



CITY OF BATTLE CREEK

ADDENDUM # 2

IFB# 2018-054B

TITLE: Clearing & Demolition of BCU Properties

ADDENDUM ISSUED: February 21, 2018

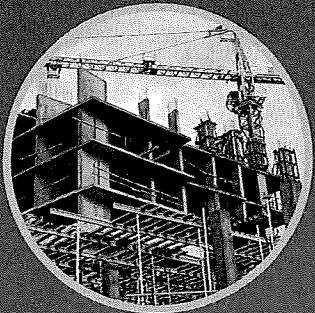
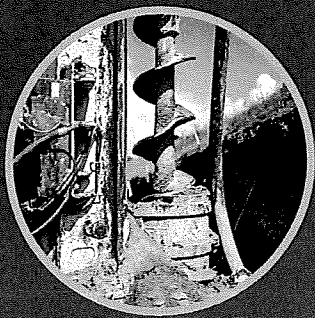
NOTE! City Hall now has Security on the 1st floor. Please allow extra time to get through Security when dropping off your bid.

The following changes, additions and deletions have been provided:

Add the attached asbestos reports for 207 Robertson and 4857 W. Columbia.

Due date and time remain the same.

This addendum must be acknowledged or your bid may be deemed non-responsive.



ASBESTOS AND LEAD-BEARING PAINT ASSESSMENT REPORT

207 ROBERTSON AVENUE
BATTLE CREEK, MICHIGAN 49015

SME Project Number: 076030.00
March 13, 2017





3301 Tech Circle Drive
Kalamazoo, MI 49008-5611

T (269) 323-3555

www.sme-usa.com

March 13, 2017

Mr. Joe Sobieralski
Battle Creek TIFA
4950 W. Dickman Road
Battle Creek, MI, 49016

RE: Asbestos and Lead Bearing Paint Assessment
207 Robertson Avenue
Battle Creek, MI, 49015
SME Project No. 075756.00

Dear Mr. Sobieralski:

We have completed an Asbestos and Lead Bearing Paint Assessment of the residential structure located at 207 Robertson Avenue, Battle Creek Michigan. Battle Creek Tax Increment Finance Authority (TIFA) requested the assessment prior to the planned demolition of the building. We appreciate this opportunity to provide these services for Battle Creek TIFA. Should you have questions concerning this report or require additional services, please contact us.

Sincerely,

SME

Anthony J. Hosbein ^{cosign}
Environmental Technician

Davin K. Ojala ^{cosign}
Senior Project Consultant

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PAINT CHIP SAMPLE CHAIN OF CUSTODY FORMS AND CERTIFICATES OF ANALYSIS

EXECUTIVE SUMMARY

We completed an Asbestos and Lead Bearing Paint Assessment of the residential structure located at 207 Robertson Avenue in Battle Creek, Michigan, to assist with identification of asbestos-containing materials (ACMs), and lead-bearing paints prior to the planned demolition of the building. At the time of our assessment, the site was developed with a one-story, approximately 1,400 square-foot residential building, with a partial basement. The building was unoccupied at the time of the assessment.

The findings from the Asbestos and Lead Bearing Paint Assessment are summarized below. The summary presented below is general in nature and should not be considered apart from the entire text of the report, with all the qualifications and considerations mentioned herein. Details of our findings and conclusions are elaborated upon in this report.

FINDINGS AND CONCLUSIONS

ASBESTOS

We collected 46 samples from 18-suspected ACMs identified during the assessment. The results of laboratory analyses indicated that asbestos was not detected in the suspect ACMs analyzed.

Although not considered ACMs, "trace" levels of asbestos (less than 1% asbestos) was detected in the white joint compound of the wallboard wall system (HA1) located throughout the residence. **Work involving materials with trace levels of asbestos is subject to additional engineering and work practices as required by the OSHA Asbestos Construction Standard.**

We understand the building is planned to be demolished. A 10 working day (14 calendar days) notification to the Michigan Department of Environmental Quality-Air Quality Division (MDEQ-AQD) is required prior to demolition. Please note, the *Notification of Intent to Renovate/Demolish* form is required by the United States Environmental Protection Agency (USEPA) National Emission Standards for Hazardous Air Pollutants asbestos regulation (NESHAP, 40 CFR Part 61 M), and must be prepared and submitted to the MDEQ-AQD at least 10 working days prior to demolition of a building, regardless of whether or not ACMs are present in the building. The demolition contractor is responsible for submitting the notification prior to work activities that meet the definition of demolition.

LEAD-BEARING PAINTS

Lead was detected at concentrations above laboratory reporting limits in three, (P8, P9, and P10) of the 13 paint chip samples collected from the building. The OSHA Lead Exposure in Construction Standard (29 CFR Part 1926.62) is applicable to construction activities when lead is present regardless of their concentrations in the paints. If lead-bearing paints are subjected to demolition forces that may cause paint particles to become airborne, unacceptable levels of lead 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.

RECOMMENDATIONS

ASBESTOS

We recommend conducting work involving the "trace" asbestos materials in accordance with the requirements for unclassified asbestos work contained in the OSHA Asbestos Standard for Construction. Although not required by the standard, we also recommend the use of vacuums equipped with HEPA filtration to clean accumulations of dust and debris generated by unclassified asbestos work.

We recommend proper notification to MDEQ-AQD prior to demolition of the building.

LEAD-BEARING PAINTS

We recommend conducting demolition activities in accordance with the OSHA Lead Exposure in Construction Standard.

1. INTRODUCTION

We completed an Asbestos and Lead Bearing Paint Assessment of the residential structure located at 207 Robertson Avenue in Battle Creek, Michigan, to assist with identification of asbestos-containing materials (ACMs) and lead-bearing paints, prior to demolition of the building. At the time of our assessment, the site was developed with a one-story, approximately 1,400 square-foot residential building with a partial basement. The building was unoccupied at the time of the assessment.

We conducted the assessment to provide information to assist in complying with the United States Environmental Protection Agency (USEPA) requirements for inspection of buildings prior to renovation or demolition under the National Emission Standards for Hazardous Air Pollutants asbestos regulation (NESHAP, 40 CFR Part 61 M). The assessment services also provide information to assist in complying with the Occupational Safety and Health Administration (OSHA) Asbestos Construction Standard (29 CFR Part 1926.1101), and the OSHA Lead Exposure in Construction Standard (29 CFR Part 1926.62), regarding communication of hazards. The Michigan Occupational Safety and Health Administration (MIOSHA) adopted each of these OSHA standards by reference.

SME staff member Mr. Anthony Hosbein (Accreditation No. A37250) trained in accordance with the USEPA regulations and accredited under the requirements of Michigan Act 440 as an Inspector, conducted the field activities.

2. VISUAL ASSESSMENT AND SAMPLING

On February 20, 2017, Mr. Hosbein toured the building and conducted a visual assessment to identify suspect ACMs and potential lead-bearing paints associated with the building.

2.1 SUSPECT ACMs

We observed 18 types of suspect ACMs, associated with the building. We assigned a unique homogeneous area number to each suspect ACM observed during the assessment. 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. According to USEPA and OSHA regulations, building materials that contain greater than one percent (1%) asbestos are considered ACMs.

Following the visual assessment, Mr. Hosbein collected 46 samples from the 18 suspect homogeneous areas of ACMs in accordance with the USEPA's AHERA assessment protocol (40 CFR Part 763), which is also referenced by the OSHA regulations. A list of the suspect ACMs identified during the assessment, and a summary of the descriptions, ACM or non-ACM categorization, estimated quantity, friability, condition, and locations of the suspect ACMs are presented in Table 1.

We submitted the suspect ACM 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 USEPA's AHERA regulation (40 CFR Part 763). The Chain-of-Custody forms and analytical data for the suspect asbestos samples are included in Appendix A of this report.

2.2 LEAD-BEARING PAINTS

We identified painted surfaces suspected to be lead-bearing coatings in the building and collected thirteen (13) chip samples of paint. 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 analysis of the paint chip samples via atomic absorption spectrophotometry (AAS). The Chain-of-Custody forms and analytical data for the paint chip samples are included in Appendix B of this report. A summary of the descriptions of lead-bearing paints, sample locations, and lead content of the paint chip samples are presented in Table 2.

3. ANALYTICAL RESULTS AND RECOMMENDATIONS

Results from analyses of samples collected from suspect ACMs and potential lead-bearing paints are presented in the following subsections. The information presented below also includes information about assessment limitations, applicable regulations, and recommendations for managing ACMs and lead-bearing paints.

3.1 ASBESTOS

The PLM analytical data reported by IATL indicated asbestos was not detected in the suspect ACMs analyzed.

We understand the building is planned to be demolished. A 10 working day, (14 calendar days) notification to the Michigan Department of Environmental Quality-Air Quality Division (MDEQ-AQD) is required prior to demolition. Please note, the *Notification of Intent to Renovate/Demolish* form is required by the USEPA NESHAP asbestos regulation and must be prepared and submitted to the MDEQ-AQD at least 10 working days, prior to demolition of a building, regardless of whether or not ACMs are present in the building. The demolition contractor is responsible for submitting the notification prior to work activities that meet the definition of demolition.

3.1.1 MATERIALS CONTAINING TRACE ASBESTOS

Although not considered an ACM, detectable asbestos was present in the white joint compound of the wallboard wall system (HA1) observed throughout the residence. According to the OSHA Asbestos Construction Standard, work involving these materials 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; and 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.

We recommend conducting work involving the "trace" asbestos materials in accordance with the requirements for unclassified asbestos work contained in the OSHA Asbestos Standard for Construction. Although not required by the standard, we recommend the use of vacuums equipped with HEPA filtration to clean accumulations of dust and debris generated by unclassified asbestos work.

3.2 LEAD-BEARING PAINTS

Lead was detected at concentrations above the laboratory reporting limit in three, (P8, P9, and P10) of the thirteen (13) paint chip samples collected from the residence. The OSHA Lead Exposure in Construction Standard (29 CFR Part 1926.62) is applicable to construction activities when lead is present regardless of their concentrations in the paints. If lead-bearing paints are subjected to demolition forces that may cause paint particles to become airborne, unacceptable levels of lead 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 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. When lead 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 ($\mu\text{g}/\text{m}^3$), 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. 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.

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

4. LIMITATIONS

Our project team conducted limited destructive assessment of wall cavities, ceilings, floor surfaces, and other interstitial spaces within the building. We did not assess every wall cavity and ceiling space within the building or demolish floor surfaces. Additional ACMs may exist in concealed spaces that were not assessed. We recommend selective demolition to expose concealed spaces, such as these prior to initiation of demolition activities to assess for the presence of ACMs. If suspect ACMs are encountered during demolition activities for which no analytical data exists, we recommend the material(s) remain undisturbed until the asbestos content of the material(s) are determined, or be assumed to contain asbestos and handled in accordance with USEPA and OSHA regulations.

The quantities presented in our report are intended to be "Order of Magnitude" estimates and **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.**

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 our 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.

5. GENERAL COMMENTS

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 Battle Creek TIFA 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 party 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

TABLE 1

**ASBESTOS BULK SAMPLING RESULTS
207 ROBERTSON AVENUE, BATTLE CREEK, MICHIGAN
SME Project Number: 076030.00**

HA#	MATERIAL DESCRIPTION	ACM/ NON-ACM	ESTIMATED QUANTITY**	FRIABLE/ NONFRIABLE	CONDITION***	LOCATION
1	Wallboard wall system Wallboard Joint compound	NON-ACM* NON-ACM*	3,000 sq. ft.	Nonfriable	Good	Throughout
2	Wallboard ceiling system Wallboard Joint compound	NON-ACM NON-ACM	1,400 sq. ft.	Nonfriable	Good	Throughout
3	Vinyl sheet flooring, brown with squares and rectangles	NON-ACM	600 sq. ft.	Nonfriable	Good	Living room, kitchen, bathroom and south foyer
4	Vinyl sheet flooring, beige with 8" squares	NON-ACM	40 sq. ft.	Nonfriable	Good	East foyer
5	Bathroom fixture caulk, white	NON-ACM	1 sq. ft.	Nonfriable	Good	Bathroom
6	Textured surfacing on walls, white with bubbles	NON-ACM	900 sq. ft.	Nonfriable	Good	Living room and south foyer
7	Textured surfacing on ceilings, white with bubbles	NON-ACM	425 sq. ft.	Nonfriable	Good	Living room, south foyer, southeast bedroom and east bedroom
8	Textured surfacing on ceilings, white troweled pattern	NON-ACM	450 sq. ft.	Nonfriable	Good	Dining room and northeast bedroom
9	Grout, associated with 4" white ceramic tile	NON-ACM	NQ	Nonfriable	Good	Kitchen, along west wall

TABLE 1

**ASBESTOS BULK SAMPLING RESULTS
207 ROBERTSON AVENUE, BATTLE CREEK, MICHIGAN
SME Project Number: 076030.00**

HA#	MATERIAL DESCRIPTION	ACM/ NON-ACM	ESTIMATED QUANTITY**	FRIABLE/ NONFRIABLE	CONDITION***	LOCATION
10	Mortar, outer foundation wall	NON-ACM	NQ	Nonfriable	Good	Outer foundation wall
11	Mortar, inner foundation wall	NON-ACM	NQ	Nonfriable	Good	Inner foundation wall
12	Mortar, chimney block	NON-ACM	NQ	Nonfriable	Good	Chimney
13	Roofing system Shingles, black	NON-ACM	24 sq. ft.	Nonfriable	Good	Well house, east half
14	Roofing system Shingles, tan	NON-ACM	24 sq. ft.	Nonfriable	Good	Well house, west half
15	Roofing system Shingles, black	NON-ACM	150 sq. ft.	Nonfriable	Good	Shed
16	Roofing system Shingles, black	NON-ACM	1,550 sq. ft.	Nonfriable	Good	House
17	Roofing system Shingles, grey	NON-ACM	50 sq. ft.	Nonfriable	Good	Small section of roof in valley on west side of house
18	Vinyl sheet flooring, white Yellow mastic	NON-ACM NON-ACM	300 sq. ft.	Nonfriable	Good	Kitchen, bathroom, south foyer, (beneath HA3) and east foyer (beneath HA4)

NOTES:

HA = Homogenous Area.

ACM = Asbestos Containing Material.

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

NQ = Not Quantified

sq. ft. = square feet

* = Trace asbestos (less than 1% asbestos) present.

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

*** = Material condition as defined in AHERA, 40 CFR Part 763.

TABLE 2

**PAINT CHIP SAMPLING RESULTS
207 ROBERTSON AVENUE, BATTLE CREEK, MICHIGAN
SME Project Number: 076030.00**

PAINT CHIP #	MATERIAL DESCRIPTION / LOCATION	LEAD % BY WEIGHT
P1	Grey/Exterior, East wooden porch	<0.0075
P2	White/Exterior, South wooden porch	<0.0073
P3	Black/Exterior, South wooden porch and house trim	<0.0071
P4	White/Interior, Throughout on wallboard walls and ceilings	<0.0088
P5	Purple/Interior, Northeast bedroom wallboard walls	<0.0077
P6	Pink/Interior, Northwest bedroom wallboard walls	<0.0055
P7	Red/Interior, Basement, HVAC duct in north portion	<0.0071
P8	Yellow/Interior, Basement, HVAC duct in north portion	0.020
P9	Blue/Interior, Basement, HVAC duct in north portion	0.0099
P10	Green/Interior, Basement, HVAC duct in north portion	0.036
P11	Beige/Interior, Bathroom wallboard walls	<0.0071
P12	Grey/Interior, Throughout north portion of basement on block walls	<0.0046
P13	Grey/Interior, North portion of basement, concrete floors	<0.0072

NOTES:

* = matrix/substrate interference possible

APPENDIX A
ASBESTOS SAMPLE CHAIN OF CUSTODY FORMS AND CERTIFICATES OF
ANALYSIS

Chain of Custody

–Bulk Asbestos –

Contact Information

Client Company: <u>SME</u>	Project Number: <u>076030.00</u>
Office Address: <u>3301 TECH CIRCLE DRIVE</u>	Project Name: <u>207 ROBERTSON</u>
City, State, Zip: <u>KALAMAZOO, MICHIGAN</u>	Primary Contact: <u>ANTHONY HOSBEIN</u>
Fax Number: <u>269-323-3553</u>	Office Phone: <u>269-323-3555</u>
Email Address: <u>hosbein@sme-usa.com</u>	Cell Phone: <u>616-835-2298</u>

PLM Instructions:

- PLM: Bulk Asbestos Building Materials EPA 600 R-93/116, 1993
- PLM: Bulk Asbestos Building Materials EPA 600 M-4/82-020, 1982
- PLM: Bulk Asbestos Building Materials NIOSH 9002, 1985
- PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.1, 2002
- PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.6, 2010
- TEM: Bulk Asbestos Building Materials NYSDOH-ELAP 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 *
 - If <1% by PLM, Hold for Instructions
- PLM: Instructions for Multi-Layered Samples
 - Analyze and Report All Separable Layers per EPA 600
 - Report Composite for Drywall Systems per NESHAP
 - Report All Layers and Composite Where Applicable
 - Only Analyze and Report Specifically Noted Layer
- PLM: Non-Building Material^{***} (Dust, Wipe, Tape)
 - Soil or Vermiculite Analysis^{*}
 - CARB 435

Special Instructions: REFER TO ATTACHED SME CHAIN OF CUSTODY FOR ANALYSIS INSTRUCTIONS

** Additional charge and turnaround may be required ** Alternative Method (ex: EPA 600/R-04/004) may be recommended by Laboratory*

Turnaround Time

Preliminary Results Requested Date: 2-28-17 3:00pm Verbal Email Fax

Specific date / time

10 Day 5 Day 3 Day 2 Day 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):	<u>ANTHONY HOSBEIN</u>	Date:	<u>2-20-17</u>	Time:	<u>5:00PM</u>
Received (Name / iATL):	_____	Date:	_____	Time:	_____
Sample Login (Name / iATL):	_____	Date:	_____	Time:	_____
Analysis(Name(s) / iATL):	_____	Date:	_____	Time:	_____
QA/QC Review (Name / iATL):	_____	Date:	_____	Time:	_____
Archived / Released:	_____	QA/QC InterLAB Use:	_____	Date:	_____
				Time:	_____

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 2/27/2017
Report No.: 530200 - PLM
Project: 207 Robertson Ave, Battle Creek, MI
Project No.: 076030.00

Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6159976
Client No.: HA1-A
Description: White/Brown Sheetrock
Facility:
Location: Closet, Southeast Bedroom
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
12 Cellulose
Percent Non-Fibrous Material:
88

Lab No.: 6159976(L2)
Client No.: HA1-A
Description: White Woven Joint Compound
Facility:
Location: Closet, Southeast Bedroom
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
10 Fibrous Glass
Percent Non-Fibrous Material:
90

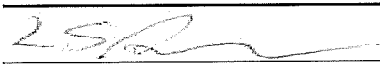
Lab No.: 6159977
Client No.: HA1-B
Description: White/Brown Sheetrock
Facility:
Location: Closet, East Bedroom
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
12 Cellulose
Percent Non-Fibrous Material:
88

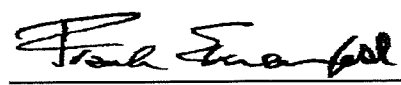
Lab No.: 6159977(L2)
Client No.: HA1-B
Description: White Woven Joint Compound
Facility:
Location: Closet, East Bedroom
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
10 Fibrous Glass
Percent Non-Fibrous Material:
90

Lab No.: 6159977(L3)
Client No.: HA1-B
Description: Off-White Tape
Facility:
Location: Closet, East Bedroom
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
95 Cellulose
Percent Non-Fibrous Material:
5

Lab No.: 6159978
Client No.: HA1-C
Description: White/Brown Sheetrock
Facility:
Location: Closet, Dining Room
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
10 Cellulose
Percent Non-Fibrous Material:
90

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 2/21/2017
Date Analyzed: 02/27/2017
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
 3301 Tech Circle Drive
 Kalamazoo MI 49008


Report Date: 2/27/2017
Report No.: 530200 - PLM
Project: 207 Robertson Ave, Battle Creek, MI
Project No.: 076030.00

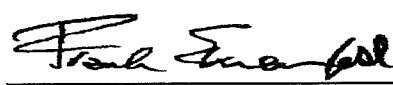
Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

<p>Lab No.: 6159978(L2) Client No.: HA1-C</p> <p><u>Percent Asbestos:</u> <i>None Detected</i></p>	<p>Description: White Woven Joint Compound Facility:</p> <p><u>Percent Non-Asbestos Fibrous Material:</u> 10 Fibrous Glass</p>	<p>Location: Closet, Dining Room</p> <p><u>Percent Non-Fibrous Material:</u> 90</p>
<p>Lab No.: 6159979 Client No.: HA1-D</p> <p><u>Percent Asbestos:</u> <i>None Detected</i></p>	<p>Description: White/Brown Sheetrock Facility:</p> <p><u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose</p>	<p>Location: Closet, Northeast Bedroom</p> <p><u>Percent Non-Fibrous Material:</u> 90</p>
<p>Lab No.: 6159979(L2) Client No.: HA1-D</p> <p><u>Percent Asbestos:</u> <i>PC Trace Chrysotile</i></p>	<p>Description: White Joint Compound Facility:</p> <p><u>Percent Non-Asbestos Fibrous Material:</u> None Detected</p>	<p>Location: Closet, Northeast Bedroom</p> <p><u>Percent Non-Fibrous Material:</u> 100</p>
<p>Lab No.: 6159980 Client No.: HA1-E</p> <p><u>Percent Asbestos:</u> <i>None Detected</i></p>	<p>Description: White/Brown Sheetrock Facility:</p> <p><u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose</p>	<p>Location: Closet, Northwest Bedroom</p> <p><u>Percent Non-Fibrous Material:</u> 90</p>
<p>Lab No.: 6159980(L2) Client No.: HA1-E</p> <p><u>Percent Asbestos:</u> <i>PC 0.25 Chrysotile</i></p>	<p>Description: White Joint Compound Facility:</p> <p><u>Percent Non-Asbestos Fibrous Material:</u> None Detected</p>	<p>Location: Closet, Northwest Bedroom</p> <p><u>Percent Non-Fibrous Material:</u> 99.75</p>
<p>Lab No.: 6159980(L3) Client No.: HA1-E</p> <p><u>Percent Asbestos:</u> <i>PC Trace Chrysotile</i></p>	<p>Description: Composite Facility:</p> <p><u>Percent Non-Asbestos Fibrous Material:</u> 8 Cellulose</p>	<p>Location: Closet, Northwest Bedroom</p> <p><u>Percent Non-Fibrous Material:</u> 99.75</p>

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 2/21/2017
Date Analyzed: 02/27/2017
Signature: 
Analyst: Linda Price

Approved By: 
 Frank E. Ehrenfeld, III
 Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 2/27/2017
Report No.: 530200 - PLM
Project: 207 Robertson Ave, Battle Creek, MI
Project No.: 076030.00

Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6159981
Client No.: HA2-A
Description: White/Brown Sheetrock
Facility:
Location: Northwest Bedroom, Southeast Corner
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
12 Cellulose
Percent Non-Fibrous Material:
88

Lab No.: 6159981(L2)
Client No.: HA2-A
Description: White Woven Joint Compound
Facility:
Location: Northwest Bedroom, Southeast Corner
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
10 Fibrous Glass
Percent Non-Fibrous Material:
90


Lab No.: 6159982
Client No.: HA2-B
Description: White/Brown Sheetrock
Facility:
Location: Northwest Bedroom, Northwest Corner
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
12 Cellulose
Percent Non-Fibrous Material:
88

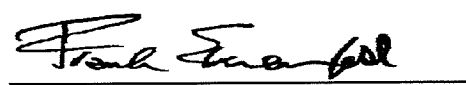
Lab No.: 6159982(L2)
Client No.: HA2-B
Description: White Woven Joint Compound
Facility:
Location: Northwest Bedroom, Northwest Corner
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
10 Fibrous Glass
Percent Non-Fibrous Material:
90

Lab No.: 6159983
Client No.: HA2-C
Description: White/Brown Sheetrock
Facility:
Location: Bathroom, Along East Wall
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
10 Cellulose
Percent Non-Fibrous Material:
90

Lab No.: 6159983(L2)
Client No.: HA2-C
Description: White Joint Compound
Facility:
Location: Bathroom, Along East Wall
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
100

Analytical Method - US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 2/21/2017
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Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
 3301 Tech Circle Drive
 Kalamazoo MI 49008

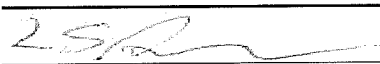
Report Date: 2/27/2017
Report No.: 530200 - PLM
Project: 207 Robertson Ave, Battle Creek, MI
Project No.: 076030.00

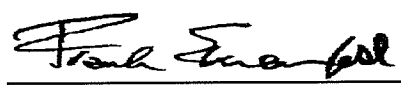
Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6159984 Client No.: HA2-D	Description: White/Brown Sheetrock Facility:	Location: Kitchen, Along West Wall
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 12 Cellulose	<u>Percent Non-Fibrous Material:</u> 88
Lab No.: 6159984(L2) Client No.: HA2-D	Description: White Joint Compound Facility:	Location: Kitchen, Along West Wall
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6159985 Client No.: HA2-E	Description: White/Brown Sheetrock Facility:	Location: Kitchen, Along East Wall
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose Trace Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 90
Lab No.: 6159986 Client No.: HA3-A	Description: Brown/Grey/White Vinyl Sheet Flooring Facility:	Location: South Foyer, Northwest Corner
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 2 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 88
Lab No.: 6159987 Client No.: HA3-B	Description: Brown/Grey/White Vinyl Sheet Flooring Facility:	Location: Living Room, Along North Wall
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 2 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 88
Lab No.: 6159988 Client No.: HA3-C	Description: Brown/Grey Vinyl Sheet Flooring Facility:	Location: Bathroom, Southwest Corner
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Cellulose 5 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 80

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 2/21/2017
Date Analyzed: 02/27/2017
Signature: 
Analyst: Linda Price

Approved By: 
 Frank E. Ehrenfeld, III
 Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
 3301 Tech Circle Drive
 Kalamazoo MI 49008


Report Date: 2/27/2017
Report No.: 530200 - PLM
Project: 207 Robertson Ave, Battle Creek, MI
Project No.: 076030.00


Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6159989 Client No.: HA4-A	Description: Tan/White Vinyl Sheet Flooring Facility:	Location: Doorway At East Entrance
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Cellulose	<u>Percent Non-Fibrous Material:</u> 85
Lab No.: 6159990 Client No.: HA4-B	Description: Tan/White Vinyl Sheet Flooring Facility:	Location: East Foyer, North Wall
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Cellulose	<u>Percent Non-Fibrous Material:</u> 85
Lab No.: 6159991 Client No.: HA5-A	Description: White Caulk Facility:	Location: Bathroom Sink
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6159992 Client No.: HA5-B	Description: White Caulk Facility:	Location: Bathroom Sink
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6159993 Client No.: HA6-A	Description: White Wall Texture Facility:	Location: Living Room, Northwest Corner
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6159994 Client No.: HA6-B	Description: White Wall Texture Facility:	Location: Southeast Bedroom, Northwest Corner
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 2/21/2017
Date Analyzed: 02/27/2017
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Analyst: Linda Price

Approved By: 
 Frank E. Ehrenfeld, III
 Laboratory Director

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Client: Soil and Materials Engineers-995
 3301 Tech Circle Drive
 Kalamazoo MI 49008

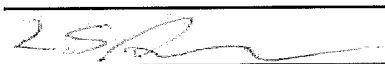
Report Date: 2/27/2017
Report No.: 530200 - PLM
Project: 207 Robertson Ave, Battle Creek, MI
Project No.: 076030.00


Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6159995 Client No.: HA6-C <u>Percent Asbestos:</u> <i>None Detected</i>	Description: White Wall Texture Facility: <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: South Foyer, Closet <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6159996 Client No.: HA7-A <u>Percent Asbestos:</u> <i>None Detected</i>	Description: White Ceiling Texture Facility: <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Living Room, Northwest Corner <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6159997 Client No.: HA7-B <u>Percent Asbestos:</u> <i>None Detected</i>	Description: White Ceiling Texture Facility: <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Southeast Bedroom, Northwest Corner <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6159998 Client No.: HA7-C <u>Percent Asbestos:</u> <i>None Detected</i>	Description: White Ceiling Texture Facility: <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: East Bedroom, Northwest Corner <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6159999 Client No.: HA8-A <u>Percent Asbestos:</u> <i>None Detected</i>	Description: White Ceiling Texture Facility: <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Dining Room, West Half <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6160000 Client No.: HA8-B <u>Percent Asbestos:</u> <i>None Detected</i>	Description: White Ceiling Texture Facility: <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Dining Room, East Half <u>Percent Non-Fibrous Material:</u> 100

Analytical Method - US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 2/21/2017
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Signature: 
Analyst: Linda Price

Approved By: 
 Frank E. Ehrenfeld, III
 Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
 3301 Tech Circle Drive
 Kalamazoo MI 49008

Report Date: 2/27/2017
Report No.: 530200 - PLM
Project: 207 Robertson Ave, Battle Creek, MI
Project No.: 076030.00

Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6160001 **Description:** White Ceiling Texture **Location:** Northeast Bedroom, Southwest Corner
Client No.: HA8-C **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100

Lab No.: 6160002 **Description:** White Grout **Location:** Kitchen, West Wall
Client No.: HA9-A **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100


Lab No.: 6160003 **Description:** White Grout **Location:** Kitchen, West Wall
Client No.: HA9-B **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100

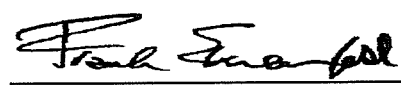
Lab No.: 6160004 **Description:** Grey Mortar **Location:** Exterior, Northeast Corner Of East
Client No.: HA10-A **Facility:** Bedroom
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100

Lab No.: 6160005 **Description:** Grey Mortar **Location:** Exterior, Southeast Corner Of House
Client No.: HA10-B **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100

Lab No.: 6160006 **Description:** Grey Mortar **Location:** Basement, North Wall Of South Portion
Client No.: HA11-A **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 2/21/2017
Date Analyzed: 02/27/2017
Signature: 
Analyst: Linda Price

Approved By: 
 Frank E. Ehrenfeld, III
 Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
 3301 Tech Circle Drive
 Kalamazoo MI 49008

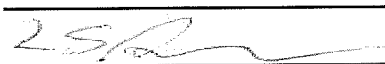
Report Date: 2/27/2017
Report No.: 530200 - PLM
Project: 207 Robertson Ave, Battle Creek, MI
Project No.: 076030.00

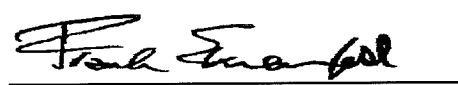
Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6160007 Client No.: HA11-B <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Grey Mortar Facility: <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Basement, Southwest Corner Of Basement <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6160008 Client No.: HA12-A <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Grey Mortar Facility: <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Exterior, Chimney <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6160009 Client No.: HA12-B <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Grey Mortar Facility: <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Exterior, Chimney <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6160010 Client No.: HA13-A <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Black Shingle Facility: <u>Percent Non-Asbestos Fibrous Material:</u> 20 Cellulose	Location: Well House, East Side <u>Percent Non-Fibrous Material:</u> 80
Lab No.: 6160011 Client No.: HA13-B <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Black Shingle Facility: <u>Percent Non-Asbestos Fibrous Material:</u> 30 Cellulose	Location: Well House, East Side <u>Percent Non-Fibrous Material:</u> 70
Lab No.: 6160012 Client No.: HA14-A <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Tan/Brown/Black Shingle Facility: <u>Percent Non-Asbestos Fibrous Material:</u> 20 Fibrous Glass	Location: Well House, West Side <u>Percent Non-Fibrous Material:</u> 80

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 2/21/2017
Date Analyzed: 02/27/2017
Signature: 
Analyst: Linda Price

Approved By: 
 Frank E. Ehrenfeld, III
 Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
 3301 Tech Circle Drive
 Kalamazoo MI 49008

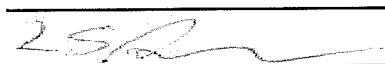
Report Date: 2/27/2017
Report No.: 530200 - PLM
Project: 207 Robertson Ave, Battle Creek, MI
Project No.: 076030.00


Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6160013 Client No.: HA14-B <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Tan/Brown/Black Shingle Facility: <u>Percent Non-Asbestos Fibrous Material:</u> 15 Fibrous Glass	Location: Well House, West Side <u>Percent Non-Fibrous Material:</u> 85
Lab No.: 6160014 Client No.: HA15-A <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Black Shingle Facility: <u>Percent Non-Asbestos Fibrous Material:</u> 15 Fibrous Glass	Location: Shed, East Half <u>Percent Non-Fibrous Material:</u> 85
Lab No.: 6160015 Client No.: HA15-B <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Black Shingle Facility: <u>Percent Non-Asbestos Fibrous Material:</u> 15 Fibrous Glass	Location: Shed, West Half <u>Percent Non-Fibrous Material:</u> 85
Lab No.: 6160016 Client No.: HA16-A <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Black Shingle Facility: <u>Percent Non-Asbestos Fibrous Material:</u> 15 Fibrous Glass	Location: House, Northwest Corner Of Kitchen <u>Percent Non-Fibrous Material:</u> 85
Lab No.: 6160017 Client No.: HA16-B <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Black Shingle Facility: <u>Percent Non-Asbestos Fibrous Material:</u> 20 Fibrous Glass	Location: House, Southwest Corner Of House <u>Percent Non-Fibrous Material:</u> 80
Lab No.: 6160018 Client No.: HA17-A <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Grey/Black Shingle Facility: <u>Percent Non-Asbestos Fibrous Material:</u> 20 Fibrous Glass	Location: House, Valley Of Roof Along West Side Of House <u>Percent Non-Fibrous Material:</u> 80

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 2/21/2017
Date Analyzed: 02/27/2017
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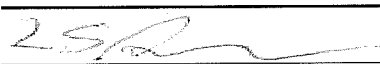
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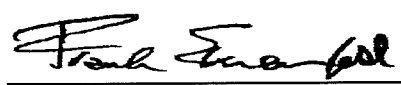
Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6160019 Client No.: HA17-B <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Grey/Black Shingle Facility: <u>Percent Non-Asbestos Fibrous Material:</u> 20 Fibrous Glass	Location: House, Valley Of Roof Along West Side Of House <u>Percent Non-Fibrous Material:</u> 80
Lab No.: 6160020 Client No.: 18A <u>Percent Asbestos:</u> <i>None Detected</i>	Description: White/Off-White Vinyl Sheet Flooring Facility: <u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 2 Fibrous Glass	Location: South Foyer, Northwest Corner (Beneath HA3) <u>Percent Non-Fibrous Material:</u> 88
Lab No.: 6160020(L2) Client No.: 18A <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Yellow Mastic Facility: <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: South Foyer, Northwest Corner (Beneath HA3) <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6160021 Client No.: 18B <u>Percent Asbestos:</u> <i>None Detected</i>	Description: White/Off-White Vinyl Sheet Flooring Facility: <u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose 5 Fibrous Glass	Location: East Foyer, Doorway (Beneath HA4) <u>Percent Non-Fibrous Material:</u> 90
Lab No.: 6160021(L2) Client No.: 18B <u>Percent Asbestos:</u> <i>None Detected</i>	Description: Yellow Mastic Facility: <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: East Foyer, Doorway (Beneath HA4) <u>Percent Non-Fibrous Material:</u> 100

Analytical Method - US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

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Laboratory Director

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Client: SOI995

Appendix to Analytical Report

Customer Contact: Davin Ojala
Analysis: US EPA 600, R93-116

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: 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 in 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
- NY-DOH 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. 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)

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

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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%.

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).

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.

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. ~0.25% LOQ for most samples.
- 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.

LOQ, Limit of Quantitation estimates for mass and volume analyses.

*With advance notice and confirmation by the laboratory.

**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

APPENDIX B
PAINT CHIP SAMPLE CHAIN OF CUSTODY FORMS AND CERTIFICATES OF
ANALYSIS

Chain of Custody

– Environmental Lead –

Contact Information	
Client Company: <u>SME</u>	Project Number: <u>076030.00</u>
Office Address: <u>3301 TECH CIRCLE DRIVE</u>	Project Name: <u>207 ROBERTSON</u>
City, State, Zip: <u>KALAMAZOO, MI</u>	Primary Contact: <u>ANTHONY HOSBEIN</u>
Fax Number: <u>269-323-3553</u>	Office Phone: <u>269-323-3555</u>
Email Address: <u>hosbein@sme-usa.com</u>	Cell Phone: <u>616-835-2298</u>

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

Matrix/Method:

Paint by AAS: ASTM D3335-85a, 2009
 Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010
 Air by AAS: NIOSH 7082, 1994
 Soil by AAS: EPA SW 846 (Soil)
 Water by AAS-GF: ASTM D3559-03D, USEPA 40CFR 141.11B, 2010
 Other Metals (Cd, Zn, Cr) by AAS
 Toxicity Characteristic Leaching Procedure (TCLP) by AAS: USEPA 1311
 Other _____

Special Instructions:
SEE SME'S COC FOR ADDITIONAL INFORMATION

Turnaround Time

Preliminary Results Requested Date: 02/28/2017 3:00PM Verbal Email Fax

Specific date / time

10 Day 5 Day 3 Day 2 Day 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): <u>Anthony Hosbein/SME</u>	Date: <u>2-20-17</u>	Time: <u>5:00pm</u>
Received (Name / iATL): _____	Date: _____	Time: _____
Sample Login (Name / iATL): _____	Date: _____	Time: _____
Analysis(Name(s) / iATL): _____	Date: _____	Time: _____
QA/QC Review (Name / iATL): _____	Date: _____	Time: _____
Archived / Released: _____	QA/QC InterLAB Use: _____	Date: _____

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 2/28/2017
Report No.: 530226 - Lead Paint
Project: 207 Robertson Avenue, Battle Creek MI
Project No.: 076030.00

Client: SOI995

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 6155210 **Description:** Grey **Result (% by Weight):** <0.0075
Client No.: P1 **Location:** Exterior, 2/20/17 **Result (ppm):** <75
Comments:

Lab No.: 6155211 **Description:** White **Result (% by Weight):** <0.0073
Client No.: P2 **Location:** Exterior, 2/20/17 **Result (ppm):** <73
Comments:

Lab No.: 6155212 **Description:** Black **Result (% by Weight):** <0.0071
Client No.: P3 **Location:** Exterior, 2/20/17 **Result (ppm):** <71
Comments:

Lab No.: 6155213 **Description:** White **Result (% by Weight):** <0.0088
Client No.: P4 **Location:** Interior, 2/20/17 **Result (ppm):** <88
Comments:


Lab No.: 6155214 **Description:** Purple **Result (% by Weight):** <0.0077
Client No.: P5 **Location:** Interior, 2/20/17 **Result (ppm):** <77
Comments:

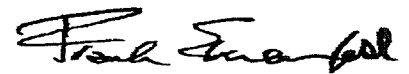
Lab No.: 6155215 **Description:** Pink **Result (% by Weight):** <0.0055
Client No.: P6 **Location:** Interior, 2/20/17 **Result (ppm):** <55
Comments:

Lab No.: 6155216 **Description:** Red **Result (% by Weight):** <0.0071
Client No.: P7 **Location:** Interior, 2/20/17 **Result (ppm):** <71
Comments:

Lab No.: 6155217 **Description:** Yellow **Result (% by Weight):** 0.020
Client No.: P8 **Location:** Interior, 2/20/17 **Result (ppm):** 200
Comments:

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

Date Received: 2/21/2017
Date Analyzed: 02/28/2017
Signature: 
Analyst: Chad Shaffer

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 2/28/2017
Report No.: 530226 - Lead Paint
Project: 207 Robertson Avenue, Battle Creek MI
Project No.: 076030.00

Client: SOI995

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 6155218 **Description:** Blue **Result (% by Weight):** 0.0099
Client No.: P9 **Location:** Interior, 2/20/17 **Result (ppm):** 99
Comments:

Lab No.: 6155219 **Description:** Green **Result (% by Weight):** 0.036
Client No.: P10 **Location:** Interior, 2/20/17 **Result (ppm):** 360
Comments:

Lab No.: 6155220 **Description:** Beige **Result (% by Weight):** <0.0071
Client No.: P11 **Location:** Interior, 2/20/17 **Result (ppm):** <71
Comments:

Lab No.: 6155221 **Description:** Grey **Result (% by Weight):** <0.0046
Client No.: P12 **Location:** Interior, 2/20/17 **Result (ppm):** <46
Comments:

Lab No.: 6155222 **Description:** Grey **Result (% by Weight):** <0.0072
Client No.: P13 **Location:** Interior, 2/20/17 **Result (ppm):** <72
Comments:


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

Date Received: 2/21/2017

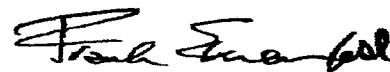
Date Analyzed: 02/28/2017

Signature:

Analyst:


Chad Shaffer

Approved By:



Frank E. Ehrenfeld, III

Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 2/28/2017
Report No.: 530226 - Lead Paint
Project: 207 Robertson Avenue, Battle Creek MI
Project No.: 076030.00

Client: SOI995

Appendix to Analytical Report:

Customer Contact: Davin Ojala
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 in 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:

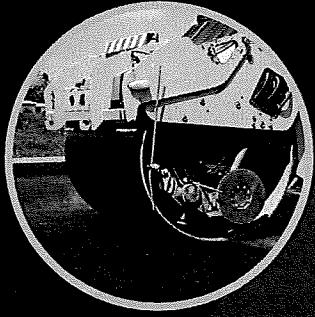
- National Lead Laboratory Program (NLLAP): AIHA-LAP, LLC No. 100188
- NYSDOH-ELAP No. 11021

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 Appendix 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:

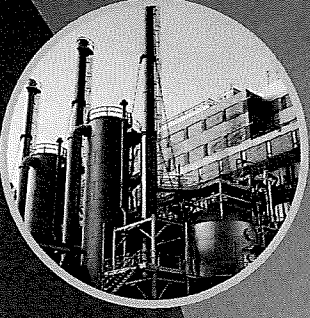
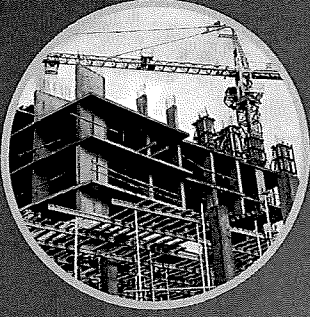
There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation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

- * Insufficient sample provided to perform QC reanalysis (<200 mg)
- ** Not enough sample provided to analyze (<50 mg)
- *** Matrix / substrate interference possible.



*Passionate People Building
and Revitalizing our World*





PRE-DEMOLITION ASBESTOS AND PAINT ASSESSMENT REPORT

4857 W. COLUMBIA AVENUE
BATTLE CREEK, MICHIGAN

SME Project Number: 077931.00
December 14, 2017





3301 Tech Circle Drive
Kalamazoo, MI 49008-5611

T (269) 323-3555

www.sme-usa.com

December 14, 2017

Mr. Joe Sobieralski
President & CEO
Battle Creek TIFA
4950 W. Dickman Road
Battle Creek, Michigan 49016

RE: Pre-Demolition Asbestos and Paint Assessment Report
4857 W. Columbia Avenue
Battle Creek, Michigan
SME Project No.: 077931.00

Dear Mr. Sobieralski:

We have completed an asbestos and paint assessment of the vacant building located at 4857 W. Columbia Avenue in Battle Creek, Michigan. You requested the assessment prior to the planned demolition of the building. We completed our assessment services in accordance with our proposal (P03488.17), dated November 22, 2017.

We plan contact you within the next week to discuss the findings of the assessment and provide answers to any questions you may have.

Sincerely,

SME

Sara Bals for

Anthony J. Hosbert
Environmental Technician

Davin K. Ojala
Senior Project Consultant

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TABLE 1: ASBESTOS BULK SAMPLING RESULTS

TABLE 2: PAINT CHIP SAMPLING RESULTS

APPENDIX A

ASBESTOS FIELD SAMPLING SKETCH

APPENDIX B

ASBESTOS SAMPLE CERTIFICATES OF ANALYSIS AND CHAIN OF CUSTODY
FORMS

APPENDIX C

PAINT CHIP SAMPLE CERTIFICATES OF ANALYSIS AND CHAIN OF CUSTODY
FORMS

1. INTRODUCTION

We completed an asbestos and paint assessment of the vacant building located at 4857 W. Columbia Avenue in Battle Creek, Michigan. The building was unoccupied at the time of our assessment. We conducted the assessment activities to assist with identification of asbestos-containing materials (ACMs), and potential lead-bearing paints, prior to demolition of the building.

This assessment will provide information to assist the building owner 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) and the OSHA Lead Exposure in Construction Standard (29 CFR Part 1926.62), regarding communication of hazards. The Michigan Occupational Safety and Health Administration (MIOSHA) adopted these OSHA standards by reference.

SME staff member, Mr. Anthony Hosbein (Accreditation No. A37250), trained in accordance with USEPA asbestos assessment regulations and accredited by the Michigan Department of Licensing and Regulatory Affairs (MDLRA), under the requirements of Michigan Act 440 as an Asbestos Inspector, conducted the field activities.

2. ASBESTOS

2.1 VISUAL ASSESSMENT AND SAMPLING PROCEDURES

On November 28, 2017, 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 homogenous 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 29 samples from the 13 homogenous areas of suspected ACMs in accordance with the AHERA assessment protocol (40 CFR Part 763), which is also referenced by the OSHA regulations.

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 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

No asbestos was detected in the samples of suspect ACMs collected from the building. A summary of the descriptions of suspect ACMs identified during our assessment, estimated quantity, friability, condition, and locations of the materials sampled is presented in Table 1.

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. Additional ACMs may exist in concealed spaces that were not assessed. A field sampling sketch is included in Appendix A. The Chain-of-Custody forms and analytical data for the bulk asbestos samples are included in Appendix B.

2.2.1 REGULATORY INFORMATION REGARDING ASBESTOS REMOVAL AND DEMOLITION OF STRUCTURES

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 10-calendar day notification to the Michigan Department of Licensing and Regulatory Affairs (MDLRA) 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 10-working day (14 calendar-day) notification to the Michigan Department of Environmental Quality-Air Quality Division (MDEQ-AQD) is also required. The *Notification of Intent to Renovate/Demolish* form is used for both the MDLRA and the MDEQ-AQD notifications. This form can be submitted online or downloaded from the MDEQ's website.¹

¹ Notification of Intent to Renovate/Demolish Form: http://www.michigan.gov/deq/0,1607,7-135-3310_4106-11856--,00.html

The *Notification of Intent to Renovate/Demolish* form required by the USEPA NESHAP regulation must also be prepared and submitted to the MDEQ-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 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.

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 MDLRA. 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.

3. LEAD-BEARING PAINTS

3.1 VISUAL ASSESSMENT AND SAMPLING PROCEDURES

On November 28, 2017, we conducted a visual assessment to identify painted surfaces in the building. We collected six chip samples of paints suspected to be lead-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 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 five of the six 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 paints, paint locations, as well as lead content of the paint chip samples is presented in Table 2.

The OSHA Lead Exposure in Construction Standard (29 CFR Part 1926.62) is applicable to construction activities when lead is present regardless of their concentrations in the paints. If lead-bearing paints are subjected to demolition forces that may cause paint particles to become airborne, unacceptable levels of lead 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 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. When lead 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 ($\mu\text{g}/\text{m}^3$) 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. RECOMMENDATIONS

4.1 ASBESTOS

- We recommend proper notification to MDEQ-AQD prior to demolition of the building.
- 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.

4.2 LEAD-BEARING PAINTS

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

5. 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. Additional ACMs may exist in concealed spaces that were not assessed. We recommend selective demolition to expose concealed spaces, such as these, 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 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.

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 Battle Creek TIFA 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 party 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

**TABLE 1
ASBESTOS BULK SAMPLING RESULTS
4857 W. COLUMBIA, BATTLE CREEK, MICHIGAN
SME Project Number: 077931.00**

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
1	Block, gray Mortar, light gray	NON-ACM NON-ACM	NQ	Nonfriable	Good	East exterior wall and utility room walls
2	Brick, red Mortar, gray	NON-ACM NON-ACM	NQ	Nonfriable	Good	East wall, north and south window openings
3	Concrete, gray	NON-ACN	3 sq. ft.	Nonfriable	Good	East wall, middle window opening
4	Brick, red Mortar, white	NON-ACM NON-ACM	NQ	Nonfriable	Good	Exterior walls beneath vinyl siding
5	Rolled roofing system, white	NON-ACM	425 sq. ft.	Nonfriable	Good	Roof
6	Roof flashing, black	NON-ACM	4 sq. ft.	Nonfriable	Good	Roof penetrations
7	Wallboard wall system Joint compound, white Wallboard, white	NON-ACM NON-ACM	800 sq. ft.	Nonfriable	Good	Throughout structure
8	Wallboard ceiling, white (unfinished) Mastic, tan	NON-ACM NON-ACM	230 sq. ft.	Nonfriable	Good	Throughout structure Mastic adhered to wooden ceiling panels
9	Sheet flooring, brown Mastic, yellow	NON-ACM NON-ACM	15 sq. ft.	Nonfriable	Damaged	Damaged portion in southern portion of utility room
10	Mastic, yellow	NON-ACM	25 sq. ft.	Nonfriable	Good	Floor in utility room
11	Textured surfacing, white	NON-ACM	100 sq. ft.	Nonfriable	Good	Utility room

**TABLE 1
 ASBESTOS BULK SAMPLING RESULTS
 4857 W. COLUMBIA, BATTLE CREEK, MICHIGAN
 SME Project Number: 077931.00**

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
12	Ceiling tile, 2'x4', white, pinhole, pockmarks	NON-ACM	280 sq. ft.	Friable	Good	Throughout structure
13	Cove base, 4", gray Mastic, yellow	NON-ACM NON-ACM	10 sq. ft.	Nonfriable	Good	Restroom

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.

ln. ft. = linear feet

sq. ft. = square feet

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

**TABLE 2
 PAINT CHIP SAMPLING RESULTS
 5784 W. COLUMBIA, BATTLE CREEK, MICHIGAN
 SME Project Number: 077931.00**

Paint #	MATERIAL DESCRIPTION	LEAD % by weight
P1	Maroon (Exterior); East block wall	1.0
P2	White (Exterior); Trim	0.074
P3	Red (Exterior); Roof drain down spout	0.43
P4	White (Interior); Throughout	1.4
P5	Green (Interior); HVAC duct in utility room	0.39
P6	Blue (Interior); Restroom walls	<0.0062

APPENDIX A
FIELD SAMPLING SKETCH

DATE:

PROJECT NUMBER

PROJECT NAME:

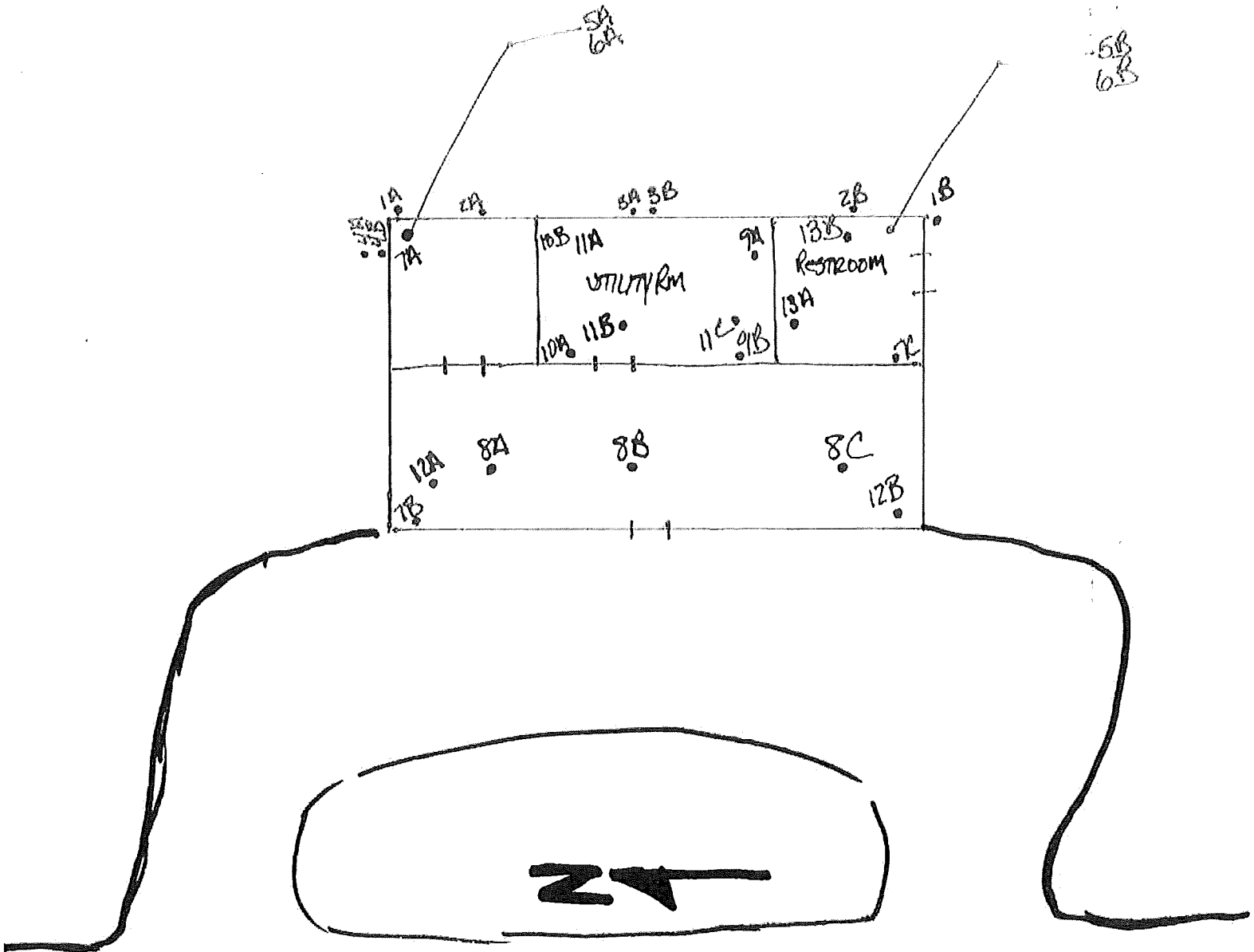
CLIENT NAME:

4857 W COLUMBIA
77931.00
11/28/17



COMPUTED BY:

CHECKED BY:



COLUMBIA AVE

APPENDIX B
ASBESTOS SAMPLE CERTIFICATES OF ANALYSIS AND CHAIN OF CUSTODY
FORMS

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 12/5/2017
Report No.: 552830 - PLM
Project: 4857 W. Columbia
Project No.: 077931.00

Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6397072
Client No.: 1A
Percent Asbestos:
None Detected

Analyst Observation: Grey/Red Plaster
Client Description: Block, Grey And Mortar, Light Grey
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Northeast Bldg. Corner
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 6397072(L2)
Client No.: 1A
Percent Asbestos:
None Detected

Analyst Observation: Lt Grey Mortar
Client Description: Block, Grey And Mortar, Light Grey
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Northeast Bldg. Corner
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 6397073
Client No.: 1B
Percent Asbestos:
None Detected

Analyst Observation: Grey Plaster
Client Description: Block, Grey And Mortar, Light Grey
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Southeast Bldg. Corner
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 6397073(L2)
Client No.: 1B
Percent Asbestos:
None Detected

Analyst Observation: Lt Grey Mortar
Client Description: Block, Grey And Mortar, Light Grey
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Southeast Bldg. Corner
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 6397074
Client No.: 2A
Percent Asbestos:
None Detected

Analyst Observation: Grey Plaster
Client Description: Brick, Red And Mortar, Light Grey
Percent Non-Asbestos Fibrous Material:
None Detected

Location: East Wall, North Window
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 6397075
Client No.: 2B
Percent Asbestos:
None Detected

Analyst Observation: Grey Plaster
Client Description: Brick, Red And Mortar, Light Grey
Percent Non-Asbestos Fibrous Material:
None Detected

Location: East Wall, South Window
Facility:
Percent Non-Fibrous Material:
100

Analytical Method - US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/29/2017
Date Analyzed: 12/05/2017
Signature: Jyotika Shah
Analyst: Jyotika Shah

Approved By: Frank E. Ehrenfeld, III
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 12/5/2017
Report No.: 552830 - PLM
Project: 4857 W. Columbia
Project No.: 077931.00

Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6397075(L2)
Client No.: 2B

Analyst Observation: Red Brick
Client Description: Brick, Red And Mortar, Light Grey

Location: East Wall, South Window
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6397076
Client No.: 3A

Analyst Observation: Grey Plaster
Client Description: Concrete, Grey

Location: East Wall, Middle Window
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6397077
Client No.: 3B

Analyst Observation: Grey Plaster
Client Description: Concrete, Grey

Location: East Wall, Middle Window
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6397078
Client No.: 4A

Analyst Observation: Grey Mortar
Client Description: Brick, Red And Mortar, White

Location: Northeast Bldg. Corner
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6397078(L2)
Client No.: 4A

Analyst Observation: Red Brick
Client Description: Brick, Red And Mortar, White

Location: Northeast Bldg. Corner
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6397079
Client No.: 4B

Analyst Observation: Grey Mortar
Client Description: Brick, Red And Mortar, White

Location: Southeast Bldg. Corner
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/29/2017
Date Analyzed: 12/05/2017
Signature: Jyotika Shah
Analyst: Jyotika Shah

Approved By: Frank E. Ehrenfeld, III
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 12/5/2017
Report No.: 552830 - PLM
Project: 4857 W. Columbia
Project No.: 077931.00

Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6397079(L2)
Client No.: 4B

Analyst Observation: Red Brick
Client Description: Brick, Red And Mortar, White

Location: Southeast Bldg. Corner
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6397080
Client No.: 5A

Analyst Observation: Black Shingle
Client Description: Rolled Roofing System, White

Location: Northeast Corner Of Roof
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
3 Cellulose

Percent Non-Fibrous Material:
97

Lab No.: 6397081
Client No.: 5B

Analyst Observation: Black Shingle
Client Description: Rolled Roofing System, White

Location: Southeast Corner Of Roof
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
2 Cellulose

Percent Non-Fibrous Material:
98

Lab No.: 6397082
Client No.: 6A

Analyst Observation: Black Roof Material
Client Description: Roof Flashing, Black

Location: Northeast Corner Of Roof
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6397083
Client No.: 6B

Analyst Observation: Black Roof Material
Client Description: Roof Flashing, Black

Location: Southeast Corner Of Roof
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6397084
Client No.: 7A

Analyst Observation: White Sheetrock
Client Description: Wallboard Wall System With Associated
Joint Compound

Location: Northeast Corner Of Bldg
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
2 Cellulose

Percent Non-Fibrous Material:
98

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/29/2017
Date Analyzed: 12/05/2017
Signature: Jyotika Shah
Analyst: Jyotika Shah

Approved By: Frank E. Ehrenfeld, III
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 12/5/2017
Report No.: 552830 - PLM
Project: 4857 W. Columbia
Project No.: 077931.00

Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6397084(L2)	Analyst Observation: White Joint Compound	Location: Northeast Corner Of Bldg
Client No.: 7A	Client Description: Wallboard Wall System With Associated Joint Compound	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 6397085	Analyst Observation: White Sheetrock	Location: Northwest Corner Of Bldg
Client No.: 7B	Client Description: Wallboard Wall System With Associated Joint Compound	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 2 Cellulose	<u>Percent Non-Fibrous Material:</u> 98

Lab No.: 6397085(L2)	Analyst Observation: White Joint Compound	Location: Northwest Corner Of Bldg
Client No.: 7B	Client Description: Wallboard Wall System With Associated Joint Compound	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 6397086	Analyst Observation: White Sheetrock	Location: Southeast Corner Of Bldg
Client No.: 7C	Client Description: Wallboard Wall System With Associated Joint Compound	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 1 Cellulose	<u>Percent Non-Fibrous Material:</u> 99

Lab No.: 6397086(L2)	Analyst Observation: White Joint Compound	Location: Southeast Corner Of Bldg
Client No.: 7C	Client Description: Wallboard Wall System With Associated Joint Compound	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 6397087	Analyst Observation: White Sheetrock	Location: West Half Of Bldg., North Portion
Client No.: 8A	Client Description: Wallboard Ceiling (Unfinished) With Associated Mastic	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 2 Cellulose	<u>Percent Non-Fibrous Material:</u> 98

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/29/2017
Date Analyzed: 12/05/2017
Signature: Jyotika Shah
Analyst: Jyotika Shah

Approved By: Frank E. Ehrenfeld, III
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 12/5/2017
Report No.: 552830 - PLM
Project: 4857 W. Columbia
Project No.: 077931.00

Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6397087(L2)
Client No.: 8A

Analyst Observation: Brown Mastic
Client Description: Wallboard Ceiling (Unfinished) With Associated Mastic

Location: West Half Of Bldg., North Portion

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
3 Cellulose

Facility:
Percent Non-Fibrous Material:
97

Lab No.: 6397088
Client No.: 8B

Analyst Observation: White Sheetrock
Client Description: Wallboard Ceiling (Unfinished) With Associated Mastic

Location: West Half Of Bldg., Middle Portion

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
2 Cellulose

Facility:
Percent Non-Fibrous Material:
98

Lab No.: 6397088(L2)
Client No.: 8B

Analyst Observation: Brown Mastic
Client Description: Wallboard Ceiling (Unfinished) With Associated Mastic

Location: West Half Of Bldg., Middle Portion

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
1 Cellulose

Facility:
Percent Non-Fibrous Material:
99

Lab No.: 6397089
Client No.: 8C

Analyst Observation: White Sheetrock
Client Description: Wallboard Ceiling (Unfinished) With Associated Mastic

Location: West Portion Of Bldg., South Portion

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
2 Cellulose

Facility:
Percent Non-Fibrous Material:
98

Lab No.: 6397089(L2)
Client No.: 8C

Analyst Observation: Brown Mastic
Client Description: Wallboard Ceiling (Unfinished) With Associated Mastic

Location: West Portion Of Bldg., South Portion

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
2 Cellulose

Facility:
Percent Non-Fibrous Material:
98

Lab No.: 6397090
Client No.: 9A

Analyst Observation: Off-White Vinyl Sheet Flooring
Client Description: Sheet Flooring, Brown

Location: Southeast Corner Of Utility Room

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
2 Cellulose

Facility:
Percent Non-Fibrous Material:
98

Analytical Method - US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/29/2017
Date Analyzed: 12/05/2017
Signature: Jyotika Shah
Analyst: Jyotika Shah

Approved By: Frank E. Ehrenfeld, III
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 12/5/2017
Report No.: 552830 - PLM
Project: 4857 W. Columbia
Project No.: 077931.00

Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6397090(L2)
Client No.: 9A

Analyst Observation: Yellow Mastic
Client Description: Sheet Flooring, Brown

Location: Southeast Corner Of Utility Room

Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6397091
Client No.: 9B

Analyst Observation: Off-White Vinyl Sheet Flooring
Client Description: Sheet Flooring, Brown

Location: Southwest Corner Of Utility Room

Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
2 Cellulose

Percent Non-Fibrous Material:
98

Lab No.: 6397091(L2)
Client No.: 9B

Analyst Observation: Brown Mastic
Client Description: Sheet Flooring, Brown

Location: Southwest Corner Of Utility Room

Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6397092
Client No.: 10A

Analyst Observation: Yellow/Brown Mastic
Client Description: Mastic, Yellow

Location: Utility Room Floor, Northwest Corner

Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
2 Cellulose

Percent Non-Fibrous Material:
98

Lab No.: 6397093
Client No.: 10B

Analyst Observation: Yellow/Brown Mastic
Client Description: Mastic, Yellow

Location: Utility Room Floor, Northeast Corner

Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
1 Cellulose

Percent Non-Fibrous Material:
99

Lab No.: 6397094
Client No.: 11A

Analyst Observation: White Texture
Client Description: Textured Surfacing On Ceiling, White

Location: Utility Room, Northeast Corner

Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Analytical Method - US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/29/2017
Date Analyzed: 12/05/2017
Signature: Jyotika Shah
Analyst: Jyotika Shah

Approved By: Frank E. Ehrenfeld, III
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 12/5/2017
Report No.: 552830 - PLM
Project: 4857 W. Columbia
Project No.: 077931.00

Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6397095 **Analyst Observation:** White Texture **Location:** Utility Room, Northwest Corner
Client No.: 11B **Client Description:** Textured Surfacing On Ceiling, White **Facility:**
Percent Asbestos: **Percent Non-Asbestos Fibrous Material:** **Percent Non-Fibrous Material:**
None Detected None Detected 100

Lab No.: 6397096 **Analyst Observation:** White Texture **Location:** Utility Room, Southwest Corner
Client No.: 11C **Client Description:** Textured Surfacing On Ceiling, White **Facility:**
Percent Asbestos: **Percent Non-Asbestos Fibrous Material:** **Percent Non-Fibrous Material:**
None Detected None Detected 100

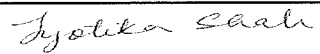
Lab No.: 6397097 **Analyst Observation:** Off-White Ceiling Tile **Location:** Northwest Corner Of Bldg.
Client No.: 12A **Client Description:** Ceiling Tile, 2' x 4', White **Facility:**
Pinhole/Pockmarks
Percent Asbestos: **Percent Non-Asbestos Fibrous Material:** **Percent Non-Fibrous Material:**
None Detected 45 Fibrous Glass 55

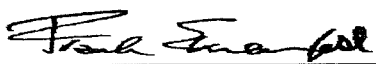
Lab No.: 6397098 **Analyst Observation:** Off-White Ceiling Tile **Location:** Southwest Corner Of Bldg.
Client No.: 12B **Client Description:** Ceiling Tile, 2' x 4', White **Facility:**
Pinhole/Pockmarks
Percent Asbestos: **Percent Non-Asbestos Fibrous Material:** **Percent Non-Fibrous Material:**
None Detected 55 Fibrous Glass 45

Lab No.: 6397099 **Analyst Observation:** Grey Cove Base **Location:** Restroom, North Wall
Client No.: 13A **Client Description:** Cove Base, Grey, 4" With Associated **Facility:**
Mastic
Percent Asbestos: **Percent Non-Asbestos Fibrous Material:** **Percent Non-Fibrous Material:**
None Detected None Detected 100

Lab No.: 6397099(L2) **Analyst Observation:** Yellow Mastic **Location:** Restroom, North Wall
Client No.: 13A **Client Description:** Cove Base, Grey, 4" With Associated **Facility:**
Mastic
Percent Asbestos: **Percent Non-Asbestos Fibrous Material:** **Percent Non-Fibrous Material:**
None Detected 2 Cellulose 98

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/29/2017
Date Analyzed: 12/05/2017
Signature: 
Analyst: Jyotika Shah

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 12/5/2017
Report No.: 552830 - PLM
Project: 4857 W. Columbia
Project No.: 077931.00

Client: SOI995

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6397099(L3)
Client No.: 13A

Analyst Observation: White/Brown Texture
Client Description: Cove Base, Grey, 4" With Associated Mastic

Location: Restroom, North Wall
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
4 Cellulose

Percent Non-Fibrous Material:
96

Lab No.: 6397100
Client No.: 13B

Analyst Observation: Grey Cove Base
Client Description: Cove Base, Grey, 4" With Associated Mastic

Location: Restroom, East Wall
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6397100(L2)
Client No.: 13B

Analyst Observation: Yellow Mastic
Client Description: Cove Base, Grey, 4" With Associated Mastic

Location: Restroom, East Wall
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
2 Cellulose

Percent Non-Fibrous Material:
98

Lab No.: 6397100(L3)
Client No.: 13B

Analyst Observation: White/Brown Texture
Client Description: Cove Base, Grey, 4" With Associated Mastic

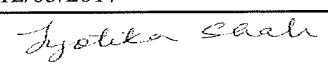
Location: Restroom, East Wall
Facility:

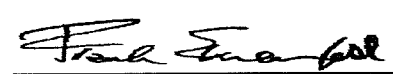
Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
5 Cellulose

Percent Non-Fibrous Material:
95

Analytical Method - US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/29/2017
Date Analyzed: 12/05/2017
Signature: 
Analyst: Jyotika Shah

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 12/5/2017
Report No.: 552830 - PLM
Project: 4857 W. Columbia
Project No.: 077931.00

Client: SOI995

Appendix to Analytical Report

Customer Contact: Davin Ojala
Analysis: US EPA 600, R93-116

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: 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 in 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
- NY-DOH 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. 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)

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)

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 12/5/2017
Report No.: 552830 - PLM
Project: 4857 W. Columbia
Project No.: 077931.00

Client: SOI995

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%.

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).

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.

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. ~0.25% LOQ for most samples.
- 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

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 12/5/2017
Report No.: 552830 - PLM
Project: 4857 W. Columbia
Project No.: 077931.00

Client: SOI995

Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Suspension" only.

LOQ, Limit of Quantitation estimates for mass and volume analyses.

*With advance notice and confirmation by the laboratory.

**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).



9000 Commerce Parkway, Suite B • Mount Laurel, NJ 08054
 Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

Chain of Custody

-Bulk Asbestos -

Contact Information	
Client Company: <u>SME</u>	Project Number: <u>077931.00</u>
Office Address: <u>3301 TECH CIRCLE DRIVE</u>	Project Name: <u>4857 W. COLUMBIA</u>
City, State, Zip: <u>KALAMAZOO, MICHIGAN</u>	Primary Contact: <u>TONY HOSBEIN</u>
Fax Number: <u>269-323-3553</u>	Office Phone: <u>269-323-3555</u>
Email Address: <u>hosbein@sme-usa.com</u>	Cell Phone: <u>616-835-2298</u>

PLM Instructions:

- PLM: Bulk Asbestos Building Materials EPA 600 R-93/116, 1993
- PLM: Bulk Asbestos Building Materials EPA 600 M-4/82-020, 1982
- PLM: Bulk Asbestos Building Materials NIOSH 9002, 1985
- PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.1, 2002
- PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.6, 2010
- TEM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.4, 2009

<ul style="list-style-type: none"> <input type="checkbox"/> PLM: Point Counting <ul style="list-style-type: none"> <input type="checkbox"/> PC: via ELAP 198.1 <input checked="" type="checkbox"/> PC: 400 Points <input type="checkbox"/> PC: 800 Points * <input type="checkbox"/> PC: 1600 Points * <input type="checkbox"/> PLM: Instructions for Multi-Layered Samples <ul style="list-style-type: none"> <input type="checkbox"/> Analyze and Report All Separable Layers per EPA 600 <input type="checkbox"/> Report Composite for Drywall Systems per NESHAP <input type="checkbox"/> Report All Layers and Composite Where Applicable <input type="checkbox"/> Only Analyze and Report Specifically Noted Layer 	<ul style="list-style-type: none"> <input type="checkbox"/> PLM: Analyze Until Positive (Positive Stop) <ul style="list-style-type: none"> <input type="checkbox"/> AUP: by Homogenous Area as Noted <input type="checkbox"/> AUP: by Material Type as Noted <input type="checkbox"/> PLM: NOB via 198.6 <ul style="list-style-type: none"> <input type="checkbox"/> PLM: Friable via EPA 600 2.3 <input type="checkbox"/> If <1% by PLM, to TEM via 198.4 * <input type="checkbox"/> If <1% by PLM, Hold for Instructions <input type="checkbox"/> PLM: Non-Building Material*** (Dust, Wipe, Tape) <ul style="list-style-type: none"> <input type="checkbox"/> Soil or Vermiculite Analysis* <input type="checkbox"/> CARB 435
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Special Instructions: REFER TO ATTACHED SME CHAIN OF CUSTODY FOR ANALYSIS INSTRUCTIONS

* Additional charge and turnaround may be required ** Alternative Method (ex: EPA 600/R-04/004) may be recommended by Laboratory

Turnaround Time

Preliminary Results Requested Date: 2/6/17 4:00PM Verbal Email Fax

Specific date / time

10 Day 5 Day 3 Day 2 Day 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): <u>ANTHONY HOSBEIN/SME</u>	Date: <u>1/28/17</u>	Time: <u>5:00PM</u>	RECEIVED
Received (Name / iATL): _____	Date: _____	Time: _____	
Sample Login (Name / iATL): _____	Date: _____	Time: _____	
Analysis(Name(s) / iATL): <u>JS</u>	Date: <u>12/05/17</u>	Time: _____	<u>NOV 29 2017</u>
QA/QC Review (Name / iATL): <u>[Signature]</u>	Date: <u>12-5-17</u>	Time: _____	
Archived / Released: _____	QA/QC InterLAB Use: _____	Date: _____	Time: _____



CHAIN OF CUSTODY LOG

3301 Tech Circle Drive
 Kalamazoo, MI, 49008
 Phone 269-323-3555
 FAX 269-323-3553

CLIENT NAME: Battle Creek TIFA
 SITE ADDRESS: 4857 W. Columbia, Battle Creek, 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	#
1	A	Block, grey and Mortar, light grey	Northeast bldg. corner	63397072
1	B	Block, grey and Mortar, light grey	Southeast bldg. corner	63397073
2	A	Brick, red and Mortar, grey	East wall, north window	63397074
2	B	Brick, red and Mortar, grey	East wall, south window	63397075
3	A	Concrete, grey	East wall, middle window	63397076
3	B	Concrete, grey	East wall, middle window	63397077
4	A	Brick, red and Mortar, white	Northeast bldg. corner	63397078
4	B	Brick, red and Mortar, white	Southeast bldg. corner	63397079
5	A	Rolled roofing system, white	Northeast corner of roof	63397080
5	B	Rolled roofing system, white	Southeast corner of roof	63397081
6	A	Roof flashing, black	Northeast corner of roof	63397082
6	B	Roof flashing, black	Southeast corner of roof	63397083
7	A	Wallboard wall system with associated joint compound	Northeast corner of bldg.	63397084
7	B	Wallboard wall system with associated joint compound	Northwest corner of bldg.	63397085
7	C	Wallboard wall system with associated joint compound	Southeast corner of bldg.	63397086
8	A	Wallboard ceiling (unfinished) with associated mastic	West half of bldg., north portion	63397087
8	B	Wallboard ceiling (unfinished) with associated mastic	West half of bldg., middle portion	63397088
8	C	Wallboard ceiling (unfinished) with associated mastic	West portion of bldg., south portion	63397089
9	A	Sheet flooring, brown	Southeast corner of utility room	63397090
9	B	Sheet flooring, brown	Southwest corner of utility room	63397091
10	A	Mastic, yellow	Utility room floor, northwest corner	63397092
10	B	Mastic, yellow	Utility room floor, northeast corner	63397093
11	A	Textured surfacing on ceiling, white	Utility room, northeast corner	63397094

RELINQUISHED BY: Tony Hosbein DATE: 11-28-17 TIME: 5:00pm
 RECEIVED BY: _____ DATE: _____ TIME: _____

Please provide 5-day turnaround, emailed to Tony Hosbein at hosbein@sme-usa.com.

SME USE ONLY

Date Sampled: 11/28/17

SME Project #: 077931



CHAIN OF CUSTODY LOG

3301 Tech Circle Drive
Kalamazoo, MI, 49008
Phone 269-323-3555
FAX 269-323-3553

CLIENT NAME: Battle Creek TIFA
SITE ADDRESS: 4857 W. Columbia, Battle Creek, 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%.

Table with 5 columns: AREA #, SAMPLE #, MATERIAL DESCRIPTION, SAMPLE LOCATION, #. Rows include textured surfacing on ceiling, ceiling tile, and cove base samples.

6397095
6397096
6397097
6397098
6397099
6397100

RELINQUISHED BY: Tony Hosbein DATE: 11-28-17 TIME: 5:00pm
RECEIVED BY: DATE: TIME:

Please provide 5-day turnaround, emailed to Tony Hosbein at hosbein@sme-usa.com.

SME USE ONLY

Date Sampled: 11/28/17

SME Project #: 077931

APPENDIX C
PAINT CHIP SAMPLE CERTIFICATES OF ANALYSIS AND CHAIN OF CUSTODY
FORMS

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 12/6/2017
Report No.: 552809 - Lead Paint
Project: 4857 W. Columbia
Project No.: 077931.00

Client: SOI995

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 6396854
Client No.: P1

Description: Maroon Paint
Location: Exterior, East Block Wall, 11/28/17

Result (% by Weight): 1.0
Result (ppm): 10000
Comments:

Lab No.: 6396855
Client No.: P2

Description: White Paint
Location: Exterior, Trim, 11/28/17

Result (% by Weight): 0.074
Result (ppm): 740
Comments:

Lab No.: 6396856
Client No.: P3

Description: Red Paint
Location: Exterior, Roof Down Spout, 11/28/17

Result (% by Weight): 0.43
Result (ppm): 4300
Comments:

Lab No.: 6396857
Client No.: P4

Description: White Paint
Location: Interior, Throughout, 11/28/17

Result (% by Weight): 1.4
Result (ppm): 14000
Comments:

Lab No.: 6396858
Client No.: P5

Description: Green Paint
Location: Interior, HVAC Duct, 11/28/17


Result (% by Weight): 0.39
Result (ppm): 3900
Comments:


Lab No.: 6396859
Client No.: P6

Description: Blue Paint
Location: Interior, Restroom Walls, 11/28/17

Result (% by Weight): <0.0062
Result (ppm): <62
Comments:

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

Date Received: 11/29/2017
Date Analyzed: 12/06/2017
Signature: 
Analyst: Chad Shaffer

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Soil and Materials Engineers-995
3301 Tech Circle Drive
Kalamazoo MI 49008

Report Date: 12/6/2017
Report No.: 552809 - Lead Paint
Project: 4857 W. Columbia
Project No.: 077931.00

Client: SOI995

Appendix to Analytical Report:

Customer Contact: Davin Ojala
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 in 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

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 Appendix 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.

- * Insufficient sample provided to perform QC reanalysis (<200 mg)
- ** Not enough sample provided to analyze (<50 mg)
- *** Matrix / substrate interference possible.



9000 Commerce Parkway, Suite B • Mount Laurel, NJ 08054
 Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

Chain of Custody

– Environmental Lead –

<u>Contact Information</u>	
Client Company: <u>SME</u>	Project Number: <u>077931.00</u>
Office Address: <u>3301 TECH CIRCLE DRIVE</u>	Project Name: <u>4857 W.COLUMBIA</u>
City, State, Zip: <u>KALAMAZOO, MI</u>	Primary Contact: <u>TONY HOSBEIN</u>
Fax Number: <u>269-323-3553</u>	Office Phone: <u>269-323-3555</u>
Email Address: <u>hosbein@sme-usa.com</u>	Cell Phone: <u>616-835-2298</u>

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

Matrix/Method:

Paint by AAS: ASTM D3335-85a, 2009

Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010

Air by AAS: NIOSH 7082, 1994

Soil by AAS: EPA SW 846 (Soil)

Water by AAS-GF: ASTM D3559-03D, USEPA 40CFR 141.11B, 2010

Other Metals (Cd, Zn, Cr) by AAS

Toxicity Characteristic Leaching Procedure (TCLP) by AAS: USEPA 1311

Other _____

Special Instructions:
 SEE SME'S COC FOR ADDITIONAL INFO

Turnaround Time

Preliminary Results Requested Date: 12-6-17/4:00PM Verbal Email Fax

Specific date / time

10 Day 5 Day 3 Day 2 Day 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): <u>Anthony Hosbein/SME</u>	Date: <u>11-28-17</u>	Time: <u>5:00PM</u>
Received (Name / iATL): _____	Date: _____	Time: _____
Sample Login (Name / iATL): _____	Date: _____	Time: _____
Analysis(Name(s) / iATL): <u>CV 6/17</u>	Date: _____	Time: _____
QA/QC Review (Name / iATL): <u>AS 12/6/17</u>	Date: _____	Time: <u>NOV 29 2017</u>
Archived / Released: _____	QA/QC InterLAB Use: _____	Date: _____



CHAIN OF CUSTODY LOG

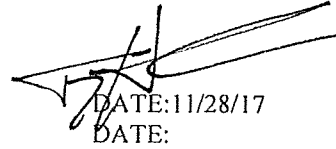
3301 Tech Circle Dr.
Kalamazoo Michigan, 49008
Phone 269-323-3555
FAX 269-323-3553

CLIENT NAME: Battle Creek TIFA
SITE ADDRESS: 4857 W. Columbia Ave., Battle Creek, MI

ANALYSIS REQUESTED: LEAD by AAS: ASTM D3335-85a, 2009

Sample #	Description/Location	
P1	Maroon (exterior), east block wall	639684
P2	White (exterior), trim	639685
P3	Red (exterior), roof down spout	639686
P4	White (interior), throughout	639687
P5	Green (interior), HVAC duct	639688
P6	Blue (interior), restroom walls	639689

RELINQUISHED BY: Anthony Hosbein
RECEIVED BY:


DATE: 11/28/17
DATE:

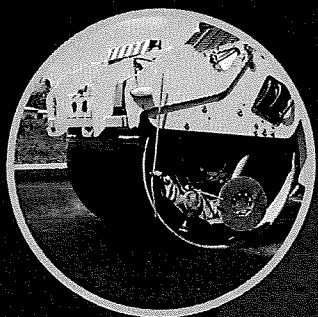
TIME: 5:00pm
TIME:

Please provide 5day turnaround, emailed to Tony Hosbein at hosbein@sme-usa.com.

SME USE ONLY

Date Sampled: 11/28/17

SME Project #:
077931.00



*Passionate People Building
and Revitalizing our World*

