

HAZARDOUS BUILDING MATERIALS INSPECTION REPORT

Sioux Falls VA Medical Center

**New SPS Addition
Sioux Falls, South Dakota**

VA Project No: 438-460

May 22, 2019

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HAZARDOUS MATERIALS INSPECTION REPORT

New SPS Addition, Building 1 Veterans Affairs Medical Center Sioux Falls, SD

1. SURVEY OVERVIEW

On April 17, 2019, Building 5, First Floor Microbiology Lab area at the Veterans Affairs Medical Center, Sioux Falls, South Dakota, were inspected for asbestos-containing material (ACM) and lead-based paint (LBP) by a representative of AMI Environmental (AMIE). The hazardous building materials inspection was conducted in preparation for renovation of the space. The renovation project is hereinafter referred to as The Project. The inspection was initiated at the request of Mr. Joel Simonyak of FourFront Design Inc. on behalf of the VA Medical Center.

The inspection was performed by Mr. Jason Biggins, in accordance with regulatory requirements and generally accepted industry methods. Copies of applicable requisite training certificates for Mr. Biggins are provided in Appendix E.

1.1. Purpose and Scope

The purpose and scope of the inspection was to identify and sample suspect ACMs, LBPs or other lead containing building materials present in the project area that may be impacted by The Project.

1.1.1. Inspection Area

The hazardous building materials inspection of the limited project area included all accessible interior areas of the Microbiology Lab area, as identified in the project schematics, and the exterior surfaces of Building 5 to the limits of the project. The project is expected to impact the above grade to approximately first floor. The Project area of Building 5 also included a below grade mechanical room, accessed from outside the building. Also included was a tunnel, accessed from the first-floor stairwell. The tunnel consisted of a concrete floor and approximately 100 ft in length. The above described areas are hereinafter referred to collectively as the Inspection Area.

1.1.2. Limitations

Nondestructive sampling protocols prevented inspection and sampling of materials inside walls and other inaccessible areas of the building. Examples of suspect materials not sampled, include those which may exist inside finished interior walls, pipe chases and rigid ceilings.

It is recommended that prior to or during construction that any new materials discovered in the demolition process be tested or abated.

Sampling of these materials may not be necessary if, in the case of suspect ACM, the materials are assumed to be ACM or if they are determined by a licensed asbestos inspector to be homogenous to other materials that were sampled.

1.2. Regulatory Reference

The asbestos inspection was conducted in accordance with USEPA National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations (ref.: 40 CFR, Part 61), following criteria established for identifying asbestos-containing building materials that may be impacted by planned renovation activities; applicable protocols established by the Asbestos Hazard Emergency Response Act (AHERA) (ref.: 40 CFR 763). There is also no licensing requirement for lead paint sampling in non-HUD facilities.

The State of South Dakota licenses asbestos inspectors to perform asbestos inspections in the State of South Dakota.

2. BUILDING INFORMATION

2.1. General Construction

This project involves the provision of approximately 10,800 gross square feet for a Sterile Processing Service (SPS) Addition on the property of the Sioux Falls VA Health Care System. 8,500 gross square feet as new and 2,300 gross square feet as renovated space.

2.2. Pre-Existing Information

Information on previous surveys or sampling for lead-based paint or asbestos, within the Building 5 Inspection Area, was not provided.

3. INSPECTION METHODOLOGIES

3.1. Asbestos Inspection

The inspection and sampling were conducted in accordance with the USEPA National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations (ref.: 40 CFR, Part 61), following criteria established for identifying asbestos-containing building materials that may be impacted by planned renovation. Additional aspects of the inspection methodology are discussed below.

3.1.1. Key Definitions

3.1.1.1. Homogenous Material

Homogenous materials are unique applications of building materials uniform in color and texture. The homogeneity of a material can be further defined by area(s) of application. Bulk sampling is conducted to determine the asbestos content of a homogenous material.

3.1.1.2. Asbestos-Containing Material (ACM)

The Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) define ACMs as any material that contains greater than one percent asbestos, as determined by visual area estimation (microscopic analysis). The State of South Dakota follows the EPA standard. Some materials contain one percent or less asbestos. While these materials are not ACMs by definition, they are still regulated by OSHA, for worker exposure.

3.1.1.3. Friable/Non-Friable ACM

Friable ACMs are materials that contain more than one percent asbestos and, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure, thereby releasing fibers into the air more readily. In contrast, non-friable ACMs are ACMs that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable ACMs are grouped into two categories: Category I and Category II.

3.1.1.4. Regulated Asbestos-Containing Materials (RACM)

Regulated Asbestos-Containing Materials (RACM) include friable ACMs and non-friable ACMs that, depending on their category, have become friable, have been subjected to specific forms of impact damage, have a high probability of becoming friable, and/or may become friable during removal.

3.1.2. Homogenous Material Numbering Convention

All suspect asbestos materials are assigned a unique homogeneous material number. AHERA identifies three basic material types: Surfacing Materials (SM), which include spray and trowel applied materials, such as fireproofing, ceiling texture, plaster, etc.; Thermal System Insulation (TSI), which includes insulating materials applied to mechanical and plumbing components for temperature preservation and condensation prevention purposes; and Miscellaneous Materials (MM), which includes all other materials, such as floor coverings and mastics, roofing materials, asbestos cement products, and many others. When a homogenous material has multiple layers, individual layers are identified and analyzed separately by laboratory analysis.

3.1.3. Bulk Sampling

Bulk sampling must be performed to determine whether suspect building material contains asbestos. Asbestos bulk sampling for the inspection was conducted in accordance with protocols established by the Asbestos Hazard Emergency Response Act (AHERA) (ref.: 40 CFR 763). Friability of the suspect asbestos-containing materials was determined by touching and/or sampling of the material.

3.1.3.1. Bulk Sample Numbering Convention

Bulk samples are given a sequence number when collected.

3.1.3.2. Polarized Light Microscopy Analysis (PLM)

Bulk samples collected during the inspection were submitted to an EPA accredited laboratory, EMSL Analytical, Inc. (EMSL), located at 200 Route 130 North, Cinnaminson, New Jersey. EMSL was instructed to perform Polarized Light Microscopy (PLM) analysis, utilizing dispersion staining techniques (ref: EPA Method 600/M4-82-020). PLM analysis is the least expensive and most commonly used visual estimate method. While PLM analysis is acceptable to EPA, OSHA, and most states for determining asbestos content, some states now require more sophisticated methods when analyzing certain types of materials.

A total of 50 asbestos bulk samples were collected and submitted for laboratory analysis. PLM Analysis was performed on the 50 samples collected, including 23 additional distinct layers (i.e. mastic). Heterogeneous applications are individual layers of different materials contained within a single bulk sampled, each of which must be analyzed individually to determine its asbestos content (e.g. vinyl floor tiles and mastic; cove base and mastic; etc.). Table 1 lists all samples collected and analyzed in the current survey.

Some samples and/or heterogeneous applications may not have been analyzed by the lab if a positive result was obtained from a sample that is among a group of samples representing a suspect material. This process, known as stop on first positive, is followed because if a single sample is found to be positive, that material is determined to be ACM, thus making it unnecessary to analyze any additional samples in the sampling group.

Please refer to the Table 1— Asbestos Material Sampling Table in Appendix A for a complete listing of all materials sampled. The laboratory analytical reports may be found in Appendix D for the current inspection.

3.1.3.3. Quantification Method Analysis

EPA regulations allow materials determined to contain less than 10 percent asbestos utilizing a visual estimate quantification method, such as PLM analysis, to be treated as non-asbestos containing if the material is re-analyzed using one of two quantification methods and determined to contain one percent or less of asbestos. The two acceptable quantification methods are point count analysis and TEM Chatfield analysis.

Quantification methods are more time-consuming and more expensive analytical procedures that are occasionally used to more accurately determine the amount of asbestos in certain samples. Because of their higher cost and the acceptable accuracy of the less expensive visual estimation method, laboratories do not typically perform quantification analyses unless specifically requested.

The quantification method known as point count analysis is used for most ACM types, except floor tile. The organic matrix composition of floor tile precludes the use of point count analysis to more accurately determine asbestos amounts within a sample. Therefore, TEM Chatfield analysis—which effectively removes all organic materials, leaving only asbestos behind—is necessary to provide a more precise percentage of asbestos content in floor tile.

Please refer to section 6.0 Recommendations, for recommendations concerning supplemental analysis.

3.2. Lead-Based Paint Inspection

The LBP inspection included visual identification of homogenous paint applications and X-Ray Fluorescence (XRF) sampling of the paint(s). While the U. S. Department of Housing and Urban Development (HUD) promulgates guidelines for LBP inspections in child occupied facilities, there are no formal guidelines for non-HUD regulated inspections. Thus, the LBP inspection was conducted in accordance with generally accepted industry standards and practices. Additional aspects of the inspection methodology are discussed below.

3.2.1. Key Definitions

3.2.1.1. Homogenous Paint Applications

Homogenous paint applications are significant paint applications that are visually distinct by their color and uniformity. Significant paint applications do not include incidental occurrences of paint such as isolated occurrences of accent trim, artistic paints, etc. While visual inspection alone cannot generally identify sub-layers of paint, these applications are often identified in the XRF analysis.

3.2.1.2. Lead-Based Paint (LBP)

Pursuant to Federal Register, Vol. 61, No. 169, LBP is defined as paint or other surface coatings equal to or greater than 0.5 percent lead by weight or equal to or greater than 1 mg/cm².

3.2.2. Homogenous Paint Applications Numbering Convention

Homogenous paints and coatings are assigned a unique homogeneous material number (HM#). The HM# is referenced throughout the report to uniquely identify each paint application.

3.2.3. Lead-based Paint and Lead Containing Materials Sampling

Sampling of suspected lead-based paint or other suspected lead containing materials was conducted using an X-Ray Fluorescence (XRF) instrument for the paint applications and materials identified. A total of 89 lead-based paint readings were taken using the XRF to determine the lead content of materials or painted surfaces.

3.3. Mold Inspection

The Project area was inspected for evidence of moisture intrusion or visible suspected mold.

4. SUMMARY OF INSPECTION FINDINGS

Key findings of the hazardous building materials inspection are summarized below. Please refer to the Appendices for complete details of the inspection findings and supporting documentation.

4.1. Asbestos Inspection Findings

Below is a summary of the findings of the asbestos inspection:

- Black mastic under 12" x 12" VFT patched area in main lab (50 ft²)
The VFT is considered ACM since it is associated with the black mastic present on the underside of the VFT applications. Both VFT and Black Mastic are considered ACM.-
- Black mastic in Rm D20 (Mechanical Room) Not associated with VFT. (40 ft²)

Please refer to Table 1 – Asbestos Sampling Table in Appendix A for a complete listing of all asbestos sampling.

4.2. Lead Paint Inspection Findings

Below is a summary of the findings of the lead-based paint inspection:

- LBP, brown, is present is present on exterior hand railings, near the entrance of the below grade mechanical room. (Approximately 150 linear ft.)
- LBP, brown, is present on decorative grates within the brick on exterior of the first floor of the building. (15 sq. ft.)
- LBP, white is present on top plate of 11 exterior windows (44 sq. ft.)
- LBP, brown, is present is present on interior hand railings on stairs leading to the tunnel. (Approximately 25 linear ft.)
- LBP, brown, is present on stairs leading to the tunnel. (100 sq. ft.)
- LBP, gray, is present on a ladder in the tunnel. (1 each)
- LBP, white, is present on window sills in the interior windows of the Inspection Area. (50 sq. ft.)

Please refer to Table 2 – Lead Paint Sampling Table in Appendix A for a complete listing of all lead-based paint sampling.

4.3. Mold & Water Intrusion Inspection Findings

No suspected mold was observed in the Inspection Area.

5. RISKS AND HAZARDS

5.1. Asbestos

To be a significant health concern, asbestos fibers must be inhaled. When asbestos fibers are inhaled, they become lodged in the lung tissue or alveoli. Here they clog and scar the tissues, causing the walls of the alveoli to lose their elasticity and useful function in respiration. Asbestosis (scarring of the lung), lung cancer, and Mesothelioma (cancer of the lining of the chest or lining of the abdominal wall) are diseases associated with asbestos exposure. Risks and hazards increase with increased exposure. ACM condition, proximity to building occupants, building use, and other factors can influence the potential for asbestos fibers to become airborne, and therefore increase exposure risks.

5.2. Lead-Based Paint

Inhalation and ingestion are the major routes of lead exposure. Once in the body, lead is distributed via the bloodstream to red blood cells, soft-tissue and bone. The kidneys and gastrointestinal (GI) tract eliminate lead in the body very slowly, while minute amounts are lost through perspiration.

Lead in the body can cause serious damage to the central and peripheral nervous system, the cardiovascular system, and the kidneys. Exposure to high concentrations of lead can cause retardation, convulsions, coma, and sometimes death. Children are especially vulnerable and susceptible to lead poisoning. Even low levels of exposure persisting during childhood are known to slow a child's normal development and cause learning and behavioral problems. Exposure to lead can result from deteriorating surfaces and activities mechanically impacting lead surfaces. Preventing exposure requires proper work practices, monitoring, disposal and personal protective equipment during demolition, alteration and friction producing activities.

5.3. Mold

Molds have the potential to cause health problems in some individuals. Molds produce allergens (substances that can cause allergic reactions), irritants, and in some cases, potentially toxic substances (mycotoxins). Inhaling or touching mold or mold spores may cause allergic reactions in sensitive individuals. Allergic responses include hay fever-type symptoms, such as sneezing, runny nose, red eyes, and skin rash (dermatitis). Allergic reactions to mold are common and can be immediate or delayed. Molds can also cause asthma attacks in people with asthma who are allergic to mold.

6. RECOMMENDATIONS

The purpose of this section is to interpret survey findings and provide preliminary recommendations that may be relevant and appropriate at this time. Because this document is a presentation of investigative findings, recommendations related to future construction activities are inherently general in nature. More specific determinations concerning hazardous building materials to be impacted by construction should be made during the abatement project design process.

6.1. General Recommendations

6.1.1. Asbestos

State and/or federal regulations require that ACMs be removed prior to demolition or renovation activities that will impact the ACMs. Depending on the specific renovation work to be performed, certain ACMs may not require removal if they will not be disturbed and do not pose a risk to building occupants or construction trade workers. However, to ensure worker safety and to eliminate future asbestos-related maintenance and management costs and risks, AMIE recommends removal of all identified ACMs in the areas to be renovated. While partial abatement may be technically possible, it is often impractical and not cost-effective.

ACMs not impacted by renovation or demolition activities should be inspected annually and maintained in good condition. ACMs deemed to be in less than good condition (damaged or significantly damaged) should be repaired or removed and replaced. Such repairs should be performed by qualified persons and in accordance with regulatory guidelines.

6.1.2. Lead-Based Paint and Lead Containing Materials

Facility owners are ultimately liable for their lead-containing hazardous waste from cradle to grave. EPA regulations provide two ways to determine whether a waste stream, such as demolition debris containing LBP, must be classified as hazardous waste. Waste generators can either test the waste using an approved testing method (Toxicity Characteristic Leaching Procedure [TCLP]), or they can apply knowledge of the hazardous characteristic of the waste.

Based on the initial lead paint testing results, AMIE recommends TCLP testing be conducted on the existing building materials, painted and unpainted, prior to the start of renovation or demolition activity. In addition, trade contractors who work in the facility should also be notified of the presence of lead so that they can appropriately monitor and protect their workers against lead exposure.

Any lead-based painted building components not removed during renovation should be considered for inclusion in a facility management plan that maintains potential exposure below OSHA action levels and ensures the material will be handled properly and in accordance with applicable regulations.

6.1.3. Mold

No suspected mold was observed in the Inspection Area.

6.2. Hazardous Conditions Recommendations

No hazardous conditions, from hazardous materials, were observed in the building during the inspection.

6.3. Point Count Analysis / TEM Chatfield Analysis Recommendations

AMIE does not recommend Point Count or TEM Chatfield analysis of any of the ACMs identified.

7. REGULATORY REQUIREMENTS

7.1. Asbestos-Containing Materials

The removal and disposal of ACMs is regulated at the federal, state, and, sometimes, local level. While some states have developed their own regulatory standards for the various asbestos disciplines, many states have adopted the federal standards but have established licensing requirements and enforcement authority at the state level.

7.1.1. Notification Requirements

EPA's NESHAP regulation, 40 CFR, Subpart M, 61.145, Standard for Demolition and Renovation, stipulates that an owner of a facility submit proper notification with either the EPA's regional office and/or the state and local regulatory agency of intention to demolish or renovate. Notifications must be received by the appropriate regulatory agencies 10 working days prior to commencement of asbestos stripping or removal, or other site work. If the demolition or renovation date changes, or the scope of work is increased, another notification is required.

7.1.2. Asbestos Removal Requirements

Asbestos removal must be performed by a licensed abatement contractor. The contractor should follow all work practices, worker protection, and disposal requirements set forth in the contract specifications and by the Occupational Safety and Health Administration (OSHA) and the EPA. Key federal regulations concerning asbestos include 29 CFR 1910.1001, 29 CFR 1926.1101, 40 CFR Part 61, Subpart M, and 40 CFR 763.

7.1.3. OSHA Regulation of ≤ 1 Percent Asbestos

While EPA and many states do not regulate materials containing one percent or less asbestos, OSHA regulates materials containing any amount of asbestos. (Ref. OSHA Construction Industry Standard, 29 CFR 1926.1101(a)(3))

7.1.4. State of South Dakota Asbestos Removal Regulations

Asbestos Containing Building Material (ACBM) should only be removed by licensed and accredited contractors in the State of South Dakota.

7.2. Lead Waste

7.2.1. Disposal Requirements

The Resource Conservation and Recovery Act (RCRA) classifies lead-containing waste streams as hazardous materials if TCLP levels exceed five parts per million. If TCLP leachable lead levels exceed that threshold, EPA regulations (40 CFR 261) require the waste stream to be handled and disposed of as a hazardous waste. Waste streams containing less the five parts per million of leachable lead are classified as non-hazardous waste and can be disposed of in a construction and demolition landfill.

7.2.2. Construction Requirements

OSHA's 29 CFR 1926.62 regulates worker exposure to lead during construction activities that include demolition or salvage of structures where lead or materials containing lead are present, as well as removal or encapsulation of lead-containing materials. The standard establishes maximum limits of exposure to lead, including a permissible exposure limit and action level, and should be adhered to during construction and demolition activities.

APPENDIX A

Tables

Table 1 – Asbestos Materials Sampling Table

Table 2 – Lead Paint Sampling Table

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Table 1 – Asbestos Material Sampling Table

Table 1. Asbestos Material Sampling Results

Asbestos Containing Materials (ACM) = >1% Asbestos

| Homogeneous Area | Sample No. | Photo No. | Description | Color | Material Location | Asbestos Content | Estimated Quantity | Comments |
|------------------|------------|-----------|----------------------|--------|------------------------|------------------|--------------------|----------|
| 1 | 1 | 1 | Mastic | Gray | Below Grade Mech. Room | None Detected | | |
| 1 | 2 | 2 | Mastic | Gray | Below Grade Mech. Room | None Detected | | |
| 2 | 3 | 3 | EFIS | Gray | Below Grade Mech. Room | None Detected | | |
| 2 | 4 | 4 | EFIS | Gray | Below Grade Mech. Room | None Detected | | |
| 2 | 5 | 5 | EFIS | Gray | Below Grade Mech. Room | None Detected | | |
| 3 | 6 | 6 | Tar behind EFIS | Black | Below Grade Mech. Room | None Detected | | |
| 3 | 7 | 7 | Tar behind EFIS | Black | Below Grade Mech. Room | None Detected | | |
| 4 | 8 | 8 | Caulk | White | Mech. Room Entry | None Detected | | |
| 4 | 9 | 9 | Caulk | White | Mech. Room Entry | None Detected | | |
| 5 | 10 | 10 | Window Caulk | Gray | Windows-Exterior | None Detected | | |
| 5 | 11 | 11 | Window Caulk | Gray | Windows-Exterior | None Detected | | |
| 6 | 12 | 12 | Concrete Caulk | Gray | Exterior | None Detected | | |
| 6 | 13 | 13 | Concrete Caulk | Gray | Exterior | None Detected | | |
| 7 | 14 | 14 | Vertical Joint Caulk | Gray | Exterior | None Detected | | |
| 7 | 15 | 15 | Vertical Joint Caulk | Gray | Exterior | None Detected | | |
| 8 | 16 | 16 | Debris | N/A | Floor of Tunnel | None Detected | | |
| 8 | 17 | 17 | Debris | N/A | Floor of Tunnel | None Detected | | |
| 9 | 18 | 18 | Ceiling Tile 2x2 | White | Rm D17 | None Detected | | |
| 9 | 19 | 19 | Ceiling Tile 2x2 | White | Rm D17 | None Detected | | |
| 10 | 20 | 20 | Drywall | White | Rm D17 | None Detected | | |
| 11 | 20A | 20 | Joint Compound | White | Rm D17 | None Detected | | |
| 10 | 21 | 21 | Drywall | White | Rm D17 | None Detected | | |
| 11 | 21A | 21 | Joint Compound | White | Rm D17 | None Detected | | |
| 12 | 22 | 22 | Window Caulk | Black | Lab | None Detected | | |
| 12 | 23 | 23 | Window Caulk | Black | D17 | None Detected | | |
| 13 | 24 | 24 | Ceiling Tile 2x2 | White | Hallway | None Detected | | |
| 14 | 25 | 25 | Base Cove Mastic | Yellow | Rm D21 | None Detected | | |
| 14 | 26 | 26 | Base Cove Mastic | Yellow | Rm D21 | None Detected | | |
| 15 | 27 | 27 | Carpet Mastic | Yellow | Rm D21 | None Detected | | |
| 15 | 28 | 28 | Carpet Mastic | Yellow | Rm D21 | None Detected | | |

| Homogeneous Area | Sample No. | Photo No. | Description | Color | Material Location | Asbestos Content | Estimated Quantity | Comments |
|------------------|------------|-----------|---|--------|-------------------|------------------------------|--------------------|---------------------|
| 15 | 29 | 29 | Mastic Under Carpet | Yellow | Rm D21 | None Detected | | |
| 16 | 29A | 29 | 12" x 12" VFT/Mastic Under Carpet-Beige | Beige | Rm D21 | None Detected | | |
| 17 | 29B | 29 | Mastic Under Carpet | Black | Rm D21 | None Detected | | |
| 17 | 30 | 30 | Mastic Under Carpet | Black | Rm D21 | None Detected | | |
| 16 | 30A | 30 | 12" x 12" VFT/Mastic Under Carpet-Beige | Beige | Rm D21 | None Detected | | |
| 15 | 30B | 30 | Mastic Under Carpet | Yellow | Rm D21 | None Detected | | |
| 17 | 31 | 31 | Mastic Under Carpet | Black | Rm D21 | None Detected | | |
| 16 | 31A | 31 | 12" x 12" VFT/Mastic Under Carpet-Beige | Beige | Rm D21 | None Detected | | |
| 15 | 31B | 31 | Mastic Under Carpet | Yellow | Rm D21 | None Detected | | |
| 16 | 32 | 32 | 12" x 12" VFT Beige | Beige | Rm D27 | None Detected | | |
| 17 | 32A | 32 | Mastic | Black | Rm D27 | None Detected | | |
| 16 | 33 | 33 | 12" x 12" VFT Beige | Beige | Rm D27 | None Detected | | |
| 17 | 33A | 33 | Mastic | Black | Rm D27 | None Detected | | |
| 16 | 34 | 34 | 12" x 12" VFT Beige | Beige | Rm D27 | None Detected | | |
| 17 | 34A | 34 | Mastic | Black | Rm D27 | None Detected | | |
| 18 | 35 | 35 | Epoxy Resin Tops | Black | Back Lab | None Detected | | |
| 19 | 36 | 36 | Mastic | White | Back Lab | None Detected | | |
| 19 | 37 | 37 | Mastic | White | Back Lab | None Detected | | |
| 20 | 38 | 38 | Plaster | Gray | Lab | None Detected | | |
| 22 | 39 | 39 | Plaster | Gray | Lab | None Detected | | |
| 23 | 40 | 40 | 12x12 VFT Tan Blotchy | Tan | Lab | None Detected | | Patched area |
| 24 | 40A | 40 | Mastic | Black | Lab | Positive Result | 50 Ft ² | Patched area of VFT |
| 25 | 40B | 40 | Mastic | Yellow | Lab | None Detected | | |
| 23 | 41 | 41 | 12" x 12" VFT Tan Blotchy | Tan | Lab | None Detected | | |
| 24 | 41A | 41 | Mastic | Black | Lab | Positive Stop (Not Analyzed) | | |

[illegible]

Table 2 – Lead Sampling Table

Table 2. Lead-Based Paint/Lead Material Content
XRF Model: NITON XLp Series Lead Analyzer, serial #24794
Lead-Based Pint = $\geq 1 \text{ mg/cm}^3$

| Sample No. | Photo No. | Substrate | Description | Location | Color | Lead Content | Condition | Estimated Quantity |
|------------|-----------|-----------|------------------|-------------|--------|--------------|-----------|--------------------|
| 1 | | Metal | Electrical Panel | Mech Rm | Grey | 0.00 | Good | |
| 2 | | Concrete | Wall | Mech Rm | White | 0.00 | Fair | |
| 3 | | Concrete | Wall | Mech Rm | Red | 0.00 | Fair | |
| 4 | | Metal | Duct | Mech Rm | Grey | 0.00 | Fair | |
| 5 | | Metal | Frame | Mech Rm | Red | 0.01 | Fair | |
| 6 | | Concrete | Wall | Mech Rm | Red | 0.00 | Good | |
| 7 | | Metal | Tank | Mech Rm | Silver | 0.01 | Fair | |
| 8 | | Metal | Mixing Chamber | Mech Rm | Red | 0.25 | Fair | |
| 9 | | Wood | Panel | Mech Rm | Grey | 0.00 | Fair | |
| 10 | | Metal | Casing | Mech Rm | Grey | 0.01 | Good | |
| 11 | | Metal | Mixing Chamber | Mech Rm | Red | 0.50 | Good | |
| 12 | | Metal | Valve | Mech Rm | Red | 0.60 | Fair | |
| 13 | | Metal | Breaker Box | Mech Rm | Grey | 0.01 | Good | |
| 14 | | Metal | Breaker Box | Mech Rm | Grey | 0.00 | Good | |
| 15 | | Metal | Pipe | Mech Rm | Red | 0.02 | Good | |
| 16 | | Metal | Conduit | Mech Rm | White | 0.00 | Fair | |
| 17 | | Metal | Pipe | Mech Rm | White | 0.00 | Fair | |
| 18 | | Metal | Overhead Tank | Exterior | Grey | 0.02 | Fair | |
| 19 | | Metal | Window Frame | Exterior | Black | 0.00 | Good | |
| 20 | | Metal | Window | Exterior | Black | 0.00 | Good | |
| 21 | | Metal | Door (inside) | Exterior | Red | 0.06 | Fair | |
| 22 | | Metal | Door (outside) | Exterior | Black | 0.00 | Good | |
| 23 | | Metal | Door (outside) | Exterior | Brown | 0.00 | Good | |
| 24 | | Metal | Hand Railing | Exterior | Brown | 1.7 | Fair | 150 linear ft |
| 25 | | Metal | Pipe | Exterior | Red | 0.00 | Fair | |
| 26 | | Metal | Flashing | Exterior | Black | 0.00 | Good | |
| 27 | | Metal | Duct (Ext) | Exterior | Red | 0.00 | Fair | |
| 28 | | Metal | Panel | Exterior | Brown | 0.00 | Good | |
| 29 | | Metal | Grate | Exterior | Brown | 10.20 | Poor | 15 ft ² |
| 30 | | Metal | Door | Exterior | Black | 0.00 | Good | |
| 31 | | Metal | Window Frame | Exterior | Silver | 0.00 | Good | |
| 32 | | Metal | Window Top Plate | Exterior | White | 15.00 | Poor | 44 ft ² |
| 33 | | Metal | Pipe | Crawl Space | Black | 0.00 | Fair | |
| 34 | | Metal | Pipe | Crawl Space | Black | 0.00 | Fair | |

| | | | | | | | |
|----|-----------|--------------------|-------------|--------|------|------|---------------|
| 35 | Metal | Pipe | Crawl Space | Black | 0.00 | Fair | |
| 36 | Metal | Pipe | Crawl Space | Black | 0.00 | Fair | |
| 37 | Metal | Pipe | Crawl Space | Black | 0.00 | Fair | |
| 38 | Metal | Pipe | Crawl Space | Black | 0.02 | Fair | |
| 39 | Metal | Handrail | Crawl Space | Brown | 3.80 | Fair | 25 linear ft. |
| 40 | Metal | Stairs | Crawl Space | Brown | 2.90 | Fair | 100 ft² |
| 41 | Metal | Ladder | Crawl Space | Grey | 3.10 | Fair | 1 each |
| 42 | Metal | Valve | Crawl Space | Silver | 0.00 | Good | |
| 43 | Metal | Breaker Box | Crawl Space | Grey | 0.06 | Good | |
| 44 | Metal | Pipe | Crawl Space | Red | 0.02 | Good | |
| 45 | Clay | Block | Crawl Space | Red | 0.00 | Good | |
| 46 | Ceramic | Tile | D-17 | Cream | 0.00 | Good | |
| 47 | Metal | Cabinet | D-17 | Beige | 0.00 | Good | |
| 48 | Metal | Upper Cabinet | D-17 | Beige | 0.02 | Good | |
| 49 | Metal | Door Frame | D-17 | Beige | 0.02 | Good | |
| 50 | Ceramic | Floor | D-17 | Beige | 0.00 | Good | |
| 51 | Metal | Cabinet | D-17 | Beige | 0.00 | Good | |
| 52 | Metal | Pipe | D-17 | Black | 0.00 | Good | |
| 53 | Sheetrock | Wall | Hallway | White | 0.00 | Good | |
| 54 | Metal | Grate | Hallway | White | 0.00 | Good | |
| 55 | Metal | Grid | Hallway | White | 0.00 | Good | |
| 56 | Metal | Door Frame | D-18 | Beige | 0.00 | Good | |
| 57 | Metal | Door Frame | D-22 | Beige | 0.00 | Good | |
| 58 | Metal | Pipe | Hallway | Black | 0.00 | Fair | |
| 59 | Sheetrock | Wall | D-21 | Cream | 0.00 | Fair | |
| 60 | Sheetrock | Wall | Hallway | Cream | 0.00 | Fair | |
| 61 | Metal | Door Frame | D-27 | Beige | 0.00 | Good | |
| 62 | Metal | Cabinet | D-27 | Beige | 0.00 | Good | |
| 63 | Metal | Cabinet with glass | D-27 | Beige | 0.00 | Good | |
| 64 | Metal | File Cabinet | S. end | Cream | 0.00 | Good | |
| 65 | Metal | Door | S. end | Cream | 0.00 | Good | |
| 66 | Metal | Door Frame | S. end | Cream | 0.05 | Good | |
| 67 | Metal | Cabinet | S. end | Beige | 0.00 | Good | |
| 68 | Sheetrock | Wall | W. wall | White | 0.00 | Good | |
| 69 | Metal | Fume Hood | W. wall | Cream | 0.01 | Good | |
| 70 | Metal | Side of Fume Hood | W. wall | Cream | 0.00 | Good | |
| 71 | Wood | Window Sill | E. wall | White | 5.30 | Fair | 25 ft² |
| 72 | Wood | Vertical Window | W. wall | White | 0.00 | Good | |
| 73 | Sheetrock | Wall | W. wall | White | 0.00 | Fair | |
| 74 | Metal | Under Sink | W. wall | Black | 0.00 | Good | |
| 75 | Plaster | Wall | W. wall | White | 0.28 | Poor | |

| | | | | | | | | | |
|----|--|----------------|-----------------------|--|---------|-------|------|------|--|
| 76 | | Plaster | Wall | | W. wall | White | 0.00 | Good | |
| 77 | | Sheetrock | Column | | W. wall | White | 0.00 | Good | |
| 78 | | Plaster | Wall | | W. wall | White | 0.00 | Good | |
| 79 | | Metal | Power Strip | | W. wall | Tan | 0.14 | Good | |
| 80 | | Metal | Transformer | | D-20 | Green | 0.12 | Good | |
| 81 | | Plaster | E Wall | | D-20 | White | 0.23 | Good | |
| 82 | | Plaster | N Wall | | D-20 | White | 0.00 | Good | |
| 83 | | Metal | Breaker Box | | D-20 | Grey | 0.00 | Good | |
| 84 | | Wood | Panel Behind Box | | D-20 | Grey | 0.00 | Good | |
| 85 | | Metal | Pipe | | D-20 | Red | 0.03 | Good | |
| 86 | | Porcelain | Sink | | D-20 | White | 0.00 | Good | |
| 87 | | Metal | Ceiling Light Fixture | | D-20 | White | 0.00 | Good | |
| 88 | | Concrete Block | Wall | | D-20 | Black | 0.02 | Good | |
| 89 | | Concrete | Floor | | D-20 | Grey | 0.00 | Good | |

APPENDIX B

Photo Logs

Asbestos Photo Log

Lead-Based Paint Photo Log

www.amienvironmental.com

8802 South 135th Street, Suite 100 • Omaha, NE 68138
800.828.8487 • 402.397.5001 • 402.397.3313 (fax)

Asbestos Photo Log

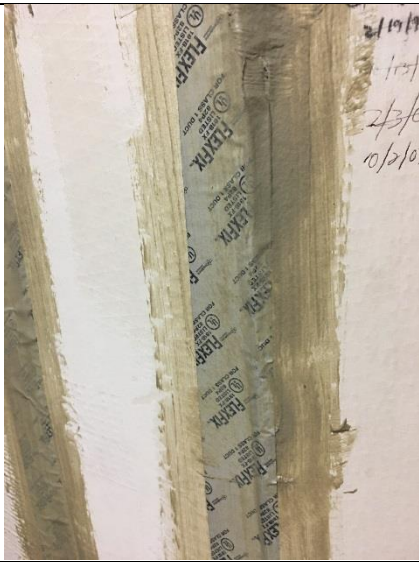


PHOTO 1 Gray Mastic – Duct in below grade mechanical room



PHOTO 2 Gray Mastic – Duct in below grade mechanical room

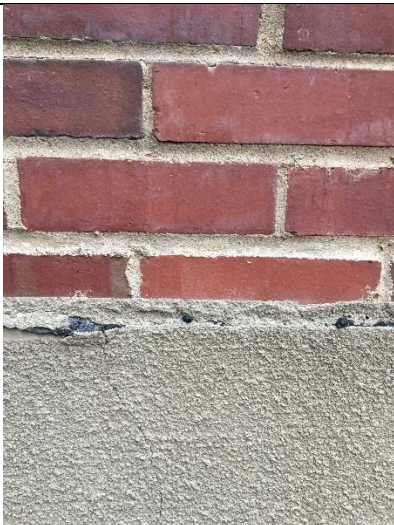


PHOTO 3 EFIS Surfacing – Mech. Room & Entry Area



PHOTO 4 EFIS Surfacing – Mech. Room & Entry Area



PHOTO 5 EFIS Surfacing – Mech. Room & Entry Area



PHOTO 6 Black Tar Under EFIS – Mech. Room Entry



PHOTO 7 Black Tar Under EFIS – Mech. Room Entry



PHOTO 8 White Joint Caulk – Entry to Mech. Room



PHOTO 9 White Joint Caulk – Entry to Mech. Room



PHOTO 10 Gray Window Caulk - Exterior



PHOTO 11 Gray Window Caulk - Exterior



PHOTO 12 Gray Joint Caulk – Horizontal Concrete Pad



PHOTO 13 Gray Joint Caulk – Horizontal Concrete Pad



PHOTO 14 Gray Joint Caulk - Exterior



PHOTO 15 Gray Joint Caulk - Exterior



PHOTO 16 Debris on Tunnel Floor

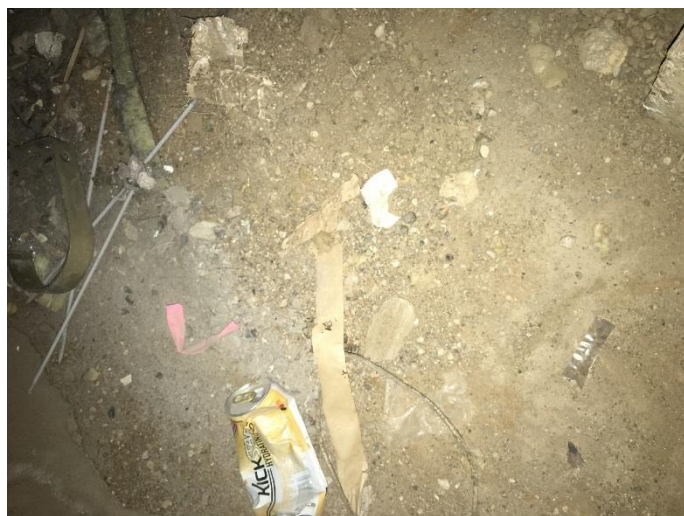


PHOTO 17 Debris on Tunnel Floor



PHOTO 18 2' x 2' Ceiling Tile D-17



PHOTO 19 | 2' x 2' Ceiling Tile D-17

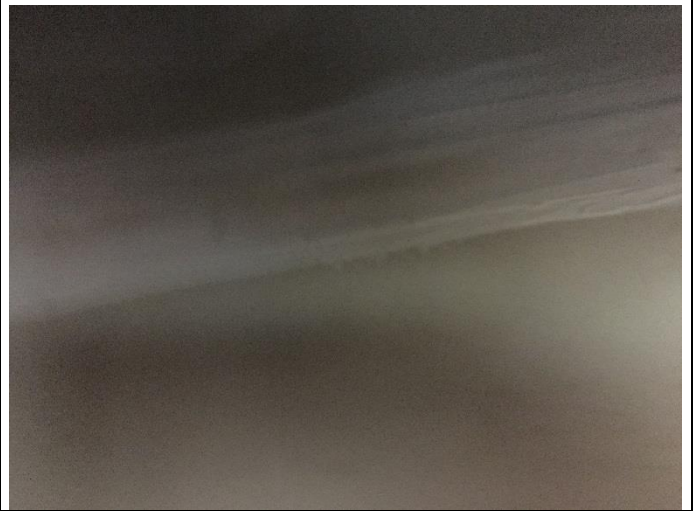


PHOTO 20 | Drywall/Joint Compound D-17



PHOTO 21 | Drywall/Joint Compound D-17

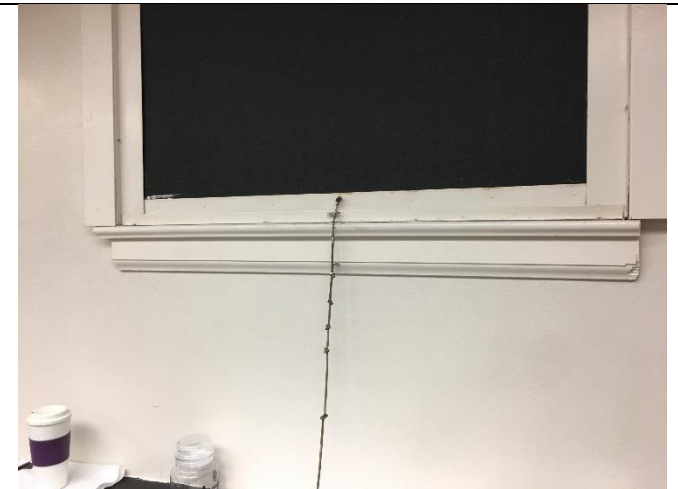


PHOTO 22 | Black Window Caulk – Windows Throughout



PHOTO 23 | Black Window Caulk – Windows Throughout



PHOTO 24 | 2' x 2' Ceiling Tile Hallway



PHOTO 25 Tan Base Cove Mastic



PHOTO 26 Tan Base Cove Mastic



PHOTO 27 Brown Carpet Mastic – D 21



PHOTO 28 Brown Carpet Mastic – D 21



PHOTO 29 Beige VFT Black Mastic (under carpet) – D 21



PHOTO 30 Beige VFT Black Mastic (under carpet) – D 21



PHOTO 31 Beige VFT Black Mastic (under carpet) – D 21



PHOTO 32 12" x 12" Beige VFT – D-27 (throughout space)



PHOTO 33 12" x 12" Beige VFT – D-27 (throughout space)



PHOTO 34 12" x 12" Beige VFT – D-27 (throughout space)



PHOTO 35 Epoxy Resin Bench Top - Lab



PHOTO 36 White Mastic – Lab Base Cabinets



PHOTO 37 White Mastic – Lab Base Cabinets



PHOTO 38 Plaster Wall – Lab (Exterior Wall)



PHOTO 39 Plaster Wall – Lab (Exterior Wall)



PHOTO 40 12" x 12" VFT Tan Blotchy/Mastic
Black Mastic 4% Chrysotile



PHOTO 41 12" x 12" VFT Tan Blotchy/Mastic
Black Mastic 4% Chrysotile



PHOTO 42 12" x 12" VFT Tan Blotchy/Mastic
Black Mastic 4% Chrysotile



PHOTO 43 Black Mastic – D-20
5% Chrysotile



PHOTO 44 Black Mastic – D-20
5% Chrysotile



PHOTO 45 Firestop – D-20



PHOTO 46 Firestop – D-20



PHOTO 47 12" x 12" VFT Tan/Black Mastic
Under Carpet D-22

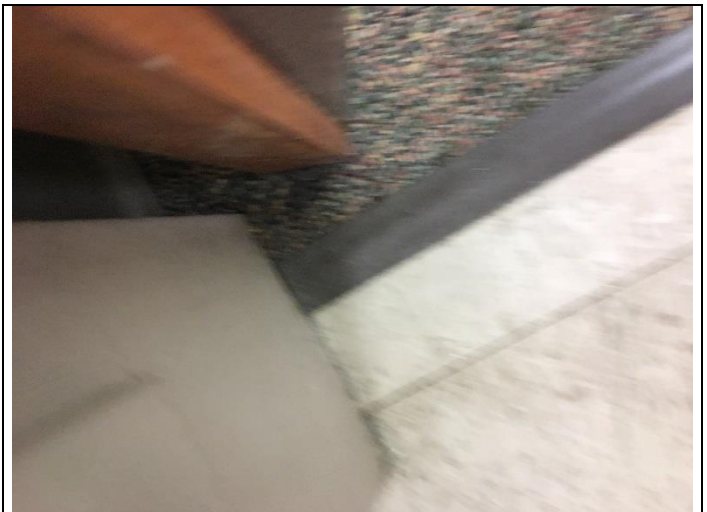


PHOTO 48 12" x 12" VFT Tan/Black Mastic
Under Carpet D-22



PHOTO 49

12" x 12" VFT Tan/Black Mastic
Under Carpet D-22



PHOTO 50

Black Epoxy Resin Bench Top – D-25

Lead-Based Paint Photo Log



PHOTO 1 Electrical Panel – Below Grade Mechanical Room
<1mg/cm² lead



PHOTO 2 White Painted wall - Below Grade Mech. Room
<1mg/cm² lead



PHOTO 3 Red Base Cove Paint – Below Grade Mech. Room
<1mg/cm² lead



PHOTO 4 Electrical Panel – Below Grade Mechanical Room
<1mg/cm² lead



PHOTO 5 Red Painted Frame – Below Grade Mech. Room
<1mg/cm² lead



PHOTO 6 Red Painted Block Wall – Below Grade Mech. Rm
<1mg/cm² lead



PHOTO 7 Silver Painted Tank – Below Grade Mech. Room
<1mg/cm² lead



PHOTO 8 Red Painted Mixing Chamber – Below Grade Mech. Room
<1mg/cm² lead



PHOTO 9 Gray Painted Wood Panel – Below Grade Mechanical Room
<1mg/cm² lead



PHOTO 10 Gray Painted Casing – Below Grade Mechanical Room
<1mg/cm² lead



PHOTO 11 Red Painted Mixing Chamber – Below Grade Mech. Room
<1mg/cm² lead



PHOTO 12 Red Painted Valve – Below Grade Mech. Room
<1mg/cm² lead



PHOTO 13 Gray Breaker Box – Below Grade Mech. Room
<1mg/cm² lead



PHOTO 14 Gray Breaker Box – Below Grade Mech. Room
<1mg/cm² lead



PHOTO 15 Red Painted Pipe – Below Grade Mech. Room
<1mg/cm² lead



PHOTO 16 White Painted Conduit – Below Grade Mech. Room
<1mg/cm² lead



PHOTO 17 White Painted Pipe – Below Grade Mech. Room
<1mg/cm² lead



PHOTO 18 Silver Overhead Tank – Below Grade Mech. Room
<1mg/cm² lead



PHOTO 19 Black Window Frame - Exterior
<1mg/cm² lead



PHOTO 20 Black Window - Exterior
<1mg/cm² lead



PHOTO 21 Red Mech. Room Door (Inside)
<1mg/cm² lead

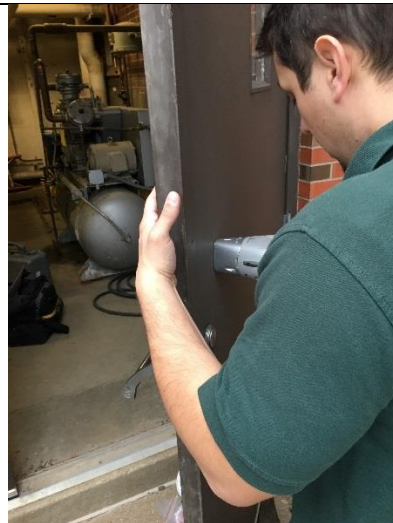


PHOTO 22 Black Mech. Room Door (Outside)
<1mg/cm² lead



PHOTO 23 Brown Door (Outside)
<1mg/cm² lead



PHOTO 24 Brown Hand Railing-Stairs to Mech. Room
1.7 mg/cm² lead



PHOTO 25 Red Pipe - Exterior
<1mg/cm² lead



PHOTO 26 Black Flashing - Exterior
<1mg/cm² lead



PHOTO 27 Red Ventilation Duct - Exterior
<1mg/cm² lead

NO PHOTO

PHOTO 28 Brown Metal Panel – Exterior
<1mg/cm² lead



PHOTO 29 Red Decorative Grate on vertical wall - exterior
10.2 mg/cm² lead

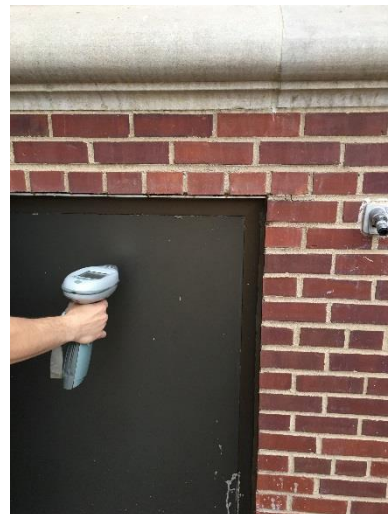


PHOTO 30 Brown Door - Exterior
<1mg/cm² lead



PHOTO 31 Silver Window Frame
<1mg/cm² lead



PHOTO 32 White Top Plate – Exterior Window
15 mg/cm² lead



PHOTO 33 Black Pipe – Tunnel
<1mg/cm² lead



PHOTO 34 Black Pipe – Tunnel
<1mg/cm² lead



PHOTO 35 Black Pipe – Tunnel
<1mg/cm² lead



PHOTO 36 Black Pipe – Tunnel
<1mg/cm² lead



PHOTO 37 Black Pipe – Tunnel
 $<1\text{ mg/cm}^2$ lead



PHOTO 38 Black Pipe – Tunnel
 $<1\text{ mg/cm}^2$ lead



PHOTO 39 Brown Hand Railing-Stairs to Tunnel
 3.8 mg/cm^2 lead



PHOTO 40 Brown Stairs to Tunnel
 2.9 mg/cm^2 lead



PHOTO 41 Gray ladder in Tunnel
 3.1 mg/cm^2 lead



PHOTO 42 Silver Valve - Tunnel
 $<1\text{ mg/cm}^2$ lead



PHOTO 43

Wall in Hallway Tower 3
<1mg/cm² lead

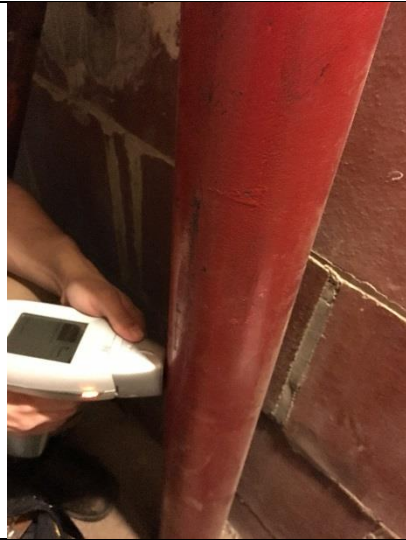


PHOTO 44

Wall in Rm.360 East Pipechase Tower 3
<1mg/cm² lead



PHOTO 45

Metal Door Frame to East Stairwell Tower 3
<1mg/cm² lead



PHOTO 46

Cream Ceramic Tile – D-17
<1mg/cm² lead

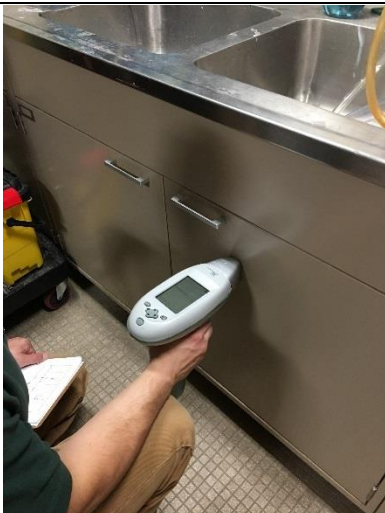


PHOTO 47

Beige Base Cabinet – D-17
<1mg/cm² lead



PHOTO 48

Beige Upper Cabinet – D-17
<1mg/cm² lead



PHOTO 49 Beige Door Frame – D-17
<1mg/cm² lead



PHOTO 50 Beige Ceramic Tile Floor – D-17
<1mg/cm² lead



PHOTO 51 Beige Base Cabinet – D-17
<1mg/cm² lead



PHOTO 52 Black Pipe D-17 Hallway
<1mg/cm² lead



PHOTO 53 White Painted Wall – Hallway by D-17
<1mg/cm² lead



PHOTO 54 Diffuser Grate – Hallway by D-17
<1mg/cm² lead



PHOTO 55 Ceiling Grid Hallway by D-17
<1mg/cm² lead

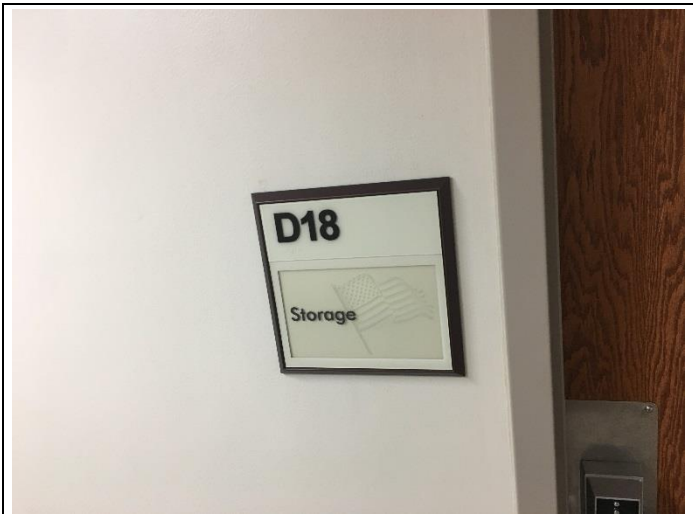


PHOTO 56 Beige Door Frame D-18
<1mg/cm² lead

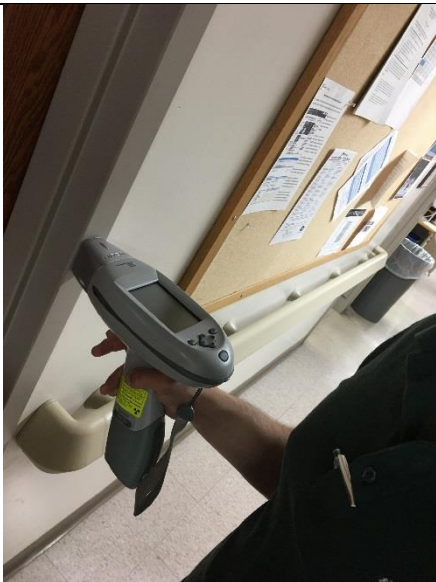


PHOTO 57 Beige Door Frame D-22
<1mg/cm² lead



PHOTO 58 Black Pipe - Hallway
<1mg/cm² lead



PHOTO 59 Cream Painted Sheetrock Wall – Room D-21
<1mg/cm² lead



PHOTO 60 Cream Painted Sheetrock Wall - Hallway
<1mg/cm² lead



PHOTO 61 Beige Door Frame Room D-27
<1mg/cm² lead



PHOTO 62 Beige Cabinet Room D-27
<1mg/cm² lead



PHOTO 63 Beige Cabinet with Glass Room D-27
<1mg/cm² lead

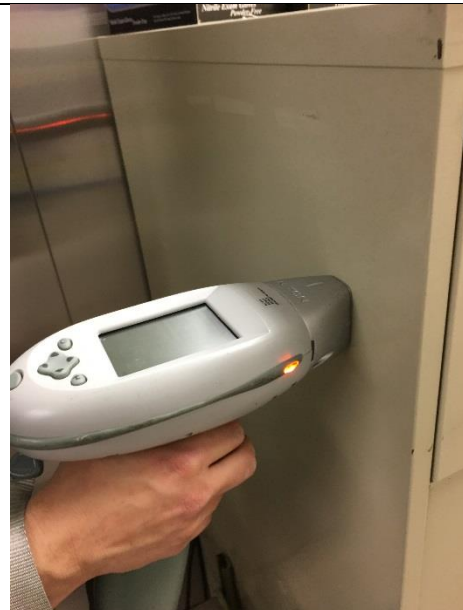


PHOTO 64 File Cabinet – S End
<1mg/cm² lead



PHOTO 65 Cream Door – S End
<1mg/cm² lead



PHOTO 66 Cream Door Frame – S End
<1mg/cm² lead



PHOTO 67 Beige Metal Cabinet – S End
<1mg/cm² lead



PHOTO 68 White Painted Sheetrock – West Wall
<1mg/cm² lead



PHOTO 69 Cream Fume Hood – West Wall
<1mg/cm² lead



PHOTO 70 Cream Fume Hood – West Wall
<1mg/cm² lead



PHOTO 71 Window Sill and Trim Below Window
5.3 mg/cm² lead



PHOTO 72 Non-Decorative Window Trim
<1mg/cm² lead



PHOTO 73 White Painted Sheetrock Wall - Lab
<1mg/cm² lead



PHOTO 74 Black Metal surrounding sink basin
<1mg/cm² lead



PHOTO 75 Peeling White Paint Under Sink
<1mg/cm² lead



PHOTO 76 White Paint on Plaster
<1mg/cm² lead



PHOTO 77 White Paint on Sheetrock - Lab
<1mg/cm² lead

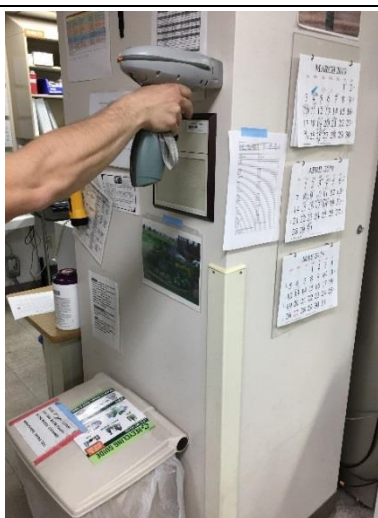


PHOTO 78 Plaster on column - Lab
<1mg/cm² lead



PHOTO 79 Metal Power Strip - Lab
<1mg/cm² lead



PHOTO 80 Transformer Box – D -20
<1mg/cm² lead



PHOTO 81 East Wall – D-20
<1mg/cm² lead



PHOTO 82 North Wall – D-20
<1mg/cm² lead



PHOTO 83 Breaker Box – D-20
<1mg/cm² lead



PHOTO 84 Panel behind Breaker Box – D-20
<1mg/cm² lead



PHOTO 85 Red Metal Pipe – D-20
<1mg/cm² lead



PHOTO 86 Porcelain Sink – Lab
<1mg/cm² lead

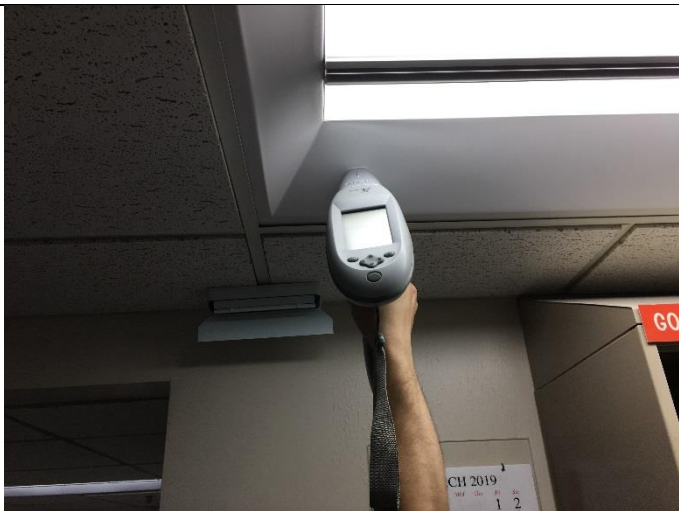


PHOTO 87 Ceiling Light Fixture
<1mg/cm² lead



PHOTO 88 Black Concrete Wall Above Window – D-20
<1mg/cm² lead



PHOTO 89

Gray Concrete Floor – D-20
<1mg/cm² lead

APPENDIX C

Schematics



Asbestos Material Locations

Lead-Based Paint Locations

1. ESTABLISH REGULATED AREA AND REMOVE CONTAMINATION AREA AND REMOVE 12"X12" VENT AND BLACK MASTIC, ALTHOUGH 12"X12" VENT AND BLACK MASTIC CONTAINING THE VENT REMOVED. REMOVE 2'X12' FLOOR TILE AND BLACK MASTIC AS REQUIRED BY SECTION 02.82.13.8. REMOVE 2'X12' FLOOR TILE AND BLACK MASTIC IN WALLS, ABOVE CEILING, IN PIPE CHASES, AND WITH WALL PENETRATIONS IF SUSPECT. AOMs ARE ENCOUNTERED DURING REMOVAL OF FLOOR TILE AND BLACK MASTIC THAT ARE NOT IDENTIFIED ON THE ASBESTOS ABATEMENT DRAWINGS. STOP WORK AND CONTACT THE PROJECT MANAGER OF VPH FOR INSTRUCTIONS. REMOVE FLOOR TILE SURVEYED FOR AOM. REFER TO THE HAZARDOUS BUILDING MATERIALS INSPECTION REPORT FOR AOM IDENTIFICATION. DATE MAY 22, 2018. FOR MORE INFORMATION ABOUT AOMs IDENTIFIED IN THE PROJECT AREA.

1. SHEET SPECIFIC NOTES TO BE TYPED HERE





| DESCRIPTION | CONDITION | EST. QTY. | HATCHING |
|---|-----------|--------------------|---|
| BLACK MASTIC 12X12 VINYL FLOOR TILE (VFT) | | 50 FT ² |  |
| BLACK MASTIC IN MECHANICAL ROOM | | 44 FT ² |  |

| | | | | | | | |
|---------------------|---|--|---|-----------------------------|---|---|--|
| CONSULTANTS: |  ENVIRONMENTAL AMI Advanced Engineering Inc. 315 NORTH MAIN AVENUE SUITE 200 S. SOUTH DAKOTA 57104 PH: (402) 397-3313 |  FABIS ENGINEERING (now Farris and Associates) 1270 WEST COOGE ROAD OMAHA, NEBRASKA PH: (402) 330-9900 |  FOURFRONT DESIGN, INC. RAPID CITY, SOUTH DAKOTA 57707-0603 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM | ARCHITECT/ENGINEERS: | <p>Drawing Title</p> <p>ASBESTOS CONTAINING MATERIALS</p> <p>Approved Project Director</p> <p>SIOUX FALLS VAMC</p> <p>Location</p> <p>SIOUX FALLS, SOUTH DAKOTA</p> <p>Date</p> <p>05/14/2019</p> <p>Drawn</p> <p>Checked</p> <p>Author</p> | <p>Project No.</p> <p>ASBESTOS CONTAINING MATERIALS</p> <p>Project Number</p> <p>5</p> <p>Sheet Number</p> <p>A1.00</p> <p>Dwg. of</p> <p>d</p> | <p>Office of Construction and Facilities Management</p> <p>CS</p> |
|---------------------|---|--|---|-----------------------------|---|---|--|

- 1 LBP IS KNOWN TO EXIST ON WALLS. IT MAY BE DETECTED BY VISUAL INSPECTION, OR BY REMOVAL OF THE LBP. IF THE LBP IS NOT DETECTED, THE LBP MAY BE PENETRATED, REFINISHED, OR DEMOLISHED. PERFORM DEMOLITION OF LBP IN ACCORDANCE WITH SECTION 02 83.11. LEAD-BASED PAINT REMOVAL, AND/OR PCII IN ACCORDANCE WITH LBP APPLICABLE REGULATIONS. SECTION 02 83.11. LEAD-BASED PAINT REMOVAL, AND/OR PCII IN ACCORDANCE WITH LBP APPLICABLE REGULATIONS.
- 2 SURFACES BEHIND WALLS AND MAY BE IMPACTED FOR PENETRATIONS, OR WALL DEMOLITION. LBP MUST BE CONTROLLED ACCORDING TO 29 CFR 1926.62. PERFORM LBP REMOVAL IN ACCORDANCE WITH SECTION 02 83.11. LEAD-BASED PAINT REMOVAL, AND DISPOSAL.

1. SHEET SPECIFIC NOTES TO BE TYPED HERE.



| DESCRIPTION | CONDITION | EST. QTY. | HATCHING |
|---|-----------|-----------|---|
| LEAD-BASED PAINT (LBP) ON EXTERIOR HAND RAILS | FAIR | 150 LF |  |
| LBP ON EXTERIOR GRATES | POOR | 15 FT² |  |
| LBP ON EXTERIOR WINDOW TOP PLATES | POOR | 44 FT² |  |
| LBP ON INTERIOR WINDOW SILLS | FAIR | 50 FT² |  |
| LBP ON HANDRAIL TO TUNNEL | FAIR | 25 LF |  |
| LBP ON STAIRS IN TUNNEL | FAIR | 100 FT² |  |
| LBP ON LADDER IN TUNNEL | FAIR | 1 EACH |  |

| | | | | | | | | | | | | | |
|--|--|---|--|---|--|--|--|---|--|--------------------------------------|--|---|--|
| <p>CONSULTANTS:</p> <div>  <p>AMI ENVIRONMENTAL 8602 SOUTH 135TH STREET SUITE 200 OMAHA, NEBRASKA 68138 PH: (402) 397-3313</p> </div> <div>  <p>Hatch Engineering Inc. Atkins Engineering Inc. 12700 WEST DOUGLASS ROAD SUITE 100 OMAHA, NEBRASKA 68114 PH: (402) 394-0880</p> </div> <div>  <p>FARRIS ENGINEERING (Over 30 years of experience) FARRIS ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 373-3900</p> </div> <div>  <p>FARRIS DESIGN, INC. 1001 WEST STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2574 WWW.FARRISDESIGN.COM</p> </div> | | <p>ARCHITECT/ENGINEERS:</p> <div>  <p>404 FOUR FRONT PH: (605) 342-2574 WWW.FOURFRONT.COM</p> </div> | | <p>Drawing Title</p> <p>LEAD CONTAINING MATERIAL</p> <p>Approved Project Director</p> <p>VAMC</p> | | <p>Project Title</p> <p>SIOUX FALLS VAMC NEW SPS ADDITION</p> | | <p>Project Number</p> <p>438-460</p> | | <p>Rating Number</p> <p>5</p> | | <p>Office of Construction and Facilities Management</p> | |
| <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | | |
| <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | | |
| <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | | |
| <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | | |
| <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | <p>Revision</p> <p>Date</p> | | | |
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5/13/2019 10:39:42 AM

APPENDIX D

Analytical Results

Asbestos Lab Report

Lead Results

XRF Lead Analysis Report



EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / cinnaslab@EMSL.com

EMSL Order: 041910574

Customer ID: AMI50

Customer PO: 18-00338

Project ID:

Attention: Bill Crowe

AMI Group, Inc.

8802 South 135th Street

Suite 100

Omaha, NE 68138-6511

Project: 18-00338 / SFVA Bldg 5 / Sioux Falls, SD

Phone: (402) 397-5001

Fax: (402) 397-3313

Received Date: 04/19/2019 9:20 AM

Analysis Date: 04/24/2019 - 05/01/2019

Collected Date: 04/17/2019

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|----------------------|---------------------|--|--------------|--------------------------|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 1 041910574-0001 | Gray Mastic | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 2 041910574-0002 | Gray Mastic | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 3 041910574-0003 | EFIS | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 4 041910574-0004 | EFIS | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 5 041910574-0005 | EFIS | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 6 041910574-0006 | Tar behind EFIS | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 7 041910574-0007 | Tar behind EFIS | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 8 041910574-0008 | White Caulk | White Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 9 041910574-0009 | White Caulk | White Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 10 041910574-0010 | Gray Window Caulk | Gray/Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 11 041910574-0011 | Gray Window Caulk | Gray/Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 12 041910574-0012 | Gray on Concrete | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 13 041910574-0013 | Gray on Concrete | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 14 041910574-0014 | Gray Joint Vertical | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 15 041910574-0015 | Gray Joint Vertical | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 16 041910574-0016 | Debris | Brown Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |

Report amended: 05/01/2019 17:29:52 Replaces initial report from: 04/24/2019 14:56:38 Reason Code: Client-Additional Analysis



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Tel/Fax: (800) 220-3675 / (856) 786-5974

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EMSL Order: 041910574

Customer ID: AMI50

Customer PO: 18-00338

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|--------------------------------------|--------------------------------|--|--------------------------------|--------------------------|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 17 041910574-0017 | Debris | Brown Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 18 041910574-0018 | Rm D17 Ceiling Tile 2x2 | Brown/Gray/White Fibrous Homogeneous | 50% Cellulose 30% Min. Wool | 20% Non-fibrous (Other) | None Detected |
| 19 041910574-0019 | Rm D17 Ceiling Tile 2x2 | Brown/Gray/White Fibrous Homogeneous | 60% Cellulose 30% Min. Wool | 10% Non-fibrous (Other) | None Detected |
| 20-Drywall 041910574-0020 | Drywall | Brown Fibrous Homogeneous | 5% Cellulose | 95% Non-fibrous (Other) | None Detected |
| 20-Joint Compound 041910574-0020A | Joint Compound | White Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 21-Drywall 041910574-0021 | Drywall | White Fibrous Homogeneous | 15% Cellulose 5% Glass | 80% Non-fibrous (Other) | None Detected |
| 21-Joint Compound 041910574-0021A | Joint Compound | White Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 22 041910574-0022 | Black Window Caulk | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 23 041910574-0023 | Black Window Caulk | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 24 041910574-0024 | Ceiling Tile same as 18, 19 | Gray/White Fibrous Homogeneous | 50% Cellulose 30% Min. Wool | 20% Non-fibrous (Other) | None Detected |
| 25 041910574-0025 | Base Mastic | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 26 041910574-0026 | Base Mastic | Yellow Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 27 041910574-0027 | Carpet Mastic | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 28 041910574-0028 | Carpet Mastic | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 29-Mastic 041910574-0029 | Under Carpet - Black Mastic | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 29-Floor Tile 041910574-0029A | Floor Tile | Beige Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 29-Mastic 2 041910574-0029B | Under Carpet - Black Mastic | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 30-Mastic 041910574-0030 | Under Carpet - Black Mastic | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 30-Floor Tile 041910574-0030A | Floor Tile | Beige Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |

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EMSL Order: 041910574

Customer ID: AMI50

Customer PO: 18-00338

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|----------------------------------|-----------------------------|--------------------------------------|--------------|--------------------------|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 30-Mastic 2 041910574-0030B | Under Carpet - Black Mastic | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 31-Mastic 041910574-0031 | Under Carpet - Black Mastic | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 31-Floor Tile 041910574-0031A | Floor Tile | Beige Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 31-Mastic 2 041910574-0031B | Under Carpet - Black Mastic | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 32-Tile 041910574-0032 | 12x12 Beige | Beige Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 32-Mastic 041910574-0032A | Black Mastic | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 33-Tile 041910574-0033 | 12x12 Beige | Beige Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 33-Mastic 041910574-0033A | Black Mastic | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 34-Tile 041910574-0034 | 12x12 Beige | Beige Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 34-Mastic 041910574-0034A | Black Mastic | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 35 041910574-0035 | Epoxy Resin Tops | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 36 041910574-0036 | White Mastic | White Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 37 041910574-0037 | White Mastic | White Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 38 041910574-0038 | Plaster Main Lab | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 39 041910574-0039 | Plaster Main Lab | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 40-Tile 041910574-0040 | Tan Blotchy | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 40-Mastic 041910574-0040A | Black Mastic | Black Fibrous Homogeneous | | 96% Non-fibrous (Other) | 4% Chrysotile |
| 40-Mastic 2 041910574-0040B | Yellow Mastic | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 41-Tile 041910574-0041 | Tan Blotchy | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |

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EMSL Order: 041910574

Customer ID: AMI50

Customer PO: 18-00338

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|-----------------|-------------------|---|--------------|--------------------------|------------------------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 41-Mastic | Black Mastic | | | | Positive Stop (Not Analyzed) |
| 041910574-0041A | | | | | |
| 41-Mastic 2 | Yellow Mastic | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0041B | | | | | |
| 42-Tile | Tan Blotchy | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0042 | | | | | |
| 42-Mastic | Black Mastic | | | | Positive Stop (Not Analyzed) |
| 041910574-0042A | | | | | |
| 42-Mastic 2 | Yellow Mastic | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0042B | | | | | |
| 43 | Black Mastic | Black Fibrous Homogeneous | | 95% Non-fibrous (Other) | 5% Chrysotile |
| 041910574-0043 | | | | | |
| 44 | Black Mastic | | | | Positive Stop (Not Analyzed) |
| 041910574-0044 | | | | | |
| 45 | Firestop | Red Fibrous Homogeneous | 10% Glass | 90% Non-fibrous (Other) | None Detected |
| 041910574-0045 | | | | | |
| 46 | Firestop | Red Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0046 | | | | | |
| 47-Tile | Tile under Carpet | White/Red Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0047 | | | | | |
| 47-Mastic | Mastic | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0047A | | | | | |
| 47-Mastic 2 | Mastic | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0047B | | | | | |
| 48-Tile | Tile under Carpet | White/Red Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0048 | | | | | |
| 48-Mastic | Mastic | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0048A | | | | | |
| 48-Mastic 2 | Mastic | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0048B | | | | | |
| 49-Tile | Tile under Carpet | White/Red Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0049 | | | | | |
| 49-Mastic | Mastic | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0049A | | | | | |
| 49-Mastic 2 | Mastic | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0049B | | | | | |
| 50 | Epoxy Resin Tops | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 041910574-0050 | | | | | |

Report amended: 05/01/2019 17:29:52 Replaces initial report from: 04/24/2019 14:56:38 Reason Code: Client-Additional Analysis



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EMSL Order: 041910574

Customer ID: AMI50

Customer PO: 18-00338

Project ID:

Analyst(s)

Alexis Kum (35)

Edward Zambrano (12)

Seri Smith (23)

Benjamin Ellis, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367, LA #04127

Report amended: 05/01/2019 17:29:52 Replaces initial report from: 04/24/2019 14:56:38 Reason Code: Client-Additional Analysis

| | | | | | | | |
|-------------------|---------------|---|------------------|--------------|----------------------|------------------|----------------|
| Location: | | VA Medical Center, Sioux Falls, SD - Building 5 (Mech Rm, Tunnel, Lower Level) | | | | | |
| Inspector: | | Jason Biggins, Prairie Environmental Consulting, LLC | | | | | |
| XRF Model: | | NITON Xlp Series Lead Analyzer, serial #24794 | | | | | |
| XRF # | Unit # | Substrate | Component | Color | Test Location | Condition | Results |
| 1 | | | | | Calibrate | | Test |
| 2 | | | | | Calibrate | | Test |
| 3 | | | | | Calibrate | | Test |
| 4 | | | | | Calibrate | | Test |
| 5 | | | | | Calibrate | | Test |
| 6 | | | | | Calibrate | | Test |
| 7 | Mech Rm | Metal | Electrical Panel | Grey | Mech Rm | Good | 0.00 |
| 8 | Mech Rm | Concrete | Wall | White | Mech Rm | Fair | 0.00 |
| 9 | Mech Rm | Concrete | Wall | Red | Mech Rm | Fair | 0.00 |
| 10 | Mech Rm | Metal | Duct | Grey | Mech Rm | Fair | 0.00 |
| 11 | Mech Rm | Metal | Frame | Red | Mech Rm | Fair | 0.01 |
| 12 | Mech Rm | Concrete | Wall | Red | Mech Rm | Good | 0.00 |
| 13 | Mech Rm | Metal | Tank | Silver | Mech Rm | Fair | 0.01 |
| 14 | Mech Rm | Metal | Mixing Chamber | Red | Mech Rm | Fair | 0.25 |
| 15 | Mech Rm | Wood | Panel | Grey | Mech Rm | Fair | 0.00 |
| 16 | Mech Rm | Metal | Casing | Grey | Mech Rm | Good | 0.01 |
| 17 | Mech Rm | Metal | Mixing Chamber | Red | Mech Rm | Good | 0.50 |
| 18 | Mech Rm | Metal | Valve | Red | Mech Rm | Fair | 0.60 |
| 19 | Mech Rm | Metal | Breaker Box | Grey | Mech Rm | Good | 0.01 |
| 20 | Mech Rm | Metal | Breaker Box | Grey | Mech Rm | Good | 0.00 |
| 21 | Mech Rm | Metal | Pipe | Red | Mech Rm | Good | 0.02 |
| 22 | Mech Rm | Metal | Conduit | White | Mech Rm | Fair | 0.00 |
| 23 | Mech Rm | Metal | Pipe | White | Mech Rm | Fair | 0.00 |
| 24 | Exterior | Metal | Overhead Tank | Grey | Exterior | Fair | 0.02 |
| 25 | Exterior | Metal | Window Frame | Black | Exterior | Good | 0.00 |

| | | | | | | | | |
|----|-------------|---------|------------------|--------|-------------|------|-------|--------------------|
| 26 | Exterior | Metal | Window | Black | Exterior | Good | 0.00 | |
| 27 | Exterior | Metal | Door (inside) | Red | Exterior | Fair | 0.06 | |
| 28 | Exterior | Metal | Door (outside) | Black | Exterior | Good | 0.00 | |
| 29 | Exterior | Metal | Door (outside) | Brown | Exterior | Good | 0.00 | |
| 30 | Exterior | Metal | Hand Railing | Brown | Exterior | Fair | 1.7 | 150 linear ft |
| 31 | Exterior | Metal | Pipe | Red | Exterior | Fair | 0.00 | |
| 32 | Exterior | Metal | Flashing | Black | Exterior | Good | 0.00 | |
| 33 | Exterior | Metal | Duct (Ext) | Red | Exterior | Fair | 0.00 | |
| 34 | Exterior | Metal | Panel | Brown | Exterior | Good | 0.00 | |
| 35 | Exterior | Metal | Grate | Brown | Exterior | Poor | 10.20 | 15 ft² |
| 36 | Exterior | Metal | Door | Black | Exterior | Good | 0.00 | |
| 37 | Exterior | Metal | Window Frame | Silver | Exterior | Good | 0.00 | |
| 38 | Exterior | Metal | Window Top Plate | White | Exterior | Poor | 15.00 | 11 windows = 44 ft |
| 39 | Crawl Space | Metal | Pipe | Black | Crawl Space | Fair | 0.00 | |
| 40 | Crawl Space | Metal | Pipe | Black | Crawl Space | Fair | 0.00 | |
| 41 | Crawl Space | Metal | Pipe | Black | Crawl Space | Fair | 0.00 | |
| 42 | Crawl Space | Metal | Pipe | Black | Crawl Space | Fair | 0.00 | |
| 43 | Crawl Space | Metal | Pipe | Black | Crawl Space | Fair | 0.00 | |
| 44 | Crawl Space | Metal | Pipe | Black | Crawl Space | Fair | 0.02 | |
| 45 | Crawl Space | Metal | Handrail | Brown | Crawl Space | Fair | 3.80 | 25 ft |
| 46 | Crawl Space | Metal | Stairs | Brown | Crawl Space | Fair | 2.90 | 100 ft² |
| 47 | Crawl Space | Metal | Ladder | Grey | Crawl Space | Fair | 3.10 | 1 ea |
| 48 | Crawl Space | Metal | Valve | Silver | Crawl Space | Good | 0.00 | |
| 49 | Crawl Space | Metal | Breaker Box | Grey | Crawl Space | Good | 0.06 | |
| 50 | Crawl Space | Metal | Pipe | Red | Crawl Space | Good | 0.02 | |
| 51 | Crawl Space | Clay | Block | Red | Crawl Space | Good | 0.00 | |
| 52 | D-17 | Ceramic | Tile | Cream | D-17 | Good | 0.00 | |
| 53 | D-17 | Metal | Cabinet | Beige | D-17 | Good | 0.00 | |
| 54 | D-17 | Metal | Upper Cabinet | Beige | D-17 | Good | 0.02 | |

| | | | | | | | | |
|----|---------|-----------|--------------------|-------|---------|------|------|-------|
| 55 | D-17 | Metal | Door Frame | Beige | D-17 | Good | 0.02 | |
| 56 | D-17 | Ceramic | Floor | Beige | D-17 | Good | 0.00 | |
| 57 | D-17 | Metal | Cabinet | Beige | D-17 | Good | 0.00 | |
| 58 | D-17 | Metal | Pipe | Black | D-17 | Good | 0.00 | |
| 59 | Hallway | Sheetrock | Wall | White | Hallway | Good | 0.00 | |
| 60 | Hallway | Metal | Grate | White | Hallway | Good | 0.00 | |
| 61 | Hallway | Metal | Grid | White | Hallway | Good | 0.00 | |
| 62 | D-18 | Metal | Door Frame | Beige | D-18 | Good | 0.00 | |
| 63 | D-22 | Metal | Door Frame | Beige | D-22 | Good | 0.00 | |
| 64 | Hallway | Metal | Pipe | Black | Hallway | Fair | 0.00 | |
| 65 | D-21 | Sheetrock | Wall | Cream | D-21 | Fair | 0.00 | |
| 66 | Hallway | Sheetrock | Wall | Cream | Hallway | Fair | 0.00 | |
| 67 | D-27 | Metal | Door Frame | Beige | D-27 | Good | 0.00 | |
| 68 | D-27 | Metal | Cabinet | Beige | D-27 | Good | 0.00 | |
| 69 | D-27 | Metal | Cabinet with glass | Beige | D-27 | Good | 0.00 | |
| 70 | S. end | Metal | File Cabinet | Cream | S. end | Good | 0.00 | |
| 71 | S. end | Metal | Door | Cream | S. end | Good | 0.00 | |
| 72 | S. end | Metal | Door Frame | Cream | S. end | Good | 0.05 | |
| 73 | S. end | Metal | Cabinet | Beige | S. end | Good | 0.00 | |
| 74 | W. wall | Sheetrock | Wall | White | W. wall | Good | 0.00 | |
| 75 | W. wall | Metal | Fume Hood | Cream | W. wall | Good | 0.01 | |
| 76 | W. wall | Metal | Side of Fume Hood | Cream | W. wall | Good | 0.00 | |
| 77 | E. wall | Wood | Window Sill | White | E. wall | Fair | 5.30 | 25 ft |
| 78 | W. wall | Wood | Vertical Window | White | W. wall | Good | 0.00 | |
| 79 | W. wall | Sheetrock | Wall | White | W. wall | Fair | 0.00 | |
| 80 | W. wall | Metal | Under Sink | Black | W. wall | Good | 0.00 | |
| 81 | W. wall | Plaster | Wall | White | W. wall | Poor | 0.28 | |
| 82 | W. wall | Plaster | Wall | White | W. wall | Good | 0.00 | |
| 83 | W. wall | Sheetrock | Column | White | W. wall | Good | 0.00 | |

| | | | | | | | | |
|-----|---------|----------------|-----------------------|-------|---------|------|------|--|
| 84 | W. wall | Plaster | Wall | White | W. wall | Good | 0.00 | |
| 85 | W. wall | Metal | Power Strip | Tan | W. wall | Good | 0.14 | |
| 86 | D-20 | Metal | Transformer | Green | D-20 | Good | 0.12 | |
| 87 | D-20 | Plaster | E Wall | White | D-20 | Good | 0.23 | |
| 88 | D-20 | Plaster | N Wall | White | D-20 | Good | 0.00 | |
| 89 | D-20 | Metal | Breaker Box | Grey | D-20 | Good | 0.00 | |
| 90 | D-20 | Wood | Panel Behind Box | Grey | D-20 | Good | 0.00 | |
| 91 | D-20 | Metal | Pipe | Red | D-20 | Good | 0.03 | |
| 92 | D-20 | Porcelain | Sink | White | D-20 | Good | 0.00 | |
| 93 | D-20 | Metal | Ceiling Light Fixture | White | D-20 | Good | 0.00 | |
| 94 | D-20 | Concrete Block | Wall | Black | D-20 | Good | 0.02 | |
| 95 | D-20 | Concrete | Floor | Grey | D-20 | Good | 0.00 | |
| 96 | | | | | | | | |
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APPENDIX E

Inspector's Credentials



South Dakota
Department of Environment & Natural Resources

ASBESTOS CERTIFICATION

This is to certify that

JASON BIGGINS

has successfully completed the appropriate training in accordance with
ARSD 74:31 and is certified in South Dakota as an :

JB Inspector

JB Management Planner

JB Abatement Designer

JB Contractor/Supervisor

 Worker

Expires:

Expires:

Expires:

Expires:

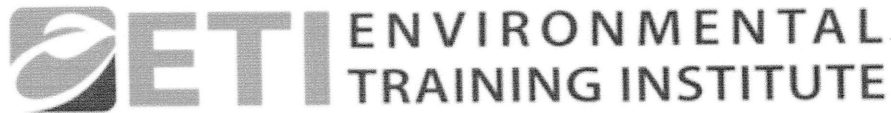
Expires:

1/22/2020

10/31/2019

1/17/2020

Certificate No. 7953



UND Environmental Training Institute
4201 James Ray Drive
Grand Forks, ND 58202
(701) 757-1676

Hereby certifies that

Jason Biggins

Gary Snow & Associates
118 N Garfield
Pierre, SD 57501

Has attended and successfully completed the

Lead - Risk Assessor Refresher

In compliance with and accredited by the Environmental Protection Agency (EPA), pursuant to TSCA Sections 402/404 (15 U.S.C. 2682) and approved by the State of Minnesota under 4761.2000 to 4761.2700 and the State of North Dakota under North Dakota Air Pollution Control Rule (NDAC) 33-15-24.

Held on:

11/15/2017

Course Location: Fargo-Expressway
Exam Date: 11/15/2017
Certificate #: LRAR-17-001-0034 34
Expiration Date: 11/15/2018 MN
11/15/2020 EPA

A handwritten signature in black ink, appearing to be 'D. A.', is written over a horizontal line.

TRAINING DIRECTOR
UND ENVIRONMENTAL TRAINING INSTITUTE

END OF REPORT