

HAZARDOUS MATERIALS SURVEY



PRINCE GEORGES COUNTY HOSPITAL

3001 HOSPITAL DRIVE
CHEVERLY, MARYLAND 20785

ECS PROJECT NO. 47:10416-B

FOR: UMMS

FEBRUARY 26, 2021





February 26, 2021

Ms. Stephanie Lachell
UMMS
Linthicum Heights, Maryland 21090
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ECS Project No. 47:10416-B

Reference: Hazardous Materials Survey, Prince Georges County Hospital, 3001 Hospital Drive, Cheverly, Maryland

Dear Ms. Lachell:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide UMMS with the results of the above referenced Hazardous Materials Survey performed at Prince Georges County Hospital located at 3001 Hospital Drive in Cheverly, Maryland. This report summarizes our observations, analytical results, findings, and recommendations related to the work performed. The work described in this report was performed by ECS in general accordance with the Scope of Services described in ECS Proposal Number 47:15921-EP and the terms and conditions of the agreement authorizing those services.

ECS appreciates this opportunity to provide UMMS with our services. If we can be of further assistance to you, please do not hesitate to contact us.

Sincerely,

ECS Mid-Atlantic, LLC

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EXECUTIVE SUMMARY

The subject property is improved with a multi-story hospital building located at 3001 Hospital Drive in Cheverly, Maryland. The original building was built in 1950. The building has a varied construction history and has had multiple renovations and additions over the years. Mr. Mike Hall with property maintenance who escorted ECS, provided the following dates of original construction for various wings/additions:

- H&J Wings - 1950
- K Wing - 1954
- E Wing - 1968
- ACF Wing - 1972-1974
- Pavilion- 1994

Furthermore, based on aerial photography, ECS believes that the Spellman building (a stand-alone building connected by pedestrian bridge), the Southwest Addition, and the Power Plant (a stand-alone building) were constructed between 1965 and 1977.

Interior finishes in the multi-story building generally consists of vinyl, ceramic, and terrazzo floor systems, drywall and plaster walls, and dropped ceiling tile, plaster, or drywall ceilings. The exteriors consist of brick façade with areas of concrete finishes. The structures are currently occupied and are proposed to be vacated in 2021.

ECS reviewed historic asbestos-containing material documents and reports which were on file at the hospital. The reports indicate that small scale abatement (<2,500 SF) had taken place at various locations of the hospital. ECS did not observe any reports which indicated a "full" abatement of any wings of the building. ECS interviewed Ms. Kifri Edwards and Mr. Mike Hall with UMMS. Based on the report review and the onsite interviews, ECS understands that the Plenum Space in the E-Wing, J-wing, K-Wing, ACF wing, SW Addition, and Pavilion are suspected or known to be contaminated with asbestos dust from deteriorating pipe elbows. ECS also understands that the bottom layer of flooring and mastic throughout the building is assumed or known to be asbestos-containing. In addition to interviews, ECS also reviewed three (3) prior ECS asbestos-containing materials surveys.

The purpose of the Hazardous Materials Survey was to identify asbestos-containing materials (ACMs), lead based paints (LBP), universal waste, or mercury containing components which may require special handling and/or disposal if removed during construction activities. The identification of ACMs, LBPs, universal wastes, or mercury may require trained labor, regulated work practices, and special disposal.

The purpose of this assessment was to obtain information regarding hazardous materials for due diligence purposes. ECS is unaware of future activities in regards to renovation or demolition.

Asbestos

Based on the laboratory analysis of the bulk samples collected during the survey, the following materials were reported to contain asbestos:

- Spellman Building
 - Gray Sink Undercoating
- E Wing
 - Black Duct Mastic
 - Gray Window Glazing
 - Black Thermal System Insulation Hanger Mastic
 - Off-White Cemented Pipe Elbows
 - Gray Domestic Water Mudded Elbows
 - Air-o-Cell Thermal System Insulation
- H&J Wings
 - White Mastic on Foil Over Cloth Thermal System Insulation
 - Gray Duct Pin Mastic
- K Wing
 - Gray Sink Undercoat
 - Gray Duct Pin Mastic
 - Tan Joint Compound
 - Gray Window Glazing (Trace)
 - Brown Duct Covering
- ACF Wing
 - Black Water Proofing

Furthermore, previous reports for the subject property identified the following ACM':

- Residual debris from pipe elbows in plenum space
- Ceiling Tile contaminated with pipe elbow debris
- Various Floor Tiles and Mastics (Throughout)
- Pipe insulation behind solid walls/above solid ceilings

Lead-Based Paint

The lead-based paint survey was performed by a MDE licensed Lead Inspector. Painted and/or glazed surfaces were assessed for lead content using a Direct-Read X-Ray Fluorescence (XRF) Spectrometer. Lead-Based Paint/Glaze was identified on the following building materials/components:

- E Wing
 - White Ceramic Wall Tile in E500
 - White Speckled 4"x4" White Speckled Wall Tile in E500
 - Sage 4"x4" Ceramic Wall in E900 Shower
 - Red Metal Fire Exit Door in E900
 - Tan 9"x9" Ceramic Wall Tile in E900
- H Wing
 - White Metal Wall Panel in H400
 - White Wood Window Frame in H200 OBGYN and H400 Cardiac
- K Wing
 - White 12"x12" Ceramic Wall Tile in K400
 - Cream 4"x4" Ceramic Wall Tile in K305 Bathroom
 - Tan Marble Pattern 12"x18" Ceramic Wall Tile in K300 Shower

- Yellow 12"x12" Ceramic Wall Tile in K200 Elevator
- Laboratory and Common Areas
 - Yellow Concrete Curbing in Basement Mechanical Room
 - Light Olive 9"x9" Ceramic Wall Tile in 1st Floor Histology
 - White 4"x4" Ceramic Wall Tile in Food Prep

Mercury Vapor

ECS did not find levels of mercury vapor in excess of the Agency for Toxic Substances and Disease Registry (ATSDR) standard for mercury vapor of 10 ug/m³. ECS recommends a comprehensive mercury vapor screening be performed once the building becomes unoccupied and fixtures have been removed from the building.

Universal Waste

In addition to survey for ACMs, LBPs, and mercury vapor, ECS surveyed the building for various materials which may require special handling or disposal if removed from the building which is referenced below:

- Lead-acid battery containing components including fire detection system
- Fluorescent bulbs
- Light ballasts
- Equipment in the electrical room
- Pharmaceuticals including chemotherapeutics and other anti-neoplastic agents
- Household cleaning materials
- Sterilization agents
- Tissue stains including Hematoxylin and Eosin
- Cryostat and microtome chemicals
- Histology processing chemicals including fixatives (formalin and Pen Fix), xylene, and Clear Rite
- Waste containers for stains and solvents
- Bouin Solution
 - Note: Bouin Solution contains picric acid, acetic acid, and formaldehyde. Picric acid can pose an explosive hazard if dried out. Formaldehyde is a carcinogen.
- Historic presence of picric acid
- Lubricants for the mechanical rooms
- A holding pool of unknown depth in the basement crawlspace under the Core Laboratory that was previously used for chemical disposal
- Anesthesia agents
- Radionuclides
- Hospital-grade cleaning solutions
- Historic laundry, no longer in use
- Alcohols
- Hydrogen peroxide
- Enzyme cleaner
- System Endo (sterilization for bronchoscopes)
- Hood in the pharmacy used for chemotherapeutics and antineoplastic medications

General Recommendation (for all known/suspect hazardous materials in the buildings)

Due to the fact that this is an active hospital, in addition to COVID concerns, significant portions of the hospital were not surveyed during this assessment. Once the hospital is no longer in active use further assessment is recommended to further evaluate asbestos and other hazardous materials in the facility.

Recommendations regarding the removal and disposal of the ACMs and other hazardous materials identified by ECS can be found in Section 5.0 of this report.

The executive summary is an integral portion of this report, however, ECS recommends the report be read in its entirety.

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1.0 SITE DESCRIPTION

The subject property is improved with a multi-story hospital building located at 3001 Hospital Drive in Cheverly, Maryland. The original building was built in 1950. The building has a varied construction history and has had multiple renovations and additions over the years. Mr. Mike Hall with property maintenance who escorted ECS, provided the following dates of original construction for various wings/additions:

- H&J Wings - 1950
- K Wing - 1954
- E Wing - 1968
- ACF Wing - 1972-1974
- Pavilion- 1994

Furthermore, based on aerial photography, ECS believes that the Spellman building (a stand-alone building connected by pedestrian bridge), the Southwest Addition, and the Power Plant (a stand-alone building) were constructed between 1965 and 1977.

Interior finishes in the multi-story building generally consists of vinyl, ceramic, and terrazzo floor systems, drywall and plaster walls, and dropped ceiling tile, plaster, or drywall ceilings. The exteriors consist of brick façade with areas of concrete finishes. The structures are currently occupied and are proposed to be vacated in 2021.

ECS reviewed historic asbestos-containing material documents and reports which were on file at the hospital. The reports indicate that small scale abatement (<2,500 SF) had taken place at various locations of the hospital. ECS did not observe any reports which indicated a "full" abatement of any wings of the building. ECS interviewed Ms. Kifri Edwards and Mr. Mike Hall with UMMS. Based on the report review and the onsite interviews, ECS understands that the Plenum Space in the E-Wing, J-wing, K-Wing, ACF wing, SW Addition, and Pavilion are suspected or known to be contaminated with asbestos dust from deteriorating pipe elbows. ECS also understands that the bottom layer of flooring and mastic throughout the building is assumed or known to be asbestos-containing.

Previously ECS conducted the following Reports:

- 47:4595-A, dated September 25, 2017 - In response to a previous report conducted by HE Consulting which identified asbestos fibers in detectable concentrations in the kitchen area drop ceiling tile, ECS collected three vacuum samples for presence/absence of asbestos fibers in previously unassessed portion of the kitchen. The TEM analysis of all three samples were reported as no asbestos detected. ECS recommended that the previous area identified in the HE Consulting report be cleaned.
- 47:4595-C, Dated November 2, 2017 - In an effort to document cleaning activities in the plenum space of the kitchen which was previously identified in an HE Consulting report as being contaminated with asbestos fibers, ECS collected three (3) vacuum samples of the cleaned area. Two of the TEM analyses (within the kitchen area, fiberglass ceiling tile) were reported as no asbestos detected. The TEM analyses of the hallway sample (rigid ceiling tile) contained chrysotile asbestos fibers. ECS recommended that the area hallway area previously identified as impacted with asbestos containing dust be cleaned.

- 47:4595-D, dated December 21, 2017 - ECS conducted an asbestos-containing materials (ACMs) survey of the third floor of the K-Wing (K-300), a limited ACM survey of the sixth floor of the E-Wing (E-600), and visual plenum assessments of the second and fifth floors of the K and E Wings (K-200, E-500). Based on the laboratory analysis of the bulk samples collected during the survey, the following materials were reported to contain asbestos:
 - **K-300 Wing**
 - Beige Floor Tile under Green Linoleum w/ Green/Black Marks
 - Second Layer Floor Tile under 12"x12" White Floor Tile w/ Blue/Brown Flecks
 - 12"x12" Grey Floor Tile w/ Red Streaks
 - Tan/Black Mastic associated with 12x12 Rose Mottled Floor Tile
 - **E-600 Wing**
 - 9"x9" Grey Floor Tile w/ Brown Streaks
 - 9"x9" Tan Floor Tile w/ Brown Streaks
 - Grey Floor Tile under 12"x12" Grey Mottled Floor Tile
 - Black Mastic associated with multiple floor tile layers
 - Tan/Black Mastic associated with multiple floor tile layers

In addition, ECS accessed the plenums of the K-200 and E-500 wings in representative areas of the space to visually assess the area for mudded piping elbows. ECS accessed a total of seven (7) areas of the K-200 plenum, and three (3) areas of the E-500 plenum. Accessible pipe fittings were observed to be insulated with plastic and fiberglass coverings. No mudded elbows were observed during our visual assessment.

2.0 PURPOSE

The purpose of the Hazardous Materials Survey was to identify asbestos-containing materials (ACMs), lead based paints (LBP), universal waste, or mercury containing components which may require special handling and/or disposal if removed during construction activities. The identification of ACMs, LBPs, universal wastes, or mercury may require trained labor, regulated work practices, and special disposal.

The purpose of this assessment was to obtain information regarding hazardous materials for due diligence purposes. ECS is unaware of future activities in regards to renovation or demolition.

3.0 METHODOLOGY

ECS performed the authorized Scope of Services in general accordance with our proposal, standard industry practices and methods specified by regulations for the identification of Asbestos-Containing Materials (ACMs) Lead-Based Paints (LBPs), universal wastes, or mercury.

3.1 Asbestos-Containing Materials

The non-invasive/non-destructive asbestos survey was performed by asbestos inspectors who have received EPA accredited training and are licensed by the Maryland Department of the Environment (MDE). Samples of suspect ACMs were collected utilizing hand tools and placed into individual,

labeled plastic bags. Unique bulk suspect ACM samples were submitted to Eurofins CEI Laboratory in Cary, North Carolina for analysis via Polarized Light Microscopy (PLM) in accordance with current EPA-600 methodology. Materials consisting of additional layers were analyzed separately. Eurofins CEI Laboratory is listed as an accredited laboratory by the National Voluntary Laboratory Accreditation Plan (NVLAP) managed by the National Institute of Standards and Technology (NIST) for bulk sample analysis by currently approved EPA methodology by PLM.

During the survey, ECS attempted to identify suspect ACMs in readily accessible areas. However, due to the destructive means required to identify some materials, certain areas were deemed inaccessible (i.e. behind walls or sub grade materials) and were not surveyed for suspect ACMs. Inaccessible areas include, at a minimum: 5200 (Labor and Delivery), E400, K200 (Maternal Care), Operating Room Pavilion, Inpatient Specialty Care (1st Floor), Recovery, Power Plant, Parking Garage, Operating Room, and Laboratory space. Patient rooms were not accessed unless specifically stated in the report. In addition, roofing components and exterior components were not included in this survey. Unidentified suspect ACMs may be located in these and/or other inaccessible areas.

Samples were collected in general accordance with EPA Standard 40 CFR 763 Subpart E, Asbestos Hazard Emergency Response Act (AHERA) and OSHA Standard 29 CFR 1926.1101 Inspection Protocol. Multiple samples of each unique material were submitted. Samples were analyzed using "Positive Stop" methodology. If one sample of a homogeneous material is reported to contain asbestos, the remaining samples of that material are not analyzed. EPA regulations stipulate that if one sample contains asbestos the entire quantity of that material contains asbestos, regardless of additional analysis.

3.2 Lead in Paint and Surface Coatings

The Lead-Based Paint (LBP) survey was performed by a Maryland licensed Risk Assessor using a X-Ray Fluorescence (XRF) Spectrometer to identify lead concentrations in painted and glazed surfaces.

The survey was conducted utilizing the State of Maryland definition of LBP. Under this definition, painted surfaces which contain lead in concentrations equal to or greater than 0.7 milligrams per square centimeter (≥ 0.7 mg/cm²) are classified as coated with LBP. Paints with concentrations of lead detectable by the XRF are considered lead-containing paints. Additionally, fixtures or components that are manufactured with a factory applied glazing (i.e., sinks, toilets, ceramic tiles, etc.) are tested as these factory-applied finishes often contain lead. Activities which disturb lead-containing paints and glazing (while not lead-based paints by the U.S. EPA definition) are regulated by OSHA (29 CFR 1926.62).

Because the current or proposed use of the property is not residential or child-occupied, the scope of the LBP survey was not conducted in accordance with HUD Chapter 7 requirements. This representative survey included taking readings from walls, windows, doors, and miscellaneous components. Walls are listed by letter with wall "A" being the entrance of the subject building, proceeding clockwise to "B, C, D", etc.

Due to the subject building being an occupied hospital and restrictions regarding COVID-19, ECS was not available to access patient room (otherwise specifically stated), 5200 (Labor and Delivery), E400, K200 (Maternal Care), Operating Room Pavilion, Inpatient Specialty Care (1st Floor), Recovery, Power Plant, Parking Garage, Operating Rooms, and Laboratory space. In addition, ECS did not access the roofs or exterior of the structures.

3.3 Universal Waste and Suspect Liquid PCB-Containing Equipment

ECS performed a visual survey of within the buildings for the presence of universal waste materials and suspect liquid PCB-containing equipment. ECS entered the accessible areas to identify universal waste materials including batteries, stored pesticides, mercury-containing equipment and lamps. Additionally, lamp ballasts suspected of containing PCBs and lead-containing equipment were documented if observed.

No sampling or other characterization was performed as part of this scope of service. Additionally, ECS did not access any energized electrical equipment or other equipment/devices which were in use or that may pose a hazard to ECS personnel or building occupants.

Due to the subject building being an occupied hospital and restrictions regarding COVID-19, ECS was not available to access patient room (otherwise specifically stated), 5200 (Labor and Delivery), E400, K200 (Maternal Care), Operating Room Pavilion, Inpatient Specialty Care (1st Floor), Recovery, Power Plant, Parking Garage, Operating Rooms, and Laboratory space. In addition, ECS did not access the roof of the structures.

3.4 Mercury

ECS measured the concentration of mercury vapors in sink traps and floor drains throughout the building utilizing a Jerome brand Mercury Vapor Analyzer (MVA) (Model J405).

The MVA works by pulling ambient air through an intake to a gold film sensor. The MVA only samples air and does not sample specific surfaces. The detection limit for the Jerome J405 MVA is $0.5 \mu\text{g}/\text{m}^3$. For comparison purposes, OSHA permissible exposure limit (PEL) of $100 \mu\text{g}/\text{m}^3$ over an 8-hour time period, the National Institute for Occupational Safety and Health (NIOSH) recommended exposure limit of $50 \mu\text{g}/\text{m}^3$, and the American Conference of Governmental Industrial Hygienist (ACGIH) recommended exposure limit of $25 \mu\text{g}/\text{m}^3$.

ECS measured concentrations of mercury vapor on floors, countertops, sinks, and other surfaces in accessible areas of the building including custodial closets, exam rooms, and laboratories. Due to the hospital being occupied and current COVID-19 conditions, a through survey of the building was not performed.

ECS compared the levels of mercury vapor to the Agency for Toxic Substances and Disease Registry (ATSDR) standard for mercury vapor of $10 \text{ug}/\text{m}^3$.

Due to the subject building being an occupied hospital and restrictions regarding COVID-19, ECS was not available to access patient rooms (otherwise specifically stated), 5200 (Labor and Delivery), E400, K200 (Maternal Care), Operating Room Pavilion, Inpatient Specialty Care (1st Floor), Recovery, Power Plant, Parking Garage, Operating Room, and Laboratory. In addition, ECS did not access the roofs of the structures.

4.0 RESULTS

The following is a summary of laboratory results, findings and observations.

4.1 Asbestos-Containing Materials

An Asbestos-Containing Material (ACM) is defined as any material containing more than one percent (>1%) asbestos as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, PLM. Materials are categorized by the U.S. EPA in the following categories:

- Friable ACMs are defined as any ACM that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. Non-friable ACMs are defined as any ACM that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- Category I non-friable ACM are listed as following: packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one percent (>1%) asbestos.
- Category II non-friable ACM are listed as any material, excluding Category I non-friable ACM, containing more than one percent (>1%) asbestos.

Regulated Asbestos Containing Materials (RACM) are friable ACM or non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading or has crumbled, been pulverized, or reduced to powder in the course of renovation and/or demolition operations.

Eurofins CEI Laboratory submitted a signed final laboratory reports to ECS on November 9, 2020. 15 of the bulk samples submitted for analysis were reported to contain asbestos in detectable concentrations. These materials are summarized below. A complete list of the sampled materials submitted for analysis and sample locations are located in the Appendix of this report. Additional details regarding the overall locations of the materials identified as asbestos-containing are provided further in the report. Photographs of collected samples reported as asbestos-containing are also located in the Appendix of this report.

A trace amount of asbestos ($\leq 1\%$) was detected in the grey window glazing sample analyzed by the laboratory. Although materials that contain trace amounts of asbestos are not subject to U.S. EPA or Maryland regulations for the handling and disposal of asbestos, OSHA still regulates any work which will disturb materials identified with trace amounts of asbestos (reference the November 24, 2003 OSHA Interpretation document - Compliance Requirements For Renovation Work Involving Materials Containing Less Than 1% Asbestos). Therefore, any Contractors disturbing these materials will need to comply with components of 29 CFR 1926.1101, as detailed in the 2003 OSHA Interpretation document.

In total, 218 bulk samples from 93 homogeneous areas were submitted to the laboratory of which 361 layers were analyzed.

Summary of Asbestos-Containing Materials Identified

Location	Material Description	Analytical Result	Category
Spellman Building			
1st Floor	21- Gray Sink Undercoat	Chrysotile 8%	Category II Non-Friable
E Wing			
Room 928	25- Black Duct Mastic	Chrysotile 3%	Category II Non-Friable
Room 928	29- Gray Window Glaze	Chrysotile 2%	Category II Non-Friable
Room 911	30- Black Thermal System Insulation Hanger Mastic	Chrysotile 3%	Category II Non-Friable
Room 300 near Radiology	31- Off-White Cemented Pipe Elbow	Amosite 2%	Friable
Sub Basement	50-Gray Domestic Water Mudded Elbow	Amosite <1% to 3%* Chrysotile 2%	Friable
Old Electric Shop	51- Gray Air-o-Cell Thermal System Insulation	Chrysotile 55%	Friable
E-606	9"x9" Grey Floor Tile w/ Brown Streaks**	3% Chrysotile	Category I Non-Friable
E-606	Black Mastic associated with 9"x9" Grey Floor Tile w/ Brown Streaks**	5% Chrysotile	Category II Non-Friable
E-600 Corridor	Tan/Black Mastic associated with 9"x9" White Floor Tile w/ Grey Flecks**	3% Chrysotile	Category II Non-Friable
E-600 Corridor	9"x9" Tan Floor Tile w/ Brown Streaks**	3% Chrysotile	Category I Non-Friable
E-600 Corridor	Tan/Black Mastic associated with 9"x9" Tan Floor Tile w/ Brown Streaks**	3% Chrysotile	Category II Non-Friable
E-605	Tan/Black Mastic associated with 12"x12" Grey Floor Tile w/ Brown/ Turquoise Streaks**	3% Chrysotile	Category II Non-Friable

Location	Material Description	Analytical Result	Category
E-607	Grey Floor Tile under 12"x12" Grey Mottled Floor Tile**	3% Chrysotile	Category I Non-Friable
E-607	Black Mastic associated with Grey Floor Tile under 12"x12" Grey Mottled Floor Tile**	5% Chrysotile	Category II Non-Friable
H & J Wings			
Ultrasound 1	37- Foil Over Cloth Thermal System Insulation	White Mastic: Chrysotile 3% Foil and Cloth: NAD	Category II Non-Friable
Room 100 Outside Cafeteria	39- Off-White Mudded Fitting	Amosite 2%	Friable
K Wings			
Sub Basement	54- Gray Sink Undercoating	Chrysotile 3%	Category II Non-Friable
Sub Basement	58- Gray Duct Pin Mastic	Chrysotile 5%	Category II Non-Friable
Sub Basement	61- Tan Joint Compound	Chrysotile 2%	Friable
Room 303	64- Gray Window Glazing	<1% Chrysotile	Trace
Room 400 Pantry	67- Brown Duct Covering with Black Mastic	Brown Covering: Chrysotile 3% Black Mastic: NAD	Category II Non-Friable
K-300 Shower	Beige Floor Tile under Green Linoleum w/ Green/Black Marks**	2% Chrysotile	Category I Non-Friable
K-312	Second Layer Floor Tile under 12"x12" White Floor Tile w/ Blue/ Brown Flecks**	2% Chrysotile	Category I Non-Friable

Location	Material Description	Analytical Result	Category
K-312	Black Mastic associated with Second Layer Floor Tile under 12"x12" White Floor Tile w/ Blue/Brown Flecks	4% Chrysotile	Category II Non-Friable
K-300 Nursing Station	Black Mastic associated with 12"x12" Beige Floor Tile w/ Brown Flecks**	5% Chrysotile	Category II Non-Friable
K-300 Nursing Station	Tan/Black Mastic associated with 12"x12" Rose Mottled Floor Tile**	<1% Chrysotile	Category II Non-Friable
Telephone Closet	12"x12" Grey Floor Tile w/ Red Streaks**	3% Chrysotile	Category I Non-Friable
Telephone Closet	Black Mastic associated with 12"x12" Grey Floor Tile w/ Red Streaks**	5% Chrysotile	Category II Non-Friable
ACF Wing			
Empty Shell	76- Black Water Proofing	Chrysotile 10%	Category II Non-Friable
Known Asbestos-Containing Materials Previously Identified			
Plenum Space with E-Wing, J-wing, K-Wing, ACF, SW Addition, and Pavilion	Residual debris from Pipe Elbows		Friable
E-Wing, J-wing, K-Wing, ACF, SW Addition, and Pavilion	Ceiling Tile Contaminated with debris from Pipe Elbows		Friable
Throughout	Various Floor Tiles and Mastics		Category I Non-Friable
Location refers only to the location that the material was sampled. ECS recommends where a material type has been identified as asbestos containing that all other materials with similar color, texture, age and size throughout the building's interior and exterior be assumed to contain asbestos.			

*One domestic water mudded elbow sample was analyzed with less than 1% amosite while another was analyzed with 3% amosite. ECS recommends to treat each of these domestic water mudded elbows as asbestos containing materials.

**Sample collected during ECS' previous hazardous materials report dated December 21, 2017 (ECS Project number 47:4595-D)

Trace Asbestos-Containing Materials

A trace amount of asbestos ($\leq 1\%$) was detected in the bulk sample of gray window glazing analyzed by the laboratory. Although materials that contain trace amounts of asbestos are not subject to U.S. EPA or Maryland regulations for the handling and disposal of asbestos, OSHA still regulates any work which will disturb materials identified with trace amounts of asbestos (reference the November 24, 2003 OSHA Interpretation document - Compliance Requirements For Renovation Work Involving Materials Containing Less Than 1% Asbestos). Therefore, any Contractors disturbing these materials will need to comply with components of 29 CFR 1926.1101, as detailed in the 2003 OSHA Interpretation document.

Joint Compound

ECS identified one sample of tan joint compound, collected from the K-Wing Sub-Basement, as an asbestos-containing material (2% Chrysotile). ECS recommends where a material type has been identified as asbestos containing that other materials with similar color, texture, age and size throughout the building's interior and exterior be assumed to contain asbestos. Based on the varied construction history of the subject property ECS collected joint compound samples, where applicable, in each of the wings. Only the K-Wing samples were identified as asbestos containing. ECS recommends that all joint compound in the K-Wing be treated as an asbestos-containing material until testing proves otherwise.

Black Waterproofing

Due to the non-destructive nature of this survey, black waterproofing was only able to be observed on an exterior wall of the ACF Wing. ECS recommends that it be assumed that asbestos-containing black waterproofing is throughout the entire building until testing or observation indicates otherwise.

Fireproofing

Due to the non-destructive/non-invasive nature of this survey, fireproofing was only able to be sampled in select spots throughout the structure. Fireproofing may be located in other inaccessible areas.

4.2 Suspect or Assumed Asbestos-Containing Materials

Due to the inaccessibility or the destructive means that asbestos sampling requires, additional suspect ACMs may remain within the building hidden behind inaccessible areas that include, but are not limited to, sub-grade walls, structural members, topping slabs, sub-grade sealants, flooring located below underlayments, areas behind exterior walls, pipe trenches, and subsurface utilities, etc. These areas were deemed inaccessible and were not assessed.

Based on previous surveys conducted at the subject property, ECS assumed that all flooring was asbestos-containing for the purposes of this survey. All flooring and mastics should be treated as asbestos-containing until testing proves otherwise. It is also assumed that all pipe insulation behind solid walls/above solid ceilings is asbestos containing.

If these materials are discovered during construction activities, they should be presumed to contain asbestos and be treated as ACMs or be sampled immediately upon discovery and prior to disturbance for asbestos content by a certified asbestos inspector in accordance with 29 CFR 1926.1101.

Based upon our past experience in the identification of ACMs in similarly constructed buildings, the following additional suspect ACMs may also be located in inaccessible areas of the structure:

- Vibration Dampers
- CMU Block Insulation
- Exterior walls and Subgrade Sealants and Waterproofing
- Shower pan water proofing
- Materials behind solid walls and in pipe chases
- All suspect materials found within the Powerplant
- Suspect materials found in the parking garage structure
- Fireproofing found in other areas of the building*
- Fire Door Insulation
- Electrical Wiring
- Roofing and Exterior Materials
- Elevator components including the cabs, doors, switch plates, and brakes

As noted due to the fact that this is an active hospital, in addition to COVID concerns, portions of the hospital were not surveyed during this assessment. Once the hospital is no longer in active use further assessment is recommended to further evaluate asbestos in the facility.

4.3 Lead in Paint and Surface Coatings

Paint and surface coatings which contain detectable concentrations of lead considered "lead-containing paints". Since OSHA has no specific action level for lead in paint, all paint on the site found to have a measurable concentration of lead should be assumed to be lead containing. Work performed which may disturb lead-containing paint is regulated under OSHA as referenced under 29 CFR 1926.62. A total of 483 readings were collected during the survey, including calibration readings. Paint and other surface coatings which are defined by applicable regulation as lead-based paints are summarized in the table below and photographs of lead-based paint identified are located in the Appendix.

Summary of XRF Lead-Based Paint Results

Location	Color	Substrate	Component
E500	White	Ceramic	Wall
E500	White Speckled	4"x4" Ceramic	Wall
E900 Shower	Sage	4"x4" Ceramic	Wall
E900	Red	Metal	Fire Exit Door
E900	Tan	9"x9" Ceramic	Wall

Location	Color	Substrate	Component
Basement Mechanical Room	Yellow	Concrete	Curbing
H400	White	Metal	Wall Panel
H200 OBGYN and H400 Cardiac	White	Wood	Window Frame
H200 OBGYN	White	Wood	Window Sill
K400	White	12"x12" Ceramic	Wall
K305 Bathroom	Cream	4"x4" Ceramic	Wall
K300 Shower	Tan Marble Pattern	12"x18" Ceramic	Wall
K200 Elevator	Yellow	12"x12" Ceramic	Wall
1st Floor Histology	Light Olive	9"x9" Ceramic	Wall
Food Prep	White	4"x4" Ceramic	Wall
<p>Location refers only to where the component was tested. ECS recommends where a paint/glazing type has been identified as lead-containing or lead-based that other materials with similar color, texture, age and size throughout the building's interior and exterior be assumed to be lead-based.</p>			

4.4 Universal Waste and Liquid Suspect PCB-Containing Equipment

The disposal of fixtures and equipment in buildings which contain various substances such as mercury or lead are regulated by local, state, and federal regulation. Collectively most mercury-containing materials and batteries which may contain lead, along with stored pesticides are classified as "Universal Waste". The disposal of lamp ballasts and electrical transformers which contain suspect PCB-containing oils is also regulated at the state and federal level.

4.4.1 Suspect Polychlorinated Biphenyl (PCB) Containing Ballasts and Equipment

Polychlorinated biphenyls (PCBs) are toxic coolants or lubricating oils used in some electrical transformers and capacitors, hydraulically-operated equipment, light ballasts, and other similar equipment.

As part of our survey, ECS attempted to identify potential liquid PCB containing materials and equipment. At the time of the Hazardous Materials Survey, ECS visually observed several of the fluorescent light ballasts in accessible areas of the structure in an attempt to identify labeling indicating the presence/absence of PCB containing fluids. Labeling was not observed or accessible on the ballasts surveyed. At this time it is recommended that all ballasts be assumed to be suspect PCB containing. ECS observed signage on the electrical room door warning of PCB-containing equipment.

4.4.2 Mercury-Containing Components

The EPA classifies mercury as both hazardous and toxic. The survey included observations for equipment which could contain mercury, such as thermostats, transformers, fluorescent lamps, and switch-containing devices.

As previously discussed, fluorescent lamps were observed. The fluorescent lamps may contain small quantities of mercury. Additionally, exterior pole mounted spot lights should be assumed to contain mercury lamps.

4.4.3 Batteries

Lead-acid batteries located in emergency lamps, exit signs, alarm panels and associated with electrical components, etc. were observed or are assumed to be present. No evidence of leaking or damage was observed.

4.4.4 Pesticides

No pesticides were observed at the subject property.

4.4.5 Other Materials Observed

During the performance of the Hazardous Materials Survey, ECS observed the following hazardous materials:

- Pharmaceuticals including chemotherapeutics and other anti-neoplastic agents
- Household cleaning materials
- Sterilization agents
- Tissue stains including Hematoxylin and Eosin
- Cryostat and microtome chemicals
- Histology processing chemicals including fixatives (formalin and Pen Fix), xylene, and Clear Rite
- Waste containers for stains and solvents
- Bouin Solution
 - Note: Bouin Solution contains picric acid, acetic acid, and formaldehyde. Picric acid can pose an explosive hazard if dried out. Formaldehyde is a carcinogen.
- Historic presence of picric acid
- Lubricants for the mechanical rooms
- A holding pool of unknown depth in the basement crawlspace under the Core Laboratory that was previously used for chemical disposal
- Anesthesia agents
- Radionuclides
- Hospital-grade cleaning solutions
- Historic laundry, no longer in use
- Alcohols
- Hydrogen peroxide
- Enzyme cleaner

- System Endo (sterilization for bronchoscopes)
- Hood in the pharmacy used for chemotherapeutics and antineoplastic medications

This is not a comprehensive list of all hazardous materials within the hospital. Departments should properly dispose of or recycle hazardous materials prior to abandoning their work stations. A thorough survey should be performed after the hospital is vacated for remaining materials including testing for residual radionuclides by a Health Physicist.

4.5 Mercury Vapor

ECS performed a limited mercury vapor survey within accessible laboratory spaces, empty exam rooms in the Gladys Spellman Building, select custodial closets, and the former laundry area in the maintenance room. Many areas of the hospital including patient rooms, the morgue, and operating rooms were inaccessible at the time of the survey due to the occupancy of the building.

ECS compared the levels of mercury vapor to the Agency for Toxic Substances and Disease Registry (ATSDR) standard for mercury vapor of 10 ug/m³.

The areas surveyed and the concentration of mercury vapor are listed in the table below.

Mercury Vapor

Location	Concentration (µg/m ³)
General Hospital Areas	
Old laundry under dryer	<0.05
Old laundry under washer	0.06
Floor, center, old laundry	<0.05
Drain by washer	<0.05
8th floor custodial closet drain	<0.05
Operating Room custodial closet sink drain	<0.05
Core Lab	
Under bench near storage	<0.05
Under equipment by front door	0.05
Under centrifuge by back offices	0.06
Under blood refrigerator	<0.05
Back bench	<0.05
Chemical storage room floor	<0.05
Core Lab Back Storage Room	
Metal sink right drain	<0.05
Metal sink left drain	<0.05
Under metal sink	<0.05
Center of floor	<0.05
Microbiology Hallway Connector	
Lab sink right drain	0.09

Location	Concentration ($\mu\text{g}/\text{m}^3$)
Lab sink left drain	0.01
Under cabinet	0.08
Under bench	<0.05
Microbiology Lab	
Under biological safety cabinet	0.05
Behind Refrigerator	<0.05
Sink drain	<0.05
Under bench by biological safety cabinet	0.05
Pathology Lab	
Under biological safety cabinet	<0.05
Biological safety cabinet sink	<0.05
Bench by biological safety cabinet	<0.05
Lab sink drain	<0.05
Under lab bench sink	0.09
Mechanical Rooms	
Sump in ELMR mechanical room	<0.05
Chemical storage pool	<0.05
Floor near bottom of chemical storage pool	<0.05
Ambient air in crawl space	<0.05
Electrical room drain	<0.05
Pharmacy	
Front room sink	0.07
Under sink on floor	<0.05
Back room sink drain	<0.05
Under back room sink	<0.05
Gladys Spellman Center	
Procedure room 230 sink drain	0.11
Under sink on floor	<0.05
Procedure room 270 sink drain	<0.05
Under sink on floor	<0.05
Lab sink drain	<0.05
Floor in lab	<0.05
Room 223 sink drain	0.09
Under sink in cabinet	<0.05
Under sink on floor	<0.05

ECS did not find levels of mercury vapor in excess of the Agency for Toxic Substances and Disease Registry (ATSDR) standard for mercury vapor. ECS recommends a comprehensive mercury vapor screening be performed once the building becomes unoccupied and fixtures have been removed from the building.

5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS

Based on our understanding of the purpose of the Hazardous Materials Survey, the results of laboratory analysis, and our findings and observations, ECS presents the following recommendations.

5.1 Asbestos-Containing Materials

Asbestos Abatement

ECS recommends where a material type has been identified as asbestos containing that other materials with similar color, texture, age and size throughout the building's interior and exterior be assumed to contain asbestos. Please refer to Section 4.1 for a complete list of building materials that were reported positive for asbestos and to Section 4.2 for materials that were assumed to contain asbestos.

Asbestos-containing materials (ACMs) to be disturbed as part of any renovations planned for the facility must be properly removed by a Maryland-licensed asbestos abatement contractor prior to disturbance by construction activities. The EPA and the State of Maryland requires 10 working days notice prior to removal of regulated ACM (RACM) in quantities greater than or equal to 160 square feet, 260 linear feet, or 35 cubic feet.

If ACMs are to be removed, it is recommended that an industrial hygienist monitor the project. This involves collecting air samples from within and outside abatement work areas to monitor the asbestos abatement contractor's work practices over the course of the project. The industrial hygienist should evaluate if the asbestos abatement work is in accordance with project specifications, U.S. EPA regulation 40 CFR Part 61-National Emission Standards for Hazardous Air Pollutants Subpart M: National Emission Standard for Asbestos, and U.S. Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 – Asbestos in Construction. The industrial hygienist should assess each work area to monitor the removal of ACMs. Only after the industrial hygienist has determined the identified ACMs have been removed should final clearance air samples be collected (if necessary).

Suspect ACMs not observed due to inaccessibility or not sampled due to the destructive means that sampling would require may also be encountered during construction activities. At the time of the survey, only limited destructive means were used to locate or sample suspect ACMs; therefore, additional suspect ACMs may remain within inaccessible areas that include, but are not limited to, sub-grade walls, structural members, topping slabs, exterior areas, sub-grade sealants, flooring located below underlayments, vapor barriers, pipe trenches and other subsurface utilities, etc. If additional suspect ACMs are uncovered which were not accessible during this survey, it is recommended that these materials either be assumed to contain asbestos or be sampled prior to disturbance upon discovery for asbestos content by an asbestos inspector in accordance with 29 CFR 1926.1101.

Trace Asbestos Containing Materials

A trace amount of asbestos ($\leq 1\%$) was detected in the bulk samples of grey window glazing analyzed by the laboratory. Although materials that contain trace amounts of asbestos are not subject to U.S. EPA or Maryland regulations for the handling and disposal of asbestos, OSHA still regulates any work which will disturb materials identified with trace amounts of asbestos (reference the November 24, 2003 OSHA Interpretation document - Compliance Requirements For Renovation Work Involving Materials Containing Less Than 1% Asbestos). Therefore, any Contractors disturbing these materials will need to comply with components of 29 CFR 1926.1101, as detailed in the 2003 OSHA Interpretation document.

Abatement Specification

ECS recommends that a project specification be prepared to delineate and quantify known and suspect hazardous and regulated materials in the buildings and to outline proper procedures for the abatement. This will help protect the owner's liability in better defining the scope of work and contractors' roles and responsibilities in the abatement process and holding the contractor accountable for the performance of the project. The specification typically defines the Contractor's scope of work and outline requirements and procedures that must be followed for the project. The intent of the specification is to give performance requirements for the Contractor so that the project can be completed safely and in compliance with applicable federal and state regulations. Typically, the specification document serves as part of the site owner's contract with the contractor.

Asbestos Operations and Maintenance Plan

Should any identified ACM remain in place, ECS recommends the development and implementation of a site-specific Asbestos Operations and Maintenance Plan detailing routine maintenance and repair operations, contractor notification procedures, and all other requirements under OSHA - reference 29 CFR 1926.1101.

General Recommendation (for all known/suspect hazardous materials in the buildings)

As noted due to the fact that this is an active hospital, in addition to COVID concerns, portions of the hospital were not surveyed during this assessment. Once the hospital is no longer in active use further assessment is recommended to further evaluate asbestos and other hazardous materials in the facility.

5.2 Lead in Paint and Surface Coatings

Based on the findings of the lead survey, detectable concentrations of lead were identified on some paints and surface coatings.

The presence of lead is a concern primarily when conditions exist where it may inhaled or ingested. Regardless of the analytical results of a material, all painted and/or glazed surfaces may still contain concentrations of lead in the paint, which when disturbed, may generate lead dust greater than the Permissible Exposure Limit (PEL) of 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) as an 8-hour Time Weighted Average (TWA) established by the OSHA "Lead Exposure in Construction Rule (29 CFR 1926.62)."

The OSHA standard gives no guidance on acceptable levels of lead in paint at which no exposure to airborne lead (above the action level) would be expected. Rather, OSHA defines airborne concentrations, and references specific types of work practices and operations from which a lead hazard may be generated (reference 29 CFR 1926.62, section d). Environmental and personnel monitoring should be conducted during any removal/demolition process (as appropriate) to verify that actual personal exposures are below the Permissible Exposure Limit (PEL) of 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) as an 8-hour Time Weighted Average (TWA). Under OSHA requirements, the contractor performing renovation work will be required to conduct this monitoring and follow applicable requirements under 29 CFR 1926.62 if disturbing lead-containing paint.

General Note: For demolition purposes, ECS does not believe the presence of LBP or lead containing paint will have a significant impact on the cost of demolition of the structure.

5.3 Universal Waste and Liquid PCBs in Equipment

Fluorescent lamp ballasts manufactured prior to 1979 may contain small quantities of PCBs. Additionally, regardless of "PCB labeling," ballasts produced between 1980 and 1991 may contain di-ethyl hexyl phthalate (DEHP) which is classified as a potential carcinogen by the EPA. Additionally, DEHP contamination on Superfund sites is common and responsible parties are subject to liability under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) should cleanup of DEHP be necessary. ECS recommends that all ballasts suspected to contain PCBs be properly recycled or disposed of in accordance with US EPA and regulations. In practice many ballasts lacking the "No-PCBs" label have been removed from buildings as part of routine maintenance; however, inspection of each ballast by the contractor performing removal is still recommended to ensure proper disposal into the proper waste stream.

ECS recommends that fluorescent lamp tubes/bulbs suspected to contain mercury be properly recycled or disposed of in accordance with EPA and Maryland regulations. Recycling is the most environmental friendly means of disposal for these materials. Fluorescent lamps may be disposed as universal waste if they remain unbroken during removal. If bulbs are crushed or broken prior to disposal, they are classified as hazardous waste by the EPA.

The disposal of universal waste and lamp ballasts must be performed in a manner by which the individual wastes are segregated and disposed of properly as required by federal regulations. If any of these materials are observed to be leaking or otherwise damaged prior to disposal they must be disposed of as hazardous waste in accordance with EPA regulations. Handling, packaging, labeling, and disposal of hazardous materials should be performed in accordance with EPA and Department of Transportation regulations.

Generators of universal and hazardous waste must obtain an EPA Generator ID number in order to dispose of these materials.

5.3.1 Other Hazardous and Regulated Waste

ECS recommends that departments properly remove and dispose of (or reuse) chemicals from the hospital as they abandon their work stations. Chemicals should be re-used, disposed of or recycled in accordance with State, Local, and Federal laws.

Further inspection for picric acid residue should be performed on pipe threads and within duct work in areas near laboratory spaces or connected to laboratory spaces.

A radionuclide survey is recommended to be performed by a Certified Health Physicist once the hospital has been vacated and all equipment with radioactive components have been removed. Areas where nuclear medicine (therapeutic and diagnostic applications) should also be included in this survey.

Further testing should be performed in the chemical disposal pool in the basement crawlspace prior to demolition of the hospital.

5.4 Mercury Vapor

ECS did not find levels of mercury vapor in excess of the Agency for Toxic Substances and Disease Registry (ATSDR) standard for mercury vapor of 10 ug/m³. ECS recommends a comprehensive mercury vapor screening be performed once the buildings become unoccupied and fixtures have been removed from the buildings.

6.0 LIMITATIONS

Due to the subject building being an occupied hospital and restrictions regarding COVID-19, ECS was not available to access patient rooms (otherwise specifically stated), 5200 (Labor and Delivery), E400, K200 (Maternal Care), Operating Room Pavilion, Inpatient Specialty Care (1st Floor), Recovery, Power Plant, Parking Garage, Operating Room, and Laboratory. In addition, ECS did not access the roof or exteriors of the structures.

The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards that may potentially cause damage, accidents, or injuries.

The observations, conclusions, and recommendations pertaining to environmental conditions at the subject site are necessarily limited to conditions observed, and/or materials reviewed at the time this study was undertaken. No warranty, expressed or implied, is made with regard to the conclusions and recommendations presented within this report. This report is provided for the exclusive use of the client. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties without the written consent of ECS and the client.

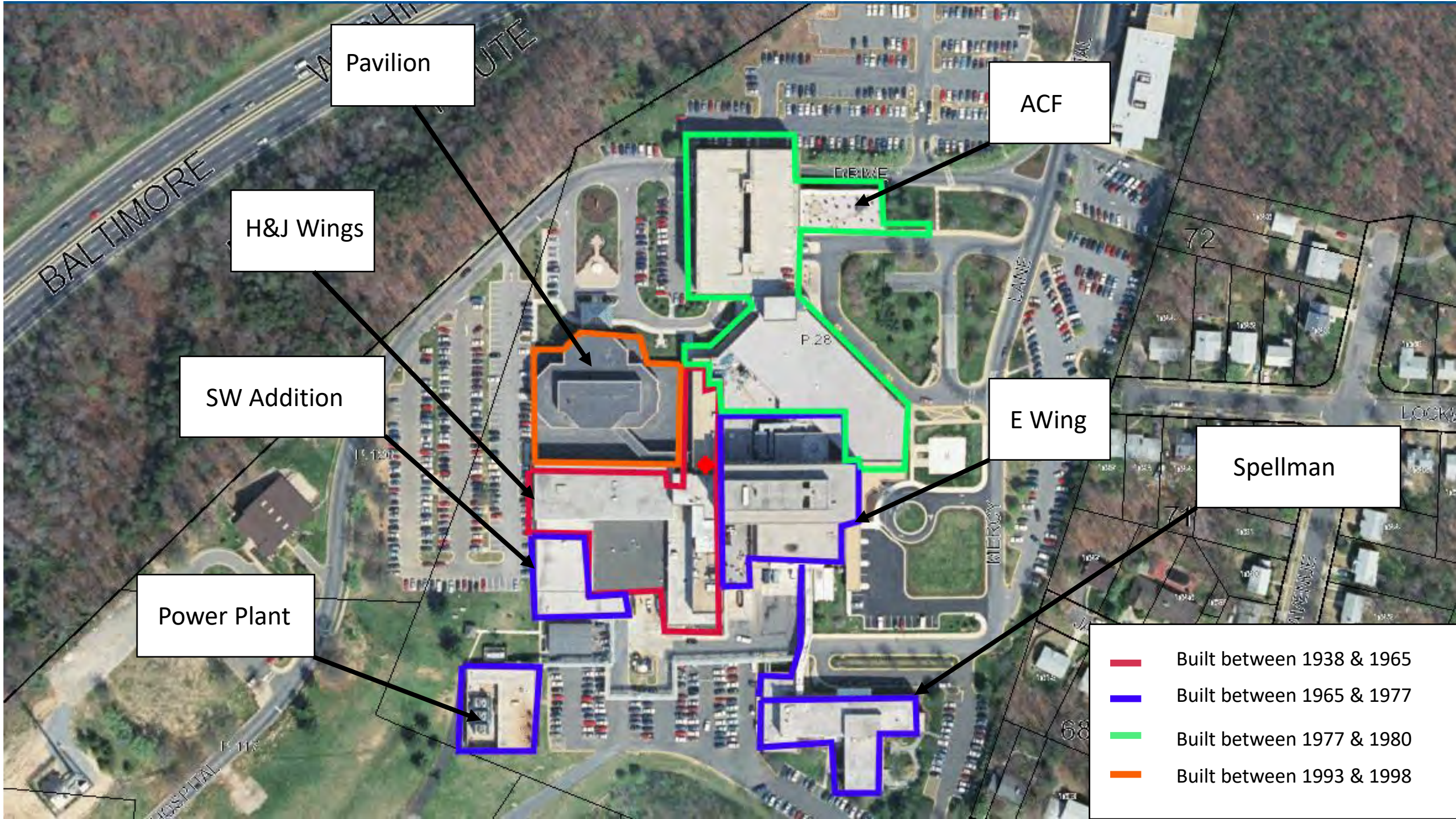
During this study, samples were submitted for analysis at an accredited laboratory via polarized light microscopy. As with any similar survey of this nature, actual conditions exist only at the precise locations from which samples were collected. Certain inferences are based on the results of this sampling and related testing to form a professional opinion of conditions in areas beyond those from which the samples were collected. No warranty, expressed or implied, is made.

Our recommendations are in part based on federal, state, and local regulations and guidelines. ECS does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies, any conditions at the site that may present a potential danger to public health, safety, or the environment. Under this scope of

services, ECS assumes no responsibility regarding any response actions initiated as a result of these findings. General compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements.

During this study, samples were submitted for analysis at an accredited laboratory via polarized light microscopy. As with any similar survey of this nature, actual conditions exist only at the precise locations from which samples were collected. Certain inferences are based on the results of this sampling and related testing to form a professional opinion of conditions in areas beyond those from which the samples were collected. No warranty, expressed or implied, is made.

Appendix I: Figures



Pavilion

ACF

H&J Wings

SW Addition

E Wing

Spellman

Power Plant

- Built between 1938 & 1965
- Built between 1965 & 1977
- Built between 1977 & 1980
- Built between 1993 & 1998

Appendix II: Site Photographs



1 - Black Thermal System Insulation Hangar Mastic (ACM)



2 - Cemented Pipe Elbow (ACM)



3 - Black Waterproofing (ACM)



4 - Black Duct Mastic (ACM)



5 - Fire Door and Frame (Suspect ACM)



6 - Brown Fiber Duct Covering (ACM)



7 - Fire Damper (Suspect ACM)



8 - Asbestos Labels Observed



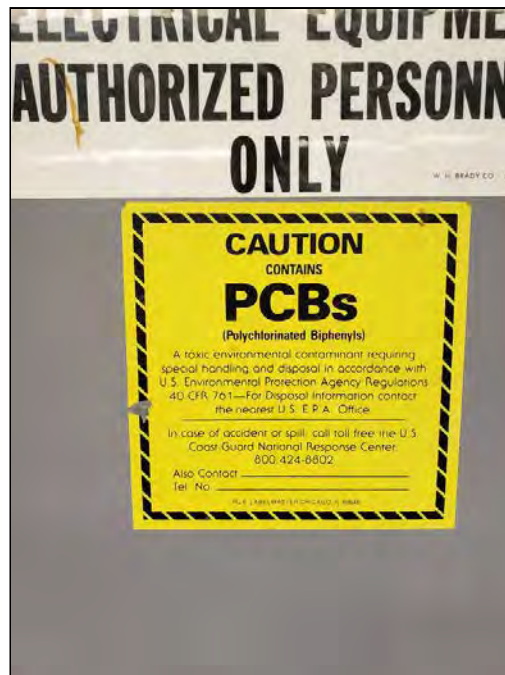
9 - Vibration Dampener (Suspect ACM)



10 - Grey Sink Undercoat (ACM)



11 - Duct Pin Mastic (ACM)



12 - PCB sign on electrical room



13 - Former chemical storage pool in the basement crawlspace



14 - Example of laboratory chemicals: stains in the histology lab



15 - Histology lab chemicals

Appendix III: Asbestos Bulk Sample Results

November 9, 2020

ECS Mid-Atlantic
1340 Charwood Road Ste B
Hanover, MD 21076

CLIENT PROJECT: PG County Hospital, 47:10416-B
CEI LAB CODE: B2010023

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 2, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH
Laboratory Director



CEI

ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

ECS Mid-Atlantic

CLIENT PROJECT: PG County Hospital, 47:10416-B

LAB CODE: B2010023

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 11/09/20

TOTAL SAMPLES ANALYZED: 109

SAMPLES >1% ASBESTOS: 7



CEI

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: PG County Hospital, 47:10416-B

LAB CODE: B2010023

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1A		B153150	White	Duct Mastic	None Detected
1B		B153151	White	Duct Mastic	None Detected
2A	Layer 1	B153152	White	Bridging Mastic	None Detected
	Layer 2	B153152	White	Cloth T S I Wrap	None Detected
	Layer 3	B153152	Yellow	Insulation	None Detected
2B	Layer 1	B153153	Off-white	Bridging Mastic	None Detected
	Layer 2	B153153	White	Cloth T S I Wrap	None Detected
	Layer 3	B153153	Yellow	Insulation	None Detected
2C	Layer 1	B153154	Off-white	Bridging Mastic	None Detected
	Layer 2	B153154	White	Cloth T S I Wrap	None Detected
3A	Layer 1	B153155	White	Mastic	None Detected
	Layer 2	B153155	White	Cloth Wrap	None Detected
3B	Layer 1	B153156	White	Mastic	None Detected
	Layer 2	B153156	White	Cloth Wrap	None Detected
3C	Layer 1	B153157	White	Mastic	None Detected
	Layer 2	B153157	White	Cloth Wrap	None Detected
4A	Layer 1	B153158	White	Mastic	None Detected
	Layer 2	B153158	Tan,Silver	Paper & Foil	None Detected
4B	Layer 1	B153159	White	Mastic	None Detected
	Layer 2	B153159	Tan,Silver	Paper & Foil	None Detected
	Layer 3	B153159	Brown	Insulation	None Detected
4C	Layer 1	B153160	White	Mastic	None Detected
	Layer 2	B153160	Tan,Silver	Paper & Foil	None Detected
	Layer 3	B153160	Brown	Insulation	None Detected
5A	Layer 1	B153161	Gray	HVAC Mastic	None Detected
	Layer 2	B153161	White	HVAC Mastic	None Detected
5B	Layer 1	B153162	Gray	HVAC Mastic	None Detected
	Layer 2	B153162	White	HVAC Mastic	None Detected
6A		B153163	Yellow	Pin Mastic	None Detected
6B		B153164	Yellow	Pin Mastic	None Detected
7A		B153165	Red	Firestop	None Detected



CEI

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: PG County Hospital, 47:10416-B

LAB CODE: B2010023

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
7B		B153166	Red	Firestop	None Detected
8A		B153167	Light Gray	Vibration Dampener Caulk	None Detected
8B		B153168	Light Gray	Vibration Dampener Caulk	None Detected
9A		B153169	Gray	Door Caulk	None Detected
9B		B153170	Gray	Door Caulk	None Detected
10A	Layer 1	B153171	White	Plaster Skim Coat	None Detected
	Layer 2	B153171	Gray	Plaster Base Coat	None Detected
10B	Layer 1	B153172	White	Plaster Skim Coat	None Detected
	Layer 2	B153172	Gray	Plaster Base Coat	None Detected
10C	Layer 1	B153173	White	Plaster Skim Coat	None Detected
	Layer 2	B153173	Gray	Plaster Base Coat	None Detected
10D	Layer 1	B153174	White	Plaster Skim Coat	None Detected
	Layer 2	B153174	Gray	Plaster Base Coat	None Detected
10E	Layer 1	B153175	White	Plaster Skim Coat	None Detected
	Layer 2	B153175	Gray	Plaster Base Coat	None Detected
11A		B153176	White	Duct Elbow Cement	None Detected
11B		B153177	White	Duct Elbow Cement	None Detected
11C		B153178	White	Duct Elbow Cement	None Detected
13A		B153179	White	Drywall	None Detected
13B		B153180	White	Drywall	None Detected
14A		B153181	Gray	Fireproofing	None Detected
14B		B153182	Gray	Fireproofing	None Detected
14C		B153183	Gray	Fireproofing	None Detected
14D		B153184	Gray	Fireproofing	None Detected
14E		B153185	Gray	Fireproofing	None Detected
15A		B153186	Yellow	C B Mastic	None Detected
15B		B153187	Yellow	C B Mastic	None Detected
16A		B153188	Brown	C B Mastic	None Detected
16B		B153189	Brown	C B Mastic	None Detected
17A		B153190	White	Textured Ceiling	None Detected
17B	Layer 1	B153191	White	Textured Ceiling	None Detected



CEI

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: PG County Hospital, 47:10416-B

LAB CODE: B2010023

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
	Layer 2	B153191	White	Plaster Skim Coat	None Detected
	Layer 3	B153191	Gray	Plaster Base Coat	None Detected
17C	Layer 1	B153192	White	Textured Ceiling	None Detected
	Layer 2	B153192	White	Textured Ceiling	None Detected
	Layer 3	B153192	White	Plaster	None Detected
18A		B153193	White	Fixture Caulk	None Detected
18B		B153194	White	Fixture Caulk	None Detected
19A		B153195	Black	W F Tar	None Detected
19B		B153196	Black	W F Tar	None Detected
20A		B153197	White	Window Caulk	None Detected
20B		B153198	White	Window Caulk	None Detected
21A		B153199	Gray	Sink Undercoat	Chrysotile 8%
21B		B153200		Sample Not Analyzed per COC	
21C		B153201		Sample Not Analyzed per COC	
22A	Layer 1	B153202	White,Silver	Paper & Foil	None Detected
	Layer 2	B153202	Yellow	Fiberglass	None Detected
22B	Layer 1	B153203	White,Silver	Paper & Foil	None Detected
	Layer 2	B153203	Yellow	Fiberglass	None Detected
23A		B153204	White	Drywall	None Detected
23B		B153205	White	Drywall	None Detected
24A		B153206	White	Joint Compound	None Detected
24B		B153207	White	Joint Compound	None Detected
25A	Layer 1	B153208	Black	Duct Mastic	Chrysotile 3%
	Layer 2	B153208	Tan,Silver	Paper & Foil Wrap	None Detected
	Layer 3	B153208	Yellow	Fiberglass	None Detected
25B		B153209		Sample Not Analyzed per COC	
26A	Layer 1	B153210	White	Plaster Skim Coat	None Detected
	Layer 2	B153210	Gray	Plaster Base Coat	None Detected
26B	Layer 1	B153211	White	Plaster Skim Coat	None Detected
	Layer 2	B153211	Gray	Plaster Base Coat	None Detected
26C	Layer 1	B153212	White	Plaster Skim Coat	None Detected



CEI

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: PG County Hospital, 47:10416-B

LAB CODE: B2010023

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
	Layer 2	B153212	Gray	Plaster Base Coat	None Detected
26D	Layer 1	B153213	White	Plaster Skim Coat	None Detected
	Layer 2	B153213	Gray	Plaster Base Coat	None Detected
26E	Layer 1	B153214	White	Plaster Skim Coat	None Detected
	Layer 2	B153214	Gray	Plaster Base Coat	None Detected
27A		B153215	Red	Firestop	None Detected
27B		B153216	Red	Firestop	None Detected
28A		B153217	White	Textured Plaster Backing Block	None Detected
28B		B153218	White	Textured Plaster Backing Block	None Detected
29A		B153219	Gray	Window Glaze	Chrysotile 2%
29B		B153220		Sample Not Analyzed per COC	
30A	Layer 1	B153221	Black	Tsi Hanger Mastic	None Detected
	Layer 2	B153221	White,Silver	Paper & Foil Wrap	None Detected
	Layer 3	B153221	Yellow	Fiberglass	None Detected
30B	Layer 1	B153222	Black	Tsi Hanger Mastic	Chrysotile 3%
	Layer 2	B153222	White,Silver	Paper & Foil Wrap	None Detected
	Layer 3	B153222	Yellow	Fiberglass	None Detected
31A		B153223	Off-white	Cemented Pipe Elbow	Amosite 2%
31B		B153224		Sample Not Analyzed per COC	
31C		B153225		Sample Not Analyzed per COC	
32A		B153226	White	Drywall	None Detected
32B		B153227	White	Drywall	None Detected
33A		B153228	White	Joint Compound	None Detected
33B		B153229	White	Joint Compound	None Detected
34A		B153230	Red	Firestop	None Detected
34B		B153231	Red	Firestop	None Detected
35A	Layer 1	B153232	White	Plaster Skim Coat	None Detected
	Layer 2	B153232	Gray	Plaster Base Coat	None Detected
35B	Layer 1	B153233	White	Plaster Skim Coat	None Detected
	Layer 2	B153233	Gray	Plaster Base Coat	None Detected
35C	Layer 1	B153234	White	Plaster Skim Coat	None Detected



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Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: PG County Hospital, 47:10416-B

LAB CODE: B2010023

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
	Layer 2	B153234	Gray	Plaster Base Coat	None Detected
35D	Layer 1	B153235	White	Plaster Skim Coat	None Detected
	Layer 2	B153235	Gray	Plaster Base Coat	None Detected
35E	Layer 1	B153236	White	Plaster Skim Coat	None Detected
	Layer 2	B153236	Gray	Plaster Base Coat	None Detected
35F	Layer 1	B153237	White	Plaster Skim Coat	None Detected
	Layer 2	B153237	Gray	Plaster Base Coat	None Detected
35G	Layer 1	B153238	White	Plaster Skim Coat	None Detected
	Layer 2	B153238	Gray	Plaster Base Coat	None Detected
36A		B153239	White	Firebrick	None Detected
36B		B153240	White	Firebrick	None Detected
37A	Layer 1	B153241	White	Mastic	Chrysotile 3%
	Layer 2	B153241	Silver,Tan	Foil & Cloth	None Detected
	Layer 3	B153241	Yellow	Fiberglass	None Detected
37B		B153242		Sample Not Analyzed per COC	
37C		B153243		Sample Not Analyzed per COC	
38A	Layer 1	B153244	Black	Waterproofing	None Detected
	Layer 2	B153244	Gray	Concrete	None Detected
38B	Layer 1	B153245	Black	Waterproofing	None Detected
	Layer 2	B153245	Gray	Concrete	None Detected
38C	Layer 1	B153246	Black	Waterproofing	None Detected
	Layer 2	B153246	Gray	Concrete	None Detected
39A	Layer 1	B153247	White	Bridging Mastic	None Detected
	Layer 2	B153247	Yellow	Fiberglass	None Detected
39B	Layer 1	B153248	White	Bridging Mastic	None Detected
	Layer 2	B153248	White,Silver	Paper & Foil	None Detected
	Layer 3	B153248	Yellow	Fiberglass	None Detected
39C		B153249	Off-white	Mudded Fitting	Amosite 2%
40A	Layer 1	B153250	White	Duct Mastic	None Detected
	Layer 2	B153250	Brown,Silver	Paper & Foil	None Detected
	Layer 3	B153250	Yellow	Fiberglass	None Detected



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LAB CODE: B2010023

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
40B	Layer 1	B153251	White	Duct Mastic	None Detected
	Layer 2	B153251	Brown,Silver	Paper & Foil	None Detected
	Layer 3	B153251	Yellow	Fiberglass	None Detected
41A	Layer 1	B153252	White	Plaster Skim Coat	None Detected
	Layer 2	B153252	Gray	Plaster Base Coat	None Detected
41B	Layer 1	B153253	White	Plaster Skim Coat	None Detected
	Layer 2	B153253	Gray	Plaster Base Coat	None Detected
41C	Layer 1	B153254	White	Plaster Skim Coat	None Detected
	Layer 2	B153254	Gray	Plaster Base Coat	None Detected
42A	Layer 1	B153255	White	Bridging Mastic	None Detected
	Layer 2	B153255	Brown	Fiberglass	None Detected
42B	Layer 1	B153256	White	Bridging Mastic	None Detected
	Layer 2	B153256	Brown	Fiberglass	None Detected
42C	Layer 1	B153257	White	Bridging Mastic	None Detected
	Layer 2	B153257	Tan	Fiberglass	None Detected
43A	Layer 1	B153258	White	Cloth	None Detected
	Layer 2	B153258	Yellow	Fiberglass	None Detected
43B	Layer 1	B153259	White	Cloth	None Detected
	Layer 2	B153259	Yellow	Fiberglass	None Detected
43C	Layer 1	B153260	White	Cloth	None Detected
	Layer 2	B153260	Yellow	Fiberglass	None Detected
44A		B153261	Gray	Pin Mastic	None Detected
44B		B153262	Gray	Pin Mastic	None Detected
45A	Layer 1	B153263	White	Duct Mastic	None Detected
	Layer 2	B153263	Tan,Silver	Paper & Foil	None Detected
	Layer 3	B153263	Pink	Fiberglass	None Detected
45B	Layer 1	B153264	White	Duct Mastic	None Detected
	Layer 2	B153264	Tan,Silver	Paper & Foil	None Detected
	Layer 3	B153264	Pink	Fiberglass	None Detected
46A		B153265	Red	Firestop	None Detected
46B		B153266	Red	Firestop	None Detected



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ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
1340 Charwood Road Ste B
Hanover, MD 21076

Lab Code: B2010023
Date Received: 11-02-20
Date Analyzed: 11-09-20
Date Reported: 11-09-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1A B153150	Duct Mastic	Homogeneous White Non-fibrous Bound	<1%	Cellulose	95%	Mastic 5% Calc Carb	None Detected
1B B153151	Duct Mastic	Homogeneous White Non-fibrous Bound	<1%	Cellulose	95%	Mastic 5% Calc Carb	None Detected
2A Layer 1 B153152	Bridging Mastic	Homogeneous White Non-fibrous Bound			100%	Mastic	None Detected
Layer 2 B153152	Cloth T S I Wrap	Heterogeneous White Fibrous Bound	85%	Cellulose	5%	Metal Foil 10% Binder	None Detected
Layer 3 B153152	Insulation	Homogeneous Yellow Fibrous Loosely Bound	100%	Fiberglass			None Detected
2B Layer 1 B153153	Bridging Mastic	Homogeneous Off-white Non-fibrous Bound	2%	Talc	98%	Mastic	None Detected
Layer 2 B153153	Cloth T S I Wrap	Heterogeneous White Fibrous Bound	85%	Cellulose	5%	Metal Foil 10% Binder	None Detected



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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous	Non-Fibrous			
Layer 3 B153153	Insulation	Homogeneous Yellow Fibrous Loosely Bound	100%	Fiberglass			None Detected
2C Layer 1 B153154	Bridging Mastic	Homogeneous Off-white Non-fibrous Bound	3% 2%	Talc Wollastonite	95%	Mastic	None Detected
Layer 2 B153154	Cloth T S I Wrap	Homogeneous White Fibrous Bound	98%	Cellulose	2%	Binder	None Detected
3A Layer 1 B153155	Mastic	Homogeneous White Non-fibrous Bound	5%	Cellulose	95%	Mastic	None Detected
Layer 2 B153155	Cloth Wrap	Homogeneous White Fibrous Bound	98%	Cellulose	2%	Binder	None Detected
3B Layer 1 B153156	Mastic	Homogeneous White Non-fibrous Bound	5%	Cellulose	95%	Mastic	None Detected
Layer 2 B153156	Cloth Wrap	Homogeneous White Fibrous Bound	98%	Cellulose	2% <1%	Binder Metal Foil	None Detected



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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
3C Layer 1 B153157	Mastic	Homogeneous White Non-fibrous Bound	5%	Cellulose	95%	Mastic	None Detected
	Layer 2 B153157	Cloth Wrap Homogeneous White Fibrous Bound	98%	Cellulose	2%	Binder	None Detected
4A Layer 1 B153158	Mastic	Homogeneous White Non-fibrous Bound	<1% 2%	Wollastonite Cellulose	98%	Mastic	None Detected
	Layer 2 B153158	Paper & Foil Heterogeneous Tan,Silver Fibrous Bound	85% 5%	Cellulose Fiberglass	10%	Metal Foil	None Detected
4B Layer 1 B153159	Mastic	Homogeneous White Non-fibrous Bound	2%	Wollastonite	98%	Mastic	None Detected
	Layer 2 B153159	Paper & Foil Heterogeneous Tan,Silver Fibrous Bound	85% 5%	Cellulose Fiberglass	10%	Metal Foil	None Detected
Layer 3 B153159	Insulation	Homogeneous Brown Fibrous Loosely Bound	100%	Fiberglass			None Detected



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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous		Non-Fibrous		
4C Layer 1 B153160	Mastic	Homogeneous White Non-fibrous Bound	<1%	Cellulose	100%	Mastic	None Detected
Layer 2 B153160	Paper & Foil	Heterogeneous Tan, Silver Fibrous Bound	85% 5%	Cellulose Fiberglass	10%	Metal Foil	None Detected
Layer 3 B153160	Insulation	Homogeneous Brown Fibrous Loosely Bound	100%	Fiberglass			None Detected
5A Layer 1 B153161	HVAC Mastic	Homogeneous Gray Non-fibrous Bound			100%	Mastic	None Detected
Layer 2 B153161	HVAC Mastic	Homogeneous White Non-fibrous Bound	<1%	Cellulose	100%	Mastic	None Detected
5B Layer 1 B153162	HVAC Mastic	Homogeneous Gray Non-fibrous Bound			100%	Mastic	None Detected
Layer 2 B153162	HVAC Mastic	Homogeneous White Non-fibrous Bound	<1%	Cellulose	100%	Mastic	None Detected

ASBESTOS BULK ANALYSIS

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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous	Non-Fibrous			
6A B153163	Pin Mastic	Homogeneous Yellow Non-fibrous Bound	100%	Mastic		None Detected	
6B B153164	Pin Mastic	Homogeneous Yellow Non-fibrous Bound	100%	Mastic		None Detected	
7A B153165	Firestop	Homogeneous Red Fibrous Bound	5%	Fiberglass	80% 15%	Caulk Binder None Detected	
7B B153166	Firestop	Homogeneous Red Fibrous Bound	5%	Fiberglass	80% 15%	Caulk Binder None Detected	
8A B153167	Vibration Dampener Caulk	Homogeneous Light Gray Non-fibrous Bound			98% 2%	Caulk Binder None Detected	
8B B153168	Vibration Dampener Caulk	Homogeneous Light Gray Non-fibrous Bound			98% 2%	Caulk Binder None Detected	
9A B153169	Door Caulk	Heterogeneous Gray Non-fibrous Bound	<1%	Talc	95% 5% <1%	Caulk Binder Paint None Detected	

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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
9B B153170	Door Caulk	Heterogeneous	<1% Talc	95% Caulk	None Detected
		Gray		5% Binder	
		Non-fibrous		<1% Paint	
		Bound			
10A Layer 1 B153171	Plaster Skim Coat	Heterogeneous		35% Calc Carb	None Detected
		White		65% Binder	
		Non-fibrous			
		Bound			
Layer 2 B153171	Plaster Base Coat	Heterogeneous		65% Silicates	None Detected
		Gray		35% Binder	
		Non-fibrous			
		Bound			
10B Layer 1 B153172	Plaster Skim Coat	Heterogeneous		35% Calc Carb	None Detected
		White		65% Binder	
		Non-fibrous			
		Bound			
Layer 2 B153172	Plaster Base Coat	Heterogeneous		65% Silicates	None Detected
		Gray		35% Binder	
		Non-fibrous			
		Bound			
10C Layer 1 B153173	Plaster Skim Coat	Heterogeneous		35% Calc Carb	None Detected
		White		65% Binder	
		Non-fibrous			
		Bound			
Layer 2 B153173	Plaster Base Coat	Heterogeneous		65% Silicates	None Detected
		Gray		35% Binder	
		Non-fibrous			
		Bound			

ASBESTOS BULK ANALYSIS

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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
10D Layer 1 B153174	Plaster Skim Coat	Heterogeneous	35%	Calc Carb	None Detected
		White Non-fibrous Bound	65%	Binder	
Layer 2 B153174	Plaster Base Coat	Heterogeneous	65%	Silicates	None Detected
		Gray Non-fibrous Bound	35%	Binder	
10E Layer 1 B153175	Plaster Skim Coat	Heterogeneous	35%	Calc Carb	None Detected
		White Non-fibrous Bound	65%	Binder	
Layer 2 B153175	Plaster Base Coat	Heterogeneous	65%	Silicates	None Detected
		Gray Non-fibrous Bound	35%	Binder	
11A B153176	Duct Elbow Cement	Heterogeneous	5%	Paint	None Detected
		White Non-fibrous Bound	70%	Calc Carb 25% Binder	
11B B153177	Duct Elbow Cement	Heterogeneous	5%	Paint	None Detected
		White Non-fibrous Bound	70%	Calc Carb 25% Binder	
11C B153178	Duct Elbow Cement	Homogeneous	70%	Calc Carb	None Detected
		White Non-fibrous Bound	30%	Binder	

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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
13A B153179	Drywall	Heterogeneous White Fibrous Bound	15%	Cellulose	85%	Gypsum	None Detected
13B B153180	Drywall	Heterogeneous White Fibrous Bound	15%	Cellulose	85%	Gypsum	None Detected
14A B153181	Fireproofing	Heterogeneous Gray Non-fibrous Bound			65%	Silicates	None Detected
					35%	Binder	
14B B153182	Fireproofing	Heterogeneous Gray Non-fibrous Bound			65%	Silicates	None Detected
					35%	Binder	
					<1%	Paint	
14C B153183	Fireproofing	Heterogeneous Gray Non-fibrous Bound			65%	Silicates	None Detected
					35%	Binder	
					<1%	Paint	
14D B153184	Fireproofing	Heterogeneous Gray Non-fibrous Bound			65%	Silicates	None Detected
					35%	Binder	
14E B153185	Fireproofing	Heterogeneous Gray Non-fibrous Bound			65%	Silicates	None Detected
					35%	Binder	

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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %
			Fibrous	Non-Fibrous		
15A B153186	C B Mastic	Heterogeneous Yellow Non-fibrous Bound	<1%	Synthetic Fiber 100%	Mastic	None Detected
15B B153187	C B Mastic	Heterogeneous Yellow Non-fibrous Bound	<1%	Synthetic Fiber 100%	Mastic	None Detected
16A B153188	C B Mastic	Homogeneous Brown Non-fibrous Bound		100%	Mastic	None Detected
16B B153189	C B Mastic	Homogeneous Brown Non-fibrous Bound		100%	Mastic	None Detected
17A B153190	Textured Ceiling	Heterogeneous White Non-fibrous Bound		70% 5% 25%	Paint Foam Binder	None Detected
17B Layer 1 B153191	Textured Ceiling	Heterogeneous White Non-fibrous Bound		80% 10% 10%	Paint Foam Binder	None Detected
Layer 2 B153191	Plaster Skim Coat	Heterogeneous White Non-fibrous Bound		25% 75%	Perlite Binder	None Detected

ASBESTOS BULK ANALYSIS

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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 3 B153191	Plaster Base Coat	Heterogeneous Gray Non-fibrous Bound	25% 10% 65%	Perlite Silicates Binder	None Detected
17C Layer 1 B153192	Textured Ceiling	Heterogeneous White Non-fibrous Bound	80% 10% 10%	Paint Foam Binder	None Detected
Layer 2 B153192	Textured Ceiling	Heterogeneous White Non-fibrous Bound	70% 30%	Calc Carb Binder	None Detected
Layer 3 B153192	Plaster	Heterogeneous White Non-fibrous Bound	25% 75%	Perlite Binder	None Detected
18A B153193	Fixture Caulk	Homogeneous White Non-fibrous Bound	98% 2%	Caulk Binder	None Detected
18B B153194	Fixture Caulk	Homogeneous White Non-fibrous Bound	98% 2%	Caulk Binder	None Detected
19A B153195	W F Tar	Homogeneous Black Fibrous Bound	10%	Cellulose Binder	90% None Detected

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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
19B B153196	W F Tar	Homogeneous Black Fibrous Bound	10%	Cellulose	90%	Binder	None Detected
20A B153197	Window Caulk	Heterogeneous White Non-fibrous Bound			5%	Paint Caulk Binder	None Detected
20B B153198	Window Caulk	Heterogeneous White Non-fibrous Bound			5%	Paint Caulk Binder	None Detected
21A B153199	Sink Undercoat	Homogeneous Gray Fibrous Bound			92%	Binder	8% Chrysotile
21B B153200	Sample Not Analyzed per COC						
21C B153201	Sample Not Analyzed per COC						
22A Layer 1 B153202	Paper & Foil	Heterogeneous White,Silver Fibrous Bound	60%	Cellulose	15%	Metal Foil	None Detected
			5%	Fiberglass	10%	Tar	
					10%	Binder	
Layer 2 B153202	Fiberglass	Homogeneous Yellow Fibrous Loosely Bound	100%	Fiberglass			None Detected

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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
22B Layer 1 B153203	Paper & Foil	Heterogeneous	60%	Cellulose	15%	Metal Foil	None Detected
		White,Silver Fibrous Bound	5%	Fiberglass	10%	Tar Binder	
22B Layer 2 B153203	Fiberglass	Homogeneous Yellow Fibrous Loosely Bound	100%	Fiberglass			None Detected
23A B153204	Drywall	Heterogeneous White Fibrous Bound	15% <1%	Cellulose Fiberglass	85%	Gypsum	None Detected
23B B153205	Drywall	Heterogeneous White Fibrous Bound	15% <1%	Cellulose Fiberglass	85%	Gypsum	None Detected
24A B153206	Joint Compound	Heterogeneous White Non-fibrous Bound			70% 30%	Calc Carb Binder	None Detected
24B B153207	Joint Compound	Heterogeneous White Non-fibrous Bound			70% 30%	Calc Carb Binder	None Detected
25A Layer 1 B153208	Duct Mastic	Homogeneous Black Non-fibrous Bound			97%	Mastic	3% Chrysotile

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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous	Non-Fibrous			
Layer 2 B153208	Paper & Foil Wrap	Heterogeneous Tan, Silver Fibrous Bound	80%	Cellulose	20%	Metal Foil	None Detected
Layer 3 B153208	Fiberglass	Homogeneous Yellow Fibrous Loosely Bound	100%	Fiberglass			None Detected
25B B153209	Sample Not Analyzed per COC						
26A Layer 1 B153210	Plaster Skim Coat	Homogeneous White Non-fibrous Bound			35% 65%	Calc Carb Binder	None Detected
Layer 2 B153210	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound			65% 35%	Silicates Binder	None Detected
26B Layer 1 B153211	Plaster Skim Coat	Homogeneous White Non-fibrous Bound			35% 65%	Calc Carb Binder	None Detected
Layer 2 B153211	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound			65% 35%	Silicates Binder	None Detected
26C Layer 1 B153212	Plaster Skim Coat	Homogeneous White Non-fibrous Bound			35% 65%	Calc Carb Binder	None Detected



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ASBESTOS BULK ANALYSIS

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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous		Non-Fibrous		
Layer 2 B153212	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	65%	Silicates	35%	Binder	None Detected
26D Layer 1 B153213	Plaster Skim Coat	Homogeneous White Non-fibrous Bound	35%	Calc Carb	65%	Binder	None Detected
Layer 2 B153213	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	65%	Silicates	35%	Binder	None Detected
26E Layer 1 B153214	Plaster Skim Coat	Homogeneous White Non-fibrous Bound	35%	Calc Carb	65%	Binder	None Detected
Layer 2 B153214	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	65%	Silicates	35%	Binder	None Detected
27A B153215	Firestop	Homogeneous Red Fibrous Bound	5%	Fiberglass	85%	Caulk	None Detected
			10%	Binder			
27B B153216	Firestop	Heterogeneous Red Fibrous Bound	3%	Fiberglass	90%	Caulk	None Detected
			2%	Wollastonite	5%	Binder	

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
 1340 Charwood Road Ste B
 Hanover, MD 21076

Lab Code: B2010023
Date Received: 11-02-20
Date Analyzed: 11-09-20
Date Reported: 11-09-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
28A B153217	Textured Plaster Backing Block	Homogeneous White Fibrous Bound	5%	Cellulose	95%	Gypsum	None Detected
28B B153218	Textured Plaster Backing Block	Homogeneous White Fibrous Bound	5%	Cellulose	95%	Gypsum	None Detected
29A B153219	Window Glaze	Homogeneous Gray Non-fibrous Bound			95% 3%	Caulk Binder	2% Chrysotile
29B B153220	Sample Not Analyzed per COC						
30A Layer 1 B153221	Tsi Hanger Mastic	Homogeneous Black Non-fibrous Bound			100%	Binder	None Detected
Layer 2 B153221	Paper & Foil Wrap	Heterogeneous White, Silver Fibrous Bound	75%	Cellulose	15% 10%	Metal Foil Tar	None Detected
Layer 3 B153221	Fiberglass	Homogeneous Yellow Fibrous Loosely Bound	100%	Fiberglass			None Detected
30B Layer 1 B153222	Tsi Hanger Mastic	Homogeneous Black Non-fibrous Bound			97%	Mastic	3% Chrysotile



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ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
1340 Charwood Road Ste B
Hanover, MD 21076

Lab Code: B2010023
Date Received: 11-02-20
Date Analyzed: 11-09-20
Date Reported: 11-09-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
Layer 2 B153222	Paper & Foil Wrap	Heterogeneous White, Silver Fibrous Bound	75%	Cellulose	15%	Metal Foil 10% Tar	None Detected
Layer 3 B153222	Fiberglass	Homogeneous Yellow Fibrous Loosely Bound	100%	Fiberglass			None Detected
31A B153223	Cemented Pipe Elbow	Homogeneous Off-white Fibrous Loose	15%	Fiberglass	15%	Silicates 68% Binder	2% Amosite
31B B153224	Sample Not Analyzed per COC						
31C B153225	Sample Not Analyzed per COC						
32A B153226	Drywall	Heterogeneous White Fibrous Bound	15% <1%	Cellulose Fiberglass	85%	Gypsum	None Detected
32B B153227	Drywall	Heterogeneous White Fibrous Bound	15% <1%	Cellulose Fiberglass	85%	Gypsum	None Detected
33A B153228	Joint Compound	Heterogeneous White Non-fibrous Bound			70% 30%	Calc Carb Binder	None Detected

ASBESTOS BULK ANALYSIS

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Client: ECS Mid-Atlantic
 1340 Charwood Road Ste B
 Hanover, MD 21076

Lab Code: B2010023
Date Received: 11-02-20
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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
33B B153229	Joint Compound	Heterogeneous	70%	Calc Carb	None Detected
		White	30%	Binder	
		Non-fibrous			
		Bound			
34A B153230	Firestop	Homogeneous	95%	Caulk	None Detected
		Red	5%	Binder	
		Non-fibrous			
		Bound			
34B B153231	Firestop	Homogeneous	95%	Caulk	None Detected
		Red	5%	Binder	
		Non-fibrous			
		Bound			
35A Layer 1 B153232	Plaster Skim Coat	Heterogeneous	5%	Paint	None Detected
		White	35%	Calc Carb	
		Non-fibrous	60%	Binder	
		Bound			
Layer 2 B153232	Plaster Base Coat	Homogeneous	<1%	Cellulose	None Detected
		Gray	65%	Silicates	
		Non-fibrous	35%	Binder	
		Bound			
35B Layer 1 B153233	Plaster Skim Coat	Heterogeneous	5%	Paint	None Detected
		White	35%	Calc Carb	
		Non-fibrous	60%	Binder	
		Bound			
Layer 2 B153233	Plaster Base Coat	Homogeneous	<1%	Cellulose	None Detected
		Gray	65%	Silicates	
		Non-fibrous	35%	Binder	
		Bound			

ASBESTOS BULK ANALYSIS

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Client: ECS Mid-Atlantic
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Lab Code: B2010023
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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %	
			Fibrous	Non-Fibrous		
35C Layer 1 B153234	Plaster Skim Coat	Heterogeneous	5%	Paint	None Detected	
		White	35%	Calc Carb		
		Non-fibrous	60%	Binder		
		Bound				
Layer 2 B153234	Plaster Base Coat	Homogeneous	<1%	Cellulose	65%	None Detected
		Gray			35%	
		Non-fibrous		Binder		
		Bound				
35D Layer 1 B153235	Plaster Skim Coat	Heterogeneous	65%	Binder	None Detected	
		White	35%	Calc Carb		
		Non-fibrous				
		Bound				
Layer 2 B153235	Plaster Base Coat	Homogeneous	<1%	Cellulose	65%	None Detected
		Gray			35%	
		Non-fibrous		Binder		
		Bound				
35E Layer 1 B153236	Plaster Skim Coat	Heterogeneous	65%	Binder	None Detected	
		White	35%	Calc Carb		
		Non-fibrous				
		Bound				
Layer 2 B153236	Plaster Base Coat	Homogeneous	<1%	Cellulose	65%	None Detected
		Gray			35%	
		Non-fibrous		Binder		
		Bound				
35F Layer 1 B153237	Plaster Skim Coat	Heterogeneous	5%	Paint	None Detected	
		White	35%	Calc Carb		
		Non-fibrous	60%	Binder		
		Bound				



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ASBESTOS BULK ANALYSIS

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Date Received: 11-02-20
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Date Reported: 11-09-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
Layer 2 B153237	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	<1%	Cellulose	65%	Silicates 35% Binder	None Detected
35G Layer 1 B153238	Plaster Skim Coat	Heterogeneous White Non-fibrous Bound			5% 35% 60%	Paint Calc Carb Binder	None Detected
Layer 2 B153238	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	<1%	Cellulose	65%	Silicates 35% Binder	None Detected
36A B153239	Firebrick	Heterogeneous White Fibrous Bound	2%	Cellulose	88% 10%	Binder Silicates	None Detected
36B B153240	Firebrick	Heterogeneous White Fibrous Bound	2%	Cellulose	98%	Binder	None Detected
37A Layer 1 B153241	Mastic	Homogeneous White Non-fibrous Bound	<1%	Talc	97%	Mastic	3% Chrysotile
Layer 2 B153241	Foil & Cloth	Heterogeneous Silver,Tan Fibrous Bound	80%	Cellulose	10% 10%	Vinyl Binder	None Detected



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ASBESTOS BULK ANALYSIS

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Date Received: 11-02-20
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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 3 B153241	Fiberglass	Homogeneous Yellow Fibrous Loosely Bound	100% Fiberglass		None Detected
37B B153242	Sample Not Analyzed per COC				
37C B153243	Sample Not Analyzed per COC				
38A Layer 1 B153244	Waterproofing	Homogeneous Black Non-fibrous Bound	100% Tar		None Detected
Layer 2 B153244	Concrete	Homogeneous Gray Non-fibrous Bound	70% 30%	Silicates Binder	None Detected
38B Layer 1 B153245	Waterproofing	Homogeneous Black Non-fibrous Bound	100% Tar		None Detected
Layer 2 B153245	Concrete	Homogeneous Gray Non-fibrous Bound	70% 30%	Silicates Binder	None Detected
38C Layer 1 B153246	Waterproofing	Homogeneous Black Non-fibrous Bound	100% Tar		None Detected

ASBESTOS BULK ANALYSIS

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 1340 Charwood Road Ste B
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Lab Code: B2010023
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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %		
			Fibrous		Non-Fibrous			
Layer 2 B153246	Concrete	Homogeneous Gray Non-fibrous Bound	70%	Silicates	30%	Binder	None Detected	
39A Layer 1 B153247	Bridging Mastic	Homogeneous White Non-fibrous Bound	<1%	Cellulose	100%	Mastic	None Detected	
Lab Notes: No paper or foil present								
Layer 2 B153247	Fiberglass	Homogeneous Yellow Fibrous Loosely Bound	100%	Fiberglass			None Detected	
39B Layer 1 B153248	Bridging Mastic	Homogeneous White Non-fibrous Bound	<1%	Cellulose	100%	Mastic	None Detected	
Layer 2 B153248	Paper & Foil	Heterogeneous White, Silver Fibrous Bound	75%	Cellulose	20%	Metal Foil	5% Fiberglass	None Detected
Layer 3 B153248	Fiberglass	Homogeneous Yellow Fibrous Loosely Bound	100%	Fiberglass			None Detected	
39C B153249	Mudded Fitting	Homogeneous Off-white Fibrous Loose	15%	Fiberglass	15%	Silicates	68% Binder	2% Amosite

Lab Notes: No mastic, paper, or foil present. Sample appears to be mudded fitting, similar to cemented pipe elbow sample 31A



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ASBESTOS BULK ANALYSIS

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Lab Code: B2010023
Date Received: 11-02-20
Date Analyzed: 11-09-20
Date Reported: 11-09-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous		Non-Fibrous		
40A Layer 1 B153250	Duct Mastic	Homogeneous White Non-fibrous Bound	<1%	Cellulose	100%	Mastic	None Detected
Layer 2 B153250	Paper & Foil	Heterogeneous Brown,Silver Fibrous Bound	75% 5%	Cellulose Fiberglass	20%	Metal Foil	None Detected
Layer 3 B153250	Fiberglass	Homogeneous Yellow Fibrous Loosely Bound	100%	Fiberglass			None Detected
40B Layer 1 B153251	Duct Mastic	Homogeneous White Non-fibrous Bound	<1%	Cellulose	100%	Mastic	None Detected
Layer 2 B153251	Paper & Foil	Heterogeneous Brown,Silver Fibrous Bound	75% 5%	Cellulose Fiberglass	20%	Metal Foil	None Detected
Layer 3 B153251	Fiberglass	Homogeneous Yellow Fibrous Loosely Bound	100%	Fiberglass			None Detected
41A Layer 1 B153252	Plaster Skim Coat	Homogeneous White Non-fibrous Bound			65% 35%	Binder Calc Carb	None Detected



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ASBESTOS BULK ANALYSIS

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Date Received: 11-02-20
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Date Reported: 11-09-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
Layer 2 B153252	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	<1%	Cellulose	65%	Silicates 35% Binder	None Detected
41B Layer 1 B153253	Plaster Skim Coat	Homogeneous White Non-fibrous Bound			65%	Binder 35% Calc Carb	None Detected
Layer 2 B153253	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	<1%	Cellulose	65%	Silicates 35% Binder	None Detected
41C Layer 1 B153254	Plaster Skim Coat	Homogeneous White Non-fibrous Bound			65%	Binder 35% Calc Carb	None Detected
Layer 2 B153254	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	<1%	Cellulose	65%	Silicates 35% Binder	None Detected
42A Layer 1 B153255	Bridging Mastic	Homogeneous White Non-fibrous Bound	5%	Wollastonite	95%	Mastic	None Detected
Layer 2 B153255	Fiberglass	Homogeneous Brown Fibrous Loosely Bound	100%	Fiberglass			None Detected



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ASBESTOS BULK ANALYSIS

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Client: ECS Mid-Atlantic
1340 Charwood Road Ste B
Hanover, MD 21076

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Date Received: 11-02-20
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Date Reported: 11-09-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
42B Layer 1 B153256	Bridging Mastic	Homogeneous White Non-fibrous Bound	5%	Wollastonite	95%	Mastic	None Detected
	Layer 2 B153256	Fiberglass Homogeneous Brown Fibrous Loosely Bound	100%	Fiberglass			None Detected
42C Layer 1 B153257	Bridging Mastic	Homogeneous White Non-fibrous Bound	5%	Wollastonite	95%	Mastic	None Detected
	Layer 2 B153257	Fiberglass Homogeneous Tan Fibrous Loosely Bound	100%	Fiberglass			None Detected
43A Layer 1 B153258	Cloth	Homogeneous White Fibrous Bound	100%	Cellulose			None Detected
	Layer 2 B153258	Fiberglass Homogeneous Yellow Fibrous Loosely Bound	100%	Fiberglass			None Detected
43B Layer 1 B153259	Cloth	Homogeneous White Fibrous Bound	100%	Cellulose			None Detected

ASBESTOS BULK ANALYSIS

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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
Layer 2 B153259	Fiberglass	Homogeneous Yellow Fibrous Loosely Bound	100% Fiberglass				None Detected
43C Layer 1 B153260	Cloth	Homogeneous White Fibrous Bound	100% Cellulose				None Detected
Layer 2 B153260	Fiberglass	Homogeneous Yellow Fibrous Loosely Bound	100% Fiberglass				None Detected
44A B153261	Pin Mastic	Homogeneous Gray Fibrous Bound	35%	Cellulose	65%	Mastic	None Detected
44B B153262	Pin Mastic	Homogeneous Gray Fibrous Bound	35%	Cellulose	65%	Mastic	None Detected
45A Layer 1 B153263	Duct Mastic	Homogeneous White Non-fibrous Bound	2%	Wollastonite	98%	Mastic	None Detected
Layer 2 B153263	Paper & Foil	Heterogeneous Tan, Silver Fibrous Bound	75%	Cellulose	20%	Metal Foil	None Detected
			5%	Fiberglass			



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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous	Non-Fibrous			
Layer 3 B153263	Fiberglass	Homogeneous Pink Fibrous Loosely Bound	100%	Fiberglass		None Detected	
45B Layer 1 B153264	Duct Mastic	Homogeneous White Non-fibrous Bound	2%	Wollastonite	98%	Mastic	None Detected
Layer 2 B153264	Paper & Foil	Heterogeneous Tan,Silver Fibrous Bound	75% 5%	Cellulose Fiberglass	20%	Metal Foil	None Detected
Layer 3 B153264	Fiberglass	Homogeneous Pink Fibrous Loosely Bound	100%	Fiberglass			None Detected
46A B153265	Firestop	Homogeneous Red Fibrous Bound	5%	Fiberglass	85% 10%	Caulk Binder	None Detected
46B B153266	Firestop	Homogeneous Red Fibrous Bound	5%	Fiberglass	85% 10%	Caulk Binder	None Detected

LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

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Information provided by customer includes customer sample ID and sample description.

ANALYST: Samantha Card
Samantha Card

APPROVED BY: Tianbao Bai
Tianbao Bai, Ph.D., CIH
Laboratory Director

B2010023 (117)
 B153158 - B153266

Project: PG County Hospital		
No: 47:10416-B		
Sampled in Maryland		
TAT: 5 Day		
Analysis: Bulk PLM		
Analyze All Layers. Stop Positive		
PG County Hospital		
Sample Number	Homogenous Area	Location
1A	White Duct Mastic	Spellman AHU Room 4th Floor
1B	White Duct Mastic	Spellman AHU Room 4th Floor
2A	Cloth TSI Wrap & Bridging Mastic	Spellman AHU Room
2B	Cloth TSI Wrap & Bridging Mastic	Spellman AHU Room
2C	Cloth TSI Wrap & Bridging Mastic	Spellman AHU Room
3A	White Mastic & Cloth Wrap over HVAC	Spellman AHU Room
3B	White Mastic & Cloth Wrap over HVAC	Spellman AHU Room
3C	White Mastic & Cloth Wrap over HVAC	Spellman AHU Room
4A	White Paper & Foil	Spellman AHU Room
4B	White Paper & Foil	Spellman AHU Room
4C	White Paper & Foil	Spellman AHU Room
5A	Gray HVAC Mastic	Spellman AHU Room
5B	Gray HVAC Mastic	Spellman AHU Room
6A	Yellow Pin Mastic	Spellman AHU Room
6B	Yellow Pin Mastic	Spellman AHU Room
7A	Red Firestop	Spellman AHU Room
7B	Red Firestop	Spellman AHU Room
8A	Light Gray Vibration Dampener Caulk	Spellman AHU Room
8B	Light Gray Vibration Dampener Caulk	Spellman AHU Room
9A	Door Caulk	Spellman AHU Room
9B	Door Caulk	Spellman AHU Room 3rd Floor Hall Outside 360
10A	2 Coat Plaster	Spellman AHU Room 3rd Floor Hall Outside 360
10B	2 Coat Plaster	Spellman AHU Room 3rd Floor Hall Outside 360
10C	2 Coat Plaster	Spellman AHU Room 1st Floor
10D	2 Coat Plaster	Spellman AHU Room 1st Floor
10E	2 Coat Plaster	Spellman AHU Room 1st Floor
11A	Duct Elbow Cement	Spellman AHU Room 3rd Floor Hall Outside 360
11B	Duct Elbow Cement	Spellman AHU Room 3rd Floor Hall Outside 360
11C	Duct Elbow Cement	Spellman AHU Room 3rd Floor Hall Outside 360
12A	NO SAMPLE SUBMITTED	
12B	NO SAMPLE SUBMITTED	
13A	DW	Spellman AHU Room 2nd Floor
13B	DW	Spellman AHU Room 2nd Floor
14A	Gray Fireproofing	Spellman AHU Room 2nd Floor
14B	Gray Fireproofing	Spellman AHU Room 2nd Floor
14C	Gray Fireproofing	Spellman AHU Room 2nd Floor
14D	Gray Fireproofing	Spellman AHU 1st Floor
14E	Gray Fireproofing	Spellman AHU 1st Floor
15A	Yellow CB Mastic	Spellman AHU 1st Floor Hall
15B	Yellow CB Mastic	Spellman AHU 1st Floor Hall
16A	Brown CB Mastic	Spellman AHU 1st Floor
16B	Brown CB Mastic	Spellman AHU 1st Floor
17A	Textured Ceiling	Spellman AHU 1st Floor
17B	Textured Ceiling	Spellman AHU 1st Floor
17C	Textured Ceiling	Spellman AHU 1st Floor
18A	White Fixture Caulk	Spellman AHU 1st Floor Bath
18B	White Fixture Caulk	Spellman AHU 1st Floor Bath
19A	Black WF Tar	WF 1st Floor Spellman
19B	Black WF Tar	WF 1st Floor Spellman
20A	White Window Caulk	1st Floor Spellman
20B	White Window Caulk	1st Floor Spellman
21A	Gray Sink Under Coat	1st Floor Spellman
21B	Gray Sink Under Coat	1st Floor Spellman
21C	Gray Sink Under Coat	1st Floor Spellman
22A	Paper & Foil Over FBS	E-928
22B	Paper & Foil Over FBS	E-928
23A	DW	E-928
23B	DW	E-911
24A	JC	E-928
24B	JC	E-911
25A	Black Duct Mastic	E-928

EUROFINS CEI, INC
SAMPLES ACCEPTED

JJB

B 2010023

25B	Black Duct Mastic	E-928
26A	2 Coat Plaster	Hallway Outside 519
26B	2 Coat Plaster	Hallway Outside 519
26C	2 Coat Plaster	Hallway Outside 519
26D	2 Coat Plaster	E-300's Outside Radiology
26E	2 Coat Plaster	E-300's Outside Radiology
27A	Red Firestop	Hallway Outside 519
27B	Red Firestop	Hallway Outside 519
28A	Textured Plaster Backing Block	Hallway Outside 519
28B	Textured Plaster Backing Block	Hallway Outside 519
29A	Gray Window Glaze	E-518
29B	Gray Window Glaze	E-518
30A	Black TSI Hanger Mastic	3rd Floor Hall E near sprinkler room
30B	Black TSI Hanger Mastic	E-911
31A	Cemented Pipe Elbow	300 E-Wing near Radiology
31B	Cemented Pipe Elbow	300 E-Wing near Radiology
31C	Cemented Pipe Elbow	300 E-Wing near Radiology
H&J		
32A	DW	J-400 PHP Bath
32B	DW	J-400 PHP Bath
33A	JC	J-400 PHP Bath
33B	JC	Ultrasound 1 Hwing PDC
34A	Red firestop	H-400 Dialysis Hopper
34B	Red firestop	H-400 Dialysis Hopper
35A	2 Coat Plaster	H-400 Dialysis Hopper
35B	2 Coat Plaster	H-400 Dialysis Hopper
35C	2 Coat Plaster	H-400 Dialysis Hopper
35D	2 Coat Plaster	Ultrasound 1 Hwing PDC
35E	2 Coat Plaster	Ultrasound 1 Hwing PDC
35F	2 Coat Plaster	1st Floor H/J Outside Cafeteria
35G	2 Coat Plaster	1st Floor H/J Outside Cafeteria
36A	Firebrick	H-400 Dialysis Hopper
36B	Firebrick	H-400 Dialysis Hopper
37A	Foil Over Cloth TSI	Ultrasound 1 Hwing PDC
37B	Foil Over Cloth TSI	H-100 Hallway
37C	Foil Over Cloth TSI	H-200 Rear Fire Exit Door
38A	Black Waterproofing	Ultrasound 1 Hwing PDC
38B	Black Waterproofing	Ultrasound 1 Hwing PDC
38C	Black Waterproofing	Ultrasound 1 Hwing PDC
39A	Paper Over Foil Bridging Mastic	H-100 Special Procedures Outside Dual RR
39B	Paper Over Foil Bridging Mastic	H-100 Special Procedures Outside Dual RR
39C	Paper Over Foil Bridging Mastic	H/J 100 Outside Cafeteria
40A	White Duct Mastic	E- Cafeteria
40B	White Duct Mastic	E- Cafeteria
41A	2 Coat Plaster	SW Addition- Shutdown OR
41B	2 Coat Plaster	SW Addition- Shutdown OR
41C	2 Coat Plaster	SW Addition- Shutdown OR
42A	White Bridging Mastic	Case Magement AHU- SWADD
42B	White Bridging Mastic	Case Magement AHU- SWADD
42C	White Bridging Mastic	Case Magement AHU- SWADD
43A	Cloth Over Fiberglass	SW Addition
43B	Cloth Over Fiberglass	SW Addition
44A	Gray Pin Mastic	SW Addition
44B	Gray Pin Mastic	SW Addition
45A	White Duct Mastic	SW Addition
45B	White Duct Mastic	SW Addition
46A	Red firestop	SW Addition
46B	Red firestop	SW Addition

NA 11/4
43C

Relinquished by Nathan Edwards 10/30/20
11:30 AM

EUROFINS CEI, INC.
SAMPLES ACCEPTED
KW 11/2/20
9:20am

B2010023

Rouse, Nickolas

From: Nathan Edwards <NEdwards@ecslimited.com>
Sent: Wednesday, November 04, 2020 9:37 AM
To: Rouse, Nickolas
Subject: RE: Extra Sample

EXTERNAL EMAIL*

Please include this sample Nick. It was left off of the COC by mistake.

Thanks,

NATHAN EDWARDS | Environmental Project Manager
ECS MID-ATLANTIC, LLC | T 410.859.4300 | D 571.748.5135 | C 443.386.5538
www.ecslimited.com

Confidential/proprietary message/attachments. Delete message/attachments if not intended recipient.

From: Rouse, Nickolas <Nickolas.Rouse@eurofinset.com>
Sent: Wednesday, November 4, 2020 9:07 AM
To: Nathan Edwards <NEdwards@ecslimited.com>
Subject: Extra Sample

Good Morning,

Project PG County Hospital 47:10416-B has an extra sample 43C (cloth over fiberglass) that was not listed on the COC. Would you like us to include this sample with the project, or should we discard the extra sample? Please reply at your earliest convenience to confirm. Let me know if there is anything else I can do for you, and thank you for choosing Eurofins CEI Labs.

Best Regards

Nickolas Rouse
Senior Laboratory Technician, Sample Receiving

Eurofins CEI
730 SE Maynard Rd
Cary, NC 27511
USA

Phone: +1 919-481-1413

November 12, 2020

ECS Mid-Atlantic
1340 Charwood Road Ste B
Hanover, MD 21076

CLIENT PROJECT: PG County Hospital, 47:10416-B
CEI LAB CODE: B2010211

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 5, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH
Laboratory Director



CEI

ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

ECS Mid-Atlantic

CLIENT PROJECT: PG County Hospital, 47:10416-B

LAB CODE: B2010211

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 11/12/20

TOTAL SAMPLES ANALYZED: 109

SAMPLES >1% ASBESTOS: 7



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Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: PG County Hospital, 47:10416-B

LAB CODE: B2010211

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
47A		B156352	Black	Tar Wrap	None Detected
47B		B156353	Black	Tar Wrap	None Detected
48A	Layer 1	B156354	Silver	Cloth Tsi	None Detected
	Layer 2	B156354	Black	Mastic	None Detected
48B	Layer 1	B156355	Silver	Cloth Tsi	None Detected
	Layer 2	B156355	Black	Mastic	None Detected
48C	Layer 1	B156356	Silver	Cloth Tsi	None Detected
	Layer 2	B156356	Black	Mastic	None Detected
49A		B156357	Gray	Duct Mastic	None Detected
49B		B156358	Gray	Duct Mastic	None Detected
50A		B156359	Gray	Domestic Water Mudded Elbows	Amosite <1%
50B		B156360	Gray	Domestic Water Mudded Elbows	Amosite 3% Chrysotile 2%
50C		B156361		Sample Not Analyzed per COC	
51A		B156362	Gray	Airocell Tsi	Chrysotile 55%
51B		B156363		Sample Not Analyzed per COC	
51C		B156364		Sample Not Analyzed per COC	
52A		B156365	Red	Firestop	None Detected
52B		B156366	Red	Firestop	None Detected
53A		B156367	White	End Cap Mastic	None Detected
53B		B156368	White	End Cap Mastic	None Detected
53C		B156369	White	End Cap Mastic	None Detected
54A		B156370	Pink	Sink Undercoating	Chrysotile 3%
54B		B156371		Sample Not Analyzed per COC	
54C		B156372		Sample Not Analyzed per COC	
55A	Layer 1	B156373	Green	Wrinkly Tsi	None Detected
	Layer 2	B156373	Black	Mastic	None Detected
55B	Layer 1	B156374	Green	Wrinkly Tsi	None Detected
	Layer 2	B156374	Black	Mastic	None Detected
55C	Layer 1	B156375	Green	Wrinkly Tsi	None Detected
	Layer 2	B156375	Black	Mastic	None Detected
56A		B156376	White	Cloth Tsi	None Detected



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Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: PG County Hospital, 47:10416-B

LAB CODE: B2010211

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
56B		B156377	White	Cloth Tsi	None Detected
56C		B156378	White	Cloth Tsi	None Detected
57A		B156379	Tan	Duct Mastic	None Detected
57B		B156380	Tan	Duct Mastic	None Detected
58A		B156381	Gray,Green	Duct Pin Mastic	Chrysotile 5%
58B		B156382		Sample Not Analyzed per COC	
59A		B156383	White	Cloth Duct Covering	None Detected
59B		B156384	White	Cloth Duct Covering	None Detected
59C		B156385	White	Cloth Duct Covering	None Detected
60A		B156386	Gray	Drywall	None Detected
60B		B156387	Gray	Drywall	None Detected
61A		B156388	Tan	Joint Compound	Chrysotile 2%
61B		B156389		Sample Not Analyzed per COC	
61C		B156390		Sample Not Analyzed per COC	
62A		B156391	Tan	Insulation	None Detected
62B		B156392	Tan	Insulation	None Detected
63A	Layer 1	B156393	White	Plaster Skim Coat	None Detected
	Layer 2	B156393	Tan	Plaster Base Coat	None Detected
63B	Layer 1	B156394	White	Plaster Skim Coat	None Detected
	Layer 2	B156394	Tan	Plaster Base Coat	None Detected
63C	Layer 1	B156395	White	Plaster Skim Coat	None Detected
	Layer 2	B156395	Tan	Plaster Base Coat	None Detected
63D	Layer 1	B156396	White	Plaster Skim Coat	None Detected
	Layer 2	B156396	Gray	Plaster Base Coat	None Detected
63E	Layer 1	B156397	White	Plaster Skim Coat	None Detected
	Layer 2	B156397	Gray	Plaster Base Coat	None Detected
63F	Layer 1	B156398	White	Plaster Skim Coat	None Detected
	Layer 2	B156398	Gray	Plaster Base Coat	None Detected
63G	Layer 1	B156399	White	Plaster Skim Coat	None Detected
	Layer 2	B156399	Gray	Plaster Base Coat	None Detected
64A		B156400	Gray	Glazing	Chrysotile <1%



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Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: PG County Hospital, 47:10416-B

LAB CODE: B2010211

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
64B		B156401	Gray	Glazing	Chrysotile <1%
65A		B156402	Black	Pipe Wrap	None Detected
65B		B156403	Black	Pipe Wrap	None Detected
66A		B156404	Brown	Fiberboard	None Detected
66B		B156405	Brown	Fiberboard	None Detected
67A	Layer 1	B156406	Brown	Covering	Chrysotile 3%
	Layer 2	B156406	Black	Mastic	None Detected
67B		B156407		Sample Not Analyzed per COC	
68A		B156408	White	Duct Mastic	None Detected
68B		B156409	White	Duct Mastic	None Detected
69A		B156410	Gray	Duct Mastic	None Detected
69B		B156411	Gray	Duct Mastic	None Detected
70A		B156412	Pink	Joint Compound	None Detected
70B		B156413	White	Joint Compound	None Detected
71A		B156414	Gray	Drywall	None Detected
71B		B156415	Gray	Drywall	None Detected
72A		B156416	Gray	Fireproofing	None Detected
72B		B156417	Gray	Fireproofing	None Detected
72C		B156418	Gray	Fireproofing	None Detected
72D		B156419	Gray	Fireproofing	None Detected
72E		B156420	Gray	Fireproofing	None Detected
73A		B156421	White	Paper Over Foil	None Detected
73B		B156422	White	Paper Over Foil	None Detected
73C		B156423	White	Paper Over Foil	None Detected
74A		B156424	Green	Duct Mastic	None Detected
74B		B156425	Green	Duct Mastic	None Detected
75A		B156426	Red	Firestop	None Detected
75B		B156427	Red	Firestop	None Detected
76A		B156428	Black	Water Proofing	None Detected
76B		B156429	Black	Water Proofing	Chrysotile 10%
76C		B156430		Sample Not Analyzed per COC	



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Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: PG County Hospital, 47:10416-B

LAB CODE: B2010211

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
77A		B156431	Gray	Drywall	None Detected
78A	Layer 1	B156432	White	Surface Material	None Detected
	Layer 2	B156432	White	Plaster Skim Coat	None Detected
	Layer 3	B156432	Gray	Plaster Base Coat	None Detected
78B	Layer 1	B156433	White	Surface Material	None Detected
	Layer 2	B156433	White	Plaster Skim Coat	None Detected
	Layer 3	B156433	Gray	Plaster Base Coat	None Detected
78C	Layer 1	B156434	White	Surface Material	None Detected
	Layer 2	B156434	White	Plaster Skim Coat	None Detected
	Layer 3	B156434	Gray	Plaster Base Coat	None Detected
79A		B156435	Red	Firestop	None Detected
79B		B156436	Red	Firestop	None Detected
80A		B156437	White	Joint Compound	None Detected
80B		B156438	White	Joint Compound	None Detected
80C		B156439	White	Joint Compound	None Detected
81A		B156440	Tan,White	Paper Over Foil Tsi	None Detected
81B		B156441	Tan,White	Paper Over Foil Tsi	None Detected
81C		B156442	Tan,White	Paper Over Foil Tsi	None Detected
83A	Layer 1	B156443	Yellow	TSI	None Detected
	Layer 2	B156443	White	Endcap Mastic	None Detected
83B	Layer 1	B156444	Yellow	TSI	None Detected
	Layer 2	B156444	White	Endcap Mastic	None Detected
83C	Layer 1	B156445	Yellow	TSI	None Detected
	Layer 2	B156445	White	Endcap Mastic	None Detected
84A		B156446	White	Water Tank Cementitious Insulation	None Detected
84B		B156447	White	Water Tank Cementitious Insulation	None Detected
84C		B156448	White	Water Tank Cementitious Insulation	None Detected
85A		B156449	Tan,Gray	Cement Elbow	None Detected
85B		B156450	Tan,Gray	Cement Elbow	None Detected



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Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: PG County Hospital, 47:10416-B

LAB CODE: B2010211

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
85C		B156451	Tan,Gray	Cement Elbow	None Detected
86A		B156452	Gray	Duct Mastic	None Detected
86B		B156453	Gray	Duct Mastic	None Detected
87A		B156454	Black	Pipe Wrap	None Detected
87B		B156455	Black	Pipe Wrap	None Detected
88A		B156456	Beige	Duct Mastic	None Detected
88B		B156457	Beige	Duct Mastic	None Detected
89A		B156458	White	Textured Column	None Detected
89B		B156459	White	Textured Column	None Detected
89C		B156460	White	Textured Column	None Detected
90A		B156461	White	Duct Mastic	None Detected
90B		B156462	White	Duct Mastic	None Detected
91A		B156463	Beige	Fireproofing	None Detected
91B		B156464	Beige	Fireproofing	None Detected
91C		B156465	Beige	Fireproofing	None Detected
92A		B156466	White	Wall To Window Caulk	None Detected
92B		B156467	White	Wall To Window Caulk	None Detected
93A		B156468	Tan	Pipe Hanger Cement	None Detected
93B		B156469	Tan	Pipe Hanger Cement	None Detected
93C		B156470	Tan	Pipe Hanger Cement	None Detected



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ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
1340 Charwood Road Ste B
Hanover, MD 21076

Lab Code: B2010211
Date Received: 11-05-20
Date Analyzed: 11-12-20
Date Reported: 11-12-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
47A B156352	Tar Wrap	Heterogeneous Black Fibrous Bound	70%	Cellulose	30%	Tar	None Detected
47B B156353	Tar Wrap	Heterogeneous Black Fibrous Bound	70%	Cellulose	30%	Tar	None Detected
48A Layer 1 B156354	Cloth Tsi	Heterogeneous Silver Fibrous Bound	55%	Fiberglass	5%	Paint	None Detected
			25%	Cellulose	15%	Metal Foil	
Layer 2 B156354	Mastic	Heterogeneous Black Fibrous Bound	70%	Cellulose	30%	Mastic	None Detected
48B Layer 1 B156355	Cloth Tsi	Heterogeneous Silver Fibrous Bound	55%	Fiberglass	5%	Paint	None Detected
			25%	Cellulose	15%	Metal Foil	
Layer 2 B156355	Mastic	Heterogeneous Black Fibrous Bound	70%	Cellulose	30%	Mastic	None Detected
48C Layer 1 B156356	Cloth Tsi	Heterogeneous Silver Fibrous Bound	55%	Fiberglass	5%	Paint	None Detected
			25%	Cellulose	15%	Metal Foil	

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
 1340 Charwood Road Ste B
 Hanover, MD 21076

Lab Code: B2010211
Date Received: 11-05-20
Date Analyzed: 11-12-20
Date Reported: 11-12-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
Layer 2 B156356	Mastic	Heterogeneous Black Fibrous Bound	70%	Cellulose	30%	Mastic	None Detected
49A B156357	Duct Mastic	Heterogeneous Gray Fibrous Bound			100%	Mastic	None Detected
49B B156358	Duct Mastic	Heterogeneous Gray Fibrous Bound			100%	Mastic	None Detected
50A B156359	Domestic Water Mudded Elbows	Heterogeneous Gray Fibrous Bound		Fiberglass	100%	Mastic	<1% Amosite
50B B156360	Domestic Water Mudded Elbows	Heterogeneous Gray Fibrous Bound	65%	Fiberglass	30%	Binder	3% Amosite 2% Chrysotile
50C B156361	Sample Not Analyzed per COC						
51A B156362	Airocell Tsi	Heterogeneous Gray Fibrous Bound	30%	Cellulose	15%	Binder	55% Chrysotile
51B B156363	Sample Not Analyzed per COC						
51C B156364	Sample Not Analyzed per COC						

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
 1340 Charwood Road Ste B
 Hanover, MD 21076

Lab Code: B2010211
Date Received: 11-05-20
Date Analyzed: 11-12-20
Date Reported: 11-12-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %
			Fibrous	Non-Fibrous		
52A B156365	Firestop	Homogeneous Red Non-fibrous Bound	100%	Caulk		None Detected
52B B156366	Firestop	Homogeneous Red Non-fibrous Bound	100%	Caulk		None Detected
53A B156367	End Cap Mastic	Homogeneous White Non-fibrous Bound	<1%	Cellulose	100%	Mastic None Detected
53B B156368	End Cap Mastic	Homogeneous White Non-fibrous Bound	<1%	Cellulose	100%	Mastic None Detected
53C B156369	End Cap Mastic	Homogeneous White Non-fibrous Bound	<1%	Cellulose	100%	Mastic None Detected
54A B156370	Sink Undercoating	Homogeneous Pink Non-fibrous Bound	<1%	Cellulose	97%	Mastic 3% Chrysotile
Lab Notes: Sample appears to be pink.						
54B B156371	Sample Not Analyzed per COC					
54C B156372	Sample Not Analyzed per COC					



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ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
1340 Charwood Road Ste B
Hanover, MD 21076

Lab Code: B2010211
Date Received: 11-05-20
Date Analyzed: 11-12-20
Date Reported: 11-12-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
55A Layer 1 B156373	Wrinkly Tsi	Heterogeneous	5%	Fiberglass	5%	Paint	None Detected
		Green Fibrous Bound	65%	Cellulose	25%	Metal Foil	
Layer 2 B156373	Mastic	Heterogeneous Black Fibrous Bound	70%	Cellulose	30%	Mastic	None Detected
55B Layer 1 B156374	Wrinkly Tsi	Heterogeneous	5%	Fiberglass	5%	Paint	None Detected
		Green Fibrous Bound	65%	Cellulose	25%	Metal Foil	
Layer 2 B156374	Mastic	Heterogeneous Black Fibrous Bound	70%	Cellulose	30%	Mastic	None Detected
55C Layer 1 B156375	Wrinkly Tsi	Heterogeneous	5%	Fiberglass	5%	Paint	None Detected
		Green Fibrous Bound	65%	Cellulose	25%	Metal Foil	
Layer 2 B156375	Mastic	Heterogeneous Black Fibrous Bound	70%	Cellulose	30%	Mastic	None Detected
56A B156376	Cloth Tsi	Heterogeneous White Fibrous Bound	25%	Fiberglass	5%	Binder	None Detected
			45%	Cellulose	25%	Metal Foil	

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
 1340 Charwood Road Ste B
 Hanover, MD 21076

Lab Code: B2010211
Date Received: 11-05-20
Date Analyzed: 11-12-20
Date Reported: 11-12-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
56B B156377	Cloth Tsi	Heterogeneous	25%	Fiberglass	5%	Binder	None Detected
		White	45%	Cellulose	25%	Metal Foil	
		Fibrous Bound					
56C B156378	Cloth Tsi	Heterogeneous	25%	Fiberglass	5%	Binder	None Detected
		White	45%	Cellulose	25%	Metal Foil	
		Fibrous Bound					
57A B156379	Duct Mastic	Heterogeneous	<1%	Cellulose	100%	Mastic	None Detected
		Tan					
		Fibrous Bound					
57B B156380	Duct Mastic	Heterogeneous	<1%	Cellulose	100%	Mastic	None Detected
		Tan					
		Fibrous Bound					
58A B156381	Duct Pin Mastic	Heterogeneous	5%	Cellulose	90%	Mastic	5% Chrysotile
		Gray,Green					
		Fibrous Bound					
58B B156382	Sample Not Analyzed per COC						
59A B156383	Cloth Duct Covering	Heterogeneous	95%	Cellulose	5%	Binder	None Detected
		White					
		Fibrous Bound					
59B B156384	Cloth Duct Covering	Heterogeneous	95%	Cellulose	5%	Binder	None Detected
		White					
		Fibrous Bound					

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
 1340 Charwood Road Ste B
 Hanover, MD 21076

Lab Code: B2010211
Date Received: 11-05-20
Date Analyzed: 11-12-20
Date Reported: 11-12-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
59C B156385	Cloth Duct Covering	Heterogeneous White Fibrous Bound	100%	Cellulose	<1%	Binder	None Detected
60A B156386	Drywall	Heterogeneous Gray Fibrous Bound	25%	Cellulose	70%	Gypsum 5% Paint	None Detected
60B B156387	Drywall	Heterogeneous Gray Fibrous Bound	25%	Cellulose	70%	Gypsum 5% Paint	None Detected
61A B156388	Joint Compound	Heterogeneous Tan Fibrous Bound			68%	Calc Carb 25% Binder 5% Paint	2% Chrysotile
61B B156389	Sample Not Analyzed per COC						
61C B156390	Sample Not Analyzed per COC						
62A B156391	Insulation	Heterogeneous Tan Fibrous Loose	5%	Cellulose	60%	Binder 35% Calc Carb	None Detected
Lab Notes: Sample appears to be insulation and tan colored.							
62B B156392	Insulation	Heterogeneous Tan Fibrous Loose	5%	Cellulose	60%	Binder 35% Calc Carb	None Detected
Lab Notes: Sample appears to be insulation and tan colored.							

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
 1340 Charwood Road Ste B
 Hanover, MD 21076

Lab Code: B2010211
Date Received: 11-05-20
Date Analyzed: 11-12-20
Date Reported: 11-12-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
63A Layer 1 B156393	Plaster Skim Coat	Heterogeneous White Non-fibrous Bound	70% Calc Carb		25% Silicates		None Detected
			5% Paint				
Layer 2 B156393	Plaster Base Coat	Heterogeneous Tan Non-fibrous Bound	<1% Hair	75% Silicates			None Detected
			<1% Cellulose	25% Binder			
63B Layer 1 B156394	Plaster Skim Coat	Heterogeneous White Non-fibrous Bound	70% Calc Carb		25% Silicates		None Detected
			5% Paint				
Layer 2 B156394	Plaster Base Coat	Heterogeneous Tan Non-fibrous Bound	<1% Hair	75% Silicates			None Detected
			<1% Cellulose	25% Binder			
63C Layer 1 B156395	Plaster Skim Coat	Heterogeneous White Non-fibrous Bound	70% Calc Carb		25% Silicates		None Detected
			5% Paint				
Layer 2 B156395	Plaster Base Coat	Heterogeneous Tan Non-fibrous Bound	<1% Hair	75% Silicates			None Detected
			<1% Cellulose	25% Binder			
63D Layer 1 B156396	Plaster Skim Coat	Heterogeneous White Non-fibrous Bound	70% Calc Carb		25% Silicates		None Detected
			5% Paint				



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ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
1340 Charwood Road Ste B
Hanover, MD 21076

Lab Code: B2010211
Date Received: 11-05-20
Date Analyzed: 11-12-20
Date Reported: 11-12-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
Layer 2 B156396	Plaster Base Coat	Heterogeneous Gray Non-fibrous Bound	<1%	Hair	75%	Silicates	None Detected
			<1%	Cellulose	25%	Binder	
63E Layer 1 B156397	Plaster Skim Coat	Heterogeneous White Non-fibrous Bound			70%	Calc Carb	None Detected
					25%	Silicates	
					5%	Paint	
Layer 2 B156397	Plaster Base Coat	Heterogeneous Gray Non-fibrous Bound	<1%	Hair	75%	Silicates	None Detected
			<1%	Cellulose	25%	Binder	
63F Layer 1 B156398	Plaster Skim Coat	Heterogeneous White Non-fibrous Bound			70%	Calc Carb	None Detected
					25%	Silicates	
					5%	Paint	
Layer 2 B156398	Plaster Base Coat	Heterogeneous Gray Non-fibrous Bound	<1%	Hair	75%	Silicates	None Detected
			<1%	Cellulose	25%	Binder	
63G Layer 1 B156399	Plaster Skim Coat	Heterogeneous White Non-fibrous Bound			70%	Calc Carb	None Detected
					25%	Silicates	
					5%	Paint	
Layer 2 B156399	Plaster Base Coat	Heterogeneous Gray Non-fibrous Bound	<1%	Hair	75%	Silicates	None Detected
			<1%	Cellulose	25%	Binder	

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
 1340 Charwood Road Ste B
 Hanover, MD 21076

Lab Code: B2010211
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Date Reported: 11-12-20

Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
64A B156400	Glazing	Heterogeneous	75%	Cellulose	75%	Binder	<1% Chrysotile
		Gray Non-fibrous Bound	25%	Calc Carb	25%	Calc Carb	
64B B156401	Glazing	Heterogeneous	75%	Cellulose	75%	Binder	<1% Chrysotile
		Gray Non-fibrous Bound	25%	Calc Carb	25%	Calc Carb	
65A B156402	Pipe Wrap	Heterogeneous	25%	Cellulose	75%	Tar	None Detected
		Black Fibrous Bound					
65B B156403	Pipe Wrap	Heterogeneous	25%	Cellulose	75%	Tar	None Detected
		Black Fibrous Bound					
66A B156404	Fiberboard	Heterogeneous	95%	Cellulose	5%	Tar	None Detected
		Brown Fibrous Bound					
66B B156405	Fiberboard	Heterogeneous	95%	Cellulose	5%	Tar	None Detected
		Brown Fibrous Bound					
67A Layer 1 B156406	Covering	Heterogeneous	35%	Cellulose	62%	Tar	3% Chrysotile
		Brown Fibrous Bound					



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ASBESTOS BULK ANALYSIS

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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous	Non-Fibrous			
Layer 2 B156406	Mastic	Heterogeneous Black Fibrous Bound	15%	Fiberglass	85%	Mastic	None Detected
67B B156407	Sample Not Analyzed per COC						
68A B156408	Duct Mastic	Heterogeneous White Non-fibrous Bound	<1%	Wollastonite	100%	Mastic	None Detected
68B B156409	Duct Mastic	Heterogeneous White Non-fibrous Bound	<1%	Wollastonite	100%	Mastic	None Detected
69A B156410	Duct Mastic	Heterogeneous Gray Non-fibrous Bound	<1%	Wollastonite	100%	Mastic	None Detected
69B B156411	Duct Mastic	Heterogeneous Gray Non-fibrous Bound	<1%	Wollastonite	100%	Mastic	None Detected
70A B156412	Joint Compound	Heterogeneous Pink Non-fibrous Bound			75%	Calc Carb	None Detected
					25%	Binder	
70B B156413	Joint Compound	Heterogeneous White Non-fibrous Bound			75%	Calc Carb	None Detected
					25%	Binder	

ASBESTOS BULK ANALYSIS

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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
71A B156414	Drywall	Heterogeneous Gray Non-fibrous Bound	25%	Cellulose	75%	Gypsum	None Detected
71B B156415	Drywall	Heterogeneous Gray Non-fibrous Bound	25%	Cellulose	75%	Gypsum	None Detected
72A B156416	Fireproofing	Heterogeneous Gray Fibrous Loose	75%	Fiberglass	25%	Binder	None Detected
72B B156417	Fireproofing	Heterogeneous Gray Fibrous Loose	75%	Fiberglass	25%	Binder	None Detected
72C B156418	Fireproofing	Heterogeneous Gray Fibrous Loose	75%	Fiberglass	25%	Binder	None Detected
72D B156419	Fireproofing	Heterogeneous Gray Fibrous Loose	75%	Fiberglass	25%	Binder	None Detected
72E B156420	Fireproofing	Heterogeneous Gray Fibrous Loose	75%	Fiberglass	25%	Binder	None Detected

ASBESTOS BULK ANALYSIS

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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
73A B156421	Paper Over Foil	Heterogeneous White Fibrous Loose	25%	Fiberglass	60% 15%	Binder Metal Foil	None Detected
73B B156422	Paper Over Foil	Heterogeneous White Fibrous Loose	25%	Fiberglass	60% 15%	Binder Metal Foil	None Detected
73C B156423	Paper Over Foil	Heterogeneous White Fibrous Loose	25%	Fiberglass	60% 15%	Binder Metal Foil	None Detected
74A B156424	Duct Mastic	Heterogeneous Green Non-fibrous Bound			100%	Mastic	None Detected
Lab Notes: Sample appears to be green.							
74B B156425	Duct Mastic	Heterogeneous Green Non-fibrous Bound			100%	Mastic	None Detected
Lab Notes: Sample appears to be green.							
75A B156426	Firestop	Heterogeneous Red Non-fibrous Bound			100%	Caulk	None Detected
75B B156427	Firestop	Heterogeneous Red Non-fibrous Bound			100%	Caulk	None Detected

ASBESTOS BULK ANALYSIS

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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
76A B156428	Water Proofing	Heterogeneous Black Fibrous Bound	65%	Cellulose	35%	Tar	None Detected
76B B156429	Water Proofing	Heterogeneous Black Fibrous Bound	50%	Cellulose	40%	Tar	10% Chrysotile
76C B156430	Sample Not Analyzed per COC						
77A B156431	Drywall	Heterogeneous Gray Fibrous Bound	25%	Cellulose	75%	Gypsum	None Detected
78A Layer 1 B156432	Surface Material	Heterogeneous White Non-fibrous Bound			75%	Calc Carb	None Detected
Layer 2 B156432	Plaster Skim Coat	Heterogeneous White Non-fibrous Bound			75%	Calc Carb	None Detected
Layer 3 B156432	Plaster Base Coat	Heterogeneous Gray Non-fibrous Bound			75%	Silicates	None Detected
78B Layer 1 B156433	Surface Material	Heterogeneous White Non-fibrous Bound			75%	Calc Carb	None Detected



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ASBESTOS BULK ANALYSIS

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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 2 B156433	Plaster Skim Coat	Heterogeneous White Non-fibrous Bound	75% 20% 5%	Calc Carb Binder Paint	None Detected
Layer 3 B156433	Plaster Base Coat	Heterogeneous Gray Non-fibrous Bound	75% 25%	Silicates Binder	None Detected
78C Layer 1 B156434	Surface Material	Heterogeneous White Non-fibrous Bound	75% 20% 5%	Calc Carb Binder Paint	None Detected
Layer 2 B156434	Plaster Skim Coat	Heterogeneous White Non-fibrous Bound	75% 20% 5%	Calc Carb Binder Paint	None Detected
Layer 3 B156434	Plaster Base Coat	Heterogeneous Gray Non-fibrous Bound	75% 25%	Silicates Binder	None Detected
79A B156435	Firestop	Heterogeneous Red Non-fibrous Bound	100%	Caulk	None Detected
79B B156436	Firestop	Heterogeneous Red Non-fibrous Bound	100%	Caulk	None Detected



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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %	
			Fibrous	Non-Fibrous		
80A B156437	Joint Compound	Heterogeneous White Non-fibrous Bound	70% 25% 5%	Calc Carb Binder Paint	None Detected	
80B B156438	Joint Compound	Heterogeneous White Non-fibrous Bound	70% 25% 5%	Calc Carb Binder Paint	None Detected	
80C B156439	Joint Compound	Heterogeneous White Non-fibrous Bound	70% 25% 5%	Calc Carb Binder Paint	None Detected	
81A B156440	Paper Over Foil Tsi	Heterogeneous Tan,White Fibrous Bound	25%	Fiberglass 50% 25%	Mastic Metal Foil	None Detected
81B B156441	Paper Over Foil Tsi	Heterogeneous Tan,White Fibrous Bound	25%	Fiberglass 50% 25%	Mastic Metal Foil	None Detected
81C B156442	Paper Over Foil Tsi	Heterogeneous Tan,White Fibrous Bound	25%	Fiberglass 50% 25%	Mastic Metal Foil	None Detected
83A Layer 1 B156443	TSI	Heterogeneous Yellow Fibrous Loose	100%	Fiberglass		None Detected



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ASBESTOS BULK ANALYSIS

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Date Received: 11-05-20
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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %
			Fibrous	Non-Fibrous		
Layer 2 B156443	Endcap Mastic	Heterogeneous White Non-fibrous Bound		100%	Mastic	None Detected
83B Layer 1 B156444	TSI	Heterogeneous Yellow Fibrous Loose	100%	Fiberglass		None Detected
Layer 2 B156444	Endcap Mastic	Heterogeneous White Non-fibrous Bound		100%	Mastic	None Detected
83C Layer 1 B156445	TSI	Heterogeneous Yellow Fibrous Loose	100%	Fiberglass		None Detected
Layer 2 B156445	Endcap Mastic	Heterogeneous White Non-fibrous Bound		100%	Mastic	None Detected
84A B156446	Water Tank Cementitious Insulation	Heterogeneous White Fibrous Loose	13% 2%	Cellulose Synthetic Fiber	85% Binder	None Detected
84B B156447	Water Tank Cementitious Insulation	Heterogeneous White Fibrous Loose	13% 2%	Cellulose Synthetic Fiber	85% Binder	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
 1340 Charwood Road Ste B
 Hanover, MD 21076

Lab Code: B2010211
Date Received: 11-05-20
Date Analyzed: 11-12-20
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Project: PG County Hospital, 47:10416-B

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %
			Fibrous	Non-Fibrous		
84C B156448	Water Tank Cementitious Insulation	Heterogeneous	13%	Cellulose	85%	None Detected
		White	2%	Synthetic Fiber		
		Fibrous Loose				
85A B156449	Cement Elbow	Heterogeneous	13%	Cellulose	70%	None Detected
		Tan,Gray	2%	Synthetic Fiber	15%	
		Fibrous Loose		Silicates		
85B B156450	Cement Elbow	Heterogeneous	13%	Cellulose	70%	None Detected
		Tan,Gray	2%	Synthetic Fiber	15%	
		Fibrous Loose		Silicates		
85C B156451	Cement Elbow	Heterogeneous	13%	Cellulose	70%	None Detected
		Tan,Gray	2%	Synthetic Fiber	15%	
		Fibrous Loose		Silicates		
86A B156452	Duct Mastic	Heterogeneous			100%	None Detected
		Gray Non-fibrous Bound			Mastic	
86B B156453	Duct Mastic	Heterogeneous			100%	None Detected
		Gray Non-fibrous Bound			Mastic	
87A B156454	Pipe Wrap	Heterogeneous	<1%	Synthetic Fiber	65%	None Detected
		Black	<1%	Cellulose	35%	
		Non-fibrous Bound			Tar Binder	

ASBESTOS BULK ANALYSIS

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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %
			Fibrous	Non-Fibrous		
87B B156455	Pipe Wrap	Heterogeneous	<1%	Synthetic Fiber	65%	None Detected
		Black Non-fibrous Bound	<1%	Cellulose	35%	
88A B156456	Duct Mastic	Heterogeneous			100%	None Detected
		Beige Non-fibrous Bound			Mastic	
88B B156457	Duct Mastic	Heterogeneous			100%	None Detected
		Beige Non-fibrous Bound			Mastic	
89A B156458	Textured Column	Heterogeneous			75%	None Detected
		White Non-fibrous Bound			25% Calc Carb Binder	
89B B156459	Textured Column	Heterogeneous			75%	None Detected
		White Non-fibrous Bound			25% Calc Carb Binder	
89C B156460	Textured Column	Heterogeneous			75%	None Detected
		White Non-fibrous Bound			25% Calc Carb Binder	
90A B156461	Duct Mastic	Heterogeneous			100%	None Detected
		White Non-fibrous Bound			Mastic	

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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
90B B156462	Duct Mastic	Heterogeneous White Non-fibrous Bound		100% Mastic	None Detected
91A B156463	Fireproofing	Heterogeneous Beige Fibrous Loose	100%	Cellulose	None Detected
91B B156464	Fireproofing	Heterogeneous Beige Fibrous Loose	100%	Cellulose	None Detected
91C B156465	Fireproofing	Heterogeneous Beige Fibrous Loose	100%	Cellulose	None Detected
92A B156466	Wall To Window Caulk	Heterogeneous White Non-fibrous Bound		95% Caulk 5% Paint	None Detected
92B B156467	Wall To Window Caulk	Heterogeneous White Non-fibrous Bound		95% Caulk 5% Paint	None Detected
93A B156468	Pipe Hanger Cement	Heterogeneous Tan Fibrous Loose	100%	Cellulose	None Detected



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ASBESTOS BULK PLM, EPA 600 METHOD

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			Fibrous		Non-Fibrous		
93B B156469	Pipe Hanger Cement	Heterogeneous Tan Fibrous Bound	35%	Fiberglass	65%	Binder	None Detected
93C B156470	Pipe Hanger Cement	Heterogeneous Tan Fibrous Bound	35%	Fiberglass	65%	Binder	None Detected

LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

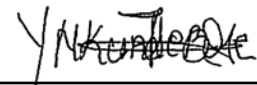
REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

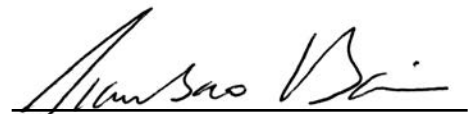
This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Information provided by customer includes customer sample ID and sample description.

ANALYST: _____


Yvette Nkunde-Bose

APPROVED BY: _____


Tianbao Bai, Ph.D., CIH
Laboratory Director



CEI

CHAIN OF CUSTODY

730 SE Maynard Road, Cary, NC 27511
 Tel: 866-481-1412; Fax: 919-481-1442

LAB USE ONLY:	
CEI Lab Code:	B2070211
CEI Lab I.D. Range:	B156352-B156470

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COMPANY INFORMATION		PROJECT INFORMATION	
CEI CLIENT #:		Job Contact:	John Farmer
Company:	ECS Mid-Atlantic	Email / Tel:	jfarmer@ecslimited.com
Address:	1340 Charwood Road, Suite B	Project Name:	PG County Hospital
	Hanover, Maryland 21076	Project ID#:	47:10416-B
Email:		PO #:	47:10416-B
Tel: 410-859-4300	Fax:	STATE SAMPLES COLLECTED IN: MD	

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR*	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Blanks should be taken from the same sample lot as field samples.

REMARKS / SPECIAL INSTRUCTIONS: Analyze all Layers, Stop Positive		<input checked="" type="checkbox"/> Accept Samples
		<input type="checkbox"/> Reject Samples
Relinquished By:	Date/Time	Received By:
<i>[Signature]</i>	11:03 AM 11/4/2020	EL
		11/5 9:20

Samples will be disposed of 30 days after analysis

31C	Cemented Pipe Elbow	300 E-Wing near Radiology
H & J Buildings		
32A	DW	J-400 PHP Bath
32B	DW	J-400 PHP Bath
33A	JC	J-400 PHP Bath
33B	JC	Ultrasound 1 Hwing PDC
34A	Red firestop	H-400 Dialysis Hopper
34B	Red firestop	H-400 Dialysis Hopper
35A	2 Coat Plaster	H-400 Dialysis Hopper
35B	2 Coat Plaster	H-400 Dialysis Hopper
35C	2 Coat Plaster	H-400 Dialysis Hopper
35D	2 Coat Plaster	Ultrasound 1 Hwing PDC
35E	2 Coat Plaster	Ultrasound 1 Hwing PDC
35F	2 Coat Plaster	1st Floor H/J Outside Cafeteria
35G	2 Coat Plaster	1st Floor H/J Outside Cafeteria
36A	Firebrick	H-400 Dialysis Hopper
36B	Firebrick	H-400 Dialysis Hopper
37A	Foil Over Cloth TSI	Ultrasound 1 Hwing PDC
37B	Foil Over Cloth TSI	H-100 Hallway
37C	Foil Over Cloth TSI	H-200 Rear Fire Exit Door
38A	Black Waterproofing	Ultrasound 1 Hwing PDC
38B	Black Waterproofing	Ultrasound 1 Hwing PDC
38C	Black Waterproofing	Ultrasound 1 Hwing PDC
39A	Paper Over Foil Bridging Mastic	H-100 Special Procedures Outside Dual RR
39B	Paper Over Foil Bridging Mastic	H-100 Special Procedures Outside Dual RR
39C	Paper Over Foil Bridging Mastic	H/J 100 Outside Cafeteria
40A	White Duct Mastic	E- Cafeteria
40B	White Duct Mastic	E- Cafeteria
41A	2 Coat Plaster	SW Addition- Shutdown OR
41B	2 Coat Plaster	SW Addition- Shutdown OR
41C	2 Coat Plaster	SW Addition- Shutdown OR
42A	White Bridging Mastic	Case Magement AHU- SWADD
42B	White Bridging Mastic	Case Magement AHU- SWADD
42C	White Bridging Mastic	Case Magement AHU- SWADD
43A	Cloth Over Fiberglass	SW Addition
43B	Cloth Over Fiberglass	SW Addition
44A	Gray Pin Mastic	SW Addition
44B	Gray Pin Mastic	SW Addition
45A	White Duct Mastic	SW Addition
45B	White Duct Mastic	SW Addition
46A	Red firestop	SW Addition
46B	Red firestop	SW Addition
47A	Black Tar Wrap	Building E Sub Basement
47B	Black Tar Wrap	Building E Sub Basement
48A	Cloth TSI w/ Black Mastic	Building E Sub Basement
48B	Cloth TSI w/ Black Mastic	Building E Sub Basement
48C	Cloth TSI w/ Black Mastic	Building E Sub Basement
49A	Gray Duct Mastic	Building E Sub Basement
49B	Gray Duct Mastic	Building E Sub Basement
50A	Domestic Water Mudded Elbows	Building E Sub Basement
50B	Domestic Water Mudded Elbows	Building E Sub Basement
50C	Domestic Water Mudded Elbows	Building E Sub Basement
51A	Airocell TSI	E Wing Old Electric Shop (E1AGMR)
51B	Airocell TSI	E Wing Old Electric Shop (E1AGMR)
51C	Airocell TSI	E Wing Old Electric Shop (E1AGMR)
52A	Red firestop	K100 Electrical Closet DRs Parking Lot
52B	Red firestop	K357
K Building		
53A	White End Cap Mastic	Building K Sub Basement
53B	White End Cap Mastic	Building K Sub Basement
53C	White End Cap Mastic	Building K Sub Basement
54A	Gray Sink Undercoat	Building K Sub Basement
54B	Gray Sink Undercoat	Building K Sub Basement
54C	Gray Sink Undercoat	Building K Sub Basement
55A	White/ Green Wrinkly TSI w/ Black Mastic	Building K Sub Basement Domestic Hot Water
55B	White/ Green Wrinkly TSI w/ Black Mastic	Building K Sub Basement Domestic Hot Water
55C	White/ Green Wrinkly TSI w/ Black Mastic	Building K Sub Basement Domestic Hot Water
56A	Cloth White TSI	Building K Sub Basement
56B	Cloth White TSI	Building K Sub Basement
56C	Cloth White TSI	Building K Sub Basement
57A	Tan Duct Mastic	Building K Sub Basement
57B	Tan Duct Mastic	Building K Sub Basement
58A	Gray Duct Pin Mastic	Building K Sub Basement
58B	Gray Duct Pin Mastic	Building K Sub Basement
59A	Cloth Duct Covering	Building K Sub Basement
59B	Cloth Duct Covering	Building K Sub Basement
59C	Cloth Duct Covering	Building K Sub Basement
60A	DW	Building K Sub Basement
60B	DW	Building K Sub Basement
61A	JC	Building K Sub Basement

THOR

Analyzed

Previously

61B	JC	K Wing Front of Elevator
61C	JC	K400 RC410
62A	White Pipe Hanger Mastic	Building K Sub Basement
62B	White Pipe Hanger Mastic	Building K Sub Basement
63A	2- Coat Plaster	K Stairwell
63B	2- Coat Plaster	K303
63C	2- Coat Plaster	K303
63D	2- Coat Plaster	K Wing 3rd Floor Soiled Utility
63E	2- Coat Plaster	K Wing 3rd Floor Soiled Utility
63F	2- Coat Plaster	K411
63G	2- Coat Plaster	K411
64A	Gray Glazing	K303
64B	Gray Glazing	K303
65A	Black Pipe Wrap	K303 Under Window
65B	Black Pipe Wrap	K303 Under Window
66A	Brown Fiberboard	K303 Under Window
66B	Brown Fiberboard	K303 Under Window
67A	Brown Duct Covering w/ Black Mastic	K400 Pantry
67B	Brown Duct Covering w/ Black Mastic	K400 Pantry
68A	White Duct Mastic	K400 CCU10
68B	White Duct Mastic	K400 CCU10
69A	Gray Duct Mastic	K400 CCU10
69B	Gray Duct Mastic	K400 CCU10
70A	JC	Pavilion 1st Near Donning Room
70B	JC	ISP 1st Floor Environmental Services
71A	DW	70A
71B	DW	ISP 1st Floor Environmental Services
72A	Gray Fireproofing	Room 22 3rd Floor ISP
72B	Gray Fireproofing	Room 22 3rd Floor ISP
72C	Gray Fireproofing	Room 22 3rd Floor ISP
72D	Gray Fireproofing	Elevator Room ISP
72E	Gray Fireproofing	Elevator Room ISP
73A	Paper Over Foil	ISP Penthouse Mechanic Room
73B	Paper Over Foil	ISP Penthouse Mechanic Room
73C	Paper Over Foil	ISP Penthouse Mechanic Room
74A	Yellow Duct Mastic	ISP Penthouse Mechanic Room
74B	Yellow Duct Mastic	ISP Penthouse Mechanic Room
75A	Red Firestop	ISP Penthouse Mechanic Room
75B	Red Firestop	ISP Penthouse Mechanic Room
76A	Black Water Proofing	ACF-1 Empty Shell
76B	Black Water Proofing	ACF-1 Empty Shell
76C	Black Water Proofing	ACF-1 Empty Shell
77A	DW	ACF-1 Empty Shell
78A	2- Coat Plaster	ACF-1 Empty Shell
78B	2- Coat Plaster	ACF-1 Empty Shell
78C	2- Coat Plaster	ACF-1 Empty Shell
79A	Red Firestop	ACF-1 Empty Shell
79B	Red Firestop	ACF Machine Room
80A	JC	ACF-1 Empty Shell
80B	JC	ACF-1 Empty Shell
80C	JC	ACF Machine Room
81A	Tan/White Paper Over Foil TSI	ACF Machine Room
81B	Tan/White Paper Over Foil TSI	ACF Machine Room
81C	Tan/White Paper Over Foil TSI	ACF Machine Room
82A	NOT SUBMITTED	N/A
83A	Bright White TSI w/ Endcap Mastic	ACF Machine Room
83B	Bright White TSI w/ Endcap Mastic	ACF Machine Room
83C	Bright White TSI w/ Endcap Mastic	ACF Machine Room
84A	Water Tank Cementitious Insulation	ACF Machine Room
84B	Water Tank Cementitious Insulation	ACF Machine Room
84C	Water Tank Cementitious Insulation	ACF Machine Room
85A	Large Cement Elbow	Generator ACF Machine Room
85B	Large Cement Elbow	Generator ACF Machine Room
85C	Large Cement Elbow	Generator ACF Machine Room
86A	Gray Duct Mastic	ACF 4th Floor Machine Room (4007)
86B	Gray Duct Mastic	ACF 4th Floor Machine Room (4123)
87A	Black Pipe Wrap	ACF 4th Floor Machine Room (4007)
87B	Black Pipe Wrap	ACF 4th Floor Machine Room (4123)
88A	Beige Duct Mastic	ACF 4th Floor Machine Room (4123)
88B	Beige Duct Mastic	ACF 4th Floor Machine Room (4123)

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89A	White Textured Column	ACF-2 Business Office
89B	White Textured Column	ACF-2 Business Office
89C	White Textured Column	ACF-2 Business Office
90A	White Duct Mastic	ACF-2 Machine Room
90B	White Duct Mastic	ACF-2 Machine Room
91A	Grey Fireproofing	ACF Basement
91B	Grey Fireproofing	ACF Basement
91C	Grey Fireproofing	ACF Basement
92A	White Wall to Window Caulk	ACF Basement
92B	White Wall to Window Caulk	ACF Basement
93A	Pipe Hanger Cement	ACF Basement
93B	Pipe Hanger Cement	ACF Basement
93C	Pipe Hanger Cement	ACF Basement

Appendix IV: Lead-Based Paint Readings

XRF Results Table
February 2, 2021

ECS Project #47-10416-B

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
1	E 500	White	Concrete	Wall	0.00
	E 600	White	Concrete	Wall	0.01
	K 400	White	Concrete	Wall	0.00
2	E 500	White	Ceramic	Wall	>1.00
	E 600	White	Ceramic	Wall	0.34
	E600	White	Ceramic	Wall	0.12
3	E523	White	Plaster	Wall	0.00
	E 900 Kitchen	White	Plaster	Wall	0.00
	E600	White	Plaster	Wall	0.00
4	E 519	White	Metal	Door Frame	0.00
	E 400 Pysch	White	Metal	Door Frame	0.00
	J 400	White	Metal	Door Frame	0.00
5	E 500	White	Metal	Ceiling Grid	0.00
	E 900	White	Metal	Ceiling Grid	0.00
	J 400	White	Metal	Ceiling Grid	0.00
6	E 500 Nurse'S Station	White	Metal	Window Frame	0.00
	E 400 Pysch	White	Metal	Window Frame	0.00
	E 201	White	Metal	Window Frame	0.00
7	E 523	White	Metal	Radiator Cover	0.00
	E 600	White	Metal	Radiator Cover	0.00
	ACF 4	White	Metal	Radiator Cover	0.00
8	E 500	White Speckled	4"X4" Ceramic Tile	Wall	>1.00
	E 500	White Speckled	4"X4" Ceramic Tile	Wall	>1.00
	E 500	White Speckled	4"X4" Ceramic Tile	Wall	>1.00
9	E 900 Shower	White	1"X1" Ceramic Tile	Floor	0.00
	E 900 Shower	White	1"X1" Ceramic Tile	Floor	0.00
	E 900 Shower	White	1"X1" Ceramic Tile	Floor	0.01
10	E 900 Shower	Black	1"X1" Ceramic Tile	Floor	0.00
	E 900 Shower	Black	1"X1" Ceramic Tile	Floor	0.02
	E 900 Shower	Black	1"X1" Ceramic Tile	Floor	0.01
11	E 900 Shower	Gray	1"X1" Ceramic Tile	Floor	0.00
	E 900 Shower	Gray	1"X1" Ceramic Tile	Floor	0.00
	E 900 Shower	Gray	1"X1" Ceramic Tile	Floor	0.00

XRF Results Table
February 2, 2021

ECS Project #47-10416-B

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
12	E 900 Shower	Sage	4"X4" Ceramic Tile	Wall	>1.00
	E 900 Shower	Sage	4"X4" Ceramic Tile	Wall	>1.00
	E 900 Shower	Sage	4"X4" Ceramic Tile	Wall	>1.00
13	E 500 Bath	Sage Speckled	1"X1" Ceramic Tile	Floor	0.00
	1St Histology	Sage Speckled	1"X1" Ceramic Tile	Floor	0.00
	E 900	Sage Speckled	1"X1" Ceramic Tile	Floor	0.00
14	E 500 Locker Room	Salmon	Metal	Lockers	0.00
	E 500 Locker Room	Salmon	Metal	Lockers	0.00
	E 500 Locker Room	Salmon	Metal	Lockers	0.00
15	E 500	Red	Metal	Fire Exit Door	0.70
	E 900	Red	Metal	Fire Exit Door	0.87
	K 400	Red	Metal	Fire Exit Door	0.55
16	E 900	Tan	9"X9" Ceramic Tile	Wall	>1.00
	E 800	Tan	9"X9" Ceramic Tile	Wall	>1.00
	E 900	Tan	9"X9" Ceramic Tile	Wall	>1.00
17	E900	Tan	Concrete	Wall	0.00
	E800	Tan	Concrete	Wall	0.01
	E900	Tan	Concrete	Wall	0.00
18	E900 Nurse's Station	Tan	Metal	Window Frame	0.00
	E800	Tan	Metal	Window Frame	0.00
	E600 Nurse's Station	Tan	Metal	Window Frame	0.00
19	E900 Nurse's Station	Tan	Metal	Door Frame	0.00
	E900 Fire Door In Hall	Tan	Metal	Door Frame	0.01
	E800	Tan	Metal	Door Frame	0.03
20	E900 Kitchen	White	Metal	Electrical Conduit	0.00
	E 600 Nurse's Station	White	Metal	Electrical Conduit	0.00
	K 400	White	Metal	Electrical Conduit	0.00
21	E900	Beige	Metal	Corner Guard	0.00
	E 800	Beige	Metal	Corner Guard	0.00
	E 400	Beige	Metal	Corner Guard	0.00
22	E 900	Tan	Metal	Fire Exit Door Frame	0.58
	E 800	Tan	Metal	Fire Exit Door Frame	0.38
	E 400 Pysch	Tan	Metal	Fire Exit Door Frame	0.69
23	E 800	Tan	Metal	Electrical Conduit Box	0.00
	J 200	Tan	Metal	Electrical Conduit Box	0.00
	E 800	Tan	Metal	Electrical Conduit Box	0.00

XRF Results Table
February 2, 2021

ECS Project #47-10416-B

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
24	Basement	Tan	Metal	Door	0.00
	J 200	Tan	Metal	Door	0.00
	ACF 1 Security	Tan	Metal	Door	0.00
25	Basement	White	Drywall	Wall	0.00
	Basement	White	Drywall	Wall	0.00
	Basement	White	Drywall	Wall	0.00
26	Basement	White	Concrete	Column	0.00
	ACF 2	White	Concrete	Column	0.00
	3Rd Floor ACF	White	Concrete	Column	0.00
27	Basement	White	Cmu	Wall	0.00
	Basement	White	Cmu	Wall	0.00
	Basement	White	Cmu	Wall	0.00
28	Basement	Blue	Cmu	Wall	0.00
	Basement	Blue	Cmu	Wall	0.00
	Basement	Blue	Cmu	Wall	0.00

XRF Results Table
February 2, 2021

ECS Project #47-10416-B

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
29	Basement	Off White	Metal	Stairs	0.01
	Basement	Off White	Metal	Stairs	0.00
	Basement	Off White	Metal	Stairs	0.03
30	Basement	Gray	Concrete	Floor	0.00
	Basement	Gray	Concrete	Floor	0.00
	Basement	Gray	Concrete	Floor	0.00
31	Basement	Light Gray	Metal	Window/Door System	0.00
	Basement	Light Gray	Metal	Window/Door System	0.01
	2Nd Floor	Light Gray	Metal	Window/Door System	0.00
32	Basement	Blue	Concrete	Column	0.00
	Basement	Blue	Concrete	Column	0.00
	Basement	Blue	Concrete	Column	0.00
33	Basement	Yellow	Concrete	Floor	0.00
	Basement	Yellow	Concrete	Floor	0.00
	Basement	Yellow	Concrete	Floor	0.00
34	Basement	Yellow	Concrete	Curb	>2.69
	Basement	Yellow	Concrete	Curb	>1.45
	Basement	Yellow	Concrete	Curb	>3.72
35	Engineering	Green	Drywall	Wall	0.00
	Engineering	Green	Drywall	Wall	0.00
	Engineering	Green	Drywall	Wall	0.00
36	Engineering	Teal	Concrete	Wall	0.00
	Engineering	Teal	Concrete	Wall	0.00
	Engineering	Teal	Concrete	Wall	0.00
37	Basement	Lime Green	Metal	Pipe	0.00
	Basement	Lime Green	Metal	Pipe	0.00
	Basement	Lime Green	Metal	Pipe	0.00

XRF Results Table
February 2, 2021

ECS Project #47-10416-B

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
38	Basement	White	Metal	Duct	0.00
	Basement	White	Metal	Duct	0.00
	9Th Floor Mechanical Room	White	Metal	Duct	0.00
39	E 600	Tan	Metal	Door	0.00
	K 300	Tan	Metal	Door	0.03
	E 600	Tan	Metal	Door	0.00
40	E 600	Tan	Wood	Door	0.00
	E 600	Tan	Wood	Door	0.00
	E 600	Tan	Wood	Door	0.00
41	K4 Waiting	Sage	Plaster	Wall	0.00
	K4 Waiting	Sage	Plaster	Wall	0.00
	K4 Waiting	Sage	Plaster	Wall	0.00
42	K4 Waiting	Teal	Plaster	Wall	0.00
	K4 Waiting	Teal	Plaster	Wall	0.00
	K4 Waiting	Teal	Plaster	Wall	0.00
43	J 400	Light Green	Drywall	Wall	0.00
	J 400	Light Green	Drywall	Wall	0.00
	J 400	Light Green	Drywall	Wall	0.00
44	J 400	Green	Metal	Panel	0.00
	J 400	Green	Metal	Panel	0.00
	J 400	Green	Metal	Panel	0.00
45	J 400	Green	Metal	Door Frame	0.00
	J 400	Green	Metal	Door Frame	0.00
	J 400	Green	Metal	Door Frame	0.00
46	J 400	Tan	Drywall	Wall	0.00
	J 400	Tan	Drywall	Wall	0.00
	J 400	Tan	Drywall	Wall	0.00
47	J 400	Perriwinkle	Drywall	Wall	0.00
	J 400	Perriwinkle	Drywall	Wall	0.00
	J 400	Perriwinkle	Drywall	Wall	0.00

XRF Results Table
February 2, 2021

ECS Project #47-10416-B

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
48	J 400	Grey	Drywall	Wall	0.00
	J 400	Grey	Drywall	Wall	0.00
	J 400	Grey	Drywall	Wall	0.00
49	H 400	Lightest Green	Plaster	Wall	0.01
	H 400	Lightest Green	Plaster	Wall	0.22
	H 400	Lightest Green	Plaster	Wall	0.00
50	H 400	White	Metal	Panel	0.49
	H 400	White	Metal	Panel	0.35
	H 400	White	Metal	Panel	1.01
51	H 400 Cardiac	Pink	Drywall	Wall	0.00
	H 400 Cardiac	Pink	Drywall	Wall	0.00
	H 400 Cardiac	Pink	Drywall	Wall	0.00
52	H 200 OBGYN	White	Wood	Window Frame	1.35
	H 400 Dialysis	White	Wood	Window Frame	0.10
	H 400 Cardiac	White	Wood	Window Frame	1.40
53	H 400 Cardiac	White	Wood	Window Sill	0.00
	H 400 Cardiac	White	Wood	Window Sill	0.10
	H 200 OBGYN	White	Wood	Window Sill	0.98
54	H 400	White	Metal	Door	0.01
	H 400	White	Metal	Door	0.30
	H 400	White	Metal	Door	0.10
55	H 400 Dialysis	Tan	Plaster	Wall	0.00
	H 400 Dialysis	Tan	Plaster	Wall	0.00
	H 400 Dialysis	Tan	Plaster	Wall	0.00
56	H 400 Dialysis	White	Metal	Radiator	0.00
	H 400 Dialysis	White	Metal	Radiator	0.00
	H 400 Dialysis	White	Metal	Radiator	0.00
57	H 400 Break Room	White	Plaster	Wall	0.20
	H 400 Break Room	White	Plaster	Wall	0.00
	H 400 Break Room	White	Plaster	Wall	0.00
58	K 400	White	12"X12" Ceramic	Wall	>1.03
	K 400	White	12"X12" Ceramic	Wall	>1.03
	K 400	White	12"X12" Ceramic	Wall	>1.03
59	K 400	Orange	Plaster	Wall	0.00
	K 400	Orange	Plaster	Wall	0.00
	K 400	Orange	Plaster	Wall	0.00

XRF Results Table
February 2, 2021

ECS Project #47-10416-B

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
60	K 400	White	Metal	Corner Guard	0.00
	E Wing 1St Floor	White	Metal	Corner Guard	0.00
	E Wing 1St Floor	White	Metal	Corner Guard	0.00
61	K 300	Light Pink	Plaster	Wall	0.00
	K 300	Light Pink	Plaster	Wall	0.41
	K 300	Light Pink	Plaster	Wall	0.32
62	E 600	Gray	Metal	Ceiling Grid	0.00
	K 300	Gray	Metal	Ceiling Grid	0.00
	H 200	Gray	Metal	Ceiling Grid	0.00
63	K 305 Bath	Cream	4 "X4" Ceramic Tile	Wall	>1.00
	K 305 Bath	Cream	4 "X4" Ceramic Tile	Wall	>1.00
	K 305 Bath	Cream	4 "X4" Ceramic Tile	Wall	>1.00
64	K 305 Bath	Red	1 "X 1" Ceramic	Floor	0.00
	K 305 Bath	Red	1 "X 1" Ceramic	Floor	0.00
	K 305 Bath	Red	1 "X 1" Ceramic	Floor	0.00
65	K 300 Shower	Tan Marble Pattern	12 "X 18" Ceramic Tile	Wall	0.00
	K 300 Shower	Tan Marble Pattern	12 "X 18" Ceramic Tile	Wall	0.00
	K 300 Shower	Tan Marble Pattern	12 "X 18" Ceramic Tile	Wall	>1.00
66	K 300 Nourishment	Brown	1 "X 1" Ceramic Tile	Floor	0.02
	K 300 Nourishment	Brown	1 "X 1" Ceramic Tile	Floor	0.04
	K 300 Nourishment	Brown	1 "X 1" Ceramic Tile	Floor	0.00
67	Executive Offices	White	Wood	Window Sill	0.00
	Executive Offices	White	Wood	Window Sill	0.00
	Executive Offices	White	Wood	Window Sill	0.00
68	Executive Offices	Tan	Textured Drywall	Wall	0.00
	Executive Offices	Tan	Textured Drywall	Wall	0.00
	Executive Offices	Tan	Textured Drywall	Wall	0.00
69	Executive Offices	White	Wood	Chair Rail	0.00
	Executive Offices	White	Wood	Chair Rail	0.00
	Executive Offices	White	Wood	Chair Rail	0.00
70	Executive Offices	White	Wood	Cove Base	0.00
	Executive Offices	White	Wood	Cove Base	0.00
	Executive Offices	White	Wood	Cove Base	0.00
71	H 200 Ultrasound	Light Green	Drywall	Wall	0.00
	H 200 Ultrasound	Light Green	Drywall	Wall	0.00
	K200	Light Green	Drywall	Wall	0.00

XRF Results Table
February 2, 2021

ECS Project #47-10416-B

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
72	H 200 Ultrasound	Light Gray	Metal	Door Frame	0.00
	H 200 OBGYN	Light Gray	Metal	Door Frame	0.00
	H 200 Midwife	Light Gray	Metal	Door Frame	0.00
73	H 200	Purple	Metal	Door Frame	0.00
	H 200	Purple	Metal	Door Frame	0.00
	H 200	Purple	Metal	Door Frame	0.00
74	H 200 Ultrasound	Light Green	Metal	Radiator	0.00
	H 200 OBGYN	Light Green	Metal	Radiator	0.00
	H 200 Midwife	Light Green	Metal	Radiator	0.00
75	H 200 Office	Light Blue	Drywall	Wall	0.00
	H 200 Office	Light Blue	Drywall	Wall	0.00
	H 200 Office	Light Blue	Drywall	Wall	0.00
76	H 200 Office	Blue	Drywall	Wall	0.00
	H 200 Office	Blue	Drywall	Wall	0.00
	H 200 Office	Blue	Drywall	Wall	0.00
77	H 200 Waiting Area	Light Purple	Drywall	Wall	0.00
	H 200 Waiting Area	Light Purple	Drywall	Wall	0.00
	H 200 Waiting Area	Light Purple	Drywall	Wall	0.00
78	H 200 Waiting Area	Tan/Yellow	Drywall	Wall	0.00
	H 200 Waiting Area	Tan/Yellow	Drywall	Wall	0.00
	H 200 Waiting Area	Tan/Yellow	Drywall	Wall	0.00
79	H 200 Waiting Area	Purple	Metal	Door	0.11
	H 200 Waiting Area	Purple	Metal	Door	0.07
	K200	Purple	Metal	Door	0.09
80	H 200 Waiting Area	White	Metal	Door Frame	0.00
	H 200 Waiting Area	White	Metal	Door Frame	0.00
	E 1st Floor	White	Metal	Door Frame	0.00
81	H 200 Waiting Area	Brown	Metal	Door	0.00
	H 200 Waiting Area	Brown	Metal	Door	0.00
	H 200 Waiting Area	Brown	Metal	Door	0.00
82	E 200	Light Yellow	Plaster	Wall	0.00
	E 200	Light Yellow	Plaster	Wall	0.00
	K 200	Light Yellow	Plaster	Wall	0.00
83	E 200	White	Metal	Elevator Casing	0.00
	Basement	White	Metal	Elevator Casing	0.00
	E 600	White	Metal	Elevator Casing	0.00

XRF Results Table
February 2, 2021

ECS Project #47-10416-B

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
84	K 200 Elevator	Yellow	12 "X 12" Ceramic	Wall	>1,43
	K 200 Elevator	Yellow	12 "X 12" Ceramic	Wall	>1,43
	K 200 Elevator	Yellow	12 "X 12" Ceramic	Wall	>1,43
85	K 200	Multi-Color	Ceramic Tile	Backsplash	0.00
	K 200	Multi-Color	Ceramic Tile	Backsplash	0.00
	K 200	Multi-Color	Ceramic Tile	Backsplash	0.13
86	NICU 1	Light Tan	Plaster	Wall	0.00
	NICU 1	Light Tan	Plaster	Wall	0.34
	NICU 1	Light Tan	Plaster	Wall	0.00
87	NICU 1	Light Tan	Metal	Door Frame	0.00
	NICU 1	Light Tan	Metal	Door Frame	0.00
	NICU 1	Light Tan	Metal	Door Frame	0.00
88	NICU 2	Seafoam	Drywall	Wall	0.00
	NICU 2	Seafoam	Drywall	Wall	0.00
	NICU 2	Seafoam	Drywall	Wall	0.00
89	NICU 2	Seafoam	Metal	Door/Door Frame	0.00
	NICU 2	Seafoam	Metal	Door/Door Frame	0.00
	NICU 2	Seafoam	Metal	Door/Door Frame	0.00
90	NICU 2	Seafoam	Plaster	Wall	0.00
	NICU 2	Seafoam	Plaster	Wall	0.00
	NICU 2	Seafoam	Plaster	Wall	0.00
91	Special Procedures	Light Pink	Metal	Electrical Conduit Box	0.00
	Special Procedures	Light Pink	Metal	Electrical Conduit Box	0.00
	Special Procedures	Light Pink	Metal	Electrical Conduit Box	0.00
92	Special Procedures	Light Pink	Drywall	Wall	0.00
	Special Procedures	Light Pink	Drywall	Wall	0.00
	Cafeteria	Light Pink	Drywall	Wall	0.00
93	Cafeteria	Tan	Metal	Cabinets	0.00
	Cafeteria	Tan	Metal	Cabinets	0.00
	Cafeteria	Tan	Metal	Cabinets	0.00
94	1St Histology	White	Plaster	Wall	0.00
	1St Histology	White	Plaster	Wall	0.00
	1St Histology	White	Plaster	Wall	0.00
95	1St Histology	White	Drywall	Wall	0.00
	1St Histology	White	Drywall	Wall	0.00
	1St Histology	White	Drywall	Wall	0.00

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
96	1St Histology Fridge Room	Light Olive	9"X9" Ceramic Tile	Wall	>5.00
	1St Histology Fridge Room	Light Olive	9"X9" Ceramic Tile	Wall	>5.00
	1St Histology Fridge Room	Light Olive	9"X9" Ceramic Tile	Wall	>5.00
97	Food Prep	Light Green	4"X4" Ceramic Tile	Wall	0.04
	Food Prep	Light Green	4"X4" Ceramic Tile	Wall	0.08
	Food Prep	Light Green	4"X4" Ceramic Tile	Wall	0.19
98	Food Prep	White	4"X4" Ceramic Tile	Wall	>5.00
	Food Prep	White	4"X4" Ceramic Tile	Wall	>5.00
	Food Prep	White	4"X4" Ceramic Tile	Wall	>5.00
99	Basement Men'S Bathroom	Beige Speckled	1"X1" Ceramic Tile	Wall	0.00
	Basement Men'S Bathroom	Beige Speckled	1"X1" Ceramic Tile	Wall	0.00
	Basement Men'S Bathroom	Beige Speckled	1"X1" Ceramic Tile	Wall	0.00
100	Basement Men'S Bathroom	Red	Ceramic Brick Tile	Floor	0.00
	Basement Men'S Bathroom	Red	Ceramic Brick Tile	Floor	0.00
	Basement Men'S Bathroom	Red	Ceramic Brick Tile	Floor	0.00
101	Basement	Tan	Metal	Elevator Casing	0.00
	Basement	Tan	Metal	Elevator Casing	0.00
	Basement	Tan	Metal	Elevator Casing	0.00
102	3Rd Floor ACF	Brown	Metal	Radiator Cover	0.00
	3Rd Floor ACF	Brown	Metal	Radiator Cover	0.00
	3Rd Floor ACF	Brown	Metal	Radiator Cover	0.00
103	3Rd Floor ACF	White	Drywall	Wall	0.00
	3Rd Floor ACF	White	Drywall	Wall	0.00
	3Rd Floor ACF	White	Drywall	Wall	0.00
104	3Rd Floor ACF	White	Textured Drywall	Wall	0.00
	3Rd Floor ACF	White	Textured Drywall	Wall	0.00
	3Rd Floor ACF	White	Textured Drywall	Wall	0.00
105	3Rd Floor ACF	Red	Ceramic Brick Tile	Floor	0.00
	3Rd Floor ACF	Red	Ceramic Brick Tile	Floor	0.00
	3Rd Floor ACF	Red	Ceramic Brick Tile	Floor	0.00
106	3Rd Floor ACF	Brown	Wood Pattern Ceramic	Floor	0.00
	3Rd Floor ACF	Brown	Wood Pattern Ceramic	Floor	0.00
	3Rd Floor ACF	Brown	Wood Pattern Ceramic	Floor	0.00
107	ACF1 Stairs	Brown	Metal	Stair Components	0.00
	ACF 3 Stairs	Brown	Metal	Stair Components	0.00
	ACF 3 Stairs	Brown	Metal	Stair Components	0.00

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
108	ACF1 Stairs	Brown	Metal	Sprinkler Riser	0.00
	ACF 3 Stairs	Brown	Metal	Sprinkler Riser	0.00
	ACF 3 Stairs	Brown	Metal	Sprinkler Riser	0.00
109	ACF1 Stairs	Grey	Concrete	Stair Components	0.00
	ACF1 Stairs	Grey	Concrete	Stair Components	0.00
	ACF1 Stairs	Grey	Concrete	Stair Components	0.00
110	6Th Floor ACF	Teal	Metal	Door	0.00
	5Th Floor ACF	Teal	Metal	Door	0.00
	5Th Floor ACF	Teal	Metal	Door	0.00
111	6Th Floor ACF	Teal	Metal	Door Frame	0.00
	5Th Floor ACF	Teal	Metal	Door Frame	0.00
	5Th Floor ACF	Teal	Metal	Door Frame	0.00
112	6Th Floor ACF	White	Metal	Handrail	0.00
	5Th Floor ACF	White	Metal	Handrail	0.00
	4Th Floor ACF	White	Metal	Handrail	0.00
113	6Th Floor ACF	White	Concrete	Wall	0.00
	5Th Floor ACF	White	Concrete	Wall	0.00
	4Th Floor ACF	White	Concrete	Wall	0.00
114	4Th Floor ACF Outside Diabetes	Blue	Drywall	Wall	0.00
	4Th Floor ACF Outside Diabetes	Blue	Drywall	Wall	0.00
	4Th Floor ACF Outside Diabetes	Blue	Drywall	Wall	0.00
115	Diabetes	Red	Drywall	Wall	0.00
	Diabetes	Red	Drywall	Wall	0.00
	Diabetes	Red	Drywall	Wall	0.00
116	Diabetes	Yellow	Drywall	Wall	0.00
	Diabetes	Yellow	Drywall	Wall	0.00
	Diabetes	Yellow	Drywall	Wall	0.00
117	Diabetes	Salmon	Drywall	Wall	0.00
	Diabetes	Salmon	Drywall	Wall	0.00
	Diabetes	Salmon	Drywall	Wall	0.00
118	Corporate Education	Light Blue	Drywall	Wall	0.00
	2Nd Floor ACF Patient Financial Services	Light Blue	Drywall	Wall	0.00
	3Rd Floor ACF Patient Financial Services	Light Blue	Drywall	Wall	0.00
119	1St Floor ACF	Salmon	Cmu	Wall	0.00
	1St Floor ACF	Salmon	Cmu	Wall	0.00
	1St Floor ACF	Salmon	Cmu	Wall	0.00

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
120	ACF Decision Support	Tan	Drywall	Wall	0.00
	ACF Decision Support	Tan	Drywall	Wall	0.00
	ACF Decision Support	Tan	Drywall	Wall	0.00
121	2Nd Floor ACF	Tan	Metal	Ceiling Grid	0.00
	2Nd Floor ACF	Tan	Metal	Ceiling Grid	0.00
	2Nd Floor ACF	Tan	Metal	Ceiling Grid	0.00
122	Food Prep	Olive	Concrete	Floor	0.00
	Food Prep	Olive	Concrete	Floor	0.00
	Food Prep	Olive	Concrete	Floor	0.00
123	Cafeteria	White	Eifs	Bulkhead/Light Fixture	0.00
	Cafeteria	White	Eifs	Bulkhead/Light Fixture	0.00
	Cafeteria	White	Eifs	Bulkhead/Light Fixture	0.00
124	Cafeteria	White	1"X1" Ceramic Tile	Column	0.51
	Cafeteria	White	1"X1" Ceramic Tile	Column	0.45
	Cafeteria	White	1"X1" Ceramic Tile	Column	0.32
125	Old Operating Room	Tan	Plaster	Wall	0.00
	Old Operating Room	Tan	Plaster	Wall	0.00
	Old Operating Room	Tan	Plaster	Wall	0.00
126	Old Operating Room	Green	12"X12" Ceramic	Wall	0.01
	Old Operating Room	Green	12"X12" Ceramic	Wall	0.01
	Old Operating Room	Green	12"X12" Ceramic	Wall	0.01
127	Old Operating Room	Tan	12"X12" Ceramic	Wall	0.00
	Old Operating Room	Tan	12"X12" Ceramic	Wall	0.00
	Old Operating Room	Tan	12"X12" Ceramic	Wall	0.00
128	Stairs Pavilion	Tan	Metal	Stair Components	0.00
	Stairs Pavilion	Tan	Metal	Stair Components	0.00
	Stairs Pavilion	Tan	Metal	Stair Components	0.00
129	Stairs Pavilion	Tan	Textured Concrete	Wall	0.00
	Stairs Pavilion	Tan	Textured Concrete	Wall	0.00
	Stairs Pavilion	Tan	Textured Concrete	Wall	0.00
130	Stairs Pavilion	Tan	Metal	Sprinkler Pipe	0.00
	Stairs Pavilion	Tan	Metal	Sprinkler Pipe	0.00
	Stairs Pavilion	Tan	Metal	Sprinkler Pipe	0.00
131	Pacu Restroom	Tan/Pink	1"X1" Ceramic Tile	Floor	0.00
	Pacu Restroom	Tan/Pink	1"X1" Ceramic Tile	Floor	0.00
	Pacu Restroom	Tan/Pink	1"X1" Ceramic Tile	Floor	0.00

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
132	Pacu Restroom	Dark Green	1"X1" Ceramic Tile	Floor	0.00
	Pacu Restroom	Dark Green	1"X1" Ceramic Tile	Floor	0.00
	Pacu Restroom	Dark Green	1"X1" Ceramic Tile	Floor	0.00
133	Pavilion Air Handling Unit Room	Grey	Concrete	Floor	0.00
	Pavilion Air Handling Unit Room	Grey	Concrete	Floor	0.00
	Pavilion Air Handling Unit Room	Grey	Concrete	Floor	0.00
134	Pavilion Air Handling Unit Room	Red/Maroon	Steel	Support Beam	0.00
	Pavilion Air Handling Unit Room	Red/Maroon	Steel	Support Beam	0.00
	Pavilion Air Handling Unit Room	Red/Maroon	Steel	Support Beam	0.00
135	Pavilion Air Handling Unit Room	Red	Metal	Sprinkler Pipe	0.00
	Pavilion Air Handling Unit Room	Red	Metal	Sprinkler Pipe	0.00
	Pavilion Air Handling Unit Room	Red	Metal	Sprinkler Pipe	0.00
136	Tv Workshop E Wing	White	Wood	Window Frame	0.00
	Tv Workshop E Wing	White	Wood	Window Frame	0.00
	Tv Workshop E Wing	White	Wood	Window Frame	0.00
137	E Wing 1st Floor Pump Room	Black	Metal	Handrail	0.00
	E Wing 1st Floor Pump Room	Black	Metal	Handrail	0.15
	E Wing 1st Floor Pump Room	Black	Metal	Handrail	0.10
138	E Wing 1st Floor Machine Room	Green	Cloth	Thermal System Insulation	0.00
	E Wing 1st Floor Machine Room	Green	Cloth	Thermal System Insulation	0.00
	E Wing 1st Floor Machine Room	Green	Cloth	Thermal System Insulation	0.00
139	E Wing 1st Floor Machine Room	Blue	Cloth	Thermal System Insulation	0.00
	E Wing 1st Floor Machine Room	Blue	Cloth	Thermal System Insulation	0.00
	E Wing 1st Floor Machine Room	Blue	Cloth	Thermal System Insulation	0.00
140	E Wing 1st Floor Machine Room	Yellow	Cloth	Thermal System Insulation	0.00
	E Wing 1st Floor Machine Room	Yellow	Cloth	Thermal System Insulation	0.00
	E Wing 1st Floor Machine Room	Yellow	Cloth	Thermal System Insulation	0.00
141	E Wing 1st Floor Machine Room	Red	Cloth	Thermal System Insulation	0.00
	E Wing 1st Floor Machine Room	Red	Cloth	Thermal System Insulation	0.00
	E Wing 1st Floor Machine Room	Red	Cloth	Thermal System Insulation	0.00
142	E Wing 9th Floor Stair	Black	Metal	Stair Components	0.04
	E Wing 9th Floor Stair	Black	Metal	Stair Components	0.06
	E Wing 9th Floor Stair	Black	Metal	Stair Components	0.03
143	E Wing 9th Floor Stair	Black	Concrete	Stair Components	0.00
	E Wing 9th Floor Stair	Black	Concrete	Stair Components	0.00
	E Wing 9th Floor Stair	Black	Concrete	Stair Components	0.00

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
144	Spellman Bridge	White	Metal	Beam	0.00
	Spellman Bridge	White	Metal	Beam	0.00
	Spellman Bridge	White	Metal	Beam	0.00
145	Spellman Building 2nd Floor	Red	Wood	Door	0.00
	Spellman Building 2nd Floor	Red	Wood	Door	0.00
	Spellman Building 2nd Floor	Red	Wood	Door	0.00
146	Spellman Building Stairwell	Green	12"X12" Ceramic	Wall	0.25
	Spellman Building Stairwell	Green	12"X12" Ceramic	Wall	0.25
	Spellman Building Stairwell	Green	12"X12" Ceramic	Wall	0.25
147	Spellman Building Stairwell	Red	Metal	Stair Components	0.19
	Spellman Building Stairwell	Red	Metal	Stair Components	0.01
	Spellman Building Stairwell	Red	Metal	Stair Components	0.16
148	Spellman Building Stairwell	Black	Metal	Handrail	0.21
	Spellman Building Stairwell	Black	Metal	Handrail	0.51
	Spellman Building Stairwell	Black	Metal	Handrail	0.14
149	Spellman Building Stairwell	Tan Speckled	1"X1" Ceramic Tile	Floor	0.00
	Spellman Building Stairwell	Tan Speckled	1"X1" Ceramic Tile	Floor	0.00
	Spellman Building Stairwell	Tan Speckled	1"X1" Ceramic Tile	Floor	0.00
150	Spellman Building 2nd Floor Waiting Area	Purple	Drywall	Wall	0.00
	Spellman Building 2nd Floor Waiting Area	Purple	Drywall	Wall	0.00
	Spellman Building 2nd Floor Waiting Area	Purple	Drywall	Wall	0.00
151	Spellman Building 3rd Floor Waiting Area	Blue	Drywall	Wall	0.00
	Spellman Building 3rd Floor Waiting Area	Blue	Drywall	Wall	0.00
	Spellman Building 3rd Floor Waiting Area	Blue	Drywall	Wall	0.00
152	Spellman Building 1st Floor	Pink	Metal	Door Frame	0.00
	Spellman Building 1st Floor	Pink	Metal	Door Frame	0.00
	Spellman Building 1st Floor	Pink	Metal	Door Frame	0.00
153	Spellman Building 1st Floor	Green Mottled	12"X18" Ceramic	Wall	0.04
	Spellman Building 1st Floor	Green Mottled	12"X18" Ceramic	Wall	0.04
	Spellman Building 1st Floor	Green Mottled	12"X18" Ceramic	Wall	0.04
154	Spellman Building 1st Floor	Green	Drywall	Wall	0.00
	Spellman Building 1st Floor	Green	Drywall	Wall	0.00
	Spellman Building 1st Floor	Green	Drywall	Wall	0.00
155	Spellman Building 1st Floor	White	12"X18" Ceramic	Wall	0.03
	Spellman Building 1st Floor	White	12"X18" Ceramic	Wall	0.03
	Spellman Building 1st Floor	White	12"X18" Ceramic	Wall	0.03

XRF Results Table
February 2, 2021

ECS Project #47-10416-B

Testing Combo Number	Room	Color	Substrate	Component	XRF Reading
156	Spellman Building 1st Floor	Pink	Metal	Electrical Panel	0.00
	Spellman Building 1st Floor	Pink	Metal	Electrical Panel	0.00
	Spellman Building 1st Floor	Pink	Metal	Electrical Panel	0.00

**Appendix V: EPA Generator ID
Form 8700-12**

United States Environmental Protection Agency
RCRA SUBTITLE C SITE IDENTIFICATION FORM



1. Reason for Submittal (Select only one.)

<input type="checkbox"/>	Obtaining or updating an EPA ID number for an on-going regulated activity that will continue for a period of time. (Includes HSM activity)
<input type="checkbox"/>	Submitting as a component of the Hazardous Waste Report for _____ (Reporting Year)
<input type="checkbox"/>	Site was a TSD facility and/or generator of > 1,000 kg of hazardous waste, > 1 kg of acute hazardous waste, or > 100 kg of acute hazardous waste spill cleanup in one or more months of the reporting year (or State equivalent LQG regulations)
<input type="checkbox"/>	Notifying that regulated activity is no longer occurring at this Site
<input type="checkbox"/>	Obtaining or updating an EPA ID number for conducting Electronic Manifest Broker activities
<input type="checkbox"/>	Submitting a new or revised Part A Form

2. Site EPA ID Number

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3. Site Name

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4. Site Location Address

Street Address		
City, Town, or Village		County
State	Country	Zip Code

5. Site Mailing Address

Same as Location Address

Street Address		
City, Town, or Village		
State	Country	Zip Code

6. Site Land Type

<input type="checkbox"/> Private	<input type="checkbox"/> County	<input type="checkbox"/> District	<input type="checkbox"/> Federal	<input type="checkbox"/> Tribal	<input type="checkbox"/> Municipal	<input type="checkbox"/> State	<input type="checkbox"/> Other
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7. North American Industry Classification System (NAICS) Code(s) for the Site (at least 5-digit codes)

A. (Primary)	C.
B.	D.

EPA ID Number

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8. Site Contact Information

Same as Location Address

First Name	MI	Last Name
Title		
Street Address		
City, Town, or Village		
State	Country	Zip Code
Email		
Phone	Ext	Fax

9. Legal Owner and Operator of the Site

A. Name of Site's Legal Owner

Same as Location Address

Full Name	Date Became Owner (mm/dd/yyyy)
Owner Type <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other	
Street Address	
City, Town, or Village	
State	Country
Zip Code	
Email	
Phone	Ext
Fax	
Comments	

B. Name of Site's Legal Operator

Same as Location Address

Full Name	Date Became Operator (mm/dd/yyyy)
Operator Type <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other	
Street Address	
City, Town, or Village	
State	Country
Zip Code	
Email	
Phone	Ext
Fax	
Comments	

10. Type of Regulated Waste Activity (at your site)

Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

A. Hazardous Waste Activities

<input type="checkbox"/> Y	<input type="checkbox"/> N	1. Generator of Hazardous Waste—If "Yes", mark only one of the following—a, b, c	
<input type="checkbox"/>	<input type="checkbox"/>	a. LQG	-Generates, in any calendar month (includes quantities imported by importer site) 1,000 kg/mo (2,200 lb/mo) or more of non-acute hazardous waste; or - Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lb/mo) of acute hazardous waste; or - Generates, in any calendar month or accumulates at any time, more than 100 kg/mo (220 lb/mo) of acute hazardous spill cleanup material.
<input type="checkbox"/>	<input type="checkbox"/>	b. SQG	100 to 1,000 kg/mo (220-2,200 lb/mo) of non-acute hazardous waste and no more than 1 kg (2.2 lb) of acute hazardous waste and no more than 100 kg (220 lb) of any acute hazardous spill cleanup material.
<input type="checkbox"/>	<input type="checkbox"/>	c. VSQG	Less than or equal to 100 kg/mo (220 lb/mo) of non-acute hazardous waste.
If "Yes" above, indicate other generator activities in 2 and 3, as applicable.			
<input type="checkbox"/> Y	<input type="checkbox"/> N	2. Short-Term Generator (generates from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section.	
<input type="checkbox"/> Y	<input type="checkbox"/> N	3. Mixed Waste (hazardous and radioactive) Generator	
<input type="checkbox"/> Y	<input type="checkbox"/> N	4. Treater, Storer or Disposer of Hazardous Waste—Note: A hazardous waste Part B permit is required for these activities.	
<input type="checkbox"/> Y	<input type="checkbox"/> N	5. Receives Hazardous Waste from Off-site	
<input type="checkbox"/> Y	<input type="checkbox"/> N	6. Recycler of Hazardous Waste	
<input type="checkbox"/>	<input type="checkbox"/>	a. Recycler who stores prior to recycling	
<input type="checkbox"/>	<input type="checkbox"/>	b. Recycler who does not store prior to recycling	
<input type="checkbox"/> Y	<input type="checkbox"/> N	7. Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply.	
<input type="checkbox"/>	<input type="checkbox"/>	a. Small Quantity On-site Burner Exemption	
<input type="checkbox"/>	<input type="checkbox"/>	b. Smelting, Melting, and Refining Furnace Exemption	

B. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g. D001, D003, F007, U112). Use an additional page if more spaces are needed.

C. Waste Codes for State Regulated (non-Federal) Hazardous Wastes. Please list the waste codes of the State hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.

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11. Additional Regulated Waste Activities (NOTE: Refer to your State regulations to determine if a separate permit is required.)**A. Other Waste Activities**

<input type="checkbox"/> Y <input type="checkbox"/> N	1. Transporter of Hazardous Waste—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Transporter
<input type="checkbox"/>	b. Transfer Facility (at your site)
<input type="checkbox"/> Y <input type="checkbox"/> N	2. Underground Injection Control
<input type="checkbox"/> Y <input type="checkbox"/> N	3. United States Importer of Hazardous Waste
<input type="checkbox"/> Y <input type="checkbox"/> N	4. Recognized Trader—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Importer
<input type="checkbox"/>	b. Exporter
<input type="checkbox"/> Y <input type="checkbox"/> N	5. Importer/Exporter of Spent Lead-Acid Batteries (SLABs) under 40 CFR 266 Subpart G—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Importer
<input type="checkbox"/>	b. Exporter

B. Universal Waste Activities

<input type="checkbox"/> Y <input type="checkbox"/> N	1. Large Quantity Handler of Universal Waste (you accumulate 5,000 kg or more) - If “Yes” mark all that apply. Note: Refer to your State regulations to determine what is regulated.
<input type="checkbox"/>	a. Batteries
<input type="checkbox"/>	b. Pesticides
<input type="checkbox"/>	c. Mercury containing equipment
<input type="checkbox"/>	d. Lamps
<input type="checkbox"/>	e. Other (specify) _____
<input type="checkbox"/>	f. Other (specify) _____
<input type="checkbox"/>	g. Other (specify) _____
<input type="checkbox"/> Y <input type="checkbox"/> N	2. Destination Facility for Universal Waste Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities

<input type="checkbox"/> Y <input type="checkbox"/> N	1. Used Oil Transporter—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Transporter
<input type="checkbox"/>	b. Transfer Facility (at your site)
<input type="checkbox"/> Y <input type="checkbox"/> N	2. Used Oil Processor and/or Re-refiner—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Processor
<input type="checkbox"/>	b. Re-refiner
<input type="checkbox"/> Y <input type="checkbox"/> N	3. Off-Specification Used Oil Burner
<input type="checkbox"/> Y <input type="checkbox"/> N	4. Used Oil Fuel Marketer—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
<input type="checkbox"/>	b. Marketer Who First Claims the Used Oil Meets the Specifications

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12. Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR 262 Subpart K.

<input type="checkbox"/> Y <input type="checkbox"/> N	A. Opting into or currently operating under 40 CFR 262 Subpart K for the management of hazardous wastes in laboratories—If “Yes”, mark all that apply. Note: See the item-by-item instructions for definitions of types of eligible academic entities.
<input type="checkbox"/>	1. College or University
<input type="checkbox"/>	2. Teaching Hospital that is owned by or has a formal written affiliation with a college or university
<input type="checkbox"/>	3. Non-profit Institute that is owned by or has a formal written affiliation with a college or univer-
<input type="checkbox"/> Y <input type="checkbox"/> N	B. Withdrawing from 40 CFR 262 Subpart K for the management of hazardous wastes in laboratories.

13. Episodic Generation

<input type="checkbox"/> Y <input type="checkbox"/> N	Are you an SQG or VSQG generating hazardous waste from a planned or unplanned episodic event, lasting no more than 60 days, that moves you to a higher generator category. If “Yes”, you must fill out the Addendum for Episodic Generator.
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14. LQG Consolidation of VSQG Hazardous Waste

<input type="checkbox"/> Y <input type="checkbox"/> N	Are you an LQG notifying of consolidating VSQG Hazardous Waste Under the Control of the Same Person pursuant to 40 CFR 262.17(f)? If “Yes”, you must fill out the Addendum for LQG Consolidation of VSQGs hazardous waste.
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15. Notification of LQG Site Closure for a Central Accumulation Area (CAA) (optional) OR Entire Facility (required)

<input type="checkbox"/> Y <input type="checkbox"/> N	LQG Site Closure of a Central Accumulation Area (CAA) or Entire Facility.
	A. <input type="checkbox"/> Central Accumulation Area (CAA) or <input type="checkbox"/> Entire Facility
	B. Expected closure date: _____ mm/dd/yyyy
	C. Requesting new closure date: _____ mm/dd/yyyy
	D. Date closed : _____ mm/dd/yyyy
	<input type="checkbox"/> 1. In compliance with the closure performance standards 40 CFR 262.17(a)(8)
	<input type="checkbox"/> 2. Not in compliance with the closure performance standards 40 CFR 262.17(a)(8)

16. Notification of Hazardous Secondary Material (HSM) Activity

<input type="checkbox"/> Y <input type="checkbox"/> N	A. Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27)? If “Yes”, you must fill out the Addendum to the Site Identification Form for Managing Hazardous Secondary Material.
<input type="checkbox"/> Y <input type="checkbox"/> N	B. Are you notifying under 40 CFR 260.43(a)(4)(iii) that the product of your recycling process has levels of hazardous constituents that are not comparable to or unable to be compared to a legitimate product or intermediate but that the recycling is still legitimate? If “Yes”, you may provide explanation in Comments section. You must also document that your recycling is still legitimate and maintain that documentation on site.

17. Electronic Manifest Broker

<input type="checkbox"/> Y <input type="checkbox"/> N	Are you notifying as a person, as defined in 40 CFR 260.10, electing to use the EPA electronic manifest system to obtain, complete, and transmit an electronic manifest under a contractual relationship with a hazardous waste generator?
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**ADDENDUM TO THE SITE IDENTIFICATION FORM:
NOTIFICATION OF HAZARDOUS SECONDARY MATERIAL ACTIVITY**



ONLY fill out this form if:

- You are located in a State that allows you to manage excluded hazardous secondary material (HSM) under 40 CFR 261.2(30), 261.4(a)(23), (24), or (27) (or state equivalent; See <https://www.epa.gov/epawaste/hazard/dsw/statespf.htm> for a list of eligible states; AND
- You are or will be managing excluded HSM in compliance with 40 CFR 260.30, 261.4(a)(23), (24), or (27) (or state equivalent) or have stopped managing excluded HSM in compliance with the exclusion(s) and do not expect to manage any amount of excluded HSM under the exclusion(s) for at least one year. Do not include any information regarding your hazardous waste activities in this section. Note: If your facility was granted a solid waste variance under 40 CFR 260.30 prior to July 13, 2015, your management of HSM under 40 CFR 260.30 is grandfathered under the previous regulations and you are not required to notify for the HSM management activity excluded under 40 CFR 260.30.

1. Reason for Notification (Include dates where requested)

Facility will begin managing excluded HSM as of _____ (mm/dd/yyyy).

Facility is still managing excluded HSM/re-notifying as required by March 1 of each even-numbered year.

Facility has stopped managing excluded HSM as of _____ (mm/dd/yyyy) and is notifying as required.

2. Description of Excluded HSM Activity. Please list the appropriate codes (see Code List section of the instructions) and quantities, in short tons, to describe your excluded HSM activity ONLY (do not include any information regarding your hazardous wastes). Use additional pages if more space is needed.

A. Facility Code	B. Waste Code(s) for HSM	C. Estimate Short Tons of excluded HSM to be managed annually	D. Actual Short Tons of excluded HSM that was managed during the most recent odd-numbered year	E. Land-based Unit Code

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**ADDENDUM TO THE SITE IDENTIFICATION FORM:
EPISODIC GENERATOR**



ONLY fill out this form if:

- You are an SQG or VSQG generating hazardous waste from a planned or unplanned episodic event, lasting no more than 60 days, that moves the generator to a higher generator category pursuant to 40 CFR 262 Subpart L. Note: Only one planned and one unplanned episodic event are allowed within one year; otherwise, you must follow the requirements of the higher generator category. Use additional pages if more space is needed.

Episodic Event	
1. Planned <input type="checkbox"/> Excess chemical inventory removal <input type="checkbox"/> Tank cleanouts <input type="checkbox"/> Short-term construction or demolition <input type="checkbox"/> Equipment maintenance during plant shutdowns <input type="checkbox"/> Other _____	2. Unplanned <input type="checkbox"/> Accidental spills <input type="checkbox"/> Production process upsets <input type="checkbox"/> Product recalls <input type="checkbox"/> "Acts of nature" (Tornado, hurricane, flood, etc.) <input type="checkbox"/> Other _____
3. Emergency Contact Phone	4. Emergency Contact Name
5. Beginning Date _____ (mm/dd/yyyy)	6. End Date _____ (mm/dd/yyyy)

Waste 1

7. Waste Description	8. Estimated Quantity (in pounds)				
9. Federal and/or State Hazardous Waste Codes					

Waste 2

7. Waste Description	8. Estimated Quantity (in pounds)				
9. Federal and/or State Hazardous Waste Codes					

Waste 3

7. Waste Description	8. Estimated Quantity (in pounds)				
9. Federal and/or State Hazardous Waste Codes					

EPA ID Number

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**ADDENDUM TO THE SITE IDENTIFICATION FORM:
LQG CONSOLIDATION OF VSQG HAZARDOUS WASTE**



ONLY fill out this form if:

- You are an LQG receiving hazardous waste from VSQGs under the control of the same person. Use additional pages if more space is needed.

VSQG 1		
1. EPA ID Number (if assigned)	2. Name	
3. Street Address		
4. City, Town, or Village	5. State	6. Zip Code
7. Contact Phone Number	8. Contact Name	
9. Email		

VSQG 2		
1. EPA ID Number (if assigned)	2. Name	
3. Street Address		
4. City, Town, or Village	5. State	6. Zip Code
7. Contact Phone Number	8. Contact Name	
9. Email		

VSQG 3		
1. EPA ID Number (if assigned)	2. Name	
3. Street Address		
4. City, Town, or Village	5. State	6. Zip Code
7. Contact Phone Number	8. Contact Name	
9. Email		

Appendix VI: Certifications/ Licenses

AEROSOL MONITORING & ANALYSIS

This is to certify that
JOHN FARMER

has met the attendance requirements and successfully completed
the course entitled

4-HOUR EPA ASBESTOS INSPECTOR REFRESHER

For Accreditation Under TSCA Title II

01/16/2020

Course Date

01/16/2020


Exam Date

1/16/2021

Expiration Date

STEPHEN WINOGRAD

Principal Instructor



AIR01162020-4

Certification No.

VAAIR01162020-4

Virginia Certification No.

E. Rush Barnett

Course Director



John Farmer
Name

Signature

Inspector Review
Course Title

2000000041



Asbestos License



Course Date: 01/16/2020

Exp Date: 01/16/2021

Exam Date: 01/24/2020

STATE OF MARYLAND

1331 Ashton Road

P.O.Box 646

Hanover, MD 21076

P: 410-684-3327

F: 410-684-3724

www.amatraining.com

THIS IS TO CERTIFY THAT

Nathaniel Albert Edwards

**HAS MET THE LEAD PAINT SERVICES
ACCREDITATION REQUIREMENTS FOR**

Risk Assessor

EXPIRATION DATE 09 04 2022

Aerosol Monitoring & Analysis,

TRAINING PROVIDER Inc.

COURSE DATE 02 21 2020

**ADMINISTRATOR, LEAD PAINT ACCREDITATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT**

DATE

12/4/2020

STATE OF MARYLAND

Application for reaccreditation shall be submitted to MDE 60 days prior to accreditation expiration indicated on this certificate.

Certificate # 16842

Results

Maryland Asbestos Accreditation Exam

Certificate Number: AIR05112020-3

First Name: Nathan

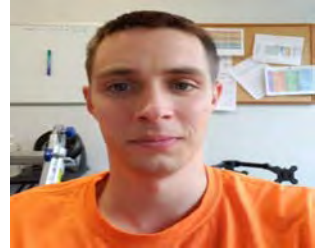
Last Name: Edwards

Address: 5112 Pegasus Court, Suite S

City: Frederick

State: MD

Zip: 21704



According to our records this test was completed on: **12/14/2020**

We administered the following asbestos certification exam: **Inspector**

Your Results

Score: **94%**

Congratulations you have passed your Maryland asbestos accreditation exam. This document and your training certificate will serve as a temporary license until you receive your official license in the mail. Prior to issuing a license, MDE will verify all necessary information and submitted documents.
necessary information and submitted documents.

Thank you for taking the Maryland asbestos accreditation exam. If you have any concerns or questions about the exam, including how to collect your photo ID, please direct them to the Maryland Department of the environment at (410) 537-3200.

Issued By _____

Date **12/14/2020**

Appendix VII: Previous Reports



LIMITED ASBESTOS IN DUST SAMPLING

**PRINCE GEORGE'S COUNTY HOSPITAL
3001 HOSPITAL DRIVE
CHEVERLY, MARYLAND 20785**

ECS PROJECT NO. 47-4595-A

FOR

**BREWINGTON MANAGEMENT COMPANY
9620 PENNSYLVANIA AVENUE
UPPER MARLBORO, MARYLAND**

SEPTEMBER 25, 2017



September 25, 2017

Ms. Danielle Gittens
Brewington Management Company
9620 Pennsylvania Avenue
Upper Marlboro, Maryland 20772

ECS Project No. 47-4595-A

Reference: Limited Asbestos in Dust Sampling
Prince George's County Hospital
3001 Hospital Drive
Cheverly, Maryland 20785

Dear Ms. Gittens:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide the Brewington Management Company with this summary report for the work performed at referenced project site. This work was performed in general conformance with ECS Proposal No. 47-5582-EP, dated September 11, 2017.

PROJECT OVERVIEW

The Brewington Management Company recently provided ECS with a report by HE Consulting dated November 16, 2016. According to the report several vacuum samples were collected above the drop-ceiling within the Kitchen area of the hospital. The vacuum samples contained detectable concentrations of asbestos via Transmission Electron Microscopy (TEM) analysis. ECS understands the vacuum samples containing asbestos were likely associated with damaged asbestos-containing mudded elbows within the kitchen plenum.

As only a portion of the kitchen was assessed by HE Consulting, ECS understands you have concerns that similar conditions may be present in the remainder of the kitchen plenum. ECS only sampled within the kitchen plenum. No other areas of the structure were included in our scope of services.

SCOPE OF SERVICES

ECS performed a visual assessment within the unassessed portion of the kitchen in an attempt to locate damaged mudded fittings. No mudded fittings were observed within the assessment area. ECS collected three vacuum samples in the unassessed portions of the kitchen in an attempt to delineate the asbestos impact within the plenum. The vacuum samples were analyzed for asbestos via TEM (presence/absence). The vacuum samples were collected from on top of drop-ceiling tiles, located below exposed uninsulated piping as no mudded fittings were observed in the assessment area. Each sample was collected with a high flow pump attached to a 25 millimeter, open faced cassette with a Mixed Cellulose Ester (MCE) filter. Each sample included vacuuming a 100 cm² area for approximately two-minutes. Samples were submitted to EMSL analytical in Beltsville, Maryland for Analysis per chain of custody protocol.

OBSERVATIONS AND RESULTS

ECS did not observe damaged mudded fittings within the plenum. ECS did observe fiberglass insulated piping within the plenum. Several un-insulated elbows and pipe joints were observed. ECS collected the vacuum samples below the un-insulated pipes located throughout the plenum as these un-insulated pipes may have formerly been insulated with asbestos-containing material. In summary, the TEM analysis of all three samples were reported as no asbestos detected. Please see Figure I (Appendix II) for the approximate sample locations. The analytical results can be found within Appendix III.

CONCLUSIONS

ECS recommends that the area previously identified as impacted with asbestos-containing dust be cleaned. This area is illustrated in Figure I. The total area equates to approximately 2,200-square feet.

Non-porous surfaces such as ducts, framing, ceiling grid, etc. should be wet wiped and cleaned with a vacuum equipped with a High Efficiency Particulate Air (HEPA) filter. Porous materials such as fiberglass insulation and ceiling tiles should be removed as asbestos contaminated.

If the proposed renovations are to affect the kitchen storage area and office (adjacent to the impacted hallway), ECS recommends conducting similar sampling within this area to determine if this area should also be cleaned.

LIMITATIONS

The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards that may potentially cause damage, accidents, or injuries.

The observations, conclusions, and recommendations pertaining to environmental conditions at the subject site are necessarily limited to conditions observed, and/or materials reviewed at the time this study was undertaken. No warranty, expressed or implied, is made with regard to the conclusions and recommendations presented within this report. This report is provided for the exclusive use of the client. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties without the written consent of ECS and the client.

Our recommendations are in part based on federal, state, and local regulations and guidelines. ECS does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies, any conditions at the site that may present a potential danger to public health, safety, or the environment. Under this scope of services, ECS assumes no responsibility regarding any response actions initiated as a result of these findings. General compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements.

During this study, samples were submitted for analysis at an accredited laboratory via TEM. As with any similar survey of this nature, actual conditions exist only at the precise locations from which samples were collected. Certain inferences are based on the results of this sampling and

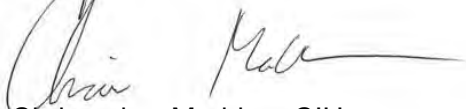
Prince George's County Hospital Asbestos Dust Sampling
ECS Project No. 47-4595-A
September 25, 2017

related testing to form a professional opinion of conditions in areas beyond those from which the samples were collected. No other warranty, expressed or implied, is made.

If we can be of further assistance, please do not hesitate to contact us at (410) 859-4300.

Respectfully,

ECS Mid-Atlantic, LLC



Christopher Madden, CIH
Senior Industrial Hygiene Project Manager



Michael Smith, ASP
Senior Industrial Hygiene Project Manager

Attachments: HE Consulting Report
Sample Location Diagram
Laboratory Analytical Results

Appendix I:
HE Consulting Report



November 16, 2016

Campbell Gibbons & Associates
4390 Lottsford Vista Road
Lanham, MD 20706-4817

Re: Prince Georges Hospital Center
 ○ **Suspect Asbestos Materials Testing**
 • **Kitchen Ceiling**
 • **Prep Kitchen Ceiling**
 • **Hallway Ceiling**

On November 10, 2016 H E Consulting, Inc., (HEC) collected representative presume asbestos containing materials (PACM) at the above described location. HEC collected a total of 12 suspect asbestos samples. The samples collected, location and results are listed below:

Asbestos Samples Collected and Results: TEM Vacuum Bulk Samples (See Appendix A – Lab Report)

- PH-01, Vacuum Sample, Prep Top of Drop Ceiling next to Pipe Fittings, Result: **Positive due to association**
- PH-03, Vacuum Sample, Prep Kitchen, Below Mudded Hanger on top of Light, Result: **Asbestos Present**
- PH-04, Vacuum Sample, Prep Kitchen, Floor below Hanger at Light, Result: **Asbestos Present**
- PH-05, Vacuum Sample, Kitchen, On top of Drop Ceiling next to Hood, Result: **Asbestos Present**
- PH-07, Vacuum Sample, Kitchen, Above Drop Ceiling, Result: **Asbestos Present**
- PH-08, Vacuum Sample, Prep Kitchen, Above Drop Ceiling, Result: **Asbestos Present**
- PH-09, Vacuum Sample, Hallway, Above Drop Ceiling, Result: **Asbestos Present**
- PH-12, Vacuum Sample, Hallway, Above Drop Ceiling, Result: **Asbestos Present**

Conclusion: Analysis of all samples and areas listed above are contaminated, and yielded **positive** results for asbestos fibers. The materials tested and all like materials in the project do meet the EPA definition of an Asbestos Containing Material (A.C.M.) and if disturbed during renovation or demolition **these materials and all like materials must be handled and disposed of by a licensed asbestos abatement contractor**. Analysis of all samples was conducted by AMA Analytical Services, Inc. (See Appendix A for Laboratory Results).

Asbestos Samples Collected and Results: PLM Bulk Samples (See Appendix A – Lab Report)

- PH-02, Prep Kitchen, Pipe Fittings at Wall, 3% Asbestos
- PH-06, Debris on top of Hood above Ceiling, NAD (Contaminated due to associated area)
- PH-10, Hallway Ceiling, White debris on top of Drop Ceiling, NAD (Contaminated due to associated area)
- PH-11, Hallway Ceiling, White debris on top of Drop Ceiling, 12% Asbestos

Conclusion: Analysis of all areas listed above are contaminated, and yielded **positive** results for asbestos fibers. The materials tested and all like materials in the project do meet the EPA definition of an Asbestos Containing Material (A.C.M.) and if disturbed during renovation or demolition **these materials and all like materials must be handled and disposed of by a licensed asbestos abatement contractor**. Analysis of all samples was conducted by AMA Analytical Services, Inc. (See Appendix A for Laboratory Results).

If there are any questions concerning our findings please do not hesitate to call. Thank you for selecting H E Consulting, Inc. for your environmental needs.

Sincerely,
H E CONSULTING, INC.

Phillip Haun
President
Attachments: Appendix A – Laboratory Reports

Appendix A
Laboratory Reports



Client: HE Consulting **Job Name:** PG Hospital **Chain Of Custody:** 277557
Address: 3930 Cove Road **Job Location:** Not Provided **Date Analyzed:** 11/15/2016
 Edgewater, Maryland 21037 **Job Number:** Not Provided **Person Submitting:** Phillip Haun
Attention: Phillip Haun **P.O. Number:** Not Provided

Summary of Results of Asbestos in Settled Dust by TEM - ASTM Method D5755-09(2014)

AMA Sample Number	Client Sample Number	Surface Area Sampled (cm ²)	Sample Aliquot (ml)	Filter Collection Area (mm ²)	Dilution Factor	Filter Area Analyzed (mm ²)	Analytical Sensitivity (s/cm ²)	# of Asbestos Structures and Asbestos Type	Asbestos Concentration (s/cm ²)	Comments
17017913	PH-01	100	0.20	1047	500.0	0.133	39400	NAD	<39400	
17017914	PH-03	100	0.10	1047	1000.0	0.133	78700	21 Chry	1650000	
17017915	PH-04	100	1.00	1047	100.0	0.133	7870	2 Chry	15700	
17017916	PH-05	100	0.10	1047	1000.0	0.133	78700	3 Chry	236000	
17017917	PH-07	100	0.20	1047	500.0	0.133	39400	NAD	<39400	
17017918	PH-08	100	0.20	1047	500.0	0.133	39400	1 Chry	39400	
17017919	PH-09	100	1.00	1047	100.0	0.0798	13100	32 Chry, 69 Trem	1320000	
17017920	PH-12	100	0.10	1047	1000.0	0.133	78700	12 Chry	944000	

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. All rights reserved. AMA Analytical Services, Inc.



Field Sample Data Sheet

WF: Working Final Clearance F: Final Clearance
 OWA: Outside the Work Area IWA: Inside the Work Area
 BL: Base Line Sample STEL: Excursion P: Personal

Project: PG Hospital
 Project Number: _____
 Client: CGA

Project Location: Kitchen Hallway
 HEC Personnel: Phil Hahn
 Activity Date: 11/12/16

Sample Number	Sample Type	Sample Location	Pre/Post Calibration	Air Flow (Rate)	Time On/Off	Run Time (Min)	Fibers/Field	Area Sample Volume	Analytical Result (f/cc)	Activity During Sampling
PH-01	VAC	Prep Kitchen Next to pipe fittings	2.5 2.5	2.5	/			10cm x 10cm		
PH-02	Bulk	Prep Kitchen Pipe fittings at wall	/	/	/					
PH-03	VAC	Prep kitchen Below mudded Hanger light	2.5 2.5	2.5	/			10cm x 10cm		
PH-04	VAC	Prep kitchen Below Hanger light	2.5 2.5	2.5	/			10cm x 10cm		
PH-05	VAC	Kitchen on top of drop ceiling next to hood	2.5 2.5	2.5	/			10cm x 10cm		
PH-06	Bulk	Debris on top of hood above ceiling	/	/	/					
PH-07	VAC	Above drop ceiling Kitchen	2.5 2.5	2.5	/			10cm x 10cm		
PH-08	VAC	Above drop ceiling Prep kitchen	2.5 2.5	2.5	/			10cm x 10cm		
PH-09	VAC	Above drop ceiling Hallway	2.5 2.5	2.5	/			10cm x 10cm		
PH-10	Bulk	White debris on top of drop ceiling hallway	/	/	/					
PH-11	Bulk	White debris on top of drop ceiling hallway	/	/	/					
PH-12	VAC	Hallway above drop ceiling	2.5 2.5	2.5	/			10cm x 10cm		

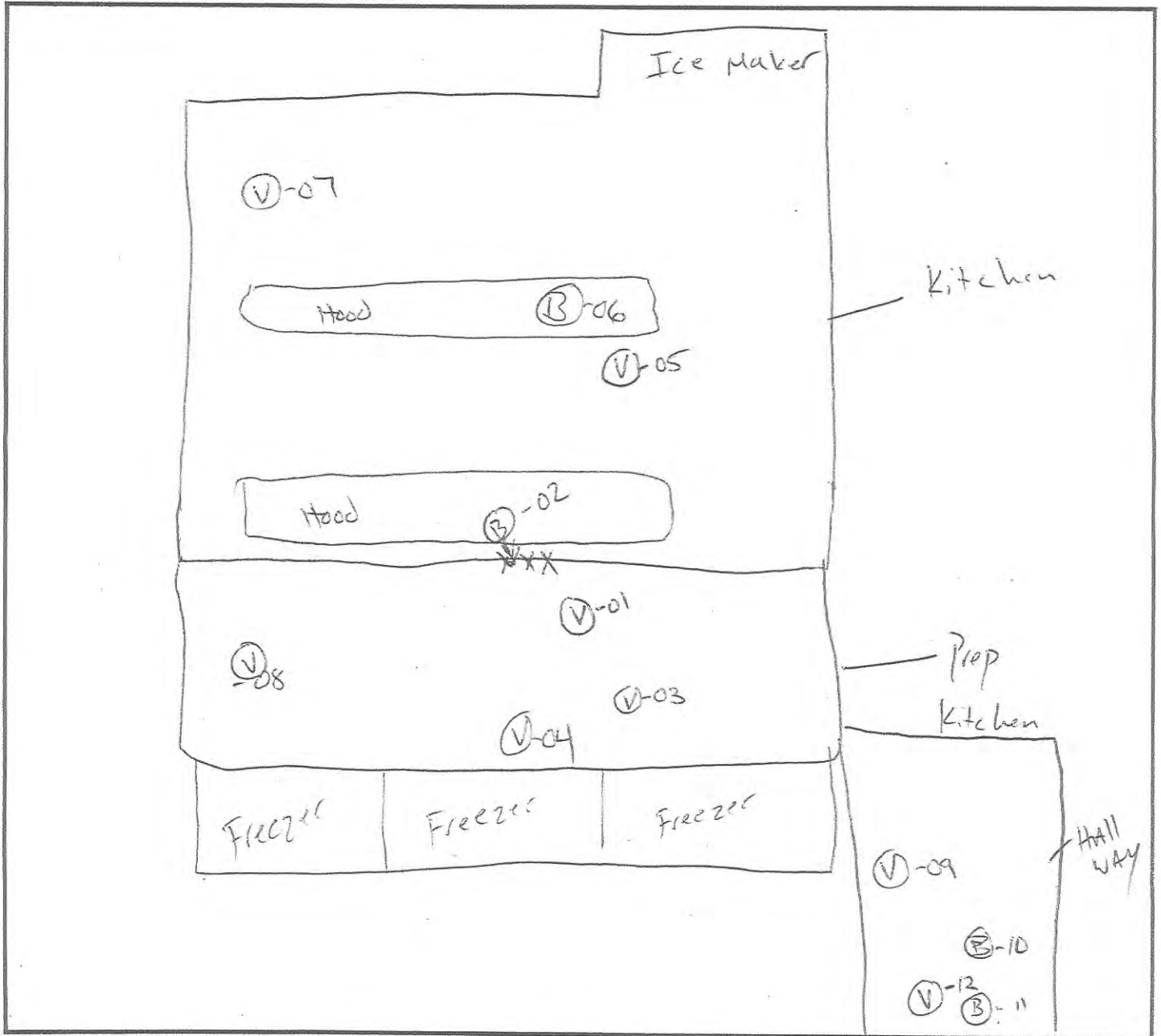
Final Review: _____



DAILY WORK AREA SKETCH

Project: PG Hospital
Project Number:
Client: CGA

Project Location: Kitchen / Hallway
HEC Personnel: Phil Brown
Activity Date: 11/10/11



FINAL REVIEW:



Client: HE Consulting **Job Name:** PG Hospital **Chain Of Custody:** 277557
Address: 3930 Cove Road **Job Location:** Not Provided **Date Analyzed:** 11/15/2016
 Edgewater, Maryland 21037 **Job Number:** Not Provided **Person Submitting:** Phillip Haam
Attention: Phillip Haam **P.O. Number:** Not Provided

Summary of Results of Asbestos in Settled Dust by TEM - ASTM Method D5755-09(2014)

AMA Sample Number	Client Sample Number	Surface Area Sampled (cm ²)	Sample Aliquot (ml)	Filter Collection Area (mm ²)	Dilution Factor	Filter Area Analyzed (mm ²)	Analytical Sensitivity (s/cm ²)	# of Asbestos Structures and Asbestos Type	Asbestos Concentration (s/cm ²)	Comments
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Method of Analysis: ASTM Method D5755-09(2014) "Standard Test Method for Microvacuum Sampling and Indirect Analysis of Dust by Transmission Electron Microscopy (TEM) for Asbestos Structure Number Concentrations"
Limit of Detection: The Limit of Detection (LOD) for this method has been determined by the ASTM D6620. Therefore, if fewer than one (1) structures was observed, the asbestos concentration is reported as less than the analytical sensitivity.
Analytical Sensitivity: An analytical sensitivity of 1000 asbestos structures per square centimeter has been designed for this method. Occasionally, this analytical sensitivity cannot be achieved due to high particulate loadings or high asbestos concentrations invoking the stopping rules.
Stopping Rules: The analysis is terminated for a sample when an analytical sensitivity of 1000 s/cm² is achieved, Ten (10) grid openings have been analyzed, or upon completion of the grid opening in which the 100 confirmed asbestos structure was documented.
Asbestos Types: Chry = Chrysotile; Amos = Amosite; Croc = Crocidolite; Trem = Tremolite; Actn = Actinolite; Anth = Anthophyllite; NAD = No Asbestos Detected
Units of Measure: cm² = square centimeters; mm² = square millimeters; s/cm² = asbestos structures per square centimeter of surface area sampled.
s/ft² Conversion: To convert the final asbestos concentration to structures per square foot (s/ft²), multiply the final concentration reported in s/cm² by 929.
Significant Figures: Final results are reported to three (3) significant figures.

Technical Director: G Edward Carney **Analyst(s):** Andreas Saldivar

*This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. All rights reserved. AMA Analytical Services, Inc.



AMA Analytical Services, Inc.
 Focused on Results www.amalab.com
 AIHA-LAP (#100470) NVLAP (#101143-0) NY ELAP (10920)
 4475 Forbes Blvd. • Lanham, MD 20706
 (301) 459-2640 • (800) 346-0961 • Fax (301) 459-2643

(Please Refer To This
 Number For Inquires)

277557

CHAIN OF CUSTODY

Mailing/Billing Information:

1. Client Name: HE Con
 2. Address 1:
 3. Address 2:
 4. Address 3:
 5. Phone #: Fax #:

Submittal Information: P.G. Hospital

1. Job Name: P.O. #:
 2. Job Location:
 3. Job #:
 4. Contact Person: Phillip Hanna Cell: 202007-5737
 5. Collected by: Cell:

Reporting Info (Results provided as soon as technically feasible). If no TAT/Reporting Info is provided, AMA will assign defaults of 5-Day and email/fax to contacts on file.

AFTER HOURS (must be pre-scheduled)
 4 Hours
 Immediate Date Due:
 24 Hours Time Due:
 Comments:

NORMAL BUSINESS HOURS
 3 Day
 5 Day + 11/15 Results Required By Noon
 Date Due:
 Email:
 Email 2:
 Verbal:

REPORT TO:

Asbestos Analysis

*PCM Air - Please Indicate Filter Type:
 NIOSH 7400 (QTY)
 Fiberglass (QTY)
 TEM Air* - Please Indicate Filter Type:
 AHJERA (QTY)
 MOSH 7402 (QTY)
 Other (specify) WAX (QTY)
 PLM Bulk (QTY)
 EPA 600 - Visual Estimate (QTY) Pos Stop
 EPA Point Count (QTY)
 NY State Friable 198.1 (QTY)
 Grav. Reduction ELAP 198.6 (QTY)
 Other (specify) (QTY)
 MISC
 Vermiculite
 Asbestos Soil PLM (Qual) PLM (Quant) PLM/TEM (Qual) PLM/TEM (Quant)
 *It is recommended that blank samples be submitted with all air and surface samples

TEM Bulk
 ELAP 198.4/Chatfield (QTY)
 NY State PLM/TEM (QTY)
 Residual Ash (QTY)
TEM Dust*
 Qual. (pres/abs) Vacuum/Dust (QTY)
 Quan. (s/area) Vacuum D5755-95 (QTY)
 Quan. (s/area) Dust D6480-99 (QTY)
TEM Water
 Qual. (pres/abs) (QTY)
 ELAP 198.2/EPA 100.2 (QTY)
 EPA 100.1 (QTY)

Metals Analysis
 Pb Paint Chip (QTY)
 Pb Dust Wipe (wipe type) (QTY)
 Pb Air (QTY)
 Pb Soil/Solid (QTY)
 Pb TCLP (QTY)
 Drinking Water Pb (QTY) Cu (QTY) As (QTY)
 Waste Water Pb (QTY) Cu (QTY) As (QTY)
 Pb Furnace (Media) (QTY)
Fungal Analysis
 Collection Apparatus for Spore Traps/Air Samples:
 Collection Media
 *Spore-Trap (QTY) Surface Vacuum Dust (QTY)
 *Surface Swab (QTY) Culturable ID Genus (Media) (QTY)
 *Surface Tape (QTY) Culturable ID Species (Media) (QTY)
 Other (Specify) (QTY)

All samples received in good condition unless otherwise noted.
 (TEM Water samples °C)

If field data sheets are submitted, there is no need to complete bottom section.

CLIENT ID #	SAMPLE INFORMATION			ANALYSIS										CLIENT CONTACT			
	SAMPLE LOCATION/ID	DATE/TIME	VOL (L) / Wipe Area	TEM	PCM	PLM	LEAD	MOLD	AIR	BULK	DUST	WATER AND OTHER	SPORE TRAP	TAPE	SWAB	Date/Time:	Contact: By:
S.F.F.	Attached																

Relinquished by:	Print Name	Signature	Date	Time	Shipping Information			
Received by:					<input type="checkbox"/> UPS	<input type="checkbox"/> In-Person	<input type="checkbox"/> Other	
Relinquished by:					<input type="checkbox"/> FedEx	<input checked="" type="checkbox"/> Drop Box		
Received for Lab by:	<u>Phillip Hanna</u>	<u>[Signature]</u>	<u>11/15/15</u>	<u>0800</u>	<input type="checkbox"/> USFS	<input type="checkbox"/> Courier		Airbill/Tracking No. <u> </u>



CERTIFICATE OF ANALYSIS

Client: HE Consulting Job Name: PG Hospital Chain Of Custody: 277557
 Address: 3930 Cove Road Job Location: Not Provided Date Analyzed: 11/15/2016
 Edgewater, Maryland 21037 Job Number: Not Provided Person Submitting: Phillip Haun
 P.O. Number: Not Provided

Page 1 of 2

Attention: Phillip Haun

Summary of Polarized Light Microscopy

AMA Sample Number	Client Sample #	Total Asbestos	Chrysotile Percent	Amosite Percent	Crocidolite Percent	Other Asbestos Percent	Mineral Wool Percent	Fiberglass Percent	Organic Percent	Synthetic Percent	Other Percent	Particulate Percent	Sample Type	Sample Color	Homogeneity	Analyst ID	Comments
17017909	PH-02	3	3	--	--	--	25	--	--	--	--	72	Fitting	Gray	Homogeneous	PC	
17017910	PH-06	NAD	--	--	--	--	--	--	--	--	--	100	Debris	Gray	Homogeneous	PC	
17017911	PH-10	NAD	--	--	--	--	--	--	--	--	--	100	Debris	Gray	Homogeneous	PC	
17017912	PH-11	12	2	10	--	--	--	--	--	--	--	88	Debris	White	Homogeneous	PC	

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. NVLAP accreditation applies only to polarized light microscopy of bulk samples and transmission electron microscopy of AHERA air samples. This report must not be used to claim, and does not imply product certification, approval, or endorsement by NVLAP, AIHA, NVLAP, NIST, or any agency of the US Federal Government. All rights reserved. AMA Analytical Services, Inc.

CERTIFICATE OF ANALYSIS

Client: HE Consulting Job Name: PG Hospital Chain Of Custody: 277557
 Address: 3930 Cove Road Job Location: Not Provided Date Analyzed: 11/15/2016
 Edgewater, Maryland 21037 Job Number: Not Provided Person Submitting: Phillip Haun
 P.O. Number: Not Provided

Page 2 of 2

Summary of Polarized Light Microscopy

AMA Sample Number	Client Sample #	Total Asbestos Percent	Chrysotile Percent	Amosite Percent	Crocidolite Percent	Other Asbestos Percent	Mineral Wool Percent	Fiberglass Percent	Organic Percent	Synthetic Percent	Other Particulate Percent	Sample Type	Sample Color	Sample Homogeneity	Analyst ID	Comments

The following footnotes only apply to those samples which the total asbestos result is flagged with a note number.

1 TEM RECOMMENDATION - Please note, due to resolution limitations with optical microscopy and/or interference from matrix components of this sample, results which are reported via PLM as negative or trace (<1%) for asbestos may contain a significant quantity of asbestos. It is recommended that the additional analytical technique of TEM be used to check for asbestos fibers below the resolution limits of optical microscopy.

2 MATRIX REDUCTION RECOMMENDATION - Please note, due to interference from the matrix components of this sample, results which are reported via PLM as negative or trace (<1%) for asbestos may contain a significant quantity of asbestos which is obscured from view. It is recommended that the additional preparation technique of gravimetric reduction be performed on this sample to minimize the obscuring effects of matrix components, followed by reanalysis by PLM and/or TEM.

Analysis Method - EPA/600/R-93/116 dated July 1993

NAD = "No Asbestos Detected" TR = "Trace equals less than 1% of this component"

Uncertainty: For samples containing asbestos in range of 1-10% the CV is 0.43, 11-35% CV=0.55, >35 CV=0.23

All results are to be considered preliminary and subject to change unless signed by the Technical Director or Deputy.

P. Peerauwit
 Peerauwit Chaikeence

Analyst(s)

Peerawut Chaikeence

Technical Director

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. NVLAP accreditation applies only to polarized light microscopy of bulk samples and transmission electron microscopy of AHERA air samples. This report must not be used to claim, and does not imply product certification, approval, or endorsement by NY ELAP, AIHA, NVLAP, NIST, or any agency of the US Federal Government. All rights reserved. AMA Analytical Services, Inc.



AMA Analytical Services, Inc.
 Focused on Results www.amalab.com
 AHA-LAP (#100470) NVLAP (#101143-0) NY ELAP (10920)
 4475 Forbes Blvd. • Lanham, MD 20706
 (301) 459-2640 • (800) 346-0961 • Fax (301) 459-2643

CHAIN OF CUSTODY

(Please Refer To This Number For Inquiries)

277557

Mailing/Billing Information:

1. Client Name: H E Con
 2. Address 1:
 3. Address 2:
 4. Address 3:
 5. Phone #: _____ Fax #: _____

Submittal Information:

1. Job Name: P.G. Hospital
 2. Job Location:
 3. Job #: _____ P.O. #:
 4. Contact Person: Phillip Hua Cell: 202007-5737
 5. Collected by: _____ Cell: _____

Reporting Info (Results provided as soon as technically feasible). If no TAT/Reporting Info is provided, AMA will assign defaults of 5-Day and email/fax to contacts on file.

AFTER HOURS (must be pre-scheduled)
 4 Hours
 Immediate
 24 Hours
 Comments: _____
 3 Day
 5 Day + 11/15
 Date Due: _____
 Results Required By Noon
 Email: _____
 Email 2: _____
 Verhals: _____

REPORT TO:

Asbestos Analysis

*PCM Air - Please Indicate Filter Type:
 NIOSH 7400 (QTY)
 Fiberglass (QTY)
 TEM Air* - Please Indicate Filter Type:
 AHPRA (QTY)
 MOSH 7402 (QTY)
 Other (specify) 1 (QTY)
 PLM Bulk
 EPA 600 - Visual Estimate (QTY) Pos Stop
 EPA Point Count (QTY)
 NY State Friable 198.1 (QTY)
 Grav. Reduction ELAP 198.6 (QTY)
 Other (specify) _____ (QTY)
 MISC
 Vermiculite
 Asbestos Soil PLM (Qual) PLM/TEM (Qual) PLM/TEM (Qual) PLM/TEM (Qual)
 *It is recommended that blank samples be submitted with all air and surface samples

TEM Bulk

ELAP 198.4/Charfield (QTY)
 NY State PLM/TEM (QTY)
 Residual Ash (QTY)
 TEM Dust*
 Qual. (pres/abs) Vacuum/Dust (QTY)
 Quan. (s/area) Vacuum D5755-95 (QTY)
 Quan. (s/area) Dust D6480-99 (QTY)
 TEM Water
 Qual. (pres/abs) _____ (QTY)
 ELAP 198.2/EPA 100.2 (QTY)
 EPA 100.1 _____ (QTY)

Metals Analysis

Pb Paint Chip (QTY)
 *Pb Dust Wipe (wipe type) _____ (QTY)
 *Pb Air (QTY)
 Pb Soil/Solid (QTY)
 Pb TCLP (QTY)
 Drinking Water Pb (QTY) Cu (QTY) As (QTY)
 Waste Water Pb (QTY) Cu (QTY) As (QTY)
 Pb Furnace (Media) _____ (QTY)
 Fungal Analysis
 Collection Apparatus for Spore Traps/Air Samples:
 Collection Media
 Spore-Trap (QTY) Surface Vacuum Dust (QTY)
 *Surface Swab (QTY) Cultureable ID Genus (Media) (QTY)
 *Surface Tape (QTY) Cultureable ID Species (Media) (QTY)
 Other (Specify) _____ (QTY)

All samples received in good condition unless otherwise noted.
 (TEM Water samples _____ °C)

If field data sheets are submitted, there is no need to complete bottom section.

MATRIX AND OTHER ANALYSIS
 WATER BULK AIR MOLD LEAD PCM PLM/TEM TEM
 DUST BULK AIR MOLD LEAD PCM PLM/TEM TEM
 SWAB TAP SPORE TRAP OTHER

CLIENT ID #	SAMPLE LOCATION/ID	DATE/TIME	VOL (L) / Wipe Area	ANALYSIS	MATRIX AND OTHER	CLIENT CONTACT (LABORATORY STAFF ONLY)
SFF	Attached					Date/Time: _____ Contact: By: _____
						Date/Time: _____ Contact: By: _____
						Date/Time: _____ Contact: By: _____
						Date/Time: _____ Contact: By: _____

Print Name: _____ Signature: _____ Date: _____
 Relinquished by: _____
 Received by: _____
 Relinquished by: _____
 Shipping Information
 UPS In-Person Other
 FedEx Drop Box
 USPS Courier
 Aishil/Tracking No: _____
 AUTHORIZED: _____
 W. K. K. K.

Appendix II:
Sample Location Diagram



PROJECT: PG County Hospital

SHEET NO: 1 of 1

TITLE: Sample Location Diagram (Fig. 1)

PROJ. NO: 4395-A

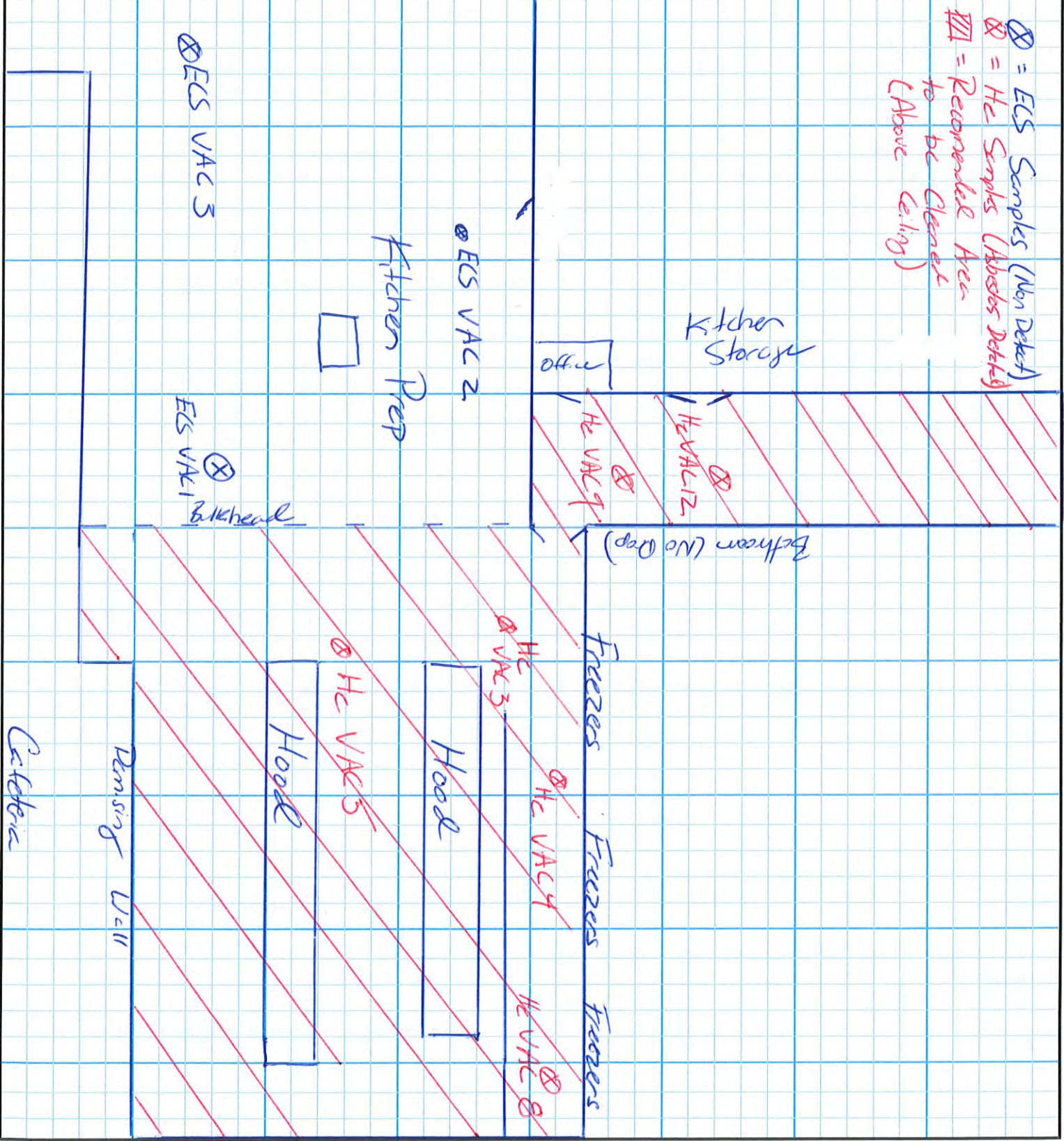
SCALE: NTS

BY: CBM

DATE: 9/22/2017

APPROVED:

DATE:



Appendix III:
Laboratory Analytical Results



EMSL ANALYTICAL, INC.
LABORATORY-PRODUCTS-TRAINING

Chain of Custody
EMSL Order Number (Lab Use Only):

191711090

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 786-5974

Company : Engineering Consulting Services		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different	
Street: 1340 Charwood Road, Suite A		If Bill to is Different note instructions in Comments**	
City: Hanover		Third Party Billing requires written authorization from third party	
State/Province: MD	Zip/Postal Code: 21076	Country:	
Report To (Name): Christopher Madden		Fax #:	
Telephone #: 410-859-4300		Email Address: CMadden@ECSLimited.com	
Project Name/Number: 4595-A			
Please Provide Results: <input type="checkbox"/> Fax <input type="checkbox"/> Email		Purchase Order:	U.S. State Samples Taken:

Turnaround Time (TAT) Options* - Please Check

3 Hour
 6 Hour
 24 Hour
 48 Hour
 72 Hour
 96 Hour
 1 Week
 2 Week

*For RUSH TAT's Please Call Ahead to Confirm Lab Hours and Availability. Not all TAT options are valid for every test. Materials Science and IAQ TATs are in Business Days rather than Hours (i.e. 24 Hour = End of Next Business Day)

Asbestos

PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ 8hr. TWA TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA ONLY) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Water Fibers ≥10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	PLM - Bulk <input type="checkbox"/> PLM EPA 600/R-93/116 <input type="checkbox"/> PLM EPA NOB (<1%) <input type="checkbox"/> NYS 198.1 (friable-NY) <input type="checkbox"/> NYS 198.6 (non-friable-NY) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/ Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) TEM - Dust <input checked="" type="checkbox"/> Microvac - ASTM D 5755 <i>TEM Qual. w/ Attenuation</i> <input type="checkbox"/> Wipe-ASTM D6480	TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> EPA Reg. 1 Screening Protocol (Qualitative) Other:
---	--	--

Lead (Pb)		Materials Science
Flame Atomic Absorption <input type="checkbox"/> Chips SW846-7000B or AOAC 974.02 <input type="checkbox"/> Soil SW846-7000B/7420 <input type="checkbox"/> Air NIOSH 7082 <input type="checkbox"/> Wastewater SM3111B or SW846-7000B/7420 <input type="checkbox"/> ASTM Wipe SW846-7000B/7420 <input type="checkbox"/> non ASTM Wipe SW846-7000B/7420 <input type="checkbox"/> TCLP SW846-1311/7420/SM 3111B	ICP <input type="checkbox"/> Air NIOSH 7300 Modified <input type="checkbox"/> non ASTM Wipe SW846-6010B or C <input type="checkbox"/> ASTM Wipe SW846-6010B or C <input type="checkbox"/> Soil SW846-6010 B or C <input type="checkbox"/> Waste Water SW846-6010B or C <input type="checkbox"/> TCLP SW846-6010B or C	<input type="checkbox"/> Common Particle ID (large particles) <input type="checkbox"/> Full Particle ID (environmental dust) <input type="checkbox"/> Basic Material ID (solids) <input type="checkbox"/> Advanced Material ID <input type="checkbox"/> Physical Testing (Tensile, Compression) <input type="checkbox"/> Combustion-by-products (soot, char, etc.) <input type="checkbox"/> X-Ray Fluorescence (elem. analysis) <input type="checkbox"/> X-Ray Diffraction (Crystalline Part.) <input type="checkbox"/> MMVF's (Fibrous glass, RCF's) <input type="checkbox"/> Particle Size (sieve/microscopy/laser) <input type="checkbox"/> Combustible Dust <input type="checkbox"/> Petrographic Examination Other: <input type="checkbox"/>
Graphite Furnace Atomic Absorption <input type="checkbox"/> Soil SW846-7421 <input type="checkbox"/> Wastewater EPA 200.9 <input type="checkbox"/> Air NIOSH 7105 <input type="checkbox"/> Drinking Water EPA 200.9	Other: <input type="checkbox"/>	

Microbiology

Wipe and Bulk Samples <input type="checkbox"/> Mold & Fungi - Direct Examination <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi Culture (Genus & Species) <input type="checkbox"/> Bacterial Count & ID (Up to Three Types) <input type="checkbox"/> Bacterial Count & ID (Up to Five Types) <input type="checkbox"/> MRSA <input type="checkbox"/> <i>Pseudomonas aeruginosa</i>	Air Samples <input type="checkbox"/> Mold & Fungi (Spore Trap) <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi (Genus & Species) <input type="checkbox"/> Bacterial Culture & ID (Up to Three Types) <input type="checkbox"/> Bacterial Culture & ID (Up to Five Types) <input type="checkbox"/> Endotoxin Testing Real Time Q-PCR (See Analytical Guide for Code) Code: Legionella <input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 Other: <input type="checkbox"/>	IAQ Nuisance Dust NIOSH <input type="checkbox"/> 0500 <input type="checkbox"/> 0600 Airborne Dust <input type="checkbox"/> PM10 <input type="checkbox"/> TSP Silica Analysis: <input type="checkbox"/> All Species Silica Analysis - Single Species <input type="checkbox"/> Alpha Quartz <input type="checkbox"/> Cristobalite <input type="checkbox"/> Tridymite <input type="checkbox"/> HVAC Efficiency <input type="checkbox"/> Carbon Black <input type="checkbox"/> Airborne Oil Mist Radon Testing: Call for Kit and COC Other: <input type="checkbox"/>
---	---	--

****Comments/Special Instructions:** *Presence Absence*

Client Sample #'s	<i>VAC-1 - VAC-3</i>	Total # of Samples:	<i>3</i>
Relinquished (Client):	<i>[Signature]</i>	Date:	<i>9/14/2017</i>
Received (Lab):	<i>[Signature]</i>	Date:	<i>9/14/17</i>
		Time:	<i>10:05 AM</i>
		Time:	<i>10:50 am</i>

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide
Controlled Document-OneChain-R2-1/12/2010

walk in



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Chain of Custody
EMSL Order Number (Lab Use Only):

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 786-5974

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
*Comments/Special Instructions:			

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide



EMSL Analytical, Inc.

10768 Baltimore Avenue, Beltsville, MD 20705

Phone/Fax: (301) 937-5700 / (301) 937-5701

<http://www.EMSL.com>

beltsvillelab@emsl.com

EMSL Order: 191711090
CustomerID: EC5L51
CustomerPO:
ProjectID:

Attn: **Chris Madden**
ECS Mid-Atlantic, LLC
1340 Charwood Road
Suite A
Hanover, MD 21076

Phone: (410) 859-4300
Fax: (410) 859-4300
Received: 09/14/17 10:50 AM
Analysis Date: 9/19/2017
Collected:

Project: 4595-A

**Test Report: Qualitative Asbestos Analysis by Transmission
Electron Microscopy (TEM) and Filtration Technique**

Sample	Description	TEM Result	Notes
VAC 1 191711090-0001		None Detected	
VAC 2 191711090-0002		None Detected	
VAC 3 191711090-0003		None Detected	

Analyst(s) _____
Joe Centifonti (3)

Joe Centifonti, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not 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. This is a qualitative screen only. There is a chance for false negatives with this method. Samples received in good condition unless otherwise noted.
Samples analyzed by EMSL Analytical, Inc. Beltsville, MD

Initial report from 09/19/2017 18:20:28



LIMITED ASBESTOS IN DUST SAMPLING

**PRINCE GEORGE'S COUNTY HOSPITAL
3001 HOSPITAL DRIVE
CHEVERLY, MARYLAND 20785**

ECS PROJECT NO. 47-4595-C

FOR

**BREWINGTON MANAGEMENT COMPANY
9620 PENNSYLVANIA AVENUE
UPPER MARLBORO, MARYLAND**

NOVEMBER 2, 2017



November 2, 2017

Ms. Danielle Gittens
Brewington Management Company
9620 Pennsylvania Avenue
Upper Marlboro, Maryland 20772

ECS Project No. 47-4595-C

Reference: Limited Asbestos in Dust Sampling
Prince George's County Hospital
3001 Hospital Drive
Cheverly, Maryland 20785

Dear Ms. Gittens:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide the Brewington Management Company with this summary report for the work performed at referenced project site. This work was performed in general conformance with ECS Proposal No. 47-5875-EP, dated October 12, 2017.

PROJECT OVERVIEW

The Brewington Management Company recently provided ECS with a report by HE Consulting dated November 16, 2016. According to the report, several dust vacuum samples were collected above the drop-ceiling within the kitchen area of the hospital. The vacuum samples were analyzed via Transmission Electron Microscopy (TEM) and contained detectable concentrations of asbestos. ECS understands the dust vacuum samples containing asbestos were likely associated with damaged asbestos-containing mudded elbows within the kitchen plenum. ECS understands that you believe this area may have been cleaned, but you are unsure. ECS collected vacuum samples within the kitchen area that has been identified as impacted with asbestos-containing dust.

SCOPE OF SERVICES

ECS performed a visual assessment within the unassessed portion of the kitchen in an attempt to locate damaged mudded fittings. No mudded fittings were observed within the assessment area. ECS collected three vacuum samples in the area that was formerly identified as impacted by HE Consulting. The vacuum samples were analyzed for asbestos via TEM (presence/absence). The vacuum samples were collected from on top of drop-ceiling tiles, located below exposed un-insulated piping as no mudded fittings were observed in the assessment area. Each sample was collected with a high flow pump attached to a 25 millimeter, open faced cassette with a Mixed Cellulose Ester (MCE) filter. Each sample included vacuuming an approximately 100 cm² area for approximately two-minutes. Samples were submitted to EMSL analytical in Beltsville, Maryland for Analysis per chain of custody protocol.

OBSERVATIONS AND RESULTS

ECS did not observe damaged mudded fittings within the plenum. ECS did observe fiberglass insulated piping within the plenum. Several un-insulated elbows and pipe joints were observed. ECS collected the vacuum samples below the un-insulated pipes located throughout the plenum as these un-insulated pipes may have formerly been insulated with asbestos-containing material.

Two of the TEM analyses (within the kitchen area, fiberglass ceiling tile) were reported as no asbestos detected. The TEM analyses of the hallway sample (rigid ceiling tile) contained chrysotile asbestos fibers. Please see Figure I (Appendix II) for the approximate sample locations. The analytical results can be found within Appendix III.

CONCLUSIONS

ECS recommends that the area hallway area previously identified as impacted with asbestos-containing dust be cleaned. This area is illustrated in Figure I.

Non-porous surfaces such as ducts, framing, ceiling grid, etc. should be wet wiped and cleaned with a vacuum equipped with a High Efficiency Particulate Air (HEPA) filter. Porous materials such as fiberglass insulation and ceiling tiles should be removed as asbestos contaminated.

ECS cannot definitively say that the remaining kitchen area was previously cleaned, however, the results of our limited assessment indicates no asbestos fibers were detected in the kitchen area sample locations. The most conservative measure would be to re-clean the area if documentation regarding a previous clean-up cannot be located.

LIMITATIONS

The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards that may potentially cause damage, accidents, or injuries.

The observations, conclusions, and recommendations pertaining to environmental conditions at the subject site are necessarily limited to conditions observed, and/or materials reviewed at the time this study was undertaken. No warranty, expressed or implied, is made with regard to the conclusions and recommendations presented within this report. This report is provided for the exclusive use of the client. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties without the written consent of ECS and the client.

Our recommendations are in part based on federal, state, and local regulations and guidelines. ECS does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies, any conditions at the site that may present a potential danger to public health, safety, or the environment. Under this scope of services, ECS assumes no responsibility regarding any response actions initiated as a result of these findings. General compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements.

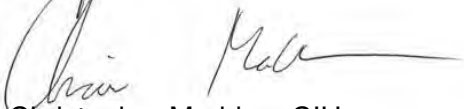
Prince George's County Hospital Asbestos Dust Sampling
ECS Project No. 47-4595-C
November 2, 2017

During this study, samples were submitted for analysis at an accredited laboratory via TEM. As with any similar survey of this nature, actual conditions exist only at the precise locations from which samples were collected. Certain inferences are based on the results of this sampling and related testing to form a professional opinion of conditions in areas beyond those from which the samples were collected. No other warranty, expressed or implied, is made.

If we can be of further assistance, please do not hesitate to contact us at (410) 859-4300.

Respectfully,

ECS Mid-Atlantic, LLC



Christopher Madden, CIH
Senior Industrial Hygiene Project Manager



Michael Smith, ASP
Senior Industrial Hygiene Project Manager

Attachments: HE Consulting Report
Sample Location Diagram
Laboratory Analytical Results

Appendix I:
HE Consulting Report



November 16, 2016

Campbell Gibbons & Associates
4390 Lottsford Vista Road
Lanham, MD 20706-4817

Re: Prince Georges Hospital Center
 ○ **Suspect Asbestos Materials Testing**
 • **Kitchen Ceiling**
 • **Prep Kitchen Ceiling**
 • **Hallway Ceiling**

On November 10, 2016 H E Consulting, Inc., (HEC) collected representative presume asbestos containing materials (PACM) at the above described location. HEC collected a total of 12 suspect asbestos samples. The samples collected, location and results are listed below:

Asbestos Samples Collected and Results: TEM Vacuum Bulk Samples (See Appendix A – Lab Report)

- PH-01, Vacuum Sample, Prep Top of Drop Ceiling next to Pipe Fittings, Result: **Positive due to association**
- PH-03, Vacuum Sample, Prep Kitchen, Below Mudded Hanger on top of Light, Result: **Asbestos Present**
- PH-04, Vacuum Sample, Prep Kitchen, Floor below Hanger at Light, Result: **Asbestos Present**
- PH-05, Vacuum Sample, Kitchen, On top of Drop Ceiling next to Hood, Result: **Asbestos Present**
- PH-07, Vacuum Sample, Kitchen, Above Drop Ceiling, Result: **Asbestos Present**
- PH-08, Vacuum Sample, Prep Kitchen, Above Drop Ceiling, Result: **Asbestos Present**
- PH-09, Vacuum Sample, Hallway, Above Drop Ceiling, Result: **Asbestos Present**
- PH-12, Vacuum Sample, Hallway, Above Drop Ceiling, Result: **Asbestos Present**

Conclusion: Analysis of all samples and areas listed above are contaminated, and yielded **positive** results for asbestos fibers. The materials tested and all like materials in the project do meet the EPA definition of an Asbestos Containing Material (A.C.M.) and if disturbed during renovation or demolition **these materials and all like materials must be handled and disposed of by a licensed asbestos abatement contractor**. Analysis of all samples was conducted by AMA Analytical Services, Inc. (See Appendix A for Laboratory Results).

Asbestos Samples Collected and Results: PLM Bulk Samples (See Appendix A – Lab Report)

- PH-02, Prep Kitchen, Pipe Fittings at Wall, 3% Asbestos
- PH-06, Debris on top of Hood above Ceiling, NAD (Contaminated due to associated area)
- PH-10, Hallway Ceiling, White debris on top of Drop Ceiling, NAD (Contaminated due to associated area)
- PH-11, Hallway Ceiling, White debris on top of Drop Ceiling, 12% Asbestos

Conclusion: Analysis of all areas listed above are contaminated, and yielded **positive** results for asbestos fibers. The materials tested and all like materials in the project do meet the EPA definition of an Asbestos Containing Material (A.C.M.) and if disturbed during renovation or demolition **these materials and all like materials must be handled and disposed of by a licensed asbestos abatement contractor**. Analysis of all samples was conducted by AMA Analytical Services, Inc. (See Appendix A for Laboratory Results).

If there are any questions concerning our findings please do not hesitate to call. Thank you for selecting H E Consulting, Inc. for your environmental needs.

Sincerely,
H E CONSULTING, INC.

Phillip Haun
President
Attachments: Appendix A – Laboratory Reports

Appendix A
Laboratory Reports



Client: HE Consulting **Job Name:** PG Hospital **Chain Of Custody:** 277557
Address: 3930 Cove Road **Job Location:** Not Provided **Date Analyzed:** 11/15/2016
 Edgewater, Maryland 21037 **Job Number:** Not Provided **Person Submitting:** Phillip Haun
Attention: Phillip Haun **P.O. Number:** Not Provided

Summary of Results of Asbestos in Settled Dust by TEM - ASTM Method D5755-09(2014)

AMA Sample Number	Client Sample Number	Surface Area Sampled (cm ²)	Sample Aliquot (ml)	Filter Collection Area (mm ²)	Dilution Factor	Filter Area Analyzed (mm ²)	Analytical Sensitivity (s/cm ²)	# of Asbestos Structures and Asbestos Type	Asbestos Concentration (s/cm ²)	Comments
17017913	PH-01	100	0.20	1047	500.0	0.133	39400	NAD	<39400	
17017914	PH-03	100	0.10	1047	1000.0	0.133	78700	21 Chry	1650000	
17017915	PH-04	100	1.00	1047	100.0	0.133	7870	2 Chry	15700	
17017916	PH-05	100	0.10	1047	1000.0	0.133	78700	3 Chry	236000	
17017917	PH-07	100	0.20	1047	500.0	0.133	39400	NAD	<39400	
17017918	PH-08	100	0.20	1047	500.0	0.133	39400	1 Chry	39400	
17017919	PH-09	100	1.00	1047	100.0	0.0798	13100	32 Chry, 69 Trem	1320000	
17017920	PH-12	100	0.10	1047	1000.0	0.133	78700	12 Chry	944000	

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. All rights reserved. AMA Analytical Services, Inc.



Field Sample Data Sheet

WF: Working Final Clearance F: Final Clearance
 OWA: Outside the Work Area IWA: Inside the Work Area
 BL: Base Line Sample STEL: Excursion P: Personal

Project: PG Hospital
 Project Number: _____
 Client: CGA

Project Location: Kitchen Hallway
 HEC Personnel: Phil Hahn
 Activity Date: 11/12/16

Sample Number	Sample Type	Sample Location	Pre/Post Calibration	Air Flow (Rate)	Time On/Off	Run Time (Min)	Fibers/Field	Area Sample Volume	Analytical Result (f/cc)	Activity During Sampling
PH-01	VAC	Prep Kitchen Next to pipe fittings	2.5 2.5	2.5	/			10cm x 10cm		
PH-02	Bulk	Prep Kitchen Pipe fittings at wall	/	/	/					
PH-03	VAC	Prep kitchen Below mudded Hanger light	2.5 2.5	2.5	/			10cm x 10cm		
PH-04	VAC	Prep kitchen Below Hanger light	2.5 2.5	2.5	/			10cm x 10cm		
PH-05	VAC	Kitchen on top of drop ceiling next to hood	2.5 2.5	2.5	/			10cm x 10cm		
PH-06	Bulk	Debris on top of hood above ceiling	/	/	/					
PH-07	VAC	Above drop ceiling Kitchen	2.5 2.5	2.5	/			10cm x 10cm		
PH-08	VAC	Above drop ceiling Prep kitchen	2.5 2.5	2.5	/			10cm x 10cm		
PH-09	VAC	Above drop ceiling Hallway	2.5 2.5	2.5	/			10cm x 10cm		
PH-10	Bulk	White debris on top of drop ceiling hallway	/	/	/					
PH-11	Bulk	White debris on top of drop ceiling hallway	/	/	/					
PH-12	VAC	Hallway above drop ceiling	2.5 2.5	2.5	/			10cm x 10cm		

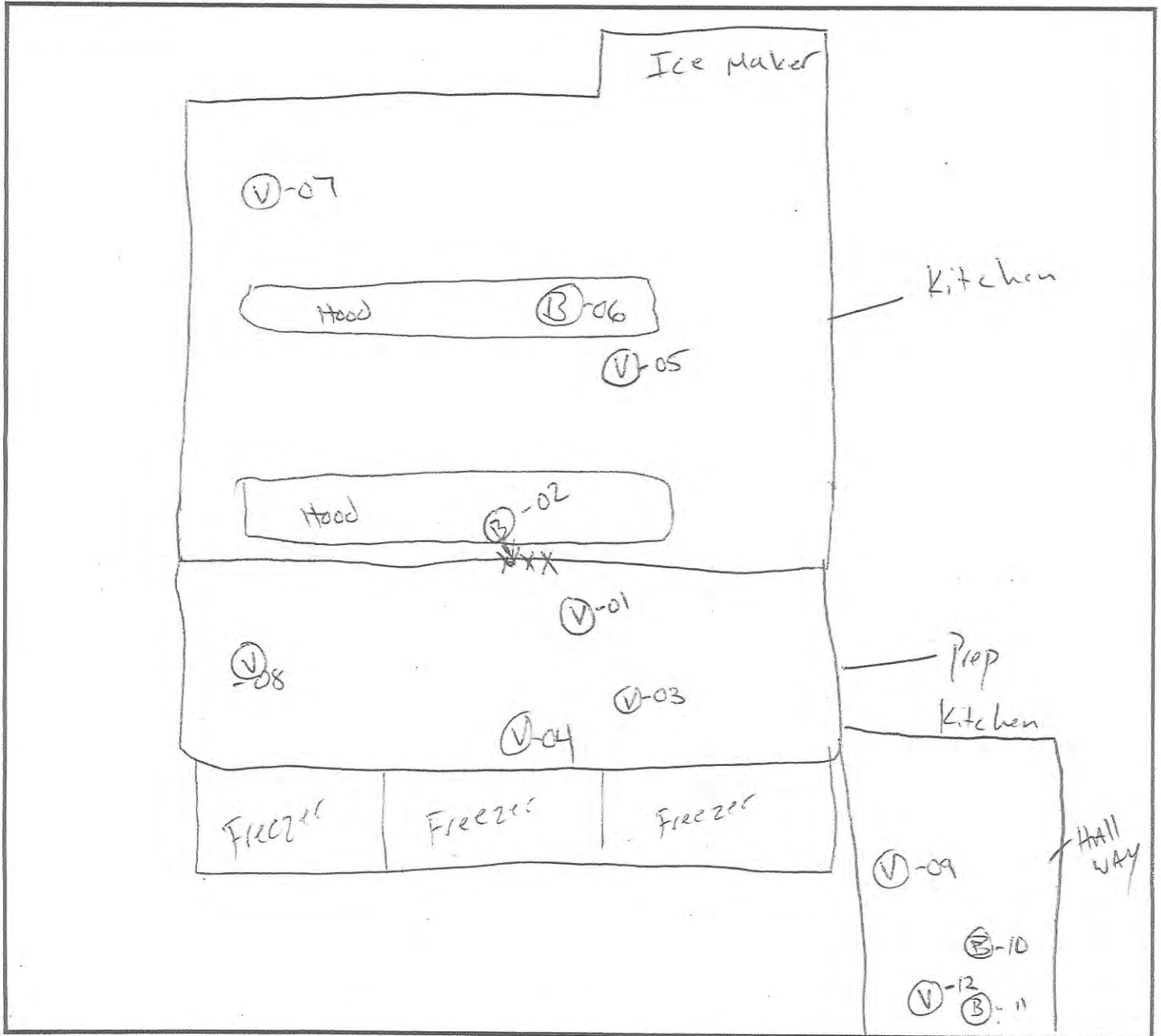
Final Review: _____



DAILY WORK AREA SKETCH

Project: PG Hospital
Project Number:
Client: CGA

Project Location: Kitchen / Hallway
HEC Personnel: Phil Brown
Activity Date: 11/10/11



FINAL REVIEW:



Client: HE Consulting
Address: 3930 Cove Road
 Edgewater, Maryland 21037
Attention: Phillip Haam
Job Name: PG Hospital
Job Location: Not Provided
Job Number: Not Provided
P.O. Number: Not Provided
Chain Of Custody: 277557
Date Analyzed: 11/15/2016
Person Submitting: Phillip Haam

Summary of Results of Asbestos in Settled Dust by TEM - ASTM Method D5755-09(2014)

Page 2 of 2

AMA Sample Number	Client Sample Number	Surface Area Sampled (cm ²)	Sample Aliquot (ml)	Filter Collection Area (mm ²)	Dilution Factor	Filter Area Analyzed (mm ²)	Analytical Sensitivity (s/cm ²)	# of Asbestos Structures and Asbestos Type	Asbestos Concentration (s/cm ²)	Comments
-------------------	----------------------	---	---------------------	---	-----------------	---	---	--	---	----------

Method of Analysis: ASTM Method D5755-09(2014) "Standard Test Method for Microvacuum Sampling and Indirect Analysis of Dust by Transmission Electron Microscopy (TEM) for Asbestos Structure Number Concentrations"

Limit of Detection: The Limit of Detection (LOD) for this method has been determined by the ASTM D6620. Therefore, if fewer than one (1) structures was observed, the asbestos concentration is reported as less than the analytical sensitivity.

Analytical Sensitivity: An analytical sensitivity of 1000 asbestos structures per square centimeter has been designed for this method. Occasionally, this analytical sensitivity cannot be achieved due to high particulate loadings or high asbestos concentrations invoking the stopping rules.

Stopping Rules: The analysis is terminated for a sample when an analytical sensitivity of 1000 s/cm² is achieved, Ten (10) grid openings have been analyzed, or upon completion of the grid opening in which the 100 confirmed asbestos structure was documented.

Asbestos Types: Chry = Chrysotile; Amos = Amosite; Croc = Crocidolite; Trem = Tremolite; Actn = Actinolite; Anth = Anthophyllite; NAD = No Asbestos Detected

Units of Measure: cm² = square centimeters; mm² = square millimeters; s/cm² = asbestos structures per square centimeter of surface area sampled.

s/ft² Conversion: To convert the final asbestos concentration to structures per square foot (s/ft²), multiply the final concentration reported in s/cm² by 929.

Significant Figures: Final results are reported to three (3) significant figures.

All results are to be considered preliminary and subject to change unless signed by the Technical Director or Deputy.

Technical Director: G Edward Carney Analyst(s): Andreas Saldivar

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. All rights reserved. AMA Analytical Services, Inc.



AMA Analytical Services, Inc.
 Focused on Results www.amafab.com
 AIHA-LAP (#100470) NVLAP (#101143-0) NY ELAP (10920)
 4475 Forbes Blvd. • Lanham, MD 20706
 (301) 459-2640 • (800) 346-0961 • Fax (301) 459-2643

(Please Refer To This Number For Inquires)

277557

CHAIN OF CUSTODY

Mailing/Billing Information: HE Con
 1. Client Name: _____
 2. Address 1: _____
 3. Address 2: _____
 4. Address 3: _____
 5. Phone #: _____ Fax #: _____

Submittal Information: P.G. Hospital
 1. Job Name: _____ P.O. #: _____
 2. Job Location: _____
 3. Job #: _____
 4. Contact Person: Phillip Hanna Cell: 202007-5737
 5. Collected by: _____ Cell: _____

Reporting Info (Results provided as soon as technically feasible). If no TAT/Reporting Info is provided, AMA will assign defaults of 5-Day and email/fax to contacts on file.

AFTER HOURS (must be pre-scheduled)
 4 Hours
 Immediate Date Due: _____
 24 Hours Time Due: _____
 Comments: _____

NORMAL BUSINESS HOURS
 3 Day
 5 Day + 11/15
 Results Required By Noon
 Date Due: _____
 Email: _____
 Email 2: _____
 Verbal: _____

REPORT TO:

Asbestos Analysis
 *PCM Air - Please Indicate Filter Type: _____
 NIOSH 7400 (QTY) _____
 Fiberglass (QTY) _____
 TEM Air* - Please Indicate Filter Type: _____
 AHJERA (QTY) _____
 MOSH 7402 (QTY) _____
 Other (specify) WAX (QTY) _____
 PLM Bulk _____
 EPA 600 - Visual Estimate (QTY) _____
 EPA Point Count (QTY) _____
 NY State Friable 198.1 (QTY) _____
 Grav. Reduction ELAP 198.6 (QTY) _____
 Other (specify) _____ (QTY) _____
 MISC
 Vermiculite
 Asbestos Soil PLM (Qual) PLM/TEM (Qual) PLM/TEM (Qual) PLM/TEM (Qual)
 *It is recommended that blank samples be submitted with all air and surface samples

TEM Bulk
 ELAP 198.4/Chatfield (QTY) _____
 NY State PLM/TEM (QTY) _____
 Residual Ash (QTY) _____
 TEM Dust*
 Qual. (pres/abs) Vacuum/Dust (QTY) _____
 Quan. (s/area) Vacuum D5755-95 (QTY) 6
 Quan. (s/area) Dust D6480-99 (QTY) _____
 TEM Water
 Qual. (pres/abs) (QTY) _____
 ELAP 198.2/EPA 100.2 (QTY) _____
 EPA 100.1 (QTY) _____

Metals Analysis
 Pb Paint Chip (QTY) _____
 Pb Dust Wipe (wipe type _____) (QTY) _____
 Pb Air (QTY) _____
 Pb Soil/Solid (QTY) _____
 Pb TCLP (QTY) _____
 Drinking Water Pb (QTY) _____
 Waste Water Pb (QTY) _____
 Pb Furnace (Media _____) (QTY) _____

Fungal Analysis
 Collection Apparatus for Spore Traps/Air Samples: _____
 Collection Media _____
 *Spore-Trap (QTY) _____
 *Surface Swab (QTY) _____
 *Surface Tape (QTY) _____
 Other (Specify _____) (QTY) _____

CLIENT ID #	SAMPLE INFORMATION		DATE/TIME	VOL (L) / Wipe Area	ANALYSIS										DATE/TIME	Contact: By:	
	SAMPLE LOCATION/ID	TEM			PCM	PLM	LEAD	MOLD	AIR	BULK	DUST	WATER AND OTHER	SPORE TRAP	TAPE			SWAB
S.F.F.	Attached																

Relinquished by: _____
Received by: _____
Relinquished by: _____
Received for Lab by: PH Hanna

Signature: PH Hanna
Date: 11/16/15
Time: 0800

Shipping Information
 UPS
 In-Person
 FedEx
 Drop Box
 USFS
 Courier
 Airbill/Tracking No. _____



CERTIFICATE OF ANALYSIS

Client: HE Consulting Job Name: PG Hospital Chain Of Custody: 277557
 Address: 3930 Cove Road Job Location: Not Provided Date Analyzed: 11/15/2016
 Edgewater, Maryland 21037 Job Number: Not Provided Person Submitting: Phillip Haun
 P.O. Number: Not Provided

Page 1 of 2

Attention: Phillip Haun

Summary of Polarized Light Microscopy

AMA Sample Number	Client Sample #	Total Asbestos	Chrysotile Percent	Amosite Percent	Crocidolite Percent	Other Asbestos		Mineral Wool		Fiberglass		Organic		Synthetic		Other Particulate		Sample Type	Sample Color	Homogeneity	Analyst ID	Comments
						Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent					
17017909	PH-02	3	3	--	--	--	--	25	--	--	--	--	--	--	--	72	--	Fitting	Gray	Homogeneous	PC	
17017910	PH-06	NAD	--	--	--	--	--	--	--	--	--	--	--	--	--	100	--	Debris	Gray	Homogeneous	PC	
17017911	PH-10	NAD	--	--	--	--	--	--	--	--	--	--	--	--	--	100	--	Debris	Gray	Homogeneous	PC	
17017912	PH-11	12	2	10	--	--	--	--	--	--	--	--	--	--	--	88	--	Debris	White	Homogeneous	PC	

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. NVLAP accreditation applies only to polarized light microscopy of bulk samples and transmission electron microscopy of AHERA air samples. This report must not be used to claim, and does not imply product certification, approval, or endorsement by NVLAP, AIHA, NVLAP, NIST, or any agency of the US Federal Government. All rights reserved. AMA Analytical Services, Inc.

CERTIFICATE OF ANALYSIS

Client: HE Consulting Job Name: PG Hospital Chain Of Custody: 277557
 Address: 3930 Cove Road Job Location: Not Provided Date Analyzed: 11/15/2016
 Edgewater, Maryland 21037 Job Number: Not Provided Person Submitting: Phillip Haun
 P.O. Number: Not Provided

Summary of Polarized Light Microscopy

AMA Sample Number	Client Sample #	Total Asbestos Percent	Chrysotile Percent	Amosite Percent	Crocidolite Percent	Other Asbestos Percent	Mineral Wool Percent	Fiberglass Percent	Organic Percent	Synthetic Percent	Other Particulate Percent	Sample Type	Sample Color	Sample Homogeneity	Analyst ID	Comments	

The following footnotes only apply to those samples which the total asbestos result is flagged with a note number.

- 1 TEM RECOMMENDATION - Please note, due to resolution limitations with optical microscopy and/or interference from matrix components of this sample, results which are reported via PLM as negative or trace (<1%) for asbestos may contain a significant quantity of asbestos. It is recommended that the additional analytical technique of TEM be used to check for asbestos fibers below the resolution limits of optical microscopy.
- 2 MATRIX REDUCTION RECOMMENDATION - Please note, due to interference from the matrix components of this sample, results which are reported via PLM as negative or trace (<1%) for asbestos may contain a significant quantity of asbestos which is obscured from view. It is recommended that the additional preparation technique of gravimetric reduction be performed on this sample to minimize the obscuring effects of matrix components, followed by reanalysis by PLM and/or TEM.

Analysis Method - EPA/600/R-93/116 dated July 1993

NAD = "No Asbestos Detected" TR = "Trace equals less than 1% of this component"

Uncertainty: For samples containing asbestos in range of 1-10% the CV is 0.43, 11-35% CV=0.55, >35 CV=0.23

All results are to be considered preliminary and subject to change unless signed by the Technical Director or Deputy.

J. Pecharin

Analyst(s) Peerawut Chaikeence

Technical Director Peerawut Chaikeence

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 Focused on Results www.amalab.com
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 4475 Forbes Blvd. • Lanham, MD 20706
 (301) 459-2640 • (800) 346-0961 • Fax (301) 459-2643

CHAIN OF CUSTODY

(Please Refer To This Number For Inquiries)

277557

Mailing/Billing Information:

1. Client Name: HEC
 2. Address 1:
 3. Address 2:
 4. Address 3:
 5. Phone #: _____ Fax #: _____

Submital Information:

1. Job Name: P.G. Hospital
 2. Job Location:
 3. Job #: _____ P.O. #:
 4. Contact Person: Phillip Hua Cell: 20207-5737
 5. Collected by: _____ Cell: _____

Reporting Info (Results provided as soon as technically feasible). If no TAT/Reporting Info is provided, AMA will assign defaults of 5-Day and email/fax to contacts on file.

AFTER HOURS (must be pre-scheduled)
 4 Hours
 Immediate
 24 Hours
 Comments: _____

NORMAL BUSINESS HOURS
 3 Day
 5 Day +
 Date Due: 11/15
 Results Required By Noon

REPORT TO:
 Email: _____
 Email 2: _____
 Verhals: _____

Asbestos Analysis

*PCM Air - Please Indicate Filter Type:
 NIOSH 7400 (QTY)
 Fiberglass (QTY)
 TEM Air* - Please Indicate Filter Type:
 AHPRA (QTY)
 MOSH 7402 (QTY)
 Other (specify) 1 (QTY)
 PLM Bulk
 EPA 600 - Visual Estimate (QTY) Pos Stop
 EPA Point Count (QTY)
 NY State Friable 198.1 (QTY)
 Grav. Reduction ELAP 198.6 (QTY)
 Other (specify) _____ (QTY)

TEM Bulk

ELAP 198.4/Charfield (QTY)
 NY State PLM/TEM (QTY)
 Residual Ash (QTY)
 TEM Dust*
 Qual. (pres/abs) Vacuum/Dust (QTY)
 Quan. (s/area) Vacuum D5755-95 (QTY)
 Quan. (s/area) Dust D6480-99 (QTY)
 TEM Water
 Qual. (pres/abs) _____ (QTY)
 ELAP 198.2/EPA 100.2 (QTY)
 EPA 100.1 _____ (QTY)

All samples received in good condition unless otherwise noted.
 TEM Water samples _____ °C

*It is recommended that blank samples be submitted with all air and surface samples

SAMPLE INFORMATION

CLIENT ID # _____ DATE/TIME _____ VOL (L) / Wipe Area _____

CLIENT ID #	SAMPLE LOCATION/ID	DATE/TIME	Wipe Area	PLM	PCM	TEM	MOLD	AIR	BULK	DUST	MATRIX	OTHER	SPORE TRAP	TAPE	SWAB	Date/Time:	Contact:By:
<u>SFF</u>	<u>Attached</u>																

CLIENT CONTACT

(LABORATORY STAFF ONLY)

Print Name

Relinquished by: _____
 Received by: _____
 Relinquished by: ADH
 Date/Time: _____

Date

Date: _____
 Signature: _____
 Date/Time: _____

Time

Time: _____
 Signature: _____
 Date/Time: _____

Shipping Information

UPS
 In-Person
 FedEx
 Drop Box
 USPS
 Courier
 Airbill/Tracking No: _____

Appendix II:
Sample Location Diagram



PROJECT: *P6 County Hospital*

SHEET NO:
1 of 1

TITLE:
Sample Location Diagram (Fig 1)

PROJ. NO:

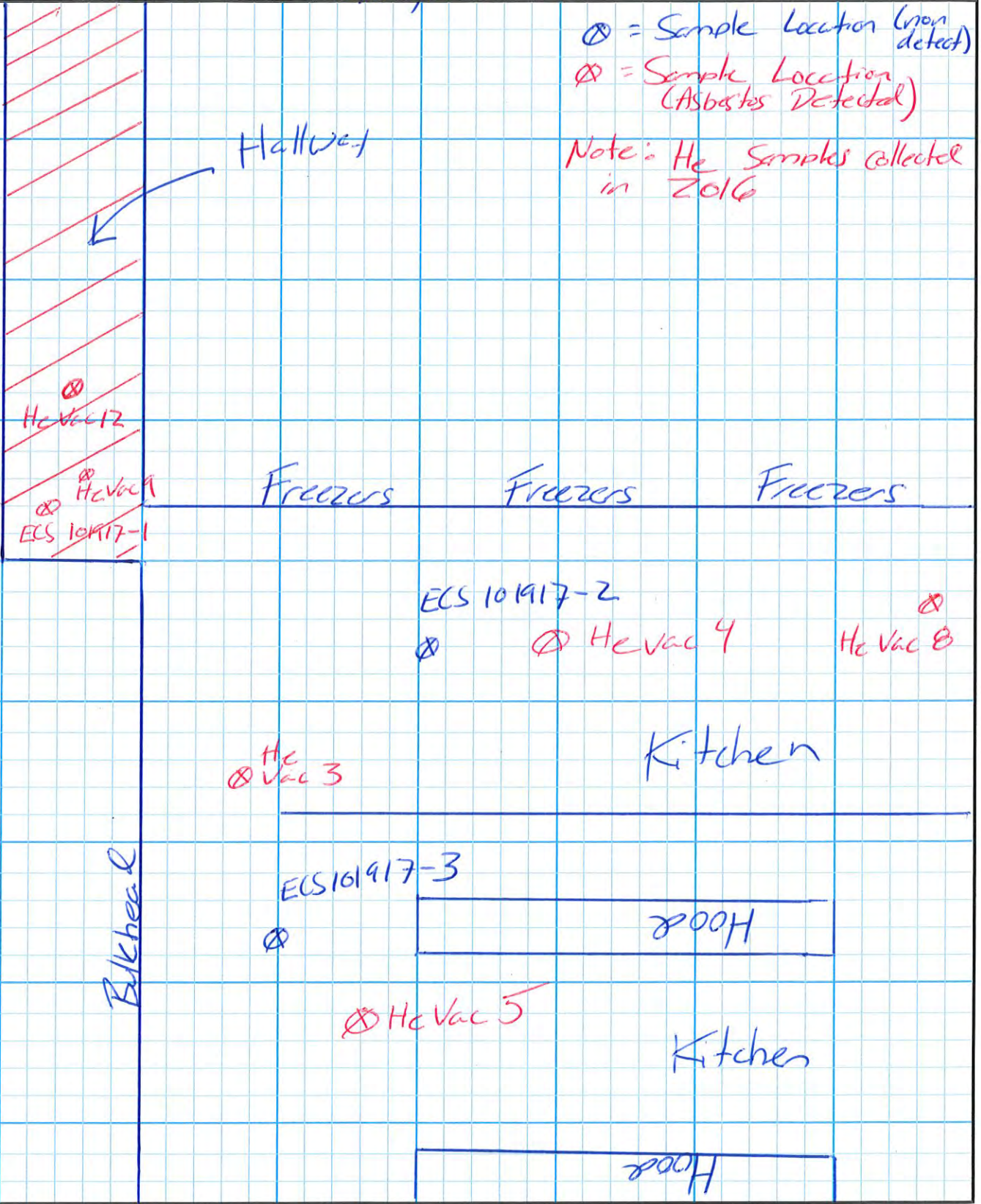
SCALE:
NTS

BY:
CBM

DATE:
10/30/2017

APPROVED:

DATE:



Appendix III:
Laboratory Analytical Results



EMSL Analytical, Inc.

10768 Baltimore Avenue, Beltsville, MD 20705

Phone/Fax: (301) 937-5700 / (301) 937-5701

<http://www.EMSL.com>

beltsvillelab@emsl.com

EMSL Order: 191712887
CustomerID: EC51
CustomerPO:
ProjectID:

Attn: **Chris Madden**
ECS Mid-Atlantic, LLC
1340 Charwood Road
Suite A
Hanover, MD 21076

Phone: (410) 859-4300
Fax: (410) 859-4300
Received: 10/23/17 10:00 AM
Analysis Date: 10/27/2017
Collected: 10/19/2017

Project: 4595-C

**Test Report: Qualitative Asbestos Analysis by Transmission
Electron Microscopy (TEM) and Filtration Technique**

Sample	Description	TEM Result	Notes
101917-1 191712887-0001		Chrysotile	
101917-2 191712887-0002		None Detected	
101917-3 191712887-0003		None Detected	

Analyst(s) _____
Joe Centifonti (3)

Joe Centifonti, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not 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. This is a qualitative screen only. There is a chance for false negatives with this method. Samples received in good condition unless otherwise noted.
Samples analyzed by EMSL Analytical, Inc. Beltsville, MD

Initial report from 10/27/2017 17:09:06



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Chain of Custody
EMSL Order Number (Lab Use Only):

191712887

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 786-5974

Company : Engineering Consulting Services		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 1340 Charwood Road, Suite A		Third Party Billing requires written authorization from third party	
City: Hanover	State/Province: MD	Zip/Postal Code: 21076	Country:
-Report To (Name): Christopher Madden		Fax #:	
Telephone #: 410-859-4300		Email Address: CMadden@ECSLimited.com	
Project Name/Number: 4515 - C			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order:	U.S. State Samples Taken:
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input checked="" type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week
*For RUSH TAT's Please Call Ahead to Confirm Lab Hours and Availability. Not all TAT options are valid for every test. Materials Science and IAQ TATs are in Business Days rather than Hours (i.e. 24 Hour = End of Next Business Day)			
Asbestos			
PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ 8hr. TWA		PLM - Bulk <input type="checkbox"/> PLM EPA 600/R-93/116 <input type="checkbox"/> PLM EPA NOB (<1%) <input type="checkbox"/> NYS 198.1 (friable-NY) <input type="checkbox"/> NYS 198.6 (non-friable-NY) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/ Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	
TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA ONLY) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312		TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP	
TEM - Water Fibers ≥10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking		Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> EPA Reg. 1 Screening Protocol (Qualitative)	
TEM - Dust <input checked="" type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe-ASTM D6480		Other:	
Lead (Pb)		Materials Science	
Flame Atomic Absorption <input type="checkbox"/> Chips SW846-7000B or AOAC 974.02 <input type="checkbox"/> Soil SW846-7000B/7420 <input type="checkbox"/> Air NIOSH 7082 <input type="checkbox"/> Wastewater SM3111B or SW846-7000B/7420 <input type="checkbox"/> ASTM Wipe SW846-7000B/7420 <input type="checkbox"/> non ASTM Wipe SW846-7000B/7420 <input type="checkbox"/> TCLP SW846-1311/7420/SM 3111B		<input type="checkbox"/> Common Particle ID (large particles) <input type="checkbox"/> Full Particle ID (environmental dust) <input type="checkbox"/> Basic Material ID (solids) <input type="checkbox"/> Advanced Material ID <input type="checkbox"/> Physical Testing (Tensile, Compression) <input type="checkbox"/> Combustion-by-products (soot, char, etc.) <input type="checkbox"/> X-Ray Fluorescence (elem. analysis) <input type="checkbox"/> X-Ray Diffraction (Crystalline Part.) <input type="checkbox"/> MMVF's (Fibrous glass, RCF's) <input type="checkbox"/> Particle Size (sieve/microscopy/laser) <input type="checkbox"/> Combustible Dust <input type="checkbox"/> Petrographic Examination	
Graphite Furnace Atomic Absorption <input type="checkbox"/> Soil SW846-7421 <input type="checkbox"/> Wastewater EPA 200.9 <input type="checkbox"/> Air NIOSH 7105 <input type="checkbox"/> Drinking Water EPA 200.9		ICP <input type="checkbox"/> Air NIOSH 7300 Modified <input type="checkbox"/> non ASTM Wipe SW846-6010B or C <input type="checkbox"/> ASTM Wipe SW846-6010B or C <input type="checkbox"/> Soil SW846-6010 B or C <input type="checkbox"/> Waste Water SW846-6010B or C <input type="checkbox"/> TCLP SW846-6010B or C	
Other: <input type="checkbox"/>		Other: <input type="checkbox"/>	
Microbiology			
Wipe and Bulk Samples <input type="checkbox"/> Mold & Fungi - Direct Examination <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi Culture (Genus & Species) <input type="checkbox"/> Bacterial Count & ID (Up to Three Types) <input type="checkbox"/> Bacterial Count & ID (Up to Five Types) <input type="checkbox"/> MRSA <input type="checkbox"/> Pseudomonas aeruginosa		Air Samples <input type="checkbox"/> Mold & Fungi (Spore Trap) <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi (Genus & Species) <input type="checkbox"/> Bacterial Culture & ID (Up to Three Types) <input type="checkbox"/> Bacterial Culture & ID (Up to Five Types) <input type="checkbox"/> Endotoxin Testing	
Water Samples <input type="checkbox"/> Total Coliform & E.coli (P/A) <input type="checkbox"/> Fecal Coliform (SM 9222D) <input type="checkbox"/> Sewage Screen <input type="checkbox"/> Heterotrophic Plate Count (SM 9215)		Real Time Q-PCR (See Analytical Guide for Code) Code: _____ Legionella <input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 Other: <input type="checkbox"/>	
**Comments/Special Instructions: Presence/Absence			
Client Sample #'s 101917-1 - 101917-3		Total # of Samples: 3	
Relinquished (Client): [Signature]		Date: 10/20/07	
Received (Lab): [Signature]		Date: 10/23/07	
		Time: FEDEX	
		Time: 10am	

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide
Controlled Document-OneChain-R2-1/12/2010

FedEx

HAZARDOUS MATERIALS SURVEY



PRINCE GEORGE'S COUNTY HOSPITAL: K AND E WINGS

3001 HOSPITAL DRIVE
CHEVERLY, MARYLAND 20785

ECS PROJECT NO. 47:4595-D

FOR

BREWINGTON MANAGEMENT COMPANY

DECEMBER 21, 2017





"Setting the Standard for Service"

Geotechnical • Construction Materials • Environmental • Facilities

December 21, 2017

Ms. Danielle Gittens
Brewington Management Company
9620 Pennsylvania Avenue
Upper Marlboro, Maryland 20772
dgittens@brewington-mgt.com

ECS Project No. 47:4595-D

Reference: Hazardous Materials Survey, Prince George's County Hospital: K and E Wings, 3001 Hospital Drive, Cheverly, Maryland

Dear Ms. Gittens:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Brewington Management Company with the results of the above referenced Hazardous Materials Survey performed at Prince George's County Hospital: K and E Wings located at 3001 Hospital Drive in Cheverly, Maryland. This report summarizes our observations, analytical results, findings, and recommendations related to the work performed. The work described in this report was performed by ECS in general accordance with the Scope of Services described in ECS Proposal Number 47:6022-EP and the terms and conditions of the agreement authorizing those services.

ECS appreciates this opportunity to provide Brewington Management Company with our services. If we can be of further assistance to you, please do not hesitate to contact us.

Sincerely,

ECS Mid-Atlantic, LLC

A handwritten signature in black ink, appearing to read 'J Trimble', written in a cursive style.

Jack H. Trimble
Environmental Project Manager
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A handwritten signature in black ink, appearing to read 'MK Smith', written in a cursive style.

Michael K. Smith, ASP
Senior Project Manager
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"Setting the Standard for Service"

Geotechnical • Construction Materials • Environmental • Facilities

EXECUTIVE SUMMARY

The subject property is improved with the Prince George's County Hospital, located at 3001 Hospital Drive in Cheverly, Maryland. ECS understands that renovation work is to occur in several areas of the hospital, including the third floor of the K-Wing, the second floor plenum of the K-Wing, the fifth floor plenum of the E-Wing, and the sixth floor of the E-Wing.

ECS conducted an asbestos-containing materials (ACMs) survey of the third floor of the K-Wing (K-300), a limited ACM survey of the sixth floor of the E-Wing (E-600), and visual plenum assessments of the second and fifth floors of the K and E Wings (K-200, E-500). The purpose of the survey of K-300 was to identify ACM which may require special handling and/or disposal if removed during construction activities. The purpose of the limited survey of E-600 was to sample floor tile and associated mastic observed within the wing. Multiple types of floor tile was identified in the E-600 wing, and was collected and analyzed as part of the survey. The purpose of the visual plenum assessments of the K-200 and E-500 wings was to survey representative areas of these plenums for piping and the possible presence of damaged mudded elbows. The identification of ACMs may require trained labor, regulated work practices, and special disposal.

Based on the laboratory analysis of the bulk samples collected during the survey, the following materials were reported to contain asbestos:

K-300 Wing

- Beige Floor Tile under Green Linoleum w/ Green/Black Marks
- Second Layer Floor Tile under 12x12 White Floor Tile w/ Blue/Brown Flecks
- 12x12 Grey Floor Tile w/ Red Streaks
- Tan/Black Mastic associated with 12x12 Rose Mottled Floor Tile
- Black Mastic associated with multiple floor tile layers

E-600 Wing

- 9x9 Grey Floor Tile w/ Brown Streaks
- 9x9 Tan Floor Tile w/ Brown Streaks
- Grey Floor Tile under 12x12 Grey Mottled Floor Tile
- Black Mastic associated with multiple floor tile layers
- Tan/Black Mastic associated with multiple floor tile layers

In addition, ECS accessed the plenums of the K-200 and E-500 wings in representative areas of the space to visually assess the area for mudded piping elbows. ECS accessed a total of seven (7) areas of the K-200 plenum, and three (3) areas of the E-500 plenum. Accessible pipe fittings were observed to be insulated with plastic and fiberglass coverings. No mudded elbows were observed during our visual assessment.



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1.0 SITE DESCRIPTION

The subject property is improved with the Prince George's County Hospital, located at 3001 Hospital Drive in Cheverly, Maryland. ECS understands that renovation work is to occur in several areas of the hospital, including the third floor of the K-Wing, the second floor plenum of the K-Wing, the fifth floor plenum of the E-Wing, and the sixth floor of the E-Wing.

2.0 PURPOSE

As part of the Hazardous Materials Survey, ECS conducted an asbestos-containing materials (ACMs) survey of the third floor of the K-Wing (K-300), a limited ACM survey of the sixth floor of the E-Wing (E-600), and visual plenum assessments of the second and fifth floors of the K and E Wings (K-200, E-500), respectively. The purpose of the ACM survey of K-300 was to identify ACM which may require special handling and/or disposal if removed during construction activities. The purpose of the limited survey of E-600 was to sample floor tile and associated mastic observed within the wing. Multiple types of floor tile was identified in the E-600 wing, and was collected and analyzed as part of the survey. The purpose of the visual plenum assessments of the K-200 and E-500 wings was to survey representative areas of these plenums for piping and the possible presence of damaged mudded elbows. The identification of ACMs may require trained labor, regulated work practices, and special disposal.

3.0 METHODOLOGY

ECS performed the authorized Scope of Services in general accordance with our proposal, standard industry practice(s) and methods specified by regulation(s) for the identification of ACMs.

3.1 Asbestos-Containing Materials Surveys (K-300, E-600 Wings)

The non-destructive asbestos surveys were performed by asbestos inspectors who have received EPA accredited training and are licensed by the State of Maryland. Samples of suspect ACMs were collected utilizing hand tools and placed into individual, labeled plastic bags. Unique bulk suspect ACM samples were submitted to EMSL Analytical, Inc. in Rochester, New York for analysis via Polarized Light Microscopy (PLM) in accordance with current EPA-600 methodology. Materials consisting of additional layers were analyzed separately. EMSL Analytical, Inc. is listed as an accredited laboratory by the National Voluntary Laboratory Accreditation Plan (NVLAP) managed by the National Institute of Standards and Technology (NIST) for bulk sample analysis by currently approved EPA methodology by PLM.

During the survey, ECS attempted to identify suspect ACMs in readily accessible areas. However, due to the destructive means required to identify some materials, certain areas were deemed inaccessible (i.e. behind walls or sub grade materials) and were not surveyed for suspect ACMs. Unidentified suspect ACMs may be located in these and/or other inaccessible areas.

Samples were collected in general accordance with EPA Standard 40 CFR 763 Subpart E, Asbestos Hazard Emergency Response Act (AHERA) and OSHA Standard 29 CFR 1926.1101 Inspection Protocol. Multiple samples of each unique material were submitted. Samples were analyzed using "Positive Stop" methodology. If one sample of a homogeneous material is reported to contain asbestos, the



remaining samples of that material are not analyzed. EPA regulations stipulate that if one sample contains asbestos the entire quantity of that material contains asbestos, regardless of additional analysis.

3.2 Visual Plenum Assessments (K-200, E-500 Wings)

ECS accessed the plenums of the K-200 and E-500 wings in representative areas of the space to visually assess the area for damaged or intact mudded piping elbows, which ECS understands had been previously identified as an asbestos-containing material. In the event that mudded elbows were observed, ECS proposed to collect vacuum samples of dust in the vicinity of the mudded fitting.

4.0 RESULTS

The following is a summary of laboratory results, findings and observations.

4.1 Asbestos-Containing Materials

In total, 66 bulk samples from 31 homogeneous areas were submitted to the laboratory of which 92 layers were analyzed.

Summary of Asbestos-Containing Materials Identified

Location	Material Description	Analytical Result	Category
K-300 Shower	Beige Floor Tile under Green Linoleum w/ Green/Black Marks	2% Chrysotile	Category I Non-Friable
K-312	Second Layer Floor Tile under 12x12 White Floor Tile w/ Blue/Brown Flecks	2% Chrysotile	Category I Non-Friable
K-312	Black Mastic associated with Second Layer Floor Tile under 12x12 White Floor Tile w/ Blue/Brown Flecks	4% Chrysotile	Category II Non-Friable
K-300 Nursing Station	Black Mastic associated with 12x12 Beige Floor Tile w/ Brown Flecks	5% Chrysotile	Category II Non-Friable
K-300 Nursing Station	Tan/Black Mastic associated with 12x12 Rose Mottled Floor Tile	<1% Chrysotile	Category II Non-Friable
Telephone Closet	12x12 Grey Floor Tile w/ Red Streaks	3% Chrysotile	Category I Non-Friable
Telephone Closet	Black Mastic associated with 12x12 Grey Floor Tile w/ Red Streaks	5% Chrysotile	Category II Non-Friable
E-606	9x9 Grey Floor Tile w/ Brown Streaks	3% Chrysotile	Category I Non-Friable



Location	Material Description	Analytical Result	Category
E-606	Black Mastic associated with 9x9 Grey Floor Tile w/ Brown Streaks	5% Chrysotile	Category II Non-Friable
E-600 Corridor	Tan/Black Mastic associated with 9x9 White Floor Tile w/ Grey Flecks	3% Chrysotile	Category II Non-Friable
E-600 Corridor	9x9 Tan Floor Tile w/ Brown Streaks	3% Chrysotile	Category I Non-Friable
E-600 Corridor	Tan/Black Mastic associated with 9x9 Tan Floor Tile w/ Brown Streaks	3% Chrysotile	Category II Non-Friable
E-605	Tan/Black Mastic associated with 12x12 Grey Floor Tile w/ Brown/ Turquoise Streaks	3% Chrysotile	Category II Non-Friable
E-607	Grey Floor Tile under 12x12 Grey Mottled Floor Tile	3% Chrysotile	Category I Non-Friable
E-607	Black Mastic associated with Grey Floor Tile under 12x12 Grey Mottled Floor Tile	5% Chrysotile	Category II Non-Friable

4.2 Suspect or Assumed Asbestos-Containing Materials

Due to the inaccessibility or the destructive means that asbestos sampling requires, additional suspect ACMs may remain within the building hidden behind inaccessible areas that include, but are not limited to, sub-grade walls, structural members, topping slabs, sub-grade sealants, flooring located below underlayments, areas behind exterior walls, pipe trenches, and subsurface utilities, etc. These areas were deemed inaccessible and were not assessed.

If these materials are discovered during construction activities, they should be presumed to contain asbestos and be treated as ACMs or be sampled immediately upon discovery and prior to disturbance for asbestos content by a certified asbestos inspector in accordance with 29 CFR 1926.1101.

4.3 Visual Plenum Assessment

ECS accessed the plenums of the K-200 and E-500 wings in representative areas of the space to visually assess the area for mudded piping elbows. ECS accessed a total of seven (7) areas of the K-200 plenum, and three (3) areas of the E-500 plenum. Accessible pipe fittings were observed to be insulated with plastic and fiberglass coverings. No mudded elbows were observed during our visual reconnaissance. As a result, vacuum dust samples were not collected. It should be noted that the ceilings of the residence units of the E-500 wing were constructed of drywall, and thus were not accessed as part of this assessment. Figures depicting observation locations are included in Appendix I of this report.



5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS

Based on our understanding of the purpose of the Hazardous Materials Survey, the results of laboratory analysis, and our findings and observations, ECS presents the following recommendations.

5.1 Asbestos-Containing Materials

ECS recommends where a material type has been identified as asbestos containing that other materials with similar color, texture, age and size throughout the building's interior and exterior be assumed to contain asbestos. Please refer to Section 4.1 for a complete list of building materials that were reported positive for asbestos and to Section 4.2 for materials that were assumed to contain asbestos.

Federal, state, and local regulations require asbestos-containing materials be removed prior to disturbance by demolition operations. However If the building is to be demolished, by regulation, Category I non-friable materials and in some instances Category II materials may remain in place during demolition under the following provisions: The Contractor must have appropriate training and/or use certified personnel; must notify appropriate state and federal agencies including US EPA (10 Day Demolition Notification), the debris must remain wet during demolition and cannot become friable; the contractor cannot compact the debris once the building is demolished with Category I/II non-friable materials present. Salvage of materials is also prohibited once the building is demolished and Category I/II non-friable materials are mixed in the debris. The landfill receiving the waste must also be notified in writing that it is receiving Category I/II non-friable materials, and it must acknowledge that it can accept this type of waste.

If ACMs are to be removed, it is recommended that an industrial hygienist monitor the project. This involves collecting air samples from within and outside abatement work areas to monitor the asbestos abatement contractor's work practices over the course of the project. The industrial hygienist should evaluate if the asbestos abatement work is in accordance with project specifications, U.S. EPA regulation 40 CFR Part 61-National Emission Standards for Hazardous Air Pollutants Subpart M: National Emission Standard for Asbestos, and U.S. Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 - Asbestos in Construction. The industrial hygienist should assess each work area to monitor the removal of ACMs. Only after the industrial hygienist has determined the identified ACMs have been removed should final clearance air samples be collected (if necessary).

Suspect ACMs not observed due to inaccessibility or not sampled due to the destructive means that sampling would require may also be encountered during construction activities. At the time of the survey, only limited destructive means were used to locate or sample suspect ACMs; therefore, additional suspect ACMs may remain within inaccessible areas that include, but are not limited to, [sub-grade walls, structural members, topping slabs, exterior areas, sub-grade sealants, flooring located below underlayments, vapor barriers, pipe trenches and other subsurface utilities, etc.] If additional suspect ACMs are uncovered which were not accessible during this survey, it is recommended that these materials either be assumed to contain asbestos or be sampled prior to disturbance upon discovery for asbestos content by an asbestos inspector in accordance with 29 CFR 1926.1101.



5.2 Visual Plenum Assessment

ECS did not observe mudded elbows in the plenums accessed as part of this survey. However, these materials may be present in inaccessible areas of the subject site. In the event that these materials are discovered in areas to be impacted by the proposed renovation, ECS recommends that vacuum dust samples be collected in the vicinity of these fittings prior to disturbance.

6.0 LIMITATIONS

The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards that may potentially cause damage, accidents, or injuries.

The observations, conclusions, and recommendations pertaining to environmental conditions at the subject site are necessarily limited to conditions observed, and/or materials reviewed at the time this study was undertaken. No warranty, expressed or implied, is made with regard to the conclusions and recommendations presented within this report. This report is provided for the exclusive use of the client. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties without the written consent of ECS and the client.

Our recommendations are in part based on federal, state, and local regulations and guidelines. ECS does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies, any conditions at the site that may present a potential danger to public health, safety, or the environment. Under this scope of services, ECS assumes no responsibility regarding any response actions initiated as a result of these findings. General compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements.

During this study, samples were submitted for analysis at an accredited laboratory via polarized light microscopy. As with any similar survey of this nature, actual conditions exist only at the precise locations from which samples were collected. Certain inferences are based on the results of this sampling and related testing to form a professional opinion of conditions in areas beyond those from which the samples were collected. No other warranty, expressed or implied, is made.



Appendix I: Figures

EX. CENTRAL SUPPORT SPACES WILL BE REMOVED AND/OR DIVIDED TO SERVE TWO SEPARATE PATIENT UNITS

WALLS BETWEEN ROOMS WILL BE REMOVED TO COMBINE 3 EX. PATIENT ROOMS INTO A MULTIPURPOSE ROOM (FIG. 2.2-3.8.6.4) - TWO EXITS MAY BE REQUIRED

SECURED DOORS WILL BE ADDED TO SEPARATED BOTH PATIENT UNITS

EX. 6'-9" WIDE SECTION OF CORRIDOR

EX. NURSERY WILL BE TURNED INTO AN EXERCISE AREA (FIG. 2.2-3.8.2.3) WITH A TRAINING KITCHEN, TRAINING BATHROOM (TOILET, BATHTUB, AND SINK), AND TRAINING BEDROOM (FIG. 2.6-2.3.2.1)

EX. SPACE WILL BE CONVERTED INTO A SPEECH TREATMENT ROOM (FIG. 2.2-3.8.4.2)

EX. PATIENT ROOM WILL BE CONVERTED INTO AN AIRBORNE ISOLATION ROOM (FIG. 2.6-2.2.4.2)

EX. BATHING AREA FOR REHAB WILL BE RENOVATED TO MEET ADA AND FIG GUIDELINES (FIG. 2.6-2.2.2.7):

- ONE SHOWER OR BATHTUB FOR EVERY 8 BEDS
- A TOILET ROOM IS REQUIRED IN EACH CENTRAL BATHING AREA

EX. LOCKER ROOM WILL BE RENOVATED TO ADD A BATHING AREA FOR POSTPARTUM (FIG. 2.2-2.1.1.2.2 & 2.2-2.2.2.7):

- ONE SHOWER OR BATHTUB FOR EVERY 12 BEDS
- A TOILET ROOM IS REQUIRED IN EACH CENTRAL BATHING AREA

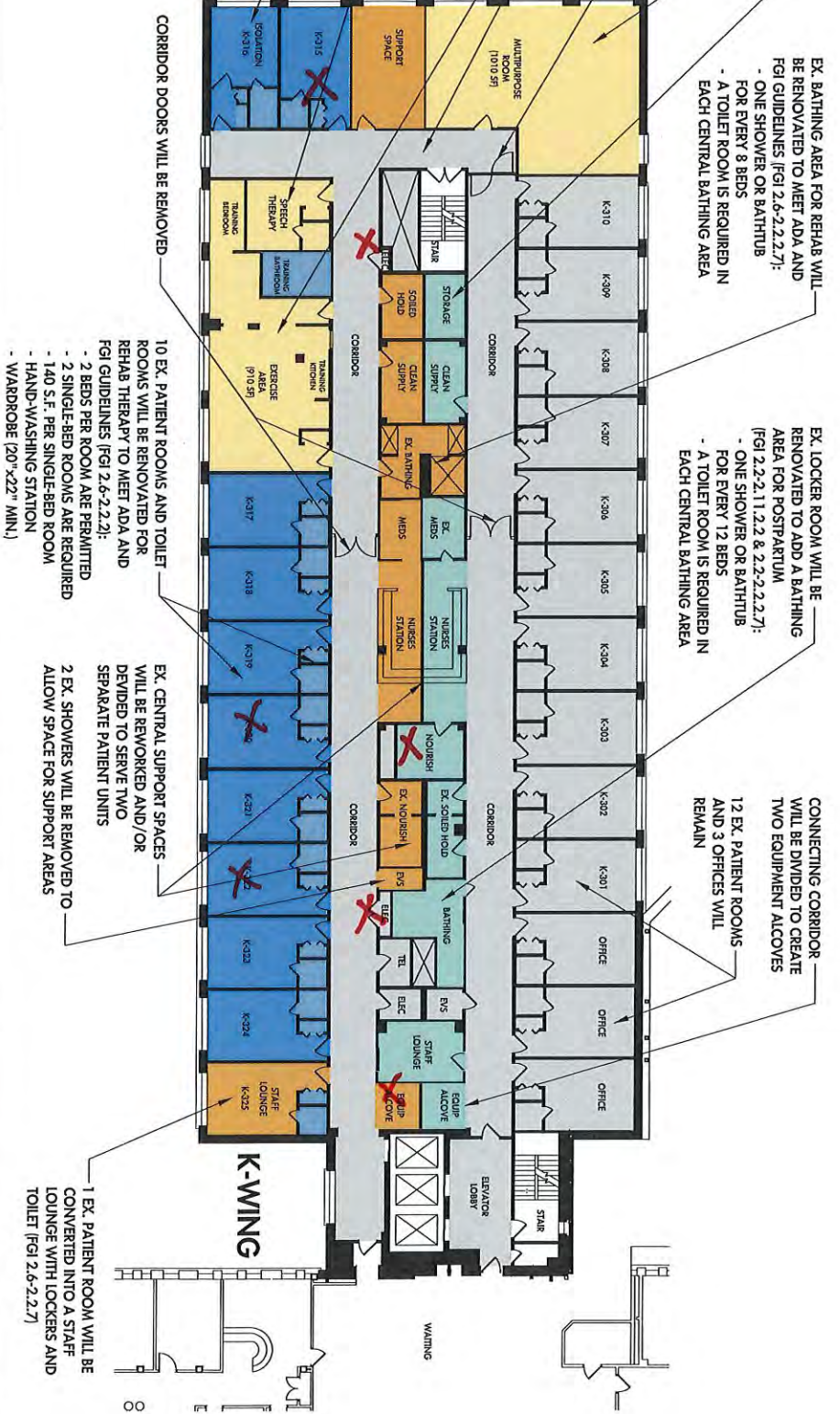
CONNECTING CORRIDOR WILL BE DIVIDED TO CREATE TWO EQUIPMENT ALCOVES

12 EX. PATIENT ROOMS AND 3 OFFICES WILL REMAIN

- REHAB PATIENT RM (RENOVATION)
- PATIENT TOILET RM (RENOVATION)
- REHAB PATIENT SUPPORT AREAS (RENOVATION)
- REHAB STAFF SUPPORT AREAS (RENOVATION)
- MCH STAFF SUPPORT AREAS (RENOVATION)
- EX. SPACES (NO WORK)
- EX. VERTICAL CIRCULATION (NO WORK)

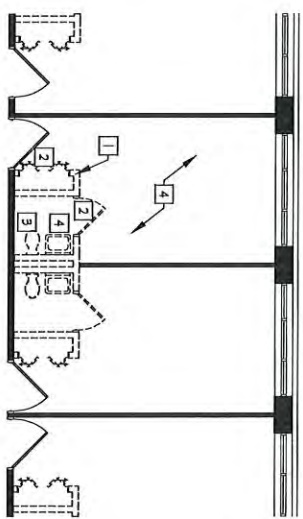
GENERAL NOTES:

- FLOOR PLAN IS ONLY CONCEPTUAL FOR THE ALLOCATION OF PROGRAM AREAS REQUIRED BY FIG-2014 GUIDELINES
- RENOVATED SPACES WILL REQUIRE NEW FINISHES OR FINISHES TO MATCH EXISTING
- RENOVATION WORK MAY REQUIRE ASBESTOS ABATEMENT OF EXISTING CONSTRUCTION MATERIALS AND FINISHES
- WORK WILL REQUIRE MODIFICATIONS TO EXISTING MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION SYSTEMS

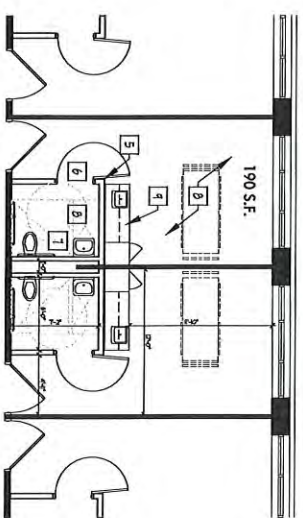


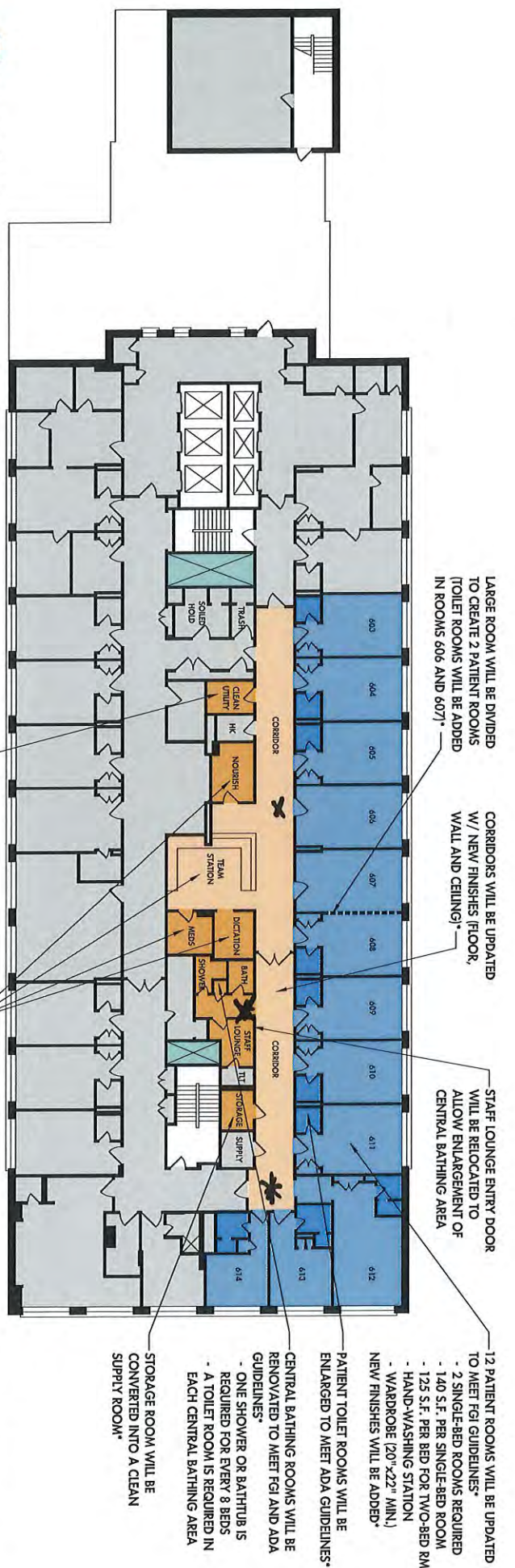
- 1 REMOVE EX. PORTION OF WARDROBE WALL
- 2 REMOVE EX. DOOR AND FRAME
- 3 REMOVE EX. PULPITIVE FINISHES
- 4 REMOVE EX. WALL/CONCRETE FINISHES
- 5 INSTALL NEW METAL GRID W. GRIP PATTERN
- 6 INSTALL NEW FLOOR AND TRIM
- 7 INSTALL NEW PLUMBING FINISHES
- 8 INSTALL NEW WALL/CONCRETE FINISHES
- 9 INSTALL NEW CABINETS, WARDROBE AND SINK

TYPICAL EX. PATIENT ROOM - DEMOLITION WORK



TYPICAL EX. PATIENT ROOM - NEW WORK



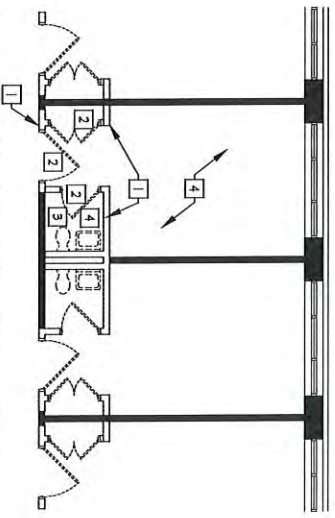


- EX. PATIENT ROOM (RENOVATION)
- EX. PATIENT ROOM TOILET (RENOVATION)
- EX. SUPPORT SPACE (RENOVATION)
- EX. CIRCULATION (RENOVATION)
- EX. SPACES (NO WORK)
- EX. MECHANICAL SHAFT
- EX. VERTICAL CIRCULATION

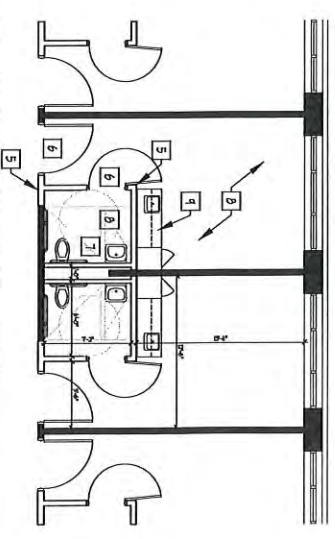
** Hard ceilings on 6th floor*

- 1 REMOVE EX. PORTION OF MAJORITY WALL
- 2 REMOVE EX. DOOR AND FRAME
- 3 REMOVE EX. PLUMBING FIXTURES
- 4 REMOVE EX. MULL/DOOR/CASE FINISHES
- 5 REPAIR/REPLACE EX. WALL FINISHES
- 6 REPAIR/REPLACE EX. CEILING FINISHES
- 7 REPAIR/REPLACE EX. FLOOR FINISHES
- 8 REPAIR/REPLACE EX. DOOR AND FRAME
- 9 REPAIR/REPLACE EX. MULL/DOOR/CASE FINISHES
- 10 REPAIR/REPLACE EX. CABINETS, HARDWARE AND SINK

TYPICAL EX. PATIENT ROOM - DEMOLITION WORK



TYPICAL EX. PATIENT ROOM - NEW WORK



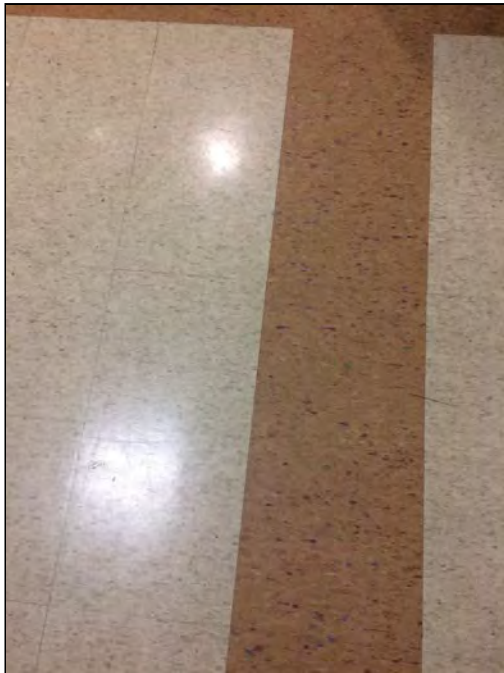
*WORK WILL INCLUDE ASBESTOS ABATEMENT OF EXISTING CONSTRUCTION MATERIALS AND FINISHES

PATIENT TOILET ROOMS WILL BE ENLARGED TO MEET ADA GUIDELINES*
 CENTRAL BATHING ROOMS WILL BE RENOVATED TO MEET FGI AND ADA GUIDELINES*
 - ONE SHOWER OR BATHUB IS REQUIRED FOR EVERY 8 BEDS
 - A TOILET ROOM IS REQUIRED IN EACH CENTRAL BATHING AREA

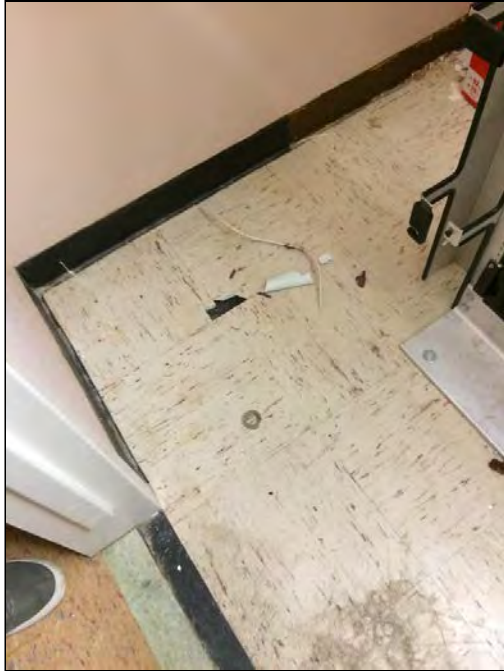
Appendix II: Site Photographs



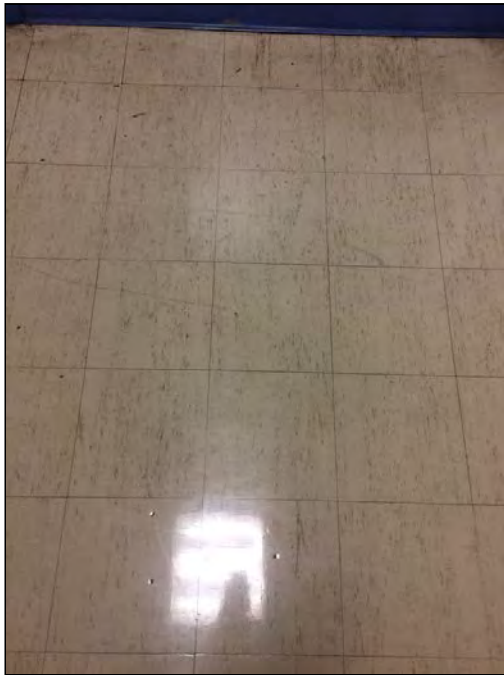
1 - 12x12 White Floor Tile w/ Blue/Brown Flecks



2 - 12x12 Beige Floor Tile w/ Brown Flecks



3 - 12x12 Grey Floor Tile w/ Red Streaks



4 - 9x9 Grey Floor Tile w/ Brown Streaks



5 - 9x9 White Floor Tile w/ Grey Flecks



6 - 9x9 Tan Floor Tile w/ Brown Streaks



7 - 12x12 Grey Mottled Floor Tile



8 - 12x12 Grey Floor Tile w/ Brown/Turquoise Streaks



9 - Grey Floor Tile under 12x12 Grey Mottled Floor Tile



10 - Representative Plastic Pipe Fitting

Appendix III: Asbestos Bulk Sample Results



EMSL Analytical, Inc.

2975 Brighton Henrietta Town Line Rd ,100 Ste 130 Rochester, NY 14623

Tel/Fax: (585) 957-9436 / (585) 957-9437

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

EMSL Order: 531700006

Customer ID: ECSL51

Customer PO:

Project ID:

Attention: Jack Trimble
ECS Mid-Atlantic, LLC
1340 Charwood Road
Suite A
Hanover, MD 21076

Project: PG Hospital 47-4595

Phone: (410) 859-4300

Fax: (410) 859-4300

Received Date: 12/15/2017 3:38 PM

Analysis Date: 12/18/2017

Collected Date: 12/13/2017

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
1A <small>531700006-0001</small>	DW	Brown/White Fibrous Heterogeneous	10% Cellulose 2% Glass	85% Gypsum 3% Non-fibrous (Other)	None Detected
1B <small>531700006-0002</small>	DW	Brown/White Fibrous Heterogeneous	10% Cellulose 2% Glass	85% Gypsum 3% Non-fibrous (Other)	None Detected
2A <small>531700006-0003</small> <i>Inseparable paint / coating layer included in analysis.</i>	JC	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
2B <small>531700006-0004</small> <i>Inseparable paint / coating layer included in analysis.</i>	JC	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
3A <small>531700006-0005</small>	Grey Ceramic Tile Grout	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3B <small>531700006-0006</small>	Grey Ceramic Tile Grout	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4A-Linoleum <small>531700006-0007</small>	Green Linoleum W/Green/Black Marks	Various Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4A-Mastic <small>531700006-0007A</small>	Green Linoleum W/Green/Black Marks	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4B-Linoleum <small>531700006-0008</small> <i>No Mastic Present.</i>	Green Linoleum W/Green/Black Marks	Various Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5A-Floor Tile <small>531700006-0009</small>	Unknown FT under HA #4	Beige Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
5A-Mastic <small>531700006-0009A</small> <i>Mastics are inseparable.</i>	Unknown FT under HA #4	Tan/Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
5B-Floor Tile <small>531700006-0010</small>	Unknown FT under HA #4				Positive Stop (Not Analyzed)
5B-Mastic <small>531700006-0010A</small>	Unknown FT under HA #4	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6A <small>531700006-0011</small>	12x12 "Fruitcake" FT	Various Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6B <small>531700006-0012</small>	12x12 "Fruitcake" FT	Various Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 12/18/2017 17:20:00



EMSL Analytical, Inc.

2975 Brighton Henrietta Town Line Rd ,100 Ste 130 Rochester, NY 14623

Tel/Fax: (585) 957-9436 / (585) 957-9437

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

EMSL Order: 531700006
Customer ID: EC5L51
Customer PO:
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
7A-Floor Tile 1 531700006-0013	12x12 White FT W/Blue & Brown Flecks	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7A-Mastic 1 531700006-0013A	12x12 White FT W/Blue & Brown Flecks	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7A-Floor Tile 2 531700006-0013B	12x12 White FT W/Blue & Brown Flecks	Tan Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
7A-Mastic 2 531700006-0013C	12x12 White FT W/Blue & Brown Flecks	Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
7B-Floor Tile 1 531700006-0014	12x12 White FT W/Blue & Brown Flecks	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7B-Mastic 1 531700006-0014A	12x12 White FT W/Blue & Brown Flecks	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7B-Floor Tile 2 531700006-0014B	12x12 White FT W/Blue & Brown Flecks				Positive Stop (Not Analyzed)
7B-Mastic 2 531700006-0014C	12x12 White FT W/Blue & Brown Flecks				Positive Stop (Not Analyzed)
8A 531700006-0015	2x2 Pin & Poch CT	Gray/White Fibrous Heterogeneous	40% Cellulose 30% Min. Wool	10% Perlite 20% Non-fibrous (Other)	None Detected
8B 531700006-0016	2x2 Pin & Poch CT	Gray/White Fibrous Heterogeneous	40% Cellulose 30% Min. Wool	10% Perlite 20% Non-fibrous (Other)	None Detected
9A 531700006-0017	Yellow Cove Base Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9B 531700006-0018	Yellow Cove Base Mastic	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10A 531700006-0019	2x2 Pin & Wormhole CT	Gray/White Fibrous Heterogeneous	40% Cellulose 30% Min. Wool	10% Perlite 20% Non-fibrous (Other)	None Detected
10B 531700006-0020	2x2 Pin & Wormhole CT	Gray/White Fibrous Heterogeneous	40% Cellulose 30% Min. Wool	10% Perlite 20% Non-fibrous (Other)	None Detected
11A 531700006-0021	Window Glazing	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11B 531700006-0022	Window Glazing	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12A-Skim Coat 531700006-0023	Plaster Rough & Skim	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12A-Rough Coat 531700006-0023A	Plaster Rough & Skim	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12B-Skim Coat 531700006-0024	Plaster Rough & Skim	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 12/18/2017 17:20:00



EMSL Analytical, Inc.

2975 Brighton Henrietta Town Line Rd ,100 Ste 130 Rochester, NY 14623

Tel/Fax: (585) 957-9436 / (585) 957-9437

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

EMSL Order: 531700006
Customer ID: ECSL51
Customer PO:
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
12B-Rough Coat <small>531700006-0024A</small>	Plaster Rough & Skim	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12C-Skim Coat <small>531700006-0025</small>	Plaster Rough & Skim	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12C-Rough Coat <small>531700006-0025A</small>	Plaster Rough & Skim	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12D-Skim Coat <small>531700006-0026</small>	Plaster Rough & Skim	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12D-Rough Coat <small>531700006-0026A</small>	Plaster Rough & Skim	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12E-Skim Coat <small>531700006-0027</small>	Plaster Rough & Skim	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12E-Rough Coat <small>531700006-0027A</small>	Plaster Rough & Skim	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13A <small>531700006-0028</small>	White Fixture Caulk	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13B <small>531700006-0029</small>	White Fixture Caulk	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14A <small>531700006-0030</small>	Red Fire Stop	Red Non-Fibrous Homogeneous	2% Glass	98% Non-fibrous (Other)	None Detected
14B <small>531700006-0031</small>	Red Fire Stop	Red Non-Fibrous Homogeneous	2% Glass	98% Non-fibrous (Other)	None Detected
15A <small>531700006-0032</small>	2x2 Pin & Dashed CT	Gray/White Fibrous Heterogeneous	40% Cellulose 40% Min. Wool	10% Perlite 10% Non-fibrous (Other)	None Detected
15B <small>531700006-0033</small>	2x2 Pin & Dashed CT	Gray/White Fibrous Heterogeneous	40% Cellulose 40% Min. Wool	10% Perlite 10% Non-fibrous (Other)	None Detected
16A <small>531700006-0034</small>	White Ceramic Tile Grout	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16B <small>531700006-0035</small>	White Ceramic Tile Grout	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17A <small>531700006-0036</small>	Brown Ceramic Tile Grout	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17B <small>531700006-0037</small>	Brown Ceramic Tile Grout	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
18A <small>531700006-0038</small>	2x2 Flat CT	White Fibrous Heterogeneous	90% Min. Wool	10% Non-fibrous (Other)	None Detected
18B <small>531700006-0039</small>	2x2 Flat CT	White Fibrous Heterogeneous	90% Min. Wool	10% Non-fibrous (Other)	None Detected

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EMSL Order: 531700006
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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
19A-Floor Tile <i>531700006-0040</i>	12x12 Beige W/Brown Flex	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19A-Mastic <i>531700006-0040A</i>	12x12 Beige W/Brown Flex	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
19A-Leveler <i>531700006-0040B</i>	12x12 Beige W/Brown Flex	Gray Non-Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
19B-Floor Tile <i>531700006-0041</i>	12x12 Beige W/Brown Flex	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19B-Mastic <i>531700006-0041A</i> <i>No Black Mastic Present.</i>	12x12 Beige W/Brown Flex	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19B-Leveler <i>531700006-0041B</i>	12x12 Beige W/Brown Flex	Gray Non-Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
20A-Floor Tile <i>531700006-0042</i>	Rose Mottled 12x12	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20A-Mastic <i>531700006-0042A</i> <i>Mastics are inseparable.</i>	Rose Mottled 12x12	Tan/Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
20B-Floor Tile <i>531700006-0043</i>	Rose Mottled 12x12	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20B-Mastic <i>531700006-0043A</i> <i>Mastics are inseparable.</i>	Rose Mottled 12x12	Tan/Black Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
21A-Floor Tile <i>531700006-0044</i>	12x12 Gray W/Red Streaks	Gray/Red Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
21A-Mastic <i>531700006-0044A</i>	12x12 Gray W/Red Streaks	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
21B-Floor Tile <i>531700006-0045</i>	12x12 Gray W/Red Streaks				Positive Stop (Not Analyzed)
21B-Mastic <i>531700006-0045A</i>	12x12 Gray W/Red Streaks				Positive Stop (Not Analyzed)
22A <i>531700006-0046</i>	Yellow Mastic Assoc. W/Plastic Wall	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22B <i>531700006-0047</i>	Yellow Mastic Assoc. W/Plastic Wall	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
23A-Floor Tile <i>531700006-0048</i>	9x9 Gray W/Brown Streaks FT	Brown/Tan Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
23A-Mastic <i>531700006-0048A</i>	9x9 Gray W/Brown Streaks FT	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile

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EMSL Order: 531700006
Customer ID: EC5L51
Customer PO:
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
23B-Floor Tile <i>531700006-0049</i>	9x9 Gray W/Brown Streaks FT				Positive Stop (Not Analyzed)
23B-Mastic <i>531700006-0049A</i>	9x9 Gray W/Brown Streaks FT				Positive Stop (Not Analyzed)
24A-Floor Tile <i>531700006-0050</i>	9x9 White W/Gray Flex	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
24A-Mastic <i>531700006-0050A</i> <i>Mastics are inseparable.</i>	9x9 White W/Gray Flex	Tan/Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
24B-Floor Tile <i>531700006-0051</i>	9x9 White W/Gray Flex	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
24B-Mastic <i>531700006-0051A</i>	9x9 White W/Gray Flex				Positive Stop (Not Analyzed)
25A-Floor Tile <i>531700006-0052</i>	9x9 Tan W/Brown Streaks	Brown/Tan Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
25A-Mastic <i>531700006-0052A</i> <i>Mastics are inseparable.</i>	9x9 Tan W/Brown Streaks	Tan/Black Non-Fibrous Heterogeneous		97% Non-fibrous (Other)	3% Chrysotile
25B-Floor Tile <i>531700006-0053</i>	9x9 Tan W/Brown Streaks				Positive Stop (Not Analyzed)
25B-Mastic <i>531700006-0053A</i>	9x9 Tan W/Brown Streaks				Positive Stop (Not Analyzed)
26A-Floor Tile <i>531700006-0054</i>	12X12 Pink W/ Blue & Brown	Tan/Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26A-Mastic <i>531700006-0054A</i>	12X12 Pink W/ Blue & Brown	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26B-Floor Tile <i>531700006-0055</i>	12X12 Pink W/ Blue & Brown	Tan/Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26B-Mastic <i>531700006-0055A</i>	12X12 Pink W/ Blue & Brown	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27A-Floor Tile <i>531700006-0056</i>	12x12 Gray W/Brown & Turquoise	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27A-Mastic <i>531700006-0056A</i> <i>Mastics are inseparable.</i>	12x12 Gray W/Brown & Turquoise	Tan/Black Non-Fibrous Heterogeneous		97% Non-fibrous (Other)	3% Chrysotile
27B-Floor Tile <i>531700006-0057</i>	12x12 Gray W/Brown & Turquoise	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27B-Mastic <i>531700006-0057A</i>	12x12 Gray W/Brown & Turquoise				Positive Stop (Not Analyzed)

Initial report from: 12/18/2017 17:20:00



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EMSL Order: 531700006
Customer ID: ECSL51
Customer PO:
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
28A-Floor Tile <small>531700006-0058</small>	12x12 Blue Mottled	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28A-Mastic <small>531700006-0058A</small>	12x12 Blue Mottled	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28B-Floor Tile <small>531700006-0059</small>	12x12 Blue Mottled	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28B-Mastic <small>531700006-0059A</small>	12x12 Blue Mottled	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29A-Floor Tile <small>531700006-0060</small>	12x12 Yellow Mottled	Tan/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29A-Mastic <small>531700006-0060A</small>	12x12 Yellow Mottled	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29B-Floor Tile <small>531700006-0061</small>	12x12 Yellow Mottled	Tan/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29B-Mastic <small>531700006-0061A</small>	12x12 Yellow Mottled	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
30A-Floor Tile <small>531700006-0062</small>	12x12 Gray Mottled	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
30A-Mastic <small>531700006-0062A</small>	12x12 Gray Mottled	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
30B-Floor Tile <small>531700006-0063</small>	12x12 Gray Mottled	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
30B-Mastic <small>531700006-0063A</small>	12x12 Gray Mottled	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
31A-Floor Tile <small>531700006-0064</small>	Gray FT Under HA 26 in Room 605	Gray Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
31A-Mastic <small>531700006-0064A</small>	Gray FT Under HA 26 in Room 605	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
31B-Floor Tile <small>531700006-0065</small>	Gray FT Under HA 26 in Room 605				Positive Stop (Not Analyzed)
31B-Mastic <small>531700006-0065A</small>	Gray FT Under HA 26 in Room 605				Positive Stop (Not Analyzed)

Initial report from: 12/18/2017 17:20:00



EMSL Analytical, Inc.

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Tel/Fax: (585) 957-9436 / (585) 957-9437

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

EMSL Order: 531700006

Customer ID: EC5L51

Customer PO:

Project ID:

Analyst(s)

Peter Donato (92)

Peter Donato Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported 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. 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. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Rochester, NY

Initial report from: 12/18/2017 17:20:00



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

531700006

EMSL ANALYTICAL, INC.
10768 BALTIMORE AVE
BELTSVILLE, MD 20705
PHONE: (301) 937-5700
FAX: (301) 937-5701

Company: <u>ECS Med-Atlantic</u>		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>	
Street: <u>1340 Chocoma Road, Suite B</u>		Third Party Billing requires written authorization from third party	
City: <u>Henover</u>	State/Province: <u>MD</u>	Zip/Postal Code: <u>21076</u>	Country: <u>USA</u>
Report To (Name): <u>Jack Trimble</u>		Telephone #: <u>410 859-4300</u>	
Email Address: <u>jtrimble@ecslimited.com</u>		Fax #: <u>410-859-4324</u>	Purchase Order:
Project Name/Number: <u>PG Hospital 147-4575</u>		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
U.S. State Samples Taken: <u>MD</u>		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

Turnaround Time (TAT) Options* - Please Check

3 Hour 6 Hour 24 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> TEM Qual. via Filtration Techniques <input type="checkbox"/> TEM Qual. via Drop-Mount Technique Other: <input type="checkbox"/>
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Check For Positive Stop - Clearly Identify Homogenous Group Filter Pore Size (Air Samples): 0.8µm 0.45µm

Samplers Name: Jack Trimble Samplers Signature: [Signature]

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A-1B	DW		
2A-2B	SL		
3A-3B	Grey Ceramic tile Grout		
4A-4B	Green linoleum w/ green/black Marks		
5A-5B	unknown FT under HA#4		
6A-6B	12x12 "Fruitcake" FT		
7A-7B	12x12 white Ft w/ blue & brown flecks		
8A-8B	2x2 pin & Patch CT		

Client Sample # (s): 1A - 3B Total # of Samples: 66

Relinquished (Client): [Signature] Date: 12/13/17 Time: 2:36

Received (Lab): [Signature] Date: 12/13/17 Time: 2:40pm

Comments/Special Instructions: [Signature] 12-15-17 0915 w/in



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

531700006

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON NJ 08077
PHONE (800) 220-3675
FAX (856) 788-5974

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
9A-B	Yellow Cove base mastic		
10A-B	2x2 Pin 1/2 wormhole CT		
11A-B	Window glazing		
12A-E	Plaster Rough 1/2 skim		
13A-B	White fixture caulk		
14A-B	Red fire stop		
15A-B	2x2 Pin 1/2 dashed CT		
16A-B	White ceramic tile grout		
17A-B	Brown ceramic tile grout		
18A-B	2x2 Flat CT		
19A-B	12x12 Beige w/ Brown fleck		
20A-B	Rose mottled 12x12		
21A-B	12x12 gray w/ red streaks		
22A-B	Yellow mastic assoc. w/ plastic wall		
23A-B	9x9 gray w/ Brown streaks FT		
24A-B	9x9 white w/ gray fleck		
25A-B	9x9 tan w/ brown streaks		
26A-B	12x12 Pink w/ blue 1/2 brown		
27A-B	12x12 gray w/ brown 1/2 Turquoise		
28A-B	12x12 blue mottled		
29A-B	12x12 Yellow mottled		
30A-B	12x12 gray mottled		
31A-B	Gray FT under MA 26 in Rooms		

*Comments/Special Instructions:

Positives TOP

Separate All Layers

* Added A-B per sample bags
OK per Jack T (client)
Page 2 of 2 pages

12-15-17 @ 1605



EMSL Analytical, Inc. Relinquish Form

Initial Lab:	EMSL- BELTSVILLE	Phone Number:	301-937-5700
		Fax Number:	301-937-5701
Relinquished to:	EMSL- ROCHESTER	Phone Number:	
		Fax Number:	
Does new Lab hold equivalent or additional accreditation*			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

EMSL Customer ID #:	ECSL51		
Client Name:	ECS MID-ATLANTIC		
Client Project:	PG HOSPITAL/47-4595		
Date Received:	12/13/17 @ 2:40PM		
Date Relinquished:	12/13/17		
Date Due:	1 WEEK TAT		
Special Instructions:	66 PLMS; POSITIVE STOP		
Relinquished by (Signature):	Date:	Received by (Signature):	Date:
	12/13/17		12-15-17
Relinquished by (Signature):	Date:	Received by (Signature):	Date:

Client Notification- Please sign this form and fax to the original laboratory. By signing below you agree to allow the above named laboratory to relinquish the samples to a new laboratory with equivalent or additional certification.

Name (please Print)	Signature	Agent of:	Date:
Babeen Spencer			

If this is a reoccurring project or sample type that will require samples to be relinquished on a regular basis please sign below and the laboratory will keep this form on file.

Name (please Print)	Signature	Agent of:	Date:

- All accreditation information and certificates can be found at www.emsl.com.

Appendix IV: Certifications/ Licenses

AEROSOL MONITORING & ANALYSIS, INC.

This is to certify that

JACK TRIMBLE

has met the attendance requirements and successfully completed

the course entitled

4-HOUR EPA AHERA INSPECTOR REFRESHER

For Accreditation Under TSCA Title II

01/17/2017 01/17/2017 1/17/2018

STEVE SIERACKI
Principal Instructor

Ann J. Fisher

AIR01172017-24

VAAIR01172017-24

Virginia Certification No.

E. Rush Barnett

Course Director

E. Rush Barnett

Asbestos License



Jack Trimble
Name

Jack Trimble
Signature

Inspector Review
Course Title

17002751



Course Date: 01/17/2017
Exp Date: 01/17/2018
Exam Date: 02/02/2017

STATE OF MARYLAND

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