#### 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/cm$^2$.

#### *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 $ft^2$)
  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. (44 $ft^2$)

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.

# 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) | | |
| 25 | 41B | 41 | Mastic | Yellow | Lab | None Detected | | |
| 23 | 42 | 42 | 12” x 12” VFT Tan Blotchy | Tan | Lab | None Detected | | |
| 24 | 42A | 42 | Mastic | Black | Lab | Positive Stop (Not Analyzed) | | |

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|---|---|---|---|---|---|---|---|---|
| 25 | 42B | 42 | Mastic | Yellow | Lab | None Detected | | |
| 26 | 43 | 43 | Mastic | Black | Mech. Room (Rm D20) | Positive Result | 44 $ft^2$ | No Tile Associated with this mastic |
| 26 | 44 | 44 | Mastic | Black | Mech. Room (Rm D20) | Positive Stop (Not Analyzed) | | |
| 27 | 45 | 45 | Firestop | Red | Mech. Room (Rm D20) | None Detected | | |
| 27 | 46 | 46 | Firestop | Red | Mech. Room (Rm D20) | None Detected | | |
| 28 | 47 | 47 | 12” x 12” VFT Under Carpet-Beige | White/Red | Rm D22 | None Detected | | |
| 29 | 47A | 47 | Mastic | Black | Rm D22 | None Detected | | |
| 30 | 47B | 47 | Mastic | Black | Rm D22 | None Detected | | |
| 28 | 48 | 48 | 12” x 12” VFT Under Carpet-Beige | White/Red | Rm D22 | None Detected | | |
| 29 | 48A | 48 | Mastic | Black | Rm D22 | None Detected | | |
| 30 | 48B | 48 | Mastic | Black | Rm D22 | None Detected | | |
| 28 | 49 | 49 | 12” x 12” VFT Under Carpet-Beige | White/Red | Rm D22 | None Detected | | |
| 29 | 49A | 49 | Mastic | Black | Rm D22 | None Detected | | |
| 30 | 49B | 49 | Mastic | Black | Rm D22 | None Detected | | |
| 18 | 50 | 50 | Epoxy Resin Tops | Black | Rm D25 | None Detected | | |
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# Table 2. Lead-Based Paint/Lead Material Content

**XRF Model: NITON XLp Series Lead Analyzer, serial #24794**

**Lead-Based Paint = ≥ 1 mg/cm$^2$**

| 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 | 50 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 | |

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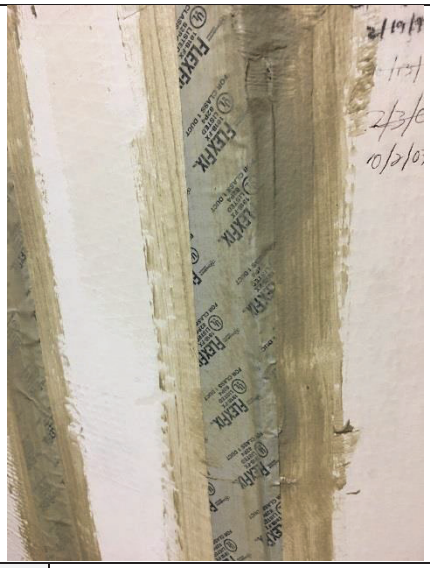
|---|---|---|---|---|---|---|---|---|
| 76 | | Plaster | Wall | W. wall | White | 0.00 | Good | |
| 77 | | Sheetrock | Column | W. wall | White | 0.00 | Good | |
| 78 | | Plaster | Wall | W. wall | White | 0.00 | Good | |
| 79 | | Metal | Power Strip | W. wall | Tan | 0.14 | Good | |
| 80 | | Metal | 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 | |



| | |
|---|---|
| **PHOTO 1** | Gray Mastic – Duct in below grade mechanical room |

| | |
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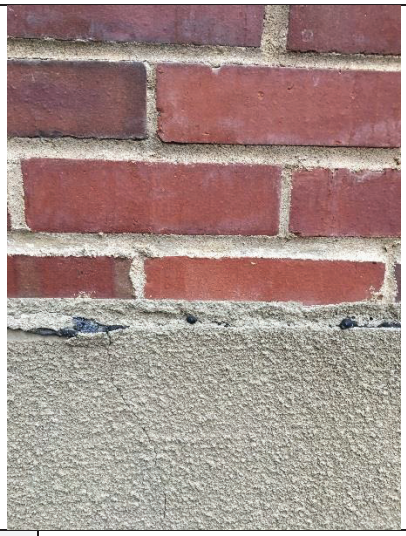
| **PHOTO 2** | Gray Mastic – Duct in below grade mechanical room |



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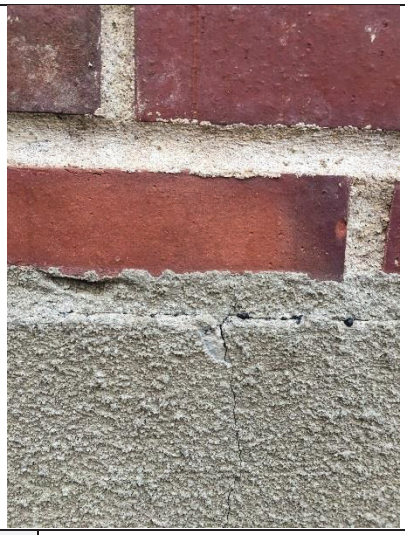
| **PHOTO 3** | EFIS Surfacing – Mech. Room & Entry Area |

| | |
|---|---|
| **PHOTO 4** | EFIS Surfacing – Mech. Room & Entry Area |



| | |
|---|---|
| **PHOTO 5** | EFIS Surfacing – Mech. Room & Entry Area |

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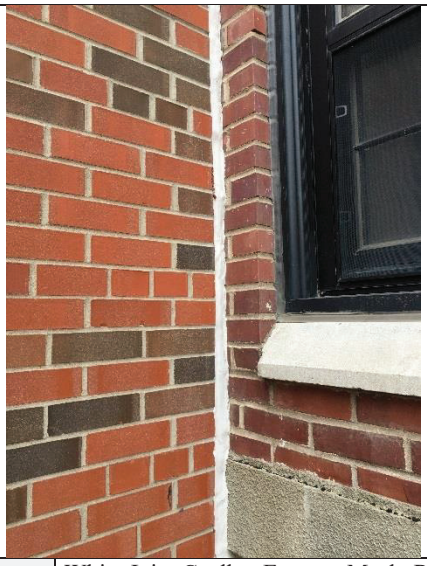
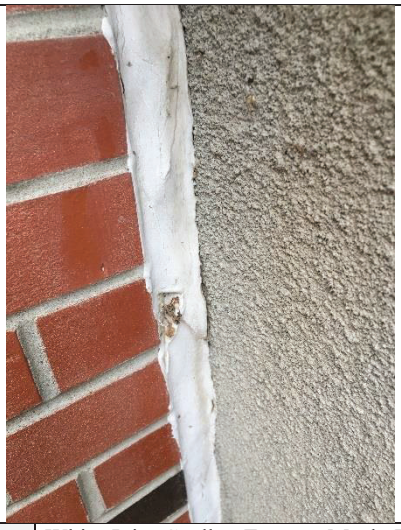
|---|---|
| **PHOTO 6** | Black Tar Under EFIS – Mech. Room Entry |

| | |
|---|---|
| **PHOTO 7** | Black Tar Under EFIS – Mech. Room Entry |



| | |
|---|---|
| **PHOTO 8** | White Joint Caulk – Entry to Mech. Room |



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| **PHOTO 9** | White Joint Caulk – Entry to Mech. Room |

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| **PHOTO 10** | Gray Window Caulk - Exterior |

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| **PHOTO 11** | Gray Window Caulk - Exterior |

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| **PHOTO 12** | Gray Joint Caulk – Horizontal Concrete Pad |

| PHOTO 13 | Gray Joint Caulk – Horizontal Concrete Pad |
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| PHOTO 14 | Gray Joint Caulk - Exterior |
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| PHOTO 15 | Gray Joint Caulk - Exterior |
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| PHOTO 16 | Debris on Tunnel Floor |
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| PHOTO 17 | Debris on Tunnel Floor |
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| PHOTO 18 | 2’ x 2’ Ceiling Tile D-17 |
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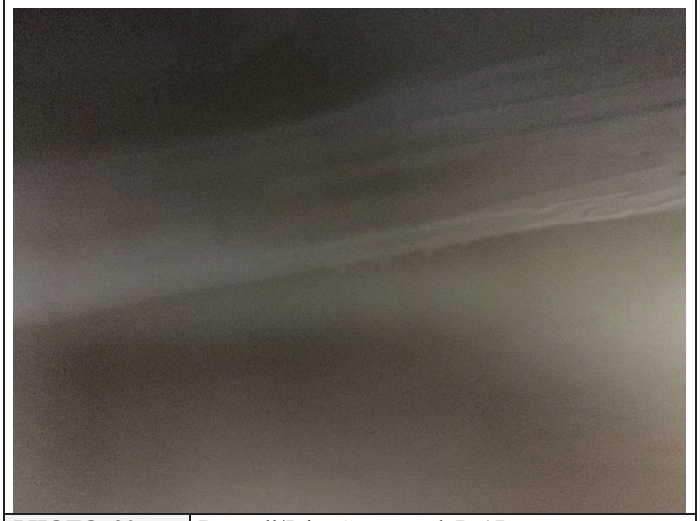
|---|---|
| **PHOTO 19** | 2’ x 2’ Ceiling Tile D-17 |



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|---|---|
| **PHOTO 20** | Drywall/Joint Compound D-17 |

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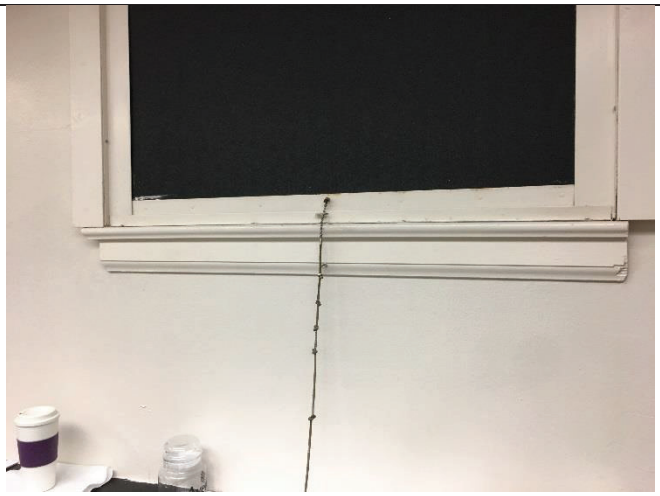
| **PHOTO 21** | Drywall/Joint Compound D-17 |



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| **PHOTO 22** | Black Window Caulk – Windows Throughout |

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|---|---|
| **PHOTO 23** | Black Window Caulk – Windows Throughout |

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| **PHOTO 24** | 2’ x 2’ Ceiling Tile Hallway |

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| **PHOTO 25** | Tan Base Cove Mastic |

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| **PHOTO 26** | Tan Base Cove Mastic |

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| **PHOTO 27** | Brown Carpet Mastic – D 21 |

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| **PHOTO 28** | Brown Carpet Mastic – D 21 |

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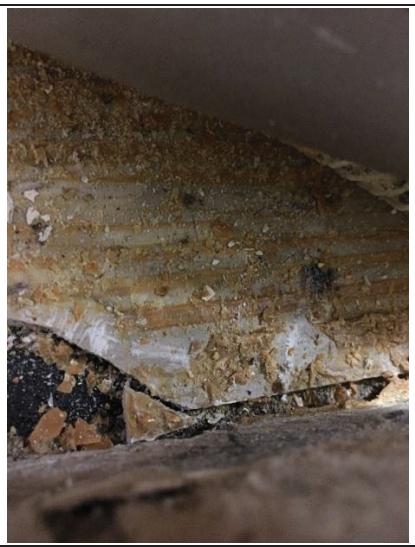
| **PHOTO 29** | Beige VFT Black Mastic (under carpet) – D 21 |



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

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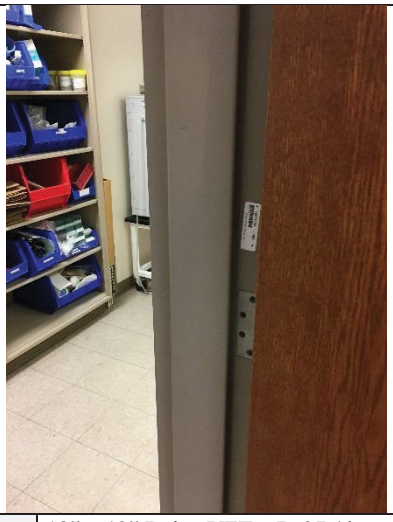
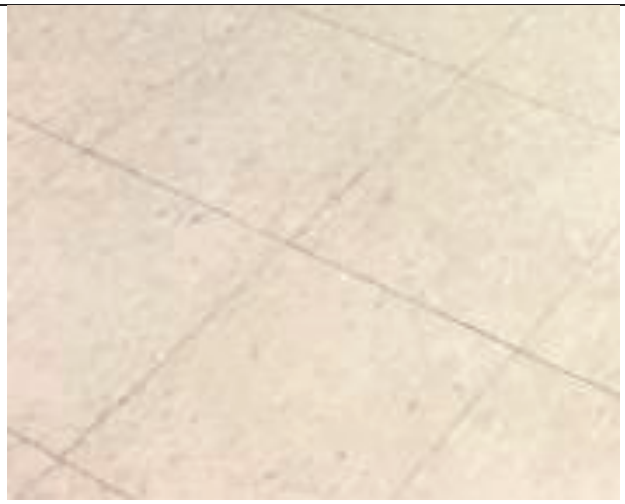
|---|---|
| **PHOTO 31** | Beige VFT Black Mastic (under carpet) – D 21 |



| | |
|---|---|
| **PHOTO 32** | 12” x 12” Beige VFT – D-27 (throughout space) |



| | |
|---|---|
| **PHOTO 33** | 12” x 12” Beige VFT – D-27 (throughout space) |

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|---|---|
| **PHOTO 34** | 12” x 12” Beige VFT – D-27 (throughout space) |

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|---|---|
| **PHOTO 35** | Epoxy Resin Bench Top - Lab |

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| **PHOTO 36** | White Mastic – Lab Base Cabinets |

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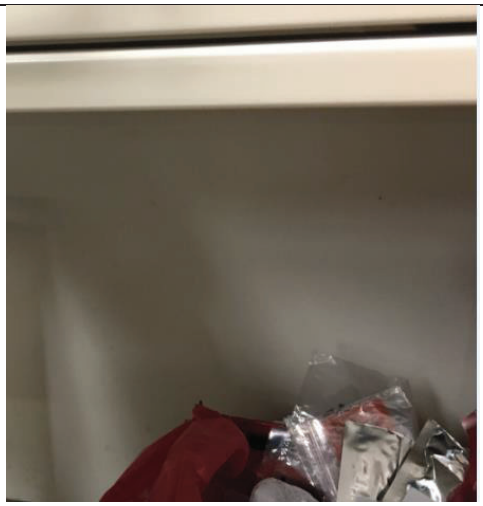
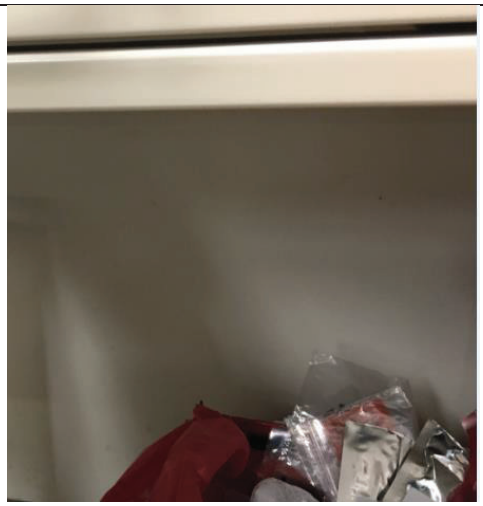
|---|---|
| **PHOTO 37** | White Mastic – Lab Base Cabinets |



| | |
|---|---|
| **PHOTO 38** | Plaster Wall – Lab (Exterior Wall) |



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|---|---|
| **PHOTO 39** | Plaster Wall – Lab (Exterior Wall) |

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|---|---|
| **PHOTO 40** | 12” x 12” VFT Tan Blotchy/Mastic<br>Black Mastic 4% Chrysotile |

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|---|---|
| **PHOTO 41** | 12” x 12” VFT Tan Blotchy/Mastic<br>Black Mastic 4% Chrysotile |

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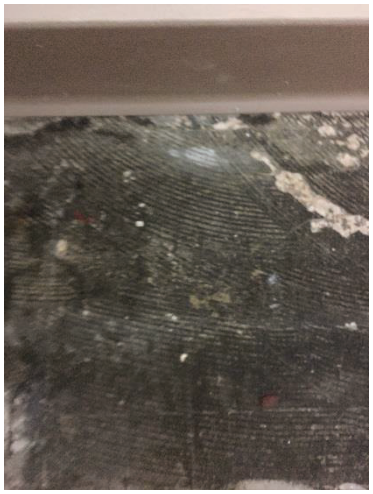
|---|---|
| **PHOTO 42** | 12” x 12” VFT Tan Blotchy/Mastic<br>Black Mastic 4% Chrysotile |



| | |
|---|---|
| **PHOTO 43** | Black Mastic – D-20<br>5% Chrysotile |

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|---|---|
| **PHOTO 44** | Black Mastic – D-20<br>5% Chrysotile |

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| **PHOTO 45** | Firestop – D-20 |

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| **PHOTO 46** | Firestop – D-20 |

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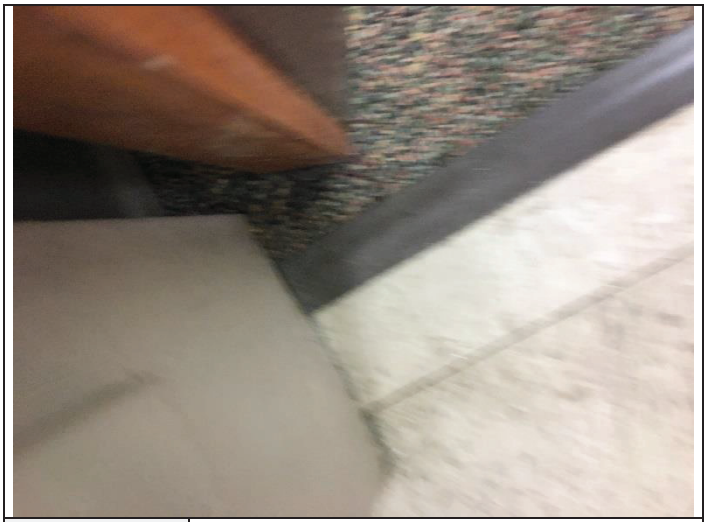
| **PHOTO 47** | 12” x 12” VFT Tan/Black Mastic<br>Under Carpet D-22 |



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|---|---|
| **PHOTO 48** | 12” x 12” VFT Tan/Black Mastic<br>Under Carpet D-22 |


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|---|---|
| **PHOTO 49** | 12” x 12” VFT Tan/Black Mastic Under Carpet D-22 |

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|---|---|
| **PHOTO 50** | Black Epoxy Resin Bench Top – D-25 |

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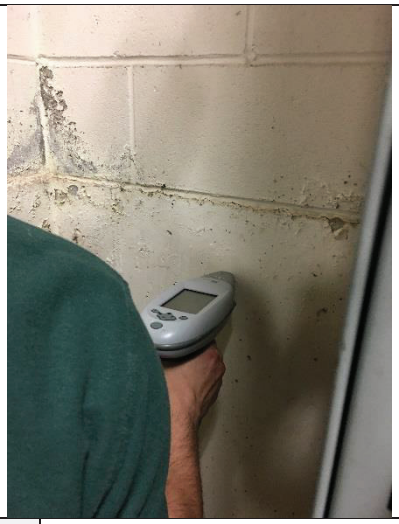
|---|---|
| **PHOTO 1** | Electrical Panel – Below Grade Mechanical Room <1mg/cm$^2$ lead |



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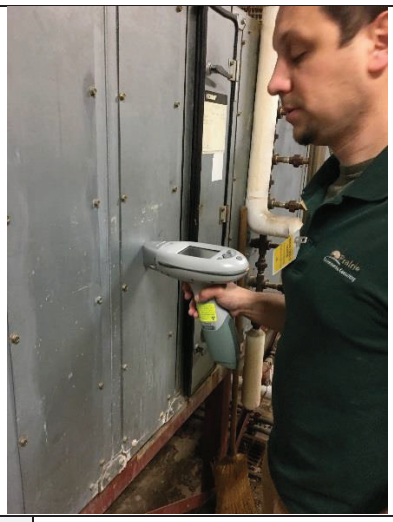
|---|---|
| **PHOTO 2** | White Painted wall - Below Grade Mech. Room <1mg/cm$^2$ lead |

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



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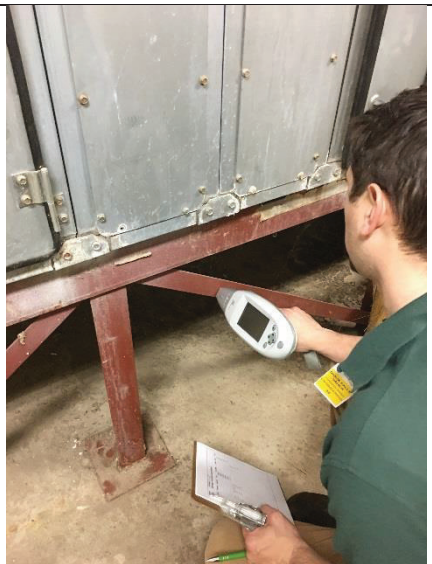
|---|---|
| **PHOTO 4** | Electrical Panel – Below Grade Mechanical Room <1mg/cm$^2$ lead |



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|---|---|
| **PHOTO 5** | Red Painted Frame – Below Grade Mech. Room <1mg/cm$^2$ lead |

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|---|---|
| **PHOTO 6** | Red Painted Block Wall – Below Grade Mech. Rm <1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 7** | Silver Painted Tank – Below Grade Mech. Room <1mg/cm$^2$ lead |

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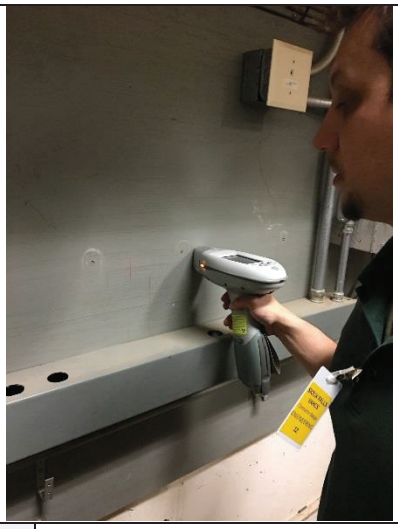
|---|---|
| **PHOTO 8** | Red Painted Mixing Chamber – Below Grade Mech. Room <1mg/cm$^2$ lead |



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|---|---|
| **PHOTO 9** | Gray Painted Wood Panel – Below Grade Mechanical Room <1mg/cm$^2$ lead |

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|---|---|
| **PHOTO 10** | Gray Painted Casing – Below Grade Mechanical Room <1mg/cm$^2$ lead |

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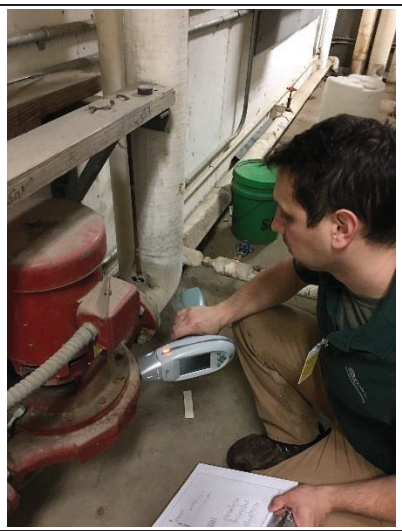
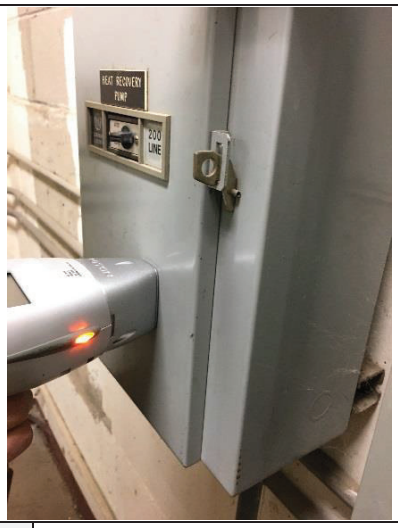
|---|---|
| **PHOTO 11** | Red Painted Mixing Chamber – Below Grade Mech. Room <1mg/cm$^2$ lead |



| | |
|---|---|
| **PHOTO 12** | Red Painted Valve – Below Grade Mech. Room <1mg/cm$^2$ lead |




| | |
|---|---|
| **PHOTO 13** | Gray Breaker Box – Below Grade Mech. Room <1mg/cm$^2$ lead |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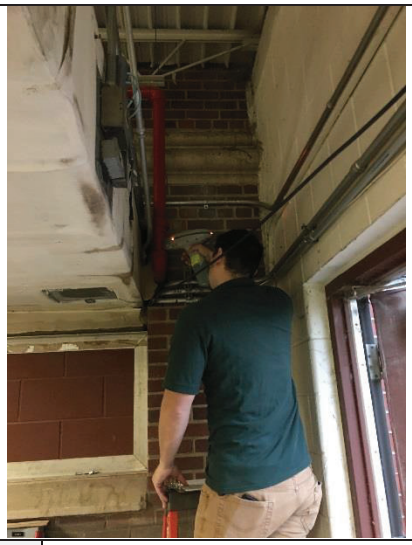
|---|---|
| **PHOTO 14** | Gray Breaker Box – Below Grade Mech. Room <1mg/cm$^2$ lead |



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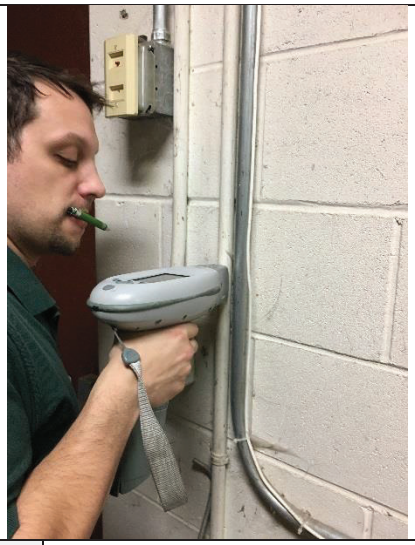
|---|---|
| **PHOTO 15** | Red Painted Pipe – Below Grade Mech. Room <1mg/cm$^2$ lead |



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|---|---|
| **PHOTO 16** | White Painted Conduit – Below Grade Mech. Room <1mg/cm$^2$ lead |

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|---|---|
| **PHOTO 17** | White Painted Pipe – Below Grade Mech. Room <1mg/cm$^2$ lead |

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

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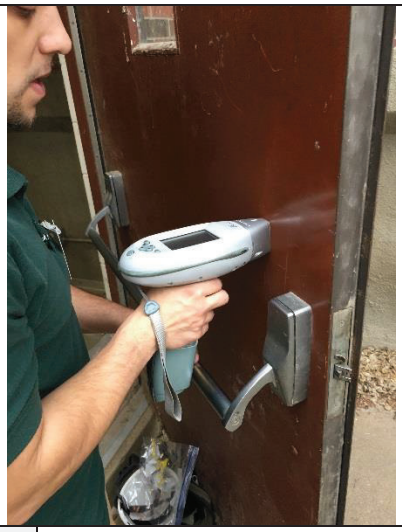
|---|---|
| **PHOTO 19** | Black Window Frame - Exterior<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 20** | Black Window - Exterior<br><1mg/cm$^2$ lead |



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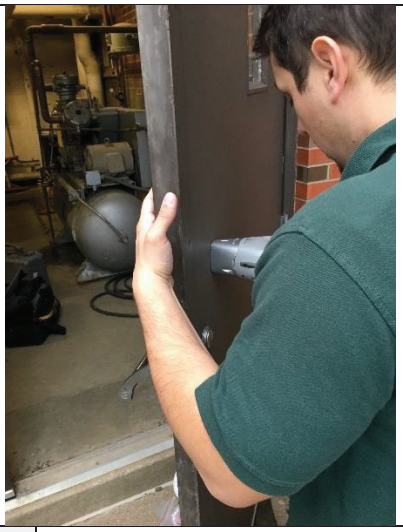
|---|---|
| **PHOTO 21** | Red Mech. Room Door (Inside)<br><1mg/cm$^2$ lead |



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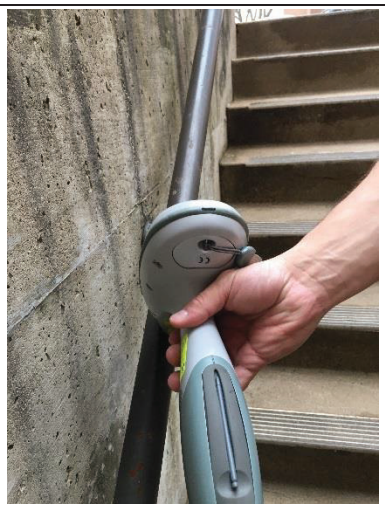
|---|---|
| **PHOTO 22** | Black Mech. Room Door (Outside)<br><1mg/cm$^2$ lead |


| | |
|---|---|
| **PHOTO 23** | Brown Door (Outside)<br><1mg/cm$^2$ lead |



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|---|---|
| **PHOTO 24** | Brown Hand Railing-Stairs to Mech. Room<br>1.7 mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 25** | Red Pipe - Exterior<br><1mg/cm2 lead |

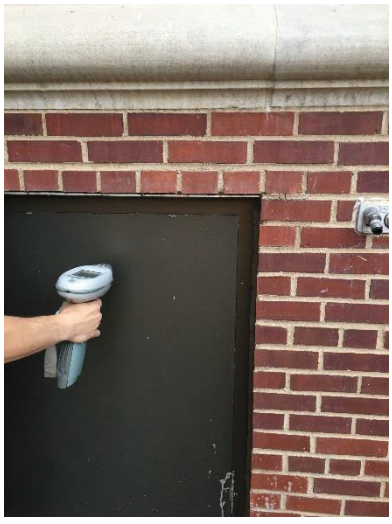
| | |
|---|---|
| **PHOTO 26** | Black Flashing - Exterior<br><1mg/cm2 lead |


| | |
|---|---|
| **PHOTO 27** | Red Ventilation Duct - Exterior<br><1mg/cm$^2$ lead |

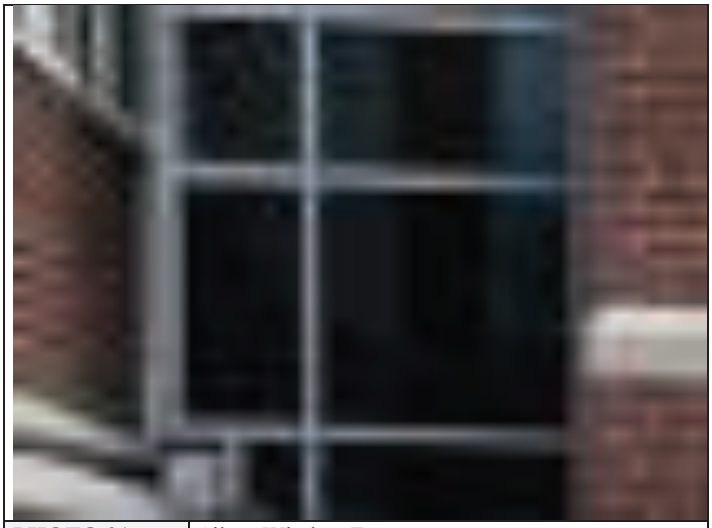
NO PHOTO

| | |
|---|---|
| **PHOTO 28** | Brown Metal Panel – Exterior<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 29** | Red Decorative Grate on vertical wall - exterior<br>10.2 mg/cm$^2$ lead |



| | |
|---|---|
| **PHOTO 30** | Brown Door - Exterior<br><1mg/cm$^2$ lead |



| | |
|---|---|
| **PHOTO 31** | Silver Window Frame<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 32** | White Top Plate – Exterior Window<br>15 mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 33** | Black Pipe – Tunnel<br><1mg/cm$^2$ lead |

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|---|---|
| **PHOTO 34** | Black Pipe – Tunnel<br><1mg/cm$^2$ lead |

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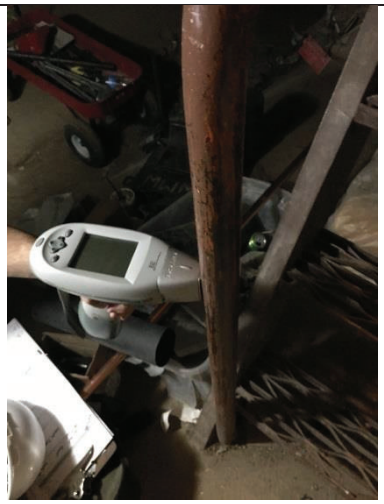
|---|---|
| **PHOTO 35** | Black Pipe – Tunnel<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 36** | Black Pipe – Tunnel<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 37** | Black Pipe – Tunnel<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 38** | Black Pipe – Tunnel<br><1mg/cm$^2$ lead |



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|---|---|
| **PHOTO 39** | Brown Hand Railing-Stairs to Tunnel<br>3.8 mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 40** | Brown Stairs to Tunnel<br>2.9 mg/cm$^2$ lead |

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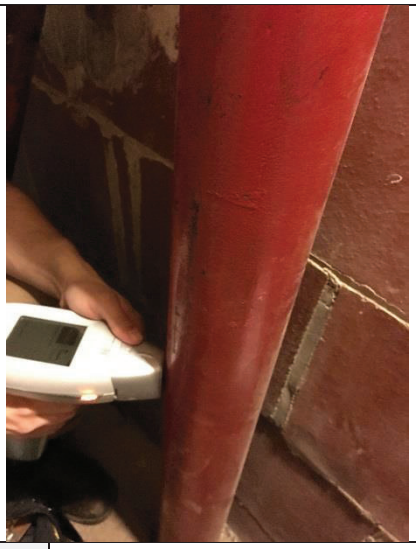
|---|---|
| **PHOTO 41** | Gray ladder in Tunnel<br>3.1 mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 42** | Silver Valve - Tunnel<br><1mg/cm2 lead |

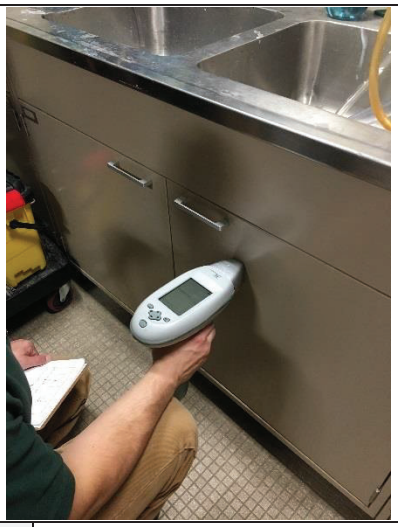
| | |
|---|---|
| **PHOTO 43** | Wall in Hallway Tower 3<br><1mg/cm2 lead |



| | |
|---|---|
| **PHOTO 44** | Wall in Rm.360 East Pipechase Tower 3<br><1mg/cm2 lead |

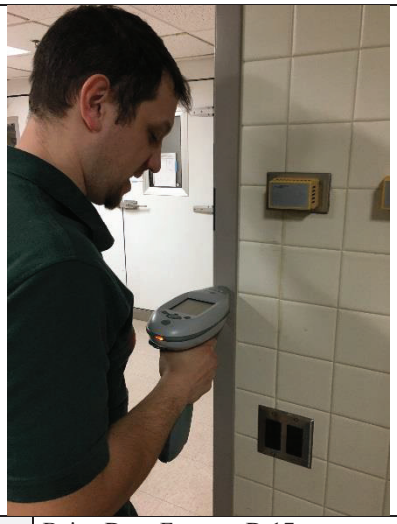
| | |
|---|---|
| **PHOTO 45** | Metal Door Frame to East Stairwell Tower 3<br><1mg/cm$^2$ lead |


| | |
|---|---|
| **PHOTO 46** | Cream Ceramic Tile – D-17<br><1mg/cm$^2$ lead |



| | |
|---|---|
| **PHOTO 47** | Beige Base Cabinet – D-17<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 48** | Beige Upper Cabinet – D-17<br><1mg/cm$^2$ lead |



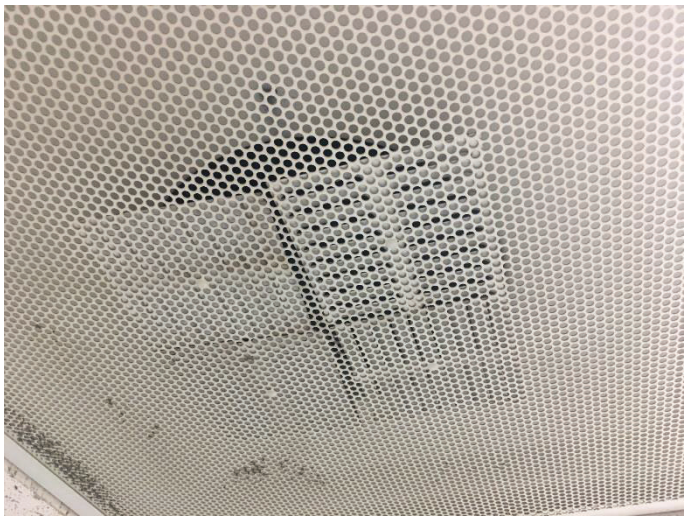
| | |
|---|---|
| **PHOTO 49** | Beige Door Frame – D-17<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 50** | Beige Ceramic Tile Floor – D-17<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 51** | Beige Base Cabinet – D-17<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 52** | Black Pipe D-17 Hallway<br><1mg/cm$^2$ lead |

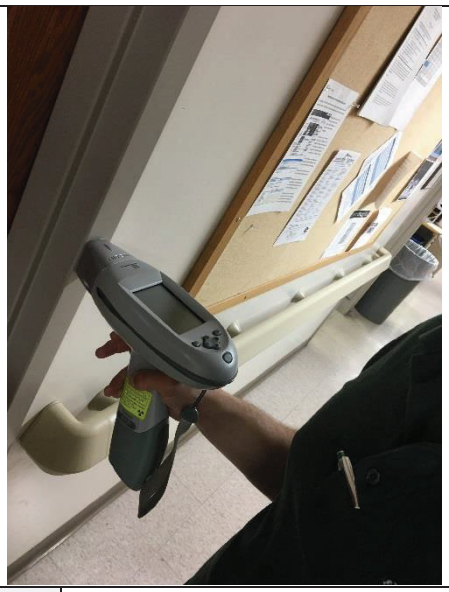

| | |
|---|---|
| **PHOTO 53** | White Painted Wall – Hallway by D-17<br><1mg/cm$^2$ lead |



| | |
|---|---|
| **PHOTO 54** | Diffuser Grate – Hallway by D-17<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 55** | Ceiling Grid Hallway by D-17<br><1mg/cm$^2$ lead |


| | |
|---|---|
| **PHOTO 56** | Beige Door Frame D-18<br><1mg/cm$^2$ lead |



| | |
|---|---|
| **PHOTO 57** | Beige Door Frame D-22<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 58** | Black Pipe - Hallway<br><1mg/cm2 lead |


| | |
|---|---|
| **PHOTO 59** | Cream Painted Sheetrock Wall – Room D-21<br><1mg/cm$^2$ lead |

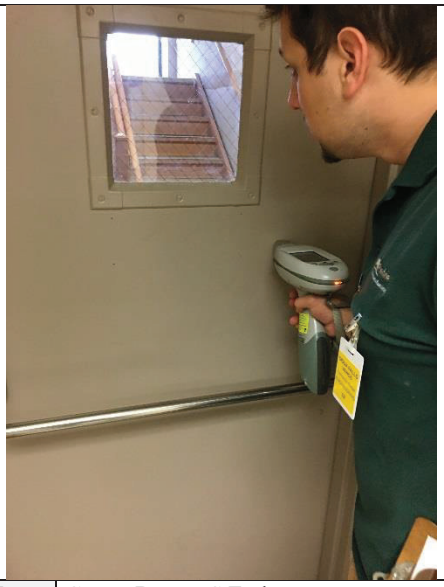

| | |
|---|---|
| **PHOTO 60** | Cream Painted Sheetrock Wall - Hallway<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 61** | Beige Door Frame Room D-27<br><1mg/cm$^2$ lead |

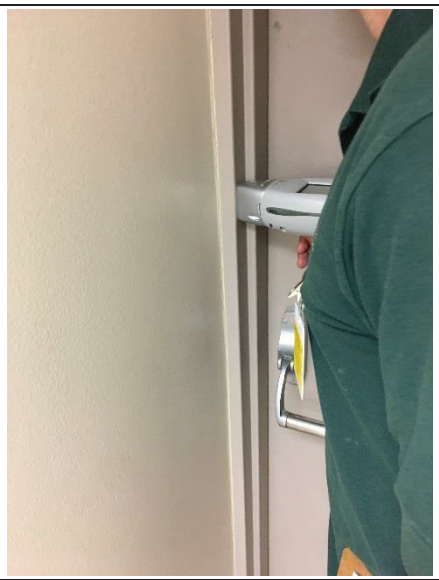
| | |
|---|---|
| **PHOTO 62** | Beige Cabinet Room D-27<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 63** | Beige Cabinet with Glass Room D-27<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 64** | File Cabinet – S End<br><1mg/cm$^2$ lead |



| | |
|---|---|
| **PHOTO 65** | Cream Door – S End<br><1mg/cm$^2$ lead |



| | |
|---|---|
| **PHOTO 66** | Cream Door Frame – S End<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 67** | Beige Metal Cabinet – S End<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 68** | White Painted Sheetrock – West Wall<br><1mg/cm$^2$ lead |


| | |
|---|---|
| **PHOTO 69** | Cream Fume Hood – West Wall<br><1mg/cm$^2$ lead |

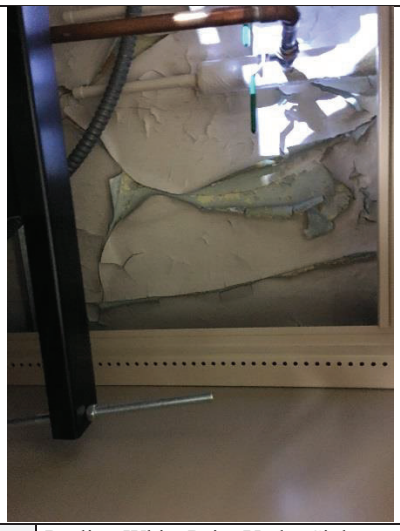

| | |
|---|---|
| **PHOTO 70** | Cream Fume Hood – West Wall<br><1mg/cm$^2$ lead |

| PHOTO 71 | Window Sill and Trim Below Window<br>5.3 mg/cm$^2$ lead |
|---|---|

| PHOTO 72 | Non-Decorative Window Trim<br><1mg/cm$^2$ lead |
|---|---|

| PHOTO 73 | White Painted Sheetrock Wall - Lab<br><1mg/cm$^2$ lead |
|---|---|

| PHOTO 74 | Black Metal surrounding sink basin<br><1mg/cm$^2$ lead |
|---|---|

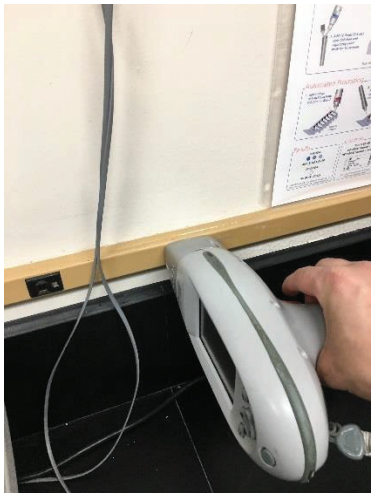


| PHOTO 75 | Peeling White Paint Under Sink<br><1mg/cm$^2$ lead |
|---|---|

| PHOTO 76 | White Paint on Plaster<br><1mg/cm$^2$ lead |
|---|---|

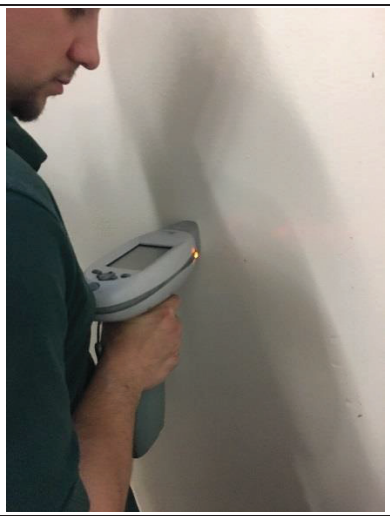
| | |
|---|---|
| **PHOTO 77** | White Paint on Sheetrock - Lab<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 78** | Plaster on column - Lab<br><1mg/cm$^2$ lead |



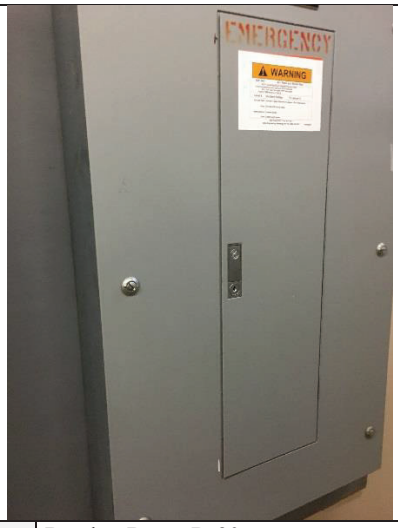
| | |
|---|---|
| **PHOTO 79** | Metal Power Strip - Lab<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 80** | Transformer Box – D -20<br><1mg/cm$^2$ lead |



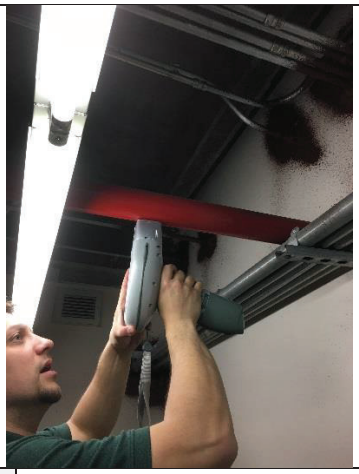
| | |
|---|---|
| **PHOTO 81** | East Wall – D-20<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 82** | North Wall – D-20<br><1mg/cm$^2$ lead |




| | |
|---|---|
| **PHOTO 83** | Breaker Box – D-20<br><1mg/cm$^2$ lead |

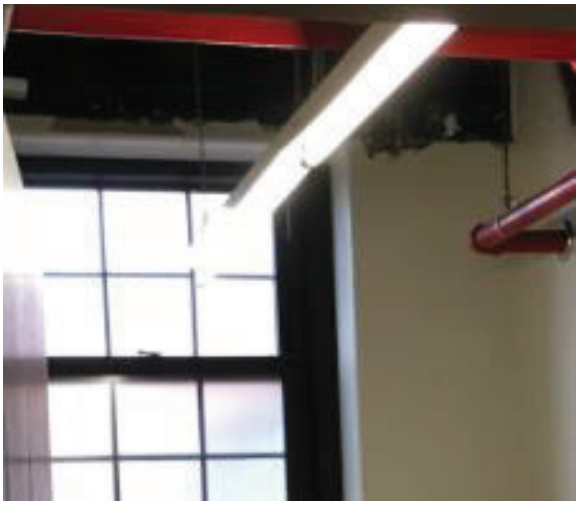
| | |
|---|---|
| **PHOTO 84** | Panel behind Breaker Box – D-20<br><1mg/cm$^2$ lead |



| | |
|---|---|
| **PHOTO 85** | Red Metal Pipe – D-20<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 86** | Porcelain Sink – Lab<br><1mg/cm$^2$ lead |


| | |
|---|---|
| **PHOTO 87** | Ceiling Light Fixture<br><1mg/cm$^2$ lead |



| | |
|---|---|
| **PHOTO 88** | Black Concrete Wall Above Window – D-20<br><1mg/cm$^2$ lead |

| | |
|---|---|
| **PHOTO 89** | Gray Concrete Floor – D-20<br><1mg/cm$^2$ lead |

# EMSL Analytical, Inc.

**200 Route 130 North Cinnaminson, NJ 08077**
Tel/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com / cinnasblab@EMSL.com


| | |
|---|---|
| **EMSL Order:** | 041910574 |
| **Customer ID:** | AMI50 |
| **Customer PO:** | 18-00338 |
| **Project ID:** | |

| | | | |
|---|---|---|---|
| **Attention:** | Bill Crowe | **Phone:** | (402) 397-5001 |
| | AMI Group, Inc. | **Fax:** | (402) 397-3313 |
| | 8802 South 135th Street | **Received Date:** | 04/19/2019 9:20 AM |
| | Suite 100 | **Analysis Date:** | 04/24/2019 - 05/01/2019 |
| | Omaha, NE 68138-6511 | **Collected Date:** | 04/17/2019 |
| **Project:** | 18-00338 / SFVA Bldg 5 / Sioux Falls, SD | | |

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

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

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

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

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| 41-Mastic<br>*041910574-0041A* | Black Mastic | | | | Positive Stop (Not Analyzed) |
| 41-Mastic 2<br>*041910574-0041B* | Yellow Mastic | Yellow<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 42-Tile<br>*041910574-0042* | Tan Blotchy | Tan<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 42-Mastic<br>*041910574-0042A* | Black Mastic | | | | Positive Stop (Not Analyzed) |
| 42-Mastic 2<br>*041910574-0042B* | Yellow Mastic | Yellow<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 43<br>*041910574-0043* | Black Mastic | Black<br>Fibrous<br>Homogeneous | | 95% Non-fibrous (Other) | 5% Chrysotile |
| 44<br>*041910574-0044* | Black Mastic | | | | Positive Stop (Not Analyzed) |
| 45<br>*041910574-0045* | Firestop | Red<br>Fibrous<br>Homogeneous | 10% Glass | 90% Non-fibrous (Other) | None Detected |
| 46<br>*041910574-0046* | Firestop | Red<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 47-Tile<br>*041910574-0047* | Tile under Carpet | White/Red<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 47-Mastic<br>*041910574-0047A* | Mastic | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 47-Mastic 2<br>*041910574-0047B* | Mastic | Yellow<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 48-Tile<br>*041910574-0048* | Tile under Carpet | White/Red<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 48-Mastic<br>*041910574-0048A* | Mastic | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 48-Mastic 2<br>*041910574-0048B* | Mastic | Yellow<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 49-Tile<br>*041910574-0049* | Tile under Carpet | White/Red<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 49-Mastic<br>*041910574-0049A* | Mastic | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 49-Mastic 2<br>*041910574-0049B* | Mastic | Yellow<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 50<br>*041910574-0050* | Epoxy Resin Tops | Black<br>Non-Fibrous<br>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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| **EMSL Order:** | 041910574 |
| **Customer ID:** | AMI50 |
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| **Project ID:** | |

Analyst(s)

*Alexis Kum (35)*
*Edward Zambrano (12)*
*Seri Smith (23)*

Benjamin Ellis, Laboratory Manager
or Other Approved Signatory



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 | | | | | Lead Paint ≥ 1.0 mg/cm² | | | |
| XRF # | Unit # | Substrate | Component | Color | Test Location | Condition | Results | Notes |
| 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 | |

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|---|---|---|---|---|---|---|---|---|
| 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 $ft^2$ |
| 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 $ft^2$ |
| 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 | |

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|---|---|---|---|---|---|---|---|---|
| 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 | 50 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 | |

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|---|---|---|---|---|---|---|---|---|
| 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 | |
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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 :

| | | |
|---|---|---|
| ✓ Inspector | Expires: | 1/22/2020 |
| ✓ Management Planner | Expires: | 10/31/2019 |
| ___ Abatement Designer | Expires: | |
| ✓ Contractor/Supervisor | Expires: | 1/17/2020 |
| ___ Worker | Expires: | |

Certificate No. 7953

ETI ENVIRONMENTAL TRAINING INSTITUTE

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<br>11/15/2020 EPA |

TRAINING DIRECTOR
UND ENVIRONMENTAL TRAINING INSTITUTE