

# PRE-DEMOLITION HAZARDOUS MATERIALS ASSESSMENT REPORT

FORMER RC COLA/COCA- COLA BOTTLING PLANT 1506 N. GRAND RIVER AVENUE LANSING, INGHAM COUNTY, MICHIGAN 48906

SME Project Number: 083616.00

March 19, 2021





2663 Eaton Rapids Road Lansing, MI 48911-6310

T (517) 887-9181

www.sme-usa.com

March 19, 2021

Turner Dodge Development, LLC c/o Associated Environmental Services, LLC 40701 Woodward Avenue, Suite 50 Bloomfield Hills, Michigan 48304 Attn: Mr. Nicholas G. Maloof, RPG

RE: Pre-Demolition Hazardous Materials Assessment Report

Former RC Cola/Coca- Cola Bottling Plant

1506 North Grand River Avenue

Lansing, Ingham County, Michigan 48906

SME Project No.: 083616.00

Dear Mr. Maloof:

We have completed a Hazardous Materials Assessment of the building located at 1506 North Grand River Avenue, Lansing, Michigan. Turner-Dodge Development, LLC, requested the assessment prior to the planned demolition of the building. The Hazardous Materials Assessment was funded by the U.S Environmental Protection Agency Brownfields Assessment Grant for hazardous substances for the Lansing Regional Brownfields Coalition, Cooperative Agreement #BF-00E02710, and by a ten percent developer cost share agreement paid by Turner-Dodge Development, LLC.

Please contact us if you have any questions regarding the assessment.

Sincerely,

SME

Percy C Richards, III Environmental Technician Jason C. Lafayette Senior Project Consultant

# **TABLE OF CONTENTS**

1. INTRODUCTION	1
2. ASBESTOS	2
2.1 VISUAL ASSESSMENT AND SAMPLING PROCEDURES	
2.2 FINDINGS AND CONCLUSIONS	
2.2.1 RACMS THAT MUST BE REMOVED PRIOR TO DEMOLITION	2
2.2.1.1 RACMS	
2.2.1.2 ASSUMED RACMS	
2.2.2 ACMS PERMITTED TO REMAIN IN PLACE DURING DEMOLITION	
2.2.2.1 ACMS	
3. LEAD-BASED AND CADMIUM BASED PAINTS	5
3.1 VISUAL ASSESSMENT AND SAMPLING PROCEDURES	5
3.2 FINDINGS AND CONCLUSIONS	5
4. REGULATED MATERIALS AND UNIVERSAL WASTES	6
4.1 POLYCHLORINATED BIPHENYLS (PCBS)	6
4.2 MERCURY	
4.3 RADIOACTIVE SOURCES	6
4.4 CHEMICALS AND OTHER HAZARDOUS MATERIALS	6
4.5 BIOLOGICAL HAZARDS	7
5. RECOMMENDATIONS	8
5.1 ASBESTOS	8
5.2 LEAD-BEARING AND CADMIUM-BEARING PAINTS	
5.3 REGULATED MATERIALS AND UNIVERSAL WASTES	
6. LIMITATIONS AND GENERAL COMMENTS	
APPENDIX A	2

# **TABLES**

TABLE 1: ASBESTOS BULK SAMPLING RESULTS
TABLE 2: PAINT CHIP SAMPLING RESULTS

# **APPENDIX A**

ASBESTOS SAMPLE CERTIFICATES OF ANALYSIS AND CHAIN OF CUSTODY FORMS

# **APPENDIX B**

REGULATORY INFORMATION REGARDING ASBESTOS NOTIFICATIONS AND WORK PRACTICES

# **APPENDIX C**

PAINT CHIP SAMPLE CERTIFICATES OF ANALYSIS AND CHAIN OF CUSTODY FORMS

# **APPENDIX D**

**SAMPLE LOCATION SKETCH** 

# 1. INTRODUCTION

We completed a Hazardous Materials Assessment of the building located at 1506 North Grand River Avenue, Lansing, Michigan. The site was developed with an approximately 50,000 square-foot, single level, former RC Cola/Coca Cola soda bottling facility. The building was unoccupied at the time of our assessment. We conducted the assessment activities to assist with identification of asbestos-containing materials (ACMs), potential lead-bearing and cadmium-bearing paints, and other regulated materials and universal waste items prior to demolition of the building. The Hazardous Materials Assessment was funded by the U.S Environmental Protection Agency Brownfields Assessment Grant for hazardous substances for the Lansing Regional Brownfields Coalition, Cooperative Agreement #BF-00E02710, and by a ten percent developer cost share agreement.

This assessment will provide information to assist in complying with the United States Environmental Protection Agency (USEPA) requirements for inspection of commercial buildings prior to demolition under the National Emission Standards for Hazardous Air Pollutants asbestos regulation (NESHAP, 40 CFR Part 61). The assessment also provides information to assist in complying with: the Occupational Safety and Health Administration (OSHA) Asbestos Construction Standard (29 CFR Part 1926.1101); the OSHA Lead Exposure in Construction Standard (29 CFR Part 1926.62); and the OSHA Cadmium Construction Standard (29 CFR 1926.1127), regarding communication of hazards. The Michigan Occupational Safety and Health Administration (MIOSHA) adopted the OSHA standard by reference.

SME staff members, Mr. Percy Richards (Accreditation No. A45410), and Mr. Anthony Hosbein (Accreditation No. A37250), and Mr. Jason Lafayette (Accreditation No. A36979) trained in accordance with the USEPA regulations and accredited by the Michigan Department of Labor and Economic Opportunity (MDLEO), under the requirements of Michigan Act 440 as Asbestos Inspectors, conducted the field activities.

© 2021 SME

### 2. ASBESTOS

### 2.1 VISUAL ASSESSMENT AND SAMPLING PROCEDURES

On January 13 and 15, 2021, we conducted a visual assessment and identified and estimated quantities of suspect ACMs associated with the building and assigned a unique homogeneous area number to each suspect ACM observed. A homogeneous area, as defined by the USEPA's Asbestos Hazard Emergency Response Act (AHERA, 40 CFR Part 763), is an area of thermal system insulation (TSI), surfacing material, or miscellaneous material that appears uniform in color and texture.

Following the visual assessment, we collected 90 samples from 37 of the 40 homogenous areas of suspected ACMs in accordance with the AHERA assessment protocol (40 CFR Part 763), which is also referenced by the OSHA regulations. The sampling locations are shown on the sketch in Appendix D. Two types of suspect asbestos-containing fire doors (HA4 and HA16), and fire safes (HA35), were not destructively assessed and sampled for asbestos content. As such, these materials are considered assumed ACMs for the purpose of the assessment.

We submitted the suspect bulk samples to International Asbestos Testing Laboratories (IATL), a laboratory accredited by the National Institute of Standards and Technology (NIST) under the requirements of the National Voluntary Laboratory Accreditation Program (NVLAP), for asbestos analysis of the bulk samples via Polarized Light Microscopy (PLM). Samples found to contain less than ten percent (10%) asbestos via the visual estimation method of PLM were further verified via the "Point Count Method" as defined by the AHERA regulation (40 CFR Part 763). Results from analyses of samples collected from suspect ACMs are presented in the following subsections.

### 2.2 FINDINGS AND CONCLUSIONS

USEPA and OSHA asbestos regulations define an ACM as a building material containing greater than one percent (1%) asbestos. A summary of the descriptions of suspect ACMs identified during our assessment, ACM or non-ACM categorization, estimated quantity, friability, condition, and locations of the materials sampled is also presented in Table 1. The Chain-of-Custody forms and analytical data for the bulk asbestos samples are included in **Appendix A**. Below is a summary of the identified ACMs and assumed ACMs relative to the planned demolition.

### 2.2.1 RACMS THAT MUST BE REMOVED PRIOR TO DEMOLITION

According to the United States Environmental Protection Agency (USEPA) National Emission Standards for Hazardous Air Pollutants asbestos regulation (NESHAP, 40 CFR Part 61, M), Regulated Asbestos-Containing Materials (RACMs) must be removed from a building prior to demolition. RACMs include thermal system insulation (TSI), surfacing materials, friable ACMs, and Category I and Category II nonfriable ACMs that are considered friable or likely to become friable if subjected to demolition forces. According to the OSHA Asbestos Construction Standard (29 CFR Part 1926.1101) ACMs must be removed by appropriately trained and accredited staff, and in accordance with the asbestos work requirements included in the standard.

The following materials are considered RACMs and must be removed from the building prior to demolition:

#### 2.2.1.1 RACMs

 135 square feet of window glazing material (HA1); located on the east bay and south bay windows, and observed to be in damaged condition;

- 85 square feet of 12"x12" off-white floor tile (HA6); located in east bay, south bay, and south bay boiler room, and observed to be in good condition;
  - Although the nonfriable floor tiles were in good condition, because the tiles were adhered
    to the concrete floor of the building, they are likely to be rendered friable during
    demolition of the floor slab, and are therefore considered RACM relative to planned
    demolition.
- 4,200 square feet of 9"x9" tan floor tile (HA11); located in south bay men's restroom, south bay lunchroom, south bay women's restroom, north bay office area, and main office area, and observed to be in good condition;
  - Although the nonfriable floor tiles were in good condition, because the tiles were adhered
    to the concrete floor of the building, they are likely to be rendered friable during
    demolition of the floor slab, and are therefore considered RACM relative to planned
    demolition.
- 650 linear feet of white corrugated pipe insulation on straight sections on 3" diameter insulated lines, (HA26), located in the south bay, east bay, south office area, and restrooms, and observed to be in significantly damaged condition;
- White mudded insulation on 35 fittings of 3" diameter insulated lines (HA27); located in the south bay, east bay, south office area, and restrooms, and observed to be in significantly damaged condition;
- 220 linear feet of brown layered pipe insulation on straight sections on 3" diameter insulated lines, (HA28), located in the south bay and east bay, and observed to be in significantly damaged condition;
- White mudded insulation on three fittings of 3" diameter insulated lines (HA29); located in the south bay and east bay, and observed to be in significantly damaged condition;
- 740 linear feet of white corrugated pipe insulation on straight sections on 4" diameter insulated lines, (HA30), located in the south bay, east bay, south office area, and restrooms, and observed to be in significantly damaged condition;
- White mudded insulation on 65 fittings of 4" diameter insulated lines (HA31); located in the south bay, east bay, south office area, and restrooms, and observed to be in significantly damaged condition;
- 280 linear feet of white corrugated pipe insulation on straight sections on 8" diameter insulated lines, (HA32), located in the south bay, east bay, south office area, and restrooms, and observed to be in significantly damaged condition;
- White mudded insulation on 14 fittings of 8" diameter insulated lines (HA33); located in the south bay, east bay, south office area, and restrooms, and observed to be in significantly damaged condition; and
- White mudded insulation (HA34) on a 6'x4' tank; located in south bay above the women's restroom, and observed to be good condition.

Additionally, it should be noted that the significantly damaged condition of the asbestos-containing pipe insulations has resulted in several areas of asbestos debris and dust contamination on floor surfaces beneath the pipe systems.

Foot traffic in these areas will unavoidably disturb the dust and debris and increase the likelihood of asbestos exposure.

Independent of the demolition plans for the building, we recommend restricting access to these areas and/or prompt cleanup of the asbestos dust and debris to minimize the potential for asbestos exposure.

© 2021 SME

#### 2.2.1.2 ASSUMED RACMs

- Five assumed asbestos-containing fire doors (HA4 and HA16); located in the east bay, south bay, and south bay boiler room of the building, and observed to be in good condition;
- Insulation associated with two assumed asbestos-containing fire safes (HA35), located in the room southeast of the main entrance of the building, and observed to be in good condition.

### 2.2.2 ACMs PERMITTED TO REMAIN IN PLACE DURING DEMOLITION

According to the USEPA NESHAP asbestos regulation, nonfriable ACMs/assumed ACMs, which were in good condition, can remain in the building during demolition provided that they are not rendered friable by the work activities. If the following nonfriable ACMs/assumed ACMs will remain in the building during demolition, the demolition activities must be conducted by staff trained to conduct demolition involving ACMs/assumed ACMs, the work must be reviewed by an asbestos supervisor accredited by the MDLEO, and conducted in accordance with the OSHA Asbestos Construction Standard:

### 2.2.2.1 ACMs

- 350 square feet of wallboard wall system (HA13), and 350 square feet of wallboard ceiling system (HA15) contaminated with asbestos-containing joint compound;
  - O Under a clarification to the asbestos NESHAP regulation (40 CFR 61 M), the USEPA indicated wallboard and wallboard joint compound may be considered a single "system" and analyzed together as a composite sample. Analytical results of composite analysis (wallboard, joint compound and/or seam tape together) of the wallboard system samples from both the asbestos-containing wallboard wall and ceiling systems contained "trace" amounts of asbestos (less than 1%). As such, the USEPA does not consider these wallboard systems to be a RACMs and the materials are permitted to remain in the building during demolition.
  - Although not regulated by USEPA NESHAP, the asbestos-containing joint compound associated with the wallboard systems is considered a separate ACM according to the OSHA Asbestos Construction Standard and, therefore, work (including demolition) that would disturb the asbestos-containing joint compound must be conducted in accordance with the required work procedures and training requirements outlined in the standard.
- 70 square feet of membrane associated with the truck dock (HA37).
- 10 square feet of flashing associated with the truck dock roof system (HA38);
- 48,200 square feet of membrane associated with the main roof system (HA39); and
- 100 square feet of flashing associated with the main roof system (HA40).

The laboratory reported asbestos was not detected in the samples collected from the remaining suspect ACMs identified during the assessment.

Refer to **Appendix B** for additional regulatory information regarding regulatory notification, training, and work practices requirements for ACMs, assumed ACMs, and trace asbestos materials.

# 3. LEAD-BASED AND CADMIUM BASED PAINTS

### 3.1 VISUAL ASSESSMENT AND SAMPLING PROCEDURES

On January 13 and 15, 2021, we conducted a visual assessment to identify painted surfaces in the building. We collected 3 chip samples of paints suspected to be lead-bearing or cadmium-bearing coatings. We submitted the paint-chip samples to IATL, which is accredited by the American Industrial Hygiene Association (AIHA) Environmental Lead Laboratory Accreditation Program (ELLAP), for lead and cadmium analysis of the paint chip samples via atomic absorption spectrophotometry (AAS).

### 3.2 FINDINGS AND CONCLUSIONS

Lead was measured at concentrations above laboratory reporting limits in each of the three samples of paints collected. Cadmium was measured at concentrations above laboratory reporting limits in one (P3) of the three samples of paints collected. The Chain-of-Custody forms and analytical data for the paint chip samples are included in **Appendix C** of this report. A summary of the descriptions of lead-bearing and cadmium-bearing paints, paint locations, as well as lead and cadmium content of the paint chip samples are presented in Table 2.

The OSHA Lead Exposure in Construction Standard (29 CFR Part 1926.62) and OSHA Cadmium Construction Standard (29 CFR Part 1926.1127) are applicable to construction activities when lead or cadmium are present regardless of their concentrations in the paints. If lead-bearing or cadmium-bearing paints are subjected to demolition forces that may cause paint particles to become airborne, unacceptable levels of lead and cadmium exposure to on-site personnel and environmental contamination could result. These paints could pose inhalation or ingestion exposure hazards if subjected to torch cutting, welding, and burning or if pulverized and converted to dust.

If lead-bearing and cadmium-bearing coatings or paints are to be removed by manual demolition of structural surfaces, manual scraping, manual sanding, heat gun applications, power tool cleaning, torch cutting, or welding, then the employees must be trained, and exposures must be assessed, in accordance with the OSHA Lead Exposure in Construction Standard and OSHA Cadmium Construction Standard. When lead or cadmium is present at any concentration, employers are required to assess their workers' exposures to airborne lead dust/fumes. The employer must perform an employee exposure assessment to determine if any employee is exposed at or above the action level of 30 micrograms of lead per cubic meter (µg/m³) or 2.5 µg/m³ cadmium, of air sampled calculated as a time-weighted average (TWA).

This exposure assessment is typically performed by conducting air monitoring in the workers' breathing zones during activities that would disturb surfaces containing lead or cadmium. In lieu of air monitoring, OSHA allows employers to use other objective data to assess their workers' exposures. Until an exposure assessment is completed and results demonstrate that employee exposures are consistently below the action level, the employer must provide interim protection in accordance with the standard.

# 4. REGULATED MATERIALS AND UNIVERSAL WASTES

On January 13 and 15, 2021, we conducted a visual assessment to identify regulated materials and universal wastes in the building. A summary of the various regulated materials and universal wastes we observed during our assessment is presented below.

### 4.1 POLYCHLORINATED BIPHENYLS (PCBs)

We noted commonly known sources of PCBs at the project site (such as transformer, capacitor, or compressor oils; electric motors, and fluorescent lamp ballasts). We observed:

- 80, 4-foot, 4-bulb fluorescent light fixtures,
- 50, 4-foot, 2-bulb fluorescent light fixtures,
- One, 4-foot, 3-bulb fluorescent light fixture,
- Three, 4-foot, 1-bulb fluorescent light fixtures,
- One 8-foot, 4-bulb fluorescent light fixture,
- 20, 8-foot, 2-bulb fluorescent light fixtures, and
- 23, high intensity discharge (HID) lights in the building.

Based on the age of the building (constructed prior to 1978), ballasts in the light fixtures not affixed with a "non-PCB" label have the potential to contain PCBs.

### **4.2 MERCURY**

We assessed the building for evidence of equipment suspected to contain mercury (such as thermostats, fluorescent light tubes, mercury vapor lamps, or gas pressure switches).

- We observed approximately 155 fluorescent fixtures throughout the building that contained approximately 470 fluorescent light tubes; and 23 bulbs in HID fixtures.
- We also observed elemental mercury switches in 10 thermostats located throughout the office areas within the building.

The fluorescent light tubes, HID bulbs, and mercury switches, if destroyed or improperly removed, can be sources of fugitive mercury emissions.

### **4.3 RADIOACTIVE SOURCES**

We assessed the building for evidence of equipment suspected to contain radioactive material such as x-ray equipment, smoke detectors, or self-illuminated exit signs). No materials or equipment with suspected radioactive source material was observed.

### 4.4 CHEMICALS AND OTHER HAZARDOUS MATERIALS

Other hazardous material observed during our assessment that may require additional handling and disposal prior to demolition of the building included one above ground storage tank (AST) located in the southwest corner of the south bay. We did not access the storage tank to determine what, if any, contents were contained in the vessel.

The AST was estimated to be approximately 35,000 gallons in capacity, based on general field measurements, and constructed of steel. The contents of the AST were not determined because SME was unable to access the interior of the AST.

### 4.5 BIOLOGICAL HAZARDS

During our assessment, we observed no visual evidence of bird excrement, or nesting materials. We did observe water-damaged building materials, with possible evidence of mold growth within areas of the building. Biological hazards may be present in concealed areas of the building.

Removal or disturbance of accumulations of bird excrement, bird nesting materials, water-damaged materials, or mold-impacted materials could subject the workers to potential health hazards from inhalation of microbial contamination.

Water-damaged building materials may potentially contain concentrations of fungi greater than those typical for indoor environments. Mold amplification occurs when adequate nutrients, temperatures, and moisture are present for mold to sporulate, colonize and grow. If adequate moisture is present, mold amplification can occur within a matter of a few days, and mold will continue growing until the source of moisture is eliminated. Health effects associated with mold exposure may include allergic reactions, including asthma triggers, hay-fever symptoms (e.g., watery/itchy eyes, congestion, and cough), and dermal irritation in susceptible persons. Some species of mold produce mycotoxins; however, there is currently no conclusive, scientific evidence that exposure to mycotoxins in indoor environments result in health problems. More scientific research is required to better understand the health effects associated with mold and mycotoxin exposures, however, removal or disturbance of mold-impacted materials could subject the workers to potential health hazards from inhalation of microbial contamination.

Bird excrement may potentially contain fungi such as Cryptococcus neoformans, Histoplasma capsulatum or Chlamydia psittaci. These fungi, if inhaled, can produce harmful, and sometimes lethal, infections. Cryptococcosis and histoplasmosis infections typically occur by inhalation of pathogenic spores through the nose and mouth. Bird droppings are most dangerous when they are dry and subject to becoming airborne as fine dust, particularly when disturbed by dry sweeping or scraping. Safe cleanup is based on protection from spore inhalation and minimizing spore dispersal in the work area.

# **5. RECOMMENDATIONS**

### **5.1 ASBESTOS**

- We recommend that the asbestos-containing pipe insulations, floor tiles, and damaged window glazing material be removed by a licensed asbestos contractor, and in accordance with the OSHA Asbestos Construction Standard, prior to demolition of the building.
- In lieu of asbestos data for the assumed asbestos-containing fire doors and fire safes, we recommend these materials also be removed from the building by a licensed asbestos contractor, prior to building demolition.
- If the asbestos-containing roof system materials and wallboard systems will be removed from the building prior to demolition, we recommend that they be removed by a licensed asbestos contractor, and in accordance with the asbestos work requirements of the OSHA Asbestos Construction Standard. If one or more of these nonfriable ACMs will remain in the building during demolition, we recommend that the demolition activities be conducted by staff trained to conduct demolition involving ACMs, supervised by an Asbestos supervisor accredited by the MDLEO and conducted in accordance with the OSHA Asbestos Construction Standard. If the wallboard systems contaminated with asbestos-containing joint compound will remain in the building during demolition, the demolition activities must also be conducted by a licensed asbestos contractor.
- Regardless of the plans for building demolition, due to the presence of friable asbestos debris
  and dust in the areas of the asbestos-containing pipe insulations, we recommend restricting
  access to those areas of the building to only authorized personnel and/or prompt cleanup of the
  dust and debris to minimize the potential for asbestos exposure.
- We recommend proper notification to MDLEO and Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD), prior to removal of ACMs and demolition of the building.
- We recommend asbestos abatement project design by an asbestos project designer that is
  trained in accordance with USEPA requirements and accredited by the MDLEO. We also
  recommend monitoring asbestos removal work or disturbance with air sampling, visual
  verification, and clearance air monitoring performed by an independent third party (such as SME).
  We recommend notification of the presence, quantity, and location of ACMs and communication
  of the hazards associated with them in accordance.
- Please refer to Appendix B for Information regarding federal and state requirements regarding notification of work operations and work practices for activities involving ACMs and trace asbestos materials

### 5.2 LEAD-BEARING AND CADMIUM-BEARING PAINTS

We recommend conducting demolition activities involving painted surfaces in accordance with the requirements of OSHA Lead Exposure in Construction Standard and OSHA Cadmium Construction Standard, as applicable. We also recommend contractor personnel receive a minimum of two-hours lead and cadmium awareness training prior to working at the site.

### **5.3 REGULATED MATERIALS AND UNIVERSAL WASTES**

Prior to demolition of the building we recommend the following with regard to the identified regulated materials and universal wastes:

- We recommend contractor personnel assess lamp ballasts for "non-PCB" labels or date codes of production. Typically, a date code is stamped on the back of the ballasts during production. Generally, ballasts manufactured prior to 1979 are presumed to potentially contain PCBs. Ballasts not affixed with "non-PCB" labels, and those produced prior to 1979, should be considered PCB ballasts. PCB-containing ballasts should be segregated from ballasts affixed with "non-PCB" labels and properly disposed or recycled by trained personnel. Personnel conducting PCB-related activities should wear appropriate personal protective equipment, and spill prevention and control measures should also be enacted for PCB cleanup activities. Potential PCB wastes should be appropriately analyzed for waste characterization purposes, removed, and disposed in accordance with USEPA 40 CFR Part 761.
- To prevent releases of mercury, we recommend intact removal of the fluorescent light tubes and mercury ampule switches containing elemental mercury prior to demolition of the building. Disposal of 350 or more fluorescent light tubes and lamps or other mercury-contaminated items, in excess of an accumulated total of 220 pounds, may constitute a regulated amount of hazardous waste that may require specific handling and disposal procedures in accordance with the Resource Conservation and Recovery Act (RCRA, 40 CFR Part 273) hazardous waste requirements or the RCRA universal waste requirements. We recommend appropriate handling methods, such as careful packaging, and transport of the mercury-containing items to a licensed disposal/recycling facility.
- We recommend that smoke detectors labeled as containing radioactive material be carefully removed intact and returned to the manufacture, or disposed a facility licensed to accept them, prior to demolition.
- We also recommend an environmental contractor properly characterize bulk product or waste material, if present, contained in the above ground storage tank, and recycle or dispose the material prior to demolition of the building.
- Contractor personnel working in the building should be advised of the potential for encountering bird droppings or mold in concealed areas of the building. Construction personnel should be informed of the potential dangers and health hazards of airborne emissions resulting from the disturbance of bird droppings or water damaged building materials and molds/fungi. Contractors should also include appropriate information, training, work procedures, and personal protective equipment use for properly removing, handling and disposing bird excrement and mold-impacted materials in their health and safety plans.

# 6. LIMITATIONS AND GENERAL COMMENTS

Our project team conducted limited destructive assessment of wall cavities, ceilings, floor surfaces, and other interstitial spaces of the building. However, we did not assess every wall cavity and ceiling space within the building or demolish floor surfaces. We noted that asbestos-containing pipe insulations were likely present within the interstitial spaces of the block walls of the building restrooms. We extrapolated the estimated quantities of asbestos pipe insulation material based on the number and orientation of restroom fixtures observed, but did not destroy the block walls to expose these insulations as part of our assessment effort. Additional ACMs/quantities may exist in concealed spaces such as these that were not destructively assessed. We recommend selective demolition to expose concealed spaces of the building prior to initiation of demolition activities to assess for the presence of concealed ACMs. If suspect ACMs are encountered for which no analytical data exists, we recommend the material(s) remain undisturbed until the asbestos content of the material(s) is determined in accordance with USEPA and OSHA regulations.

The quantities presented in our report are intended to be "Order of Magnitude" estimates and <u>the estimated quantities and other information in this report should not be used as an exclusive source of information for bid formulation or for notification to regulatory agencies.</u>

Laboratory descriptions of materials analyzed by PLM method for asbestos content were based upon the microscopists' perceptions of bulk samples that were pulverized and prepared with dispersion oils for PLM analysis. Due to the preparation of the sampled materials and the minute level of observation by the laboratory personnel, the descriptions on the Certificates of Analysis may not match the sample descriptions recorded by SME's project team in the field. Our sample descriptions and locations should be used to identify materials that were sampled and our sample numbers should be used to correlate analytical results for the sampled materials.

We based the conclusions and recommendations submitted in this report upon the scope of services noted herein. In the process of obtaining the field information presented in this report, we followed procedures that represent reasonable and accepted industrial hygiene practices and principles, in a manner consistent with that level of care and skill ordinarily exercised by members of this profession currently practicing under similar conditions. We understand that Turner-Dodge Development, LLC and the Ingham County Land Bank will rely upon the professional opinions and representations contained in this report. However, the information and opinions contained within this report are not to be construed a warranty of the conditions of this site in any way, implied or explicit. No other parties may rely upon our opinions, conclusions or reports unless we have agreed to such reliance in writing.

# **TABLES**

**TABLE 1: ASBESTOS BULK SAMPLING RESULTS** 

**TABLE 2: PAINT CHIP SAMPLING RESULTS** 

© 2021 SME

Dia formation					guiatory ageneres.		
HA#	MATERIAL DESCRIPTION	ACM/ NON-ACM	ESTIMATED QUANTITY*	FRIABLE/ NONFRIABLE	CONDITION	LOCATION	
1	½" bead interior window glazing; white	ACM	135 sq. ft. on 8'x15'- 7 pane windows	Friable	Damaged	East bay, south bay	
2	CMU block mortar	NON-ACM	NQ	Nonfriable	Good	Throughout	
3	Brick mortar	NON-ACM	NQ	Nonfriable	Good	East bay, south bay woman's restroom, north bay office area	
4	Fire door (older sliding style)	ASSUMED ACM	4 doors	Nonfriable	Good	East bay, south bay, south bay boiler room	
5	2'x4' pinhole, wormtrack ceiling tile; white	NON-ACM	2,170 sq. ft.	Friable	Damaged	East bay office, south bay men's restroom, north bay office area, main office area	
6	12"x12" vinyl floor tile, off- white Yellow mastic	ACM NON-ACM	85 sq. ft.	Nonfriable	Good	East bay office	
7	8'x2' fibrous pressboard ceiling panels; tan	NON-ACM	10,000 sq. ft.	Friable	Damaged	South bay, main office area	
8	Concrete	NON-ACM	49,000 sq. ft.	Nonfriable	Good	Throughout	
9	8"x8" ceramic floor tile with grout and bedding; red	NON-ACM	2,100 sq. ft.	Nonfriable	Good	South bay, north bay office area, northeast room off main office hallway	
10	2'x4' pinhole, wormtrack ceiling tile; white	NON-ACM	2,725 sq. ft.	Friable	Damaged	South bay, south bay lunchroom, main office area	

	bid formulation of for notification to regulatory agencies.							
HA#	MATERIAL DESCRIPTION	ACM/ NON-ACM	ESTIMATED QUANTITY*	FRIABLE/ NONFRIABLE	CONDITION	LOCATION		
11	9"x9" vinyl floor tile; tan Black mastic	ACM NON-ACM	4,200 sq. ft.	Nonfriable	Good	South bay men's restroom, south bay lunchroom, south bay women's restroom, north bay office area, main office area		
12	1"x1" ceramic floor tile with bedding and grout; tan	NON-ACM	500 sq. ft.	Nonfriable	Good	South bay men's restroom, south bay lunchroom, main office area men's and women's restroom		
13	Wallboard wall system White sheetrock White joint	NON-ACM	350 sq. ft.	Nonfriable	Good	South bay men's restroom, main entrance to		
	compound White woven material Composite	NON-ACM				building		
14	4" cove base; brown	NON-ACM	130 sq. ft.	Nonfriable	Good	South bay men's restroom, south bay lunchroom, north bay office area, main office area		

bid formulation or for notification to regulatory agencies.							
HA#	MATERIAL DESCRIPTION	ACM/ NON-ACM	ESTIMATED QUANTITY*	FRIABLE/ NONFRIABLE	CONDITION	LOCATION	
15	Wallboard ceiling system  White sheetrock  White joint compound  White tape  Composite	NON-ACM  NON-ACM  Trace	350 sq. ft.	Nonfriable	Good	South bay women's restroom, main office area (room just southeast of main entrance)	
16	Fire door (regular new style)	ASSUMED ACM	1 door	Nonfriable	Good	South bay women's restroom	
17	Terrazzo flooring	NON-ACM	600 sq. ft.	Nonfriable	Good	North bay office area	
18	1'x1' ceramic wall tile with grout and bedding; tan	NON-ACM	340 sq. ft.	Nonfriable	Good	North bay office area	
19	2'x4' ceiling tile; flat white	NON-ACM	880 sq. ft.	Friable	Good	Northeast room of main office hallway	
20	Wall panel mastic; brown	NON-ACM	1,370 sq. ft.	Nonfriable	Good	Main office area	
21	Plasterboard wall system  White plaster  Gray plaster  White sheetrock	NON-ACM NON-ACM NON-ACM	6,300 sq. ft.	Nonfriable	Good	Main office area	
22	4" cove base; light tan	NON-ACM	100 sq. ft.	Nonfriable	Good	Main office area	
23	Carpet mastic; tan	NON-ACM	550 sq. ft.	Nonfriable	Good	Main office area	
24	1'x1' pinhole ceiling tile; white	NON-ACM	400 sq. ft.	Friable	Damaged	Main office area	

	bid formulation or for notification to regulatory agencies.							
HA#	MATERIAL DESCRIPTION	ACM/ NON-ACM	ESTIMATED QUANTITY*	FRIABLE/ NONFRIABLE	CONDITION	LOCATION		
25	1'x1' ceramic wall tile with grout and bedding; pink	NON-ACM	350 sq. ft.	Nonfriable	Good	Main office area men's and women's restroom		
26	Thermal systems insulation corrugated cardboard on 3" straight lines; white	ACM	650 In. ft.	Friable	Significantly damaged	South bay, east bay, south office area, and restrooms		
27	Thermal systems insulation mudded fittings on 3" corrugated cardboard lines; white	АСМ	35 fittings	Friable	Significantly damaged	South bay, east bay, south office area, and restrooms		
28	Thermal systems insulation layered paper on 3" straight lines; white	АСМ	220 ln. ft.	Friable	Significantly damaged	South bay, east bay, south office area, and restrooms		
29	Thermal systems insulation mudded fittings on 3" layered paper lines; white	АСМ	3 fittings	Friable	Significantly damaged	South bay and east bay		
30	Thermal systems insulation corrugated cardboard on 4" straight lines; white	АСМ	740 In. ft.	Friable	Significantly damaged	South bay, east bay, south office area, and restrooms		

	Dia formulation		or for notification to regulatory		ageneies.		
HA#	MATERIAL DESCRIPTION	ACM/ NON-ACM	ESTIMATED QUANTITY*	FRIABLE/ NONFRIABLE	CONDITION	LOCATION	
31	Thermal systems insulation mudded fittings on 4" corrugated cardboard lines; white	АСМ	65 fittings	Friable	Significantly damaged	South bay, east bay, south office area, and restrooms	
32	Thermal systems insulation corrugated cardboard on 8" straight lines; white	ACM	280 ln. ft.	Friable	Significantly damaged	South bay, east bay, south office area, and restrooms	
33	Thermal systems insulation mudded fittings on 8" corrugated cardboard lines; white	АСМ	14 fittings	Friable	Significantly damaged	South bay, east bay, south office area, and restrooms	
34	Thermal systems insulation; 6'x4' tank insulation	ACM	15 sq. ft.	Friable	Good	South bay above women's restroom	
35	Safe insulation	ASSUMED ACM	2 safes	Nonfriable	Good	Main office area (room just southeast of main entrance)	
36	Fibrous insulation	NON-ACM	550 sq. ft.	Friable	Damaged	East bay at 8'x15' size windows	
37	Rubber membrane roofing system (truck dock)	ACM	70 sq. ft.	Nonfriable	Good	Exterior truck dock roof	
38	Roofing caulk (truck dock)	ACM	10 sq. ft.	Nonfriable	Good	Exterior truck dock roof	
39	Rubber membrane roofing system (main roof)	ACM	48,200 sq. ft.	Nonfriable	Damaged	Exterior main roof	

The quantities presented in this table are intended to be "Order of Magnitude" estimates. The estimated quantities should not be used by contractors as an exclusive source of information for bid formulation or for notification to regulatory agencies.

HA#	MATERIAL DESCRIPTION	ACM/ NON-ACM	ESTIMATED QUANTITY*	FRIABLE/ NONFRIABLE	CONDITION	LOCATION
40	Roofing caulk (main roof)	ACM	100 sq. ft.	Nonfriable	Good	Exterior main roof

### NOTES:

HA = Homogenous Area.

ACM = Asbestos-Containing Material as defined by USEPA and OSHA definition.

Friable = Material that can be crumbled or reduced to powder by hand pressure.

NQ = Not quantified

Material conditions are described as defined in AHERA, 40 CFR Part 763.

In. ft. = linear feet

sq. ft. = square feet

<sup>\* =</sup> Estimate of visible, accessible materials. Additional quantities and materials may be present in concealed spaces not assessed.

Paint #	MATERIAL DESCRIPTION	LEAD % by weight	CADMIUM % by weight
P1	White (Interior); throughout	0.0071	<0.0018
P2	Cream (Interior); throughout	0.090	<0.0014
Р3	Yellow (Interior); east bay concrete walls	4.9	0.0011

<sup>\*.</sup> Matrix/Substrate interference possible

<sup>\*\*</sup> Insufficient sample to provide QC reanalysis

<sup>\*\*\*</sup> Not enough sample for analysis

# **APPENDIX A**

ASBESTOS SAMPLE CERTIFICATES OF ANALYSIS AND CHAIN OF CUSTODY FORMS



9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449

Email: customerservice@iatl.com

### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date: 1/31/2021

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

> Project No.: 083616.00

# PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7134384 Analyst Observation: White Glazing Location: East Bay, Along East Wall

Client Description: 1/2" Bead Interior Window Glazing, Client No.: HA1-A **Facility:** 

White

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

None Detected **PC 2.4** Chrysotile

**Lab No.:** 7134385 **Analyst Observation:** Sample Not Analyzed **Location:** East Bay, Along South Wall

Client No.: HA1-B Client Description: 1/2" Bead Interior Window Glazing, **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material: Sample Not Analyzed Sample Not Analyzed

**Analyst Observation:** Grey/White Block **Lab No.:** 7134386 **Location:** North Bay

Client Description: CMU Block And Mortar Client No.: HA2-A **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7134386(L2) **Analyst Observation:** Grey Mortar Location: North Bay

Client No.: HA2-A Client Description: CMU Block And Mortar **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7134387 **Analyst Observation:** Grey/White Block **Location:** South Bay

**Facility:** Client No.: HA2-B Client Description: CMU Block And Mortar

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7134387(L2) Location: South Bay **Analyst Observation:** Grey Mortar

Client No.: HA2-B Client Description: CMU Block And Mortar **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 100 None Detected

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/30/2021 Date Analyzed:

Analyst:

Signature: Linda Price

Dated: 2/2/2021 5:11:31 Page 1 of 30 Approved By:

Frank Tuanful Frank E. Ehrenfeld, III

Laboratory Director



\_\_\_\_\_

None Detected

9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449

Email: customerservice@iatl.com

### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date: 1/31/2021

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

> Project No.: 083616.00

# PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7134388 **Analyst Observation:** Grev Mortar Location: East Bay, At Northeast Rm

Client No.: HA3-A **Client Description:** Brick Mortar **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

**Analyst Observation:** Grey Mortar Lab No.: 7134389 **Location:** East Bay, At Northeast Rm

Client No.: HA3-B **Client Description:** Brick Mortar **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

Lab No.: 7134390 **Analyst Observation:** White/Brown Ceiling Tile **Location:** East Bay Office

Client No.: HA5-A Client Description: 2x4 Pinhole, Wormtrack Ceiling Tile, **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material: Percent Asbestos:

95 Cellulose None Detected

Analyst Observation: White/Brown Ceiling Tile **Lab No.:** 7134391 **Location:** East Bay Office

Client No.: HA5-B Client Description: 2x4 Pinhole, Wormtrack Ceiling Tile, **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

95 Cellulose

**Analyst Observation:** Off-White/Tan Floor Tile **Lab No.:** 7134392 **Location:** East Bay Office

**Client Description:** 12x12 Vinyl Floor Tile, Off-White With Client No.: HA6-A **Facility:** 

Yellow Mastic

Percent Non-Asbestos Fibrous Material: Percent Asbestos:

Percent Non-Fibrous Material: None Detected 96.5 **PC 3.5** Chrysotile

**Lab No.:** 7134392(L2) **Analyst Observation:** Yellow Mastic **Location:** East Bay Office

Client Description: 12x12 Vinyl Floor Tile, Off-White With Client No.: HA6-A **Facility:** 

Yellow Mastic

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

Page 2 of 30

None Detected None Detected 100

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/30/2021 Date Analyzed:

Signature: Linda Price Analyst:

Dated: 2/2/2021 5:11:32

Approved By:

Frank E. Ehrenfeld, III Laboratory Director



9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449

Email: customerservice@iatl.com

### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date: 1/31/2021

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

> Project No.: 083616.00

# PLM BULK SAMPLE ANALYSIS SUMMARY

Location: East Bay Office **Analyst Observation:** Sample Not Analyzed **Lab No.:** 7134393

Client Description: 12x12 Vinyl Floor Tile, Off-White With Facility: Client No.: HA6-B

Yellow Mastic

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

Sample Not Analyzed Sample Not Analyzed

Lab No.: 7134393(L2) **Analyst Observation:** Yellow Mastic Location: East Bay Office

Client No.: HA6-B Client Description: 12x12 Vinyl Floor Tile, Off-White With **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

Location: South Bay, On Ground **Lab No.:** 7134394 **Analyst Observation:** White/Tan Ceiling Panel

Client No.: HA7-A **Client Description:** 8x2 Fibrous Pressboard Ceiling Panels, **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 98 Cellulose

**Lab No.:** 7134395 **Analyst Observation:** White/Tan Ceiling Panel **Location:** South Bay, On Ground

Client Description: 8x2 Fibrous Pressboard Ceiling Panels, **Facility:** 

Client No.: HA7-B

Tan

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 95 Cellulose

**Lab No.:** 7134396 **Analyst Observation:** Grey Concrete **Location:** East Bay

Client No.: HA8-A **Client Description:** Concrete **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

Location: North Bay **Lab No.:** 7134397 **Analyst Observation:** Grey Concrete

Client No.: HA8-B Client Description: Concrete **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 100 None Detected

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/30/2021 Date Analyzed:

Signature: Linda Price Analyst:

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Dated: 2/2/2021 5:11:32 Page 3 of 30



Email: customerservice@iatl.com

### CERTIFICATE OF ANALYSIS

Report Date:

Report No.:

1/31/2021

**Facility:** 

**Facility:** 

**Facility:** 

**Facility:** 

**Facility:** 

100

100

627155 - PLM

Location: North Bay Office Area

Location: North Bay Office Area

Percent Non-Fibrous Material:

Location: North Bay Office Area

Percent Non-Fibrous Material:

Percent Non-Fibrous Material:

Percent Non-Fibrous Material:

**Location:** South Bay

**Location:** South Bay

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd

Plymouth MI 48170 Project: Lansing Coca Cola Plant

Project No.: 083616.00 Client: SOI102

### PLM BULK SAMPLE ANALYSIS SUMMARY

**Analyst Observation:** Red Ceramic **Lab No.:** 7134398

Client Description: 8x8 Ceramic Floor Tile With Grout And Client No.: HA9-A

Bedding, Red

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7134398(L2) **Analyst Observation:** Brown Grout

Client No.: HA9-A Client Description: 8x8 Ceramic Floor Tile With Grout And

Bedding, Red

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected None Detected

**Lab No.:** 7134398(L3) **Analyst Observation:** Black Underlayment

Client No.: HA9-A Client Description: 8x8 Ceramic Floor Tile With Grout And

Bedding, Red

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected None Detected

**Lab No.:** 7134399 **Analyst Observation:** Red Ceramic

Client No.: HA9-B Client Description: 8x8 Ceramic Floor Tile With Grout And

Bedding, Red

Percent Non-Asbestos Fibrous Material: Percent Asbestos:

None Detected None Detected

**Lab No.:** 7134399(L2) **Analyst Observation:** Brown Grout

Client No.: HA9-B Client Description: 8x8 Ceramic Floor Tile With Grout And

Bedding, Red

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected None Detected

**Lab No.:** 7134399(L3) Analyst Observation: Black Underlayment

Client No.: HA9-B Client Description: 8x8 Ceramic Floor Tile With Grout And

Bedding, Red

Percent Non-Asbestos Fibrous Material: Percent Asbestos:

None Detected None Detected

Location: South Bay

**Facility:** 

Percent Non-Fibrous Material:

100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received:

1/22/2021

Date Analyzed:

01/30/2021

Signature:

Linda Price Analyst:

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Dated: 2/2/2021 5:11:32 Page 4 of 30



9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449

Email: customerservice@iatl.com

### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date: 1/31/2021

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

> Project No.: 083616.00

PLM BULK SAMPLE ANALYSIS SUMMARY

Analyst Observation: White/Tan Ceiling Tile **Lab No.:** 7134400 **Location:** At Main Entrance To Bldg

Client Description: 2x4 Pinhole, Wormtrack Ceiling Tile, Client No.: HA10-A **Facility:** 

White

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

50 Cellulose None Detected

25 Mineral Wool

**Lab No.:** 7134401 **Analyst Observation:** White/Tan Ceiling Tile **Location:** South Bay, Lunch Rm

Client No.: HA10-B Client Description: 2x4 Pinhole, Wormtrack Ceiling Tile, **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

Percent Non-Fibrous Material: None Detected 45 Cellulose 35

20 Mineral Wool

**Lab No.:** 7134402 **Analyst Observation:** Tan Floor Tile **Location:** Main Entryway To Bldg

Client Description: 9x9 Vinyl Floor Tile, Tan With Black Client No.: HA11-A **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

Percent Asbestos: None Detected 97.2 PC 2.8 Chrysotile

**Location:** Main Entryway To Bldg

**Lab No.:** 7134402(L2) Analyst Observation: Black/Tan Mastic

Client No.: HA11-A Client Description: 9x9 Vinyl Floor Tile, Tan With Black Facility:

Percent Non-Fibrous Material: Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected None Detected

**Lab No.:** 7134403 **Analyst Observation:** Sample Not Analyzed **Location:** South Bay, Men's Restroom

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director

Client No.: HA11-B Client Description: 9x9 Vinyl Floor Tile, Tan With Black **Facility:** 

Mastic

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

Percent Non-Fibrous Material: Sample Not Analyzed Sample Not Analyzed

Please refer to the Appendix of this report for further information regarding your analysis.

Mastic

1/22/2021 Date Received: 01/30/2021 Date Analyzed:

Signature: Linda Price Analyst:

Dated: 2/2/2021 5:11:32 Page 5 of 30



Email: customerservice@iatl.com

### CERTIFICATE OF ANALYSIS

Report Date:

1/31/2021

100

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

Project No.: 083616.00 Client: SOI102

# PLM BULK SAMPLE ANALYSIS SUMMARY

**Lab No.:** 7134403(L2) Analyst Observation: Black Mastic Location: South Bay, Men's Restroom

Client Description: 9x9 Vinyl Floor Tile, Tan With Black Client No.: HA11-B **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

**Analyst Observation:** Tan Ceramic **Lab No.:** 7134404 **Location:** Main Office Area, Woman's

Client No.: HA12-A Client Description: 1x1 Ceramic Floor Tile With Bedding Restroom

And Grout, Tan Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7134404(L2) **Analyst Observation:** Grey Grout **Location:** Main Office Area, Woman's

Client No.: HA12-A Client Description: 1x1 Ceramic Floor Tile With Bedding Restroom

And Grout, Tan **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 100 None Detected

**Lab No.:** 7134404(L3) Analyst Observation: Yellow/Tan Mastic / Paper Location: Main Office Area, Woman's

Client No.: HA12-A Client Description: 1x1 Ceramic Floor Tile With Bedding Restroom

And Grout, Tan **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material: 35

None Detected 65 Cellulose

**Lab No.:** 7134404(L4) **Analyst Observation:** Grey Leveling Compound **Location:** Main Office Area, Woman's

Client No.: HA12-A Client Description: 1x1 Ceramic Floor Tile With Bedding Restroom And Grout, Tan

**Facility:** Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7134405 **Analyst Observation:** Tan Ceramic Location: South Bay, Men's Restroom

**Facility:** 

Client No.: HA12-B Client Description: 1x1 Ceramic Floor Tile With Bedding

And Grout, Tan

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 100 None Detected

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/30/2021 Date Analyzed:

Signature: Linda Price Analyst:

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Frank Tua

Dated: 2/2/2021 5:11:32 Page 6 of 30



Email: customerservice@iatl.com

### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd

Plymouth ΜI 48170 Project:

Client: SOI102

Report No.: 627155 - PLM

Lansing Coca Cola Plant

1/31/2021

Project No.: 083616.00

88

Frank Tua

Frank E. Ehrenfeld, III

Laboratory Director

Report Date:

# PLM BULK SAMPLE ANALYSIS SUMMARY

**Lab No.:** 7134405(L2) Analyst Observation: Grey Grout Location: South Bay, Men's Restroom

Client Description: 1x1 Ceramic Floor Tile With Bedding Client No.: HA12-B **Facility:** 

And Grout, Tan

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7134405(L3) **Analyst Observation:** Yellow Mastic

Location: South Bay, Men's Restroom Client No.: HA12-B Client Description: 1x1 Ceramic Floor Tile With Bedding **Facility:** 

And Grout, Tan

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7134406 Analyst Observation: White/Brown Drywall Location: Main Office Area, At Main Client No.: HA13-A Client Description: Wallboard Wall System Entryway To Bldg, In Northeast Corner

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

12 Cellulose None Detected

**Lab No.:** 7134406(L2) Analyst Observation: White Joint Compound Location: Main Office Area, At Main

Client No.: HA13-A Client Description: Wallboard Wall System Entryway To Bldg, In Northeast Corner

**Facility:** 

Percent Non-Fibrous Material: Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected None Detected 100

**Lab No.:** 7134406(L3) **Analyst Observation:** White Woven Material **Location:** Main Office Area, At Main

Client No.: HA13-A Client Description: Wallboard Wall System Entryway To Bldg, In Northeast Corner

**Facility:** Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

90 Fibrous Glass None Detected

**Lab No.:** 7134406(L4) Analyst Observation: White Plaster Location: Main Office Area, At Main Client No.: HA13-A

Client Description: Wallboard Wall System Entryway To Bldg, In Northeast Corner

Approved By:

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material: None Detected None Detected

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/30/2021 Date Analyzed:

Analyst:

Signature: Linda Price

Dated: 2/2/2021 5:11:32 Page 7 of 30



Email: customerservice@iatl.com

### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd

Plymouth ΜI 48170

Client: SOI102

Percent Asbestos:

None Detected

Report Date: 1/31/2021

Report No.: 627155 - PLM

Project: Lansing Coca Cola Plant

Project No.: 083616.00

# PLM BULK SAMPLE ANALYSIS SUMMARY

Analyst Observation: White/Brown Drywall **Lab No.:** 7134407 Client Description: Wallboard Wall System Client No.: HA13-B

Percent Non-Asbestos Fibrous Material:

12 Cellulose

**Lab No.:** 7134407(L2) Analyst Observation: White Joint Compound Client No.: HA13-B

Client Description: Wallboard Wall System

Percent Non-Asbestos Fibrous Material: Percent Asbestos:

None Detected None Detected

**Lab No.:** 7134407(L3) **Analyst Observation:** White Woven Material Client No.: HA13-B

Client Description: Wallboard Wall System

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected 90 Fibrous Glass

**Lab No.:** 7134408 Analyst Observation: White/Brown Drywall

Client No.: HA13-C Client Description: Wallboard Wall System

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

12 Cellulose None Detected

**Lab No.:** 7134408(L2) Analyst Observation: Tan Joint Compound

Client No.: HA13-C Client Description: Wallboard Wall System

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected PC 1.3 Chrysotile

**Lab No.:** 7134408(L3) **Analyst Observation:** Off-White Tape

Client No.: HA13-C Client Description: Wallboard Wall System

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

100 Cellulose None Detected

Location: Main Office Area, At Main Entryway To Bldg, In Southeast Corner **Facility:** 

Percent Non-Fibrous Material:

Location: Main Office Area, At Main

Entryway To Bldg, In Southeast Corner

Facility:

Percent Non-Fibrous Material:

100

Location: Main Office Area, At Main

Entryway To Bldg, In Southeast Corner

**Facility:** 

Percent Non-Fibrous Material:

Location: South Bay, Men's Restroom

**Facility:** 

Percent Non-Fibrous Material:

Location: South Bay, Men's Restroom

**Facility:** 

Percent Non-Fibrous Material:

98.7

**Location:** South Bay, Men's Restroom

Facility:

Percent Non-Fibrous Material:

None Detected

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received:

1/22/2021

Date Analyzed:

01/30/2021

Signature:

Linda Price Analyst:

Dated: 2/2/2021 5:11:32

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director



9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449

Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date:

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

Project No.: 083616.00

1/31/2021

# PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7134408(L4) Analyst Observation: Composite Location: South Bay, Men's Restroom

Client No.: HA13-C Client Description: Wallboard Wall System Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

PC Trace Chrysotile 25 Cellulose 7.

Lab No.: 7134409 Analyst Observation: Brown Cove Base Location: South Bay, Men's Restroom

Client No.: HA14-A Client Description: 4" Cove Base, Brown Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

Lab No.: 7134409(L2) Analyst Observation: Brown Mastic Location: South Bay, Men's Restroom

Client No.: HA14-A Client Description: 4" Cove Base, Brown Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

**Lab No.:** 7134410 **Analyst Observation:** Brown Cove Base **Location:** South Bay, Lunch Rm

Client No.: HA14-B Client Description: 4" Cove Base, Brown Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

Lab No.: 7134410(L2) Analyst Observation: Brown Mastic Location: South Bay, Lunch Rm

Client No.: HA14-B Client Description: 4" Cove Base, Brown Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

Lab No.: 7134411 Analyst Observation: White/Brown Drywall Location: South Bay, West Restroom

Client No.: HA15-A Client Description: Wallboard Ceiling System Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 12 Cellulose 8

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/22/2021

Date Analyzed: 01/30/2021

Signature:
Analyst:
Linda Price

Dated: 2/2/2021 5:11:32 Page 9 of 30

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd

Plymouth MI 48170

Client: SOI102

**PC 1.5** Chrysotile

Report Date: 1/31/2021

Report No.: 627155 - PLM

Project: Lansing Coca Cola Plant

Project No.: 083616.00

# PLM BULK SAMPLE ANALYSIS SUMMARY

Analyst Observation: Tan Joint Compound Location: South Bay, West Restroom **Lab No.:** 7134411(L2) Client No.: HA15-A

Client Description: Wallboard Ceiling System **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

None Detected 98.5

**Lab No.:** 7134411(L3) **Analyst Observation:** Composite Location: South Bay, West Restroom

Client No.: HA15-A Client Description: Wallboard Ceiling System **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material: Percent Asbestos:

10 Cellulose **PC Trace** Chrysotile

**Lab No.:** 7134411(L4) Analyst Observation: Brown Wood Location: South Bay, West Restroom

Client No.: HA15-A Client Description: Wallboard Ceiling System **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 80 Cellulose

**Lab No.:** 7134411(L5) **Analyst Observation:** Lt Grey Non-Fibrous Location: South Bay, West Restroom

Client No.: HA15-A Client Description: Wallboard Ceiling System **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

Analyst Observation: White/Brown Drywall Location: South Bay, West Restroom **Lab No.:** 7134412

Client No.: HA15-B Client Description: Wallboard Ceiling System **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

15 Cellulose None Detected

**Lab No.:** 7134412(L2) Analyst Observation: Tan Joint Compound Location: South Bay, West Restroom

Client No.: HA15-B Client Description: Wallboard Ceiling System **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 98.3 **PC 1.7** Chrysotile

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received: 01/30/2021 Date Analyzed:

Signature: Linda Price Analyst:

Dated: 2/2/2021 5:11:32 Page 10 of 30 Approved By:

Frank E. Ehrenfeld, III Laboratory Director



Email: customerservice@iatl.com

### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd

Plymouth MI 48170

Client: SOI102

Report Date: 1/31/2021

Report No.: 627155 - PLM

Project: Lansing Coca Cola Plant

Project No.: 083616.00

# PLM BULK SAMPLE ANALYSIS SUMMARY

**Lab No.:** 7134412(L3) **Analyst Observation:** Off-White Tape **Location:** South Bay, West Restroom

Client No.: HA15-B Client Description: Wallboard Ceiling System Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 100 Cellulose None Detected

Lab No.: 7134412(L4) Analyst Observation: Composite Location: South Bay, West Restroom

Client No.: HA15-B Client Description: Wallboard Ceiling System Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

PC Trace Chrysotile 20 Cellulose

Lab No.: 7134413 Analyst Observation: White/Brown Drywall Location: South Bay, West Restroom

Client No.: HA15-C Client Description: Wallboard Ceiling System Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 15 Cellulose

None Detected

Lab No.: 7134413(L2) Analyst Observation: Tan Joint Compound Location: South Bay, West Restroom

Client No.: HA15-C Client Description: Wallboard Ceiling System Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

PC 1.4 Chrysotile None Detected 98.6

Lab No.: 7134413(L3) Analyst Observation: Composite Location: South Bay, West Restroom

Client No.: HA15-C Client Description: Wallboard Ceiling System Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

PC Trace Chrysotile 13 Cellulose 8'

**Lab No.:** 7134414 **Analyst Observation:** Tan Terrazzo **Location:** North Bay, Office Area

Client No.: HA17-A Client Description: Terrazzo Flooring Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/22/2021

Date Analyzed: 01/30/2021

Signature:
Analyst:
Linda Price

Dated: 2/2/2021 5:11:32 Page 11 of 30

Approved By:

Took than foll

Frank E. Ehrenfeld, III Laboratory Director



Email: customerservice@iatl.com

### CERTIFICATE OF ANALYSIS

Report Date:

1/31/2021

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

Client: SOI102 Project No.: 083616.00

# PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7134414(L2) Analyst Observation: Grey Mortar Location: North Bay, Office Area

Client No.: HA17-A Client Description: Terrazzo Flooring Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 10

Lab No.: 7134415 Analyst Observation: Tan Terrazzo Location: North Bay, Office Area

Client No.: HA17-B Client Description: Terrazzo Flooring Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 10

Lab No.: 7134415(L2) Analyst Observation: Grey Mortar Location: North Bay, Office Area

Client No.: HA17-B Client Description: Terrazzo Flooring Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 10

**Lab No.:** 7134416 **Analyst Observation:** Tan Ceramic **Location:** North Bay, Office Area, North

Client No.: HA18-A Client Description: 1x1 Ceramic Wall Tile With Grout And Half Of Office

Bedding, Tan Facility:

Percent Asbestos:Percent Non-Asbestos Fibrous Material:Percent Non-Fibrous Material:None DetectedNone Detected100

Lab No.: 7134416(L2) Analyst Observation: White Grout Location: North Bay, Office Area, North

Client No.: HA18-A

Client Description: 1x1 Ceramic Wall Tile With Grout And Half Of Office

Bedding, Tan

Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected
None Detected
None Detected
None Detected
None Detected

Lab No.: 7134416(L3) Analyst Observation: Tan Mastic Location: North Bay, Office Area, North

Client No.: HA18-A Client Description: 1x1 Ceramic Wall Tile With Grout And Half Of Office

Bedding, Tan

Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

Please refer to the Appendix of this report for further information regarding your analysis.

Linda Price

Analyst:

Date Received: 1/22/2021 Approved By: Fall Tune for the Analyzed: 01/30/2021

Frank E. Ehrenfeld, III
Signature:
Laboratory Director

Dated: 2/2/2021 5:11:32 Page 12 of 30



Email: customerservice@iatl.com

### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd

Plymouth ΜI 48170

Client: SOI102

Report Date: 1/31/2021

Report No.: 627155 - PLM

Project: Lansing Coca Cola Plant

Project No.: 083616.00

### PLM BULK SAMPLE ANALYSIS SUMMARY

Analyst Observation: Tan Ceramic **Lab No.:** 7134417

Client Description: 1x1 Ceramic Wall Tile With Grout And Client No.: HA18-B

Bedding, Tan

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected None Detected

**Lab No.:** 7134417(L2) Analyst Observation: White Grout

Client No.: HA18-B Client Description: 1x1 Ceramic Wall Tile With Grout And

Bedding, Tan

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected None Detected

**Lab No.:** 7134417(L3) **Analyst Observation:** Brown Mastic

Client No.: HA18-B Client Description: 1x1 Ceramic Wall Tile With Grout And

Bedding, Tan

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected None Detected Location: North Bay, Office Area, South

Half Of Office

**Facility:** 

Percent Non-Fibrous Material:

Location: North Bay, Office Area, South

Half Of Office **Facility:** 

Percent Non-Fibrous Material:

100

Location: North Bay, Office Area, South

Half Of Office **Facility:** 

Percent Non-Fibrous Material:

100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received:

1/22/2021

Date Analyzed:

Dated: 2/2/2021 5:11:32

01/30/2021

Signature:

Linda Price Analyst:

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Frank Tua

Page 13 of 30



9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449

Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date: 1/31/2021

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

Project No.: 083616.00

#### PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7134418 Analyst Observation: White/Tan Ceiling Tile Location: Main Office Area, Far Northeast

Client No.: HA19-A Client Description: 2x4 Ceiling Tile, Flat White Rm Of Main Hallway

Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 45 Cellulose 20

35 Mineral Wool

**Lab No.:** 7134419 **Analyst Observation:** White/Tan Ceiling Tile **Location:** Main Office Area, Far Northeast

Client No.: HA19-B Client Description: 2x4 Ceiling Tile, Flat White Rm Of Main Hallway

Facility:

<u>Percent Asbestos:</u> <u>Percent Non-Asbestos Fibrous Material:</u> <u>Percent Non-Fibrous Material:</u>

None Detected 40 Cellulose 30 Mineral Wool

Lab No.: 7134420Analyst Observation: Brown MasticLocation: Main Office Area, Office JustClient No.: HA20-AClient Description: Wall Panel Mastic, BrownNorth Of Main Entrance

Facility:

<u>Percent Asbestos:</u> <u>Percent Non-Asbestos Fibrous Material:</u> <u>Percent Non-Fibrous Material:</u>

None Detected None Detected 100

Lab No.: 7134421 Analyst Observation: Brown Mastic Location: Main Office Area, Office Just

Client No.: HA20-B Client Description: Wall Panel Mastic, Brown South Of Main Entrance

Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

None Detected None Detected

Client No.: HA21-A Client Description: Plasterboard Wall System Bldg, At South Wall

Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 10

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/22/2021

Date Analyzed: 01/31/2021

Signature:
Analyst:
Linda Price

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Dated: 2/2/2021 5:11:32 Page 14 of 30



9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449

Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date:

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

> Project No.: 083616.00

#### PLM BULK SAMPLE ANALYSIS SUMMARY

**Analyst Observation:** Grey Plaster Location: Lobby At Main Entrance To **Lab No.:** 7134422(L2)

Client Description: Plasterboard Wall System Client No.: HA21-A Bldg, At South Wall

**Facility:** 

1/31/2021

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

2 Hair None Detected

**Lab No.:** 7134422(L3) Analyst Observation: White/Brown Drywall Location: Lobby At Main Entrance To Client No.: HA21-A

Client Description: Plasterboard Wall System Bldg, At South Wall

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

15 Cellulose None Detected

**Lab No.:** 7134423 **Analyst Observation:** White Plaster Location: Main Office Area, Furnace Rm

Client Description: Plasterboard Wall System Client No.: HA21-B **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

None Detected None Detected

Analyst Observation: Grey Plaster **Lab No.:** 7134423(L2) Location: Main Office Area, Furnace Rm

Client No.: HA21-B Client Description: Plasterboard Wall System **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

2 Hair None Detected

Location: Main Office Area, Men's **Lab No.:** 7134424 **Analyst Observation:** White Plaster

Client Description: Plasterboard Wall System Client No.: HA21-C Restroom, Along South Wall

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 100 None Detected

**Lab No.:** 7134424(L2) **Analyst Observation:** Grey Plaster Location: Main Office Area, Men's Client No.: HA21-C

Client Description: Plasterboard Wall System Restroom, Along South Wall

Approved By:

Frank E. Ehrenfeld, III

**Facility:** 

Percent Non-Fibrous Material: Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected 3 Hair 97

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/31/2021 Date Analyzed:

Analyst:

Signature: Laboratory Director Linda Price

Dated: 2/2/2021 5:11:32 Page 15 of 30



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd

Plymouth MI 48170

Client: SOI102

Report Date: 1/31/2021

Report No.: 627155 - PLM

Project: Lansing Coca Cola Plant

Project No.: 083616.00

#### PLM BULK SAMPLE ANALYSIS SUMMARY

Analyst Observation: White/Brown Drywall Location: Main Office Area, Men's **Lab No.:** 7134424(L3) Client No.: HA21-C

Client Description: Plasterboard Wall System Restroom, Along South Wall

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

15 Cellulose None Detected

**Analyst Observation:** White Plaster **Lab No.:** 7134425 **Location:** Main Office Area, Far Southwest

Client No.: HA21-D Client Description: Plasterboard Wall System Rm, Along North Wall

**Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

None Detected 100 None Detected

**Lab No.:** 7134425(L2) **Analyst Observation:** Grey Plaster **Location:** Main Office Area, Far Southwest

Client No.: HA21-D Client Description: Plasterboard Wall System Rm, Along North Wall

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

2 Hair None Detected

**Lab No.:** 7134425(L3) Analyst Observation: White/Brown Drywall Location: Main Office Area, Far Southwest

Client No.: HA21-D Client Description: Plasterboard Wall System Rm, Along North Wall

**Facility:** 

Percent Non-Fibrous Material: Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected 15 Cellulose 85

**Lab No.:** 7134426 **Analyst Observation:** White Plaster **Location:** Main Office Area, Women's

Client No.: HA21-E **Client Description:** Plasterboard Wall System Restroom, Along South Wall **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7134426(L2) **Analyst Observation:** Grey Plaster Location: Main Office Area, Women's

Client Description: Plasterboard Wall System Client No.: HA21-E Restroom, Along South Wall

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material: 1 Hair None Detected

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/31/2021 Date Analyzed:

Analyst:

Signature: Linda Price

Dated: 2/2/2021 5:11:32 Page 16 of 30 Approved By:

Frank E. Ehrenfeld, III Laboratory Director



Percent Asbestos:

Dated: 2/2/2021 5:11:32

9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449

Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

> Project No.: 083616.00

Report Date:

#### PLM BULK SAMPLE ANALYSIS SUMMARY

Analyst Observation: White/Brown Drywall Location: Main Office Area, Women's **Lab No.:** 7134426(L3)

Client Description: Plasterboard Wall System Client No.: HA21-E Restroom, Along South Wall

**Facility:** 

1/31/2021

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

12 Cellulose None Detected

**Analyst Observation:** White Plaster Location: Main Office Area, Far East **Lab No.:** 7134427

Client No.: HA21-F Client Description: Plasterboard Wall System Office, Along South Wall

**Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

None Detected 100 None Detected

**Lab No.:** 7134427(L2) **Analyst Observation:** Grey Plaster Location: Main Office Area, Far East

Client No.: HA21-F Client Description: Plasterboard Wall System Office, Along South Wall

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 1 Hair

**Lab No.:** 7134427(L3) Analyst Observation: White/Brown Drywall Location: Main Office Area, Far East

Client No.: HA21-F Client Description: Plasterboard Wall System Office, Along South Wall

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 15 Cellulose 85

**Lab No.:** 7134428 **Analyst Observation:** White Plaster **Location:** Main Office Area, In Main

Client No.: HA21-G **Client Description:** Plasterboard Wall System Hallway, Along Southwest Wall **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected

None Detected

**Lab No.:** 7134428(L2) **Analyst Observation:** Grey Plaster Location: Main Office Area, In Main Client Description: Plasterboard Wall System Client No.: HA21-G

Hallway, Along Southwest Wall **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

2 Hair None Detected

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received: 01/31/2021 Date Analyzed:

Signature: Linda Price

Analyst:

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Page 17 of 30



\_\_\_\_\_

9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449 Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date:

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

> Project No.: 083616.00

1/31/2021

#### PLM BULK SAMPLE ANALYSIS SUMMARY

Analyst Observation: Brown Paper Location: Main Office Area, In Main **Lab No.:** 7134428(L3)

Client Description: Plasterboard Wall System Client No.: HA21-G Hallway, Along Southwest Wall

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

98 Cellulose None Detected

**Analyst Observation:** Lt Tan Cove Base Location: Main Office Area **Lab No.:** 7134429

Client No.: HA22-A Client Description: 4" Cove Base, Light Tan **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 100 None Detected

**Lab No.:** 7134429(L2) **Analyst Observation:** Yellow Mastic Location: Main Office Area

Client Description: 4" Cove Base, Light Tan Client No.: HA22-A **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7134430 **Analyst Observation:** Lt Tan Cove Base **Location:** Main Office Area

Client Description: 4" Cove Base, Light Tan Client No.: HA22-B **Facility:** 

Percent Non-Asbestos Fibrous Material:

Percent Asbestos: Percent Non-Fibrous Material: 100

None Detected None Detected

**Lab No.:** 7134430(L2) Analyst Observation: Yellow Mastic Location: Main Office Area

Client No.: HA22-B Client Description: 4" Cove Base, Light Tan **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 100 None Detected

**Analyst Observation:** Tan Mastic Location: Main Office Area, Office Just **Lab No.:** 7134431

Client No.: HA23-A South Of Main Entrance To Bldg **Client Description:** Carpet Mastic, Tan

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/31/2021 Date Analyzed:

Analyst:

Signature: Linda Price

Dated: 2/2/2021 5:11:32 Page 18 of 30 Approved By:

Frank E. Ehrenfeld, III Laboratory Director



9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449

Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date: 1/31/2021

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

> Project No.: 083616.00

#### PLM BULK SAMPLE ANALYSIS SUMMARY

Analyst Observation: Tan Mastic Location: Main Office Area, Office Just **Lab No.:** 7134432

Client No.: HA23-B Client Description: Carpet Mastic, Tan South Of Main Entrance To Bldg

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

**Analyst Observation:** White/Brown Ceiling Tile Location: Main Office Area, Office Just **Lab No.:** 7134433

Client No.: HA24-A Client Description: 1x1 Pinhole Ceiling Tile, White South Of Main Entrance To Bldg

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

90 Cellulose None Detected

**Lab No.:** 7134434 **Analyst Observation:** White/Brown Ceiling Tile **Location:** Main Office Area, Office Just

Client No.: HA24-B **Client Description:** 1x1 Pinhole Ceiling Tile, White South Of Main Entrance To Bldg

**Facility:** 

Percent Asbestos: Percent Non-Fibrous Material: Percent Non-Asbestos Fibrous Material:

None Detected 95 Cellulose

**Lab No.:** 7134435 **Analyst Observation:** Pink Ceramic Location: Main Office Area Men's

Client No.: HA25-A Client Description: 1x1 Ceramic Wall Tile With Grout And Restroom

Bedding, Pink **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

None Detected None Detected 100

**Lab No.:** 7134435(L2) **Analyst Observation:** White Grout

Location: Main Office Area Men's Client No.: HA25-A Client Description: 1x1 Ceramic Wall Tile With Grout And Restroom

> Bedding, Pink **Facility:**

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7134435(L3) Analyst Observation: Tan Mastic

Client Description: 1x1 Ceramic Wall Tile With Grout And Client No.: HA25-A Restroom

Bedding, Pink

Percent Non-Asbestos Fibrous Material: Percent Asbestos:

None Detected None Detected

Location: Main Office Area Men's

**Facility:** 

Percent Non-Fibrous Material:

100

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/31/2021 Date Analyzed:

Signature:

Linda Price Analyst:

Dated: 2/2/2021 5:11:32

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director

Page 19 of 30



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Report Date:

1/31/2021

**Facility:** 

Restroom

**Facility:** 

**Facility:** 

100

Percent Non-Fibrous Material:

Percent Non-Fibrous Material:

Percent Non-Fibrous Material:

Percent Non-Fibrous Material:

**Location:** South Bay

**Location:** South Bay

Location: Main Office Area Women's

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

Project No.: 083616.00 Client: SOI102

#### PLM BULK SAMPLE ANALYSIS SUMMARY

Analyst Observation: Pink Ceramic **Lab No.:** 7134436 **Location:** Main Office Area Women's Client Description: 1x1 Ceramic Wall Tile With Grout And Client No.: HA25-B Restroom

Bedding, Pink **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7134436(L2) **Analyst Observation:** White Grout Location: Main Office Area Women's Client No.: HA25-B Client Description: 1x1 Ceramic Wall Tile With Grout And Restroom

Bedding, Pink

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected None Detected

**Lab No.:** 7134436(L3) **Analyst Observation:** Tan Mastic

Client No.: HA25-B Client Description: 1x1 Ceramic Wall Tile With Grout And

Bedding, Pink

Percent Asbestos: Percent Non-Asbestos Fibrous Material:

None Detected None Detected

**Lab No.:** 7134437 Analyst Observation: White/Grey Insulation

Client No.: HA26-A Client Description: Thermal Systems Insulation Corrugated

Cardboard On 3" Straight Lines, White

Percent Non-Asbestos Fibrous Material: Percent Asbestos:

70 Chrysotile None Detected

**Lab No.:** 7134438 **Analyst Observation:** Sample Not Analyzed

Client Description: Thermal Systems Insulation Corrugated Client No.: HA26-B **Facility:** 

Cardboard On 3" Straight Lines, White

Percent Non-Asbestos Fibrous Material: Percent Asbestos:

Sample Not Analyzed Sample Not Analyzed

**Lab No.:** 7134439 **Analyst Observation:** Sample Not Analyzed **Location:** South Bay

Client Description: Thermal Systems Insulation Corrugated Client No.: HA26-C

Cardboard On 3" Straight Lines, White

Percent Non-Asbestos Fibrous Material:

Sample Not Analyzed Sample Not Analyzed

**Facility:** 

Percent Non-Fibrous Material:

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

Percent Asbestos:

01/31/2021 Date Analyzed:

Signature: Linda Price Analyst:

Dated: 2/2/2021 5:11:32

Approved By:

Page 20 of 30

Frank E. Ehrenfeld, III

Laboratory Director



9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449

Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date:

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

> Project No.: 083616.00

1/31/2021

#### PLM BULK SAMPLE ANALYSIS SUMMARY

**Analyst Observation:** White/Brown Wrap / Insulation **Lab No.:** 7134440 **Location:** South Bay

Client Description: Thermal Systems Insulation Mudded Client No.: HA27-A **Facility:** 

Fittings On 3" Corrugated Cardboard Lines, White

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

10 Cellulose **55** Chrysotile

30 Mineral Wool

Lab No.: 7134441 **Analyst Observation:** Sample Not Analyzed **Location:** South Bay

**Client Description:** Thermal Systems Insulation Mudded Client No.: HA27-B **Facility:** 

Fittings On 3" Corrugated Cardboard Lines, White

Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material: Percent Asbestos:

Sample Not Analyzed Sample Not Analyzed

Lab No.: 7134442 **Analyst Observation:** Sample Not Analyzed **Location:** South Bay

Client No.: HA27-C Client Description: Thermal Systems Insulation Mudded **Facility:** 

Fittings On 3" Corrugated Cardboard Lines, White

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

Sample Not Analyzed Sample Not Analyzed

**Lab No.:** 7134443 **Analyst Observation:** White/Brown Wrap / Insulation **Location:** South Bay

Client Description: Thermal Systems Insulation Layered Client No.: HA28-A **Facility:** 

Paper On 3" Straight Lines, White

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

25 Chrysotile 10 Cellulose

30 Mineral Wool

Lab No.: 7134444 **Analyst Observation:** Sample Not Analyzed **Location:** South Bay

Client No.: HA28-B Client Description: Thermal Systems Insulation Layered **Facility:** Paper On 3" Straight Lines, White

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

Sample Not Analyzed Sample Not Analyzed

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/31/2021 Date Analyzed:

Signature: Linda Price Analyst:

Dated: 2/2/2021 5:11:32 Page 21 of 30 Approved By:

Frank E. Ehrenfeld, III Laboratory Director



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Report Date: 1/31/2021

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

Project No.: 083616.00 Client: SOI102

#### PLM BULK SAMPLE ANALYSIS SUMMARY

**Lab No.:** 7134445 **Analyst Observation:** Sample Not Analyzed **Location:** South Bay

Client Description: Thermal Systems Insulation Layered Client No.: HA28-C **Facility:** 

Paper On 3" Straight Lines, White

Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material: Percent Asbestos:

Sample Not Analyzed Sample Not Analyzed

**Lab No.:** 7134446 Analyst Observation: White/Tan Insulation **Location:** South Bay

Client No.: HA29-A Client Description: Thermal Systems Insulation Mudded **Facility:** 

Fittings On 3" Layered Paper Lines, White

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

15 Cellulose 15 Chrysotile

50 Mineral Wool

Lab No.: 7134447 **Analyst Observation:** Sample Not Analyzed **Location:** South Bay

Client No.: HA29-B Client Description: Thermal Systems Insulation Mudded **Facility:** 

Fittings On 3" Layered Paper Lines, White

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

Sample Not Analyzed Sample Not Analyzed

**Analyst Observation:** Sample Not Analyzed **Lab No.:** 7134448 **Location:** South Bay

Client Description: Thermal Systems Insulation Mudded Client No.: HA29-C **Facility:** 

Fittings On 3" Layered Paper Lines, White

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material: Sample Not Analyzed Sample Not Analyzed

**Lab No.:** 7134449 Analyst Observation: White/Brown Insulation **Location:** South Bay

Client No.: HA30-A **Client Description:** Thermal Systems Insulation Corrugated **Facility:** 

Cardboard On 4" Straight Lines, White

Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

80 Cellulose 12 Chrysotile

Lab No.: 7134450 **Analyst Observation:** Sample Not Analyzed **Location:** South Bay

Client No.: HA30-B Client Description: Thermal Systems Insulation Corrugated **Facility:** 

Cardboard On 4" Straight Lines, White

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

Sample Not Analyzed Sample Not Analyzed

1/22/2021

Percent Asbestos:

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 01/31/2021 Date Analyzed:

Signature: Linda Price Analyst:

Dated: 2/2/2021 5:11:33 Page 22 of 30 Approved By:

Fre Francisco

Frank E. Ehrenfeld, III Laboratory Director



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd

Plymouth MI 48170

Client: SOI102

Report Date: 1/31/2021

Report No.: 627155 - PLM

Project: Lansing Coca Cola Plant

Percent Non-Fibrous Material:

Project No.: 083616.00

#### PLM BULK SAMPLE ANALYSIS SUMMARY

**Location:** South Bay **Analyst Observation:** Sample Not Analyzed **Lab No.:** 7134451 Client Description: Thermal Systems Insulation Corrugated Client No.: HA30-C **Facility:** 

Cardboard On 4" Straight Lines, White

Percent Non-Asbestos Fibrous Material:

Percent Asbestos: Sample Not Analyzed Sample Not Analyzed

**Lab No.:** 7134452 **Analyst Observation:** White/Grey Wrap / Insulation **Location:** South Bay

Client No.: HA31-A Client Description: Thermal Systems Insulation Mudded **Facility:** 

Fittings On 4" Corrugated Cardboard Lines, White Percent Asbestos: Percent Non-Asbestos Fibrous Material:

Percent Non-Fibrous Material: 10 Cellulose 25 Chrysotile 50 Mineral Wool

Lab No.: 7134453 **Analyst Observation:** Sample Not Analyzed **Location:** South Bay

Client No.: HA31-B Client Description: Thermal Systems Insulation Mudded **Facility:** 

Fittings On 4" Corrugated Cardboard Lines, White

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

Sample Not Analyzed Sample Not Analyzed

**Analyst Observation:** Sample Not Analyzed **Lab No.:** 7134454 **Location:** South Bay

Client Description: Thermal Systems Insulation Mudded Client No.: HA31-C **Facility:** 

Fittings On 4" Corrugated Cardboard Lines, White

Percent Non-Asbestos Fibrous Material:

Percent Asbestos: Percent Non-Fibrous Material:

Sample Not Analyzed Sample Not Analyzed

**Lab No.:** 7134455

Analyst Observation: White/Grey Wrap / Insulation **Location:** South Bay, Above Women's Client No.: HA32-A **Client Description:** Thermal Systems Insulation Corrugated Restroom

Cardboard On 8" Straight Lines, White **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material: Percent Asbestos: 10 Cellulose 75 Chrysotile

Lab No.: 7134456 **Analyst Observation:** Sample Not Analyzed **Location:** South Bay

Client No.: HA32-B Client Description: Thermal Systems Insulation Corrugated **Facility:** 

Cardboard On 8" Straight Lines, White

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

Sample Not Analyzed Sample Not Analyzed

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/31/2021 Date Analyzed:

Signature: Linda Price Analyst:

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director

Dated: 2/2/2021 5:11:33 Page 23 of 30



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd

Plymouth MI 48170

Client: SOI102

Report Date: 1/31/2021

Report No.: 627155 - PLM

Project: Lansing Coca Cola Plant

Project No.: 083616.00

#### PLM BULK SAMPLE ANALYSIS SUMMARY

**Location:** East Bay **Analyst Observation:** Sample Not Analyzed **Lab No.:** 7134457

**Client Description:** Thermal Systems Insulation Corrugated Client No.: HA32-C **Facility:** 

Cardboard On 8" Straight Lines, White

Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material: Percent Asbestos:

Sample Not Analyzed Sample Not Analyzed

**Lab No.:** 7134458 **Analyst Observation:** White/Grey Wrap / Insulation **Location:** East Bay

Client No.: HA33-A Client Description: Thermal Systems Insulation Mudded **Facility:** 

Fittings On 8" Corrugated Cardboard Lines, White Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

10 Cellulose 12 Chrysotile

60 Mineral Wool

**Lab No.:** 7134459 **Analyst Observation:** Sample Not Analyzed **Location:** East Bay

Client No.: HA33-B Client Description: Thermal Systems Insulation Mudded **Facility:** 

Fittings On 8" Corrugated Cardboard Lines, White

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

Sample Not Analyzed Sample Not Analyzed

Analyst Observation: Sample Not Analyzed **Lab No.:** 7134460 **Location:** East Bay

Client Description: Thermal Systems Insulation Mudded Client No.: HA33-C **Facility:** 

Fittings On 8" Corrugated Cardboard Lines, White

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

Sample Not Analyzed Sample Not Analyzed

**Lab No.:** 7134461 **Analyst Observation:** White/Grey Wrap / Insulation **Location:** South Bay, Above Women's

Client No.: HA34-A **Client Description:** Thermal Systems Insulation, 6x4 Tank Restroom

Insulation **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material: Percent Asbestos:

10 Cellulose 28.5

**40** Chrysotile

10 Mineral Wool **10** Amosite

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received: 01/31/2021 Date Analyzed:

PC 1.5 Crocidolite

Signature: Linda Price Analyst:

Dated: 2/2/2021 5:11:33 Page 24 of 30 Approved By:

Frank E. Ehrenfeld, III Laboratory Director



9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449

Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

> Project No.: 083616.00

Report Date: 1/31/2021

#### PLM BULK SAMPLE ANALYSIS SUMMARY

**Analyst Observation:** Sample Not Analyzed Location: South Bay, Above Women's **Lab No.:** 7134462

**Client Description:** Thermal Systems Insulation, 6x4 Tank Client No.: HA34-B Restroom

**Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material: Percent Asbestos:

Sample Not Analyzed Sample Not Analyzed

**Lab No.:** 7134463 **Analyst Observation:** Sample Not Analyzed Location: South Bay, Above Women's Client No.: HA34-C **Client Description:** Thermal Systems Insulation, 6x4 Tank Restroom

**Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material: Sample Not Analyzed Sample Not Analyzed

**Analyst Observation:** Brown Insulation **Lab No.:** 7134464 **Location:** East Bay, Along East Wall

**Client Description:** Fibrous Insulation Client No.: HA36-A **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

80 Cellulose None Detected

5 Mineral Wool

**Lab No.:** 7134465 **Location:** East Bay, Along South Wall **Analyst Observation:** Brown Insulation

Client No.: HA36-B **Client Description:** Fibrous Insulation **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

60 Cellulose None Detected

25 Mineral Wool

**Lab No.:** 7134466 **Analyst Observation:** White Rubber Location: At Roof Hatch

Client No.: HA37-A Client Description: Rubber Membrane Roofing System **Facility:** 

(Truck Dock)

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7134466(L2) **Analyst Observation:** Brown Fibrous Location: At Roof Hatch

Client No.: HA37-A Client Description: Rubber Membrane Roofing System **Facility:** 

(Truck Dock)

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

95 Cellulose None Detected

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/31/2021 Date Analyzed:

Analyst:

Linda Price

Signature:

Dated: 2/2/2021 5:11:33 Page 25 of 30 Approved By:

Frank E. Ehrenfeld, III Laboratory Director



9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449 Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date: 1/31/2021

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

> Project No.: 083616.00

#### PLM BULK SAMPLE ANALYSIS SUMMARY

Analyst Observation: Black Roof Material Location: At Roof Hatch **Lab No.:** 7134466(L3)

Client Description: Rubber Membrane Roofing System Client No.: HA37-A **Facility:** 

(Truck Dock)

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 15 Chrysotile

**Lab No.:** 7134467 **Analyst Observation:** White Rubber **Location:** At Roof Hatch

Client No.: HA37-B Client Description: Rubber Membrane Roofing System **Facility:** 

(Truck Dock)

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

None Detected 100 None Detected

**Lab No.:** 7134467(L2) **Analyst Observation:** Brown Fibrous Location: At Roof Hatch

Client No.: HA37-B Client Description: Rubber Membrane Roofing System **Facility:** 

(Truck Dock)

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 90 Cellulose

**Lab No.:** 7134468 **Analyst Observation:** Black Caulk Location: At Roof Hatch

Client No.: HA38-A Client Description: Roofing Caulk (Truck Dock) **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected **PC** 5.3 Chrysotile

Lab No.: 7134469 Analyst Observation: Sample Not Analyzed Location: At Roof Hatch

Client No.: HA38-B Client Description: Roofing Caulk (Truck Dock) **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

Sample Not Analyzed Sample Not Analyzed

**Lab No.:** 7134470 **Analyst Observation:** Black Roof Material **Location:** At Roof Hatch

Client No.: HA39-A Client Description: Rubber Membrane Roofing System (Main Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

Page 26 of 30

None Detected 30 Synthetic 70

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/31/2021 Date Analyzed:

Signature: Linda Price Analyst:

Dated: 2/2/2021 5:11:33

Approved By:

Frank E. Ehrenfeld, III

Frank Tuanful

Laboratory Director



9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449 Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd

Plymouth MI 48170

Client: SOI102

Report Date: 1/31/2021

Report No.: 627155 - PLM

Project: Lansing Coca Cola Plant

Project No.: 083616.00

PLM BULK SAMPLE ANALYSIS SUMMARY

Analyst Observation: Black Roof Material Location: At Roof Hatch **Lab No.:** 7134470(L2)

Client No.: HA39-A Client Description: Rubber Membrane Roofing System (Main Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

25 Cellulose None Detected

**Lab No.:** 7134470(L3) Analyst Observation: Black Roof Material Location: At Roof Hatch

Client No.: HA39-A Client Description: Rubber Membrane Roofing System (Main Facility:

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

None Detected 12 Chrysotile

**Lab No.:** 7134471 **Analyst Observation:** Black Roof Material **Location:** At Roof Hatch

Client Description: Rubber Membrane Roofing System (Main Facility: Client No.: HA39-B

Roof)

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 5 Cellulose

8 Synthetic

**Analyst Observation:** Black Caulk **Lab No.:** 7134472 **Location:** At Roof Hatch

Client No.: HA40-A Client Description: Roofing Caulk (Main Roof) **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

15 Cellulose 10 Chrysotile

**Lab No.:** 7134473 **Analyst Observation:** Sample Not Analyzed Location: At Roof Hatch

Client Description: Roofing Caulk (Main Roof) Client No.: HA40-B **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

Sample Not Analyzed Sample Not Analyzed

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

01/31/2021 Date Analyzed:

Signature: Linda Price

Analyst:

Dated: 2/2/2021 5:11:33

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Page 27 of 30



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date: 1/31/2021

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

Project No.: 083616.00

Client: SOI102

# Appendix to Analytical Report

Customer Contact: Jason Lafayette

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, and USEPA 600, R93-116 as

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com iATL Office Manager:wchampion@iatl.com iATL Account Representative: Shirley Clark Sample Login Notes: See Batch Sheet Attached Sample Matrix: Bulk Building Materials Exceptions Noted: See Following Pages

#### General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and ir our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

#### **Information Pertinent to this Report:**

Analysis by US EPA 600 93-116: Determination of Asbestos in Bulk Building Materials by Polarized Light Microscopy (PLM).

#### **Certifications:**

- NIST-NVLAP No. 101165-0
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. PC Trace represents a <0.25% amount. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analytical Methodology Alternatives: Your initial request for analysis may not have accounted for recent advances in regulatory requirements or advances in technology that are routinely used in similar situations for other qualified projects. You may have the option to explore additional analysis for further information. Below are a few options, listed as the matrix followed by the appropriate methodology. Also included are links to more information on our website.

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB)

Dated: 2/2/2021 5:11:33 Page 28 of 30



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date: 1/31/2021

43980 Plymouth Oaks Blvd Report No.: 627155 - PLM

Plymouth MI 48170 Project: Lansing Coca Cola Plant

Client: SOI102 Project No.: 083616.00

Loose Fill Vermiculite Insulation, Attic Insulation, Zonolite (copyright), etc.: US EPA 600 R-4/004 (multi-tiered analytical process) Sprayed On Insulation/Fireproofing with Vermiculite (SOF-V): ELAP 198.8 (PLM-SOF-V)

Soil, sludge, sediment, aggregate, and like materials analyzed for asbestos or other elongated mineral particles (ex. erionite, etc.): ASTM D7521, CARB 435, and other options available

Asbestos in Surface Dust according to one of ASTM's Methods (very dependent on sampling collection technique - by TEM): ASTM D 5755, D5756, or D6480

Various other asbestos matrices (air, water, etc.) and analytical methods are available.

#### **Disclaimers / Qualifiers:**

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a list with highlighted disclaimers that may be pertinent to this project. For a full explanation of these and other disclaimers, please inquire at **customerservice@iatl.com**.

- 1) Note: No mastic provided for analysis.
- 2) Note: Insufficient mastic provided for analysis.
- 3) Note: Insufficient material provided for analysis.
- 4) Note: Insufficient sample provided for QC reanalysis.
- 5) Note: Different material than indicated on Sample Log / Description.
- 6) Note: Sample not submitted.
- 7) Note: Attached to asbestos containing material.
- 8) Note: Received wet.
- 9) Note: Possible surface contamination.
- 10) Note: Not building material. 1% threshold may not apply.
- 11) Note: Recommend TEM-NOB analysis as per EPA recommendations.
- 12) Note: Asbestos detected but not quantifiable.
- 13) Note: Multiple identical samples submitted, only one analyzed.
- 14) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.080%.
- 15) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.125%.
- 16) Note: This sample contains >10% vermiculite mineral. See Appendix for Recommendations for Vermiculite Analysis.

#### **Recommendations for Vermiculite Analysis:**

Several analytical protocols exist for the analysis of asbestos in vermiculite. These analytical approaches vary depending upon the nature of the vermiculite mineral being tested (e.g. un-processed gange, homogeneous exfoliated books of mica, or mixed mineral composites). Please contact your client representative for pricing and turnaround time options available.

iATL recommends initial testing using the EPA 600/R-93/116 method. This method is specifically designed for the analysis of asbestos in bulk building materials. It provides an acceptable starting point for primary screening of vermiculite for possible asbestos.

Results from this testing may be inconclusive. EPA suggests proceeding to a multi-tiered analysis involving wet separation techniques in conjunction with PLM and TEM gravimetric analysis (EPA 600/R-04/004).

For New York State customers, NYSDOH requires disclaimers and qualifiers for various vermiculite containing samples that direct analysis via ELAP198.6 and ELAP198.8 for samples that contain >10% vermiculite mineral where ELAP198.6 may be used to evaluate the asbestos content of the material. However, any test result using ELAP198.6 will be reported with the following disclaimer: "ELAP198.6 method does not remove vermiculite and may underestimate the level of asbestos present in a sample containing >10% vermiculite."

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198\_8\_02\_2.pdf)

The following is a summary of the analytical process outlines in the EPA 600/R-04/004 Method:

1) Analytical Step/Method: Initial Screening by PLM, EPA 600R-93/116

**Requirements/Comments:** Minimum of 0.1 g of sample.  $\sim$ 0.25% for most samples.

Dated: 2/2/2021 5:11:33 Page 29 of 30



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd

Plymouth MI 48170

Client: SOI102

Report Date: 1/31/2021

Report No.: 627155 - PLM

Project: Lansing Coca Cola Plant

Project No.: 083616.00

2)Analytical Step/Method: Wet Separation by PLM Gravimetric Technique, EPA R-04/004 Requirements/Comments: Minimum 50g\*\* of dry sample. Analysis of "Sinks" only.

3) Analytical Step/Method: Wet Separation by PLM Gravimetric Technique, EPA R-04/004 Requirements/Comments: Minimum 50g\*\* of dry sample. Analysis of "Floats" only.

4) Analytical Step/Method: Wet Separation by TEM Gravimetric Technique, EPA R-04/004 Requirements/Comments: Minimum 50g\*\* of dry sample. Analysis of "Sinks" only.

5) **Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004 **Requirements/Comments:** Minimum 50g\*\* of dry sample. Analysis of "Suspension" only. \*With advance notice and confirmation by the laboratory.

Dated: 2/2/2021 5:11:33 Page 30 of 30

<sup>\*\*</sup>Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

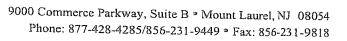


# **Chain of Custody**

-Bulk Asbestos -

Contact Information	Asucstus –
Client Company; SME	Project Number: 083616.00
Office Address: 43980 Plymouth Oaks Blvd.	
City, State, Zip: Plymouth, MI 48170	Project Name: Lansing Coca Cola plant Primary Contact: Jason Lafayette
Fax Number:	Office Phone: 734-454-9900
Email Address: lafayette@sme-usa.com	
	Cell Phone: 734-891-6277
PLM Instructions:	
PLM: Bulk Asbestos Building Materials EPA 600 R-93 PLM: Bulk Asbestos Building Materials EPA 600 M-4 PLM: Bulk Asbestos Building Materials NIOSH 9002, PLM: Bulk Asbestos Building Materials NYSDOH-EL PLM: Bulk Asbestos Building Materials NYSDOH-EL	/82-020, 1982 1985 AP 198.1, 2002 AP 198.6, 2010
TEM: Bulk Asbestos Building Materials NYSDOH-EL	AP 198.4, 2009
PLM: Point Counting PC: via ELAP 198.1 PC: 400 Points PC: 800 Points * PC: 1600 Points *	PLM: Analyze Until Positive (Positive Stop)  AUP: by Homogenous Area as Noted  AUP: by Material Type as Noted  PLM: NOB via 198.6  PLM: Friable via EPA 600 2.3  If <1% by PLM, to TEM via 198.4 *
PLM: Instructions for Multi-Layered Samples	If <1% by PI M. Hold for Instructions
Analyze and Report All Separable Layers per EPA	500
☐ Report Composite for Drywall Systems per NESHA☐ Report All Layers and Composite Where Applicable	(Dubt, Wipc, Tupe)
Only Analyze and Report Specifically Noted Layer	☐ Soil or Vermiculite Analysis* ☐ CARB 435
Special Instructions: REFER TO ATTACHED SME C	CHAIN OF CUSTODY FOR ANALYSIS INSTRUCTIONS
* Additional charge and turnaround may be required ** Al	ternative Method (ex: EPA 600/R-04/004) may be recommended by Laboratory
Turnaround Time	
Preliminary Results Requested Date:	Verbal Email Fax
Specific date / time	□ 1 Day* □ 12 Hour** □ 6 Hour** □ RUSH**
* End of next business day unless otherwise specified. **	Matrix Dependent. ***Please notify the lab before shipping***
Chain of Custody Relinquished (Name/Organization): Percy Richards/ SME	1-18-21 Date: Time:
Received (Name / iATL):	Date: Time: Time:
Sample Login (Name / iATL):	Date: Time:
Analysis(Name(s) / iATL): LS ( 1-31-21 QA/QC Review (Name / iATL):	Date: Time:
Archived / Released:QA/QC InterLAB Use:	Date: Time: Date: Time:
354000033500000000000000000000000000000	Time.

Colombian and the Shares are smooth in their





# Chain of Custody -Rulk Ashestos -

1	-Duk A	Asbestos —	
Contact Inform	ation		
Client Company:	SME	Project Number:	083616.00
Office Address:	43980 Plymouth Oaks Blvd.	Project Name:	
City, State, Zip:	Plymouth, MI 48170	Primary Contact:	Lansing Coca Cola plant Jason Lafayette
Fax Number:		Office Phone:	734-454-9900
Email Address:	lafayette@sme-usa.com	Cell Phone:	
		ten rhone:	734-891-6277
PLM: Bulk Asbe PLM: Bulk Asbe PLM: Bulk Asbe PLM: Bulk Asbe TEM: Bulk Asbe PLM: Point Cour PC: via ELAI PC: 400 Poin PC: 800 Poin PC: 1600 Poin PC: 1600 Poin Report Comp Report All La Only Analyze Special Instruction * Additional ch	estos Building Materials EPA 600 R-93/1 estos Building Materials EPA 600 M-4/8/2 stos Building Materials NIOSH 9002, 19 estos Building Materials NYSDOH-ELA estos Building Mat	2-020, 1982 085 P 198.1, 2002 P 198.6, 2010 P 198.4, 2009  PLM: Analyz AUP: by I AUP: by I PLM: NOB vi PLM: Fria If <1% by If <1% by Carb 438 IAIN OF CUSTODY FOR	PLM, to TEM via 198.4 * PLM, Hold for Instructions  uilding Material *, *** (Dust, Wipe, Tape)
Turnaround Tin			
Preliminary Results Rec	quested Date: Specific date / time	Verba	I ■ Email □ Fax
<u> </u>	Day 5 Day 3 Day 2 Day	1 Day* 12 Hour** 6	Hour** RUSH**
* End of next b	usiness day unless otherwise specified. ** M	atrix Dependent. ***Please no	otify the lab before shipping***
Chain of Custon			
Relinquished (Name/	Organization): Percy Richards/ SME	1-18-21 Date: ••••	Time:
Received (Name / iA		Date:	Time:
Sample Login (Name Analysis(Name(s) / i.e.	/iATL): ATL):	Date:	Time:
QA/QC Review (Nam	ne/iATL): $\frac{-5}{1-5}$	Date:	Time:
Archived / Released:	QA/QC InterLAB Use:	Date:	Time:



CLIENT NAME: City of Lansing

43980 Plymouth Oaks Blvd. Plymouth, MI, 48170

Phone FAX

734-454-9900 734-454-0629

SITE ADDRESS: 1501 N. Grand River Ave., Lansing, MI

## BULK SAMPLE ANALYSIS REQUESTED: EPA 600R-93/116, 1993 with PLM Point Counting PC: 400 points

Note: Multiple samples of each homogeneous area may have been collected. If asbestos is detected at greater than 1% in first sample, DO NOT analyze subsequent samples from that area with exception of plaster and wallboard system samples. Please analyze all plaster and wallboard system samples, and provide individual layer analysis for each sample. If asbestos is detected in an individual layer of a wallboard system sample, please provide composite analysis. Please provide mastic analysis for floor tile samples. Treat mastic as a separate homogeneous area. For each thermal system insulation sample, please analyze the insulation portion(s) of each sample first. If asbestos is detected at 1% or greater do not analyze the insulation covering layer of the sample. Please provide the insulation covering analysis for thermal system insulation samples where asbestos is not detected in insulation layer(s) or where asbestos is detected at less than 1%.

AREA	SAMPLE	MATERIAL DESCRIPTION	SAMPLE LOCATION	#
#	#			
HA 1	A	½" bead interior window glazing; white	East bay, along east wall	17:34384
HA 1	В	½" bead interior window glazing; white	East bay, along south wall	27 2/305
HA 2	A	CMU block and mortar	North bay	3 7 6 3 7 9 9 6
HA 2	В	CMU block and mortar	South bay	17 24384 27 34305 37 34306 47 34306 67 34306
HA 3	A	Brick mortar	East bay, at northeast room	5 3 4 4 3 3 5
HA 3	В	Brick mortar	East bay, at northeast room	67134389
HA 4	A	Fire door (older sliding style)	NOT SAMPLED, ASSUMED	1 7 1
HA 5	A	2'x4' pinhole, wormtrack ceiling tile; white	East bay office	87:34390
HA 5	В	2'x4' pinhole, wormtrack ceiling tile; white	East bay office	9 71 34 391
HA 6	Α	12"x12" vinyl floor tile; off-white with	East bay office	87134390 97134391 107134392
		yellow mastic	•	1 - 4 3 3 6
HA 6	В	12"x12" vinyl floor tile; off-white with	East bay office	11 7 1 2 4 5 0 2
		yellow mastic	_	<sup>11</sup> 7 134393
HA 7	A	8'x2' fibrous pressboard ceiling panels; tan	South bay, on ground	12 - 24 20 4
HA 7	В	8'x2' fibrous pressboard ceiling panels; tan	South bay, on ground	13 11 14 3 3 4
HA 8	A	Concrete	East bay	12 m 1 0 4 3 9 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
HA 8	В	Concrete	North bay	15 4 4 7 2 2 2 2
HA 9	Α	8"x8" ceramic floor tile with grout and	North bay office area	16 : 32337
		bedding; red		1134398
HA 9	В	8"x8" ceramic floor tile with grout and	South bay	177
		bedding; red		1 7134398
HA 10	A	2'x4' pinhole, wormtrack ceiling tile; white	At main entrance to building	18 7 2 7 4 00
HA 10	В	2'x4' pinhole, wormtrack ceiling tile; white	South bay, lunch room	19 7 7 7 7 7
HA 11	A	9"x9" vinyl floor tile; tan with black mastic	Main entryway to building	20 7 7 7 7 7 7 5
HA 11	В	9"x9" vinyl floor tile; tan with black mastic	South bay, men's restroom	21 4 2 4 6 0 2
HA 12	A	1"x1" ceramic floor tile with bedding and	Main office area, woman's	18 1 3 4 4 0 0 19 1 3 4 4 0 2 20 1 3 4 4 0 2 21 1 3 4 4 0 3 22 1 3 4 4 0 4
		grout; tan	restroom	#EU4404
HA 12	В	1"x1" ceramic floor tile with bedding and	South bay, men's restroom	<sup>23</sup> 7134405
		grout; tan	-	1203300
HA 13	Α	Wallboard wall system	Main office area, at main entryway	24 🙀
			to building, in northeast corner	<sup>24</sup> 7134406

RELINQUISHED BY:	Percy Richards	DATE: 01/18/21	TIME:
RECEIVED BY:		DATE:	TIME:

Please provide 5 day turnaround, emailed to Jason Lafayette at lafayette@sme-usa.com

SME USE ONLY

Date Sampled: 01/15/21

SME Project #: 083616.00

oFS



AREA

#

43980 Plymouth Oaks Blvd. Plymouth, MI, 48170 Phone 734-454-9900

FAX

SAMPLE LOCATION

734-454-0629

CLIENT NAME: City of Lansing

**SAMPLE** 

#

SITE ADDRESS: 1501 N. Grand River Ave., Lansing, MI

BULK SAMPLE ANALYSIS REQUESTED: EPA 600R-93/116, 1993 with PLM Point Counting PC: 400 points

Note: Multiple samples of each homogeneous area may have been collected. If asbestos is detected at greater than 1% in first sample, DO NOT analyze subsequent samples from that area with exception of plaster and wallboard system samples. Please analyze all plaster and wallboard system samples, and provide individual layer analysis for each sample. If asbestos is detected in an individual layer of a wallboard system sample, please provide composite analysis. Please provide mastic analysis for floor tile samples. Treat mastic as a separate homogeneous area. For each thermal system insulation sample, please analyze the insulation portion(s) of each sample first. If asbestos is detected at 1% or greater do not analyze the insulation covering layer of the sample. Please provide the insulation covering analysis for thermal system insulation samples where asbestos is not detected in insulation layer(s) or where asbestos is detected at less than 1%.

MATERIAL DESCRIPTION

HA 13	В	Wallboard wall system	Main office area, at main entryway	25,,,
			to building, in southeast corner	<b>.</b> .
HA 13	С	Wallboard wall system	South bay, men's restroom	26 7
HA 14	A	4" cove base; brown	South bay, men's restroom	27 📆
HA 14	В	4" cove base; brown	South bay, lunch room	28
HA 15	A	Wallboard ceiling system	South bay, west restroom	29"
HA 15	В	Wallboard ceiling system	South bay, west restroom	307
HA 15	C	Wallboard ceiling system	South bay, west restroom	317
HA 16	Α	Fire door (regular new style)	NOT SAMPLED, ASSUMED	32
HA 17	A	Terrazzo flooring	North bay, office area	33 <b>m</b>
HA 17	В	Terrazzo flooring	North bay, office area	34 149
HA 18	Α	1'x1' ceramic wall tile with grout and	North bay, office area, north half	35
		bedding; tan	of office	M
HA 18	В	1'x1' ceramic wall tile with grout and	North bay, office area, south half	36
er-		bedding; tan	of office	27
HA 19	Α	2'x4' ceiling tile; flat white	Main office area, far northeast	37 1
			room of main hallway	37 -
HA 19	В	2'x4' ceiling tile; flat white	Main office area, far northeast	38 м
			room of main hallway	:
HA 20	Α	Wall panel mastic; brown	Main office area, office just north	39 **
			of main entrance	
HA 20	В	Wall panel mastic; brown	Main office area, office just south	40 **
			of main entrance	
HA 21	Α	Plasterboard wall system	Lobby at main entrance to	41
			building, at south wall	
HA 21	В	Plasterboard wall system	Main office area, furnace room	42 .
HA 21	C	Plasterboard wall system	Main office area, men's restroom,	43
	***************************************		along south wall	
HA 21	D	Plasterboard wall system	Main office area, far southwest	44
			room, along north wall	

RELINQUISHED BY:RECEIVED BY:	Percy Richards	DATE: 01/18/21	TIME:
RECEIVED BY:		DATE:	TIME:

Please provide 5 day turnaround, emailed to Jason Lafayette at lafayette@sme-usa.com

SME USE ONLY

Date Sampled: 01/15/21

SME Project #: 083616.00

20FS



43980 Plymouth Oaks Blvd. Plymouth, MI, 48170

Phone

734-454-9900

FAX

734-454-0629

CLIENT NAME: City of Lansing

SITE ADDRESS: 1501 N. Grand River Ave., Lansing, MI

#### BULK SAMPLE ANALYSIS REQUESTED: EPA 600R-93/116, 1993 with PLM Point Counting PC: 400 points

Note: Multiple samples of each homogeneous area may have been collected. If asbestos is detected at greater than 1% in first sample, DO NOT analyze subsequent samples from that area with exception of plaster and wallboard system samples. Please analyze all plaster and wallboard system samples, and provide individual layer analysis for each sample. If asbestos is detected in an individual layer of a wallboard system sample, please provide composite analysis. Please provide mastic analysis for floor tile samples. Treat mastic as a separate homogeneous area. For each thermal system insulation sample, please analyze the insulation portion(s) of each sample first. If asbestos is detected at 1% or greater do not analyze the insulation covering layer of the sample. Please provide the insulation covering analysis for thermal system insulation samples where asbestos is not detected in insulation layer(s) or where asbestos is detected at less than 1%.

AREA #	SAMPLE #	MATERIAL DESCRIPTION	SAMPLE LOCATION	#
HA 21	E	Plasterboard wall system	Main office area, women's	45
_			restroom, along south wall	7134426
HA 21	F	Plasterboard wall system	Main office area, far east office,	46
			along south wall	47. 34428
HA 21	G	Plasterboard wall system	Main office area, in main hallway,	47.134458
		-	along southwest wall	V
HA 22	A	4" cove base; light tan	Main office area	48. 34429
HA 22	В	4" cove base; light tan	Main office area	49 m 1 3 4 4 3 0 50 m 1 3 4 4 3 1
HA 23	A	Carpet mastic; tan	Main office area, office just south	50 1 2 3 4 3 0
			of main entrance to building	7134431
HA 23	В	Carpet mastic; tan	Main office area, office just south	517 24/22
			of main entrance to building	317134432
HA 24	Α	1'x1' pinhole ceiling tile; white	Main office area, office just south	52
			of main entrance to building	7:34433
HA 24	В	1'x1' pinhole ceiling tile; white	Main office area, office just south	53 71 34434 71 34435
			of main entrance to building	7:34434
HA 25	A	1'x1' ceramic wall tile with grout and	Main office area men's restroom	54
		bedding; pink		7134435
HA 25	В	1'x1' ceramic wall tile with grout and	Main office area women's	55
···		bedding; pink	restroom	PARACE
HA 26	A	Thermal systems insulation corrugated	South bay	56. 7 6.2 6.0 0
		cardboard on 3" straight lines; white		7 34436 7 34437
HA 26	В	Thermal systems insulation corrugated	South bay	57
		cardboard on 3" straight lines; white		7134438
HA 26	C	Thermal systems insulation corrugated	South bay	<sup>58</sup> 7134439
		cardboard on 3" straight lines; white		1334433
HA 27	A	Thermal systems insulation mudded fittings	South bay	59
····		on 3" corrugated cardboard lines; white		<sup>59</sup> 7 1 3 4 4 4 0
HA 27	В	Thermal systems insulation mudded fittings	South bay	60 7 1 2 1 4 4 1
		on 3" corrugated cardboard lines; white		1204441
HA 27	C	Thermal systems insulation mudded fittings	South bay	61 11 2 2 4 4 2 2
		on 3" corrugated cardboard lines; white		617134442
RELINQU	JISHED BY:	Percy Richards	DATE: 01/18/21 TIME:	
PECETVE	D DV.		DATE: TO A	

RECEIVED BY: DATE: TIME:

Please provide 5 day turnaround, emailed to Jason Lafayette at lafayette@sme-usa.com

SME USE ONLY

Date Sampled: 01/15/21

SME Project #: 083616.00

3 of5



43980 Plymouth Oaks Blvd. Plymouth, MI, 48170

Phone FAX

734-454-9900 734-454-0629

CLIENT NAME: City of Lansing

SITE ADDRESS: 1501 N. Grand River Ave., Lansing, MI

#### BULK SAMPLE ANALYSIS REQUESTED: EPA 600R-93/116, 1993 with PLM Point Counting PC: 400 points

Note: Multiple samples of each homogeneous area may have been collected. If asbestos is detected at greater than 1% in first sample, DO NOT analyze subsequent samples from that area with exception of plaster and wallboard system samples. Please analyze all plaster and wallboard system samples, and provide individual layer analysis for each sample. If asbestos is detected in an individual layer of a wallboard system sample, please provide composite analysis. Please provide mastic analysis for floor tile samples. Treat mastic as a separate homogeneous area. For each thermal system insulation sample, please analyze the insulation portion(s) of each sample first. If asbestos is detected at 1% or greater do not analyze the insulation covering layer of the sample. Please provide the insulation covering analysis for thermal system insulation samples where asbestos is not detected in insulation layer(s) or where asbestos is detected at less than 1%.

	SAMPLE	MATERIAL DESCRIPTION	SAMPLE LOCATION	#
#	#			
HA 28	Α	Thermal systems insulation layered paper	South bay	62
		on 3" straight lines; white		7
HA 28	В	Thermal systems insulation layered paper	South bay	63
		on 3" straight lines; white		
HA 28	С	Thermal systems insulation layered paper	South bay	63
		on 3" straight lines; white		
HA 29	Α	Thermal systems insulation mudded fittings	South bay	65
		on 3" layered paper lines; white	-	177
HA 29	В	Thermal systems insulation mudded fittings	South bay	66
		on 3" layered paper lines; white	-	7 1
HA 29	С	Thermal systems insulation mudded fittings	South bay	67:-;
		on 3" layered paper lines; white	-	; +
HA 30	Α	Thermal systems insulation corrugated	South bay	68
		cardboard on 4" straight lines; white		149 4
HA 30	В	Thermal systems insulation corrugated	South bay	69 -
		cardboard on 4" straight lines; white		102 4
HA 30	C	Thermal systems insulation corrugated	South bay	70
		cardboard on 4" straight lines; white		77
HA 31	Α	Thermal systems insulation mudded fittings	South bay	71
		on 4" corrugated cardboard lines; white		707
HA 31	В	Thermal systems insulation mudded fittings	South bay	71 72 73 73 74 74 74 75
		on 4" corrugated cardboard lines; white		177
HA 31	C	Thermal systems insulation mudded fittings	South bay	73
		on 4" corrugated cardboard lines; white		17 3
HA 32	Α	Thermal systems insulation corrugated	South bay, above women's	74 ,,,
		cardboard on 8" straight lines; white	restroom	<u> </u>
HA 32	В	Thermal systems insulation corrugated	South bay	75 🤭
		cardboard on 8" straight lines; white		٠ ا ؛
HA 32	С	Thermal systems insulation corrugated	East bay	76
	alekala	cardboard on 8" straight lines; white		
HA 33	Α	Thermal systems insulation mudded fittings	East bay	77 109
		on 8" corrugated cardboard lines; white		77 🤭
	ISHED BY:	Percy Richards	DATE: 01/18/21 TIME:_	
RECEIVED	DBY:		DATE: TIME:_	

Please provide 5 day turnaround, emailed to Jason Lafayette at lafayette@sme-usa.com

SME USE ONLY

Date Sampled: 01/15/21

SME Project #: 083616.00

Cof 5



43980 Plymouth Oaks Blvd. Plymouth, MI, 48170

Phone FAX

734-454-9900 734-454-0629

CLIENT NAME: City of Lansing

SITE ADDRESS: 1501 N. Grand River Ave., Lansing, MI

#### BULK SAMPLE ANALYSIS REQUESTED: EPA 600R-93/116, 1993 with PLM Point Counting PC: 400 points

Note: Multiple samples of each homogeneous area may have been collected. If asbestos is detected at greater than 1% in first sample, DO NOT analyze subsequent samples from that area with exception of plaster and wallboard system samples. Please analyze all plaster and wallboard system samples, and provide individual layer analysis for each sample. If asbestos is detected in an individual layer of a wallboard system sample, please provide composite analysis. Please provide mastic analysis for floor tile samples. Treat mastic as a separate homogeneous area. For each thermal system insulation sample, please analyze the insulation portion(s) of each sample first. If asbestos is detected at 1% or greater do not analyze the insulation covering layer of the sample. Please provide the insulation covering analysis for thermal system insulation samples where asbestos is not detected in insulation layer(s) or where asbestos is detected at less than 1%.

AREA #	SAMPLE #	MATERIAL DESCRIPTION	SAMPLE LOCATION	#
HA 33	В	Thermal systems insulation mudded fittings	East bay	78
		on 8" corrugated cardboard lines; white		<sup>78</sup> 7134459
HA 33	С	Thermal systems insulation mudded fittings on 8" corrugated cardboard lines; white	East bay	<sup>79</sup> 7134450
HA 34	Α	Thermal systems insulation; 6'x4' tank insulation	South bay, above women's restroom	80.7134461
HA 34	В	Thermal systems insulation; 6'x4' tank insulation	South bay, above women's restroom	817134452
HA 34	С	Thermal systems insulation; 6'x4' tank insulation	South bay, above women's restroom	827 234463
HA 35	A	Safe insulation	NOT SAMPLED, ASSUMED	83
HA 36	A	Fibrous insulation	East bay, along east wall	847 1 2 1 1 6 1
HA 36	В	Fibrous insulation	East bay, along south wall	857
HA 37	A	Rubber membrane roofing system (truck dock)	At roof hatch	867 34456
HA 37	В	Rubber membrane roofing system (truck dock)	At roof hatch	87? 34457
HA 38	Α	Roofing caulk (truck dock)	At roof hatch	887 34468
HA 38	В	Roofing caulk (truck dock)	At roof hatch	897 74459
HA 39	Α	Rubber membrane roofing system (main roof)	At roof hatch	897 34459
HA 39	В	Rubber membrane roofing system (main roof)	At roof hatch	917 34471
HA 40	A	Roofing caulk (main roof)	At roof hatch	927134472
HA 40	В	Roofing caulk (main roof)	At roof hatch	937134473

RELINQUISHED BY:	Percy Richards	DATE: 01/18/21	TIME:
RECEIVED BY:		DATE:	TIME:

Please provide 5 day turnaround, emailed to Jason Lafayette at lafayette@sme-usa.com

SME USE ONLY

Date Sampled: 01/15/21

SME Project #: 083616.00

5 of5

### **APPENDIX B**

REGULATORY INFORMATION REGARDING ASBESTOS NOTIFICATIONS AND WORK PRACTICES

# REGULATORY INFORMATION REGARDING ASBESTOS NOTIFICATIONS AND WORK PRACTICES

Information regarding federal and state requirements for notification or work operations and the required work practices for activities involving ACMs and trace asbestos materials is presented below. Assumed ACMs are considered ACMs relative to regulatory notification and work requirements.

#### **ASBESTOS REMOVAL**

According to the United States Environmental Protection Agency (USEPA) National Emission Standard for Hazardous Air Pollutants asbestos regulation (NESHAP, 40 CFR Part 61 M), friable ACMs and nonfriable ACMs which could be expected to be disturbed and become friable must be removed prior to demolition activities. A ten calendar-day notification to the Michigan Department of Labor and Economic Opportunity (MDLEO) Asbestos Program is required when greater than 10 linear feet or 15 square feet of regulated asbestos material will be removed.

If greater than 160 square feet, 260 linear feet, or 35 cubic feet of regulated asbestos material will be removed, a ten working-day (14 calendar-day) notification to the Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) is also required. The *Notification of Intent to Renovate/Demolish* form is used for both the MDLRA and EGLE-AQD notifications. This form can be submitted online or downloaded from EGLE's website. <sup>1</sup>

The *Notification of Intent to Renovate/Demolish* form required by the USEPA NESHAP regulation must also be prepared and submitted to EGLE-AQD at least 10 working-days (14 calendar-days) prior to demolition of a building, regardless of whether or not ACMs are present in the building. The contractor is responsible for submitting the notification prior to demolition activities.

According to the OSHA Asbestos Construction Standard (29 CFR 1926.1101), removal or demolition involving thermal system insulation (TSI) or surfacing ACMs is considered Class I asbestos work. Removal or demolition involving ACM that is not TSI or surfacing material is considered Class II asbestos work. All Class I asbestos work activities must be conducted by a licensed and accredited asbestos contractor and in accordance with the standard. Work activities defined as Class II asbestos work must be conducted by appropriately trained or accredited staff under the supervision of an accredited Asbestos Contractor Supervisor in accordance with the standard.

According to the USEPA NESHAP asbestos regulation, nonfriable ACMs, if in good condition and not subjected to forces that would render them friable, need not be removed from a building prior to demolition. However, if a building contains one or more ACM during demolition, the demolition workers are required to have eight (8) hours of asbestos training with specific "hands-on" instruction for each asbestos material present during demolition. An individual who has completed a 40-hour asbestos supervisor training course must also supervise the work. Specific OSHA asbestos work practices including, but not limited to, the use of respirators and personal protective equipment, and restrictions related to the material(s) would apply. Personal exposure monitoring of the personnel on site would be required during demolition. In addition, hazard communication requirements contained in the OSHA Asbestos Construction Standard related to multiple employer work sites would apply.

Notification of Intent to Renovate/Demolish Form: <a href="https://www.michigan.gov/egle/0.9429,7-135-3310">https://www.michigan.gov/egle/0.9429,7-135-3310</a> 4106-11856--,00.html

40 CFR Part 763 requires asbestos abatement project design by an Asbestos Project Designer that is trained in accordance with USEPA requirements and accredited under by the MDLEO. All ACM waste generated during asbestos abatement activities should be placed in doubled, appropriately labeled waste bags, affixed with a waste generator location label, and disposed in a landfill licensed to accept asbestos waste in the State of Michigan. All ACM waste generated during asbestos abatement activities that is removed from the site should be inventoried on a Waste Shipment Record that complies with NESHAP regulations, 40 CFR Part 61.

Paragraph (k) of the OSHA Asbestos Construction Standard (29 CFR Part 1926.1101) and paragraph (j) of the OSHA Asbestos Standard for General Industry (29 CFR Part 1910.1001) require that building owners communicate to their employees, tenants, and building contractors information regarding the presence, quantity, and location of ACMs in a building.

#### MATERIALS CONTAINING TRACE ASBESTOS

According to the OSHA Asbestos Construction Standard, work involving materials containing trace concentrations of asbestos is considered "unclassified" asbestos work. Unclassified asbestos work is subject to the engineering and work practice requirements contained within paragraphs (g)(1), (g)(2), and (g)(3) of the standard with the exception of (g)(1)(i). These requirements include:

- Use of wetting agents and wet methods.
- Prompt cleanup of waste and disposal of waste within leak-tight containers.
- Use of local exhaust ventilation equipped with high-efficiency particulate air (HEPA) filtration.
- Enclosure or isolation of the work area or process.
- Ventilation of the work area to move contaminated air from the breathing zone of employees towards the HEPA filtered ventilation source.

Work involving this material may also be subject to other requirements contained within the standard including, but not limited to: exposure assessment/monitoring of personnel working with these materials, use of personal protective equipment, and hazard communication requirements.

### **APPENDIX C**

PAINT CHIP SAMPLE CERTIFICATES OF ANALYSIS AND CHAIN OF CUSTODY FORMS



9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449 Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd Plymouth MI 48170

Client: SOI102

Report Date: 1/29/2021

Report No.: 627099 - Lead Paint
Project: Lansing Coca-Cola Plant

Project No.: 083616.00

#### LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7133707 Description: White Result (% by Weight): 0.0071

Client No.: P1 Location: Interior, Throughout Result (ppm): 71

Comments:

Lab No.: 7133708 Description: Cream Result (% by Weight): 0.090

Client No.: P2 Location: Interior, Throughout Result (ppm): 900

**Comments:** 

Lab No.: 7133709 Description: Yellow Result (% by Weight): 4.9

Client No.: P3 Location: Interior, East Bay, Concrete Walls Result (ppm): 49000

Comments:

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/22/2021

Date Analyzed: 01/29/2021

Signature:

Analyst: Chad Shaffer

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Dated: 1/29/2021 3:29:23 Page 1 of 3



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date: 1/29/2021

43980 Plymouth Oaks Blvd Report No.: 627099 - Lead Paint
Plymouth MI 48170 Project: Lansing Coca-Cola Plant

Client: SOI102 Project No.: 083616.00

# Appendix to Analytical Report:

Customer Contact: Jason Lafayette

Method: ASTM D3335-85a, US EPA SW846 3050B:7000B

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com iATL Office Manager: wchampion@iatl.com iATL Account Representative: Shirley Clark Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Paint

**Exceptions Noted:** See Following Pages

#### General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and ir our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

#### **Information Pertinent to this Report:**

Analysis by ASTM D3335-85a by AAS

#### Certification:

- National Lead Laboratory Program (NLLAP): AIHA-LAP, LLC No. 100188
- NYSDOH-ELAP No. 11021

This report meets the standards set forth in the EPA's National Lead Laboratory Accreditation Program (NLLAP) through the Laboratory Quality System Requirements (LQSR) Revision 3.0 November 5, 2007. All Environmental Lead Proficiency Analytical Testing (ELPAT) is through the AIHA-PAT established program.

Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation. All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Apendix B.

Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies.

LSD=0.2 ppm MDL=0.005% by weight. RL= 0.010% by weight (based upon 100 mg sampled).

#### **Disclaimers / Qualifiers:**

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at **customerservice@iatl.com**.

Dated: 1/29/2021 3:29:23 Page 2 of 3



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Report Date:

1/29/2021

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd Report No.: 627099 - Lead Paint
Plymouth MI 48170 Project: Lansing Coca-Cola Plant
Project No.: 083616.00

Client: SOI102

\* Insufficient sample provided to perform QC reanalysis (<200 mg)

\*\* Not enough sample provided to analyze (<50 mg)

\*\*\* Matrix / substrate interference possible.

< less than sign, signifies none-detected below the empirical value based upon sub-sampled mass. This is often below the Reporting Limit (see above).

Dated: 1/29/2021 3:29:23 Page 3 of 3



9000 Commerce Parkway Suite B Mt. Laurel, New Jersey 08054 Telephone: 856-231-9449 Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd Plymouth MI 48170

Client: SOI102

Report Date: 1/29/2021

Report No.: 627099 - Cadmium Paint Project: Lansing Coca-Cola Plant

Project No.: 083616.00

CADMIUM PAINT SAMPLE ANALYSIS SUMMARY

**Lab No.:** 7133707 **Result (% by Weight):** <0.0018 **Description:** White

**Location:** Interior, Throughout Client No.: P1 **Result (ppm):** <18

Comments:

**Lab No.:** 7133708 **Description:** Cream **Result (% by Weight):** <0.0014

Client No.: P2 **Location:** Interior, Throughout Result (ppm): <14 Comments:

**Lab No.:** 7133709 **Description:** Yellow Result (% by Weight): 0.011

Client No.: P3 Location: Interior, East Bay, Concrete Walls Result (ppm): 110

**Comments:** 

Please refer to the Appendix of this report for further information regarding your analysis.

1/22/2021 Date Received:

Dated: 1/29/2021 3:29:24

01/29/2021 Date Analyzed:

Signature: Chad Shaffer

Analyst:

Approved By:

Page 1 of 3

Frank E. Ehrenfeld, III

Laboratory Director



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers Inc.-102 Report Date: 1/29/2021

43980 Plymouth Oaks Blvd Report No.: 627099 - Cadmium Paint Plymouth MI 48170 Project: Lansing Coca-Cola Plant

Client: SOI102 Project No.: 083616.00

# Appendix to Analytical Report:

**Customer Contact:** Jason Lafayette **Analysis:** ASTM D3335-85a

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com iATL Office Manager: cdavis@iatl.com

iATL Account Representative: Shirley Clark Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Paint

**Exceptions Noted:** See Following Pages

#### General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and ir our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

#### **Information Pertinent to this Report:**

Analysis by ASTM D3335-85a by AAS

#### Certification:

- National Lead Laboratory Program (NLLAP): AIHA-LAP, LLC No. 100188
- NYSDOH-ELAP No. 11021

Recommend multiple sampling for all samples less than regulatory limit for confirmation.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Apendix B.

Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies.

LSD=0.05 ppm MDL=0.00038% by weight. RL= 0.0050% by weight (based upon 100 mg sampled).

#### **Disclaimers / Qualifiers:**

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at **customerservice@iatl.com**.

\* Insufficient sample provided to perform QC reanalysis (<200 mg)

Dated: 1/29/2021 3:29:24 Page 2 of 3



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Report Date:

Report No.:

Project No.:

Project:

1/29/2021

083616.00

627099 - Cadmium Paint

Lansing Coca-Cola Plant

Client: Soil and Materials Engineers Inc.-102

43980 Plymouth Oaks Blvd Plymouth MI 48170

Client: SOI102

\*\* Not enough sample provided to analyze (<50 mg)

\*\*\* Matrix / substrate interference possible.

Dated: 1/29/2021 3:29:24 Page 3 of 3



# Chain of Custody - Environmental Lead -

Contact Inform	ation		
Client Company:		Project Number:	083616,00
Office Address:	43980 Plymouth Oaks Blvd.	Project Name:	Lansing Coca-Cola plant
City, State, Zip:	Plymouth, MI 48170	Primary Contact:	Jason Lafayette
Fax Number:		•	734-454-9900
	lofovette @area v.a.	Office Phone:	
Email Address:	lafayette@sme-usa.com	Cell Phone:	734-891-6277
environmental sam recognized state properties of the material state of the material stat	S: ASTM D3335-85a, 2009  AAS: SW 846: 3050B: 700B, 2010  NIOSH 7082, 1994  EPA SW 846 (Soil)  S-GF: ASTM D3559-03D, US EPA  (Cd, Zn, Cr) by AAS  racteristic Leaching Procedure (TCL	through AIHA-LAP, L	LC and several other nationally
1 icase test for Cu also		West of the second seco	
Turnaround Tin		***************************************	
Preliminary Results Re			6 Hour** RUSH**
Chain of Custod		1-18-21	
Relinquished (Name /	ne/Organization): Percy Richards/ SME	Date:	Time:
Sample Login (Name /	· · · · · · · · · · · · · · · · · · ·	Date:	Time:
Analysis(Name(s)	· · · · · · · · · · · · · · · · · · ·	Date:	Time: 7
QA/QC Review (N	ame / iATL): [1/24/4]	Date:	Time:
	d:QA/QC InterLAB Use:	Date:	Time:



43980 Plymouth Oaks Blvd. Plymouth, Michigan, 48170 Phone 734-454-9900 FAX 734-454-0629

CLIENT NAME: City of Lansing

SITE ADDRESS: 1501 N. Grand River Ave., Lansing, MI

#### ANALYSIS REQUESTED: AAS: Lead in Paint ASTM D3335-85a

Sample #	Description/Location		
P1	White, interior, throughout	7133707	
P2	Cream, interior, throughout	7133708	
P3	Yellow, interior, East bay, concrete walls	7133709	
<u> </u>			

RELINQUISHED BY:

Percy Richards

DATE: 1/18/21

TIME:

RECEIVED BY:

DATE:

TIME:

Please provide 5day turnaround, emailed to Jason Lafayette at lafayette@sme-usa.com

**SME USE ONLY** 

Date Sampled: 1/15/21

SME Project #: 083616.00



International Asbestos **Testing Laboratories** 

# DAILY QUALITY CONTROL DATA

## LEAD SAMPLE ANALYSIS

(DATE: 01/29/21)

Standard	Total Lead (mg)	Percent Recovery **
Reagent Blank	0.000	< LOQ
Blank Spike	0.500	103
Lab Control Std	1.390	106
Matrix Spike - LBP *	0.38	97
Matrix Spike - Wipe *	0.36	118
Matrix Spike - Soil *	0.272	99
Matrix spike - Air *	0.050	96
2.5 ppm Standard	0.25	97
10.0 ppm Standard	1.0	97
40.0 ppm Standard	4.0	98

	AIHA-LAP, LLC No. 100188	NYSDOH-ELAP No. 11021	
Analysis Method:	ASTM D3335-85A		
	NIOSH 7082		
	EPA SW846 3050B 7000B		
Comments:	IATL assumes that all sampling complies with accepted methods.		
	All client supplied sampling data is assumed to be correct when calculating results.		
	Detection limit based upon 0.2 mg/L reporting limit and sample size.		
	* NIST Traceable.		
	** 80-120% acceptable limits.		

Analyzed By: C. Shafer

Date: 1/29/21

Approved By

Frank E Ehrenfeld, III Laboratory Director



# DAILY QUALITY CONTROL DATA

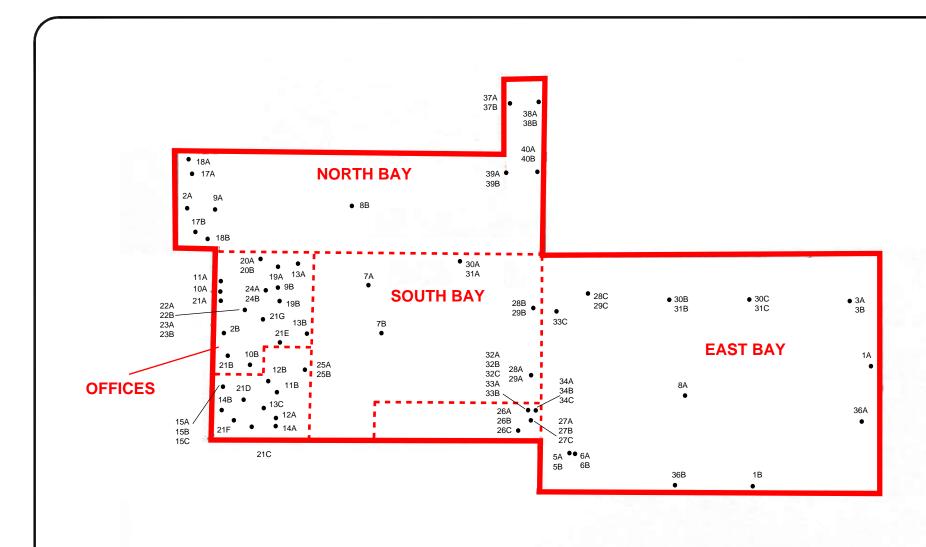
#### **CADMIUM SAMPLE ANALYSIS**

(DATE: 01/29/21)

Standard	Total Cadmium (mg)	Percent Recovery **
Reagent Blank	0.000	< LOQ
Blank Spike	20.000	97
Matrix Spike - LBP *	1.00	103
Matrix Spike - Wipe *		
Matrix Spike - Soil *		
Matrix spike - Air *		
0.75 ppm Standard	0.75	98
1.0 ppm Standard	1.0	99
3.0 ppm Standard	3.0	99

AIHA-LAP, LCC No. 100188 AIHA Cert. No. 444		
Analysis Method: ASTM D3335-85A		
NIOSH 7048	* was pass	
EPA SW846-3050B:7000B		
Comments: IATL assumes that all sampling complies with accepted methods.		
All client supplied sampling data is assumed to be correct when calculating		
Detection limit based upon 0.1 mg/L reporting limit and sample size.	en e	
* NIST Traceable.		
** 80-120% acceptable limits.		
Analyzed By: Clad Slaft	Approved By:	
C. Shaffer	Frank E. Ehrenfeld, III	
Date: 1/39/2	Laboratory Director	

# **APPENDIX D**SAMPLE LOCATION SKETCH



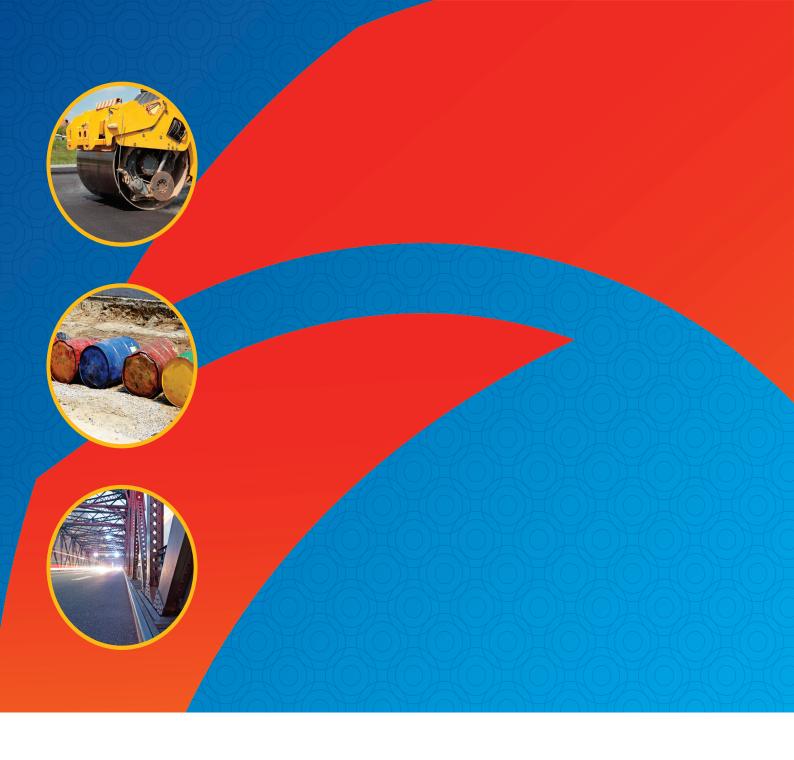
**LEGEND** 



No.	Revision Date	Date 3-18-21
		Drawn By AJH
		Designed By
		Scale NTS
eg		Project 083616.00

ASBESTOS SAMPLING DIAGRAM FORMER RC COLA/COCA-COLA BOTTLING PLANT 1506 N. GRAND RIVER AVENUE LANSING, MICHIGAN





Passionate People Building and Revitalizing our World

