



# Pre-Demolition Hazardous Materials Survey

Former YMCA Building  
111 North Madison Avenue  
Bay City, Michigan 48708

**PREPARED FOR** Columbus Development, LLC  
315 14<sup>th</sup> Street  
Bay City, Michigan 48708

**PROJECT #** 11146s2-2-194

**DATE** November 9, 2017

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# PRE-DEMOLITION HAZARDOUS MATERIALS SURVEY

111 North Madison Avenue, Bay City, Michigan, 48708  
AKT Peerless Project No. 11146s2-2-194

## 1.0 Introduction

AKT Peerless Environmental Services (AKT Peerless) was retained by Columbus Development, LLC, (Client) to conduct a Pre-Demolition Hazardous Material (HazMat) Survey of the vacant, former YMCA building, located at 111 North Madison Avenue, Bay City, Michigan (Subject Property). AKT Peerless' scope of work is based on its proposal PS-21361, dated October 3, 2017, and executed October 4, 2017. AKT Peerless' Pre-Demolition Survey was performed for the benefit of Columbus Development, LLC.

### 1.1 Purpose

The purpose of AKT Peerless' Pre-Demolition HazMat Survey was to identify the location and presence of: (1) asbestos-containing building materials (ACBMs); (2) potential polychlorinated biphenyls (PCBs) containing electrical or hydraulic equipment; (3) above and underground storage tanks (ASTs/USTs); (4) potentially hazardous or regulated materials/wastes located in containers and drums; (5) potential, mercury or radioactive-containing equipment or materials located at the subject property; and (6) any other materials that would require special handling or disposal requirements and should be segregated from demolition debris.

### 1.2 Scope of Work

The scope of work for this survey is specifically designed to support facility demolition, as identified within proposal PS-21361, **Task 1** – Asbestos and Other Regulated Materials Survey. AKT Peerless understands that the scope of demolition at the site includes two onsite subject buildings, as well as associated parking and infrastructure.

Michigan LARA accredited Asbestos Inspector, Mr. Heath S. Bobick (A43315), and Mr. Mark Breeden (A44842) of AKT Peerless, conducted the Pre-Demolition HazMat Survey of the property.

#### 1.2.1 Asbestos Survey

The scope of work for AKT Peerless' asbestos survey is based on the Asbestos School Hazard Abatement Reauthorization Act (ASHARA). The purpose of ASHARA is to extend the Asbestos Hazard Emergency Response Act (AHERA) inspection and management requirements to commercial and industrial buildings. Since the facility is slated for demolition, it is also subject to the Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) standards.

Asbestos Containing Material (ACM) survey activities were completed according to the following protocol:

1. Homogenous materials and functional spaces were identified for the purpose of assessing all suspect materials, as appropriate.
2. The ACM inspection was performed in an effort to determine the extent and location of ACM present at the subject buildings. This survey was qualitative and quantitative in that an attempt was made to locate accessible friable and non-friable ACM areas, as well as estimate the amount of ACM. All accessible locations of survey areas were inspected with exception of inaccessible areas or materials not surveyed that are identified in Section 1.3.
3. Bulk samples of suspect ACM were collected in accordance with professional standards by a Michigan-accredited Asbestos Building Inspector.
4. Bulk samples were collected in each homogeneous area in accordance with EPA-recommended sampling guidelines.
5. Samples of suspect ACM were analyzed by a National Voluntary Laboratory Accreditation Program (NVLAP)-accredited laboratory for analysis via Polarized Light Microscopy and dispersion staining (PLM) following the EPA Test Method (EPA-600/M4-82-020) and the National Institute of Standards and Technology (NIST) Bulk Asbestos Handbook.
6. In an effort to minimize costs, the laboratory analyses were performed using first positive stop analysis methodologies. First positive stop involves analyzing samples by homogeneous area groupings. Laboratory analyses proceeded sample by sample, within each homogeneous area grouping, until a sample was determined to be asbestos containing.
7. Upon completion of the field inspection and receipt of laboratory data, this report was prepared and includes: (a) a general description of the suspect ACM identified and non-suspect homogeneous materials that were visually evaluated; (b) quantity of suspect materials observed as able to be determined; and (c) laboratory testing results.

### **1.2.2 PCBs, Mercury, Lead, and Other Hazardous Materials**

The survey for PCBs, potential lead/mercury-containing equipment, and containers that may contain universal hazardous wastes or regulated materials/wastes was completed according to the following procedures:

1. The building was inspected for potential hazardous materials such as PCBs-containing light ballasts, batteries, chlorofluorocarbon-containing equipment, smoke detectors, exit signs, as well as mercury light tubes and switches. No intrusive examination or contact with manufacturers, sample collection, or testing of this equipment was performed. Based on the scope of work and limitations identified during the survey. An inventory of the materials identified has been included that summarizes the quantities of the hazardous building materials observed.

During execution of this survey, the work was performed using commercially reasonable best efforts consistent with the level and skill ordinarily exercised by members of the profession currently practicing under similar conditions.

## **1.3 Limitations and Exceptions of the Survey**

The following general limitations were encountered during the preparation of this survey:



- AKT Peerless uses trained and licensed inspectors in attempting to locate and identify materials potentially containing some form of hazardous material (i.e., asbestos, PCBs, etc.). The possibility exists that AKT Peerless did not identify all asbestos and hazardous materials within the buildings. Some buildings may have hidden spaces that may not be immediately obvious to a surveyor, who is not intimately familiar with the building and who has only a limited time in the building. There may be additional asbestos hazardous materials that were not found because they were not visible or accessible to the inspection team. Asbestos, PCBs, and mercury were used in a variety of building components and in many types of materials in the construction of buildings. In some of these materials, a hazardous material may be present, not as an intentional ingredient, but as a contaminant.

The following building-specific limitations apply to this HazMat Survey:

- Areas enclosed by fixed wall, ceiling systems, and roofing systems were restricted to limited visual access in identifying materials such as, but not limited to: pipe wrap, mud fittings, roof flashing, caulks, etc. Fixed wall and ceiling systems included plaster, drywall partitions, ceramic tile finish, concrete, and masonry. Roofing systems included multiple layers of materials. These systems are installed throughout the exterior and interior areas of the buildings. Due to pre-existing damage or destructive search techniques, limited inspections were performed of the internal ceiling and wall cavities, as well as roofing areas. Representative intrusive observations were made inside ceilings and walls, as well as below flooring materials, such as floor tiles and roofing. As such, a complete survey and delineation of all hidden materials were not performed. **Due to these limitations, actual quantities of hazardous materials present may be greater than those inventoried as part of this survey.**
- AKT Peerless' proposed scope of work for this survey was specifically designed to support facility demolition.
- Inaccessible suspect materials observed were assumed to contain asbestos.
- Building decay severely damaged and relocated ACMs, as well as other potentially hazardous materials.
- Access to select suspect ACM was restricted in areas defined as being located within a regulated confined space (i.e., such as crawl spaces, pipe chases, pipe trenches, attic, tunnel systems, etc.). These areas require the use of trained confined space professionals, personnel protective equipment, and rescue personnel. AKT Peerless did not access confined space areas.
- Access to select suspect ACM was restricted in areas in exceedance of height limitations, and safely access.
- During the survey, the subject building was not connected to electricity and AKT Peerless used portable spotlights and flashlights to improve general viewing conditions.
- During the survey, multiple areas of heavy debris, stored items, and building contents within building interiors limited the inspection.
- During the survey, no dismantling of electrical or mechanical equipment were conducted. The electrical and mechanical systems were deactivated and inoperable. Since trade personnel was

not available (i.e. electricians, plumbers, boiler workers, etc.), no dismantling of equipment was performed to identify the existence of PCBs containing components, mercury switches or asbestos insulation was performed.

- Estimated and not estimated quantities of materials reported are based on observations and estimates made by AKT Peerless at the time of the inspection. Specific materials including, but not limited to: roof flashing, roofing materials, tar coatings, building caulks, and wall adhesives were located in inaccessible areas such as behind fixed walls or ceilings, unsafe areas, confined spaces, and/or elevated heights (typically over 16-feet above ground level). **Due to these limitations, actual quantities may vary from those estimated as part of this survey.**

Other limitations pertaining to material accessibility or characterization may also be described in the survey data tables contained herein.

**Quantities of identified ACM reported in this document are provided for reference only and are not authorized to be relied upon for Contractor abatement bidding purposes.** AKT Peerless strongly cautions against utilizing the reported material quantities without field verification. It is expected that contractors will utilize their own quantities when preparing bid pricing. AKT Peerless recommends that a contingency allowance be used to address estimating method uncertainties for quantified materials.

## 2.0 Asbestos Survey Methodology

The following sections of this survey outline the approach, procedures, and methods employed by AKT Peerless to complete the ACM Survey of the subject property.

### 2.1 Description of Homogenous Areas

During the asbestos survey, AKT Peerless identified Homogeneous Areas (HA) based on appearances and type of materials observed. As defined under AHERA, a homogeneous area is an area (material) that appears similar throughout in terms of its color, texture, and date of material application.

In addition, building materials suspect for asbestos content are also described based on one of three following material classifications:

**Surfacing Materials:** A material that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes. Glued-on ceiling panels are interpreted by the State of Michigan as a surfacing material.

**Thermal System Insulation:** A material that is applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, water condensation, or for other purposes.

**Miscellaneous Materials:** A building material on structural components, structural members, or fixtures, such as floor and ceiling panels, and does not include surfacing material or thermal system insulation.

AKT Peerless identified homogeneous suspect ACMs at the subject property for sampling.

Homogeneous areas were identified based on the site inspection by AKT Peerless. Any materials that were identified and not sampled due to inaccessibility, were recorded.

## 2.2 Description of Functional Spaces

In general, functional spaces are defined as spatially distinct units or areas within the building, which contain identifiable populations of building occupants. Functional spaces can also include storage spaces, mechanical rooms, closets and services areas, etc. However, a functional space can also be delineated based on the general building layout, facility use factors, and can be assigned using various arbitrary factors that were useful in the completion of this survey.

Functional Space Maps are included as Figures 1 through 4. Photographs are included as Appendix A, and a Functional Space Table is included in Appendix B.

## 2.3 Bulk Sample Material Inventory

Based on homogeneous and functional areas identified during the survey, AKT Peerless collected bulk samples for analysis. Samples were collected in polyethylene containers and labeled with an identification number. In general, AKT Peerless' sampling protocol consisted of: (a) wetting or misting the sample as appropriate; (b) extracting a sample with a clean knife, chisel, or coring tool; and (c) placing the sample into its properly labeled sample container.

The sampling protocol used to procure the appropriate number of samples for an identified homogeneous area of suspect ACM is based on sampling guidelines outlined under AHERA or as proposed in the approved Scope of Work.

## 2.4 Laboratory Analytical Procedures

All samples collected by AKT Peerless were submitted to Apex Research, Inc. (Apex) of Whitmore Lake, Michigan for analysis. Apex is accredited by the American Industrial Hygiene Association (AIHA) and participates in the NVLAP. Samples were submitted under chain-of-custody guidelines to ensure proper handling and delivery of the samples. The samples were analyzed using PLM with dispersion staining in accordance with the following USEPA guidance document *Determination of Asbestos in Bulk Building Materials*: EPA/600/R-93/116, dated July 1993.

The USEPA defines ACM as those materials that contain **greater than one percent** asbestos. Friable materials are defined as those that can be crumbled or reduced to powder by hand pressure. The NESHAP for asbestos, dated November 1990, stipulates that any friable material identified as containing asbestos in concentrations greater than one percent must be considered ACM.

Materials containing one percent or less asbestos are generally considered non-asbestos-containing; and therefore, are not regulated by NESHAP. The OSHA definition of ACM is similarly any material containing more than one percent asbestos. However, specific work practices must be followed under OSHA regulations for materials containing less than one percent asbestos, if an individual layer exceeds one percent. Under the PLM method, percentages and types of fibrous components in these samples were determined by visual estimation of the amount of fibrous materials, versus the total amount of material present.

Current USEPA guidelines specify that when initial laboratory analysis of friable or non-friable materials regulated under NESHAP detects the presence of asbestos in a quantity between less than trace (less than one percent) and less than ten percent, a verification analysis using the point counting analytical method should be considered or the material in question should be treated as ACBM as identified by PLM analysis.

AKT Peerless utilized the “positive-stop” method of sample analyses. In this method, the analyses of a homogeneous material is stopped on a group of samples once the first positive (e.g., greater than 1% asbestos) sample is analyzed. According to the USEPA, if one sample of a homogenous material is identified to be asbestos-containing, the entire material must be considered asbestos-containing.

Based on appearances and type of materials, suspect ACMs were grouped into homogeneous areas and functional spaces, as appropriate. Upon completion of these activities, representative bulk samples of the suspect materials were collected.

A copy of the bulk sample laboratory report and chain-of-custody record is presented in Appendix D.

### 3.0 Conclusions and Recommendations

AKT Peerless was retained to conduct a Pre-Demolition HazMat Survey of the subject buildings located at 111 North Madison Avenue, Bay City, Michigan. The purpose of the survey was to identify hazardous materials that will require special handling procedures or removal activities, prior to demolition activities. The following sections of this report summarize the findings of the HazMat Survey.

#### 3.1 Homogeneous Area & Asbestos Containing Materials

Based on the results of the asbestos survey, the following ACMs were identified:

**Summary of Homogeneous Areas & Asbestos Containing Materials (ACMs)**

Material Description	HA	Identified Locations	Estimated Quantity	F/NF	Asbestos Content
Plaster	1	Throughout	NE	NF	NAD
<b>Mud Fittings</b>	<b>2</b>	<b>Throughout</b>	<b>150 CT</b>	<b>F</b>	<b>60% CHR</b>
<b>Air Cell Pipe Insulation</b>	<b>3</b>	<b>Throughout</b>	<b>2,250 LF</b>	<b>F</b>	<b>60% CHR</b>
Basement Cement Floors	4	Throughout Basement	NE	NF	NAD
<b>Roofing Material- Stone and Tar*</b>	<b>5</b>	<b>Roof Areas</b>	<b>NE</b>	<b>NF</b>	<b>5% CHR</b>
<b>Heat Shields</b>	<b>6</b>	<b>Throughout</b>	<b>40 SF</b>	<b>F</b>	<b>60% CHR</b>
12" Gray Floor Tile w/Colored Streaks and Splotches	7	Throughout Portions of Building	NE	NF	NAD
White Textured Ceiling	8	Throughout Portions of Building	130	F	NAD
12" White Floor Tile w/Colored Streaks and Splotches	9	Throughout Portions of Building	5,900 SF	NF	NAD
4" Brown Cove Base and Adhesives	10	Throughout Portions of Building	150 SF	NF	NAD
2'x4' White Ceiling Tile w/Grooves and Pinholes	11	Throughout Portions of Building	NE	F	NAD
Drywall	12	Throughout	NE	NF	NAD

Material Description	HA	Identified Locations	Estimated Quantity	F/NF	Asbestos Content
2'x2' White Ceiling Tiles w/Grooves and Pinholes	13	Throughout Portions of Building	NE	F	NAD
Brown and White Paper Material Near Ceiling	14	FS-13 Hallway to Pool	NE	NF	NAD
4" Brown Cove Base and Adhesives	15	Throughout Portions of Building	NE	NF	NAD
Red Caulk	16	FS-2 Main Hallway	10 SF	NF	NAD
<b>Ceiling Material with Gray Glue*</b>	<b>17</b>	<b>FS-35 Classroom #7</b>	<b>500 SF</b>	<b>F</b>	<b>20% CHR</b>
12" Brown Blend Floor Tile and Mastic	18	Throughout Portions of Building	NE	NF	NAD
<b>Black Mastic (Floor Previous Location had 9" Floor Tile)</b>	<b>19</b>	<b>Throughout Portions of Building</b>	<b>7,500 SF</b>	<b>NF</b>	<b>10% CHR</b>
<b>Brown Stair Tread and Glue</b>	<b>20</b>	<b>FS-20 Stairway</b>	<b>30 SF</b>	<b>NF</b>	<b>Tread 2% CHR, Glue NAD</b>
Brown with White Streaks Linoleum on Stairs	21	FS-15 Stairway	50 SF	NF	NAD
<b>9" Black Floor Tile and Mastic*</b>	<b>22</b>	<b>FS-78 Locker Room FS-84 Closet</b>	<b>105 SF</b>	<b>NF</b>	<b>Tile 10% CHR, Mastic NAD</b>
Brown Tread Material and Glue Between Rooms	23	FS-85 2 <sup>nd</sup> Floor Overlook Area of Former Handball Courts	3 SF	NF	NAD
<b>Window Caulk- Hard*</b>	<b>24</b>	<b>FS-112 Exterior</b>	<b>54 CT (27 SF)</b>	<b>NF</b>	<b>5% CHR</b>
<b>Window Caulk- Rubber*</b>	<b>25</b>	<b>FS-112 Exterior</b>	<b>6 CT (3 SF)</b>	<b>NF</b>	<b>10% CHR</b>
12" Gray Floor Tile w/ 2" Square Design	26	FS-87 Basement Room #1	400 SF	NF	NAD
Textured Paint	27	Throughout Portions of Basement	4,550 SF	F	NAD
Carpet Glue	28	Throughout Portions of Building	NE	NF	NAD
End Caps on Tank	29	FS-109 Basement Room #23	24 SF	F	NAD
<b>Black Flashing on Roof*</b>	<b>30</b>	<b>Roof Areas</b>	<b>NE</b>	<b>NF</b>	<b>20% CHR</b>
<b>Gray Flashing on Roof*</b>	<b>31</b>	<b>Roof Areas</b>	<b>NE</b>	<b>NF</b>	<b>20% CHR</b>
Brown Stair Tread w/Lines	32	FS-20 Stairway	60 SF	NF	NAD
Riser Material on Stairs	33	Throughout Portions of Building	NE	NF	NAD
<b>Building Caulk around Metal Siding*</b>	<b>34</b>	<b>FS-112 Exterior</b>	<b>125 SF</b>	<b>NF</b>	<b>15% CHR</b>

Material Description	HA	Identified Locations	Estimated Quantity	F/NF	Asbestos Content
Vibrations Dampeners	35	FS-113 HVAC Area	30 SF	NF	NAD
Textured Walls	36	Throughout Portions of Building	NE	F	NAD
Ceramic Tile and Grout	37	Throughout Portions of Building	NE	NF	NAD
<b>9" Gray Floor Tile and Mastic*</b>	<b>38</b>	<b>FS-27 Coach's Office</b>	<b>130 SF</b>	<b>NF</b>	<b>Tile 10% CHR, Mastic 5% CHR</b>
<b>Floor Tile and Mastic under Carpet*</b>	<b>39</b>	<b>FS-17 Locker Room FS-19 Locker Room</b>	<b>860 SF</b>	<b>NF</b>	<b>Tile 10% CHR, Mastic NAD</b>
L Shaped Black Base Cove and Adhesives	40	FS-29 Gymnasium FS-30 Gymnasium Equipment Room	150 SF	NF	NAD
<b>Electrical Panels</b>	<b>41</b>	<b>Throughout Building</b>	<b>NE</b>	<b>NF</b>	<b>Assumed</b>
<b>Fire Door and Frames</b>	<b>42</b>	<b>Throughout Building</b>	<b>50 CT</b>	<b>NF</b>	<b>Assumed</b>
<b>Boiler Units (Assumed Internal Parts)</b>	<b>43</b>	<b>FS-98 Boiler Room</b>	<b>2 CT</b>	<b>NF</b>	<b>Assumed</b>
<b>Safe (Not Observed During October 2017 Survey)</b>	<b>44</b>	<b>FS-7 Classroom #3</b>	<b>1 CT</b>	<b>NF</b>	<b>Assumed</b>
Window Sills and Associated Materials	45	Throughout	NE	NF	Sills NAD, Caulk NAD, Mortar NAD
<b>Black Adhesive Pods (Bulletin Boards, Chalk Boards)</b>	<b>46</b>	<b>FS-7 Classroom #3 FS-10 South Entrance #1</b>	<b>25 SF</b>	<b>NF</b>	<b>10% CHR</b>
Suspect Building Caulk (Sandstone Panels)	47	FS-1 East Entrance #1 FS-4 East Entrance #2 FS-112 Exterior	75 SF	NF	NAD
6" Reddish Ceramic Floor Tile w/Associated Mortar	48	FS-1 East Entrance #1 FS-4 East Entrance #2 FS-112 Exterior	950 SF	NF	Tile NAD, Mortar NAD
<b>Interior/Exterior Building Caulk – Tacky/Thin Bead (Door Frames to Structure) *</b>	<b>49</b>	<b>Throughout Interior FS-112 Exterior</b>	<b>85 SF</b>	<b>NF</b>	<b>5% CHR</b>
Drywall Adhesives – Tan Color	50	Throughout	NE	NF	NAD
<b>12" White Grid Pattern Stick Down Flooring*</b>	<b>51</b>	<b>FS-87 Basement Room #1</b>	<b>450 SF</b>	<b>NF</b>	<b>Floor Tile NAD, Mastic 2% CHR</b>

Material Description	HA	Identified Locations	Estimated Quantity	F/NF	Asbestos Content
Door Trim Adhesives – Tan	52	Throughout	NE	NF	NAD
Sandstone Type Wall Panels	53	FS-1 East Entrance #1 FS-4 East Entrance #2 FS-112 Exterior	1,500 SF	NF	NAD
<b>Stud Adhesives – Black (Observed Within FS-35, Potentially Throughout)</b>	<b>54</b>	<b>FS-35 Classroom #7</b>	<b>NE</b>	<b>NF</b>	<b>1.25% CHR</b>
<b>Suspect Transite Chalkboard</b>	<b>55</b>	<b>FS-32 Classroom #6</b>	<b>1 CT (20 SF)</b>	<b>NF</b>	<b>25% CHR</b>
<b>Interior/Exterior Building Caulk – Hard/Thin Bead (Door Frames to Building) *</b>	<b>56</b>	<b>Throughout</b>	<b>150 SF</b>	<b>NF</b>	<b>5% CHR</b>
Bulletin Board – Fibrous	57	FS-7 Classroom #3 FS-20 Stairway	30 SF	F	NAD
<b>Vent Hood</b>	<b>58</b>	<b>FS-8 Kitchen</b>	<b>1 CT</b>	<b>NF</b>	<b>Assumed</b>
Cloth Wrap – Above Ceilings	59	Throughout	NE	F	NAD
Counter Top Adhesives	60	FS-8 Kitchen FS-41 Storage FS-42 Classroom #8 FS-43 Office Storage	170 SF	NF	NAD
<b>Former Roof Line Material – Black/Tar Like</b>	<b>61</b>	<b>FS-13 Hallway to Pool</b>	<b>10 SF</b>	<b>NF</b>	<b>10% CHR</b>
Floor Barrier Paper – Black w/Tar Like Material (Under Wood Floors)	62	FS-29 Gymnasium FS-30 Gymnasium Equipment Room	4,600 SF	F	NAD
Base Cove – Black w/Associated Adhesives	63	Throughout	NE	NF	NAD
Base Cove – Gray w/Associated Adhesives	64	Throughout	NE	NF	NAD
Base Cove Debris Pile	65	FS-109 Basement Room #23	15 SF	NF	NAD
Sink Undercoating – Light Gray/Brown	66	FS-42 Classroom #8	1 CT (6 SF)	NF	NAD
Paneling Adhesives – Black	67	FS-49 2 <sup>nd</sup> Floor Office #14	110 SF	NF	NAD
Wall Adhesives – Tan	68	Throughout	NE	NF	NAD
Shed Roofing Materials	69	FS-112 Exterior	60 SF	NF	NAD
Ceiling Drain Material – Brown Fibrous	70	Throughout	NE	F	NAD
Plaster Type Ceiling Material – White	71	Throughout Eastern 2 <sup>nd</sup> Floor	NE	NF	NAD
Pool – Concrete Foundation	72	FS-110 Basement Room #24 (Pool Storage)	NE	NF	NAD
Pool – Floor Patching/White	73	FS-14 Pool Area	40 SF	NF	NAD

Material Description	HA	Identified Locations	Estimated Quantity	F/NF	Asbestos Content
<b>Pool – Ceiling Panels and Potential Associated Materials</b>	<b>74</b>	<b>FS-14 Pool Area</b>	<b>4,000 SF</b>	<b>NF/F</b>	<b>Assumed</b>
Pool – Miscellaneous Ceramic Type Tiles w/Associated Mortar	75	FS-14 Pool Area	5,500 SF	NF	NAD
<b>Exterior Building Caulk – Thick White/Gray Beads – Window Frames to Building*</b>	<b>76</b>	<b>FS-112 Exterior</b>	<b>100 SF</b>	<b>NF</b>	<b>10% CHR</b>
<b>Exterior Building Caulk – Medium White/Gray Beads Various Areas*</b>	<b>77</b>	<b>FS-112 Exterior</b>	<b>150 SF</b>	<b>NF</b>	<b>10% CHR</b>
Boiler Room – Red Type Gaskets	78	FS-98 Basement Room #12 (Boiler Room)	15 SF	F	NAD
Boiler Room – Black Pipe Coating	79	Throughout	NE	NF	NAD
Window Glazing – Metal to Glass (Wood Covered Sections)	80	FS-112 Exterior	NE	NF	NAD
Walling Material – Cinder Blocks w/Reflective Flecks	81	Throughout	NE	NF	NAD
Built in Radiant Heat – Heat Shielding Brown and Fibrous w/White Covering	82	Throughout	NE	F	NAD
Counter Top Trim Board – Brown Adhesives	83	FS-41 Storage FS-42 Classroom #8	16 SF	NF	NAD
<b>Suspect Transite Piping (Above Ceilings)</b>	<b>84</b>	<b>Throughout</b>	<b>NE</b>	<b>NF</b>	<b>Assumed</b>
<b>9" Light Brown Floor Tile w/Associated Mastic/Paper*</b>	<b>85</b>	<b>FS-27 Coach's Office FS-31 Stairway to Basement</b>	<b>125 SF</b>	<b>NF</b>	<b>Floor Tile 10% CHR, Mastic 10% CHR, Paper NAD</b>
<b>9" Light Tan Floor Tile w/Associated Mastic/Paper*</b>	<b>86</b>	<b>FS-17 Locker Room FS-19 Locker Room FS-43 Office Storage</b>	<b>825 SF</b>	<b>NF</b>	<b>Floor Tile 10% CHR, Mastic 10% CHR, Paper NAD</b>
Pool – Black Paper w/Associated Material	87	FS-14 Pool Area	450 SF	F	NAD
Pool – Brown Paper w/In Glazed Walling	88	FS-14 Pool Area	NE	F	NAD
<b>Basement Textured Ceilings*</b>	<b>89</b>	<b>Throughout Basement</b>	<b>4,500 SF</b>	<b>F</b>	<b>10% CHR</b>
White Fire Block	90	Throughout	NE	NF	NAD
Pipe/HVAC Pipe Opening Putty	91	FS-112 Exterior	10 SF	NF	NAD
Pre-Formed Pipe Casing/Covering	92	FS-112 Exterior	1 SF	F	NAD



Material Description	HA	Identified Locations	Estimated Quantity	F/NF	Asbestos Content
Foundation/Structure Concrete	93	Throughout	NE	NF	TRACE to <1% CHR (PC)
<b>Cork Flooring Material (Under 2<sup>nd</sup> Floor Former Sporting Court Observation Area)*</b>	<b>94</b>	<b>FS-85 2<sup>nd</sup> Floor Overlook Area of Former Handball Courts</b>	<b>525 SF</b>	<b>F</b>	<b>1.50% CHR (PC)</b>
Boiler Cap Cover	95	FS-109 Basement Room #23	30 SF	F	NAD
Boiler Jacket Material	96	FS-98 Basement Room #12 (Boiler Room)	140 SF	F	NAD
Cloth Typed Boiler Gaskets	97	FS-98 Basement Room #12 (Boiler Room)	20 SF	F	NAD
Foundation Tar – Black w/Skim Coat Material	98	FS-112 Exterior	NE	NF	NAD
<b>Interior Building Caulk – Window Frames to Building</b>	<b>99</b>	<b>Throughout</b>	<b>150 SF</b>	<b>NF</b>	<b>5% CHR</b>
Exterior Building Caulk – Granite Panels on Eastern Side of Building	100	FS-112 Exterior	40 SF	NF	NAD
Light Switch Panel Mounting	101	Throughout Interior FS-112 Exterior	NE	F	NAD
<b>Exterior Building Caulk – HVAC Vent Caulking*</b>	<b>102</b>	<b>FS-112 Exterior</b>	<b>25 SF</b>	<b>NF</b>	<b>10% CHR</b>
Secondary Ceiling – Textured Ceiling Materials (Above Ceilings Throughout 1 <sup>st</sup> Floor)	103	Throughout First Floor	NE	F	NAD
Glazed Block Mortar	104	Throughout	NE	NF	NAD

**\*Remove All Layers as Asbestos Containing**

**Table Notes:**

F= Friable      NF= Non-Friable      SF= Square Feet      LF= Linear Feet      NE= Not Estimated  
 NAD= No Asbestos Detected      CHR= Chrysotile      AMO= Amosite      CRO= Crocidolite  
 CT= Count      PC= Point Count  
 ACM= Asbestos Containing Material (Greater than 1% Asbestos Content)  
 Assumed= Suspect material that was not sampled, but was assumed asbestos-containing

The following summarizes our recommendations regarding the ACMs identified:

1. Flooring Mastic materials were observed and sampled throughout the subject building. ACM content was variable per floor. AKT Peerless recommends that all flooring Mastics and associated materials impacted, such as, but not limited to: floor tiles, tar paper, etc., be treated as ACM containing in accordance with all applicable state and federal regulations. The Mastic material is similar in color, texture, etc. and creates an inability to delineate between areas of asbestos containing and non-asbestos containing materials.
2. Select materials were not estimated due to limited accessibility and observations.

3. Based on the findings of the Asbestos Survey and the anticipated demolition of the building, AKT Peerless recommends that all identified ACMs be properly removed by a licensed contractor in accordance with applicable state and federal regulations.
4. Assumed ACMs (safe, fire doors, pipe materials, ceiling systems, etc.) not accessible or sampled as part of the survey, or other suspect materials discovered during the demolition are required to be assumed asbestos containing and handled appropriately in accordance with state and federal regulations. Assumed materials must be removed by a licensed contractor in accordance with applicable state and federal regulations or sampled to verify asbestos content.
5. Certain ACM identified as part of this survey including, but not limited to; joint compounds, flooring, windows and associated caulks, etc., may have associated debris in conjunction to intact sections of ACM. Estimated quantities of ACM include the associated debris.
6. Due to damage to certain portions of ACM materials and associated components throughout the subject building, all building debris that has come into contact with ACM debris and cannot be properly decontaminated, is to be removed and handled as ACM and removed for disposal by a licensed contractor in accordance with applicable state and federal regulations.
7. AKT Peerless attempted to quantify materials based on visual observations made during the survey. Further, it is AKT Peerless' opinion additional quantities of ACM may be identified during demolition and disposed of in accordance with State and Federal Regulations.
8. Any potentially unsafe portions of the structure may need to be demolished under the Order Demolition provisions of the NESHAP rule 40 CFR 61.145 (a)(3). AKT Peerless recommends the local municipality and/or a licensed building inspector be contracted to determine structural integrity prior to abatement.

### **3.2 Summary of Identified Other Potentially Hazardous Materials**

During the Hazardous Material Survey, AKT Peerless observed the existence of various types of potentially hazardous materials in the building. In general, these materials were stored in containers of various capacities. An inventory of hazardous building materials and containers was prepared and is included in Appendix C.

The survey was conducted to identify universal hazardous wastes or regulated materials/wastes. The building was inspected for potential hazardous materials, such as PCBs or oil containing light ballasts, batteries, chlorofluorocarbon-containing equipment, smoke detectors, exit signs, mercury light tubes and switches, as well as underground storage tanks (USTs). No intrusive examination or contact with manufacturers, sample collection, or testing of this equipment was performed. No sampling of any hazardous component materials was performed.

AKT Peerless recommends that qualified contractors perform the removal of these materials and follow appropriate special handling and disposal measures, which are required before general building demolition. Based on the conditions observed, it is recommended that unknown waste materials and oil stained concrete, as well as sump basins/potential storm water discharge pits are appropriately characterized for waste disposal or recycling purposes, if applicable.

#### Hazardous Materials Recommendation:

1. The materials included in Appendix C and other items banned from landfill disposal, identified during the demolition should be properly removed and disposed of in accordance with applicable regulations.
2. The contractor must identify and delineate any oil stained concrete and segregate from the recyclable materials. Oil stained concrete should be disposed at a licensed landfill.

Special attention should be paid to liquids accumulated in building components, site features, the sub grade areas, which shall be removed, prior to demolition of buildings in accordance with applicable regulations. For example, heating system and fire suppression components are present within the building and may contain accumulated liquids. In addition, pipe chases, crawlspaces, and trucking bays may contain accumulated liquids. These and any other liquids encountered must be properly drained, containerized, and transported to a licensed waste disposal facility.

### **3.3 Electrical Transformers**

AKT Peerless inspected the subject property for the presence of liquid-cooled electrical units such as transformers and large capacitors. Such units are notable, since they may be potential sources of PCBs. AKT Peerless observed several suspect PCBs-containing pole mounted transformers located at the subject property.

## **4.0 Limitations**

The information and opinions obtained in this report are for the exclusive use of Columbus Development, LLC. No distribution to or reliance by other parties may occur without the express written permission of AKT Peerless. AKT Peerless will not distribute this report without written consent or as required by law or by a Court order. The information and opinions contained in the report are given in light of that assignment. The report must be reviewed and relied upon only in conjunction with the terms and conditions expressly agreed upon by the parties and as limited therein. Any third parties, who have been extended the right to rely on the contents of this report by AKT Peerless (which is expressly required prior to any third-party release), agrees to be bound by the original terms and conditions entered into by AKT Peerless and the Client.

Subject to the above and the terms and conditions, AKT Peerless accepts responsibility for the competent performance of its duties in executing the assignment and preparing reports in accordance with the normal standards of the profession, but disclaims any responsibility for consequential damages. Although AKT Peerless believes that results contained herein are reliable, AKT Peerless cannot warrant or guarantee that the information provided is exhaustive or that the information provided by the client or third parties is complete or accurate.

## 5.0 Signatures of Environmental Professionals

The following individuals contributed to the completion of this report.

A handwritten signature in blue ink, appearing to read "Heath S. Bobick".

---

**Heath S. Bobick**  
Environmental Consultant  
**AKT Peerless**  
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[BobickH@AKTPeerless.com](mailto:BobickH@AKTPeerless.com)

MIOSHA LARA CSHD Asbestos Inspector  
Accreditation No. A43315

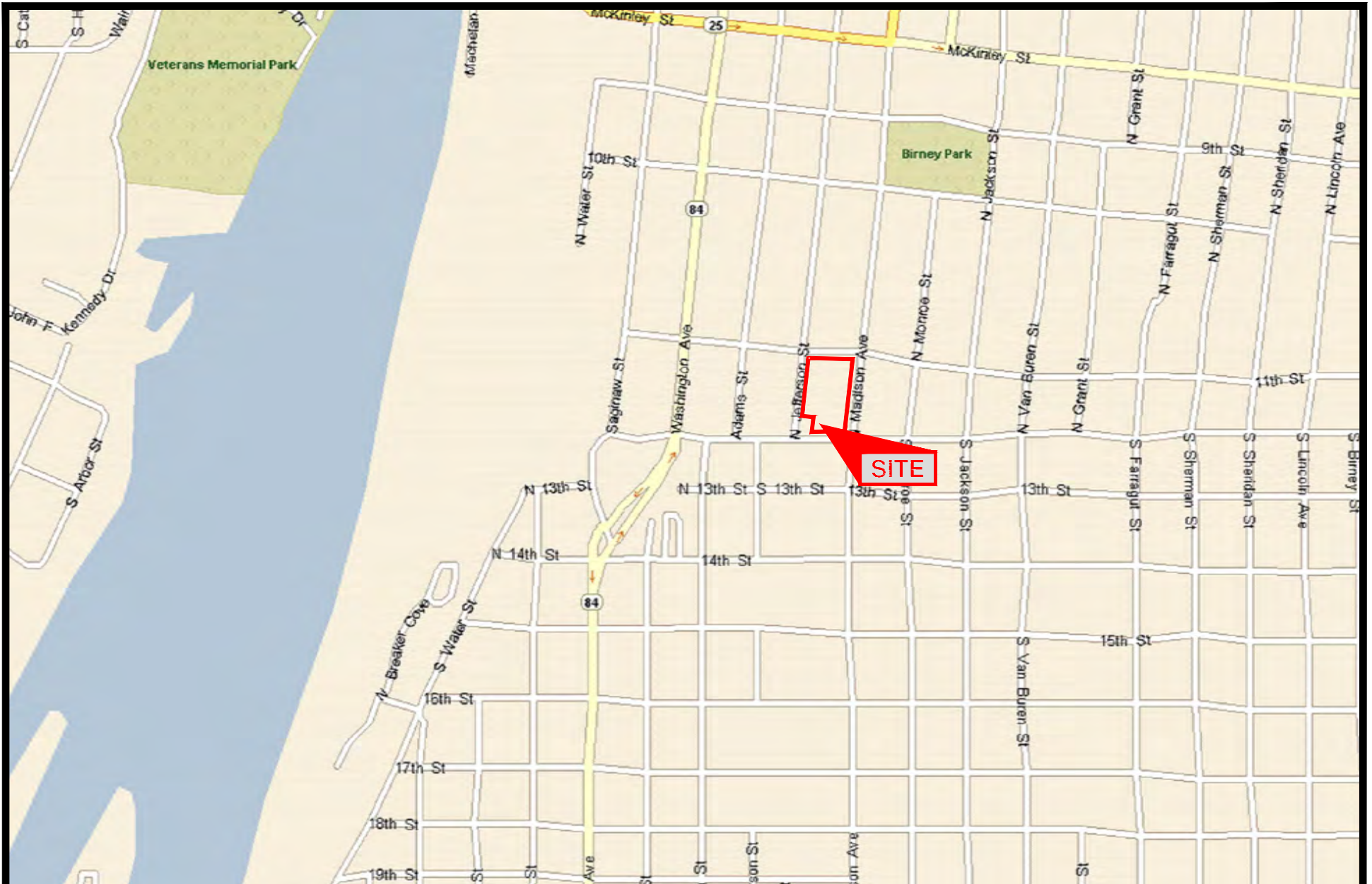
A handwritten signature in blue ink, appearing to read "Sean D. Robinson".

---

**Sean D. Robinson, CHMM**  
Project Manager-Group Leader  
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## FIGURES



**AKT**PEERLESS

[www.aktpeerless.com](http://www.aktpeerless.com)

#### SUBJECT PROPERTY LOCATION MAP

111 NORTH MADISON AVENUE  
BAY CITY, MICHIGAN  
PROJECT NUMBER : 11146s2-2-194

#### LEGEND



DRAWN BY: OGO  
DATE: 10/24/2017

FIGURE 1



Scale is approximate, room locations area generalized



www.aktpeerless.com

## FUNCTIONAL SPACE - FIRST FLOOR

111 NORTH MADISON AVENUE  
BAY CITY, MICHIGAN  
PROJECT NUMBER : 11146s2-2-194

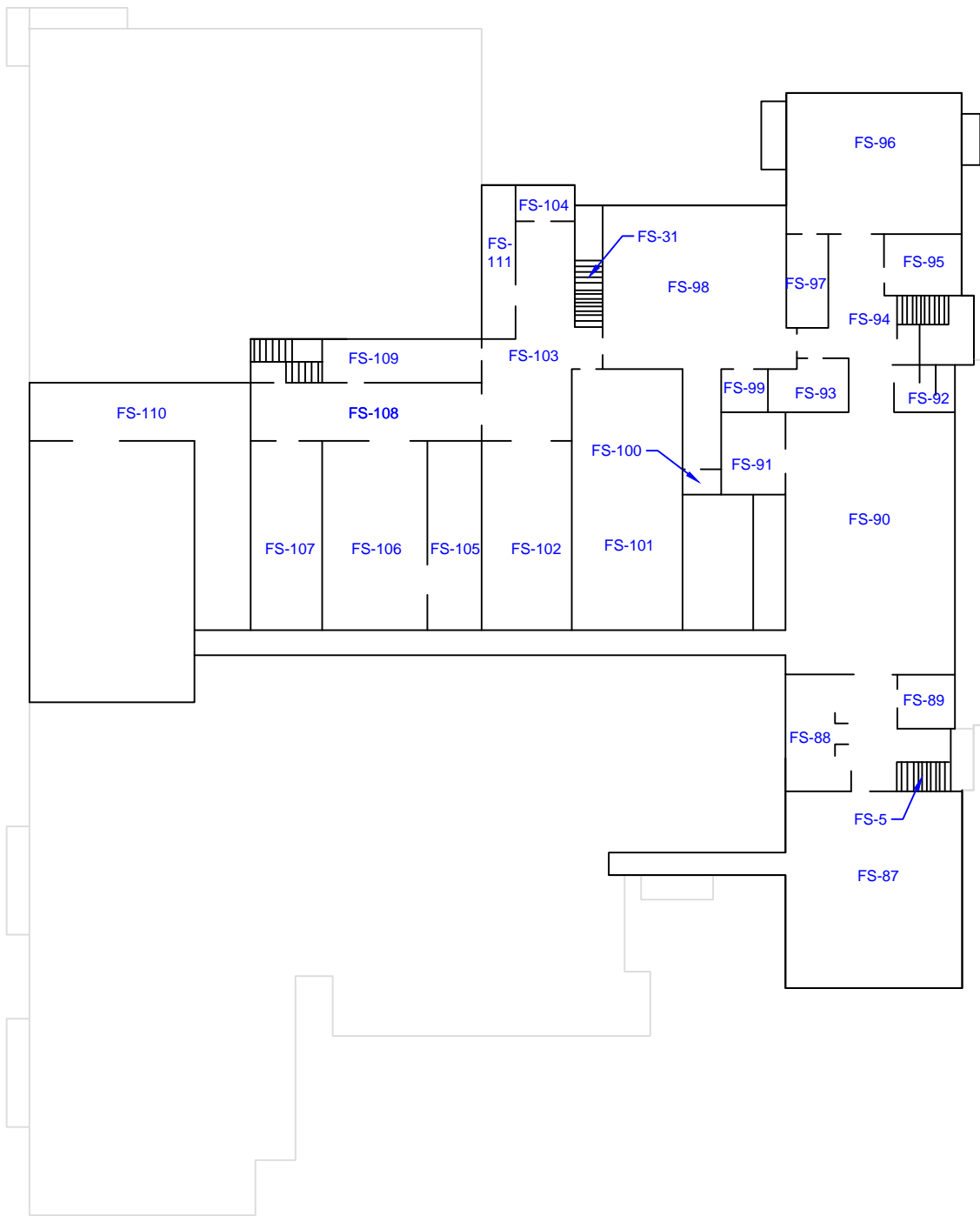
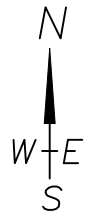
DRAWN BY: OGO  
DATE: 10/24/2017

0 15 30  
SCALE: 1" = 30'

FIGURE 2







Scale is approximate, room locations area generalized



www.aktpeerless.com

## FUNCTIONAL SPACE - BASEMENT

111 NORTH MADISON AVENUE  
BAY CITY, MICHIGAN  
PROJECT NUMBER : 11146s2-2-194

DRAWN BY: OGO  
DATE: 10/24/2017

0 15 30  
SCALE: 1" = 30'

FIGURE 4

## **APPENDIX A**

## **PHOTOGRAPHS**



**EXTERIOR VIEW OF SUBJECT BUILDING**



**EXTERIOR VIEW OF SUBJECT BUILDING**



*PROPERTY PHOTOGRAPHS*

111 NORTH MADISON AVENUE  
BAY CITY, MICHIGAN

TAKEN BY: AKT  
DATE: 10-2017

PROJECT NUMBER:  
11146s2



**EXTERIOR VIEW OF SUBJECT BUILDING**



**VIEW OF SUBJECT BUILDING FACING SOUTHEAST**





INTERIOR VIEW OF BASEMENT



INTERIOR VIEW OF BASEMENT  
BOILER ROOM



PROPERTY PHOTOGRAPHS

111 NORTH MADISON AVENUE  
BAY CITY, MICHIGAN

TAKEN BY: AKT  
DATE: 10-2017

PROJECT NUMBER:  
11146s2



**INTERIOR VIEW OF BASEMENT  
POOL MECHANICAL/STORAGE ROOM**



**INTERIOR VIEW OF TUNNEL  
DEBRIS**



INTERIOR VIEW OF 1<sup>ST</sup> FLOOR  
KITCHEN



INTERIOR VIEW OF 1<sup>ST</sup> FLOOR  
GYMNASIUM





**INTERIOR VIEW OF 1<sup>ST</sup> FLOOR  
CLASSROOM**



**INTERIOR VIEW OF STAIRWAY  
AND MOISTURE INTRUSION**

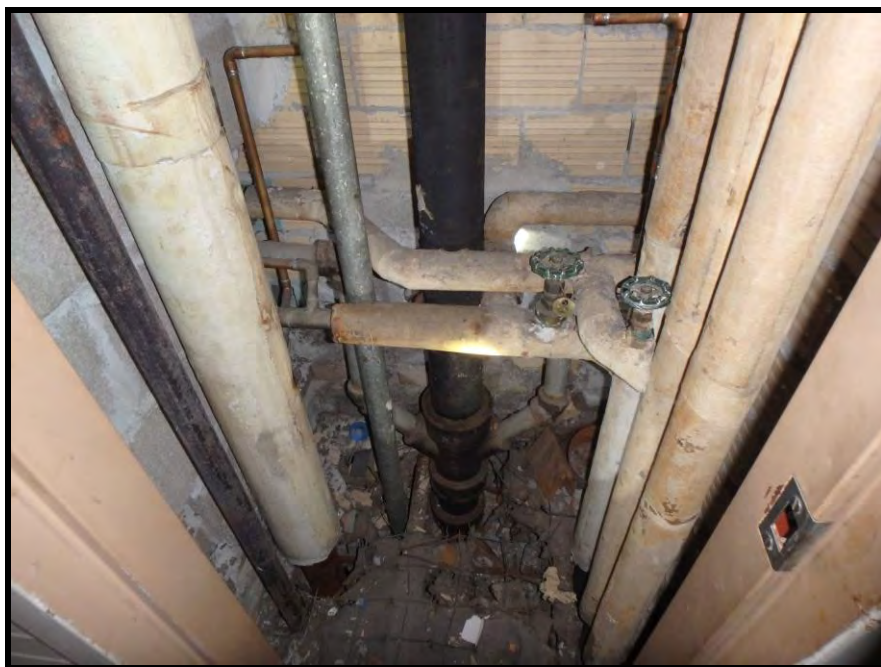




**REPRESENTATIVE VIEW OF 2<sup>ND</sup> FLOOR**



**REPRESENTATIVE VIEW OF ROOF AREA**



**REPRESENTATIVE VIEW OF PIPE CHASE  
MUD FITTINGS (HA-2) AND PIPE WRAP (HA-3)**



**INTERIOR VIEW  
DRYWALL ADHESIVE (HA-50)**



*PROPERTY PHOTOGRAPHS*

111 NORTH MADISON AVENUE  
BAY CITY, MICHIGAN

TAKEN BY: AKT  
DATE: 10-2017

PROJECT NUMBER:  
11146s2





**INTERIOR VIEW OF 1<sup>ST</sup> FLOOR, HALLWAY TO POOL AREA  
FORMER ROOF LINE (HA-61)**



**INTERIOR VIEW OF GYMNASIUM  
FLOOR BARRIER PAPER (HA-62)**



**INTERIOR VIEW OF 1<sup>ST</sup> FLOOR ABOVE CEILING  
SUSPECT TRANSITE PIPE (HA-84)**



**INTERIOR VIEW OF POOL AREA  
BLACK PAPER WITHIN PERIMETER WALL (HA-87)**





**INTERIOR VIEW OF POOL AREA  
BROWN PAPER WITHIN GLAZED WALLING (HA-88)**



**INTERIOR VIEW OF BASEMENT  
TEXTURED CEILING MATERIAL (HA-89)**



*PROPERTY PHOTOGRAPHS*

111 NORTH MADISON AVENUE  
BAY CITY, MICHIGAN

TAKEN BY: AKT  
DATE: 10-2017

PROJECT NUMBER:  
11146s2



**REPRESENTATIVE VIEW OF CEILING DRAIN MATERIAL (HA-70) AND  
PAPER TYPE CEILING MATERIAL (HA-71)**



**REPRESENTATIVE VIEW OF WHITE FIRE BLOCK (HA-90)**



REPRESENTATIVE VIEW OF HAZMAT

## **APPENDIX B**

### **FUNCTIONAL SPACE TABLE**



### FORMER YMCA FUNCTIONAL SPACE (FS) LISTING

**CLIENT:** Columbus Development LLC  
**PROJECT NO:** 11146s2-2-194  
**PROJECT NAME:** 111 North Madison Avenue, Bay City, Michigan

Functional Space No.	Description
FS-1	East Entrance #1
FS-2	Main Hallway
FS-3	Classroom #1
FS-4	East Entrance #2
FS-5	Stairway
FS-6	Classroom #2
FS-7	Classroom #3
FS-8	Kitchen
FS-9	Kitchen Entrance
FS-10	South Entrance #1
FS-11	Classroom #4
FS-12	Classroom #5
FS-13	Hallway to Pool
FS-14.1	Pool Area
FS-14.2	Hallway
FS-15	Stairway
FS-16	Pool Office
FS-17	Locker Room
FS-18	Locker Room
FS-19	Locker Room
FS-20	Stairway
FS-21	Stairway
FS-22	Landing
FS-23	Locker Room
FS-24	Locker Room
FS-25	Locker Room
FS-26	Locker Room
FS-27	Coach's Office
FS-28	Stairway
FS-29	Gymnasium
FS-30	Gymnasium Equipment Room
FS-31	Stairway to Basement
FS-32	Classroom #6
FS-33	Bathroom
FS-34	Bathroom
FS-35	Classroom #7
FS-36	Coat Room

## FORMER YMCA FUNCTIONAL SPACE (FS) LISTING

**CLIENT:** Columbus Development LLC  
**PROJECT NO:** 11146s2-2-194  
**PROJECT NAME:** 111 North Madison Avenue, Bay City, Michigan

Functional Space No.	Description
FS-37	Bathroom
FS-38	Bathroom
FS-39	Closet
FS-40	Storage
FS-41	Storage
FS-42	Classroom #8
FS-43	Office Storage
FS-44	Office Hallway
FS-45	Office #1
FS-46	Office #2
FS-47	Office #3
FS-48	Stairway
FS-49	2nd Floor Office #1
FS-50	2nd Floor Office #2
FS-51	2nd Floor Office #3
FS-52	2nd Floor Office Area Hallway #1
FS-53	2nd Floor Office #4
FS-54	2nd Floor Office #5
FS-55	2nd Floor Office #6
FS-56	2nd Floor Office #7
FS-57	2nd Floor Office #8
FS-58	2nd Floor Common Area
FS-59	2nd Floor Office #8
FS-60	Closet
FS-61	Bathroom
FS-62	2nd Floor Office #9
FS-63	2nd Floor Office #10
FS-64	2nd Floor Office #11
FS-65	2nd Floor Office #12
FS-66	2nd Floor Office #13
FS-67	2nd Floor Office #14
FS-68	2nd Floor Office #15
FS-69	2nd Floor Office #16
FS-70	2nd Floor Office #17
FS-71	Closet
FS-72	2nd Floor Hallway #2

## FORMER YMCA FUNCTIONAL SPACE (FS) LISTING

**CLIENT:** Columbus Development LLC  
**PROJECT NO:** 11146s2-2-194  
**PROJECT NAME:** 111 North Madison Avenue, Bay City, Michigan

Functional Space No.	Description
FS-73	Locker Room
FS-74	2nd Floor Office #18
FS-75	Storage Room
FS-76	Locker Room
FS-77	Locker Room
FS-78	Locker Room
FS-79	Locker Room
FS-80	Locker Room
FS-81	Locker Room
FS-82	Locker Room
FS-83	2nd Floor Hallway #3
FS-84	Closet
FS-85	2nd Floor Overlook Area of Former Handball Courts
FS-86	Utility Corridor
FS-87	Basement Room #1
FS-88	Basement Room #2
FS-89	Basement Room #3
FS-90	Basement Room #4
FS-91	Basement Room #5
FS-92	Basement Room #6
FS-93	Basement Room #7
FS-94	Basement Room #8
FS-95	Basement Room #9
FS-96	Basement Room #10
FS-97	Basement Room #11
FS-98	Basement Room #12 (Boiler Room)
FS-99	Basement Room #13
FS-100	Basement Room #14
FS-101	Basement Room #15
FS-102	Basement Room #16
FS-103	Basement Room #17
FS-104	Basement Room #18
FS-105	Basement Room #19
FS-106	Basement Room #20
FS-107	Basement Room #21
FS-108	Basement Room #22

### FORMER YMCA FUNCTIONAL SPACE (FS) LISTING

**CLIENT:** Columbus Development LLC  
**PROJECT NO:** 11146s2-2-194  
**PROJECT NAME:** 111 North Madison Avenue, Bay City, Michigan

Functional Space No.	Description
FS-109	Basement Room #23
FS-110	Basement Room #24 (Pool Storage)
FS-111	Basement Room #25
FS-112	Exterior
FS-113	HVAC Area
FS-114	Classroom # 9 (Former Handball Court)
FS-115	Classroom #10 (Former Handball Court)
FS-116	Classroom #11 (Former Handball Court)
FS-117	Classroom #12 (Former Handball Court)

**APPENDIX C**  
**PCBs, MERCURY, AND OTHER HAZARDOUS MATERIALS**  
**TABLE**

## Former YMCA

Project Address: 111 North Madison Avenue, Bay City, MI

Project #: 11146s2-2-194

### Hazardous Material Inventory of Former YMCA

Materials Location Functional Space #	Miscellaneous Hazardous Materials	Exit Signs w/Lighting and/or Battery	Types of Bulbs				Light Ballasts	Smoke Detectors	Door Actuator	Thermostat / Thermometer	Fire Extinguishers	Misc. Electronics	Tires	Aerosol Cans	Misc. Cleaners	Misc. Paints, Varnish, & Stains	Drinking Fountains	AC Unit Wall Mount	Televisions
			CFL's, Mercury Vapor	1' - 3' Fluorescents	4' Fluorescents	8' Fluorescents													
	Quantities																		
1	No Hazardous Materials Identified																		
2		8	6	1	58		22		3			2					2		
3		2			140		35			3									
4			1						3										
5			4		2		1		1										
6		1			24		6			2								1	
7	Heart Defibrillator - 1 CT				16		4			1	1								
8	Fire Suppression System Canister - 1 CT				14		7		1						1				
9	No Hazardous Materials Identified																		
10					2		1												
11	No Hazardous Materials Identified																		
12	No Hazardous Materials Identified																		
13					4		1		2										
14.1		1	10						4										
14.2		1			16		9	2					8						
15					1												1		
16					2		1					1							
17			1		42		19		2										
18	No Hazardous Materials Identified																		
19					4		2												
20			2		20	2	7		2										
21	No Hazardous Materials Identified																		

## Former YMCA

Project Address: 111 North Madison Avenue, Bay City, MI

Project #: 11146s2-2-194

### Hazardous Material Inventory of Former YMCA

Materials Location Functional Space #	Miscellaneous Hazardous Materials	Exit Signs w/Lighting and/or Battery	Types of Bulbs				Light Ballasts	Smoke Detectors	Door Actuator	Thermostat / Thermometer	Fire Extinguishers	Misc. Electronics	Tires	Aerosol Cans	Misc. Cleaners	Misc. Paints, Varnish, & Stains	Drinking Fountains	AC Unit Wall Mount	Televisions
			CFL's, Mercury Vapor	1' - 3' Fluorescents	4' Fluorescents	8' Fluorescents													
22																			
23			2		24		13												
24																			
25				2	2		2		2										
26																			
27					2		1												
28																			
29						40	40												
30									3										
31																			
32		1			8		4			1									
33					2		1												
34			1		2		1			1									
35		1			12		6			4									
36																			
37				6			3												
38					4		2												
39												1							
40	Alarm Box - 2 CT w/Batteries				4		2							1					
41					8		4			1									
42										3								1	
43	Electric Clothes Dryer - 1 CT, Ink Cartridges - 15 CT								1						2				

## Former YMCA

Project Address: 111 North Madison Avenue, Bay City, MI

Project #: 11146s2-2-194

### Hazardous Material Inventory of Former YMCA

Materials Location Functional Space #	Miscellaneous Hazardous Materials	Exit Signs w/Lighting and/or Battery	Types of Bulbs				Light Ballasts	Smoke Detectors	Door Actuator	Thermostat / Thermometer	Fire Extinguishers	Misc. Electronics	Tires	Aerosol Cans	Misc. Cleaners	Misc. Paints, Varnish, & Stains	Drinking Fountains	AC Unit Wall Mount	Televisions
			CFL's, Mercury Vapor	1' - 3' Fluorescents	4' Fluorescents	8' Fluorescents													
44	Ink Cartridges - 12 CT				12		6					1							
45					2		1												
46					2		1												
47					2		1												
48	No Hazardous Materials Identified																		
49												1							
50					2		1												
51					2		1	1											
52					4		2	1	1										
53								1				1							
54								1											
55					2		2	1											
56					2		2												
57					2		1	1				1							
58	Miscellaneous Building Materials - 6 CT	2								1		5							
59					24		6												
60	No Hazardous Materials Identified																		
61					4		3	1	1							2			
62								1				1							
63								1				2							
64								1											
65								2				2							
66	No Hazardous Materials Identified																		



## Former YMCA

Project Address: 111 North Madison Avenue, Bay City, MI

Project #: 11146s2-2-194

### Hazardous Material Inventory of Former YMCA

Materials Location Functional Space #	Miscellaneous Hazardous Materials	Exit Signs w/Lighting and/or Battery	Types of Bulbs				Light Ballasts	Smoke Detectors	Door Actuator	Thermostat / Thermometer	Fire Extinguishers	Misc. Electronics	Tires	Aerosol Cans	Misc. Cleaners	Misc. Paints, Varnish, & Stains	Drinking Fountains	AC Unit Wall Mount	Televisions
			CFL's, Mercury Vapor	1' - 3' Fluorescents	4' Fluorescents	8' Fluorescents													
67																			
68								1											
69																			
70																			
71																			
72		2			6		3												
73			2		10		3					1					1		
74					24		6												
75					20		5			1									
76			2		38		19		2	2		2					1		
77										1									
78					4		1		2										
79					1		1												
80					2		1		1										
81																			
82					12		6												
83			2		3	2	5		2										
84														1	9				
85	Solder Paste - 1 CT		29																
86					36		18												
87					8	4	6		2	1									
88					4		2					4							2
89					2		1												
90					32						1								

## Former YMCA

Project Address: 111 North Madison Avenue, Bay City, MI

Project #: 11146s2-2-194

### Hazardous Material Inventory of Former YMCA

Materials Location Functional Space #	Miscellaneous Hazardous Materials	Exit Signs w/Lighting and/or Battery	Types of Bulbs				Light Ballasts	Smoke Detectors	Door Actuator	Thermostat / Thermometer	Fire Extinguishers	Misc. Electronics	Tires	Aerosol Cans	Misc. Cleaners	Misc. Paints, Varnish, & Stains	Drinking Fountains	AC Unit Wall Mount	Televisions
			CFL's, Mercury Vapor	1' - 3' Fluorescents	4' Fluorescents	8' Fluorescents													
91					2		1												
92				2		1			1										
93	Refrigerator - 1 CT																		
94							2												
95	Coil Cleaner - 4 CT																		
96					8		4		1			2							1
97	No Hazardous Materials Identified																		
98	Mercury Switches - 7 CT, Gas Powered Snow Blower - 1 CT		1					2						3		2			
99	Weed Killer - 1 CT, Hydraulic Cement - 1 CT, Joint Compound - 1 CT, Spray Bottles Unknown Content - 4 CT																		
100	No Hazardous Materials Identified																		
101	Motor Oil - 1 CT				7		2												
102	No Hazardous Materials Identified																		
103									2		1								
104	Weed Killer - 1 CT		2	2	16	2													

## Former YMCA

Project Address: 111 North Madison Avenue, Bay City, MI

Project #: 11146s2-2-194

### Hazardous Material Inventory of Former YMCA

Materials Location Functional Space #	Miscellaneous Hazardous Materials	Exit Signs w/Lighting and/or Battery	Types of Bulbs				Light Ballasts	Smoke Detectors	Door Actuator	Thermostat / Thermometer	Fire Extinguishers	Misc. Electronics	Tires	Aerosol Cans	Misc. Cleaners	Misc. Paints, Varnish, & Stains	Drinking Fountains	AC Unit Wall Mount	Televisions
			CFL's, Mercury Vapor	1' - 3' Fluorescents	4' Fluorescents	8' Fluorescents													
105	TSP - 1 CT, Weed Killer - 3 CT, Hydraulic Jack Oil - 2 CT, Oxalic Acid - 1 CT, Grout Sealer - 1 CT, Herbicide - 1 CT, Sprocket Oil - 1 CT, Xylene - 1 CT, Roof Cement - 1 CT, Gout Tile Cement - 4 CT, Unknown Materials (5 Gallon Containers) - 4 CT													4	1	72			
106	Motor Oil - 4 CT, Pipe Joint Compound - 14 CT, Lithium Grease - 1 CT, Lighter Fluid - 1 CT, Spray Containers - 4 CT				6		10							7	5	4			

## Former YMCA

Project Address: 111 North Madison Avenue, Bay City, MI

Project #: 11146s2-2-194

### Hazardous Material Inventory of Former YMCA

Materials Location Functional Space #	Miscellaneous Hazardous Materials	Exit Signs w/Lighting and/or Battery	Types of Bulbs				Light Ballasts	Smoke Detectors	Door Actuator	Thermostat / Thermometer	Fire Extinguishers	Misc. Electronics	Tires	Aerosol Cans	Misc. Cleaners	Misc. Paints, Varnish, & Stains	Drinking Fountains	AC Unit Wall Mount	Televisions
			CFL's, Mercury Vapor	1' - 3' Fluorescents	4' Fluorescents	8' Fluorescents													
107	No Hazardous Materials Identified																		
108			3						3										
109	5 Gallon Container of Adhesives - 1 CT		2		2		1												
110	Misc. Pool Equipment and Chemicals											4							
111	No Hazardous Materials Identified																		
112	No Hazardous Materials Identified																		
113	No Hazardous Materials Identified																		
114	Video Game Machines - 2 CT	1			24		6						12						
115	Helium Cylinders - 3 CT	1			24		6												
116		1			24		6												
117		1			24		6												
Totals		23	70	13	812	51	342	17	42	22	3	31	20	16	18	80	5	2	3

## **APPENDIX D**

### **ACM LABORATORY REPORTS AND CHAIN OF CUSTODY**

# Certificate of Laboratory Analysis

## Test Method, Polarized Light Microscopy (PLM)

Project: 111 North Madison Ave, Bay City, MI  
Project #: 11146s2

**Report To:**

Mr. Heath Bobick  
AKT Peerless  
214 Janes Ave.  
Saginaw, MI 48607

ARI Report # 17-72776

Date Collected: 10/30/17

Date Received: 11/02/17

Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 01 Cust. #: 45-1 Material: Black Window Sills Location: Appearance: black,nonfibrous,homogenous Layer: 1 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 01a Cust. #: 45-1 Material: Caulk Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 01b Cust. #: 45-1 Material: Mortar Location: Appearance: grey,nonfibrous,homogenous Layer: 3 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate may not be used by the customer to claim product endorsement by NVLAP or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



NVLAP Lab Code 102118-0

# Certificate of Laboratory Analysis

## Test Method, Polarized Light Microscopy (PLM)

Project: 111 North Madison Ave, Bay City, MI  
Project #: 11146s2

**Report To:**

Mr. Heath Bobick  
AKT Peerless  
214 Janes Ave.  
Saginaw, MI 48607

ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 02 Cust. #: 45-2 Material: Black Window Sills Location: Appearance: black,nonfibrous,homogenous Layer: 1 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 02a Cust. #: 45-2 Material: Caulk Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 02b Cust. #: 45-2 Material: Mortar Location: Appearance: grey,nonfibrous,homogenous Layer: 3 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Project: 111 North Madison Ave, Bay City, MI  
Project #: 11146s2

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AKT Peerless  
214 Janes Ave.  
Saginaw, MI 48607

ARI Report # 17-72776

Date Collected: 10/30/17

Date Received: 11/02/17

Date Analyzed: 11/08/17

Date Reported: 11/08/17

**Sample Information****Asbestos Type/Percent****Non-Asbestos**

Lab ID #: 72776 - 03

Cust. #: 46-1

Material: Black Adhesive Pods

Location: Bulletin Boards, Chalk Boards

Appearance: black, fibrous, homogenous

Layer: 1 of 1

Asbestos Present: **YES**

Chrysotile - 10%

Other - 90%

Lab ID #: 72776 - 04

Cust. #: 46-2

Material: Black Adhesive Pods

Location: Bulletin Boards, Chalk Boards

Appearance:

Layer: of

Asbestos Present:

NOT ANALYZED

Lab ID #: 72776 - 05

Cust. #: 46-3

Material: Black Adhesive Pods

Location: Bulletin Boards, Chalk Boards

Appearance:

Layer: of

Asbestos Present:

NOT ANALYZED

For Layered Samples, each component will be analyzed and reported separately.

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Project #: 11146s2

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Saginaw, MI 48607

ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 06 Cust. #: 47-1 Material: Suspect Building Caulk Location: Sandstone Panels Appearance: grey, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 07 Cust. #: 47-2 Material: Suspect Building Caulk Location: Sandstone Panels Appearance: grey, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 08 Cust. #: 48-1 Material: 6" Reddish Ceramic Floor Tile Location: Appearance: red, nonfibrous, homogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 08a Cust. #: 48-1 Material: Mortar Location: Appearance: grey,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 09 Cust. #: 48-2 Material: 6" Reddish Ceramic Floor Tile Location: Appearance: red,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 09a Cust. #: 48-2 Material: Mortar Location: Appearance: grey,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Saginaw, MI 48607

ARI Report # 17-72776

Date Collected: 10/30/17

Date Received: 11/02/17

Date Analyzed: 11/08/17

Date Reported: 11/08/17

**Sample Information****Asbestos Type/Percent****Non-Asbestos**

Lab ID #: 72776 - 10

Cust. #: 49-1

Material: Interior/Exterior Building Caulk, Tacky, Thin

Location: Door Frames to Structure

Appearance: beige, fibrous, homogenous

Layer: 1 of 1

Asbestos Present: **YES**

Chrysotile - 5%

Other - 95%

Lab ID #: 72776 - 11

Cust. #: 49-2

Material: Interior/Exterior Building Caulk, Tacky, Thin

Location: Door Frames to Structure

Appearance:

Layer: of

Asbestos Present:

NOT ANALYZED

Lab ID #: 72776 - 12

Cust. #: 50-1

Material: Drywall Adhesives, Tan Color

Location:

Appearance: yellow, nonfibrous, homogenous

Layer: 1 of 1

Asbestos Present: **NO**

No Asbestos Observed

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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ARI Report # 17-72776

Date Collected: 10/30/17

Date Received: 11/02/17

Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 13 Cust. #: 50-2 Material: Drywall Adhesives, Tan Color Location: Appearance: yellow, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 14 Cust. #: 51-1 Material: 12" Shite Grid Pattern Stick Down Location: Appearance: beige, nonfibrous, homogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 14a Cust. #: 51-1 Material: Mastic Location: Appearance: black, fibrous, nonhomogenous Layer: 2 of 2	Asbestos Present: <b>YES</b> Chrysotile - 2%	Other - 98%

For Layered Samples, each component will be analyzed and reported separately.

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Date Collected: 10/30/17

Date Received: 11/02/17

Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 15 Cust. #: 52-1 Material: Door Trim Adhesives, Tan Location: Appearance: yellow,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 16 Cust. #: 52-2 Material: Door Trim Adhesives, Tan Location: Appearance: yellow,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 17 Cust. #: 52-3 Material: Door Trim Adhesives, Tan Location: Appearance: yellow,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Saginaw, MI 48607

ARI Report # 17-72776

Date Collected: 10/30/17

Date Received: 11/02/17

Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 18 Cust. #: 53-1 Material: Sandstone Type Wall Panels Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 19 Cust. #: 53-2 Material: Sandstone Type Wall Panels Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 20 Cust. #: 54-1 Material: Stud Adhesives, Black Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>YES</b> Chrysotile - 1.25%  POINT COUNT RESULT	Other - 98.75%

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Project: 111 North Madison Ave, Bay City, MI  
Project #: 11146s2

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Saginaw, MI 48607

ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 21 Cust. #: 55-1 Material: Suspect Transite Location: Chalk Board Appearance: grey, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>YES</b> Chrysotile - 25%	Other - 75%
Lab ID #: 72776 - 22 Cust. #: 55-2 Material: Suspect Transite Location: Chalk Board Appearance: Layer: of	Asbestos Present:  NOT ANALYZED	
Lab ID #: 72776 - 23 Cust. #: 56-1 Material: Interior/Exterior Building Caulk, Hard, Thin Location: Door Frames to Building Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>YES</b> Chrysotile - 5%	Other - 95%

For Layered Samples, each component will be analyzed and reported separately.

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Project: 111 North Madison Ave, Bay City, MI  
Project #: 11146s2

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Saginaw, MI 48607

ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

**Sample Information****Asbestos Type/Percent****Non-Asbestos**

Lab ID #: 72776 - 24

Asbestos Present:

Cust. #: 56-2

Material: Interior/Exterior Building Caulk, Hard, Thin

Location: Door Frames to Building

NOT ANALYZED

Appearance:

Layer: of

Lab ID #: 72776 - 25

Asbestos Present:

Cust. #: 56-3

Material: Interior/Exterior Building Caulk, Hard, Thin

Location: Door Frames to Building

NOT ANALYZED

Appearance:

Layer: of

Lab ID #: 72776 - 26

Asbestos Present: **NO**

Cellulose - 95%

Cust. #: 57-1

No Asbestos Observed

Other - 5%

Material: Bulletin Board, Fibrous

Location:

Appearance: brown, fibrous, homogenous

Layer: 1 of 1

For Layered Samples, each component will be analyzed and reported separately.

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Robert T. Letarte Jr., Laboratory Director

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ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 27 Cust. #: 57-2 Material: Bulletin Board, Fibrous Location: Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 72776 - 28 Cust. #: 58-1 Material: Vent Hood Location: (ASSUMED- NOT SAMPLED) Appearance: Layer: of	Asbestos Present:  NO SAMPLE RECEIVED	
Lab ID #: 72776 - 29 Cust. #: 59-1 Material: Cloth Wrap Location: Above Ceilings Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 85% Other - 15%

For Layered Samples, each component will be analyzed and reported separately.

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ARI Report # 17-72776

Date Collected: 10/30/17

Date Received: 11/02/17

Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 30 Cust. #: 59-2 Material: Cloth Wrap Location: Above Ceilings Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 85% Other - 15%
Lab ID #: 72776 - 31 Cust. #: 59-3 Material: Cloth Wrap Location: Above Ceilings Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 85% Other - 15%
Lab ID #: 72776 - 32 Cust. #: 60-1 Material: Counter Top Adhesives Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%

For Layered Samples, each component will be analyzed and reported separately.

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ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 33 Cust. #: 60-2 Material: Counter Top Adhesives Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 72776 - 34 Cust. #: 61-1 Material: Former Roof Line Material, Black, Tar-Like Location: Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>YES</b> Chrysotile - 10%	Other - 90%
Lab ID #: 72776 - 35 Cust. #: 61-2 Material: Former Roof Line Material, Black, Tar-Like Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	

For Layered Samples, each component will be analyzed and reported separately.

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Robert T. Letarte Jr., Laboratory Director

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NVLAP Lab Code 102118-0

# Certificate of Laboratory Analysis

## Test Method, Polarized Light Microscopy (PLM)

Project: 111 North Madison Ave, Bay City, MI  
Project #: 11146s2

**Report To:**

Mr. Heath Bobick  
AKT Peerless  
214 Janes Ave.  
Saginaw, MI 48607

ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 36 Cust. #: 62-1 Material: Floor Barrier Paper, Black w/ Tar Like Mat. Location: Under Wood Floors Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 72776 - 37 Cust. #: 62-2 Material: Floor Barrier Paper, Black w/ Tar Like Mat. Location: Under Wood Floors Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 72776 - 38 Cust. #: 62-3 Material: Floor Barrier Paper, Black w/ Tar Like Mat. Location: Under Wood Floors Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%

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Date Collected: 10/30/17  
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Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 39 Cust. #: 63-1 Material: Base Cove, Black Location: Appearance: black,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 39a Cust. #: 63-1 Material: Adhesive Location: Appearance: yellow,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 40 Cust. #: 63-2 Material: Base Cove, Black Location: Appearance: black,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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ARI Report # 17-72776

Date Collected: 10/30/17

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Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 40a Cust. #: 63-2 Material: Adhesive Location: Appearance: brown, fibrous, homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Wollastonite - 2% Other - 98%
Lab ID #: 72776 - 41 Cust. #: 64-1 Material: Base Cove, Grey Location: Appearance: grey, nonfibrous, homogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 41a Cust. #: 64-1 Material: Adhesive Location: Appearance: yellow, nonfibrous, homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 42 Cust. #: 64-2 Material: Base Cove, Grey Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 42a Cust. #: 64-2 Material: Adhesive Location: Appearance: yellow,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 43 Cust. #: 65-1 Material: Base Cove Debris Pile Location: Appearance: black,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 43a Cust. #: 65-1 Material: Adhesive Location: Appearance: brown,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 44 Cust. #: 65-2 Material: Base Cove Debris Pile Location: Appearance: black,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 44a Cust. #: 65-2 Material: Adhesive Location: Appearance: brown,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 45 Cust. #: 66-1 Material: Sink Undercoating, Lt. Grey/Brown Location: Appearance: beige, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 5% Other - 95%
Lab ID #: 72776 - 46 Cust. #: 66-2 Material: Sink Undercoating, Lt. Grey/Brown Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 5% Other - 95%
Lab ID #: 72776 - 47 Cust. #: 67-1 Material: Paneling Adhesives, Black Location: Appearance: black, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 48 Cust. #: 67-2 Material: Paneling Adhesives, Black Location: Appearance: black,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 49 Cust. #: 68-1 Material: Wall Adhesives, Tan Location: Appearance: yellow,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 50 Cust. #: 68-2 Material: Wall Adhesives, Tan Location: Appearance: yellow,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 51 Cust. #: 69-1 Material: Shed Roofing Materials Location: Appearance: black, fibrous, homogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 20% Other - 80%
Lab ID #: 72776 - 51a Cust. #: 69-1 Material: Shingle Location: Appearance: black, fibrous, homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 20% Other - 80%
Lab ID #: 72776 - 52 Cust. #: 69-2 Material: Shed Roofing Materials Location: Appearance: black, fibrous, homogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 20% Other - 80%

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Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 52a Cust. #: 69-2 Material: Shingle Location: Appearance: black, fibrous, homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 20% Other - 80%
Lab ID #: 72776 - 53 Cust. #: 70-1 Material: Ceiling Drain Material, Brown/Fibrous Location: Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 72776 - 54 Cust. #: 70-2 Material: Ceiling Drain Material, Brown/Fibrous Location: Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%

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Date Collected: 10/30/17

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Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 55 Cust. #: 71-1 Material: Paper Type Ceiling Material, White Location: Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 72776 - 56 Cust. #: 71-2 Material: Paper Type Ceiling Material, White Location: Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 72776 - 57 Cust. #: 72-1 Material: Concrete Foundation Location: Pool Appearance: grey, nonfibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Collected: 10/30/17

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Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 58 Cust. #: 72-2 Material: Concrete Foundation Location: Pool Appearance: grey,nonfibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 59 Cust. #: 72-3 Material: Concrete Foundation Location: Pool Appearance: grey,nonfibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 60 Cust. #: 72-4 Material: Concrete Foundation Location: Pool Appearance: grey,nonfibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 61 Cust. #: 72-5 Material: Concrete Foundation Location: Pool Appearance: grey, nonfibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 62 Cust. #: 73-1 Material: Floor Patching, White Location: Pool Appearance: white, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Wollastonite - 2% Other - 98%
Lab ID #: 72776 - 63 Cust. #: 73-2 Material: Floor Patching, White Location: Pool Appearance: white, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Wollastonite - 5% Other - 95%

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Date Reported: 11/08/17

**Sample Information****Asbestos Type/Percent****Non-Asbestos**

Lab ID #: 72776 - 64

Cust. #: 74-1

Material: Ceiling Panels/Assoc. Materials

Location: Pool, Not Sampled- Assumed

Appearance:

Layer: of

Asbestos Present:

NO SAMPLE RECEIVED

Lab ID #: 72776 - 65

Cust. #: 75-1

Material: Misc. Ceramic Type Tiles (Various Sizes)

Location: Pool

Appearance: blue, nonfibrous, homogenous

Layer: 1 of 3

Asbestos Present: **NO**

No Asbestos Observed

Other - 100%

Lab ID #: 72776 - 65a

Cust. #: 75-1

Material: Grout

Location: Pool

Appearance: beige, nonfibrous, homogenous

Layer: 2 of 3

Asbestos Present: **NO**

No Asbestos Observed

Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 65b Cust. #: 75-1 Material: Mortar Location: Pool Appearance: grey, nonfibrous, nonhomogenous Layer: 3 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 66 Cust. #: 75-2 Material: Misc. Ceramic Type Tiles (Various Sizes) Location: Pool Appearance: blue, nonfibrous, homogenous Layer: 1 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 66a Cust. #: 75-2 Material: Grout Location: Pool Appearance: beige, nonfibrous, homogenous Layer: 2 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 66b Cust. #: 75-2 Material: Mortar Location: Pool Appearance: grey, nonfibrous, nonhomogenous Layer: 3 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 67 Cust. #: 75-3 Material: Misc. Ceramic Type Tiles (Various Sizes) Location: Pool Appearance: red, nonfibrous, homogenous Layer: 1 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 67a Cust. #: 75-3 Material: Grout Location: Pool Appearance: beige, nonfibrous, nonhomogenous Layer: 2 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

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NVLAP Lab Code 102118-0

# Certificate of Laboratory Analysis

## Test Method, Polarized Light Microscopy (PLM)

Project: 111 North Madison Ave, Bay City, MI  
Project #: 11146s2

**Report To:**

Mr. Heath Bobick  
AKT Peerless  
214 Janes Ave.  
Saginaw, MI 48607

ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 67b Cust. #: 75-3 Material: Mortar Location: Pool Appearance: grey, nonfibrous, nonhomogenous Layer: 3 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 68 Cust. #: 76-1 Material: Ext. Building Caulk, Thick White/Grey Location: Window Frame to Building Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>YES</b> Chrysotile - 10%	Other - 90%
Lab ID #: 72776 - 69 Cust. #: 76-2 Material: Ext. Building Caulk, Thick White/Grey Location: Window Frame to Building Appearance: Layer: of	Asbestos Present:  NOT ANALYZED	

For Layered Samples, each component will be analyzed and reported separately.

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ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

**Sample Information****Asbestos Type/Percent****Non-Asbestos**

Lab ID #: 72776 - 70

Cust. #: 76-3

Material: Ext. Building Caulk, Thick White/Grey

Location: Window Frame to Building

Appearance:

Layer: of

Asbestos Present:

NOT ANALYZED

Lab ID #: 72776 - 71

Cust. #: 77-1

Material: Ext. Building Caulk, Medium White/Grey

Location: Various Areas HVAC/Frames/Cracks/Seams

Appearance: beige, fibrous, homogenous

Layer: 1 of 1

Asbestos Present: **YES**

Other - 90%

Chrysotile - 10%

Lab ID #: 72776 - 72

Cust. #: 77-2

Material: Ext. Building Caulk, Medium White/Grey

Location: Various Areas HVAC/Frames/Cracks/Seams

Appearance:

Layer: of

Asbestos Present:

NOT ANALYZED

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ARI Report # 17-72776

Date Collected: 10/30/17

Date Received: 11/02/17

Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 73 Cust. #: 78-1 Material: Red Type Gaskets Location: Boiler Room Appearance: red,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 74 Cust. #: 78-2 Material: Red Type Gaskets Location: Boiler Room Appearance: red,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 75 Cust. #: 79-1 Material: Black Pipe Coating/Spray On Location: Boiler Room Appearance: black,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Date Collected: 10/30/17

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Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 76 Cust. #: 79-2 Material: Black Pipe Coating/Spray On Location: Boiler Room Appearance: black, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 77 Cust. #: 80-1 Material: Window Glazing Location: Metal to Glass (Wood Covered Sections) Appearance: beige, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 78 Cust. #: 80-2 Material: Window Glazing Location: Metal to Glass (Wood Covered Sections) Appearance: beige, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Collected: 10/30/17

Date Received: 11/02/17

Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 79 Cust. #: 81-1 Material: Wall Mat.- Cinderblocks w/ Reflective Flecks Location: Appearance: grey,nonfibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 80 Cust. #: 81-2 Material: Wall Mat.- Cinderblocks w/ Reflective Flecks Location: Appearance: grey,nonfibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 81 Cust. #: 81-3 Material: Wall Mat.- Cinderblocks w/ Reflective Flecks Location: Appearance: grey,nonfibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 82 Cust. #: 81-4 Material: Wall Mat.- Cinderblocks w/ Reflective Flecks Location: Appearance: grey,nonfibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 83 Cust. #: 81-5 Material: Wall Mat.- Cinderblocks w/ Reflective Flecks Location: Appearance: grey,nonfibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 84 Cust. #: 82-1 Material: Heat Shield Brown Fiberboard w/ White Location: Built in Radiant Heat Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%

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Date Collected: 10/30/17

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Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 85 Cust. #: 82-2 Material: Heat Shield Brown Fiberboard w/ White Location: Built in Radiant Heat Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 72776 - 86 Cust. #: 82-3 Material: Heat Shield Brown Fiberboard w/ White Location: Built in Radiant Heat Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 72776 - 87 Cust. #: 83-1 Material: Counter Top Trip Boards, Brown Adhesive Location: Appearance: yellow, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 88 Cust. #: 83-2 Material: Counter Top Trip Boards, Brown Adhesive Location: Appearance: yellow,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 89 Cust. #: 84-1 Material: Counter Top Trip Boards, Brown Adhesive Location: Appearance: Layer: of	Asbestos Present:  NO SAMPLE RECEIVED	
Lab ID #: 72776 - 90 Cust. #: 85-1 Material: Top Adhesive Location: Appearance: yellow,nonfibrous,homogenous Layer: 1 of 4	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 90a Cust. #: 85-1 Material: 9" Light Brown Floor Tile Location: Appearance: grey, fibrous, homogenous Layer: 2 of 4	Asbestos Present: <b>YES</b> Chrysotile - 10%	Other - 90%
Lab ID #: 72776 - 90b Cust. #: 85-1 Material: Mastic Location: Appearance: black, fibrous, homogenous Layer: 3 of 4	Asbestos Present: <b>YES</b> Chrysotile - 10%	Other - 90%
Lab ID #: 72776 - 90c Cust. #: 85-1 Material: Vapor Barrier Location: Appearance: black, fibrous, homogenous Layer: 4 of 4	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 65% Other - 35%

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Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 91 Cust. #: 85-2 Material: Top Adhesive Location: Appearance: yellow, nonfibrous, homogenous Layer: 1 of 4	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 91a Cust. #: 85-2 Material: 9" Light Brown Floor Tile Location: Appearance: Layer: 2 of 4	Asbestos Present:  NOT ANALYZED	
Lab ID #: 72776 - 91b Cust. #: 85-2 Material: Mastic Location: Appearance: Layer: 3 of 4	Asbestos Present:  NOT ANALYZED	

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Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 91c Cust. #: 85-2 Material: Vapor Barrier Location: Appearance: black, fibrous, homogenous Layer: 4 of 4	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 65% Other - 35%
Lab ID #: 72776 - 92 Cust. #: 86-1 Material: 9" Light Tan Floor Tile Location: Appearance: beige, fibrous, homogenous Layer: 1 of 2	Asbestos Present: <b>YES</b> Chrysotile - 10%	Other - 90%
Lab ID #: 72776 - 92a Cust. #: 86-1 Material: Mastic Location: Appearance: black, nonfibrous, homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 93 Cust. #: 86-2 Material: Top Adhesive Location: Appearance: yellow, nonfibrous, homogenous Layer: 1 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 93a Cust. #: 86-2 Material: 9" Light Tan Floor Tile Location: Appearance: Layer: 2 of 3	Asbestos Present:  NOT ANALYZED	
Lab ID #: 72776 - 93b Cust. #: 86-2 Material: Mastic Location: Appearance: black, fibrous, homogenous Layer: 3 of 3	Asbestos Present: <b>YES</b> Chrysotile - 10%	Other - 90%

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Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 94 Cust. #: 86-3 Material: Top Adhesive Location: Appearance: yellow, nonfibrous, homogenous Layer: 1 of 4	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 94a Cust. #: 86-3 Material: 9" Light Tan Floor Tile Location: Appearance: Layer: 2 of 4	Asbestos Present:  NOT ANALYZED	
Lab ID #: 72776 - 94b Cust. #: 86-3 Material: Mastic Location: Appearance: Layer: 3 of 4	Asbestos Present:  NOT ANALYZED	

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Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 94c Cust. #: 86-3 Material: Vapor Barrier Location: Appearance: black, fibrous, homogenous Layer: 4 of 4	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 65% Other - 35%
Lab ID #: 72776 - 95 Cust. #: 87-1 Material: Black Paper w/ Assoc. Materials Location: Pool, Perimeter w/In Walling Appearance: black, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 72776 - 96 Cust. #: 87-2 Material: Black Paper w/ Assoc. Materials Location: Pool, Perimeter w/In Walling Appearance: black, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%

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NVLAP Lab Code 102118-0

# Certificate of Laboratory Analysis

## Test Method, Polarized Light Microscopy (PLM)

Project: 111 North Madison Ave, Bay City, MI  
Project #: 11146s2

**Report To:**

Mr. Heath Bobick  
AKT Peerless  
214 Janes Ave.  
Saginaw, MI 48607

ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 97 Cust. #: 87-3 Material: Black Paper w/ Assoc. Materials Location: Pool, Perimeter w/In Walling Appearance: black, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 72776 - 98 Cust. #: 88-1 Material: Brown Paper w/In Glazed Walling Location: Pool Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 72776 - 99 Cust. #: 88-2 Material: Brown Paper w/In Glazed Walling Location: Pool Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%

For Layered Samples, each component will be analyzed and reported separately.

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Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 100 Cust. #: 88-3 Material: Brown Paper w/In Glazed Walling Location: Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 72776 - 101 Cust. #: 89-1 Material: Basement Textured Ceiling Materials Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>YES</b> Chrysotile - 10%	Other - 90%
Lab ID #: 72776 - 102 Cust. #: 89-2 Material: Basement Textured Ceiling Materials Location: Appearance: Layer: of	Asbestos Present:  NOT ANALYZED	

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Date Analyzed: 11/08/17  
Date Reported: 11/08/17

**Sample Information****Asbestos Type/Percent****Non-Asbestos**

Lab ID #: 72776 - 103

Cust. #: 89-3

Material: Basement Textured Ceiling Materials

Location:

Appearance:

Layer: of

Asbestos Present:

NOT ANALYZED

Lab ID #: 72776 - 104

Cust. #: 89-4

Material: Basement Textured Ceiling Materials

Location:

Appearance:

Layer: of

Asbestos Present:

NOT ANALYZED

Lab ID #: 72776 - 105

Cust. #: 89-5

Material: Basement Textured Ceiling Materials

Location:

Appearance:

Layer: of

Asbestos Present:

NOT ANALYZED

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Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 106 Cust. #: 90-1 Material: White Fire Block Location: Appearance: white, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 10% Other - 90%
Lab ID #: 72776 - 107 Cust. #: 90-2 Material: White Fire Block Location: Appearance: white, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 10% Other - 90%
Lab ID #: 72776 - 108 Cust. #: 90-3 Material: White Fire Block Location: Appearance: white, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 10% Other - 90%

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Date Collected: 10/30/17

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Date Analyzed: 11/08/17

Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 109 Cust. #: 91-1 Material: Pipe/HVAC Pipe Opening Puddy Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 5% Other - 95%
Lab ID #: 72776 - 110 Cust. #: 91-2 Material: Pipe/HVAC Pipe Opening Puddy Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 5% Other - 95%
Lab ID #: 72776 - 111 Cust. #: 92-1 Material: Preformed Tan Pipe Casing/Covering Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 10% Other - 90%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 112 Cust. #: 92-2 Material: Preformed Tan Pipe Casing/Covering Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 10% Other - 90%
Lab ID #: 72776 - 113 Cust. #: 93-1 Material: Wall/Ceiling Concrete Location: Appearance: grey, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> Chrysotile - Trace  POINT COUNT RESULT	Other - 100%
Lab ID #: 72776 - 114 Cust. #: 93-2 Material: Wall/Ceiling Concrete Location: Appearance: grey, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> Chrysotile - Trace  POINT COUNT RESULT	Other - 100%

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Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 115 Cust. #: 93-3 Material: Wall/Ceiling Concrete Location: Appearance: grey, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> Chrysotile - 0.5%  POINT COUNT RESULT	Other - 99.5%
Lab ID #: 72776 - 116 Cust. #: 93-4 Material: Wall/Ceiling Concrete Location: Appearance: grey, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> Chrysotile - 0.25%  POINT COUNT RESULT	Other - 99.75%
Lab ID #: 72776 - 117 Cust. #: 93-5 Material: Wall/Ceiling Concrete Location: Appearance: grey, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> Chrysotile - Trace <1%  POINT COUNT RESULT	Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 118 Cust. #: 93-6 Material: Wall/Ceiling Concrete Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 119 Cust. #: 93-7 Material: Wall/Ceiling Concrete Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 120 Cust. #: 94-1 Material: Cork Flooring Material/Tar Location: Under 2nd Floor Wood Flooring Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: <b>YES</b> Chrysotile - 1.5%  POINT COUNT RESULT	Other - 98.5%

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Date Analyzed: 11/08/17

Date Reported: 11/08/17

**Sample Information****Asbestos Type/Percent****Non-Asbestos**

Lab ID #: 72776 - 121

Cust. #: 94-2

Material: Cork Flooring Material/Tar

Location: Under 2nd Floor Wood Flooring

Appearance:

Layer: of

Asbestos Present:

NOT ANALYZED

Lab ID #: 72776 - 122

Cust. #: 94-3

Material: Cork Flooring Material/Tar

Location: Under 2nd Floor Wood Flooring

Appearance:

Layer: of

Asbestos Present:

NOT ANALYZED

Lab ID #: 72776 - 123

Cust. #: 95-1

Material: Boiler Cap Cover

Location:

Appearance: grey, fibrous, nonhomogenous

Layer: 1 of 1

Asbestos Present: **NO**

No Asbestos Observed

Mineral Wool - 25%

Fiberglass - 70%

Other - 5%

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Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 124 Cust. #: 95-2 Material: Boiler Cap Cover Location: Appearance: grey, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Mineral Wool - 25% Fiberglass - 70% Other - 5%
Lab ID #: 72776 - 125 Cust. #: 96-1 Material: Boiler Jacket Material Location: Appearance: white, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Mineral Wool - 60% Fiberglass - 30% Other - 10%
Lab ID #: 72776 - 126 Cust. #: 96-2 Material: Boiler Jacket Material Location: Appearance: white, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Mineral Wool - 60% Fiberglass - 30% Other - 10%

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Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 127 Cust. #: 97-1 Material: Boiler Gaskets Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 95% Other - 5%
Lab ID #: 72776 - 128 Cust. #: 97-2 Material: Boiler Gaskets Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 95% Other - 5%
Lab ID #: 72776 - 129 Cust. #: 98-1 Material: Foundation Tar, Black w/ Skim Coat Location: Appearance: black, nonfibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 130 Cust. #: 98-2 Material: Foundation Tar, Black w/ Skim Coat Location: Appearance: black,nonfibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 131 Cust. #: 98-3 Material: Foundation Tar, Black w/ Skim Coat Location: Appearance: black,nonfibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 132 Cust. #: 99-1 Material: Int. Building Caulk Location: Window Frames to Building Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>YES</b> Chrysotile - 5%	Other - 95%

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Date Reported: 11/08/17

**Sample Information****Asbestos Type/Percent****Non-Asbestos**

Lab ID #: 72776 - 133  
Cust. #: 99-2  
Material: Int. Building Caulk  
Location: Window Frames to Building  
Appearance:  
Layer: of

Asbestos Present:  
  
NOT ANALYZED

Lab ID #: 72776 - 134  
Cust. #: 99-3  
Material: Int. Building Caulk  
Location: Window Frames to Building  
Appearance:  
Layer: of

Asbestos Present:  
  
NOT ANALYZED

Lab ID #: 72776 - 135  
Cust. #: 100-1  
Material: Ext. Building Caulk/Metal Material  
Location: Granite Panels, East Side  
Appearance: silver, nonfibrous, homogenous  
Layer: 1 of 1

Asbestos Present: **NO**  
No Asbestos Observed

Other - 100%

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Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 136 Cust. #: 100-2 Material: Ext. Building Caulk Location: Granite Panels, East Side Appearance: silver, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 137 Cust. #: 101-1 Material: Light Switch Panel Mounting, Black Mat. Location: Appearance: black, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 72776 - 138 Cust. #: 101-2 Material: Light Switch Panel Mounting, Black Mat. Location: Appearance: black, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 139 Cust. #: 102-1 Material: Ext. HVAC Vent Caulking Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>YES</b> Chrysotile - 10%	Other - 90%
Lab ID #: 72776 - 140 Cust. #: 102-2 Material: Ext. HVAC Vent Caulking Location: Appearance: Layer: of	Asbestos Present:  NOT ANALYZED	
Lab ID #: 72776 - 141 Cust. #: 103-1 Material: Textured Ceiling Material Location: Secondary Ceiling 1st Floor Appearance: white, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Vermiculite - 2% Other - 98%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate may not be used by the customer to claim product endorsement by NVLAP or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



NVLAP Lab Code 102118-0

# Certificate of Laboratory Analysis

## Test Method, Polarized Light Microscopy (PLM)

Project: 111 North Madison Ave, Bay City, MI  
Project #: 11146s2

**Report To:**

Mr. Heath Bobick  
AKT Peerless  
214 Janes Ave.  
Saginaw, MI 48607

ARI Report # 17-72776  
Date Collected: 10/30/17  
Date Received: 11/02/17  
Date Analyzed: 11/08/17  
Date Reported: 11/08/17

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 72776 - 142 Cust. #: 103-2 Material: Textured Ceiling Material Location: Secondary Ceiling 1st Floor Appearance: white, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Vermiculite - 2% Other - 98%
Lab ID #: 72776 - 143 Cust. #: 103-3 Material: Textured Ceiling Material Location: Secondary Ceiling 1st Floor Appearance: white, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Vermiculite - 2% Other - 98%
Lab ID #: 72776 - 144 Cust. #: 104-1 Material: Glazed Block Mortar Location: Appearance: grey, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

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NVLAP Lab Code 102118-0

# Certificate of Laboratory Analysis

## Test Method, Polarized Light Microscopy (PLM)

Project: 111 North Madison Ave, Bay City, MI  
Project #: 11146s2

**Report To:**

Mr. Heath Bobick  
AKT Peerless  
214 Janes Ave.  
Saginaw, MI 48607

ARI Report # 17-72776

Date Collected: 10/30/17

Date Received: 11/02/17

Date Analyzed: 11/08/17

Date Reported: 11/08/17

**Sample Information****Asbestos Type/Percent****Non-Asbestos**

Lab ID #: 72776 - 145

Cust. #: 104-2

Material: Glazed Block Mortar

Location:

Appearance: grey, nonfibrous, homogenous

Layer: 1 of 1

Asbestos Present: **NO**

No Asbestos Observed

Other - 100%

Lab ID #: 72776 - 146

Cust. #: 104-3

Material: Glazed Block Mortar

Location:

Appearance: grey, nonfibrous, homogenous

Layer: 1 of 1

Asbestos Present: **NO**

No Asbestos Observed

Other - 100%

Lab ID #:

Cust. #:

Material:

Location:

Appearance:

Layer: of

Asbestos Present:

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

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NVLAP Lab Code 102118-0

72776

## APEX Research, Inc.

54 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991.

Web Site: <http://apexresearch-inc.com>. Email: [Robert.Letarte@apexresearchlab.com](mailto:Robert.Letarte@apexresearchlab.com)Customer Name: AKT Peerless

Address: 214 Janes Avenue

City, St., Zip: Saginaw, MI 48607

Phone: 989-754-9896 Fax: 989-754-3804

Date of Survey: 10-30-2017

Project: 111 North Madison Ave, Bay City, MI

Project #: 11146s2

Contact Person: HEATH BOBICK

Email: [BOBICKH@aktpeerless.com](mailto:BOBICKH@aktpeerless.com)

Lab Use Only

Log-In: \_\_\_\_\_

Report: \_\_\_\_\_

Fax: \_\_\_\_\_

Verbal: \_\_\_\_\_

Email: \_\_\_\_\_

## Turn Around Times:

\*\*\*Terms and conditions on the other side.

5 Days

TTP YES

(Test Till Positive)

Asbestos:

Bulk X

Wipe \_\_\_\_\_ PCM \_\_\_\_\_

Lead:

Paint \_\_\_\_\_

Wipe \_\_\_\_\_

Lab ID	Customer ID #	Material/Location	Results
1	45-1	Black Window Sills (Some Painted) w/Associated Caulks and Mortar	
2	45-2	Black Window Sills (Some Painted) w/Associated Caulks and Mortar	
3	46-1	Black Adhesive Pods (Bulletin Boards, Chalk Boards)	
4	46-2	Black Adhesive Pods (Bulletin Boards, Chalk Boards)	
5	46-3	Black Adhesive Pods (Bulletin Boards, Chalk Boards)	
6	47-1	Suspect Building Caulk (Sandstone Panels)	
7	47-2	Suspect Building Caulk (Sandstone Panels)	
8	48-1	6" Reddish Ceramic Floor Tile w/Associated Mortar	
9	48-2	6" Reddish Ceramic Floor Tile w/Associated Mortar	
10	49-1	Interior/Exterior Building Caulk - Tacky/Thin Bead (Door Frames to Structure)	
11	49-2	Interior/Exterior Building Caulk - Tacky/Thin Bead (Door Frames to Structure)	
12	50-1	Drywall Adhesives - Tan Color	
13	50-2	Drywall Adhesives - Tan Color	
14	51-1	12" Shite Grid Pattern Stick Down	
15	52-1	Door Trim Adhesives - Tan	
16	52-2	Door Trim Adhesives - Tan	
17	52-3	Door Trim Adhesives - Tan	
18	53-1	Sandstone Type Wall Panels	
19	53-2	Sandstone Type Wall Panels	
20	54-1	Stud Adhesives - Black	
21	55-1	Suspect Transite - Chalk Board	
22	55-2	Suspect Transite - Chalk Board	
23	56-1	Interior/Exterior Building Caulk - Hard/Thin Bead (Door Frames to Building)	
24	56-2	Interior/Exterior Building Caulk - Hard/Thin Bead (Door Frames to Building)	
25	56-3	Interior/Exterior Building Caulk - Hard/Thin Bead (Door Frames to Building)	
26	57-1	Bulletin Board - Fibrous	
27	57-2	Bulletin Board - Fibrous	

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Revision Date: June/2011

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## APEX Research, Inc.

11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991.  
 Web Site: <http://apexresearch-inc.com>. Email: [Robert.Letarte@apexresearchlab.com](mailto:Robert.Letarte@apexresearchlab.com)

Customer Name: AKT Peerless

Date of Survey: 10-30-2017

Address: 214 Janes Avenue

Project: 111 North Madison Ave, Bay City, MI

City, St., Zip: Saginaw, MI 48607

Project #: 11146s2

Phone: 989-754-9896 Fax: 989-754-3804

Contact Person: HEATH BOBICK

Email: [BOBICKH@aktpeerless.com](mailto:BOBICKH@aktpeerless.com)

Lab Use Only

Log-In: \_\_\_\_\_

Report: \_\_\_\_\_

Fax: \_\_\_\_\_

Verbal: \_\_\_\_\_

Email: \_\_\_\_\_

## Turn Around Times:

\*\*\*Terms and conditions on the other side.

5 Days

TTP YES

(Test Till Positive)

Asbestos:

Bulk X

Wipe \_\_\_\_\_ PCM \_\_\_\_\_

Lead:

Paint \_\_\_\_\_

Wipe \_\_\_\_\_

Lab ID	Customer ID #	Material/Location	Results
28	58-1	Vent Hood (ASSUMED - NOT SAMPLED)	
29	59-1	Cloth Wrap - Above Ceiling(s)	
30	59-2	Cloth Wrap - Above Ceiling(s)	
31	59-3	Cloth Wrap - Above Ceiling(s)	
32	60-1	Counter Top Adhesives	
33	60-2	Counter Top Adhesives	
34	61-1	Former Roof Line Material - Black/Tar Like	
35	61-2	Former Roof Line Material - Black/Tar Like	
36	62-1	Floor Barrier Paper - Black w/Tar Like Material (Under Wood Floors)	
37	62-2	Floor Barrier Paper - Black w/Tar Like Material (Under Wood Floors)	
38	62-3	Floor Barrier Paper - Black w/Tar Like Material (Under Wood Floors)	
39	63-1	Base Cove - Black w/Associated Adhesives	
40	63-2	Base Cove - Black w/Associated Adhesives	
41	64-1	Base Cove - Grey w/Associated Adhesives	
42	64-2	Base Cove - Grey w/Associated Adhesives	
43	65-1	Base Cove Debris Pile	
44	65-2	Base Cove Debris Pile	
45	66-1	Sink Undercoating - Lt Grey/Brown	
46	66-2	Sink Undercoating - Lt Grey/Brown	
47	67-1	Paneling Adhesives - Black	
48	67-2	Paneling Adhesives - Black	
49	68-1	Wall Adhesives - Tan	
50	68-2	Wall Adhesives - Tan	
51	69-1	Shed Roofing Materials	
52	69-2	Shed Roofing Materials	
53	70-1	Ceiling Drain Material - Brown/Fibrous	
54	70-2	Ceiling Drain Material - Brown/Fibrous	

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Revision Date: June/2011

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Date: \_\_\_\_\_

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Web Site: <http://apexresearch-inc.com>. Email: [Robert.Letarte@apexresearchlab.com](mailto:Robert.Letarte@apexresearchlab.com)Customer Name: AKT Peerless

Date of Survey: 10-30-2017

Address: 214 Janes Avenue

Project: 111 North Madison Ave, Bay City, MI

City, St., Zip: Saginaw, MI 48607

Project #: 11146s2

Phone: 989-754-9896 Fax: 989-754-3804

Contact Person: HEATH BOBICK

Email: [BOBICKH@aktpeerless.com](mailto:BOBICKH@aktpeerless.com)

Lab Use Only

Log-In: \_\_\_\_\_

Report: \_\_\_\_\_

Fax: \_\_\_\_\_

Verbal: \_\_\_\_\_

Email: \_\_\_\_\_

## Turn Around Times:

\*\*\*Terms and conditions on the other side.

5 Days

TTP YES

(Test Till Positive)

Asbestos:

Bulk X

Wipe \_\_\_\_\_ PCM \_\_\_\_\_

Lead:

Paint \_\_\_\_\_

Wipe \_\_\_\_\_

Lab ID	Customer ID #	Material/Location	Results
55	71-1	Paper Type Ceiling Material - White	
56	71-2	Paper Type Ceiling Material - White	
57	72-1	Pool - Concrete Foundation	
58	72-2	Pool - Concrete Foundation	
59	72-3	Pool - Concrete Foundation	
60	72-4	Pool - Concrete Foundation	
61	72-5	Pool - Concrete Foundation	
62	73-1	Pool - Floor Patching/White	
63	73-2	Pool - Floor Patching/White	
64	74-1	<b>Pool - Ceiling Panels and Associated Materials (Not Sampled - Assumed)</b>	
65	75-1	Pool - Misc. Ceramic Type Tiles (Various Sizes) and Associated Mortar	
66	75-2	Pool - Misc. Ceramic Type Tiles (Various Sizes) and Associated Mortar	
67	75-3	Pool - Misc. Ceramic Type Tiles (Various Sizes) and Associated Mortar	
68	76-1	Ext Building Caulk - Thick White/Gray Beads Window Frame to Building	
69	76-2	Ext Building Caulk - Thick White/Gray Beads Window Frame to Building	
70	76-3	Ext Building Caulk - Thick White/Gray Beads Window Frame to Building	
71	77-1	Ext Building Caulk - Medium White/Grey Beads Various Areas (HVAC/Frames/Cracks/Seams/Corners/Windows)	
72	77-2	Ext Building Caulk - Medium White/Grey Beads Various Areas (HVAC/Frames/Cracks/Seams/Corners/Windows)	
73	78-1	Boiler Room - Red Type Gaskets	
74	78-2	Boiler Room - Red Type Gaskets	
75	79-1	Boiler Room - Black Pipe Coating/Spray On	
76	79-2	Boiler Room - Black Pipe Coating/Spray On	
77	80-1	Window Glazing - Metal to Glass (Wood Covered Sections 1st Floor)	
78	80-2	Window Glazing - Metal to Glass (Wood Covered Sections 1st Floor)	
79	81-1	Walling Material - Cinder Blocks w/Reflective Flecks	
80	81-2	Walling Material - Cinder Blocks w/Reflective Flecks	
81	81-3	Walling Material - Cinder Blocks w/Reflective Flecks	
82	81-4	Walling Material - Cinder Blocks w/Reflective Flecks	
83	81-5	Walling Material - Cinder Blocks w/Reflective Flecks	

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Contact Person: HEATH BOBICK

Email: [BOBICKH@aktpeerless.com](mailto:BOBICKH@aktpeerless.com)

Lab Use Only

Log-In: \_\_\_\_\_

Report: \_\_\_\_\_

Fax: \_\_\_\_\_

Verbal: \_\_\_\_\_

Email: \_\_\_\_\_

## Turn Around Times:

\*\*\*Terms and conditions on the other side.

5 Days

TTP YES

(Test Till Positive)

Asbestos:

Bulk X

Wipe \_\_\_\_\_ PCM \_\_\_\_\_

Lead:

Paint \_\_\_\_\_

Wipe \_\_\_\_\_

Lab ID	Customer ID #	Material/Location	Results
84	82-1	Built In Radiant Heat - Heat Shielding Brown Fiberboard w/White Layer	
85	82-2	Built In Radiant Heat - Heat Shielding Brown Fiberboard w/White Layer	
86	82-3	Built In Radiant Heat - Heat Shielding Brown Fiberboard w/White Layer	
87	83-1	Counter Top Trip Board(s) - Brown Adhesives	
88	83-2	Counter Top Trip Board(s) - Brown Adhesives	
89	84-1	Suspect Transite Piping - Above 1st Floor Ceiling (Not Sampled - Assumed)	
90	85-1	9" Light Brown Floor Tile w/Associated Mastic/Paper	
91	85-2	9" Light Brown Floor Tile w/Associated Mastic/Paper	
92	86-1	9" Light Tan Floor Tile w/Associated Mastic/Paper	
93	86-2	9" Light Tan Floor Tile w/Associated Mastic/Paper	
94	86-3	9" Light Tan Floor Tile w/Associated Mastic/Paper	
95	87-1	Pool - Black Paper w/Associated Materials (Perimeter w/In Walling)	
96	87-2	Pool - Black Paper w/Associated Materials (Perimeter w/In Walling)	
97	87-3	Pool - Black Paper w/Associated Materials (Perimeter w/In Walling)	
98	88-1	Pool - Brown Paper w/In Glazed Walling	
99	88-2	Pool - Brown Paper w/In Glazed Walling	
100	88-3	Pool - Brown Paper w/In Glazed Walling	
101	89-1	Basement Textured Ceiling Materials	
102	89-2	Basement Textured Ceiling Materials	
103	89-3	Basement Textured Ceiling Materials	
104	89-4	Basement Textured Ceiling Materials	
105	89-5	Basement Textured Ceiling Materials	
106	90-1	White Fire Block	
107	90-2	White Fire Block	
108	90-3	White Fire Block	
109	91-1	Pipe/HVAC Pipe Opening Puddy	
110	91-2	Pipe/HVAC Pipe Opening Puddy	

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Web Site: <http://apexresearch-inc.com>. Email: [Robert.Letarte@apexresearchlab.com](mailto:Robert.Letarte@apexresearchlab.com)



Customer Name: AKT Peerless

Date of Survey: 10-30-2017

Address: 214 Janes Avenue

Project: 111 North Madison Ave, Bay City, MI

City, St., Zip: Saginaw, MI 48607

Project #: 11146s2

Phone: 989-754-9896 Fax: 989-754-3804

Contact Person: HEATH BOBICK

Email: [BOBICKH@aktpeerless.com](mailto:BOBICKH@aktpeerless.com)

Lab Use Only

Log-In: \_\_\_\_\_

Report: \_\_\_\_\_

Fax: \_\_\_\_\_

Verbal: \_\_\_\_\_

Email: \_\_\_\_\_

## Turn Around Times:

\*\*\*Terms and conditions on the other side.

5 Days

TTP YES

(Test Till Positive)

Asbestos:

Bulk X

Wipe \_\_\_\_\_ PCM \_\_\_\_\_

Lead:

Paint \_\_\_\_\_

Wipe \_\_\_\_\_

Lab ID	Customer ID #	Material/Location	Results
111	92-1	Preformed Tan Pipe Casing/Covering	
112	92-2	Preformed Tan Pipe Casing/Covering	
113	93-1	Wall/Ceiling Concrete	
114	93-2	Wall/Ceiling Concrete	
115	93-3	Wall/Ceiling Concrete	
116	93-4	Wall/Ceiling Concrete	
117	93-5	Wall/Ceiling Concrete	
118	93-6	Wall/Ceiling Concrete	
119	93-7	Wall/Ceiling Concrete	
120	94-1	Cork Flooring Material (Under 2nd Floor Wood Flooring)	
121	94-2	Cork Flooring Material (Under 2nd Floor Wood Flooring)	
122	94-3	Cork Flooring Material (Under 2nd Floor Wood Flooring)	
123	95-1	Boiler Cap Cover	
124	95-2	Boiler Cap Cover	
125	96-1	Boiler Jacket Material	
126	96-2	Boiler Jacket Material	
127	97-1	Boiler Gaskets	
128	97-2	Boiler Gaskets	
129	98-1	Foundation Tar -Black w/Skim Coat Material	
130	98-2	Foundation Tar -Black w/Skim Coat Material	
131	98-3	Foundation Tar -Black w/Skim Coat Material	
132	99-1	Int Building Caulk - Window Frames to Building	
133	99-2	Int Building Caulk - Window Frames to Building	
134	99-3	Int Building Caulk - Window Frames to Building	
135	100-1	Ext Building Caulk - Granite Panels (East Side)	
136	100-2	Ext Building Caulk - Granite Panels (East Side)	
137	101-1	Light Switch Panel Mounting - Black Material	
138	101-2	Light Switch Panel Mounting - Black Material	
139	102-1	Ext HVAC Vent Caulking	
140	102-2	Ext HVAC Vent Caulking	
141	103-1	Secondary Ceiling 1st Floor - Textured Ceiling Material	
142	103-2	Secondary Ceiling 1st Floor - Textured Ceiling Material	
143	103-3	Secondary Ceiling 1st Floor - Textured Ceiling Material	
144	104-1	Glazed Block Mortar	
145	104-2	Glazed Block Mortar	
146	104-3	Glazed Block Mortar	

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Date: NOV 02 2017

APEX RESEARCH

## PRE-DEMOLITION ASBESTOS/HAZARDOUS MATERIALS SURVEY RESULTS

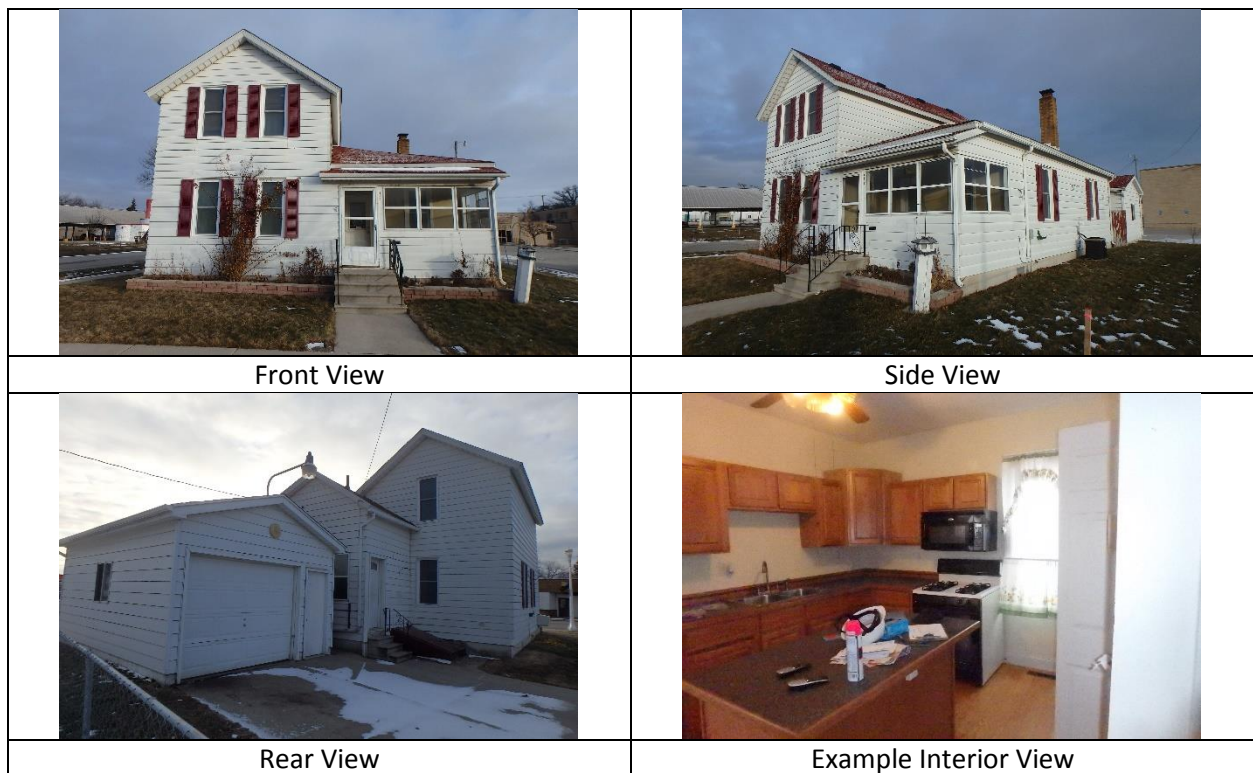
Report Date: February 23, 2018

Client: Columbus Development, LLC  
315 14th Street  
Bay City, Michigan 48708

Subject: Results of Pre-Demolition Asbestos and Hazardous Materials Survey  
AKT Peerless Project No.: 11146s2-2-194

Location: 501 Columbus Avenue  
Bay City, Michigan

AKT Peerless Environmental (AKT Peerless) was retained by the Columbus Development, LLC (Client) to perform a Pre-Demolition Hazardous Materials Survey of the above referenced property. The purpose of the survey was to identify building materials containing asbestos and other obvious hazardous substances/items that require removal from the property and/or special handling procedures in advance of structure demolition. The inspection was performed on February 2, 2018. Photographs of the site are included below:



### **Scope of Work**

AKT Peerless scope of work was limited to:

- Perform a survey of the subject property to identify suspect asbestos containing materials. Suspect materials were sampled in accordance with the client requested sample protocols and submitted for laboratory analysis.
- Perform a surficial inspection to identify other obvious hazardous materials that will require special handling procedures or removal activities before conducting general building demolition activities.
- Prepare an inventory and report describing the survey results.

### **Limitations**

The information and opinions contained in this report are for the exclusive use of Columbus Development, LLC. AKT Peerless will not distribute this report without Clients' written consent or as required by law or by a Court order. Report contents must be reviewed and relied upon only in conjunction with the terms and conditions expressly agreed upon by the parties and as limited herein.

To maintain compliance with regulatory standards including the U.S. Environmental Protection Agency (USEPA) National Emission Standards for Hazardous Air Pollutants (NESHAP), suspect materials not accessible or sampled as part of the survey or discovered during the demolition are required to be assumed asbestos containing and handled appropriately in accordance with State and Federal Regulations.

Based on the scope of work requested, only limited destructive search techniques were used during the inspection to identify and quantify materials. Identification of hazardous materials was limited to visible and accessible observations.

**Quantities of identified asbestos containing and other hazardous materials, reported in this document are provided for reference only and should not be relied upon for abatement bidding purposes.** AKT Peerless strongly cautions against utilizing the reported material quantities without field verification. It is expected that contractors will utilize their own quantities when preparing bid pricing.

Limitations due to access, safety, confined spaces, and/or other property specifics included the following:

- The property is occupied with heating and lighting in most interior areas. AKT Peerless used portable lighting to improve general viewing conditions whereas necessary.
- Interior observations of enclosed areas (i.e. walls, ceilings, and/or flooring systems) were limited due to electricity and natural gas being in service.

### Asbestos Sampling Results

The following materials were observed and/or sampled at the site:

#### MATERIALS SUMMARY (Asbestos Containing Materials In Bold)

HA No.	Material Description	Location	Approximate Quantity	F/NF	Asbestos Content
1-1	Drywall and Joint Compound	Throughout	3,100 SF	F	NAD
2-1	White w/Blue Diamond Pattern Flooring	FS-10 2 <sup>nd</sup> Floor Bathroom	80 SF	NF	NAD
3-1	Textured Paint	Throughout	3,000 SF	F	NAD
4-1	White Square Pattern Flooring w/Layers	FS-4 1 <sup>st</sup> Floor Bedroom #1 FS-5 Kitchen	40 SF	NF	NAD
5-1	Black Paper Under Paneling	FS-1 Front Porch	210 SF	F	NAD
6-1	Yellow Flooring Under Wood Plank Flooring	FS-5 Kitchen	150 SF	NF	NAD
7-1	Insulbrick Exterior Siding	FS-14 Exterior	1,850 SF	F	NAD
<b>8-1</b>	<b>Suspect Transite Skirting*</b>	<b>FS-14 Exterior</b>	<b>350 SF</b>	<b>NF</b>	<b>20% CHR</b>
9-1	White Caulk Around Exterior Windows	FS-14 Exterior	20 SF	NF	NAD
10-1	Cellulose Insulation	Throughout	2 CY	F	NAD
11-1	Roofing Materials – House	FS-14 Exterior	950 SF	NF	NAD
12-1	Roofing Materials – Garage	FS-14 Exterior	400 SF	NF	NAD

**\*Remove all layers as asbestos containing.**

#### Table Notes:

F = Friable    NF = Non-friable    FS = Functional Space    NAD = No Asbestos Detected    CHR = Chrysotile  
 AMO = Amosite    SF = Square Feet    LF = Linear Feet    PC= Point Count    NE = Not Estimated  
 CRO= Crocidolite    ACT= Actinolite    T = Tile    M = Mastic    MF = Mud Fittings CF= Cubic Feet  
 ACM = Asbestos Containing Material (Greater than 1% Asbestos Content)    NS = Not Sampled  
 ASSUMED = Suspect material that was not sampled but was assumed asbestos-containing

Samples were collected by Michigan Department of Licensing and Regulatory Affairs (MDLARA) accredited Asbestos Inspector (Mark Breeden A44842). Functional Spaces (FS) represent the rooms and/or room equivalents present and are field-marked inside the structure. Laboratory results are included in Attachment 1.

Asbestos Recommendation:

1. Based on the findings of the Asbestos Survey and the anticipated demolition of the subject building, AKT Peerless recommends that all identified and safely accessible ACM be properly removed by a licensed contractor in accordance with applicable state and federal regulations.
2. Suspect materials discovered during the demolition are required to be assumed asbestos containing and handled appropriately in accordance with state and federal regulations unless determined through laboratory testing identifying them as non-asbestos containing.

**Hazardous Materials Inventory Results**

AKT Peerless conducted field identification of other potentially hazardous/regulated materials. The following materials were identified at the site:

**HAZARDOUS / REGULATED MATERIALS SUMMARY**

Material Description	Location	Number of Units	Approximate Quantity/ Comments
Thermostats	FS-3 Living Room #2	1	Possibly Contains Mercury
	FS-5 Kitchen	1	
Air Conditioner Unit	FS-14 Exterior	1	Possibly Contains CFCs
Smoke Detectors	FS-2 Living Room	1	Possible Contains Radiation
	FS-5 Kitchen	1	
	FS-9 2 <sup>nd</sup> Floor Bedroom	1	
CFL Bulb	FS-5 Kitchen	1	Possibly Contains Mercury
	FS-7 Back Entry	1	
HID Bulb	FS-14 Exterior	1	Possibly Contains Mercury
Outdoor Mercury Vapor Light and Fixture	FS-14 Exterior	1	Possibly Contains Mercury
Paint	FS-10 2 <sup>nd</sup> Floor Bathroom	4	1 Gallon or Less Containers, Various Amounts

Hazardous Materials Recommendation:

These materials and other items banned from landfill disposal identified during the demolition should be properly removed and disposed of in accordance with applicable regulations.



Submitted by:  
**AKT Peerless Environmental**  
214 Janes Avenue  
Saginaw, Michigan 48607  
(989) 754-9896

Report prepared by:



---

Heath Bobick  
**Environmental Consultant**  
MIOSHA CSHD Asbestos Inspector  
Accreditation Number: A43315

Report reviewed by:



---

Mark Breeden  
**Environmental Consultant**  
MIOSHA CSHD Asbestos Inspector  
Accreditation Number: A44842

Attachment 1: Asbestos Laboratory Results and Chain of Custody

## **ATTACHMENT 1**

### **Asbestos Laboratory Results and Chain of Custody**

# Certificate of Laboratory Analysis

## Test Method, Polarized Light Microscopy (PLM)

Project: 501 Columbus, Bay City, MI  
Project #: 11146s2-2-194

**Report To:**

Mr. Mark Breeden  
AKT Peerless  
214 Janes Ave.  
Saginaw, MI 48607

ARI Report # 18-75017

Date Collected: 02/02/18

Date Received: 02/16/18

Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 01 Cust. #: 1-1 Material: Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 15% Fiberglass - 5% Other - 80%
Lab ID #: 75017 - 02 Cust. #: 1-2 Material: Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 75017 - 02a Cust. #: 1-2 Material: Joint Compound Location: Appearance: white, nonfibrous, homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

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NVLAP Lab Code 102118-0

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## Test Method, Polarized Light Microscopy (PLM)

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Project #: 11146s2-2-194

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214 Janes Ave.  
Saginaw, MI 48607

ARI Report # 18-75017

Date Collected: 02/02/18

Date Received: 02/16/18

Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 03 Cust. #: 1-3 Material: Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 15% Fiberglass - 5% Other - 80%
Lab ID #: 75017 - 03a Cust. #: 1-3 Material: Joint Compound Location: Appearance: white, nonfibrous, homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 04 Cust. #: 1-4 Material: Texture Location: Appearance: white, nonfibrous, homogenous Layer: 1 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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ARI Report # 18-75017

Date Collected: 02/02/18

Date Received: 02/16/18

Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 04a Cust. #: 1-4 Material: Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 2 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 15% Fiberglass - 5% Other - 80%
Lab ID #: 75017 - 04b Cust. #: 1-4 Material: Tar Paper Location: Appearance: black, fibrous, homogenous Layer: 3 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 75017 - 05 Cust. #: 1-5 Material: Texture Location: Appearance: white, nonfibrous, homogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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ARI Report # 18-75017

Date Collected: 02/02/18

Date Received: 02/16/18

Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 05a Cust. #: 1-5 Material: Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 15% Fiberglass - 5% Other - 80%
Lab ID #: 75017 - 06 Cust. #: 2-1 Material: White w/ Blue Diamonds Flooring Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 10% Other - 90%
Lab ID #: 75017 - 07 Cust. #: 2-2 Material: White w/ Blue Diamonds Flooring Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 10% Other - 90%

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Project: 501 Columbus, Bay City, MI  
Project #: 11146s2-2-194

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Saginaw, MI 48607

ARI Report # 18-75017

Date Collected: 02/02/18

Date Received: 02/16/18

Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 08 Cust. #: 3-1 Material: Textured Paint Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 09 Cust. #: 3-2 Material: Textured Paint Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 10 Cust. #: 3-3 Material: Textured Paint Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Collected: 02/02/18

Date Received: 02/16/18

Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 11 Cust. #: 4-1 Material: White Square Pattern Flooring w/ Layers Location: Appearance: beige, fibrous, nonhomogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 20% Fiberglass - 10% Other - 70%
Lab ID #: 75017 - 11a Cust. #: 4-1 Material: Linoleum Location: Appearance: beige, fibrous, homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 5% Other - 95%
Lab ID #: 75017 - 12 Cust. #: 4-2 Material: White Square Pattern Flooring w/ Layers Location: Appearance: beige, fibrous, nonhomogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 20% Fiberglass - 10% Other - 70%

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Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 12a Cust. #: 4-2 Material: Linoleum Location: Appearance: beige, fibrous, homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 5% Other - 95%
Lab ID #: 75017 - 13 Cust. #: 5-1 Material: Black Paper Under Paneling Location: Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 75017 - 14 Cust. #: 5-2 Material: Black Paper Under Paneling Location: Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%

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ARI Report # 18-75017

Date Collected: 02/02/18

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Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 15 Cust. #: 6-1 Material: Yellow Flooring Location: Under Wood Plank Flooring Appearance: beige, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 16 Cust. #: 6-2 Material: Yellow Flooring Location: Under Wood Plank Flooring Appearance: beige, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 17 Cust. #: 7-1 Material: Insulbrick Exterior Siding Location: Appearance: black, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 65% Other - 35%

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NVLAP Lab Code 102118-0

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## Test Method, Polarized Light Microscopy (PLM)

Project: 501 Columbus, Bay City, MI  
Project #: 11146s2-2-194

**Report To:**

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AKT Peerless  
214 Janes Ave.  
Saginaw, MI 48607

ARI Report # 18-75017  
Date Collected: 02/02/18  
Date Received: 02/16/18  
Date Analyzed: 02/21/18  
Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 18 Cust. #: 7-2 Material: Insulbrick Exterior Siding Location: Appearance: black, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 65% Other - 35%
Lab ID #: 75017 - 19 Cust. #: 8-1 Material: Transite Exterior Siding Location: Appearance: grey, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>YES</b> Chrysotile - 20%	Other - 80%
Lab ID #: 75017 - 20 Cust. #: 8-2 Material: Transite Exterior Siding Location: Appearance: Layer: of	Asbestos Present:  NOT ANALYZED	

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Date Collected: 02/02/18

Date Received: 02/16/18

Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 21 Cust. #: 9-1 Material: White Caulk Location: Around Exterior Vinyl Windows Appearance: white, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 22 Cust. #: 9-2 Material: White Caulk Location: Around Exterior Vinyl Windows Appearance: white, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 23 Cust. #: 10-1 Material: Cellulose Insulation Location: Appearance: brown, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%

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Date Collected: 02/02/18

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Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 24 Cust. #: 10-2 Material: Cellulose Insulation Location: Appearance: brown, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 75017 - 25 Cust. #: 11-1 Material: Roofing Material/Shingle Location: House Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 30% Other - 70%
Lab ID #: 75017 - 26 Cust. #: 11-2 Material: Roofing Material/Shingle Location: House Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 30% Other - 70%

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Robert T. Letarte Jr., Laboratory Director

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Saginaw, MI 48607

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Date Collected: 02/02/18  
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Date Analyzed: 02/21/18  
Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 27 Cust. #: 12-1 Material: Roofing Material/Shingle Location: Garage Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 30% Other - 70%
Lab ID #: 75017 - 28 Cust. #: 12-2 Material: Roofing Material/Shingle Location: Garage Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 30% Other - 70%
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	

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NVLAP Lab Code 102118-0



APEX Research, Inc.

54 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991.

Web Site: <http://apexresearch-inc.com>. Email: [Robert.Letarte@apexresearchlab.com](mailto:Robert.Letarte@apexresearchlab.com)



Customer Name: AKT Peerless  
Address: 214 Janes Avenue  
City, St., Zip: Saginaw, MI 48607  
Phone: 989-754-9896 Fax: 989-754-3804

Date of Survey: February 2, 2018

Project: 501 Columbus, Bay City, MI

Project #: 11146s2-2-194

Contact Person: Mark Breeden

Email: [breedenm@aktpeerless.com](mailto:breedenm@aktpeerless.com)

Lab Use Only

Log-In:

Report: \_\_\_\_\_

Fax:

Verbal:

Email: \_\_\_\_\_

### Turn Around Times:

**\*\*\*Terms and conditions on the other side.**

### 3 Days

TTP YES

### Asbestos:

**Bulk**      **X**

Wipe	PCM
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	1
13	1
14	1
15	1
16	1
17	1
18	1
19	1
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84	1
85	1
86	1
87	1
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89	1
90	1
91	1
92	1
93	1
94	1
95	1
96	1
97	1
98	1
99	1
100	1

(Test Till Positive)

**Lead:**

## Paint

Wipe

[illegible]

Relinquished By:

Date: February 2, 2018 411pm

Revision Date: June/2011

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**APEX RESEARCH**



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October 12, 2023

Ms. Janet Michaluk  
Michigan Department of Environment, Great Lakes, and Energy (Lansing)  
525 West Allegan P.O. Box 30242  
Lansing, Michigan 48909-7742

**Re: Hazardous Materials Survey  
Of the 108 Adams Street Site - Former Restaurant Building, Canopy Structure  
(Pavilion), Warming Shed, and Storage Shed  
Identified as 108 Adams Street, Bay City, Michigan  
PM Project No. 01-14761-0-0002  
Contract Y23308, File #761/23289.SAR**

Dear Ms. Michaluk:

PM Environmental (PM), a Pinchin Company, was retained by Michigan Department of Environment, Great Lakes, and Energy (Lansing) to perform a Hazardous Materials Survey of the 108 Adams Street Site – Former Restaurant, Canopy Structure (Pavilion), Warming Shed, and Storage Shed identified as the above referenced address (i.e. the subject property). The purpose of the assessment was to identify asbestos containing materials (ACM), and lead and cadmium-containing paint, and hazardous materials prior to demolition activities.

The Hazardous Materials Survey Report for the above referenced property represents the product of PM's professional expertise and judgment in the environmental consulting industry, and it is reasonable for **MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (LANSING)** to rely on PM's report.

This report has been reviewed for its completeness and accuracy. Please feel free to contact our office at (800) 313-2966 to discuss this report.

Sincerely,  
**PM Environmental, a Pinchin Company**

Taylor LaParl  
Staff Consultant

Jon M. Balsamo  
National Manager



Environmental & Engineering Services Nationwide



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## HAZARDOUS MATERIALS SURVEY

### **108 Adams Street Site**

108 Adams Street – Former Restaurant Building, Canopy Structure (Pavilion), Warming Shed, and Storage Shed | Bay City, Michigan

PM Project Number 01-14761-0-0002

Contract Y23308, File #761/23289.SAR

*Prepared for:*

**Michigan Department of Environment, Great Lakes, and Energy  
(Lansing)**

525 West Allegan P.O. 30242

Lansing, Michigan 48909-7742

*Prepared by:*

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## **EXECUTIVE SUMMARY**

PM Environmental (PM), a Pinchin Company, has completed a Hazardous Materials Survey of the 108 Adams Street Site – Former Restaurant, Canopy Structure (Pavilion), Warming Shed, and Storage Shed identified as 108 Adams Street, Bay City, Michigan (hereinafter referred to as the subject property). This service was performed by PM under its 2023 Environmental Indefinite Scope Indefinite Delivery (ISID) contract (Contract #00939), Contract Number Y23308, File Number 761/23289.SAR.

This survey provides a summary of on-site building materials and equipment that were found to contain building components or features that are of environmental interest. In general, these items include asbestos containing materials (ACM), lead and cadmium-containing paint, chlorofluorocarbon (CFC) containing refrigerants, mercury-containing devices, polychlorinated biphenyl (PCB) containing ballasts, and low-level radioactive devices. The following findings are based on the building inspection, material sampling and laboratory analyses:

The results of PM's survey identified the following ACM:

- Mudded Fittings Associated with Straight Pipe Insulation (HA1) – 55 Each
- Straight Pipe Insulation (HA2) – 450 Linear Feet
- Boiler Insulation (HA3) – 130 Square Feet
- Boiler Door Insulation (HA4) – 5 Square Feet
- Flat Roofing Materials (HA15) – 2,000 Square Feet
- Black Exterior Building Caulk (HA26) – 20 Linear Feet

These materials will need to be removed by a licensed abatement contractor prior to demolition activities.

PM collected paint chip samples from accessible locations in the survey area. Based on analytical results from paint chip samples, measurable amounts of lead and cadmium were found in various paint colors throughout the building. Based on these findings, contractors involved with demolition activities should be made aware of the lead and cadmium concentrations in order to use safe work practices to avoid any exposure exceedances.

Hazardous materials identified consist of components or materials that include, but are not limited to, the following:

- CFC-containing refrigerants
- Compressed cylinders
- Electronics with cathode ray tubing
- Electronics with potential heavy metals
- Low-level radioactive devices
- Mercury-containing components
- PCB-containing components

These materials can be removed by the contractor as part of initial site demolition activities. The regulated materials and general maintenance products that have specific disposal requirements as specified on their respective safety datasheets (SDS) should be removed by a contractor

**Hazardous Materials Survey  
Of the 108 Adams Street Site – Former Restaurant, Canopy Structure (Pavilion),  
Warming Shed, and Storage Shed  
Identified as 108 Adams Street, Bay City, Michigan  
PM Project No. 01-14761-0-0002; October 12, 2023**

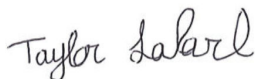
aware of local, State and Federal regulations governing removal, packaging, transportation, and disposal.

The summary presented above is general in nature and should not be considered apart from the entire text of the report, which contains the qualifications, considerations and subject property details mentioned herein. Details of findings and conclusions are elaborated upon in this survey report.

This report has been reviewed for its completeness and accuracy. Please feel free to contact our office at 800.313.2966 to discuss this report.

**REPORT PREPARED BY:**

PM Environmental, a Pinchin Company



Taylor LaParl  
Staff Consultant

**REPORT REVIEWED BY:**

PM Environmental, a Pinchin Company



Jon M. Balsamo  
National Manager

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## **1.0 INTRODUCTION**

PM Environmental (PM), a Pinchin Company, was retained by Michigan Department of Environment, Great Lakes, and Energy (Lansing), to perform a Hazardous Materials Survey of the 108 Adams Street Site – Former Restaurant, Canopy Structure (Pavilion), Warming Shed, and Storage Shed identified as 108 Adams Street, Bay City, Michigan (i.e. the subject property). The purpose of the survey was to identify asbestos containing materials (ACM), lead and cadmium-containing paint, and hazardous materials prior to demolition activities.

## **2.0 REGULATORY INFORMATION**

### **2.1 Asbestos Containing Materials**

ACM is defined by the Asbestos Hazard and Emergency Response Act (AHERA) as any material or product containing more than one percent asbestos. Materials containing more than one percent asbestos are subject to the requirements of the United States Environmental Protection Agency (U.S. EPA) Asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP). The Asbestos NESHAP requires that all ACM classified as Regulated Asbestos Containing Materials (RACM) be handled in the following manner dependent on its characteristics as summarized below.

- All friable RACM must be removed from a building or structure that is being demolished or renovated before any wrecking or dismantling is performed.
- ACM that is determined to be non-friable in nature must be classified as a Category I or Category II material. This classification then determines, based on handling procedures, whether the material must be removed prior to renovation or demolition and the means and methods to remove the ACM in accordance with the Asbestos NESHAP.
- Non-Friable Category I Materials that may become friable if subjected to sanding, grinding, cutting, or abrading during demolition or renovation must be removed.
- Category II Non-Friable Materials with a high probability of becoming crumbled, pulverized, or reduced to a powder during construction activities (i.e. including renovation and demolition) must be removed.

The Occupational Safety and Health Administration (OSHA) Construction Standard for Asbestos (29 CFR 1926.1101) identifies building or facility owner responsibilities pertaining to ACM. Specifically, the standard requires building and facility owners to determine the presence, location and quantity of ACM and to provide this information to prospective employers (i.e. contractors) applying or bidding for work, whose employees may be reasonably expected to work in areas within or adjacent to areas containing such materials.

### **2.2 Lead and Cadmium-Containing Paint**

Requirements regarding lead-containing paint are found in the OSHA Construction Standard for Lead (29 CFR 1926.62) and requirements regarding cadmium-containing paint are found in the OSHA Construction Standard for Cadmium (29 CFR 1926.1127). The lead and cadmium

standards state that employers are responsible in assuring that no workers are exposed to airborne lead concentrations greater than fifty micrograms per cubic meter of air ( $50 \mu\text{g}/\text{m}^3$ ) and airborne cadmium concentrations greater than five micrograms per cubic meter of air ( $5 \mu\text{g}/\text{m}^3$ ), both averaged over an 8-hour period.

Disposal of lead and/or cadmium-containing paint that has been generated by sanding, use of abrasive blasting, or otherwise stripped from structural materials is subject to hazardous waste disposal regulations of the Resource Conservation and Recovery Act (RCRA).

### **2.3 Universal and Hazardous Waste**

RCRA outlines the standards surrounding Universal Waste (40 CFR 273). According to the standards, materials handled as Universal Waste do not need to be shipped by a waste manifest or hazardous waste transporter. Universal Waste are not required to be managed in a way that prevents releases to the environment, though requirements are tailored to each specific type of Universal Waste and differ between small and large quantities. The standards include requirements regarding labeling, response to releases, and facilities which ultimately manage the Universal Waste. RCRA allows States to define which materials classify as Universal Waste

The State of Michigan defines the following as Universal Waste (R 299.9228):

- Antifreeze
- Batteries
- Consumer Electronics
- Electric Lamps
- Mercury-Containing Devices
- Pesticides
- Pharmaceuticals

Contractors may choose to handle these materials as Universal Waste in place of hazardous waste requirements. All other materials must be handled in accordance to their guidelines set by RCRA.

### **3.0 DESCRIPTION OF SUBJECT PROPERTY**

The subject property consists of a vacant former restaurant building, canopy structure (pavilion), warming shed and a storage shed. At the time of inspection, the storage shed had been demolished and removed from the site. Suspect interior building materials for asbestos consist of drywall ceilings and walls, various caulks, light heat shield, fiberglass reinforced wall panel adhesive, and interior boiler fire brick. Suspect exterior building materials for asbestos consist of various caulks and roofing shingles. Non-suspect building material for asbestos include wood, concrete, cinder block, loose fill fiberglass insulation, brick and mortar, glass, and metal.

### **4.0 LIMITATIONS AND EXCEPTIONS OF SURVEY**

Locating and identifying hazardous materials in buildings and structures is a difficult and time-consuming task. All buildings have hidden spaces that may not be immediately obvious to a surveyor who is not intimately familiar with the building and who has only a limited time in the



building.

Although PM uses trained and licensed inspectors in attempting to locate and identify materials potentially containing asbestos, PM cannot verify that all materials containing asbestos have been identified. Complicating this task is the fact that asbestos was used in many forms and in many types of materials in the construction of buildings. In some of these materials, asbestos is present, not as an intentional ingredient, but as a contaminant. It is possible that there are materials containing asbestos that were not found because they were not visible or accessible to the inspector or for various other reasons were not sampled. Similarly, this would apply to potential lead and cadmium-containing paint and other hazardous materials.

Quantities of identified ACM and hazardous materials that are reported in this survey are often used to generate cost projections for abatement projects. The survey is designed to aid the building owner, architect, construction manager, general contractors, and potential abatement contractors in locating hazardous or regulated building materials. No other representation, expressed or implied, is made.

During preparation of the Hazardous Materials Survey, the following limitations were encountered:

1. Due to the destructive nature of sampling, PM did not sample the following materials and are therefore classified as assumed ACM:
  - Tagged Metal Fire Door (Assumed ACM) (HA19)
  - Tagged Metal Fire Door Frame (Assumed ACM) (HA20)
2. The Storage Shed no longer remains at the site.

The site survey activities were conducted by PM on August 22, 2023 in general accordance with industry standards and procedures at the time of this project. The conclusions and recommendations are based on the applicable standards of our profession at the time this report was prepared. The field survey activities were completed by accredited and trained asbestos inspection professionals.

The analysis and recommendations submitted in this report are based in part on the data obtained from specific and discrete sampling locations. The nature and extent of variations between the sampling locations may not become evident until planned demolition procedures commence. If potential variations are identified during demolition activities, it may be necessary to conduct additional sampling. Further, it is possible that some materials were inaccessible. Such areas may include inaccessible wall cavities. If a newly identified suspect material is found, the material should be sampled prior to disturbance, and considered a non-ACM only after laboratory analysis has shown asbestos is not present in regulated quantities.

## **5.0 ASBESTOS CONTAINING MATERIALS SURVEY**

PM had previously completed a Pre-Demolition Asbestos Containing Materials Survey of the subject property on July 7, 2020. A copy of this report is attached as Appendix A. PM used analytical data collected during that survey to assist with identifying and sampling additional known/suspect ACM. The purpose of this survey was to identify the location, quantities, and

condition of ACM within the survey area. PM understands that information obtained from this survey will be used to assist in the proper removal and disposal of these materials before demolition activities. The following subsections describe the sampling plan and sample collection phases of the survey.

### **5.1 Building Walk Through and Inspection Activities**

PM performed a walk-through of the interior and exterior of the buildings using guidelines established by the EPA in the publication *Guidance for Controlling Asbestos-Containing Materials in Buildings*, Office of Pesticides and Toxic Substances, DOC No. 560/5-85-024 and 40 CFR Part 763, of AHERA. For the purposes of this inspection, suspect ACM were placed in three material categories: thermal systems insulation (TSI), surfacing materials (SM), and miscellaneous materials (MM). The locations within the buildings were inspected physically by functional space and Homogeneous Areas (HA)<sup>1</sup> to determine the presence of ACM. The inspection of the buildings included access to the requested survey areas.

The inspection activities were performed by Ms. Kathryn Cleary (State of Michigan Asbestos Inspector Accreditation No. A59151) and Ms. Taylor LaParl (State of Michigan Asbestos Inspector Accreditation No. A60830) of PM. Accessible locations within the survey area were physically inspected to determine the presence of ACM. Suspect materials in each functional space were categorized prior to the collection of bulk samples. During the inspection, the friable<sup>2</sup> or non-friable nature of the suspect ACM were determined and cataloged. A summary of the findings of the inspection is provided in Tables 1 through 4. Photographs of general site conditions or HA are included in Appendix B.

### **5.2 Bulk Sample Collection**

PM conducted bulk sampling of accessible friable and non-friable suspected ACM in general compliance with the requirements of AHERA for bulk sampling (40 CFR 763.86) and consistent with the scope of services outlined in PM's proposal. During the inspection, bulk samples of suspect ACM containing in some cases multiple layers of discrete materials were collected for analysis. All samples were assigned an identification number and chain of custody (COC) forms accompanied the samples to the laboratory.

### **5.3 Asbestos Laboratory Analytical Procedures and Methodologies**

Inspection personnel completed COC forms for all samples submitted to the laboratory. Following completion, the sampling personnel signed and dated the forms and submitted the samples to the laboratory. The COC forms with all signatures are provided with the final reports from the laboratory in Appendix C.

Laboratory analytical services using Polarized Light Microscopy (PLM) were performed by Eurofins J3 Resources, Inc. (J3) located at 6110 West 34<sup>th</sup> Street, Houston, Texas. J3 is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for Bulk

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<sup>1</sup> Homogeneous Area is defined as material that is uniform in texture and color, and appears identical in every other respect.

<sup>2</sup> Friable ACM as defined by the U.S. EPA, is any material that contains more than one percent asbestos and can be crumbled, pulverized, or reduced to powder by hand pressure.

Asbestos Fiber Analysis. Bulk samples of suspect ACM were analyzed by PLM Method 198.1 for the criteria set by the NESHAPs, 40 CFR Part 61. They were also analyzed using “positive-stop” methods in which once a positive analytical result was obtained for a material, analysis of the remaining samples from a given HA were suspended.

## **6.0 LEAD AND CADMIUM-CONTAINING PAINT SURVEY**

A Lead and Cadmium-Containing Paint survey was performed to establish lead and cadmium concentrations in painted surfaces as a general guidance tool for safe work practices during the planned demolition activities. The following subsections outline the approach, procedures and methods employed for the survey.

### **6.1 Lead and Cadmium-Containing Paint Inspection Procedures**

The initial step in identifying painted building surfaces in accessible areas consists of a walk-through inspection of the survey areas. The survey involved performing a variety of preliminary assessments to ascertain the quantity and condition of suspect lead and/or cadmium-containing painted surfaces. PM visually inspected accessible surfaces of the buildings to identify potential painted surfaces which could contain lead and/or cadmium and evaluated the condition of these surfaces. Based on these observations, the painted surfaces in the subject property were assessed to vary between intact and deteriorated condition with various painted surfaces exhibiting indications of cracking, chipping and peeling.

### **6.2 Lead and Cadmium-Containing Paint Sample Collection and Analytical Procedures**

PM collected paint chip samples of readily accessible areas of paint for laboratory analysis, to confirm lead and cadmium content for OSHA compliance. Paint chip samples were sent under COC to J3 for Lead and Cadmium Analysis using method OSHA ID 121. Analytical results of these samples are attached as Appendix D.

## **7.0 UNIVERSAL WASTE AND OTHER HAZARDOUS MATERIALS**

During the inspection, PM conducted a visual inspection of the buildings to identify accessible building items, mechanical systems, or products that may contain regulated and/or hazardous building materials.

For location purposes, PM categorized the identified Universal Waste, and other items of interest by functional space. The results of these observations are detailed in Table 5.

## **8.0 FINDINGS**

This section presents the findings of this assessment based on the results of the physical inspection, material sampling and laboratory analyses.

## **8.1 Asbestos Containing Materials**

An asbestos inspection of the buildings was performed to identify the location and condition of ACM. An inventory of these materials is provided in the attached tables. Based on the results of this assessment, the following findings concerning ACM were identified:

- A total of 11 additional different HAs were identified that were not included in PM's Report as suspect for asbestos content as part of this survey.
- A total of 19 samples were collected for laboratory analysis using sampling algorithms specified by U.S. EPA and OSHA regulations. Asbestos content was determined using PLM methods. Laboratory datasheets and COC documentation is provided in Appendix C.

The results of PM's survey identified the following ACM:

- Mudded Fittings Associated with Straight Pipe Insulation (HA1) – 55 Each
- Straight Pipe Insulation (HA2) – 450 Linear Feet
- Boiler Insulation (HA3) – 130 Square Feet
- Boiler Door Insulation (HA4) – 5 Square Feet
- Flat Roofing Materials (HA15) – 2,000 Square Feet
- Black Exterior Building Caulk (HA26) – 20 Linear Feet

The following suspect materials were identified by PM but were not sampled and therefore are considered assumed ACM:

- Tagged Metal Fire Door (Assumed ACM) (HA19) – 9 Doors
- Tagged Metal Fire Door Frame (Assumed ACM) (HA20) – 3 Frames

Tabular summaries of ACM described by HA, material description, quantities present, location, and condition are provided in Tables 2 through 4.

## **8.2 Lead and Cadmium-Containing Paint**

Based on analytical results from paint chip samples, measurable amounts of lead and cadmium were found in various paint colors on the following locations and building components:

### **Lead**

- PC-1 – Yellow Exterior Paint on Concrete
- PC-8 – Beige Interior Paint on Plaster
- PC-9 – Beige Interior Paint on Wood
- PC-10 – White Interior Paint on Plaster
- PC-11 – Blue Interior Paint on Plaster
- PC-14 – Dark Yellow Interior Paint on Plaster
- PC-16 – Grey Interior Paint on Brick
- PC-17 – Lavender Interior Paint on Plaster
- PC-18 – Black Interior Paint on Boiler
- PC-19 – Grey Interior Paint on Brick
- PC-20 – Red Exterior Paint on Brick

- PC-21 – White Exterior Paint on Brick
- PC-22 – Red Exterior Paint on Concrete

#### **Cadmium**

- PC-17 – Lavender Interior Paint on Plaster
- PC-20 – Red Exterior Paint on Brick

Construction work involving lead paint is regulated under the OSHA Construction Industry Standard for Lead (29 CFR 1926.62) and construction work involving cadmium paint is regulated under the OSHA Construction Industry Standard for Cadmium (26 CFR 1926.1127). These standards apply when painted surfaces have been identified to contain lead and cadmium in any detectable concentration.

### **8.3 Universal Waste**

During the completion of this assessment, the buildings was assessed for regulated materials. Based on the results of this assessment, the following findings were identified:

- Ballasts – potential PCB-containing materials
- Cleaning Supplies – potential chemicals of environmental interest
- Dishwasher – potential for CFC and PCB-containing materials
- Fire Extinguisher Systems – potential CFC-containing materials
- Fluorescent Bulb – potential mercury vapor
- High Intensity Discharge Lighting – potential sodium/mercury vapor
- Hydraulic Door Hinge – potential hydraulic oils
- Film Free Plus - potential chemicals of environmental interest
- Water Treatment Compound Liquid – potential chemicals of environmental interest
- Vinyl Tile Adhesive – potential chemicals of environmental interest
- Water Heater – potential heavy metals

An inventory of these items is provided in Table 5.

## **9.0 CONCLUSIONS AND RECOMMENDATIONS**

PM completed a Hazardous Materials Survey of the 108 Adams Street Site – Former Restaurant, Canopy Structure (Pavilion), Warming Shed, and Storage Shed identified as 108 Adams Street, Bay City, Michigan. The conclusions and recommendations that have been identified are based on the results of the building inspection, material sampling, and laboratory analyses. PM has identified the following conclusions and recommendations:

#### **ACM**

The results of the survey indicate that ACM were identified within the subject property, which will require removal by a licensed abatement contractor prior to demolition activities. A list of the identified ACM can be found in the Executive Summary and in the attached Tables.

PM notes that if additional suspect materials are identified during demolition, that these materials should be sampled to determine their characteristics (i.e. whether they must be treated as ACM or not) or assumed to be ACM and handled accordingly prior to their removal and disposal.

### **Lead and Cadmium**

Lead and cadmium-containing paint was identified in the survey areas. The paint condition throughout the survey areas ranged from intact to poor (peeling). The quantity of lead and cadmium found in the paint has no bearing on an employer's compliance requirement with the OSHA Construction Standards. This is because the standards require compliance with an occupational exposure to airborne lead concentrations and airborne cadmium concentrations, regardless of the quantity of lead and cadmium in the paint. Based on the results of the survey, PM recommends that air monitoring be performed during demolition to assess lead and cadmium exposure in worker breathing zones for initial assessment of lead exposure levels pursuant to 29 CFR 1926.62(d)(2) and cadmium exposure levels pursuant to 29 CFR 1926.1127(d)(2).

Workers must be provided adequate personal protective equipment while conducting work that may impact lead and/or cadmium-containing paint surfaces. Additionally, PM recommends engineering controls be implemented for demolition work on identified lead and/or cadmium-containing paint surfaces that may be cut with a torch, welded, sawed, or otherwise cut. This includes enclosures and high efficiency particulate air (HEPA) vacuums which may be utilized to limit potential exposure to lead and/or cadmium during selective demolition of lead and/or cadmium-containing paint building components.

Disposal of lead and/or cadmium-containing paint that has been generated by sanding, use of abrasive blasting, or otherwise stripped from structural materials is subject to hazardous waste disposal regulations of the Resource Conservation and Recovery Act (RCRA).

### **Universal Waste and Other Hazardous Materials**

Universal Waste and other identified potential hazardous materials as identified in Table 5 should be handled, removed, transported, and disposed of in accordance with applicable local, state, and federal requirements, and as described below.

- Lighting systems containing fluorescent bulbs and ballasts were identified throughout the subject property. The fluorescent bulbs are suspect for mercury content and should be handled as a Universal Waste by the remediation contractor. Lighting ballasts have potential for PCBs. High intensity bulb fixtures that contain sodium and/or mercury vapor light bulbs were identified on the exterior. These bulbs should also be handled as a Universal Waste by the remediation contractor.
- A water heater was identified in the subject property. This component is suspect for heavy metals and should be handled as a Universal Waste by the remediation contractor.
- CFC-containing equipment such as a fire extinguisher system were identified within the subject property. This unit should be removed by a trained and certified technician for proper disposal.

**Hazardous Materials Survey  
Of the 108 Adams Street Site – Former Restaurant, Canopy Structure (Pavilion),  
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Identified as 108 Adams Street, Bay City, Michigan  
PM Project No. 01-14761-0-0002; October 12, 2023**

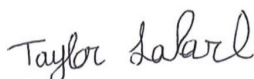
- Other various hazards that were identified include cleaning supplies, dishwasher, water treatment compound liquid, vinyl tile adhesive, film free plus and hydraulic door hinges. The materials should be removed by a trained and certified technician for recycling or proper disposal.

**PM's reporting of quantities of materials are to be interpreted as good faith estimates for contractors inspecting and bidding on project abatement and/or demolition activities; however, contractors should use their own estimates of material quantities as a basis for their project cost estimates.**

This report has been reviewed for its completeness and accuracy. Please feel free to contact our office at (800) 313-2966 to discuss this report.

**REPORT PREPARED BY:**

PM Environmental, a Pinchin Company



Taylor LaParl  
Staff Consultant

**REPORT REVIEWED BY:**

PM Environmental, a Pinchin Company



Jon M. Balsamo  
National Manager

# Tables



**Table 1**  
**Description of Functional Spaces**  
**108 Adams Street, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

Functional Space No.	Functional Space Description	Floor
1	Former Restaurant Building	First & Basement
2	Canopy Structure (Pavilion) - No Suspect ACM Identified	Exterior
3	Warming Shed	Interior/Exterior
4	Storage Shed - Demolished	-
5	Exterior of Former Restaurant Building	-

**Table 1 Notes and Acronyms:**

1. The term Functional Space (FS) is defined as one or more spatially distinct units or areas within a building. During the survey, the demarcation of these spaces is based on the judgement of the inspector(s), site plans, or other use features deemed appropriate at the time of the survey.

**Table 2**  
**Summary of Homogeneous Areas**  
**108 Adams Street, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

HA No.	Homogeneous Area Description	Asbestos Content
<b>1</b>	<b>Mudded Fittings Associated with Straight Pipe Insulation</b>	<b>50% Chrysotile</b>
<b>2</b>	<b>Straight Pipe Insulation</b>	<b>85% Chrysotile</b>
<b>3</b>	<b>Boiler Insulation</b>	<b>85% Chrysotile</b>
<b>4</b>	<b>Boiler Door Insulation</b>	<b>60% Chrysotile</b>
5	Wall and Ceiling Plaster	None Detected
6	Unfinished Drywall Panels	None Detected
7	2' x 4' Suspended Ceiling Tile with Long Gouges and Pinholes	None Detected
8	12" x 12" Tan Mottled Floor Tile and Mastic	None Detected
9	Brown Cove Base and Adhesive	None Detected
10	12" x 12" Grey Mottled Floor Tile and Mastic	None Detected
11	12" x 12" White with Red and Blue Specks Floor Tile and Mastic	None Detected
12	Wall Board Adhesive	None Detected
13	2' x 2' Ceiling Tile with Pinholes and Long Gouges	None Detected
14	Window Glazing	None Detected
<b>15</b>	<b>Flat Roofing Materials</b>	<b>10% Chrysotile</b>
16	Drywall Panels	None Detected
17	Roofing Shingles	None Detected
18	White Interior Building Caulk	None Detected
<b>19</b>	<b>Tagged Metal Fire Door (Assumed ACM)</b>	<b>Assumed ACM</b>
<b>20</b>	<b>Tagged Metal Fire Door Frame (Assumed ACM)</b>	<b>Assumed ACM</b>
21	Light Heat Shield	None Detected
22	Red Fire Stop Caulk	None Detected
23	Fiberglass Reinforced Wall Panel Adhesive	None Detected
24	Interior Boiler Fire Brick	None Detected
25	White Exterior Window Caulk	None Detected
<b>26</b>	<b>Black Exterior Building Caulk</b>	<b>5% Chrysotile</b>

**Table 2 Notes and Acronyms:**

1. Asbestos is a group of fibrous minerals that include: actinolite, amosite, anthophyllite, chrysotile, crocidolite, and tremolite.
2. Homogeneous Area (HA) is defined as an area of surfacing materials, thermal system insulation, or miscellaneous material that is uniform in color and texture.
3. HA listed in bold text were identified to contain asbestos by laboratory analysis or were assumed to contain asbestos based on the scope of work requirements.

**Table 3**  
**Summary of ACM and Material Characteristics**  
**108 Adams Street, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

HA No.	Homogeneous Area Description	Condition	Friable (Yes/No)	EPA Category	Estimated Quantity
1	Mudded Fittings Associated with Straight Pipe Insulation	Damaged	Yes	Friable	55 EA
2	Straight Pipe Insulation	Damaged	Yes	Friable	450 LF
3	Boiler Insulation	Damaged	Yes	Friable	130 SF
4	Boiler Door Insulation	Damaged	Yes	Friable	5 SF
15	Flat Roofing Materials	Damaged	No	Category I	2,000 SF
19	Tagged Metal Fire Door (Assumed ACM)	Good	No	Category II	9 EA
20	Tagged Metal Fire Door Frame (Assumed ACM)	Good	No	Category II	3 EA
26	Black Exterior Building Caulk	Good	No	Category II	20 LF

**Table 3 Notes and Acronyms:**

1. Homogeneous Area (HA) is defined as an area of surfacing materials, thermal system insulation, or miscellaneous material that is uniform in color and texture.
2. Friable asbestos-containing material (ACM): Material containing more than 1% asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
3. Nonfriable ACM: Category I or Category II ACM in good condition.
4. Category I nonfriable ACM: ACM packings, gaskets, resilient floor covering, asphalt roofing products containing more than 1% asbestos.
5. Category II nonfriable ACM: Any material, excluding Category I nonfriable ACM, containing more than 1% asbestos.
6. SF = Square Feet; LF = Linear Feet; EA = Each

**Table 4**  
**Summary of Homogeneous Areas by Functional Space**  
**108 Adams Street, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

HA No.	Homogeneous Area Description	Condition	Friable (Yes/No)	Estimated Quantity	ACM (Yes/No)	Comments
<b>FS - 1 Former Restaurant Building</b>						
1	Mudded Fittings Associated with Straight Pipe Insulation	Damaged	Yes	55 EA	Yes	Basement and Crawlspace, Bathrooms, Front Office, North and South Entry Vestibules and North Storage Room
2	Straight Pipe Insulation	Damaged	Yes	450 LF	Yes	Basement and Crawlspace, Bathrooms, Front Office, North and South Entry Vestibules and North Storage Room
3	Boiler Insulation	Damaged	Yes	130 SF	Yes	Basement Boiler - Outer Insulation Beneath Metal Shell (4' Wide x 5' Deep x 6.5' Tall)
4	Boiler Door Insulation	Damaged	Yes	5 SF	Yes	Basement Boiler - Interior Door (1 Door at 2' x 2')
5	Wall and Ceiling Plaster	Damaged	No	7,750 SF	No	Throughout Walls and Ceilings. Plaster Ceiling Above Suspended Ceiling Tiles and Behind Wall Paneling in North Storage Room. Walls Throughout Restaurant Seating Area Behind HA6. Throughout Walls and Ceiling of North and South Vestibules.
6	Unfinished Drywall Panels	Good	No	1,115 SF	No	Restaurant Seating Area Walls

**Table 4**  
**Summary of Homogeneous Areas by Functional Space**  
**108 Adams Street, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

HA No.	Homogeneous Area Description	Condition	Friable (Yes/No)	Estimated Quantity	ACM (Yes/No)	Comments
7	2' x 4' Suspended Ceiling Tile with Long Gouges and Pinholes	Good	Yes	925 SF	No	Restaurant Seating Area
8	12" x 12" Tan Mottled Floor Tile and Mastic	Good	No	1,130 SF	No	Kitchen and Restaurant Seating Area; Partial Flooring in Men's Restroom
9	Brown Cove Base and Adhesive	Good	No	100 LF	No	Majority of Perimeter Throughout Kitchen and Restaurant Seating Area
10	12" x 12" Grey Mottled Floor Tile and Mastic	Good	No	235 SF	No	Entry Vestibules, Restrooms and Restroom Vestibule
11	12" x 12" White with Red and Blue Specks Floor Tile and Mastic	Good	No	100 SF	No	Replacement Tiles in Restrooms
12	Wall Board Adhesive	Good	No	2,125 SF	No	Behind Wood Wall Panels Throughout
13	2' x 2' Ceiling Tile with Pinholes and Long Gouges	Damaged	Yes	215 SF	No	Ceiling Throughout North Storage Room
14	Window Glazing	Damaged	No	4 Windows at 3' x 3' - 18 LF EA; 1 Window at 3' x 2.5' - 21 LF; 2 Windows at 1.5' x 4.5' - 12 LF EA; 3 Windows at 4' x 7.5' - 70 LF EA	No	2 EA in North Storage Room West Windows; 1 EA in North Storage Room East Wall; 2 EA East Interior Windows in North Storage Room; 2 EA in Men's Restroom; 3 EA in Front Office

**Table 4**  
**Summary of Homogeneous Areas by Functional Space**  
**108 Adams Street, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

HA No.	Homogeneous Area Description	Condition	Friable (Yes/No)	Estimated Quantity	ACM (Yes/No)	Comments
18	White Interior Building Caulk	Good	No	290 LF	No	Partial Perimeter of White Wall Panels in North Storage Room. Partial Perimeter of Built-in Shelving within North Storage Room. Partial Perimeter of Kitchen Countertop. Partial Perimeter of Countertop in Women's Restroom
19	Tagged Metal Fire Door (Assumed ACM)	Good	No	9 EA	Assumed ACM	North and South Vestibule Entryways; Door to Front Office
20	Tagged Metal Fire Door Frame (Assumed ACM)	Good	No	3 EA; 2 Double Frames; 1 Single Frame	Assumed ACM	North and South Vestibule Entry Door Frames; Door Frame of Front Office
21	Light Heat Shield	Good	Yes	1 EA	No	North Entry Vestibule
22	Red Fire Stop Caulk	Good	No	45 LF	No	Partial Perimeter of Stove in Kitchen
23	Fiberglass Reinforced Wall Panel Adhesive	Good	No	40 SF	No	Men's Restroom
24	Interior Boiler Fire Brick	Damaged	No	30 SF	No	Partial Interior of Boiler
<b>FS - 2 Canopy Structure (Pavilion) - No Suspect ACM Identified</b>						
<b>FS - 3 Warming Shed</b>						
16	Drywall Panels	Damaged	No	50 SF	No	Partial East Wall and Ceiling
17	Roofing Shingles	Good	No	450 SF	No	Roof Throughout Underneath Metal Roof

**Table 4**  
**Summary of Homogeneous Areas by Functional Space**  
**108 Adams Street, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

HA No.	Homogeneous Area Description	Condition	Friable (Yes/No)	Estimated Quantity	ACM (Yes/No)	Comments
<b>FS - 4</b>	<b>Storage Shed - Demolished</b>					
<b>FS - 5</b>	<b>Exterior of Former Restaurant Building</b>					
<b>15</b>	<b>Flat Roofing Materials</b>	<b>Damaged</b>	<b>No</b>	<b>2,000 SF</b>	<b>Yes</b>	<b>Flat Roof (Two Tiered)</b>
25	White Exterior Window Caulk	Good	No	24 LF	No	Perimeter of Southeast Window and Northeast Window
<b>26</b>	<b>Black Exterior Building Caulk</b>	<b>Good</b>	<b>No</b>	<b>20 LF</b>	<b>Yes</b>	<b>At Seams of Concrete Block on Roof</b>

**Table 4 Notes and Acronyms:**

1. Functional Space (FS) is defined as a one or more spatially distinct units within a building or structure.
2. Homogeneous Area (HA) is defined as an area of surfacing materials, thermal system insulation, or miscellaneous material that is uniform in color and texture.
3. HA listed in bold text were identified to contain asbestos by laboratory analysis or were assumed to contain asbestos based on the scope of work requirements.
4. SF = Square Feet; LF = Linear Feet; EA = Each

**Table 5**  
**Inventory of Hazardous Materials/Universal Waste**  
**108 Adams Street, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

Component Description	Size	Comments	Quantity	Disposal Aspect
<b>FS - 1 Former Restaurant Building</b>				
Fluorescent Bulb	4'	North Storage Room, Kitchen and Seating Area	38 EA	Mercury Vapor
Fire Extinguisher Systems	-	Seating Area	1 EA	CFCs
Ballasts	-	North Storage Room	19 EA	PCBs
Appliances/Electronics	-	Dishwasher - Kitchen	1 EA	PCBs/CFCs
Hydraulic Door Hinge	12"	North and South Entry Vestibules; Front Office	5 EA	Hydraulic Oils
Other - Oven and Grill Cleaner and Degreaser	1 Gal	Kitchen	1 EA	See SDS
Other - Water Treatment Compound Liquid	5 Gal	Basement Boiler Room	1 EA	See SDS
Other - Film Free Plus	5 Gal	Basement Boiler Room	1 EA	See SDS
Other - Water Heater	50 Gal	Basement Boiler Room	1 EA	Heavy Metals
Other - Vinyl Tile Adhesive	1 Gal	Basement Stairwell	2 EA	See SDS
<b>FS - 2 Canopy Structure (Pavilion) - No Suspect ACM Identified</b>				
High Intensity Discharge Lighting	-	Throughout Pavilion Under Roof	128 EA	Mercury Vapor
<b>FS - 3 Warming Shed</b>				
No Hazardous Materials/Universal Waste Identified				
<b>FS - 4 Storage Shed - Demolished</b>				
<b>FS - 5 Exterior of Former Restaurant Building</b>				
No Hazardous Materials/Universal Waste Identified				

**Table 5 Notes and Acronyms:**

1. PCB - Polychlorinated Biphenyl
2. CFC - Chlorofluorocarbon
3. SDS - Material Safety Data Sheet
4. EA = Each; Gal = Gallon



# Appendix A





Environmental & Engineering Services Nationwide



ENVIRONMENTAL SERVICES

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## PRE-DEMOLITION ASBESTOS CONTAINING MATERIALS SURVEY

### **Bay City Market Property**

108 Adams Street | Bay City, Michigan  
PM Project Number 01-12077-1-0001

### *Prepared for:*

### **Bay City Housing Commission**

315 14<sup>th</sup> Street  
Bay City, Michigan 48708

### *Prepared by:*

### **PM Environmental, Inc.**

401 Center Avenue, Suite 9  
Bay City, Michigan 48708

Know Your Risk.  
Take Control.  
Work with the Experts.

[www.pmenv.com](http://www.pmenv.com)

July 20, 2020

Mr. William Phillips  
Bay City Housing Commission  
315 14<sup>th</sup> Street  
Bay City, Michigan 48708

**Re: Pre-Demolition Asbestos Containing Materials Survey  
For the Bay City Market Property  
Located at 108 Adams Street, Bay City, Michigan  
PM Environmental, Inc. Project No. 01-12077-1-0001**

Dear Mr. Phillips:

PM Environmental, Inc. (PM) was retained by Bay City Housing Commission (i.e., the Client) to perform an Asbestos Containing Materials (ACM) Survey of the Bay City Market Property located at 108 Adams Street, Bay City, Michigan. The purpose of this survey was to identify ACM prior to the start of the building demolition project.

PM was requested to identify existing ACM prior to scheduled demolition activities and provide recommendations in accordance with State and Federal regulations as well as the Michigan State Housing Development (MSHDA) guidelines.

The Pre-Demolition ACM Survey for the above referenced property represents the product of PM's professional expertise and judgment in the environmental consulting industry, and it is reasonable for **BAY CITY HOUSING COMMISSION AND THE MICHIGAN STATE HOUSING DEVELOPMENT AUTHORITY** to rely on PM's survey report.

The survey for ACM was performed in accordance with the United States Environmental Protection Agency's (U.S. EPA) requirements for ACM that is presented in 40 CFR 61, Subpart M, and the National Emissions Standards for Hazardous Air Pollutants (NESHAP). During the survey, bulk material inspection, physical assessment, sampling and analysis of the samples were performed in accordance with the requirements of the U.S. EPA's Asbestos Hazard Emergency Response Act (AHERA (40 CFR 763)). The ACM Survey was performed by Mr. Vince Fountain (State of Michigan Asbestos Inspector Accreditation No. A55377) and assisted by Mr. Tyler Maraskine (State of Michigan Asbestos Inspector Accreditation No. A47893), of PM on July 7, 2020. This survey was conducted in general accordance with the scope of services identified in PM's proposal (1017189) to Bay City Housing Commission dated June 17, 2020.

## **REGULATORY INFORMATION**

ACM is defined by AHERA as any material or product containing more than one percent asbestos. Materials containing more than one percent asbestos are subject to the requirements of the Asbestos NESHAP. The Asbestos NESHAP requires that all ACM classified as Regulated Asbestos Containing Materials (RACM) be handled in the following manner dependent on its characteristics as summarized below.

- All friable RACM must be removed from a building or structure that is being demolished or renovated before any wrecking or dismantling is performed.

- ACM that is determined to be non-friable in nature must be classified as a Category I or Category II material. This classification then determines, based on handling procedures, whether the material must be removed prior to renovation or demolition and the means and methods to remove the ACM in accordance with the Asbestos NESHAP.
- Category I Non-Friable Materials that may become friable if subjected to sanding, grinding, cutting, or abrading during demolition or renovation must be removed.
- Category II Non-Friable Materials with a high probability of becoming crumbled, pulverized, or reduced to a powder during construction activities (i.e., including renovation and demolition) must be removed.

## **DESCRIPTION OF BUILDING STRUCTURE**

The subject property is occupied by four buildings: a single-story restaurant containing 1,823 square feet, an open-air market space containing 35,000 square feet, a warming shed containing approximately 450 square feet, and a storage shed containing approximately 100 square feet. According to the seller, the warming shed, and storage shed will be removed from the property prior to demolition activities, therefore PM did not include these structures as part of the investigation.

The restaurant is divided into restrooms, entry vestibules, a kitchen, restaurant seating area, storage closets, office and a basement/boiler room. Interior building materials consist of wall and ceiling plaster, unfinished drywall wall panels, straight pipe insulation and associated mudded fittings, various cove base and adhesive, various suspended ceiling tiles, and various floor tile and mastics.

Exterior building materials consist of brick façade, metal framed windows with window glazing and flat roofing materials. No records concerning previous renovation activities were provided to PM for review.

The open-air market space canopy consists of metal beams and a pitched metal roof.

## **ACCESS LIMITATIONS**

During the property inspection, PM surveyed all accessible areas of these structures. The restaurant was occupied by the seller at the time of the survey with numerous contents present. Inspection into wall and ceiling cavities was performed in a non-invasive way (lifting ceiling tiles and inspecting in open areas) as to minimize destruction of current building materials. PM recommends an additional site visit once the building is vacated to perform more invasive investigation prior to demolition activities.

## **ASBESTOS SURVEY INSPECTION AND METHODOLOGY**

As required under AHERA, suspect ACM is categorized as thermal system insulation (TSI), surfacing materials (SM), or miscellaneous materials (MM). AHERA requires that at least three samples of TSI materials (i.e. piping and boiler system insulation) must be collected and analyzed by Polarized Light Microscopy (PLM).

Surfacing Materials (i.e. plaster, textured ceiling material, fireproofing, etc.) is sampled in accordance to the quantity of material present as measured by its square footage and is further defined below.

- If less than 1,000 square feet of material is present, a minimum of three bulk samples must be collected and analyzed by PLM;
- If between 1,000 and 5,000 square feet of material is present, a minimum of five bulk samples must be collected and analyzed by PLM; and
- If greater than 5,000 square feet of material is present, a minimum of seven samples must be space collected and analyzed by PLM.

Miscellaneous materials (i.e. floor tile, mastics, roofing materials, drywall, ceiling tile, etc.) as described under AHERA sampling requirements need to be sampled “in a matter sufficient to determine” its asbestos content using the professional judgment of the accredited asbestos building inspector.

During the building inspection activities, PM collected samples of suspect ACM throughout the entire building. PM entered all accessible areas and performed visual inspections for suspect materials. Sampling for ACM was conducted within homogenous areas (HA) which are defined as suspect ACM that appear to be similar based on color, texture, and date of application or installation.

## **ASBESTOS SURVEY RESULTS**

PM collected a total of 39 bulk materials samples from 15 different homogenous materials. Photographs depicting Homogenous Areas are found attached as Appendix A. The samples were placed inside laboratory provided sealed bags and submitted to a third-party laboratory for analysis using chain of custody documentation. Bulk samples were analyzed for asbestos content by EMC Labs, Inc. of Phoenix, Arizona, a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory. The samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining by U.S.EPA Test Methods (EPA-600/M4-82-020) and the United States National Institute of Standards and Technology (NIST) Bulk Asbestos Handbook. Copies of the laboratory datasheets and chain of custody documentation is attached as Appendix B for review. A summary of the survey results is provided below.

**Table No. 1: Summary of Asbestos Bulk Sample Results**

<b>HA No.</b>	<b>Material Type</b>	<b>Location</b>	<b>Condition</b>	<b>Friable (Yes/No)</b>	<b>Estimated Quantity</b>	<b>Asbestos Content (%)</b>
<b>Restaurant Building</b>						
HA1	Mudded Fittings Associated with Straight Pipe Insulation	Basement and Crawlspace, Bathrooms, Front Office, North and South Entry Vestibules and North Storage Room	Damaged	Yes	55 EA	50% Chrysotile
HA2	Straight Pipe Insulation	Basement and Crawlspace, Bathrooms, Front Office, North and South Entry Vestibules and North Storage Room	Damaged	Yes	450 LF	85% Chrysotile
HA3	Boiler Insulation	Basement Boiler – Outer Insulation Beneath Metal Shell (3' Wide x 6' Deep x 5' High)	Damaged	Yes	125 SF	85% Chrysotile
HA4	Boiler Door Insulation	Basement Boiler – Interior Doors ( 2 Doors (2' x 2') and (1' x 2')	Damaged	Yes	6 SF	60% Chrysotile
HA5	Wall and Ceiling Plaster	Throughout on Walls and Ceilings. Some Behind Paneling and Suspended Ceiling Tiles	Damaged	No	7,245 SF	None Detected
HA6	Unfinished Drywall Panels	Restaurant Seating Area Walls	Good	No	875 SF	None Detected
HA7	2' x 4' Suspended Ceiling Tile with Long Gouges and Pinholes	Restaurant Seating Area	Good	Yes	950 SF	None Detected
HA8	12" x 12" Tan Mottled Floor Tile and Mastic	Kitchen and Restaurant Seating Area	Good	No	950 SF	None Detected
HA9	Brown Cove Base and Adhesive	Kitchen and Restaurant Seating Area	Good	No	175 LF	None Detected
HA10	12" x 12" Grey Mottled Floor Tile and Mastic	Entry Vestibules, Restrooms, and Restroom Vestibule	Good	No	650 SF	None Detected
HA11	12" x 12" White with Red and Blue Specks Floor Tile and Mastic	Replacement Tiles in Restrooms	Good	No	100 SF	None Detected
HA12	Wall Board Adhesive	Throughout Behind Wall Panels	Good	No	3,000 SF	None Detected

**Pre-Demolition Asbestos Containing Materials Survey**  
**For the Bay City Market Property**  
**Located at 108 Adams Street, Bay City, Michigan**  
**PM Project No. 01-12077-1-0001; July 20, 2020**

HA No.	Material Type	Location	Condition	Friable (Yes/No)	Estimated Quantity	Asbestos Content (%)
<b>Restaurant Building continued.</b>						
HA13	2' x 2' Ceiling Tile with Pin Holes and Long Gouges	North Storage	Good	Yes	325 SF	None Detected
HA14	Window Glazing	West Windows	Damaged	No	3 Windows Total, 1 Window (7' x 12'), and 2 Windows (3' x 6')	None Detected
HA15	Flat Roofing Materials	Flat Roof (Two Tiered)	Damaged	No	2,000 SF	10% Chrysotile
<b>Canopy Structure</b>						
<b>No Suspect ACM identified</b>						
<b>Warming Shed and Storage Shed</b>						
<b>Not Inspected per Current Owner</b>						

HA – Homogenous Area

LF - Linear Feet

SF – Square Feet

EA - Each

The laboratory results indicate the mudded fittings associated with straight pipe insulation (HA1), straight pipe insulation (HA2), boiler insulation (HA3), boiler door insulation (HA4), and flat roofing materials (HA15) contained asbestos in concentrations greater than one percent and are therefore considered ACMs. As noted in the summary table, the ACM was also assessed to be in damaged condition at the time of the inspection.

## CONCLUSIONS AND RECOMMENDATIONS:

PM has completed a Pre-Demolition Asbestos Containing Materials Survey of the Bay City Market Property located at 108 Adams Street, Bay City, Michigan. The conclusions and recommendations that have been identified are based on the results of the building inspection, material sampling, and laboratory analyses. PM has identified the following conclusions and recommendations:

- The results of the asbestos survey indicate ACM were identified which will require removal by a licensed abatement contractor prior to demolition activities. The ACM include straight pipe insulation and associated mudded fittings, boiler insulation, boiler door insulation and flat roofing materials.

- It is recommended PM performs an additional site investigation of the restaurant building once vacated to include destructive sampling into wall, ceiling and floor cavities. A work plan (i.e. abatement specification) can also be prepared for the abatement project to be consulted during contractor selection activities.

In completion of this survey, PM has outlined our findings, conclusions and recommendations. In the event that additional forms of suspect ACM are identified within the subject property that were not identified and sampled, it is the property owner and operator's responsibility to ensure that these materials be properly sampled to determine its content. **PM's reporting of quantities of materials are estimates to indicate how much of that ACM may be present. Contractors inspecting and bidding on project abatement or renovation activities should visually verify quantities and prepare bids from their own quantity estimates.**

As part of MSHDA requirements, PM also must provide a summary report at the conclusion of the renovation/abatement activities that will conclude that all activities involving asbestos were performed in accordance to PM's recommendations and any applicable regulations. PM's final post abatement/renovation summary report will include a summary of all activities and related information regarding asbestos. PM must also provide an Operations and Maintenance (O&M) program for any remaining asbestos containing building materials. The O&M Plan will also address the training requirements for any on-site maintenance personnel who will remain on-site after renovations are performed.

**Therefore, PM must be notified in advance when demolition activities are to start and be involved with a "Project kick off meeting" with the client and contractors prior to the start of demolition. If any other materials are identified during demolition that have not already been sampled, or if the demolition plans change, it is advised to deem all unsampled, suspect materials (if encountered) as asbestos-containing materials, unless laboratory analysis proves otherwise. PM needs to be notified immediately to provide additional guidance.**

If you have any questions related to this survey, please contact our office at (800) 313-2966.

This report has been reviewed for its completeness and accuracy. Please feel free to contact our office at (800) 313-2966 to discuss this report.

**REPORT PREPARED BY:**

PM Environmental, Inc.



Tyler Maraskine  
Senior Industrial Hygienist

**REPORT REVIEWED BY:**

PM Environmental, Inc.



Jon M. Balsamo  
Manager, Industrial Hygiene Services

**APPENDICES**

Appendix A: Photographic Log from Site Reconnaissance

Appendix B: Laboratory Analytical Data and Chain of Custody Documentation



# Appendix A



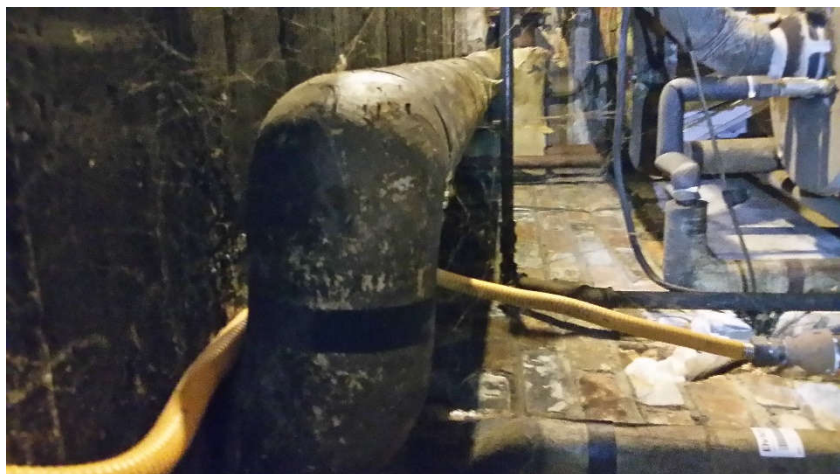
Photographs From Site Reconnaissance  
Taken by Mr. Vince Fountain on July 7, 2020  
PM Project No. 01-12077-1-0001  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 1



Exterior View of Subject Property

### Photograph 2



**View of Asbestos Containing Mudded  
Fittings Associated with Straight Pipe  
Insulation  
(HA1)**



Photographs From Site Reconnaissance  
Taken by Mr. Vince Fountain on July 7, 2020  
PM Project No. 01-12077-1-0001  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 3



**View of Asbestos Containing Straight Pipe  
Insulation  
(HA2)**

### Photograph 4



**View of Asbestos Containing Boiler  
Insulation  
(HA3)**



**Photographs From Site Reconnaissance**  
**Taken by Mr. Vince Fountain on July 7, 2020**  
**PM Project No. 01-12077-1-0001**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 5**



**View of Asbestos Containing Boiler Door  
Insulation  
(HA4)**

### **Photograph 6**



**View of Wall and Ceiling Plaster  
(HA5)**





**Photographs From Site Reconnaissance**  
**Taken by Mr. Vince Fountain on July 7, 2020**  
**PM Project No. 01-12077-1-0001**  
**Location: 108 Adams Street, Bay City, Michigan**

### Photograph 7



View of Unfinished Drywall Panels  
(HA6)

### Photograph 8



View of 2' x 4' Suspended Ceiling Tile – Long  
Gouges and Pinholes  
(HA7)



**Photographs From Site Reconnaissance**  
**Taken by Mr. Vince Fountain on July 7, 2020**  
**PM Project No. 01-12077-1-0001**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 9**



View of 12" x 12" Tan Mottled Floor Tile and  
Mastic  
(HA8)

### **Photograph 10**

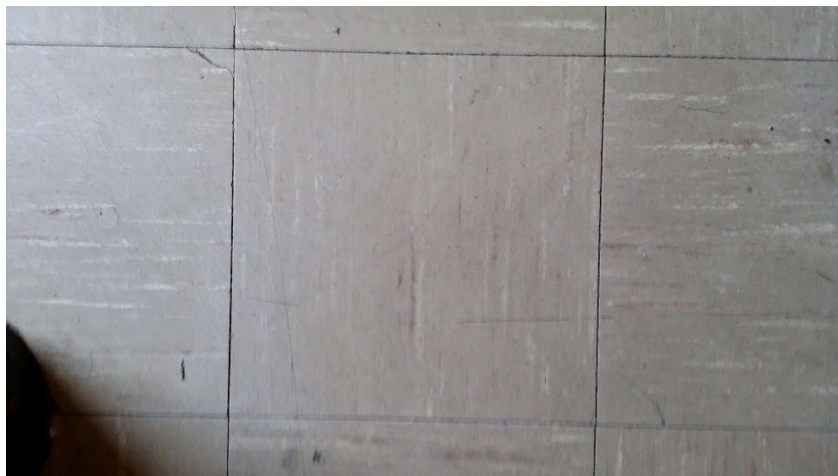


View of Brown Cove Base and Adhesive  
(HA9)



**Photographs From Site Reconnaissance**  
**Taken by Mr. Vince Fountain on July 7, 2020**  
**PM Project No. 01-12077-1-0001**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 11**



View of 12" x 12" Grey Mottled Floor Tile and  
Mastic  
(HA10)

### **Photograph 12**



View of 12" x 12" White with Red and Blue  
Specks Floor Tile and Mastic  
(HA11)



**Photographs From Site Reconnaissance**  
**Taken by Mr. Vince Fountain on July 7, 2020**  
**PM Project No. 01-12077-1-0001**  
**Location: 108 Adams Street, Bay City, Michigan**

### Photograph 13



View of Wall Board Adhesive  
(HA12)

### Photograph 14



View of 2' x 2' Ceiling Tile with Pinholes and  
Long Gouges  
(HA13)





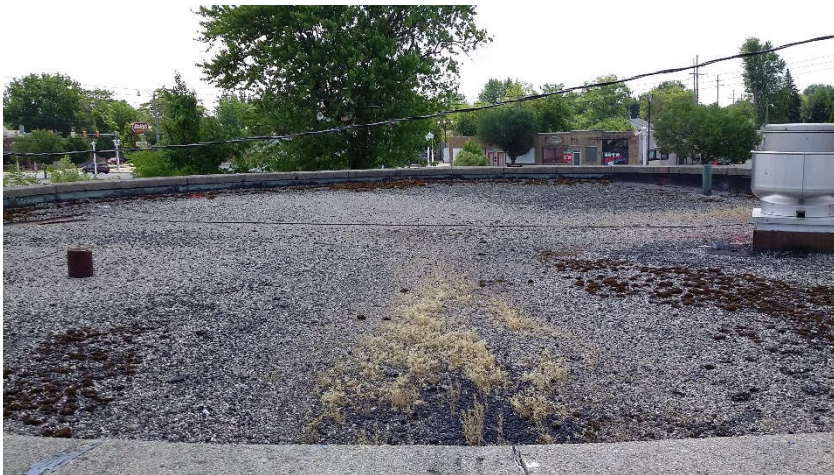
Photographs From Site Reconnaissance  
Taken by Mr. Vince Fountain on July 7, 2020  
PM Project No. 01-12077-1-0001  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 15



View of Window Glazing  
(HA14)

### Photograph 16



View of Asbestos Containing Flat Roofing  
Materials  
(HA15)

## Appendix B

# EMC LABS, INC.

9830 S. 51st Street, Suite B109, Phoenix, AZ 85044  
Phone: 800-362-3373 or 480-940-5294 - Fax: (480) 893-1726

Laboratory Report

**0239863**

## Bulk Asbestos Analysis by Polarized Light Microscopy

NVLAP#101926-0

Client:	PM ENVIRONMENTAL	Job# / P.O. #:	01-12077-1-0001
Address:	3340 RANGER ROAD	Date Received:	07/08/2020
	LANSING MI 48906	Date Analyzed:	07/15/2020
Collected:	07/07/2020	Date Reported:	07/15/2020
Project Name:	108 ADAMS ST., BAY CITY, MI	EPA Method:	EPA 600/R-93/116
Address:		Submitted By:	TYLER MARASKINE
		Collected By:	

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents
0239863-001 HA1-1	BASEMENT BOILER ROOM	Mudded Fitting, White	Yes	Chrysotile 50%	Gypsum Carbonates Mica Binder/Filler 50%
0239863-002 HA1-2	BASEMENT BOILER ROOM	Note: *Not analyzed per client request			
0239863-003 HA1-3	MENS RESTROOM	Note: *Not analyzed per client request			
0239863-004 HA2-1	BASEMENT BOILER ROOM	Pipe Insulation, White	Yes	Chrysotile 85%	Gypsum Binder/Filler 15%
0239863-005 HA2-2	BASEMENT BOILER ROOM	Note: *Not analyzed per client request			
0239863-006 HA2-3	MENS RESTROOM	Note: *Not analyzed per client request			
0239863-007 HA3-1	BASEMENT BOILER ROOM	Boiler Insulation, White	Yes	Chrysotile 85%	Gypsum Carbonates Binder/Filler 15%
0239863-008 HA3-2	BASEMENT BOILER ROOM	Note: *Not analyzed per client request			

# EMC LABS, INC.

9830 S. 51st Street, Suite B109, Phoenix, AZ 85044  
Phone: 800-362-3373 or 480-940-5294 - Fax: (480) 893-1726

Laboratory Report

**0239863**

## Bulk Asbestos Analysis by Polarized Light Microscopy

NVLAP#101926-0

Client:	PM ENVIRONMENTAL	Job# / P.O. #:	01-12077-1-0001
Address:	3340 RANGER ROAD	Date Received:	07/08/2020
	LANSING MI 48906	Date Analyzed:	07/15/2020
Collected:	07/07/2020	Date Reported:	07/15/2020
Project Name:	108 ADAMS ST., BAY CITY, MI	EPA Method:	EPA 600/R-93/116
Address:		Submitted By:	TYLER MARASKINE
		Collected By:	

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents
0239863-009 HA3-3	BASEMENT BOILER ROOM	Note: *Not analyzed per client request			
0239863-010 HA4-1	BASEMENT BOILER ROOM	Boiler Door Insulation, Brown	Yes	Chrysotile 60%	Gypsum Carbonates Mica Binder/Filler 40%
0239863-011 HA4-2	BASEMENT BOILER ROOM	Note: *Not analyzed per client request			
0239863-012 HA4-3	BASEMENT BOILER ROOM	Note: *Not analyzed per client request			
0239863-013 HA5-1	MENS RESTROOM	LAYER 1 Wall & Ceiling Plaster Scratch Coat, Gray	No	None Detected	Cellulose Fiber 2% Gypsum Quartz Carbonates 98%
		LAYER 2 Wall & Ceiling Plaster Finish/Paint, White/ Lt.Green	No	None Detected	Gypsum Carbonates Quartz Binder/Filler 100%

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**0239863**

## Bulk Asbestos Analysis by Polarized Light Microscopy

NVLAP#101926-0

Client:	PM ENVIRONMENTAL	Job# / P.O. #:	01-12077-1-0001
Address:	3340 RANGER ROAD	Date Received:	07/08/2020
	LANSING MI 48906	Date Analyzed:	07/15/2020
Collected:	07/07/2020	Date Reported:	07/15/2020
Project Name:	108 ADAMS ST., BAY CITY, MI	EPA Method:	EPA 600/R-93/116
Address:		Submitted By:	TYLER MARASKINE
		Collected By:	

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents	
0239863-014 HA5-2	WOMENS RESTROOM	LAYER 1 Wall & Ceiling Plaster Scratch Coat, Gray	No	None Detected	Cellulose Fiber	2%
					Gypsum Quartz Carbonates	98%
		LAYER 2 Wall & Ceiling Plaster Finish/Paint, White/ Lt.Green	No	None Detected	Gypsum Carbonates Quartz Binder/Filler	100%
0239863-015 HA5-3	ENTRY VESTIBULE	LAYER 1 Wall & Ceiling Plaster Scratch Coat, Gray	No	None Detected	Cellulose Fiber	2%
					Gypsum Quartz Carbonates Mica	98%
		LAYER 2 Wall & Ceiling Plaster Finish/Paint, White/ Lt.Green	No	None Detected	Gypsum Carbonates Quartz Binder/Filler	100%
		LAYER 3 Wall & Ceiling Texture, White	No	None Detected	Carbonates Quartz Mica Binder/Filler	100%
0239863-016 HA5-4	OFFICE	LAYER 1 Wall & Ceiling Plaster Scratch Coat, Gray	No	None Detected	Cellulose Fiber	2%
					Gypsum Quartz Carbonates Mica	98%
		LAYER 2 Wall & Ceiling Plaster Finish/Paint, White/ Lt.Green	No	None Detected	Gypsum Carbonates Quartz Binder/Filler	100%

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## Bulk Asbestos Analysis by Polarized Light Microscopy

NVLAP#101926-0

Client:	PM ENVIRONMENTAL	Job# / P.O. #:	01-12077-1-0001
Address:	3340 RANGER ROAD	Date Received:	07/08/2020
	LANSING MI 48906	Date Analyzed:	07/15/2020
Collected:	07/07/2020	Date Reported:	07/15/2020
Project Name:	108 ADAMS ST., BAY CITY, MI	EPA Method:	EPA 600/R-93/116
Address:		Submitted By:	TYLER MARASKINE
		Collected By:	

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents	
0239863-017 HA5-5	RESTURANT SEATING AREA	LAYER 1 Wall & Ceiling Plaster Scratch Coat, Gray	No	None Detected	Cellulose Fiber	2%
					Gypsum Quartz Carbonates Mica	98%
		LAYER 2 Wall & Ceiling Plaster Finish/Paint, White/ Lt.Green	No	None Detected	Gypsum Carbonates Quartz Binder/Filler	100%
0239863-018 HA5-6	KITCHEN	LAYER 1 Wall & Ceiling Plaster Scratch Coat, Gray	No	None Detected	Cellulose Fiber	2%
					Gypsum Quartz Carbonates Mica	98%
		LAYER 2 Wall & Ceiling Plaster Finish/Paint, White/ Lt.Green	No	None Detected	Gypsum Carbonates Quartz Binder/Filler	100%
		LAYER 3 Wall & Ceiling Texture, White	No	None Detected	Carbonates Quartz Mica Binder/Filler	100%

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**0239863**

## Bulk Asbestos Analysis by Polarized Light Microscopy

NVLAP#101926-0

Client:	PM ENVIRONMENTAL	Job# / P.O. #:	01-12077-1-0001
Address:	3340 RANGER ROAD	Date Received:	07/08/2020
	LANSING MI 48906	Date Analyzed:	07/15/2020
Collected:	07/07/2020	Date Reported:	07/15/2020
Project Name:	108 ADAMS ST., BAY CITY, MI	EPA Method:	EPA 600/R-93/116
Address:		Submitted By:	TYLER MARASKINE
		Collected By:	

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents	
0239863-019 HA5-7	NORTH STORAGE AREA	LAYER 1 Wall & Ceiling Plaster Scratch Coat, Gray	No	None Detected	Cellulose Fiber	2%
					Gypsum Quartz Carbonates Mica	98%
		LAYER 2 Wall & Ceiling Plaster Finish/Paint, White/ Lt.Green	No	None Detected	Gypsum Carbonates Quartz Binder/Filler	100%
		LAYER 3 Wall & Ceiling Texture, White	No	None Detected	Carbonates Quartz Mica Binder/Filler	100%
0239863-020 HA6-1	RESTAURANT SEATING AREA	Drywall, White/ Brown	No	None Detected	Cellulose Fiber	12%
					Gypsum Carbonates Mica	88%
0239863-021 HA6-2	RESTAURANT SEATING AREA	Drywall, White/ Brown	No	None Detected	Cellulose Fiber	12%
					Gypsum Carbonates Mica	88%
0239863-022 HA7-1	RESTAURANT SEATING AREA	2'x4' SCT, White	No	None Detected	Mineral Wool	45%
					Cellulose Fiber	40%
					Carbonates	
					Perlite Binder/Filler	15%

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**0239863**

## Bulk Asbestos Analysis by Polarized Light Microscopy

NVLAP#101926-0

Client:	PM ENVIRONMENTAL	Job# / P.O. #:	01-12077-1-0001
Address:	3340 RANGER ROAD	Date Received:	07/08/2020
	LANSING MI 48906	Date Analyzed:	07/15/2020
Collected:	07/07/2020	Date Reported:	07/15/2020
Project Name:	108 ADAMS ST., BAY CITY, MI	EPA Method:	EPA 600/R-93/116
Address:		Submitted By:	TYLER MARASKINE
		Collected By:	

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents
0239863-023 HA7-2	RESTAURANT SEATING AREA	2'x4' SCT, White	No	None Detected	Mineral Wool 45% Cellulose Fiber 40% Carbonates Perlite Binder/Filler 15%
0239863-024 HA8-1	RESTAURANT SEATING AREA	LAYER 1 12"x12" Mottled Floor Tile, Tan	No	None Detected	Carbonates Quartz Binder/Filler 100%
		LAYER 2 Mastic, Yellow	No	None Detected	Carbonates Quartz Binder/Filler 100%
0239863-025 HA8-2	KITCHEN	LAYER 1 12"x12" Mottled Floor Tile, Tan	No	None Detected	Carbonates Quartz Binder/Filler 100%
		LAYER 2 Mastic, Yellow	No	None Detected	Carbonates Quartz Binder/Filler 100%
0239863-026 HA9-1	RESTAURANT SEATING AREA	LAYER 1 Cove Base, Brown	No	None Detected	Carbonates Quartz Binder/Filler 100%
		LAYER 2 Adhesive, Brown	No	None Detected	Carbonates Quartz Binder/Filler 100%



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**0239863**

## Bulk Asbestos Analysis by Polarized Light Microscopy

NVLAP#101926-0

Client:	PM ENVIRONMENTAL	Job# / P.O. #:	01-12077-1-0001
Address:	3340 RANGER ROAD	Date Received:	07/08/2020
	LANSING MI 48906	Date Analyzed:	07/15/2020
Collected:	07/07/2020	Date Reported:	07/15/2020
Project Name:	108 ADAMS ST., BAY CITY, MI	EPA Method:	EPA 600/R-93/116
Address:		Submitted By:	TYLER MARASKINE
		Collected By:	

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents
0239863-027 HA9-2	KITCHEN	LAYER 1 Cove Base, Brown	No	None Detected	Carbonates Quartz Binder/Filler 100%
		LAYER 2 Adhesive, Brown	No	None Detected	Carbonates Quartz Binder/Filler 100%
0239863-028 HA10-1	ENTRY VESTIBULE	LAYER 1 12"x12" Mottled Floor Tile, Brown	No	None Detected	Carbonates Quartz Binder/Filler 100%
		LAYER 2 Mastic, Black	No	None Detected	Cellulose Fiber 3% Carbonates Quartz Binder/Filler 97%
0239863-029 HA10-2	ENTRY VESTIBULE	LAYER 1 12"x12" Mottled Floor Tile, Brown	No	None Detected	Carbonates Quartz Binder/Filler 100%
		LAYER 2 Mastic, Black	No	None Detected	Cellulose Fiber 3% Carbonates Quartz Binder/Filler 97%
0239863-030 HA11-1	MENS RESTROOM	LAYER 1 12"x12" Floor Tile, White w/Red & Blue Specks	No	None Detected	Carbonates Quartz Binder/Filler 100%
		LAYER 2 Mastic, Yellow	No	None Detected	Cellulose Fiber <1% Carbonates Quartz Binder/Filler 99%

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## Bulk Asbestos Analysis by Polarized Light Microscopy

NVLAP#101926-0

Client:	PM ENVIRONMENTAL	Job# / P.O. #:	01-12077-1-0001
Address:	3340 RANGER ROAD	Date Received:	07/08/2020
	LANSING MI 48906	Date Analyzed:	07/15/2020
Collected:	07/07/2020	Date Reported:	07/15/2020
Project Name:	108 ADAMS ST., BAY CITY, MI	EPA Method:	EPA 600/R-93/116
Address:		Submitted By:	TYLER MARASKINE
		Collected By:	

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents
0239863-031 HA11-2	WOMENS RESTROOM	LAYER 1 12"x12" Floor Tile, White w/Red & Blue Specks	No	None Detected	Carbonates Quartz Binder/Filler 100%
		LAYER 2 Mastic, Yellow	No	None Detected	Cellulose Fiber <1% Carbonates Quartz Binder/Filler 99%
0239863-032 HA12-1	MENS RESTROOM	Wall Board Adhesive, Brown	No	None Detected	Carbonates Binder/Filler 100%
0239863-033 HA12-2	ENTRY VESTIBULE	Wall Board Adhesive, Brown	No	None Detected	Carbonates Binder/Filler 100%
0239863-034 HA13-1	NORTH STORAGE ROOM	2'x2' Suspended Ceiling Tile, White/ Beige	No	None Detected	Mineral Wool 45% Cellulose Fiber 40% Carbonates Perlite Binder/Filler 15%
0239863-035 HA13-2	NORTH STORAGE ROOM	2'x2' Suspended Ceiling Tile, White/ Beige	No	None Detected	Mineral Wool 45% Cellulose Fiber 40% Carbonates Perlite Binder/Filler 15%
0239863-036 HA14-1	MENS RESTROOM	Window Glazing, White	No	None Detected	Carbonates Quartz Binder/Filler 100%

# EMC LABS, INC.

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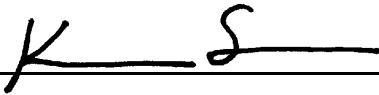
Laboratory Report  
**0239863**

## Bulk Asbestos Analysis by Polarized Light Microscopy

NVLAP#101926-0

Client:	PM ENVIRONMENTAL	Job# / P.O. #:	01-12077-1-0001
Address:	3340 RANGER ROAD	Date Received:	07/08/2020
	LANSING MI 48906	Date Analyzed:	07/15/2020
Collected:	07/07/2020	Date Reported:	07/15/2020
Project Name:	108 ADAMS ST., BAY CITY, MI	EPA Method:	EPA 600/R-93/116
Address:		Submitted By:	TYLER MARASKINE
		Collected By:	

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents
0239863-037 HA14-2	WEST OFFICE	Window Glazing, White	No	None Detected	Carbonates Quartz Binder/Filler 100%
0239863-038 HA15-1	NORTH SIDE	LAYER 1 Flat Roofing Material, Gray/ Black	No	None Detected	Cellulose Fiber Carbonates Quartz Binder/Filler 30% 70%
		LAYER 2 Roof Flashing, Gray	Yes	Chrysotile 10%	Carbonates Binder/Filler 90%
0239863-039 HA15-2	CENTRAL	Note: *Not analyzed per client request			



Analyst - Kenneth Scheske



Signatory - Lab Director - Kurt Kettler

Distinctly stratified, easily separable layers of samples are analyzed as subsamples of the whole and are reported separately for each discernible layer. All analyses are derived from calibrated visual estimate and measured in area percent unless otherwise noted. The report applies to the standards or procedures identified and to the sample(s) tested. The test results are not necessarily indicated or representative of the qualities of the lot from which the sample was taken or of apparently identical or similar products, nor do they represent an ongoing quality assurance program unless so noted. These reports are for the exclusive use of the addressed client and that they will not be reproduced wholly or in part for advertising or other purposes over our signature or in connection with our name without special written permission. The report shall not be reproduced except in full, without written approval by our laboratory. The samples not destroyed in testing are retained a maximum of thirty days. The laboratory measurement of uncertainty for the test method is approximately less than 1 by area percent. Accredited by the National Institute of Standards and Technology, Voluntary Laboratory Accreditation Program for selected test method for asbestos. The accreditation or any reports generated by this laboratory in no way constitutes or implies product certification, approval, or endorsement by the National Institute of Standards and Technology. The 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. Polarized Light Microscopy may not be consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials.

**CHAIN OF CUSTODY**  
**EMC Labs, Inc.**  
 9830 S. 51<sup>st</sup> St., Ste B-109  
 Phoenix, AZ 85044  
 (480) 940-5294 Fax (480) 893-1726

LAB#: 239863  
 TAT: 5 day  
 Rec'd: JUL 08 P.M.  
 EMC USE ONLY

COMPANY NAME:

Address:

CONTACT:

Phone/Fax:

Email:

BILL TO:

(If Different Location)

PM Environmental  
 3340 Ranger Rd  
 Lansing, MI 48906  
 Tyler Maraskine  
 (989) 600-7100  
 tms@pmenv.com

SAME

COMPLETE ITEMS 1-4: (Failure to complete any items may cause a delay in processing or analyzing your samples)

1. **TURNAROUND TIME:** [Same Day Rush] [1-2 Days] [3-4 5 Days] [6-10 Days]  
 2. **TYPE OF ANALYSIS:** [Bulk-PLM] [Air-PCM] [Lead] [Point Count] [Fungi: AOC, W-C, Bulk, Swab, Tape]  
 3. **DISPOSAL INSTRUCTIONS:** [Dispose of samples at EMC] [Return samples to me at my expense]  
 (If you do not indicate preference, EMC will dispose of samples 30 days from analysis.)

4. **Project Name:** 108 Adams St, Bay City, MI

P.O. Number:

Project Number: 01-12077-1-0001

EMC SAMPLE #	CLIENT SAMPLE #	DATE SAMPLED	LOCATION/MATERIAL TYPE	Samples Accepted Yes / No
1	HA 1-1	7-7-2020	Mudded Fittings Associated w/ SPI / Basement Boiler Room	Y N
2	1-2		" / Basement Boiler Room	Y N
3	1-3		" / Men's Restroom	Y N
4	HA 2-1		Straight Pipe Insulation / Basement Boiler Room	Y N
5	2-2		" / Basement Boiler Room	Y N
6	2-3		" / Men's Restroom	Y N
7	HA 3-1		Boiler Insulation / Basement Boiler Room	Y N
8	3-2		" / Basement Boiler Room	Y N
9	3-3		" / Basement Boiler Room	Y N
10	HA 4-1		Boiler Door Insulation / Basement Boiler Room	Y N
11	4-2		" / Basement Boiler Room	Y N
12	4-3		" / Basement Boiler Room	Y N
13	HA 5-1		Wall & Ceiling Plaster / Men's Restroom	Y N
14	5-2		" / Women's Restroom	Y N
15	5-3		" / Entry Vestibule	Y N
16	5-4		" / Office	Y N
17	5-5		" / Restaurant Seating Area	Y N
18	5-6		" / Kitchen	Y N
19	5-7		" / North Storage Area	Y N

SPECIAL INSTRUCTIONS: STOP First Positive

Sample Collector: (Print) Vince Fountain (Signature)

Relinquished by: Tyler Maraskine Date/Time: 7-7-2020 Received by: [Signature] Date/Time: 7/8/2020  
 Relinquished by: [Signature] Date/Time: 7/8/2020 Received by: [Signature] Date/Time: 7/8/2020

\*\* In the event of any dispute between the above parties for these services or otherwise, parties agree that jurisdiction and venue will be in Phoenix, Arizona and prevailing party will be entitled to attorney's fees and court costs. Rev. 09/01/08

## CHAIN OF CUSTODY

EMC Labs, Inc.  
9830 S. 51<sup>st</sup> St., Ste B-109  
Phoenix, AZ 85044  
(480) 940-5294 Fax (480) 893-1726

LAB#:

TAT:

Rec'd:

EMC USE ONLY

COMPANY NAME:

Address:

CONTACT:

Phone/Fax:

Email:

BILL TO:

(If Different Location)

COMPLETE ITEMS 1-4: (Failure to complete any items may cause a delay in processing or analyzing your samples)

1. TURNAROUND TIME: [Same Day Rush] [1-2 Days] [3-4 5 Days] [6-10 Days]  
 2. TYPE OF ANALYSIS: [Bulk-RLM] [AT-PCM] [Lead] [Point Count] [Fungi: AOC, W-C, Bulk, Swab, Tape]  
 3. DISPOSAL INSTRUCTIONS: [Dispose of samples at EMC] [Return samples to me at my expense]  
 (If you do not indicate preference, EMC will dispose of samples 30 days from analysis.)

4. Project Name: 108 Adams St, Bay City, MI

P.O. Number:

Project Number: 01-12077-1-0002

EMC SAMPLE #	CLIENT SAMPLE #	DATE SAMPLED	LOCATION/MATERIAL TYPE	Samples Accepted Yes / No
20	HA 6-1	7-7-2020	Unfinished Drywall Panels / Restaurant Seating Area	Y N
21	6-2		" / Restaurant Seating Area	Y N
22	HA 7-1		2"x4" SCT - Long Gages & Pinholes / Restaurant Seating Area	Y N
23	7-2		" / Restaurant Seating Area	Y N
24	HA 8-1		12"x12" Tan Mottled Floor Tile & Mastic / Restaurant Seating Area	Y N
25	8-2		" / Kitchen	Y N
26	HA 9-1		Brown Cove Base & Adhesive / Restaurant Seating Area	Y N
27	9-2		" / Kitchen	Y N
28	HA 10-1		12"x12" Grey Mottled Floor Tile & Mastic / Entry Vestibule	Y N
29	10-2		" / Entry Vestibule	Y N
30	HA 11-1		12"x12" White w/ Red & Blue Specks Floor Tile & Mastic / Mens Restroom	Y N
31	11-2		" / Womens Restroom	Y N
32	HA 12-1		Wall Board Adhesive / Men's Restroom	Y N
33	12-2		" / Entry Vestibule	Y N
34	HA 13-1		2"x2" SCT - Long Gages & Pinholes / North Storage Room	Y N
35	13-2		" / North Storage Room	Y N
36	HA 14-1		Window Glazing / West Men's Restroom	Y N
37	14-2		" / West office	Y N
38	HA 15-1		Flat Roofing Materials / North Side	Y N
39	15-2		" / Central	Y N

## SPECIAL INSTRUCTIONS:

Sample Collector: (Print)

(Signature)

Relinquished by:

Date/Time:

Received by:

Date/Time:

Relinquished by:

Date/Time:

Received by:

Date/Time:

\*\* In the event of any dispute between the above parties for these services or otherwise, parties agree that jurisdiction and venue will be in Phoenix, Arizona and prevailing party will be entitled to attorney's fees and court costs. Rev. 09/01/08

## Appendix B





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 1**



Exterior View of Subject Property

### **Photograph 2**



**View of Asbestos Containing Mudded  
Fittings Associated with Straight Pipe  
Insulation  
(HA1)**





Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 22, 2023  
PM Project No. 01-14761-0-0002  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 3



**View of Asbestos Containing Straight Pipe  
Insulation  
(HA2)**

### Photograph 4



**View of Asbestos Containing Boiler  
Insulation  
(HA3)**





Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 22, 2023  
PM Project No. 01-14761-0-0002  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 5



**View of Asbestos Containing Boiler Door  
Insulation  
(HA4)**

### Photograph 6



**View of Wall and Ceiling Plaster  
(HA5)**



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 7**



View of Unfinished Drywall Panels  
(HA6)

### **Photograph 8**



View of 2' x 4' Suspended Ceiling Tile with  
Long Gouges and Pinholes  
(HA7)





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### Photograph 9



View of 12" x 12" Tan Mottled Floor Tile and  
Mastic  
(HA8)

### Photograph 10



View of Brown Cove Base and Adhesive  
(HA9)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 11**



View of 12" x 12" Grey Mottled Floor Tile and  
Mastic  
(HA10)

### **Photograph 12**



View of 12" x 12" White with Red and Blue  
Specks Floor Tile and Mastic  
(HA11)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### Photograph 13



View of Wall Board Adhesive  
(HA12)

### Photograph 14



View of 2' x 2' Ceiling Tile with Pinholes and  
Log Gouges  
(HA13)





Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 22, 2023  
PM Project No. 01-14761-0-0002  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 15



View of Window Glazing  
(HA14)

### Photograph 16



View of Asbestos Containing Flat Roofing  
Materials  
(HA15)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### Photograph 17



View of Drywall Panels  
(HA16)

### Photograph 18



View of Roofing Shingles  
(HA17)





Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 22, 2023  
PM Project No. 01-14761-0-0002  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 19



View of White Interior Building Caulk  
(HA18)

### Photograph 20



View of Tagged Metal Fire Door  
(Assumed ACM)  
(HA19)





Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 22, 2023  
PM Project No. 01-14761-0-0002  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 21



View of Tagged Metal Fire Door  
(Assumed ACM)  
(HA20)

### Photograph 22



View of Light Heat Shield  
(HA21)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### Photograph 23



View of Red Fire Stop Caulk  
(HA22)

### Photograph 24



View of Fiberglass Reinforced Wall Panel  
Adhesive  
(HA23)





Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 22, 2023  
PM Project No. 01-14761-0-0002  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 25



View of Interior Boiler Fire Brick  
(HA24)

### Photograph 26



View of White Exterior Window Caulk  
(HA25)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 27**



**View of Asbestos Containing Black Exterior  
Building Caulk  
(HA26)**

### **Photograph 28**



**Typical View of Yellow Exterior Paint on  
Concrete  
(PC-1)**





Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 22, 2023  
PM Project No. 01-14761-0-0002  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 29



Typical View of White Exterior Paint on Metal  
(PC-2)

### Photograph 30



Typical View of Yellow Exterior Paint on Metal  
(PC-3)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### Photograph 31



Typical View of Blue Exterior Paint on Metal  
(PC-4)

### Photograph 32



Typical View of Red Exterior Paint on Metal  
(PC-5)





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 33**



Typical View of White Exterior Paint on Wood  
(PC-6)

### **Photograph 34**



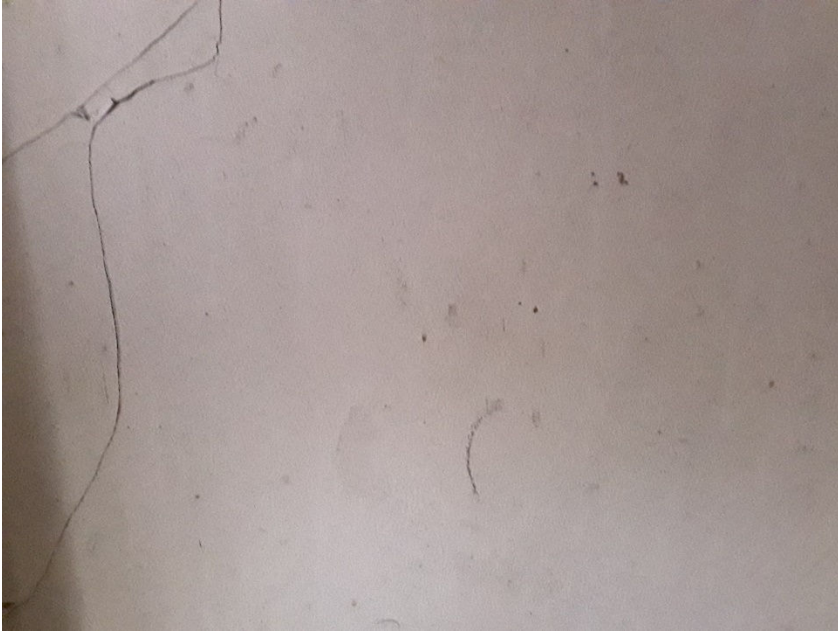
Typical View of Red Exterior Paint on Wood  
(PC-7)





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 35**



Typical View of Beige Interior Paint on Plaster  
(PC-8)

### **Photograph 36**



Typical View of Beige Interior Paint on Wood  
(PC-9)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### Photograph 37



Typical View of White Interior Paint on Plaster  
(PC-10)

### Photograph 38



Typical View of Blue Interior Paint on Plaster  
(PC-11)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 39**



Typical View of Brown Interior Paint on Metal  
(PC-12)

### **Photograph 40**



Typical View of Blue Interior Paint on Metal  
(PC-13)





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 41**



Typical View of Dark Yellow Interior Paint on  
Plaster  
(PC-14)

### **Photograph 42**



Typical View of Tan Interior Paint on Wood  
Paneling  
(PC-15)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 43**



Typical View of Grey Interior Paint on Concrete  
(PC-16)

### **Photograph 44**



Typical View of Lavender Interior Paint on  
Plaster  
(PC-17)



Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 22, 2023  
PM Project No. 01-14761-0-0002  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 45



Typical View of Black Interior Paint on Boiler  
(PC-18)

### Photograph 46



Typical View of Grey Interior Paint on Brick  
(PC-19)





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 47**



Typical View of Red Exterior Paint on Brick  
(PC-20)

### **Photograph 48**



Typical View of White Exterior Paint on Brick  
(PC-21)





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 49**



Typical View of Red Exterior Paint on Concrete  
(PC-22)

### **Photograph 50**



Typical View of Fluorescent Bulbs Containing  
Ballasts



Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 22, 2023  
PM Project No. 01-14761-0-0002  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 51



Typical View of Fire Extinguisher Systems

### Photograph 52



Typical View of Dishwasher



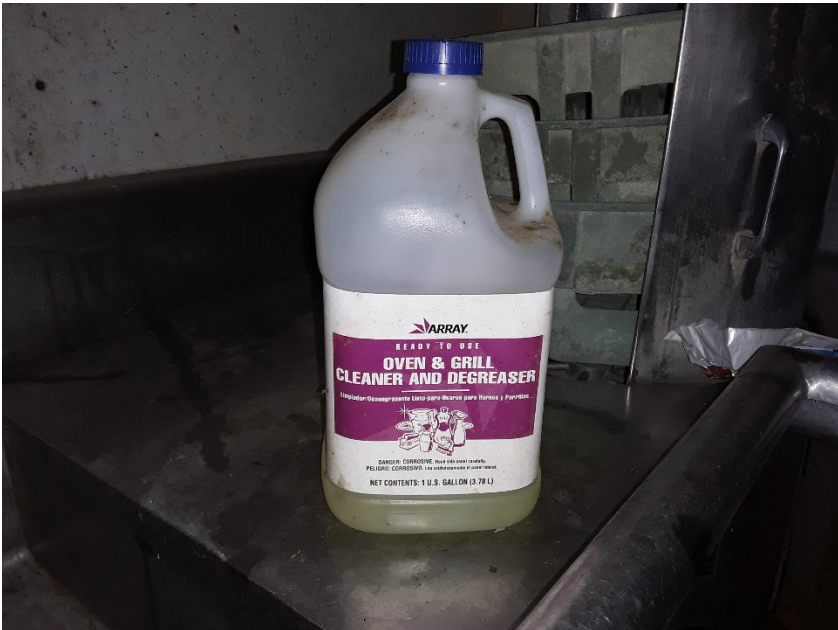
Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 22, 2023  
PM Project No. 01-14761-0-0002  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 53



Typical View of Hydraulic Door Hinge

### Photograph 54



Typical View of Oven and Grill Cleaner and Degreaser





Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 22, 2023  
PM Project No. 01-14761-0-0002  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 55



Typical View of Water Treatment Compound Liquid

### Photograph 56



Typical View of Film Free Plus



Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 22, 2023  
PM Project No. 01-14761-0-0002  
Location: 108 Adams Street, Bay City, Michigan

### Photograph 57



Typical View of Water Heater

### Photograph 58



Typical View of Vinyl Tile Adhesive



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 22, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 108 Adams Street, Bay City, Michigan**

### **Photograph 59**



Typical View of High Intensity Discharge  
Lighting

## Appendix C





Client: PM Environmental, Inc.  
C/O: Kathryn Cleary  
Re: 01-14761-0-0002, Task 2; 108 Adams Street,  
Bay  
City, MI

**Eurofins J3 Resources, Inc.**  
3113 Red Bluff Road, Pasadena, TX 77503  
713-290-0223 www.eurofinsus.com/Built

Date of Submittal: 08-28-2023  
Date of Receipt: 08-28-2023  
Date of Report: 09-01-2023

**Bulk Asbestos Fiber Analysis by Polarized Light Microscopy (PLM)**  
**Appx E Sub E 40 CFR 763 / EPA 600/R-93/116**

Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	Comment
HA 16-1. 16369649-1	Layer 1 Brown/White Drywall Homogeneity:Good	Not Detected	90% Non-Fibrous Material 10% Cellulose < 1% Glass Fibers	
HA 16-2. 16369650-1	Layer 1 Brown/White Drywall Homogeneity:Good	Not Detected	90% Non-Fibrous Material 10% Cellulose < 1% Glass Fibers	
HA 17-1. 16369651-1	Layer 1 Black Roofing Shingle Homogeneity:Moderate	Not Detected	95% Non-Fibrous Material 5% Glass Fibers	
HA 17-2. 16369652-1	Layer 1 Black Roofing Shingle Homogeneity:Moderate	Not Detected	95% Non-Fibrous Material 5% Glass Fibers	
HA 18-1. 16369653-1	Layer 1 White Caulk Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
HA 18-2. 16369654-1	Layer 1 White Caulk Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
HA 21-1. 16369655-1	Layer 1 Silver Foil Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
	Layer 2 White Insulation Homogeneity:Good	Not Detected	97% Glass Fibers 3% Non-Fibrous Material	
HA 21-2. 16369656-1	Layer 1 Silver Foil Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
	Layer 2 White Insulation Homogeneity:Good	Not Detected	97% Glass Fibers 3% Non-Fibrous Material	
HA 22-1. 16369657-1	Layer 1 Red Fire Stop Caulk Homogeneity:Good	Not Detected	95% Non-Fibrous Material 5% Glass Fibers	
HA 22-2. 16369658-1	Layer 1 Red Fire Stop Caulk Homogeneity:Good	Not Detected	95% Non-Fibrous Material 5% Glass Fibers	
HA 23-1. 16369659-1	Layer 1 Beige Wall Panel Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
HA 23-2. 16369660-1	Layer 1 Beige Wall Panel Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
HA 24-1. 16369661-1	Layer 1 Brown Brick Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
HA 24-2. 16369662-1	Layer 1 Brown Brick Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
HA 24-3. 16369663-1	Layer 1 Brown Brick Homogeneity:Good	Not Detected	100% Non-Fibrous Material	

**Comments:**

The total percentage of sample components shown may be greater than 100% when some components are detected at <1%.

The test report shall not be reproduced except in full, without written approval of the laboratory. The 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. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers of that type were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

Client: PM Environmental, Inc.  
C/O: Kathryn Cleary  
Re: 01-14761-0-0002, Task 2; 108 Adams Street,  
Bay  
City, MI

**Eurofins J3 Resources, Inc.**  
3113 Red Bluff Road, Pasadena, TX 77503  
713-290-0223 www.eurofinsus.com/Built

Date of Submittal: 08-28-2023  
Date of Receipt: 08-28-2023  
Date of Report: 09-01-2023

**Bulk Asbestos Fiber Analysis by Polarized Light Microscopy (PLM)**  
**Appx E Sub E 40 CFR 763 / EPA 600/R-93/116**

Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	Comment
HA 25-1. 16369664-1	Layer 1 White/ Red Window Caulk Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
HA 25-2. 16369665-1	Layer 1 White/ Red Window Caulk Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
HA 26-1. 16369666-1	Layer 1 Black Caulk Homogeneity:Good	5% Chrysotile	95% Non-Fibrous Material	A

**Comments:** A)Positive Stop Requested- Sample 26-2

**Analyst(s):** Leslie Vicente

The total percentage of sample components shown may be greater than 100% when some components are detected at <1%.

The test report shall not be reproduced except in full, without written approval of the laboratory. The 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. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers of that type were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

## IH CHAIN OF CUSTODY



003366831

Testing

☐ Open Lab Fee

EBET Order # (Lab use only)

Submitter Name: Kathryn Cleary	Bill to: SAME
Company: PM Environmental	Address:
Address: 3340 Ranger Road	City/State: Zip:
City/State: Lansing, MI Zip: 48906	PO #:

## Project Information

Project Name: 108 Adams Street, Bay City, MI	Project Manager: Kathryn Cleary
Project #: 01-14761-0-0002, Task 2	Telephone - Office/Cell (517)-331-7836
Reports - Email Address: IHS@pmenv.com	
Invoice - Email Address: IHS@pmenv.com	Notification By: Email: <input checked="" type="checkbox"/> Verbal: <input type="checkbox"/>

Special Instructions: Stop-First-Positive!

## Turnaround Times - Please Select One

Emergency* <input type="checkbox"/>	1 Day <input type="checkbox"/>	2 Day <input type="checkbox"/>	3 Day <input type="checkbox"/>	5 Day <input checked="" type="checkbox"/>
-------------------------------------	--------------------------------	--------------------------------	--------------------------------	---

## ASBESTOS

PLM - Bulk	PCM - Air	TEM - Air	TEM - Bulk	TEM - Water	TEM - Dust	TEM/PLM Soil/Vermiculite/Ore
EPA 600/R-93/116 <input checked="" type="radio"/> Visual Estimation (<1%) <input type="radio"/> 400 Point Count 0.25% <input type="radio"/> 1,000 Point Count 0.1% <input type="radio"/> Gravimetric Reduction <input type="radio"/> Matrix Reduction (+/-) <input type="radio"/> NIOSH 9002 <input type="radio"/> OSHA ID-191	<input type="radio"/> NIOSH 7400 <input type="radio"/> ASTM D7201 <input type="radio"/> ISO 8672 <input type="radio"/> OSHA ID-150	<input type="radio"/> AHERA <input type="radio"/> NIOSH 7402 <input type="radio"/> ASTM D6284 <input type="radio"/> ISO 10312 <input type="radio"/> ISO 13794	<input type="radio"/> Gravimetric Reduction (<1%) <input type="radio"/> Matrix Reduction (+/-) <input type="radio"/> Qualitative (+/-) <input type="radio"/> Drop Mount <input type="radio"/> Filtration	<input type="radio"/> EPA 100.2 Drinking Water <input type="radio"/> >10 µm fibers <input type="radio"/> ≥0.5 µm fibers <input type="radio"/> EPA 100.2 Effluent / WW Received on ice: <input type="radio"/> Yes <input type="radio"/> No Temp:	<input type="radio"/> ASTM D5755 Microvac <input type="radio"/> ASTM D6480 Wipe <input type="radio"/> 600/J-93/167 Carpet - EPA <input type="radio"/> Bulk Dust Qualitative	<input type="radio"/> ASTM 7521-TEM (+/-) <input type="radio"/> ASTM 7521-TEM (<1%) <input type="radio"/> CARB 435-Modified <input type="radio"/> Soil - PLM Only (+/-) <input type="radio"/> Vermiculite - TEM (+/-) <input type="radio"/> Vermiculite-Cincinnati <input type="radio"/> Erionite ID

## METALS

## SILICA/PARTICULATES

Flame AA	IC	ICP	X-Ray Diffraction / Gravimetric / Combustion Byproduct
<input type="radio"/> Lead in Paint - SW846 7000B/3050B <input type="radio"/> Lead in Air - NIOSH 7082 <input type="radio"/> Lead in Wipes - SW846 7000B/3050B <input type="radio"/> Lead in Soil - SW846 7000B/3050B <input type="radio"/> TCLP - SW846 7000B/1311	<input type="radio"/> Cr(VI) in Air - OSHA ID-215 <input type="radio"/> Cr(VI) in Wipe - OSHA ID-216 <input type="radio"/> Cr(VI) in Bulk - OSHA ID-215	<input type="radio"/> Metals in Air - NIOSH 7303 <input type="radio"/> Metals in Wipe - OSHA ID-121 <input type="radio"/> Metals in Bulk - OSHA ID-121 <input type="radio"/> Welding Fume - NIOSH 7303	<input type="radio"/> Respirable Crystalline Silica NIOSH 7500 / OSHA 142 <input type="radio"/> NIOSH 0600 - Total Particulates <input type="radio"/> NIOSH 0600 - Respirable Particulates ASTM 8802 - CBP <input type="radio"/> PLM <input type="radio"/> TEM <input type="radio"/> SEM

 Total Number of Samples Submitted: 19 Samples Positive Stop: ☐ NO ☒ YES ☐ By Layer ☐ By Sample

## Signatures

Relinquished By: <u>Kathryn Cleary</u>	Date: 8-25-2023	Time: 5:15pm
Received By: <u>[Signature]</u>	Date: 8/28/23	Time: 11:00am
Relinquished By:	Date:	Time:
Received By:	Date:	Time:

\*Emergency TAT requires prior lab notification. All samples analyzed outside normal business hours are charged at Emergency rate.

\*TAT's are in Business Days rather than Hours (i.e. 1 Day TAT = End of Next Business Day)

 6110 West 34<sup>th</sup> Street  
 Houston, Texas 77062  
 tel: 713-290-0221

 3113 Red Bluff Road  
 Pasadena, TX 77603  
 tel: 713-290-0223

 9701 Harry Hines Blvd  
 Dallas, TX 75220  
 tel: 713-290-0221

Page 1 of 3



## Appendix D



**HIH LABORATORY, INC.**

Page 1 of 12

100 E. NASAParkway, Suite 210

P.O. Box 57727

Webster, Tx 77598

(281) 338-9000

FAX (281) 338-2351

**Report Number** 56209**PO Number** 3367712**LABORATORY ANALYSIS REPORT**

EUROFINS J3 RESOURCES

**Attention:****Report Number** 56209**Date Received:** 09/06/2023

3113 RED BLUFF

Ms. Mariela Guerra

**Client Number:** 1136 1**Date Reported:** 09/08/2023

PASADENA TX 77503

<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574288	PC-1									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr style="border-top: 1px dashed #000080;"/>										
Lead (as Pb)		21000	ug/g	2.1	%	9/8/2023	500 ug/g	No		
<hr style="border-top: 1px dashed #000080;"/>										
574289	PC-2									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr style="border-top: 1px dashed #000080;"/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		



**HIH LABORATORY, INC.**

Page 2 of 12

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PASADENA TX 77503

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<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574290	PC-3									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
<hr/>										
574291	PC-4									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
<hr/>										

**HIH LABORATORY, INC.**

Page 3 of 12

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**Attention:****Report Number**

56209

**Date Received:**

09/06/2023

3113 RED BLUFF

Ms. Mariela Guerra

**Client Number:**

1136 1

**Date Reported:**

09/08/2023

PASADENA TX 77503

<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574292	PC-5									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
-----										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
-----										
574293	PC-6									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
-----										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
-----										

**HIH LABORATORY, INC.**

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**Attention:****Report Number** 56209**Date Received:** 09/06/2023

3113 RED BLUFF

Ms. Mariela Guerra

**Client Number:** 1136 1**Date Reported:** 09/08/2023

PASADENA TX 77503

<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574294	PC-7									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
<hr/>										
574295	PC-8									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr/>										
Lead (as Pb)		4400	ug/g	0.44	%	9/8/2023	50 ug/g	No		
<hr/>										

**HIH LABORATORY, INC.**

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3113 RED BLUFF

Ms. Mariela Guerra

**Client Number:** 1136 1**Date Reported:** 09/08/2023

PASADENA TX 77503

<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574296	PC-9									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr/>										
Lead (as Pb)		37000	ug/g	3.7	%	9/8/2023	500 ug/g	No		
<hr/>										
574297	PC-10									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr/>										
Lead (as Pb)		90	ug/g	0.009	%	9/8/2023	50 ug/g	No		
<hr/>										

**HIH LABORATORY, INC.**

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100 E. NASAParkway, Suite 210

P.O. Box 57727

Webster, Tx 77598

(281) 338-9000

FAX (281) 338-2351

**Report Number** 56209**PO Number** 3367712**LABORATORY ANALYSIS REPORT**

EUROFINS J3 RESOURCES

**Attention:****Report Number**

56209

**Date Received:**

09/06/2023

3113 RED BLUFF

Ms. Mariela Guerra

**Client Number:**

1136 1

**Date Reported:**

09/08/2023

PASADENA TX 77503

<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574298	PC-11									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
-----										
Lead (as Pb)		5500	ug/g	0.55	%	9/8/2023	500 ug/g	No		
-----										
574299	PC-12									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
-----										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
-----										

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3113 RED BLUFF

Ms. Mariela Guerra

**Client Number:** 1136 1**Date Reported:** 09/08/2023

PASADENA TX 77503

<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574300	PC-13									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
574301	PC-14									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
Lead (as Pb)		7300	ug/g	0.73	%	9/8/2023	500 ug/g	No		



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<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574302	PC-15									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
574303	PC-16									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
Lead (as Pb)		120	ug/g	0.012	%	9/8/2023	50 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										

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<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574304	PC-17									
Cadmium (as Cd)		6	ug/g	0.0006	%	9/8/2023	5 ug/g	No		
Lead (as Pb)		4200	ug/g	0.42	%	9/8/2023	50 ug/g	No		
574305	PC-18									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
Lead (as Pb)		22000	ug/g	2.2	%	9/8/2023	500 ug/g	No		

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<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574306	PC-19									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
Lead (as Pb)		2100	ug/g	0.21	%	9/8/2023	50 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
574307	PC-20									
Cadmium (as Cd)		9	ug/g	0.0009	%	9/8/2023	5 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
Lead (as Pb)		200	ug/g	0.020	%	9/8/2023	50 ug/g	No		

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EUROFINS J3 RESOURCES

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Ms. Mariela Guerra

**Client Number:** 1136 1**Date Reported:** 09/08/2023

PASADENA TX 77503

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<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574308	PC-21									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
Lead (as Pb)		140	ug/g	0.014	%	9/8/2023	50 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
574309	PC-22									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
Lead (as Pb)		130	ug/g	0.013	%	9/8/2023	50 ug/g	No		

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**Report Number** 56209**PO Number** 3367712**LABORATORY ANALYSIS REPORT**Report Number  
56209**SUPPLEMENTARY QUALITY ASSURANCE INFORMATION**

Analyte	Method	Media	Test date	Analyst	Instrument	MS % Recovery	MSD % RECOVERY	MS/MSD RPD	LCS % Recovery:	Precision (% Sr)	Blank Result	DUP RPD	Range	Batch No	Lit Ref	HIH Sample #
Cadmium (as Cd)	NIOSH 7303M	Paint	09/08/2023	EP	8300MET	90.3	89.9	0.4	95.4		< 5	ug/g		41266		574283
Lead (as Pb)	NIOSH 7303M	Paint	09/08/2023	EP	8300MET				97.6		< 50	ug/g		41266		574283
Due to the high level of lead versus the spiking level, accurate determination of the spike recovery was not possible.																
Cadmium (as Cd)	NIOSH 7303M	Paint	09/08/2023	EP	8300MET	86.9	86	0.998	94.6		< 5	ug/g		41267		574298
Lead (as Pb)	NIOSH 7303M	Paint	09/08/2023	EP	8300MET	84			99.2		< 50	ug/g	1.99	41267		574298

**Method Literature References**

97 NIOSH Manual of Analytical Methods, 4th Edition, August, 1994

122 NIOSH Manual of Analytical Methods, 5th Edition

HIH Laboratory did not collect these samples; therefore, calculations and sampling information are based on client-supplied sampling data.

Samples arrived in good condition unless otherwise noted.

**Approved Signatory:** Carole A. Newman**END OF REPORT****AIHA 101438****ELLAP 101438****NVLAP Lab Code 101233-0****TDH 30-0040**

IH CH 03367712

eurofins

Built Environment Testing

☐ Open Lab Fee

EB

Submitter Name: Kathryn Cleary	Bill to: SAME
Company: PM Environmental	Address:
Address: 3340 Ranger Road	City/State: Zip:
City/State: Lansing, MI Zip: 48906	PO #:

## Project Information

Project Name: 108 Adams Street, Bay City, MI	Project Manager: Kathryn Cleary
Project #: 01-14761-0-0002, Task 2	Telephone - Office/Cell (517)-331-7836
Reports - Email Address: IHS@pmenv.com	
Invoice - Email Address: IHS@pmenv.com	Notification By: Email: <input checked="" type="checkbox"/> Verbal: <input type="checkbox"/>

Special Instructions: Lead + Cadmium Testing

## Turnaround Times - Please Select One

Emergency\* ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 5 Day ☒

## ASBESTOS

PLM - Bulk	PCM - Air	TEM - Air	TEM - Bulk	TEM - Water	TEM - Dust	TEM/PLM Soil/Vermiculite/Ore
<b>EPA 600/R-93/116</b> <input type="radio"/> Visual Estimation (<1%) <input type="radio"/> 400 Point Count 0.25% <input type="radio"/> 1,000 Point Count 0.1% <input type="radio"/> Gravimetric Reduction <input type="radio"/> Matrix Reduction (+/-) <input type="radio"/> NIOSH 9002 <input type="radio"/> OSHA ID-191	<input type="radio"/> NIOSH 7400 <input type="radio"/> ASTM D7201 <input type="radio"/> ISO 8672 <input type="radio"/> OSHA ID-160	<input type="radio"/> AHERA <input type="radio"/> NIOSH 7402 <input type="radio"/> ASTM D6281 <input type="radio"/> ISO 10312 <input type="radio"/> ISO 13794	<input type="radio"/> Gravimetric Reduction (<1%) <input type="radio"/> Matrix Reduction (+/-) <input type="radio"/> Qualitative (+/-) <input type="radio"/> Drop Mount <input type="radio"/> Filtration	<input type="radio"/> EPA 100.2 Drinking Water <input type="radio"/> >10 µm fibers <input type="radio"/> ≥0.5 µm fibers <input type="radio"/> EPA 100.2 Effluent / WW Received on ice: <input type="radio"/> Yes <input type="radio"/> No Temp: _____	<input type="radio"/> ASTM D5755 Microvac <input type="radio"/> ASTM D6480 Wipe <input type="radio"/> 600/J-93/167 Carpet - EPA <input type="radio"/> Bulk Dust Qualitative	<input type="radio"/> ASTM 7521-TEM (+/-) <input type="radio"/> ASTM 7521-TEM (<1%) <input type="radio"/> CARB 435-Modified <input type="radio"/> Soil - PLM Only (+/-) <input type="radio"/> Vermiculite - TEM (+/-) <input type="radio"/> Vermiculite-Cincinnati <input type="radio"/> Erionite ID

## METALS

## SILICA/PARTICULATES

Flame AA	IC	ICP	X-Ray Diffraction / Gravimetric / Combustion Byproduct
● Lead in Paint - SW846 7000B/3050B <input type="radio"/> Lead in Air - NIOSH 7082 <input type="radio"/> Lead in Wipes - SW846 7000B/3050B <input type="radio"/> Lead in Soil - SW846 7000B/3050B <input type="radio"/> TCLP - SW846 7000B/1311	<input type="radio"/> Cr(VI) in Air - OSHA ID-215 <input type="radio"/> Cr(VI) in Wipe - OSHA ID-215 <input type="radio"/> Cr(VI) in Bulk - OSHA ID-215	<input type="radio"/> Metals in Air - NIOSH 7303 <input type="radio"/> Metals in Wipe - OSHA ID-121 <input type="radio"/> Metals in Bulk - OSHA ID-121 <input type="radio"/> Welding Fume - NIOSH 7303	<input type="radio"/> Respirable Crystalline Silica NIOSH 7500 / OSHA 142 <input type="radio"/> NIOSH 0500 - Total Particulates <input type="radio"/> NIOSH 0600 - Respirable Particulates ASTM 6602 - CBP <input type="radio"/> PLM <input type="radio"/> TEM <input type="radio"/> SEM

Total Number of Samples Submitted: 22 Samples Positive Stop: ☐ NO ☐ YES ☐ By Layer ☐ By Sample

## Signatures

Relinquished By: <i>Kathryn Cleary</i>	Date: 8-25-2023 Time: 5:15pm
Received By: <i>[Signature]</i>	Date: 8/28/23 Time: 11:00am
Relinquished By:	Date: Time:
Received By:	Date: Time:

\* Emergency TAT requires prior lab notification. All samples analyzed outside normal business hours are charged at Emergency rate.

\*\*TAT's are in Business Days rather than Hours (i.e. 1 Day TAT = End of Next Business Day)

6110 West 34<sup>th</sup> Street  
Houston, Texas 77092  
tel: 713-290-0221

3113 Red Bluff Road  
Pasadena, TX 77503  
tel: 713-290-0223

9701 Harry Hines Blvd  
Dallas, TX 75220  
tel: 713-290-0221

## CHAIN OF CUSTODY

Project Name 108 Adams Street, Bay City, MI  
Project Number 01-14761-0-0002, Task 2

Page 2 of 2

### SAMPLE IDENTIFICATION

[illegible]





**Corporate Headquarters**  
Lansing, Michigan  
3340 Ranger Road, Lansing, MI 48906  
f: 877.884.6775  
t: 517.321.3331

**Michigan Locations**  
Berkley      Bay City  
Grand Rapids      Lansing  
Oak Park

October 12, 2023

Ms. Janet Michaluk  
Michigan Department of Environment, Great Lakes, and Energy (Lansing)  
525 West Allegan P.O. Box 30242  
Lansing, Michigan 48909-7742

**Re: Hazardous Materials Survey  
Of the 501 Columbus Avenue Site  
Identified as 501 Columbus Avenue, Bay City, Michigan  
PM Project No. 01-14761-0-0002  
Contract Y23308, File #761/23289.SAR**

Dear Ms. Michaluk:

PM Environmental (PM), a Pinchin Company, was retained by Michigan Department of Environment, Great Lakes, and Energy (Lansing) to perform a Hazardous Materials Survey of the 501 Columbus Avenue Site identified as the above referenced address (i.e. the subject property). The purpose of the assessment was to identify asbestos containing materials (ACM), and lead and cadmium-containing paint, and hazardous materials prior to demolition activities.

The Hazardous Materials Survey Report for the above referenced property represents the product of PM's professional expertise and judgment in the environmental consulting industry, and it is reasonable for **MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (LANSING)** to rely on PM's report.

This report has been reviewed for its completeness and accuracy. Please feel free to contact our office at (800) 313-2966 to discuss this report.

Sincerely,  
**PM Environmental, a Pinchin Company**

Taylor LaParl  
Staff Consultant

Jon M. Balsamo  
National Manager



Environmental & Engineering Services Nationwide



ENVIRONMENTAL SERVICES

BUILDING ARCHITECTURE,  
ENGINEERING & SCIENCE

INDUSTRIAL HYGIENE SERVICES

BROWNFIELDS & ECONOMIC  
INCENTIVES CONSULTING

## HAZARDOUS MATERIALS SURVEY

### **501 Columbus Avenue Site**

501 Columbus Avenue | Bay City, Michigan

PM Project Number 01-14761-0-0002

Contract Y23308, File #761/23289.SAR

*Prepared for:*

**Michigan Department of Environment, Great Lakes, and Energy  
(Lansing)**

525 West Allegan P.O. 30242

Lansing, Michigan 48909-7742

*Prepared by:*

**PM Environmental, a Pinchin Company**

3340 Ranger Road

Lansing, Michigan 48906

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## **EXECUTIVE SUMMARY**

PM Environmental (PM), a Pinchin Company, has completed a Hazardous Materials Survey of the 501 Columbus Avenue Site identified as 501 Columbus Avenue, Bay City, Michigan (hereinafter referred to as the subject property). This service was performed by PM under its 2023 Environmental Indefinite Scope Indefinite Delivery (ISID) contract (Contract #00939), Contract Number Y23308, File Number 761/23289.SAR.

This survey provides a summary of on-site building materials and equipment that were found to contain building components or features that are of environmental interest. In general, these items include asbestos containing materials (ACM), lead and cadmium-containing paint, chlorofluorocarbon (CFC) containing refrigerants, mercury-containing devices, polychlorinated biphenyl (PCB) containing ballasts, and low-level radioactive devices. The following findings are based on the building inspection, material sampling and laboratory analyses:

The results of PM's survey identified the following ACM:

- Exterior Transite Skirting (HA8) – 350 Square Feet

This material will need to be removed by a licensed abatement contractor prior to demolition activities.

PM collected paint chip samples from accessible locations in the survey area. Based on analytical results from paint chip samples, measurable amounts of cadmium were found. Based on these findings, contractors involved with demolition activities should be made aware of the cadmium concentrations in order to use safe work practices to avoid any exposure exceedances.

Hazardous materials identified consist of components or materials that include, but are not limited to, the following:

- CFC-containing refrigerants
- Chemicals of environmental interest
- Electronics with potential heavy metals
- Low-level radioactive devices
- Mercury-containing components
- PCB-containing components

These materials can be removed by the contractor as part of initial site demolition activities. The regulated materials and general maintenance products that have specific disposal requirements as specified on their respective safety datasheets (SDS) should be removed by a contractor aware of local, State and Federal regulations governing removal, packaging, transportation, and disposal.

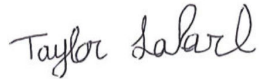
The summary presented above is general in nature and should not be considered apart from the entire text of the report, which contains the qualifications, considerations and subject property details mentioned herein. Details of findings and conclusions are elaborated upon in this survey report.

***Hazardous Materials Survey  
Of the 501 Columbus Avenue Site  
Identified as 501 Columbus Avenue, Bay City, Michigan  
PM Project No. 01-14761-0-0002; October 12, 2023***

This report has been reviewed for its completeness and accuracy. Please feel free to contact our office at 800.313.2966 to discuss this report.

**REPORT PREPARED BY:**

PM Environmental, a Pinchin Company



Taylor LaParl  
Staff Consultant

**REPORT REVIEWED BY:**

PM Environmental, a Pinchin Company



Jon M. Balsamo  
National Manager

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## APPENDICES

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Appendix C:	Asbestos Laboratory Analytical Report and Chain of Custody Documentation
Appendix D:	Lead and Cadmium Laboratory Analytical Report and Chain of Custody Documentation

## **1.0 INTRODUCTION**

PM Environmental (PM), a Pinchin Company, was retained by Michigan Department of Environment, Great Lakes, and Energy (Lansing), to perform a Hazardous Materials Survey of the 501 Columbus Avenue Site identified as 501 Columbus Avenue, Bay City, Michigan (i.e. the subject property). The purpose of the survey was to identify asbestos containing materials (ACM), lead and cadmium-containing paint, and hazardous materials prior to demolition activities.

## **2.0 REGULATORY INFORMATION**

### **2.1 Asbestos Containing Materials**

ACM is defined by the Asbestos Hazard and Emergency Response Act (AHERA) as any material or product containing more than one percent asbestos. Materials containing more than one percent asbestos are subject to the requirements of the United States Environmental Protection Agency (U.S. EPA) Asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP). The Asbestos NESHAP requires that all ACM classified as Regulated Asbestos Containing Materials (RACM) be handled in the following manner dependent on its characteristics as summarized below.

- All friable RACM must be removed from a building or structure that is being demolished or renovated before any wrecking or dismantling is performed.
- ACM that is determined to be non-friable in nature must be classified as a Category I or Category II material. This classification then determines, based on handling procedures, whether the material must be removed prior to renovation or demolition and the means and methods to remove the ACM in accordance with the Asbestos NESHAP.
- Non-Friable Category I Materials that may become friable if subjected to sanding, grinding, cutting, or abrading during demolition or renovation must be removed.
- Category II Non-Friable Materials with a high probability of becoming crumbled, pulverized, or reduced to a powder during construction activities (i.e. including renovation and demolition) must be removed.

The Occupational Safety and Health Administration (OSHA) Construction Standard for Asbestos (29 CFR 1926.1101) identifies building or facility owner responsibilities pertaining to ACM. Specifically, the standard requires building and facility owners to determine the presence, location and quantity of ACM and to provide this information to prospective employers (i.e. contractors) applying or bidding for work, whose employees may be reasonably expected to work in areas within or adjacent to areas containing such materials.

### **2.2 Lead and Cadmium-Containing Paint**

Requirements regarding lead-containing paint are found in the OSHA Construction Standard for Lead (29 CFR 1926.62) and requirements regarding cadmium-containing paint are found in the OSHA Construction Standard for Cadmium (29 CFR 1926.1127). The lead and cadmium standards state that employers are responsible in assuring that no workers are exposed to airborne lead concentrations greater than fifty micrograms per cubic meter of air (50 µg/m<sup>3</sup>) and

airborne cadmium concentrations greater than five micrograms per cubic meter of air (5 µg/m<sup>3</sup>), both averaged over an 8-hour period.

Disposal of lead and/or cadmium-containing paint that has been generated by sanding, use of abrasive blasting, or otherwise stripped from structural materials is subject to hazardous waste disposal regulations of the Resource Conservation and Recovery Act (RCRA).

### **2.3 Universal and Hazardous Waste**

RCRA outlines the standards surrounding Universal Waste (40 CFR 273). According to the standards, materials handled as Universal Waste do not need to be shipped by a waste manifest or hazardous waste transporter. Universal Waste are not required to be managed in a way that prevents releases to the environment, though requirements are tailored to each specific type of Universal Waste and differ between small and large quantities. The standards include requirements regarding labeling, response to releases, and facilities which ultimately manage the Universal Waste. RCRA allows States to define which materials classify as Universal Waste

The State of Michigan defines the following as Universal Waste (R 299.9228):

- Antifreeze
- Batteries
- Consumer Electronics
- Electric Lamps
- Mercury-Containing Devices
- Pesticides
- Pharmaceuticals

Contractors may choose to handle these materials as Universal Waste in place of hazardous waste requirements. All other materials must be handled in accordance to their guidelines set by RCRA.

### **3.0 DESCRIPTION OF SUBJECT PROPERTY**

The subject property consists of a vacant house and associated garage. Suspect interior building materials for asbestos consist of drywall ceilings and walls, various floorings and associated adhesives, textured paint, black paper under paneling, cellulose insulation, grey sink undercoating, and white interior building caulk. Suspect exterior building materials for asbestos consist of insulbrick exterior siding, exterior transite skirting, various caulks, and roofing materials. Non-suspect building material for asbestos include wood, ceramic tile, vinyl duct vibration joint, glass, and metal.

### **4.0 LIMITATIONS AND EXCEPTIONS OF SURVEY**

Locating and identifying hazardous materials in buildings and structures is a difficult and time-consuming task. All buildings have hidden spaces that may not be immediately obvious to a surveyor who is not intimately familiar with the building and who has only a limited time in the building.



Although PM uses trained and licensed inspectors in attempting to locate and identify materials potentially containing asbestos, PM cannot verify that all materials containing asbestos have been identified. Complicating this task is the fact that asbestos was used in many forms and in many types of materials in the construction of buildings. In some of these materials, asbestos is present, not as an intentional ingredient, but as a contaminant. It is possible that there are materials containing asbestos that were not found because they were not visible or accessible to the inspector or for various other reasons were not sampled. Similarly, this would apply to potential lead and cadmium-containing paint and other hazardous materials.

Quantities of identified ACM and hazardous materials that are reported in this survey are often used to generate cost projections for abatement projects. The survey is designed to aid the building owner, architect, construction manager, general contractors, and potential abatement contractors in locating hazardous or regulated building materials. No other representation, expressed or implied, is made.

During preparation of the Hazardous Materials Survey, the following limitations were encountered:

1. Portions of the exterior contained overgrown vegetation at the time of the inspection which hindered PM's ability to thoroughly inspect all exterior areas of the subject property.

The site survey activities were conducted by PM on August 23, 2023 in general accordance with industry standards and procedures at the time of this project. The conclusions and recommendations are based on the applicable standards of our profession at the time this report was prepared. The field survey activities were completed by accredited and trained asbestos inspection professionals.

The analysis and recommendations submitted in this report are based in part on the data obtained from specific and discrete sampling locations. The nature and extent of variations between the sampling locations may not become evident until planned demolition procedures commence. If potential variations are identified during demolition activities, it may be necessary to conduct additional sampling. Further, it is possible that some materials were inaccessible. Such areas may include inaccessible wall cavities. If a newly identified suspect material is found, the material should be sampled prior to disturbance, and considered a non-ACM only after laboratory analysis has shown asbestos is not present in regulated quantities.

## **5.0 ASBESTOS CONTAINING MATERIALS SURVEY**

AKT Peerless Environmental had previously completed a Pre-Demolition Asbestos/Hazardous Materials Survey of the subject property on February 23, 2018. A copy of this report is attached as Appendix A. PM used analytical data collected during that survey to assist with identifying and sampling additional known/suspect ACM. The purpose of this survey was to identify the location, quantities, and condition of ACM within the survey area. PM understands that information obtained from this survey will be used to assist in the proper removal and disposal of these materials before demolition activities. The following subsections describe the sampling plan and sample collection phases of the survey.

## **5.1 Building Walk Through and Inspection Activities**

PM performed a walk-through of the interior and exterior of the buildings using guidelines established by the EPA in the publication *Guidance for Controlling Asbestos-Containing Materials in Buildings*, Office of Pesticides and Toxic Substances, DOC No. 560/5-85-024 and 40 CFR Part 763, of AHERA. For the purposes of this inspection, suspect ACM were placed in three material categories: thermal systems insulation (TSI), surfacing materials (SM), and miscellaneous materials (MM). The locations within the buildings were inspected physically by functional space and Homogeneous Areas (HA)<sup>1</sup> to determine the presence of ACM. The inspection of the buildings included access to the requested survey areas.

The inspection activities were performed by Ms. Kathryn Cleary (State of Michigan Asbestos Inspector Accreditation No. A59151) and Ms. Taylor LaParl (State of Michigan Asbestos Inspector Accreditation No. A60830) of PM. Accessible locations within the survey area were physically inspected to determine the presence of ACM. Suspect materials in each functional space were categorized prior to the collection of bulk samples. During the inspection, the friable<sup>2</sup> or non-friable nature of the suspect ACM were determined and cataloged. A summary of the findings of the inspection is provided in Tables 1 through 4. Photographs of general site conditions or HA are included in Appendix B.

## **5.2 Bulk Sample Collection**

PM conducted bulk sampling of accessible friable and non-friable suspected ACM in general compliance with the requirements of AHERA for bulk sampling (40 CFR 763.86) and consistent with the scope of services outlined in PM's proposal. During the inspection, bulk samples of suspect ACM containing in some cases multiple layers of discrete materials were collected for analysis. All samples were assigned an identification number and chain of custody (COC) forms accompanied the samples to the laboratory.

## **5.3 Asbestos Laboratory Analytical Procedures and Methodologies**

Inspection personnel completed COC forms for all samples submitted to the laboratory. Following completion, the sampling personnel signed and dated the forms and submitted the samples to the laboratory. The COC forms with all signatures are provided with the final reports from the laboratory in Appendix C.

Laboratory analytical services using Polarized Light Microscopy (PLM) were performed by Eurofins J3 Resources, Inc. (J3) located at 6110 West 34<sup>th</sup> Street, Houston, Texas. J3 is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for Bulk Asbestos Fiber Analysis. Bulk samples of suspect ACM were analyzed by PLM Method 198.1 for the criteria set by the NESHAPs, 40 CFR Part 61. They were also analyzed using "positive-stop" methods in which once a positive analytical result was obtained for a material, analysis of the remaining samples from a given HA were suspended.

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<sup>1</sup> Homogeneous Area is defined as material that is uniform in texture and color, and appears identical in every other respect.

<sup>2</sup> Friable ACM as defined by the U.S. EPA, is any material that contains more than one percent asbestos and can be crumbled, pulverized, or reduced to powder by hand pressure.

## **6.0 LEAD AND CADMIUM-CONTAINING PAINT SURVEY**

A Lead and Cadmium-Containing Paint survey was performed to establish lead and cadmium concentrations in painted surfaces as a general guidance tool for safe work practices during the planned demolition activities. The following subsections outline the approach, procedures and methods employed for the survey.

### **6.1 Lead and Cadmium-Containing Paint Inspection Procedures**

The initial step in identifying painted building surfaces in accessible areas consists of a walk-through inspection of the survey areas. The survey involved performing a variety of preliminary assessments to ascertain the quantity and condition of suspect lead and/or cadmium-containing painted surfaces. PM visually inspected accessible surfaces of the buildings to identify potential painted surfaces which could contain lead and/or cadmium and evaluated the condition of these surfaces. Based on these observations, the painted surfaces in the subject property were assessed to be generally intact with various painted surfaces not exhibiting any indications of cracking, chipping and peeling.

### **6.2 Lead and Cadmium-Containing Paint Sample Collection and Analytical Procedures**

PM collected paint chip samples of readily accessible areas of paint for laboratory analysis, to confirm lead and cadmium content for OSHA compliance. Paint chip samples were sent under COC to J3 for Lead and Cadmium Analysis using method OSHA ID 121. Analytical results of these samples are attached as Appendix D.

## **7.0 UNIVERSAL WASTE AND OTHER HAZARDOUS MATERIALS**

During the inspection, PM conducted a visual inspection of the buildings to identify accessible building items, mechanical systems, or products that may contain regulated and/or hazardous building materials.

For location purposes, PM categorized the identified Universal Waste, and other items of interest by functional space. The results of these observations are detailed in Table 5.

## **8.0 FINDINGS**

This section presents the findings of this assessment based on the results of the physical inspection, material sampling and laboratory analyses.

### **8.1 Asbestos Containing Materials**

An asbestos inspection of the buildings was performed to identify the location and condition of ACM. An inventory of these materials is provided in the attached tables. Based on the results of this assessment, the following findings concerning ACM were identified:

- A total of 4 additional different HAs were identified that were not included in the AKT Peerless Report as suspect for asbestos content as part of this survey.

- A total of 9 samples of these additional HAs were collected for laboratory analysis using sampling algorithms specified by U.S. EPA and OSHA regulations. Asbestos content was determined using PLM methods. Laboratory datasheets and COC documentation is provided in Appendix C.

The results of PM's survey identified the following ACM:

- Exterior Transite Skirting (HA8) – 350 Square Feet

Tabular summaries of ACM described by HA, material description, quantities present, location, and condition are provided in Tables 2 through 4.

## **8.2 Lead and Cadmium-Containing Paint**

Based on analytical results from paint chip samples, measurable amounts of cadmium was found in one paint color on the following location and building component:

### **Lead**

- No lead-containing paint was identified.

### **Cadmium**

- PC-10 – Maroon Exterior Paint on Metal Exterior Crawlspace Hatch

Construction work involving lead paint is regulated under the OSHA Construction Industry Standard for Lead (29 CFR 1926.62) and construction work involving cadmium paint is regulated under the OSHA Construction Industry Standard for Cadmium (26 CFR 1926.1127). These standards apply when painted surfaces have been identified to contain lead and cadmium in any detectable concentration.

## **8.3 Universal Waste**

During the completion of this assessment, the buildings was assessed for regulated materials. Based on the results of this assessment, the following findings were identified:

- Drywall Primer and Sealer – potential chemicals of environmental interest
- Refrigerator – potential CFC-containing materials
- Smoke Detector – potential radioactive materials
- Thermostat – potential mercury
- Microwave - potential PCB and CFC-containing materials
- Oven - potential PCB and CFC-containing materials
- Water Heater – potential heavy metals
- Furnace – potential PCB-containing materials
- Air Conditioner - potential CFC-containing materials

An inventory of these items is provided in Table 5.

## **9.0 CONCLUSIONS AND RECOMMENDATIONS**

PM completed a Hazardous Materials Survey of the 501 Columbus Avenue Site identified as 501 Columbus Avenue, Bay City, Michigan. The conclusions and recommendations that have been identified are based on the results of the building inspection, material sampling, and laboratory analyses. PM has identified the following conclusions and recommendations:

### **ACM**

The results of the survey indicate that ACM were identified within the subject property, which will require removal by a licensed abatement contractor prior to demolition activities. A list of the identified ACM can be found in the Executive Summary and in the attached Tables.

PM notes that if additional suspect materials are identified during demolition, that these materials should be sampled to determine their characteristics (i.e. whether they must be treated as ACM or not) or assumed to be ACM and handled accordingly prior to their removal and disposal.

### **Lead and Cadmium**

Cadmium-containing paint was identified in the survey areas. The paint condition throughout the survey areas ranged from intact to poor (peeling). The quantity of cadmium found in the paint has no bearing on an employer's compliance requirement with the OSHA Construction Standard. This is because the standards require compliance with an occupational exposure to airborne cadmium concentrations, regardless of the quantity of cadmium in the paint. Based on the results of the survey, PM recommends that air monitoring be performed during demolition to assess cadmium exposure in worker breathing zones for initial assessment of cadmium exposure levels pursuant to 29 CFR 1926.1127(d)(2).

Workers must be provided adequate personal protective equipment while conducting work that may impact cadmium-containing paint surfaces. Additionally, PM recommends engineering controls be implemented for demolition work on identified cadmium-containing paint surfaces that may be cut with a torch, welded, sawed, or otherwise cut. This includes enclosures and high efficiency particulate air (HEPA) vacuums which may be utilized to limit potential exposure to cadmium during selective demolition of cadmium-containing paint building components.

Disposal of cadmium-containing paint that has been generated by sanding, use of abrasive blasting, or otherwise stripped from structural materials is subject to hazardous waste disposal regulations of the Resource Conservation and Recovery Act (RCRA).

### **Universal Waste and Other Hazardous Materials**

Universal Waste and other identified potential hazardous materials as identified in Table 5 should be handled, removed, transported, and disposed of in accordance with applicable local, state, and federal requirements, and as described below.

- Smoke detectors were identified throughout the subject property. These components are known to contain low quantities of radioactive elements such as Americium 241. These components should be handled as Universal Waste by the remediation contractor.

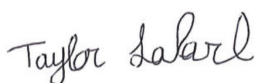
- Thermostats were identified throughout the subject property. These components are suspect for mercury content and should be handled as a Universal Waste by the remediation contractor.
- CFC-containing components such as a refrigerator and air conditioner were identified at the subject property. These units should be removed by a trained and certified technician for recycling or proper disposal.
- Appliances such as a microwave, and oven were identified within the subject property. These appliances are suspect for PCB and CFC-containing and should be removed by a trained and certified technician for proper disposal.
- A water heater was identified in the subject property. This component is suspect for heavy metals and should be handled as a Universal Waste by the remediation contractor.
- Other various hazards that were identified include a furnace and drywall primer and sealer. The materials should be removed by a trained and certified technician for recycling or proper disposal.

**PM's reporting of quantities of materials are to be interpreted as good faith estimates for contractors inspecting and bidding on project abatement and/or demolition activities; however, contractors should use their own estimates of material quantities as a basis for their project cost estimates.**

This report has been reviewed for its completeness and accuracy. Please feel free to contact our office at (800) 313-2966 to discuss this report.

**REPORT PREPARED BY:**

PM Environmental, a Pinchin Company



Taylor LaParl  
Staff Consultant

**REPORT REVIEWED BY:**

PM Environmental, a Pinchin Company



Jon M. Balsamo  
National Manager

# Tables



**Table 1**  
**Description of Functional Spaces**  
**501 Columbus Avenue, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

Functional Space No.	Functional Space Description	Floor
1	Front Porch	First
2	Living Room	First
3	Southwest Living Room	First
4	First Floor Bedroom Number 1	First
5	Kitchen	First
6	First Floor Bathroom	First
7	Back Entry	First
8	Stairwell	First/Second
9	Second Floor Bedroom	Second
10	Second Floor Bathroom	Second
11	Attic	Attic Space
12	Crawl Space	Crawl Space
13	Garage	First
14	Exterior	Exterior

**Table 1 Notes and Acronyms:**

1. The term Functional Space (FS) is defined as one or more spatially distinct units or areas within a building. During the survey, the demarcation of these spaces is based on the judgement of the inspector(s), site plans, or other use features deemed appropriate at the time of the survey.

**Table 2**  
**Summary of Homogeneous Areas**  
**501 Columbus Avenue, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

HA No.	Homogeneous Area Description	Asbestos Content
1	Drywall and Joint Compound	None Detected
2	White with Blue Diamond Pattern Flooring	None Detected
3	Textured Paint	None Detected
4	White Square Pattern Flooring with Layers	None Detected
5	Black Paper Under Paneling	None Detected
6	Yellow Flooring Under Wood Plank Flooring	None Detected
7	Insulbrick Exterior Siding	None Detected
<b>8</b>	<b>Exterior Transite Skirting</b>	<b>20% Chrysotile</b>
9	White Caulk Around Exterior Windows	None Detected
10	Cellulose Insulation	None Detected
11	Roofing Materials - House	None Detected
12	Roofing Materials - Garage	None Detected
13	Tan Square Pattern Sheet Flooring and Adhesive	None Detected
14	White Interior Building Caulk	None Detected
15	Grey Sink Undercoating	None Detected
16	Light Grey Exterior Pipe Penetration Caulk	None Detected

**Table 2 Notes and Acronyms:**

1. Asbestos is a group of fibrous minerals that include: actinolite, amosite, anthophyllite, chrysotile, crocidolite, and tremolite.
2. Homogeneous Area (HA) is defined as an area of surfacing materials, thermal system insulation, or miscellaneous material that is uniform in color and texture.
3. HA listed in bold text were identified to contain asbestos by laboratory analysis or were assumed to contain asbestos based on the scope of work requirements.

**Table 3**  
**Summary of ACM and Material Characteristics**  
**501 Columbus Avenue, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

HA No.	Homogeneous Area Description	Condition	Friable (Yes/No)	EPA Category	Estimated Quantity
8	Exterior Transite Skirting	Good	No	Category II	350 SF

**Table 3 Notes and Acronyms:**

1. Homogeneous Area (HA) is defined as an area of surfacing materials, thermal system insulation, or miscellaneous material that is uniform in color and texture.
2. Friable asbestos-containing material (ACM): Material containing more than 1% asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
3. Nonfriable ACM: Category I or Category II ACM in good condition.
4. Category I nonfriable ACM: ACM packings, gaskets, resilient floor covering, asphalt roofing products containing more than 1% asbestos.
5. Category II nonfriable ACM: Any material, excluding Category I nonfriable ACM, containing more than 1% asbestos.
6. SF = Square Feet

**Table 4**  
**Summary of Homogeneous Areas by Functional Space**  
**501 Columbus Avenue, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

HA No.	Homogeneous Area Description	Condition	Friable (Yes/No)	Estimated Quantity	ACM (Yes/No)	Comments
<b>FS - 1 Front Porch</b>						
5	Black Paper Under Paneling	Good	No	200 SF	No	Walls Throughout Behind Wood Paneling
13	Tan Square Pattern Sheet Flooring and Adhesive	Good	No	90 SF	No	Flooring Throughout
14	White Interior Building Caulk	Good	No	100 LF	No	Perimeter of Windows and Baseboard Trim
<b>FS - 2 Living Room</b>						
1	Drywall and Joint Compound	Good	No	715 SF	No	Walls and Ceiling Throughout
3	Textured Paint	Good	No	210 SF	No	Ceiling Throughout
14	White Interior Building Caulk	Good	No	115 LF	No	Perimeter of Windows and Baseboard Trim
<b>FS - 3 Southwest Living Room</b>						
1	Drywall and Joint Compound	Good	No	740 SF	No	Walls and Ceiling Throughout
3	Textured Paint	Good	No	215 SF	No	Ceiling Throughout
14	White Interior Building Caulk	Good	No	50 LF	No	Perimeter of Baseboard Trim
<b>FS - 4 First Floor Bedroom Number 1</b>						
1	Drywall and Joint Compound	Good	No	750 SF	No	Walls and Ceiling Throughout
3	Textured Paint	Good	No	200 SF	No	Ceiling Throughout; Walls Throughout Closet
4	White Square Pattern Flooring with Layers	Good	No	40 SF	No	Partial Flooring
14	White Interior Building Caulk	Good	No	100 LF	No	Perimeter of Windows and Baseboard Trim
<b>FS - 5 Kitchen</b>						
1	Drywall and Joint Compound	Good	No	750 SF	No	Walls and Ceiling Throughout
3	Textured Paint	Good	No	215 SF	No	Ceiling Throughout
4	White Square Pattern Flooring with Layers	Good	No	5 SF	No	Partial Flooring Throughout Utility Closet
6	Yellow Flooring Under Wood Plank Flooring	Good	No	15 SF	No	Partial Flooring Throughout Utility Closet
14	White Interior Building Caulk	Good	No	145 LF	No	Perimeter of Window, Baseboard Trim, and Doors
15	Grey Sink Undercoating	Good	No	1 EA; 4 SF	No	Double Sink

**Table 4**  
**Summary of Homogeneous Areas by Functional Space**  
**501 Columbus Avenue, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

HA No.	Homogeneous Area Description	Condition	Friable (Yes/No)	Estimated Quantity	ACM (Yes/No)	Comments
<b>FS - 6 First Floor Bathroom</b>						
1	Drywall and Joint Compound	Good	No	230 SF	No	Walls and Ceiling Throughout
3	Textured Paint	Good	No	30 SF	No	Ceiling Throughout
<b>FS - 7 Back Entry</b>						
14	White Interior Building Caulk	Good	No	25 LF	No	Perimeter of Window and Baseboard Trim
<b>FS - 8 Stairwell</b>						
1	Drywall and Joint Compound	Good	No	300 SF	No	Walls and Ceiling Throughout
3	Textured Paint	Good	No	300 SF	No	Walls and Ceiling Throughout
14	White Interior Building Caulk	Good	No	40 LF	No	Perimeter of Stairwell Entryway and Baseboard Trim
<b>FS - 9 Second Floor Bedroom</b>						
1	Drywall and Joint Compound	Good	No	900 SF	No	Walls and Ceiling Throughout
3	Textured Paint	Good	No	900 SF	No	Walls and Ceiling Throughout
<b>FS - 10 Second Floor Bathroom</b>						
1	Drywall and Joint Compound	Good	No	750 SF	No	Walls and Ceiling Throughout
2	White with Blue Diamond Pattern Flooring	Good	No	150 SF	No	Flooring Throughout
3	Textured Paint	Good	No	750 SF	No	Walls and Ceiling Throughout
14	White Interior Building Caulk	Good	No	75 LF	No	Perimeter of Window and Baseboard Trim
<b>FS - 11 Attic</b>						
10	Cellulose Insulation	Good	Yes	400 SF	No	Throughout Attic
<b>FS - 12 Crawl Space</b>						
No Suspect ACM Identified						
<b>FS - 13 Garage</b>						
5	Black Paper Under Paneling	Damaged	No	10 SF	No	East Wall

**Table 4**  
**Summary of Homogeneous Areas by Functional Space**  
**501 Columbus Avenue, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

HA No.	Homogeneous Area Description	Condition	Friable (Yes/No)	Estimated Quantity	ACM (Yes/No)	Comments
<b>FS - 14 Exterior</b>						
7	Insulbrick Exterior Siding	Good	No	2,460 SF	No	Exterior Walls Throughout House Underneath Aluminum Siding
<b>8</b>	<b>Exterior Transite Skirting</b>	<b>Good</b>	<b>No</b>	<b>350 SF</b>	<b>Yes</b>	<b>Bottom Perimeter of Exterior Walls of House</b>
9	White Caulk Around Exterior Windows	Good	No	170 LF	No	Perimeter of Majority of Windows Throughout (10 Windows EA at 5.5' x 3')
11	Roofing Materials - House	Good	No	1,150 SF	No	House Roof
12	Roofing Materials - Garage	Good	No	500 SF	No	Garage Roof
16	Light Grey Exterior Pipe Penetration Caulk	Good	No	1 SF	No	East Exterior Wall of House

**Table 4 Notes and Acronyms:**

1. Functional Space (FS) is defined as a one or more spatially distinct units within a building or structure.
2. Homogeneous Area (HA) is defined as an area of surfacing materials, thermal system insulation, or miscellaneous material that is uniform in color and texture.
3. HA listed in bold text were identified to contain asbestos by laboratory analysis or were assumed to contain asbestos based on the scope of work requirements.
4. SF = Square Feet; LF = Linear Feet; EA = Each

**Table 5**  
**Inventory of Hazardous Materials/Universal Waste**  
**501 Columbus Avenue, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

Component Description	Size	Comments	Quantity	Disposal Aspect
<b>FS - 1 Front Porch</b>				
No Hazardous Materials/Universal Waste Identified				
<b>FS - 2 Living Room</b>				
Smoke Detectors	6" Dim	South Wall	1 EA	Americium 241
<b>FS - 3 Southwest Living Room</b>				
Thermostat	-	West Wall	1 EA	Mercury
<b>FS - 4 First Floor Bedroom Number 1</b>				
Smoke Detectors	6" Dim	At Entry Ceiling	1 EA	Americium 241
<b>FS - 5 Kitchen</b>				
Thermostat	-	South Wall	1 EA	Mercury
Smoke Detectors	6" Dim	At Pantry Closet Ceiling	1 EA	Americium 241
Refrigerators	-	Kitchen	1 EA	CFCs
Appliances - Microwave	-	Kitchen	1 EA	PCBs/CFCs
Appliances - Oven	-	Kitchen	1 EA	PCBs/CFCs
Other - Furnace	-	Utility Closet	1 EA	See SDS
Other - Water Heater	40 Gal	Utility Closet	1 EA	See SDS
<b>FS - 6 First Floor Bathroom</b>				
No Hazardous Materials/Universal Waste Identified				
<b>FS - 7 Back Entry</b>				
No Hazardous Materials/Universal Waste Identified				
<b>FS - 8 Stairwell</b>				
No Hazardous Materials/Universal Waste Identified				
<b>FS - 9 Second Floor Bedroom</b>				
Smoke Detectors	6" Dim	North Wall	1 EA	Americium 241
<b>FS - 10 Second Floor Bathroom</b>				
Other - Drywall Primer and Sealer	5 Gal	South West Closet	1 EA	See SDS
<b>FS - 11 Attic</b>				
No Hazardous Materials/Universal Waste Identified				
<b>FS - 12 Crawl Space</b>				
No Hazardous Materials/Universal Waste Identified				
<b>FS - 13 Garage</b>				
No Hazardous Materials/Universal Waste Identified				



**Table 5**  
**Inventory of Hazardous Materials/Universal Waste**  
**501 Columbus Avenue, Bay City, Michigan**  
**PM Project No. 01-14761-0-0002**

Component Description	Size	Comments	Quantity	Disposal Aspect
<b>FS - 14 Exterior</b>				
Air Conditioners	-	East Side of House	1 EA	CFCs

**Table 5 Notes and Acronyms:**

1. PCB - Polychlorinated Biphenyl
2. CFC - Chlorofluorocarbon
3. SDS - Material Safety Data Sheet
4. EA = Each

# Appendix A



## PRE-DEMOLITION ASBESTOS/HAZARDOUS MATERIALS SURVEY RESULTS

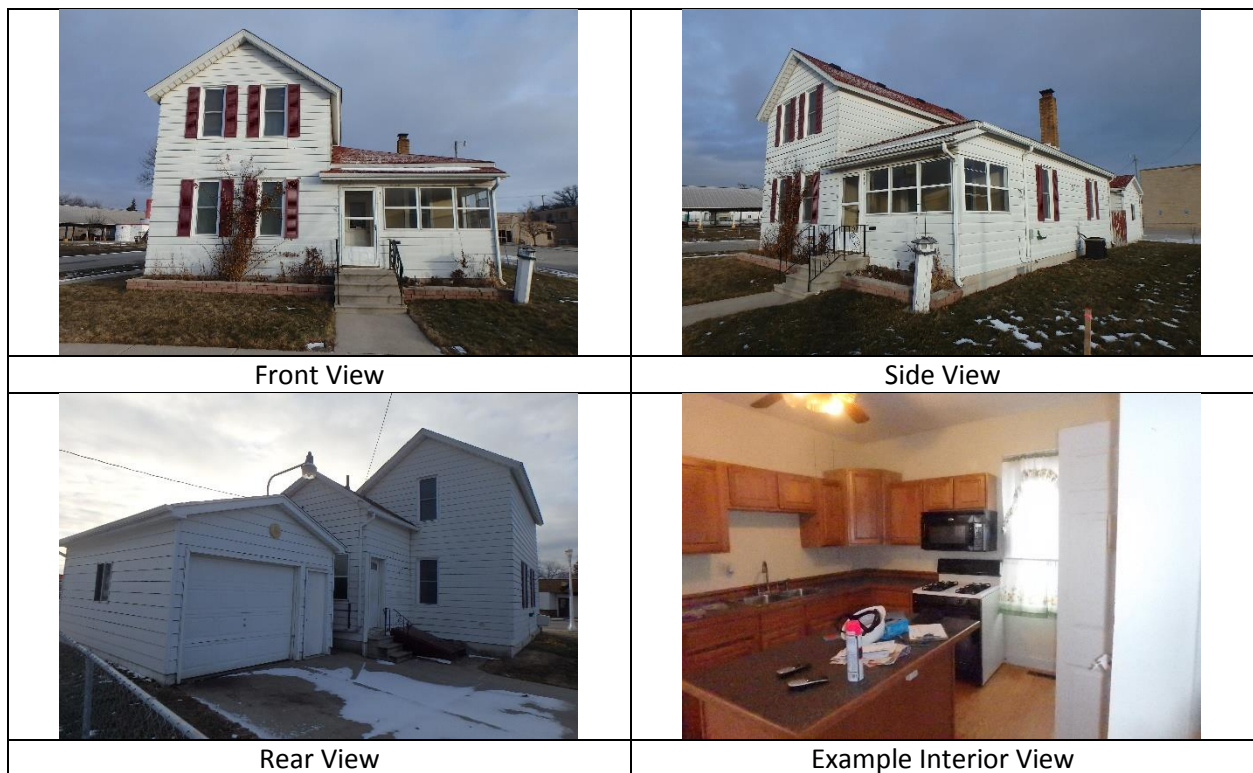
Report Date: February 23, 2018

Client: Columbus Development, LLC  
315 14th Street  
Bay City, Michigan 48708

Subject: Results of Pre-Demolition Asbestos and Hazardous Materials Survey  
AKT Peerless Project No.: 11146s2-2-194

Location: 501 Columbus Avenue  
Bay City, Michigan

AKT Peerless Environmental (AKT Peerless) was retained by the Columbus Development, LLC (Client) to perform a Pre-Demolition Hazardous Materials Survey of the above referenced property. The purpose of the survey was to identify building materials containing asbestos and other obvious hazardous substances/items that require removal from the property and/or special handling procedures in advance of structure demolition. The inspection was performed on February 2, 2018. Photographs of the site are included below:



### **Scope of Work**

AKT Peerless scope of work was limited to:

- Perform a survey of the subject property to identify suspect asbestos containing materials. Suspect materials were sampled in accordance with the client requested sample protocols and submitted for laboratory analysis.
- Perform a surficial inspection to identify other obvious hazardous materials that will require special handling procedures or removal activities before conducting general building demolition activities.
- Prepare an inventory and report describing the survey results.

### **Limitations**

The information and opinions contained in this report are for the exclusive use of Columbus Development, LLC. AKT Peerless will not distribute this report without Clients' written consent or as required by law or by a Court order. Report contents must be reviewed and relied upon only in conjunction with the terms and conditions expressly agreed upon by the parties and as limited herein.

To maintain compliance with regulatory standards including the U.S. Environmental Protection Agency (USEPA) National Emission Standards for Hazardous Air Pollutants (NESHAP), suspect materials not accessible or sampled as part of the survey or discovered during the demolition are required to be assumed asbestos containing and handled appropriately in accordance with State and Federal Regulations.

Based on the scope of work requested, only limited destructive search techniques were used during the inspection to identify and quantify materials. Identification of hazardous materials was limited to visible and accessible observations.

**Quantities of identified asbestos containing and other hazardous materials, reported in this document are provided for reference only and should not be relied upon for abatement bidding purposes.** AKT Peerless strongly cautions against utilizing the reported material quantities without field verification. It is expected that contractors will utilize their own quantities when preparing bid pricing.

Limitations due to access, safety, confined spaces, and/or other property specifics included the following:

- The property is occupied with heating and lighting in most interior areas. AKT Peerless used portable lighting to improve general viewing conditions whereas necessary.
- Interior observations of enclosed areas (i.e. walls, ceilings, and/or flooring systems) were limited due to electricity and natural gas being in service.

### Asbestos Sampling Results

The following materials were observed and/or sampled at the site:

#### MATERIALS SUMMARY (Asbestos Containing Materials In Bold)

HA No.	Material Description	Location	Approximate Quantity	F/NF	Asbestos Content
1-1	Drywall and Joint Compound	Throughout	3,100 SF	F	NAD
2-1	White w/Blue Diamond Pattern Flooring	FS-10 2 <sup>nd</sup> Floor Bathroom	80 SF	NF	NAD
3-1	Textured Paint	Throughout	3,000 SF	F	NAD
4-1	White Square Pattern Flooring w/Layers	FS-4 1 <sup>st</sup> Floor Bedroom #1 FS-5 Kitchen	40 SF	NF	NAD
5-1	Black Paper Under Paneling	FS-1 Front Porch	210 SF	F	NAD
6-1	Yellow Flooring Under Wood Plank Flooring	FS-5 Kitchen	150 SF	NF	NAD
7-1	Insulbrick Exterior Siding	FS-14 Exterior	1,850 SF	F	NAD
<b>8-1</b>	<b>Suspect Transite Skirting*</b>	<b>FS-14 Exterior</b>	<b>350 SF</b>	<b>NF</b>	<b>20% CHR</b>
9-1	White Caulk Around Exterior Windows	FS-14 Exterior	20 SF	NF	NAD
10-1	Cellulose Insulation	Throughout	2 CY	F	NAD
11-1	Roofing Materials – House	FS-14 Exterior	950 SF	NF	NAD
12-1	Roofing Materials – Garage	FS-14 Exterior	400 SF	NF	NAD

**\*Remove all layers as asbestos containing.**

#### Table Notes:

F = Friable    NF = Non-friable    FS = Functional Space    NAD = No Asbestos Detected    CHR = Chrysotile  
 AMO = Amosite    SF = Square Feet    LF = Linear Feet    PC= Point Count    NE = Not Estimated  
 CRO= Crocidolite    ACT= Actinolite    T = Tile    M = Mastic    MF = Mud Fittings CF= Cubic Feet  
 ACM = Asbestos Containing Material (Greater than 1% Asbestos Content)    NS = Not Sampled  
 ASSUMED = Suspect material that was not sampled but was assumed asbestos-containing

Samples were collected by Michigan Department of Licensing and Regulatory Affairs (MDLARA) accredited Asbestos Inspector (Mark Breeden A44842). Functional Spaces (FS) represent the rooms and/or room equivalents present and are field-marked inside the structure. Laboratory results are included in Attachment 1.

**Asbestos Recommendation:**

1. Based on the findings of the Asbestos Survey and the anticipated demolition of the subject building, AKT Peerless recommends that all identified and safely accessible ACM be properly removed by a licensed contractor in accordance with applicable state and federal regulations.
2. Suspect materials discovered during the demolition are required to be assumed asbestos containing and handled appropriately in accordance with state and federal regulations unless determined through laboratory testing identifying them as non-asbestos containing.

**Hazardous Materials Inventory Results**

AKT Peerless conducted field identification of other potentially hazardous/regulated materials. The following materials were identified at the site:

**HAZARDOUS / REGULATED MATERIALS SUMMARY**

Material Description	Location	Number of Units	Approximate Quantity/ Comments
Thermostats	FS-3 Living Room #2	1	Possibly Contains Mercury
	FS-5 Kitchen	1	
Air Conditioner Unit	FS-14 Exterior	1	Possibly Contains CFCs
Smoke Detectors	FS-2 Living Room	1	Possible Contains Radiation
	FS-5 Kitchen	1	
	FS-9 2 <sup>nd</sup> Floor Bedroom	1	
CFL Bulb	FS-5 Kitchen	1	Possibly Contains Mercury
	FS-7 Back Entry	1	
HID Bulb	FS-14 Exterior	1	Possibly Contains Mercury
Outdoor Mercury Vapor Light and Fixture	FS-14 Exterior	1	Possibly Contains Mercury
Paint	FS-10 2 <sup>nd</sup> Floor Bathroom	4	1 Gallon or Less Containers, Various Amounts

**Hazardous Materials Recommendation:**

These materials and other items banned from landfill disposal identified during the demolition should be properly removed and disposed of in accordance with applicable regulations.

Submitted by:  
**AKT Peerless Environmental**  
214 Janes Avenue  
Saginaw, Michigan 48607  
(989) 754-9896

Report prepared by:

A handwritten signature in blue ink, appearing to read "Heath Bobick".

---

Heath Bobick  
**Environmental Consultant**  
MIOSHA CSHD Asbestos Inspector  
Accreditation Number: A43315

Report reviewed by:

A handwritten signature in blue ink, appearing to read "Mark Breeden".

---

Mark Breeden  
**Environmental Consultant**  
MIOSHA CSHD Asbestos Inspector  
Accreditation Number: A44842

Attachment 1: Asbestos Laboratory Results and Chain of Custody



## **ATTACHMENT 1**

### **Asbestos Laboratory Results and Chain of Custody**

# Certificate of Laboratory Analysis

## Test Method, Polarized Light Microscopy (PLM)

Project: 501 Columbus, Bay City, MI  
Project #: 11146s2-2-194

**Report To:**

Mr. Mark Breedon  
AKT Peerless  
214 Janes Ave.  
Saginaw, MI 48607

ARI Report # 18-75017  
Date Collected: 02/02/18  
Date Received: 02/16/18  
Date Analyzed: 02/21/18  
Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 01 Cust. #: 1-1 Material: Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 15% Fiberglass - 5% Other - 80%
Lab ID #: 75017 - 02 Cust. #: 1-2 Material: Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 75017 - 02a Cust. #: 1-2 Material: Joint Compound Location: Appearance: white, nonfibrous, homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Robert T. Letarte Jr., Laboratory Director

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NVLAP Lab Code 102118-0

# Certificate of Laboratory Analysis

## Test Method, Polarized Light Microscopy (PLM)



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Saginaw, MI 48607

ARI Report # 18-75017

Date Collected: 02/02/18

Date Received: 02/16/18

Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 03 Cust. #: 1-3 Material: Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 15% Fiberglass - 5% Other - 80%
Lab ID #: 75017 - 03a Cust. #: 1-3 Material: Joint Compound Location: Appearance: white, nonfibrous, homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 04 Cust. #: 1-4 Material: Texture Location: Appearance: white, nonfibrous, homogenous Layer: 1 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 04a Cust. #: 1-4 Material: Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 2 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 15% Fiberglass - 5% Other - 80%
Lab ID #: 75017 - 04b Cust. #: 1-4 Material: Tar Paper Location: Appearance: black, fibrous, homogenous Layer: 3 of 3	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 75017 - 05 Cust. #: 1-5 Material: Texture Location: Appearance: white, nonfibrous, homogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Date Collected: 02/02/18

Date Received: 02/16/18

Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 05a Cust. #: 1-5 Material: Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 15% Fiberglass - 5% Other - 80%
Lab ID #: 75017 - 06 Cust. #: 2-1 Material: White w/ Blue Diamonds Flooring Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 10% Other - 90%
Lab ID #: 75017 - 07 Cust. #: 2-2 Material: White w/ Blue Diamonds Flooring Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 10% Other - 90%

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Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 08 Cust. #: 3-1 Material: Textured Paint Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 09 Cust. #: 3-2 Material: Textured Paint Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 10 Cust. #: 3-3 Material: Textured Paint Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 11 Cust. #: 4-1 Material: White Square Pattern Flooring w/ Layers Location: Appearance: beige, fibrous, nonhomogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 20% Fiberglass - 10% Other - 70%
Lab ID #: 75017 - 11a Cust. #: 4-1 Material: Linoleum Location: Appearance: beige, fibrous, homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 5% Other - 95%
Lab ID #: 75017 - 12 Cust. #: 4-2 Material: White Square Pattern Flooring w/ Layers Location: Appearance: beige, fibrous, nonhomogenous Layer: 1 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 20% Fiberglass - 10% Other - 70%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 12a Cust. #: 4-2 Material: Linoleum Location: Appearance: beige, fibrous, homogenous Layer: 2 of 2	Asbestos Present: <b>NO</b> No Asbestos Observed	Fiberglass - 5% Other - 95%
Lab ID #: 75017 - 13 Cust. #: 5-1 Material: Black Paper Under Paneling Location: Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 75017 - 14 Cust. #: 5-2 Material: Black Paper Under Paneling Location: Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 35% Other - 65%

For Layered Samples, each component will be analyzed and reported separately.

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Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 15 Cust. #: 6-1 Material: Yellow Flooring Location: Under Wood Plank Flooring Appearance: beige, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 16 Cust. #: 6-2 Material: Yellow Flooring Location: Under Wood Plank Flooring Appearance: beige, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 17 Cust. #: 7-1 Material: Insulbrick Exterior Siding Location: Appearance: black, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 65% Other - 35%

For Layered Samples, each component will be analyzed and reported separately.

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Robert T. Letarte Jr., Laboratory Director

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Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 18 Cust. #: 7-2 Material: Insulbrick Exterior Siding Location: Appearance: black, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 65% Other - 35%
Lab ID #: 75017 - 19 Cust. #: 8-1 Material: Transite Exterior Siding Location: Appearance: grey, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>YES</b> Chrysotile - 20%	Other - 80%
Lab ID #: 75017 - 20 Cust. #: 8-2 Material: Transite Exterior Siding Location: Appearance: Layer: of	Asbestos Present:  NOT ANALYZED	

For Layered Samples, each component will be analyzed and reported separately.

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Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 21 Cust. #: 9-1 Material: White Caulk Location: Around Exterior Vinyl Windows Appearance: white, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 22 Cust. #: 9-2 Material: White Caulk Location: Around Exterior Vinyl Windows Appearance: white, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: 75017 - 23 Cust. #: 10-1 Material: Cellulose Insulation Location: Appearance: brown, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%

For Layered Samples, each component will be analyzed and reported separately.

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Date Analyzed: 02/21/18

Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 24 Cust. #: 10-2 Material: Cellulose Insulation Location: Appearance: brown, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 75017 - 25 Cust. #: 11-1 Material: Roofing Material/Shingle Location: House Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 30% Other - 70%
Lab ID #: 75017 - 26 Cust. #: 11-2 Material: Roofing Material/Shingle Location: House Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 30% Other - 70%

For Layered Samples, each component will be analyzed and reported separately.

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Robert T. Letarte Jr., Laboratory Director

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Date Analyzed: 02/21/18  
Date Reported: 02/21/18

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 75017 - 27 Cust. #: 12-1 Material: Roofing Material/Shingle Location: Garage Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 30% Other - 70%
Lab ID #: 75017 - 28 Cust. #: 12-2 Material: Roofing Material/Shingle Location: Garage Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Cellulose - 30% Other - 70%
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate may not be used by the customer to claim product endorsement by NVLAP or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



NVLAP Lab Code 102118-0

APEX Research, Inc.

54 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991.

Web Site: <http://apexresearch-inc.com>. Email: [Robert.Letarte@apexresearchlab.com](mailto:Robert.Letarte@apexresearchlab.com)



Customer Name: AKT Peerless  
Address: 214 Janes Avenue  
City, St., Zip: Saginaw, MI 48607  
Phone: 989-754-9896 Fax: 989-754-3804

Date of Survey: February 2, 2018

Project: 501 Columbus, Bay City, MI

Project #: 11146s2-2-194

Contact Person: Mark Breeden

Email: [breedenm@aktpeerless.com](mailto:breedenm@aktpeerless.com)

Lab Use Only

Log-In:

Report: \_\_\_\_\_

Fax:

Verbal:

Email: \_\_\_\_\_

### Turn Around Times:

**\*\*\*Terms and conditions on the other side.**

### 3 Days

TTP YES

(Test Till Positive)

### Asbestos:

**Bulk**           **X**

Wipe	PCM
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
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98	1
99	1
100	1

**Lead:**

## Paint

Wipe

[illegible]

Relinquished By:

Date: February 2, 2018 411pm

Revision Date: June/2011

Received By:

Date:

FEB 16 2018

**APEX RESEARCH**



## Appendix B





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 23, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 501 Columbus Avenue, Bay City, Michigan**

### **Photograph 1**



Exterior View of Subject Property

### **Photograph 2**



View of Drywall and Joint Compound  
(HA1)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 23, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 501 Columbus Avenue, Bay City, Michigan**

### Photograph 3



View of White with Blue Diamond Pattern  
Flooring  
(HA2)

### Photograph 4



View of Textured Paint  
(HA3)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 23, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 501 Columbus Avenue, Bay City, Michigan**

### Photograph 5



View of White Square Pattern Flooring with  
Layers  
(HA4)

### Photograph 6



View of Black Paper Under Paneling  
(HA5)





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 23, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 501 Columbus Avenue, Bay City, Michigan**

### Photograph 7



View of Yellow Flooring Under Wood Plank  
Flooring  
(HA6)

### Photograph 8



View of Insulbrick Exterior Siding  
(HA7)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 23, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 501 Columbus Avenue, Bay City, Michigan**

### **Photograph 9**



**View of Asbestos Containing Exterior  
Transite Skirting  
(HA8)**

### **Photograph 10**



**View of White Caulk Around Exterior Windows  
(HA9)**





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 23, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 501 Columbus Avenue, Bay City, Michigan**

### **Photograph 11**



View of Cellulose Insulation  
(HA10)

### **Photograph 12**



View of Roofing Materials – House  
(HA11)





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 23, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 501 Columbus Avenue, Bay City, Michigan**

### **Photograph 13**



View of Roofing Materials – Garage  
(HA12)

### **Photograph 14**



View of Tan Square Pattern Sheet Flooring and  
Adhesive  
(HA13)



Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 23, 2023  
PM Project No. 01-14761-0-0002  
Location: 501 Columbus Avenue, Bay City, Michigan

### Photograph 15



View of White Interior Building Caulk  
(HA14)

### Photograph 16



View of Grey Sink Undercoating  
(HA15)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 23, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 501 Columbus Avenue, Bay City, Michigan**

### **Photograph 17**



View of Light Grey Exterior Pipe Penetration  
Caulk  
(HA16)

### **Photograph 18**



Typical View of Beige Interior Paint on Wood  
Panels  
(PC-1)





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 23, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 501 Columbus Avenue, Bay City, Michigan**

### Photograph 19



Typical View of White Interior Paint on Wood  
(PC-2)

### Photograph 20



Typical View of Light Green Interior Paint on  
Drywall  
(PC-3)



Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 23, 2023  
PM Project No. 01-14761-0-0002  
Location: 501 Columbus Avenue, Bay City, Michigan

### Photograph 21



Typical View of Beige Interior Paint on Drywall  
(PC-4)

### Photograph 22



Typical View of Pale Yellow Interior Paint on  
Drywall  
(PC-5)



**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 23, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 501 Columbus Avenue, Bay City, Michigan**

### Photograph 23



Typical View of Pale Purple Interior Paint on  
Drywall  
(PC-6)

### Photograph 24



Typical View of Blue Interior Paint on Wood  
(PC-7)





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 23, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 501 Columbus Avenue, Bay City, Michigan**

### **Photograph 25**



Typical View of White Interior Paint on Drywall  
(PC-8)

### **Photograph 26**



Typical View of Maroon Exterior Paint on Wood  
(PC-9)





**Photographs From Site Inspection**  
**Taken by Ms. Kathryn Cleary on August 23, 2023**  
**PM Project No. 01-14761-0-0002**  
**Location: 501 Columbus Avenue, Bay City, Michigan**

### **Photograph 27**



Typical View of Maroon Exterior Paint on Metal  
(PC-10)

### **Photograph 28**



Typical View of a Smoke Detector



Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 23, 2023  
PM Project No. 01-14761-0-0002  
Location: 501 Columbus Avenue, Bay City, Michigan

### Photograph 29



Typical View of a Thermostat

### Photograph 30



Typical View of a Refrigerator



Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 23, 2023  
PM Project No. 01-14761-0-0002  
Location: 501 Columbus Avenue, Bay City, Michigan

### Photograph 31



Typical View of a Microwave

### Photograph 32



Typical View of an Oven





Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 23, 2023  
PM Project No. 01-14761-0-0002  
Location: 501 Columbus Avenue, Bay City, Michigan

### Photograph 33



Typical View of a Furnace

### Photograph 34



Typical View of a Water Heater



Photographs From Site Inspection  
Taken by Ms. Kathryn Cleary on August 23, 2023  
PM Project No. 01-14761-0-0002  
Location: 501 Columbus Avenue, Bay City, Michigan

### Photograph 35



Typical View of Drywall Primer and Sealer

### Photograph 36



Typical View of an Air Conditioner

## Appendix C



Client: PM Environmental, Inc.  
C/O: Kathryn Cleary  
Re: 01-14761-0-0002, Task 2; 201 Columbus  
Avenue, Bay City, MI

Date of Submittal: 08-28-2023  
Date of Receipt: 08-28-2023  
Date of Report: 09-01-2023

**Bulk Asbestos Fiber Analysis by Polarized Light Microscopy (PLM)**  
**Appx E Sub E 40 CFR 763 / EPA 600/R-93/116**

Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	Comment
HA 13-1. 16371817-1	Layer 1 Beige/ Gray Flooring Homogeneity:Good	Not Detected	97% Non-Fibrous Material 3% Glass Fibers	
HA 13-2. 16371818-1	Layer 1 Beige/ Gray Flooring Homogeneity:Good	Not Detected	97% Non-Fibrous Material 3% Glass Fibers	
	Layer 2 Brown Flooring Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
HA 14-1. 16371819-1	Layer 1 White Caulk Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
HA 14-2. 16371820-1	Layer 1 White Caulk Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
HA 15-1. 16371821-1	Layer 1 Gray Sink Undercoating Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
HA 16-1. 16371822-1	Layer 1 Gray/ Black Caulk Homogeneity:Good	Not Detected	98% Non-Fibrous Material 2% Cellulose	
HA 16-2. 16371823-1	Layer 1 Gray/ Black Caulk Homogeneity:Good	Not Detected	98% Non-Fibrous Material 2% Cellulose	
HA 3-4. 16371824-1	Layer 1 Gray Paint Texture Homogeneity:Good	Not Detected	100% Non-Fibrous Material	
HA 3-5. 16371825-1	Layer 1 White Sink Undercoating Homogeneity:Good	Not Detected	100% Non-Fibrous Material	

**Comments:**

**Analyst(s):** Leslie Vicente

The total percentage of sample components shown may be greater than 100% when some components are detected at <1%.

The test report shall not be reproduced except in full, without written approval of the laboratory. The 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. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers of that type were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.





## IH CHAIN OF CUSTODY



003367210

isting

☐ Open Lab Fee

EBET Order # (Lab use only)

Submitter Name: Kathryn Cleary		B/E to: SAME	
Company: PM Environmental		Address:	
Address: 3340 Ranger Road		City/State: Zip:	
City/State: Lansing, MI	Zip: 48906	PO #:	

## Project Information

Project Name: 501 Columbus Avenue, Bay City, MI	Project Manager: Kathryn Cleary
Project #: 01-14761-0-0002, Task 2	Telephone - Office/Cell (517)-331-7836
Reports - Email Address: IHS@pmenv.com	
Invoice - Email Address: IHS@pmenv.com	Notification By: Email: <input checked="" type="checkbox"/> Verbal: <input type="checkbox"/>
Special Instructions: Stop - First - Positive	

## Turnaround Times - Please Select One

Emergency* <input type="checkbox"/>	1 Day <input type="checkbox"/>	2 Day <input type="checkbox"/>	3 Day <input type="checkbox"/>	5 Day <input checked="" type="checkbox"/>
-------------------------------------	--------------------------------	--------------------------------	--------------------------------	---

## ASBESTOS

PLM - Bulk	PCM - Air	TEM - Air	TEM - Bulk	TEM - Water	TEM - Dust	TEM/PLM Soil/Vermiculite/Ore
EPA 600/R-93/116 <input checked="" type="radio"/> Visual Estimation (<1%) <input type="radio"/> 400 Point Count 0.25% <input type="radio"/> 1,000 Point Count 0.1% <input type="radio"/> Gravimetric Reduction <input type="radio"/> Matrix Reduction (+/-) <input type="radio"/> NIOSH 9002 <input type="radio"/> OSHA ID-191	<input type="radio"/> NIOSH 7400 <input type="radio"/> ASTM D7201 <input type="radio"/> ISO 8672 <input type="radio"/> OSHA ID-160	<input type="radio"/> AHERA <input type="radio"/> NIOSH 7402 <input type="radio"/> ASTM D6281 <input type="radio"/> ISO 10312 <input type="radio"/> ISO 13794	<input type="radio"/> Gravimetric Reduction (<1%) <input type="radio"/> Matrix Reduction (+/-) <input type="radio"/> Qualitative (+/-) <input type="radio"/> Drop Mount <input type="radio"/> Filtration	<input type="radio"/> EPA 100.2 Drinking Water <input type="radio"/> >10 µm fibers <input type="radio"/> ≥0.5 µm fibers <input type="radio"/> EPA 100.2 Effluent / WW Received on ice: <input type="radio"/> Yes <input type="radio"/> No Temp: _____	<input type="radio"/> ASTM D5755 Microvac <input type="radio"/> ASTM D6480 Wipe <input type="radio"/> 600/J-93/167 Carpet - EPA <input type="radio"/> Bulk Dust Qualitative	<input type="radio"/> ASTM 7621-TEM (+/-) <input type="radio"/> ASTM 7621-TEM (<1%) <input type="radio"/> CARB 435-Modified <input type="radio"/> Soil - PLM Only (+/-) <input type="radio"/> Vermiculite - TEM (+/-) <input type="radio"/> Vermiculite-Cincinnati <input type="radio"/> Erionite ID

## METALS

## SILICA/PARTICULATES

Flame AA	IC	ICP	X-Ray Diffraction / Gravimetric / Combustion Byproduct
<input type="radio"/> Lead in Paint - SW846 7000B/3050B <input type="radio"/> Lead in Air - NIOSH 7082 <input type="radio"/> Lead in Wipes - SW846 7000B/3050B <input type="radio"/> Lead in Soil - SW846 7000B/3050B <input type="radio"/> TCLP - SW846 7000B/1311	<input type="radio"/> Cr(VI) in Air - OSHA ID-216 <input type="radio"/> Cr(VI) in Wipe - OSHA ID-216 <input type="radio"/> Cr(VI) in Bulk - OSHA ID-216	<input type="radio"/> Metals in Air - NIOSH 7303 <input type="radio"/> Metals in Wipe - OSHA ID-121 <input type="radio"/> Metals in Bulk - OSHA ID-121 <input type="radio"/> Welding Fume - NIOSH 7303	<input type="radio"/> Respirable Crystalline Silica NIOSH 7500 / OSHA 142 <input type="radio"/> NIOSH 0500 - Total Particulates <input type="radio"/> NIOSH 0800 - Respirable Particulates ASTM 6602 - CBP <input type="radio"/> PLM <input type="radio"/> TEM <input type="radio"/> SEM

Total Number of Samples Submitted: 9 Samples	Positive Stop: <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES	<input checked="" type="radio"/> By Layer <input type="radio"/> By Sample
--	--	--

## Signatures

Relinquished By: <u>Kathryn Cleary</u>	Date: 8-25-2023	Time: 5:15pm
Received By: <u>[Signature]</u>	Date: 8/28/23	Time: 11:00am
Relinquished By:	Date:	Time:
Received By:	Date:	Time:

\*Emergency TAT requires prior lab notification. All samples analyzed outside normal business hours are charged at Emergency rate.

\*\*TAT's are in Business Days rather than Hours (i.e. 1 Day TAT = End of Next Business Day)

 8140 West 34<sup>th</sup> Street  
 Houston, Texas 77092  
 tel: 713-290-0221

 3113 Red Bluff Road  
 Pasadena, TX 77503  
 tel: 713-290-0223

 9701 Harry Hines Blvd  
 Dallas, TX 75220  
 tel: 713-290-0221



## Appendix D



**HIH LABORATORY, INC.**

Page 1 of 6

100 E. NASAParkway, Suite 210

P.O. Box 57727

Webster, Tx 77598

(281) 338-9000

FAX (281) 338-2351

**Report Number** 56215**PO Number** 003367683**LABORATORY ANALYSIS REPORT**

EUROFINS J3 RESOURCES

**Attention:****Report Number** 56215**Date Received:** 09/06/2023

3113 RED BLUFF

Ms. Mariela Guerra

**Client Number:** 1136 1**Date Reported:** 09/08/2023

PASADENA TX 77503

<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574320	PC-1									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
<hr/>										
574321	PC-2									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
<hr/>										

**HIH LABORATORY, INC.**

Page 2 of 6

100 E. NASAParkway, Suite 210

P.O. Box 57727

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**Report Number** 56215**PO Number** 003367683**LABORATORY ANALYSIS REPORT**

EUROFINS J3 RESOURCES

**Attention:****Report Number** 56215**Date Received:** 09/06/2023

3113 RED BLUFF

Ms. Mariela Guerra

**Client Number:** 1136 1**Date Reported:** 09/08/2023

PASADENA TX 77503

<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574322	PC-3									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
<hr/>										
574323	PC-4									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
<hr/>										

**HIH LABORATORY, INC.**

Page 3 of 6

100 E. NASAParkway, Suite 210

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**Report Number** 56215**PO Number** 003367683**LABORATORY ANALYSIS REPORT**

EUROFINS J3 RESOURCES

**Attention:****Report Number** 56215**Date Received:** 09/06/2023

3113 RED BLUFF

Ms. Mariela Guerra

**Client Number:** 1136 1**Date Reported:** 09/08/2023

PASADENA TX 77503

<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574324	PC-5									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
574325	PC-6									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
<hr style="border-top: 1px dashed #0000FF;"/>										

**HIH LABORATORY, INC.**

Page 4 of 6

100 E. NASAParkway, Suite 210

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Webster, Tx 77598

(281) 338-9000

FAX (281) 338-2351

**Report Number** 56215**PO Number** 003367683**LABORATORY ANALYSIS REPORT**

EUROFINS J3 RESOURCES

**Attention:****Report Number**

56215

**Date Received:**

09/06/2023

3113 RED BLUFF

Ms. Mariela Guerra

**Client Number:**

1136 1

**Date Reported:**

09/08/2023

PASADENA TX 77503

<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574326	PC-7									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
-----										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
-----										
574327	PC-8									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
-----										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
-----										



**HIH LABORATORY, INC.**

Page 5 of 6

100 E. NASAParkway, Suite 210

P.O. Box 57727

Webster, Tx 77598

(281) 338-9000

FAX (281) 338-2351

**Report Number** 56215**PO Number** 003367683**LABORATORY ANALYSIS REPORT**

EUROFINS J3 RESOURCES

**Attention:****Report Number**

56215

**Date Received:**

09/06/2023

3113 RED BLUFF

Ms. Mariela Guerra

**Client Number:**

1136 1

**Date Reported:**

09/08/2023

PASADENA TX 77503

<i>HIH Sample Number:</i>	<i>Client Sample ID</i>	<i>Date Collected</i>	<i>Sample time (min)</i>	<i>Sample Vol. (L) or Area</i>						
<i>Analyte</i>		<i>Result</i>	<i>Units</i>	<i>Actual Exp</i>	<i>Units</i>	<i>Test date:</i>	<i>Reporting Limit</i>	<i>Blank Corrected</i>	<i>Lower 95% Confidence Limit</i>	<i>Upper 95% Confidence Limit</i>
574328	PC-9									
Cadmium (as Cd)		< 5	ug/g	< 0.0005	%	9/8/2023	5 ug/g	No		
<hr/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
<hr/>										
574329	PC-10									
Cadmium (as Cd)		6	ug/g	0.0006	%	9/8/2023	5 ug/g	No		
<hr/>										
Lead (as Pb)		< 50	ug/g	< 0.005	%	9/8/2023	50 ug/g	No		
<hr/>										

**HIH LABORATORY, INC.**

Page 6 of 6

100 E. NASAParkway, Suite 210

P.O. Box 57727

Webster, Tx 77598

(281) 338-9000

FAX (281) 338-2351

**Report Number** 56215**PO Number** 003367683**LABORATORY ANALYSIS REPORT**Report Number  
56215**SUPPLEMENTARY QUALITY ASSURANCE INFORMATION**

Analyte	Method	Media	Test date	Analyst	Instrument	MS % Recovery	MSD % RECOVERY	MS/MSD RPD	LCS % Recovery:	Precision (% Sr)	Blank Result	DUP RPD	Range	Batch No	Lit Ref	HIH Sample #
Cadmium (as Cd)	NIOSH 7303M	Paint	09/08/2023	EP	8300MET	86.9	86	0.998	94.6		< 5	ug/g		41267		574298
Lead (as Pb)	NIOSH 7303M	Paint	09/08/2023	EP	8300MET	84			99.2		< 50	ug/g		41267		574298

## Method Literature References

97 NIOSH Manual of Analytical Methods, 4th Edition, August, 1994

122 NIOSH Manual of Analytical Methods, 5th Edition

HIH Laboratory did not collect these samples; therefore, calculations and sampling information are based on client-supplied sampling data.

Samples arrived in good condition unless otherwise noted.

**Approved Signatory:** Carole A. Newman**END OF REPORT****AIHA 101438****ELLAP 101438****NVLAP Lab Code 101233-0****TDH 30-0040**



## IH CHAIN OF CUSTODY



Comment Testing

☐ Open Lab Fee

EBET Order # (Lab use only)

03367683

Submitter Name: Kathryn Cleary		Bill to: SAME	
Company: PM Environmental		Address:	
Address: 3340 Ranger Road			
City/State: Lansing, MI		City/State: Zip:	
Zip: 48906		PO #:	
<b>Project Information</b>			
Project Name: 501 Columbus Avenue, Bay City, MI		Project Manager: Kathryn Cleary	
Project #: 01-14761-0-0002, Task 2		Telephone - Office/Cell (517)-331-7836	
Reports - Email Address: IHS@pmenv.com			
Invoice - Email Address: IHS@pmenv.com		Notification By: Email: <input checked="" type="checkbox"/> Verbal: <input type="checkbox"/>	
Special Instructions: Lead and Cadmium Testing			
<b>Turnaround Times - Please Select One</b>			
Emergency* <input type="checkbox"/>	1 Day <input type="checkbox"/>	2 Day <input type="checkbox"/>	3 Day <input type="checkbox"/> 5 Day <input checked="" type="checkbox"/>
<b>ASBESTOS</b>			
<b>PLM - Bulk</b>	<b>PCM - Air</b>	<b>TEM - Air</b>	<b>TEM - Bulk</b>
EPA 600/R-93/116 <input type="checkbox"/> Visual Estimation (<1%) <input type="checkbox"/> 400 Point Count 0.25% <input type="checkbox"/> 1,000 Point Count 0.1% <input type="checkbox"/> Gravimetric Reduction <input type="checkbox"/> Matrix Reduction (+/-) <input type="checkbox"/> NIOSH 9002 <input type="checkbox"/> OSHA ID-191	<input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> ASTM D7201 <input type="checkbox"/> ISO 8672 <input type="checkbox"/> OSHA ID-160	<input type="checkbox"/> AHERA <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> ASTM D6281 <input type="checkbox"/> ISO 10312 <input type="checkbox"/> ISO 13794	<input type="checkbox"/> Gravimetric Reduction (<1%) <input type="checkbox"/> Matrix Reduction (+/-) <input type="checkbox"/> Qualitative (+/-) <input type="checkbox"/> Drop Mount <input type="checkbox"/> Filtration
<b>TEM - Water</b>	<b>TEM - Dust</b>	<b>TEM/PLM Soil/Vermiculite/Ore</b>	
<input type="checkbox"/> EPA 100.2 Drinking Water <input type="checkbox"/> >10 µm fibers <input type="checkbox"/> ≥0.5 µm fibers <input type="checkbox"/> EPA 100.2 Effluent / WW Received on ice: <input type="checkbox"/> Yes <input type="checkbox"/> No Temp: _____	<input type="checkbox"/> ASTM D5755 Microvac <input type="checkbox"/> ASTM D6480 Wipe <input type="checkbox"/> 600/J-93/167 Carpet - EPA <input type="checkbox"/> Bulk Dust Qualitative	<input type="checkbox"/> ASTM 7521-TEM (+/-) <input type="checkbox"/> ASTM 7521-TEM (<1%) <input type="checkbox"/> CARB 435-Modified <input type="checkbox"/> Soil - PLM Only (+/-) <input type="checkbox"/> Vermiculite - TEM (+/-) <input type="checkbox"/> Vermiculite-Cincinnati <input type="checkbox"/> Erionite ID	
<b>METALS</b>			<b>SILICA/PARTICULATES</b>
<b>Flame AA</b>	<b>IC</b>	<b>ICP</b>	<b>X-Ray Diffraction / Gravimetric / Combustion Byproduct</b>
<input checked="" type="checkbox"/> Lead in Paint - SW846 7000B/3050B <input type="checkbox"/> Lead in Air - NIOSH 7082 <input type="checkbox"/> Lead in Wipes - SW846 7000B/3050B <input type="checkbox"/> Lead in Soil - SW846 7000B/3050B <input type="checkbox"/> TCLP - SW846 7000B/1311	<input type="checkbox"/> Cr(VI) in Air - OSHA ID-215 <input type="checkbox"/> Cr(VI) in Wipe - OSHA ID-215 <input type="checkbox"/> Cr(VI) in Bulk - OSHA ID-215	<input type="checkbox"/> Metals in Air - NIOSH 7303 <input type="checkbox"/> Metals in Wipe - OSHA ID-121 <input type="checkbox"/> Metals in Bulk - OSHA ID-121 <input type="checkbox"/> Welding Fume - NIOSH 7303	<input type="checkbox"/> Respirable Crystalline Silica NIOSH 7500 / OSHA 142 <input type="checkbox"/> NIOSH 0500 - Total Particulates <input type="checkbox"/> NIOSH 0600 - Respirable Particulates ASTM 6602 - CBP <input type="checkbox"/> PLM <input type="checkbox"/> TEM <input type="checkbox"/> SEM
Total Number of Samples Submitted: 10 Samples		Positive Stop: <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> By Layer <input type="checkbox"/> By Sample	
<b>Signatures</b>			
Relinquished By: Kate Cn		Date: 8-25-2023 Time: 5:15 pm	
Received By: [Signature]		Date: 8/28/23 Time: 11:00 am	
Relinquished By:		Date: Time:	
Received By:		Date: Time:	

\*Emergency TAT requires prior lab notification. All samples analyzed outside normal business hours are charged at Emergency rate.

\*\*TAT's are in Business Days rather than Hours (i.e. 1 Day TAT = End of Next Business Day)

 6110 West 34<sup>th</sup> Street  
 Houston, Texas 77092  
 tel: 713-290-0221

 3113 Red Bluff Road  
 Pasadena, TX 77503  
 tel: 713-290-0223

 9701 Harry Hines Blvd  
 Dallas, TX 75220  
 tel: 713-290-0221

## CHAIN OF CUSTODY

Project Name 501 Columbus Avenue, Bay City, MI  
Project Number 01-14761-0-0002, Task 2

Page 2 of 2

## SAMPLE IDENTIFICATION

[illegible]



## STATE OF MICHIGAN

Wage and Hour Division

PO Box 30476

Lansing, MI 48909

517-284-7800

### ***Informational Sheet: Prevailing Wages on State Funded Projects***

#### **REQUIREMENTS**

**Effective February 13, 2024**

The purpose of establishing prevailing rates is to provide minimum rates of pay that must be paid to workers on construction projects that are financed or financially supported by the state. Prevailing rates compiled from the rates contained in collectively bargained agreements which cover the locations of the state projects. While the prevailing wage rates are compiled through surveys of collectively bargained agreements, a collective bargaining agreement is not required for contractors to be on or be awarded state projects. The prevailing rate schedule provides an hourly rate which includes wage and fringe benefit totals for designated construction mechanic classifications. The overtime rates also include wage and fringe benefit totals. Please pay special attention to the overtime and premium pay requirements. The prevailing wage is satisfied when wages plus fringe benefits are equal to or greater than the required rate.

#### **State of Michigan responsibilities:**

- The department establishes the prevailing rate for each classification of construction mechanic requested by the contracting agents prior to contracts being let out for bid on a state project.

#### **DTMB responsibilities**

- If a contract is not awarded or construction does not start within 90 days of the date of the issuance of rates, a re-determination of rates must be requested by the contracting agents.
- Rates for classifications needed but not provided on the Prevailing Rate Schedule, ***must*** be obtained ***prior*** to contracts being let out for bid on a state project.

#### **Contractor responsibilities:**

- Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing rates prescribed in a contract.
- Every contractor and subcontractor shall keep an accurate record showing the name and occupation of and the actual wages and benefits paid to each construction mechanic. This record shall be available for reasonable inspection by DTMB or the department.
- Each contractor or subcontractor is liable for the payment of the prevailing rate to its employees.
- The prime contractor is responsible for advising all subcontractors of the requirement to pay the prevailing rate prior to commencement of work.
- A construction mechanic ***shall only*** be paid the apprentice rate if registered with the United States Department of Labor, Bureau of Apprenticeship and Training and the rate is included in the contract.

#### **Enforcement:**

A person who has information of an alleged prevailing wage violation on a prevailing wage project may file a complaint with the State of Michigan. The department will investigate and attempt to resolve the complaint informally. During the course of an investigation, if the requested records and posting certification are not made available in compliance with contractual requirements, the Contracting Agent may consider the Contractor to be in material breach of the contract and may terminate the contract for cause at the sole discretion. There are also civil penalties for failure to be in compliance with Act 10. View the entire text of Act 10 of 2023 at [michigan.gov/wagehour](https://michigan.gov/wagehour).