

NESHAP ASBESTOS SURVEY

VA SIERRA NEVADA HEALTH CARE SYSTEM
IOANNIS A. LOUGARIS VA MEDICAL CENTER
975 KIRMAN AVENUE
RENO, NEVADA



U.S. DEPARTMENT OF VETERANS AFFAIRS

OFFICE OF CONSTRUCTION AND FACILITIES MANAGEMENT
425 I STREET, NW
WASHINGTON, DC 20001

PREPARED BY:
TTL Associates, Inc.

December 5, 2022

TABLE OF CONTENTS

<u>Section No.</u>	<u>Page No.</u>
1.0 INTRODUCTION	1
1.1 Project Background.....	1
1.2 Project Purpose and Objectives.....	3
2.0 SURVEY, SAMPLING, AND ANALYSIS.....	4
2.1 Field Survey	4
2.2 Survey Results.....	4
3.0 CONCLUSIONS AND RECOMMENDATIONS	7
4.0 LIMITATIONS.....	8

APPENDICES

- Appendix A: Inspector Certifications
- Appendix B: NESHAP Asbestos Survey Summary Tables
- Appendix C: Asbestos Analytical Reports
- Appendix D: Sample Location Maps

1.0 INTRODUCTION

TTL Associates, Inc. (TTL) performed a non-destructive United States Environmental Protection Agency (U.S. EPA) National Emission Standard for Hazardous Air Pollutants (NESHAP) asbestos survey for the VA Sierra Nevada Health Care System Ioannis A. Lougaris VA Medical Center (Reno VAMC) located at 975 Kirman Avenue in Reno, Nevada in November 2022. The asbestos survey was completed as part of the VA Environmental and Historic Studies project for the replacement of the Reno VAMC.

1.1 Project Background

VA is considering vacating the existing Reno VAMC at 975 Kirman Avenue and constructing a new medical center within a ten-mile radius of the existing Reno VAMC campus. The new location would require of an estimated 50 to 90 acres of land for the construction and operation of a new approximately 950,000-square-foot VAMC. No prospective relocation sites have yet been identified. In addition, the specific method for disposal of the existing VAMC, if vacated, has not been determined.

The existing Reno VAMC campus consists of two primary parcels (975 Kirman Avenue) that total approximately 12.5 acres. These parcels include the medical center buildings, parking lots and garages, and supporting infrastructure. In recent years, VA acquired four small residential properties (8 parcels) located north and west of the primary parcels for use for additional campus parking. These properties total approximately 1.25 acres. VA demolished the residential structures on one of these four properties; vacant residences remain on the other three properties. VA anticipates demolishing the remaining residences within the next one to two years.

VA provided an inventory of the existing buildings/structures at the Reno VAMC campus as well as previous asbestos survey information for the campus. The following summarizes this information.

Main Reno VAMC Campus Buildings/Structures

- Building 1 – previously surveyed
- Building 1A – previously surveyed
- Building 1D – previously surveyed
- Building 3 – no survey
- Building 4 – no survey
- Building 5 – no survey
- Building 6 – no survey
- Building 7 – previously surveyed
- Building 8 – previously surveyed
- Building 9 – no survey
- Building 10 – previously surveyed
- Building 12 – previously surveyed
- Building 14 – no survey

- Blockhouse 5 – no survey
- Blockhouse 6 – no survey
- Blockhouse 10 – no survey
- Blockhouse 12 – no survey
- Bridge connecting Building 1 and Specialty Clinic – no survey
- Connecting corridor between Building 1 and CLC – no survey
- Connecting corridor between Buildings 1 and 12 – no survey

Additional Reno VAMC Buildings

- 1000/1010/1020/1030 Wilson Avenue – no survey
- 530/530A East Taylor Street – no survey
- 524/526 East Taylor Street – no survey
- 925 Locust Avenue – no survey
- 633 East Taylor Street – no survey
- 635 East Taylor Street – no survey
- 635A East Taylor Street – no survey

TTL's scope of work for this project included conducting asbestos surveys for those buildings/structures that had not previously been surveyed. The following briefly describes the buildings surveyed by TTL:

- Building 3 is a single-story, approximately 850-square-foot building which is currently set up as the decontamination wing for the medical service providers and affected populace in an event of a contaminant release. The building is located on the north side of the Emergency Department (Building 4).
- Building 4 is a single-story, approximately 7,800-square-foot building which is being used as an Emergency Department. It has multiple exam rooms, a nurse's station, and some storage areas.
- Building 5 is a two-story, approximately 15,600-square-foot building which is used as an outpatient mental health facility. The building has multiple rooms that are being used as exam rooms, along with few activity rooms and a call center.
- Building 6 is a two-story, approximately 26,100-square-foot building which is currently being used as the Specialty Clinic consisting of multiple exam rooms, doctors' offices, and other uses.
- Buildings 9 and 14 are multi-story parking structures located to the east of Kirman Avenue. Building 9 is located in the southeastern portion of this area; Building 14 is located in the northern portion of this area.

- Blockhouses 5, 6, 10, and 12 are single-story, concrete block structures which house emergency generators and associated fuel for various buildings at the Reno VAMC in case of electrical grid failure. The blockhouses range from approximately 400 to 2,300-square feet.
- The bridge connecting Building 1 to the Specialty Clinic (approximately 1,000-square-foot) and the connection corridors between Building 1 and the CLC and between Buildings 1 and 12 (total approximately 1,800-square feet) are single-story connecting bridges joining the buildings.
- 1000/1010/1020/1030 Wilson Avenue is a four-unit, two-story, approximately 2,800-square-foot apartment building with four garage spaces.
- 530/530A East Taylor Street is a two-story, approximately 1,100-square-foot house with a basement.
- 524/526 East Taylor Street is a two-story, approximately 1,400-square-foot house with a basement and a detached garage.
- 925 Locust Avenue is a one-story, approximately 650-square-foot, slab-on-grade house.
- 633 East Taylor Street is a one-story, approximately 1,100-square-foot house with a basement and an attached garage.
- 635 East Taylor Street is a one-story, approximately 1,200-square-foot house with a basement and an attached garage.
- 635A East Taylor Street is a one-story, approximately 900-square-foot, slab-on-grade house with an attached garage.

1.2 Project Purpose and Objectives

The purpose of the NESHAP asbestos regulation is to protect human health and the environment by minimizing the release of asbestos when facilities that contain asbestos-containing materials (ACM) are renovated or demolished. The U.S. EPA defines an ACM as a material that contains greater than one-percent asbestos by visual estimation or weight. The objective of this project was to collect the data necessary to comply with the NESHAP renovation/demolition inspection requirements for the proposed renovation and/or demolition of the Reno VAMC campus buildings that had not been previously surveyed.

2.0 SURVEY, SAMPLING, AND ANALYSIS

This section documents the methodology and results of the NESHAP asbestos survey for the Reno VAMC campus buildings that had not been previously surveyed, as identified in Section 1.1.

2.1 Field Survey

Mr. Gary Speelman and Ms. Lauren Speelman conducted a non-destructive NESHAP asbestos survey of the accessible interior and exterior areas of the subject buildings in November 2022. Mr. and Ms. Speelman have received the U.S. EPA asbestos building inspector training in accordance with 40 CFR Part 763 of the Asbestos Emergency Response Act (AHERA) and are licensed as Asbestos Abatement Consultants by the State of Nevada. Copies of their certifications are included in Appendix A.

The asbestos survey included the identification of suspect materials and the definition of homogeneous sampling areas (HSA), assessment of the condition of each material, estimation of approximate quantity of the suspect ACM, and collection and analysis of bulk samples from each identified HSA. An HSA is defined as a material that exhibited similar physical characteristics (e.g., texture, surface color, and appearance) and was applied or installed at the same time (if known) as observed by the inspection team utilizing professional judgment and experience.

The samples were collected using a coring device or other means, as appropriate, to collect a cross section of the suspect material. The samples were placed into clean and unused sealable bags marked with unique sample identification numbers. The samples of suspect ACM were transported to International Asbestos Testing Laboratories (IATL) for analysis by Polarized Light Microscopy (PLM). IATL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), which is administered by the National Institute of Standards and Technology (NIST).

2.2 Survey Results

TTL identified 156 suspect ACMs in the subject buildings. The following materials were identified as or assumed to be ACM based on the asbestos survey:

Main Reno VAMC Campus Buildings/Structures

- Building 3
 - Roofing materials (assumed ACM)
- Building 4
 - Approximately 24 square feet (s.f.) of 12" x 12" blue floor tile and mastic (assumed ACM)
 - Approximately 24 s.f. of 12" x 12" yellow floor tile and mastic (assumed ACM)
 - Roofing materials (assumed ACM)

- Building 5
 - Roofing materials (assumed ACM)
- Building 6
 - Approximately 2,000 s.f. of off-white vinyl sheet flooring (Assumed ACM)
 - Roofing materials (Assumed ACM)
- Blockhouse 5
 - Roofing materials (assumed ACM)
- Blockhouse 6
 - Roofing materials (assumed ACM)
- Blockhouse 10
 - Roofing materials (assumed ACM)
- Blockhouse 12
 - Roofing materials (assumed ACM)
 - Approximately 500 s.f. of fireproofing (assumed ACM)
- Bridge (Corridor) between Buildings 1 & 6 (Specialty Clinic)
 - Roofing materials (assumed ACM)
- Corridor between Building 1 and CLC
 - Roofing materials (assumed ACM)
- Corridor between Buildings 1 and 12
 - Approximately 24 s.f. of 12" x 12" green floor tile and mastic (assumed ACM)
 - Approximately 36 s.f. of 12" x 12" dark grey floor tile and mastic (assumed ACM)
 - Roofing materials (assumed ACM)

Additional Reno VAMC Buildings

- 1000/1010/1020/1030 Wilson Avenue
 - Approximately 2,000 s.f. of exterior transite siding
- 530/530A East Taylor Street – no identified or assumed ACM
- 524/526 East Taylor Street
 - Approximately 100 s.f. of drywall joint compound with smooth texture
 - Approximately 100 linear feet (l.f.) and 25 s.f. of HVAC duct wrap
 - Approximately 100 s.f. of stipple wall texture

- 925 Locust Avenue
 - Approximately 100 s.f. of smooth exterior transite siding
 - Approximately 1,000 s.f. of rough exterior transite siding

- 633 East Taylor Street
 - Approximately 100 l.f. of HVAC duct joint tape
 - Approximately 32 s.f. of 9" x 9" green floor tile and mastic
 - Approximately 120 s.f. of 9" x 9" light tan floor tile

- 635 East Taylor Street
 - Approximately 600 s.f. of drywall joint compound
 - Approximately 75 s.f. of grey floor tile and mastic
 - Approximately 110 s.f. of residual black mastic

- 635A East Taylor Street – no ACM identified or assumed

Refer to Appendix B for the NESHAP Asbestos Survey Summary Tables. The analytical laboratory reports are included in Appendix C. Maps indicating the sample locations are included in Appendix D.

3.0 CONCLUSIONS AND RECOMMENDATIONS

The November 2022 asbestos survey identified assumed ACM in each of the surveyed main Reno VAMC campus buildings/structures (Buildings 3, 4, 5 and 6; Blockhouses 5, 6, 10, and 12; and the bridge/corridors between Building 1 and the Specialty Clinic, Building 1 and the CLC, and Buildings 1 and 12). The assumed ACM (mostly roofing materials) are materials that could not be sampled without damaging the material. None of the materials within these buildings that were sampled were found to be ACM (i.e., no known ACM is located within these buildings).

Based on information provided by VA regarding other buildings at the main Reno VAMC campus that were previously surveyed for asbestos, most, if not all, contain ACM.

The November 2022 asbestos survey identified ACM in the following additional Reno VAMC campus buildings: 1000/1020/1020/1030 Wilson Avenue, 524/526 East Taylor Street, 925 Locust Avenue, 633 East Taylor Street, and 635 East Taylor Street. No ACM was identified in the buildings at 530/530A East Taylor Street or 635A East Taylor Street.

The U.S. EPA defines regulated asbestos-containing material (RACM) as: (a) Friable asbestos material, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The NESHAP asbestos regulations require the removal of all RACM from a facility being demolished or renovated prior to beginning any activity that may damage or disturb the material. TTL recommends the removal of identified ACM that may become RACM during building renovation or demolition by a licensed asbestos abatement contractor in accordance with U.S. EPA and State of Nevada requirements prior to renovation/demolition activities. Materials listed as assumed to be asbestos-containing must be managed and removed as if they are ACM or sampled and confirmed to be non-ACM through additional, destructive sampling prior to renovation/demolition activities. During the asbestos abatement, ACM must be removed under controlled, contained conditions under the supervision of a licensed environmental professional. Air monitoring would be conducted to confirm asbestos fibers are not present prior to the removal of the containments and occupancy by other workers. ACM removed from the buildings must be contained/covered in plastic and transported to a disposal facility licensed to accept asbestos waste.

The U.S. EPA requires written notification if the combined amount of RACM to be removed is at least 260 linear feet, at least 160 square feet, or at least one cubic meter of facility components where length or area could not be measured. A written Notification of Intent to Renovate/Demolish form is required to be submitted to the U.S. EPA at least ten working days prior to beginning any asbestos abatement and/or demolition project.

4.0 LIMITATIONS

TTL has made reasonable efforts to identify and quantify suspect ACM based upon the standard of care in the environmental industry existing at the time of the survey. This survey only summarizes the potential presence and estimated quantities of visually observed ACM. Unless otherwise indicated, TTL did not perform destructive testing and this survey is limited to areas that were accessible to and visually observed by TTL at the time of the survey.

Additional material disturbed during renovation or demolition activities should be evaluated on a case-by-case basis, especially materials that were previously hidden, obscured, or inaccessible, to determine if the material is included in this survey. If a given material is not described in this survey or cannot be identified as a non-suspect material, the material should be assumed to contain asbestos and renovation and/or demolition activities should be halted until sampling and analysis can be accomplished. Parties conducting renovation and/or demolition activities should follow all applicable federal, state, and local regulations in handling identified and suspect ACM.

The information contained in this report was based upon specific parameters and regulations in force at the time of the survey. The information herein is only for the specific use of VA and TTL, unless written authorization is obtained from TTL. TTL accepts no responsibility for the use, interpretation, or reliance by other parties on the information contained herein, nor does this report represent an instrument of regulatory compliance or an asbestos abatement specification.

APPENDIX A

INSPECTOR CERTIFICATIONS

mm

STATE OF NEVADA
DEPARTMENT OF BUSINESS AND INDUSTRY
DIVISION OF INDUSTRIAL RELATIONS
Occupational Safety and Health Administration
Asbestos Control Program

Certifies That Gary Speelman
EICS, LLC
is Licensed As Asbestos Abatement Consultant

License No. IJPM-1804

Expiration Date 11/07/2023

Signature Of Licensee

Gary Speelman

STATE OF NEVADA
DEPARTMENT OF BUSINESS AND INDUSTRY
DIVISION OF INDUSTRIAL RELATIONS
Occupational Safety and Health Administration
Asbestos Control Program

Certifies That Lauren Speelman
EICS, LLC
is Licensed As Asbestos Abatement Consultant

License No. IM-1193

Expiration Date 11/08/2023

Signature Of Licensee Lauren Speelman

M & C Environmental Training

Asbestos Contractor/Supervisor Refresher Training Course

Lauren Speelman

Has successfully completed the Asbestos Contractor/Supervisor Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., P.O. Box 6419, Concord, California Tel. # (510) 499 - 5646

Course Approval Number: CA-003-04

Location: Reno, Nevada

Expiration: November 8, 2023

Dates: November 8, 2022

Director of Training: John McGinnis

John McGinnis

Certificate Number 51621 SR

M & C Environmental Training

Asbestos Inspector

Refresher Training Course

Lauren Speelman

Has successfully completed the Asbestos Inspector Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., P.O. Box 6419, Concord, California Tel. # (510) 499 - 5646

Course Approval Number: CA-003-06

Location: Reno, Nevada

Expiration: November 9, 2023

Dates: November 9, 2022

Director of Training: John McGinnis



Certificate Number **51645 IR**

M & C Environmental Training

Asbestos Contractor/Supervisor Refresher Training Course

Gary Spelman

Has successfully completed the Asbestos Contractor/Supervisor Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., P.O. Box 6419, Concord, California Tel. # (510) 499 - 5646

Course Approval Number: CA-003-04

Location: Reno, Nevada

Expiration: November 8, 2023

Dates: November 8, 2022

Director of Training: John McGinnis



Certificate Number **51629 SR**

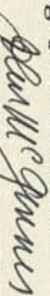
M & C Environmental Training

Asbestos Project Designer Refresher Training Course

Gary Speelman

Has successfully completed the Asbestos Project Designer Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., P.O. Box 6419, Concord, California Tel. # (510) 499 - 5646

Course Approval Number: CA-003-10

Location:	Reno, Nevada	Expiration: November 7, 2023
Dates:	November 7, 2022	
Director of Training: John McGinnis		

Certificate Number **51615 DR**

M & C Environmental Training

Asbestos Inspector Refresher Training Course

Gary Speelman

Has successfully completed the Asbestos Inspector Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., P.O. Box 6419, Concord, California Tel. # (510) 499 - 5646

Course Approval Number: CA-003-06

Location: Reno, Nevada

Expiration: November 9, 2023

Dates: November 9, 2022

Director of Training: John McGinnis



Certificate Number **51649 IR**

M & C Environmental Training

Asbestos Management Planner Refresher Training Course

Gary Speelman

Has successfully completed the Asbestos Management Planner Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., P.O. Box 6419, Concord, California Tel. # (510) 499 - 5646

Course Approval Number: CA-003-08

Location: Reno, Nevada

Expiration: November 9, 2023

Dates: November 9, 2022

Director of Training: John McGinnis



Certificate Number **51684 PR**

APPENDIX B

NESHAP ASBESTOS SURVEY SUMMARY TABLES

**NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101**

Building 3 (Decontamination)

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Exterior Stucco	N	NF-II	1,000 s.f.	All exterior walls	Good
2' x 2' Lay-In Ceiling Tiles	N	F	600 s.f.	Throughout building	Good
CMU Brick Waterproof Membrane – Clear/White Layer	N	NF-II	1,400 s.f.	All interior walls	Good
CMU Brick Waterproof Membrane – Grey Cementitious Layer	N	NF-II			
Roofing Materials	Assumed ACM	NF-I	Not Estimated	Roof	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

Building 4

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
12" x 12" Floor Tile – Grey	N	NF-I	5,000 s.f.	Throughout building	Good
Associated Yellow Mastic	N	NF-I			
2' x 2' Fissured Lay-In Ceiling Tile	N	F	2,500 s.f.	Treatment rooms, waiting areas, and support rooms	Good
Cove Base Mastic – Tan	N	NF-II	1,200 l.f.	Throughout building	Good
Fireproofing – Grey/Off-White	N	F	15,000 s.f.	Above lay-in ceiling tiles throughout	Good
Drywall	N	NF-II	13,000 s.f.	Throughout building	Good
Joint Compound	N	NF-II			
2' x 2' Square-Outlined Lay-In Ceiling Tile	N	F	5,000 s.f.	Treatment corridors	Good
12" x 12" Floor Tile – Blue	Assumed ACM	NF-I	24 s.f.	Sporadically throughout	Good
Associated Mastic	Assumed ACM	NF-I			
12" x 12" Floor Tile – Yellow	Assumed ACM	NF-I	24 s.f.	Sporadically throughout	Good
Associated Mastic	Assumed ACM	NF-I			
Roofing Materials	Assumed ACM	NF-I	Not Estimated	Roof	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

Building 5

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Drywall	N	NF-II	22,000 s.f.	Throughout building	Good
Joint Compound	N	NF-II			
Cove Base Mastic – Off-White	N	NF-II	2,400 l.f.	Throughout building	Good
Yellow Carpet Adhesive	N	NF-II	16,000 s.f.	Throughout building, except for restrooms and support closets	Good
2' x 2' Fissured Lay-In Ceiling Tile	N	F	20,000 s.f.	Throughout building	Good
HVAC Putty – White	N	NF-II	Not Estimated	Above ceiling tiles, throughout building	Good
Roofing Materials	Assumed ACM	NF-I	Not Estimated	Roof	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

**NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101**

Building 6

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
2' x 2' Lay-In Ceiling Tile	N	F	10,500 s.f.	Throughout clinic, except "wet areas"	Good
Drywall	N	NF-II	54,000 l.f.	Throughout clinic, all walls and some ceilings	Good
Joint Compound	N	NF-II			
Cove Base Mastic – White	N	NF-II	6,000 l.f.	On walls throughout clinic	Good
12" x 12" Floor Tile – Grey	N	NF-I	10,500 s.f.	Exam rooms, locker rooms, lounges, testing rooms, and restrooms	Good
Associated Yellow Mastic	N	NF-I			
Clear/Yellow Carpet Adhesive	N	NF-II	4,500 s.f.	All offices and waiting areas/rooms	Good
Exterior Stucco – Tan	N	NF-II	15,000 s.f.	All exterior walls	Good
Off-White Vinyl Sheet Flooring	Assumed ACM	Unknown	2,000 s.f.	All procedure rooms, support closets, and "wet areas"	Good
Roofing Materials	Assumed ACM	NF-I	Not Estimated	Roof	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

Blockhouse 5

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Drywall	N	NF-II	300 s.f.	Generator room	Good
Joint Compound	N	NF-II			
Cove Base Adhesive – Off-White	N	NF-II	10 l.f.	Generator room	Good
Roofing Materials	Assumed ACM	NF-I	Not Estimated	Roof	Good

Blockhouse 6

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Exterior Stucco	N	NF-II	2,000 s.f.	All exterior walls	Good
Fireproofing – Grey	N	F	100 s.f.	Ceiling throughout	Good
Roofing Materials	Assumed ACM	NF-I	Not Estimated	Roof	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

Blockhouse 10

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Duct Caulk – Grey	N	NF-II	5 s.f.	Generator 11	Good
Exterior Stucco	N	NF-II	3,200 s.f.	All exterior walls	Good
Fireproofing – Tan	N	F	200 s.f.	Ceiling throughout	Good
Roofing Materials	Assumed ACM	NF-I	Not Estimated	Roof	Good

Blockhouse 12

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Drywall	N	NF-II	3,000 s.f.	All interior walls	Good
Joint Compound/Texture	N	NF-II			
Exterior Stucco	N	NF-II	3,000 s.f.	All exterior walls	Good
Fireproofing	Assumed ACM	F	500 s.f.	Ceiling throughout	Good
Roofing Materials	Assumed ACM	NF-I	Not Estimated	Roof	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

Bridge (Corridor) Between Buildings 1 & 6 (Specialty Clinic)

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Drywall	N	NF-II	2,000 s.f.	Walls throughout corridor and riser room	Good
Joint Compound	N	NF-II			
2' x 2' Lay-In Ceiling Tile	N	F	2,000 s.f.	Full length of corridor	Good
Cove Base Adhesive – Cream	N	NF-II	200 l.f.	Walls throughout corridor and riser room	Good
12" x 12" Floor Tile - Grey	N	NF-I	800 s.f.	Full length of corridor and riser room	Good
Associated Yellow Mastic	N	NF-I			
Roofing Materials	Assumed ACM	NF-I	Not Estimated	Roof	Good

Corridor Between Building 1 & CLC

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Drywall	N	NF-II	800 s.f.	East and North wings	Good
Joint Compound	N	NF-II			
Stucco – Grey/White	N	NF-II	1,000 s.f.	Throughout	Good
Roofing Materials	Assumed ACM	NF-I	Not Estimated	Roof	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

**NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101**

Corridor Between Buildings 1 & 12

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Drywall	N	NF-II	1,700 s.f.	Walls throughout corridor	Good
Joint Compound	N	NF-II			
Cove Base Adhesive – Yellow	N	NF-II	170 l.f.	Walls throughout corridor	Good
12” x 12” Floor Tile – White	N	NF-I	800 s.f.	Full length of corridor	Good
Associated Yellow Mastic	N	NF-I			
2’ x 4’ Lay-In Ceiling Tile	N	F	850 s.f.	Full length of corridor	Good
12” x 12” Floor Tile – Green	Assumed ACM	NF-I	24 s.f.	Sporadic throughout corridor	Good
Associated Mastic	Assumed ACM	NF-I			
12” x 12” Floor Tile – Dark Grey	Assumed ACM	NF-I	36 s.f.	Sporadic throughout corridor	Good
Associated Mastic	Assumed ACM	NF-I			
Roofing Materials	Assumed ACM	NF-I	Not Estimated	Roof	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

1000/1010/1020/1030 Wilson Avenue

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Plaster (Base Coat)	N	NF-II	5,000 s.f.	All units, all walls	Good
Plaster (Finish Coat)	N	NF-II			
Skim Coat over Plaster	N	NF-II	5,000 s.f.	All units, all walls	Good
Ceramic Tile Window Sill	N	NF-I	50 s.f.	All units, all window sills	Good
Associated Grout	N	NF-I			
Mortar Associated with Ceramic Window Sill	N	F	50 s.f.	All units, all window sills	Good
Cove Base Adhesive – Yellow/Off-White	N	NF-II	100 s.f.	All units	Good
Ceramic Shower Tile	N	NF-II	32 s.f.	1000 and 1010's Bathrooms	Good
Mortar Associated with Ceramic Shower Tile	N	NF-II			
Heavy Knock-Down Wall Texture	N	NF-II	25 s.f.	1010's Kitchen	Good
Multi-Layer Vinyl Sheet Flooring and Associated Mastics	N	NF-I	200 s.f.	1010's Kitchen	Good
Multi-Layer Vinyl Sheet Flooring and Associated Mastics	N	NF-I	25 s.f.	1010's Bathroom	Good
FRP Mastic	N	NF-II	30 s.f.	1020's Kitchen	Good
Vinyl Sheet Flooring and Associated Mastic – Wood Grain	N	NF-I	100 s.f.	1020's Kitchen, top flooring layer	Good
Vinyl Sheet Flooring and Associated Mastic – Light Tan	N	NF-I	100 s.f.	1020's Kitchen, middle flooring layer	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

**NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101**

1000/1010/1020/1030 Wilson Avenue (Continued)

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Tan Floor Tile and Associated Mastic	N	NF-I	100 s.f.	1020's Kitchen, bottom flooring layer	Good
Ceramic Shower Tile	N	NF-II	16 s.f.	1020's Bathroom	Good
Associated Grout and Mortar	N	NF-II			
Ceramic Shower Tile	N	NF-II	16 s.f.	1030's Bathroom	Good
Associated Grout and Mortar	N	NF-II			
Transite Siding	P	NF-II	2,000 s.f.	Exterior walls, east side	Good
Exterior CMU Block	N	NF-II	10,000 s.f.	All exterior walls and walls between units	Good
Exterior CMU Mortar	N	NF-II	10,000 s.f.	All exterior walls and walls between units	Good
Exterior Brick	N	NF-II	2,000 s.f.	Exterior walls, front of building	Good
Exterior Brick Mortar	N	NF-II	2,000 s.f.	Exterior walls, front of building	Good
Driveway and Garage Concrete	N	NF-II	3,000 s.f.	All driveways and garages	Good
Roofing Shingles	N	NF-I	5,000 s.f.	Roofing throughout	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

530/530A East Taylor Street

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Drywall	N	NF-II	1,500 s.f.	Bedroom 1, 2 nd floor bathroom, bedroom 2 closet, 2 nd floor hallway, 1 st floor bathroom, and partial area kitchen	Good
Joint Compound	N	NF-II			
Knock-Down Wall Texture	N	NF-II			
Wall and Ceiling Plaster	N	NF-II	2,100 s.f.	Stairwell to 2 nd floor, family room, family room closet, 1 st floor bedroom, and partial area of kitchen	Good
Tan Floor Tile	N	NF-I	20 s.f.	2 nd Floor bathroom, top flooring layer	Good
Associated Yellow Mastic	N	NF-I			
Tan Vinyl Sheet Flooring	N	NF-II	20 s.f.	2 nd Floor Bathroom, bottom flooring layer	Good
Associated Yellow Mastic	N	NF-II			
Ceramic Tile	N	NF-II	20 s.f.	Kitchen counters	Good
Associated Grout, Mortar, and Caulk	N	NF-II			
Ceramic Tile	N	NF-II	110 s.f.	Kitchen floor	Good
Associated Grout	N	NF-II			
Ceramic Tile	N	NF-II	75 s.f.	1 st Floor bathroom	Good
Associated Grout, Mortar, and Thinset	N	NF-II			
Concrete	N	NF-II	1,640 s.f.	Front walkway and steps, basement walls and floor	Good
Exterior Brick	N	NF-II	2,200 s.f.	Chimney and exterior walls	Good
Exterior Brick Mortar	N	NF-II	2,200 s.f.	Chimney and exterior walls	Good
Roofing Shingles	N	NF-I	1,800 s.f.	Roofing throughout	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

524/526 East Taylor Street

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Drywall	N	NF-II	1,600 s.f.	Kitchen, family room, halls, hall bathroom, first floor bedrooms	Good
Joint Compound	N	NF-II			
Large Knock-Down Wall Texture	N	NF-II			
Drywall	N	NF-II	100 s.f.	Master bathroom	Good
Joint Compound	P	NF-II			
Smooth Wall Texture	P	NF-II			
HVAC Duct Wrap	P	F	100 l.f.; 25 s.f.	100 l.f. on basement ducts, 25 s.f. on boiler unit	Good
HVAC Duct Putty	N	NF-II	Not Estimated	Basement ducts	Good
Ceramic Floor Tile	N	NF-II	250 s.f.	Kitchen, hall bathroom, master bathroom Kitchen, hallway bathroom, upstairs bathroom	Good
Associated Mortar	N	NF-II			
Associated Grout	N	NF-II			
Exterior Brick	N	NF-II	4,000 s.f.	All exterior walls	Good
Associated Mortar	N	NF-II			
Roofing Shingle	N	NF-I	2,000 s.f.	Main house's roof	Good
Stipple Wall Texture	P	NF-II	100 s.f.	2 nd Floor bedroom wall, on wood	Good
Roofing Shingle	N	NF-I	50 s.f.	Shed's roof	Good
Concrete	N	NF-II	225 s.f.	Shed floor, back walkway	Good
Roofing Shingle	N	NF-I	1,200 s.f.	Rear (south side of lot) house's roof	Good
Drywall	N	NF-II	200 s.f.	Rear house's bathroom	Good
Wall Texture	N	NF-II			
Ceramic Tile	N	NF-II	1,000 s.f.	Throughout rear house	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

925 Locust Avenue

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Drywall	N	NF-II	1,000 s.f.	Dining room, family room, bedroom	Good
Heavy Knock-Down Wall Texture	N	NF-II			
Drywall	N	NF-II	1,000 s.f.	Family room	Good
Orange Peel Wall Texture	N	NF-II			
Drywall	N	NF-II	200 s.f.	Kitchen	Good
Smooth Wall Texture	N	NF-II			
Joint Compound	N	NF-II			
Drywall	N	NF-II	100 s.f.	Bathroom	Good
Heavy Knock-Down Texture	N	NF-II			
2" x 2" Ceramic Tile	N	NF-II	15 s.f.	Bathroom	Good
Associated Mortar	N	NF-II			
Ceramic Tile	N	NF-II	400 s.f.	Kitchen, dining room, bedroom	Good
Associated Mortar	N	NF-II			
Ceramic Tile	N	NF-II	200 s.f.	Family room	Good
Associated Grout	N	NF-II			
Transite Siding - Smooth	P	NF-II	100 s.f.	Exterior	Good
Transite Siding - Rough	P	NF-II	1,000 s.f.	Exterior	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

925 Locust Avenue (Continued)

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Siding Underlayment	N	NF-II	1,100 s.f.	Exterior, under transite	Good
Foundation Concrete	N	NF-II	900 s.f.	Foundation	Good
Sidewalk Concrete	N	NF-II	200 s.f.	Sidewalk	Good
Roofing Shingle	N	NF-I	1,000 s.f.	House's roof	Good
Roofing Shingle	N	NF-I	25 s.f.	Shed's roof	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

633 East Taylor Street

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Plaster Finish Coat	N	NF-II	3,000 s.f.	All walls and ceilings on the main floor	Good
Plaster Base Coat	N	NF-II			
Drywall	N	NF-II	60 s.f.	Basement bedroom's closet	Good
Joint Compound	N	NF-II			
HVAC Duct Joint Tape	P	F	100 l.f.	Basement's ducts	Good
9" x 9" Floor Tile – Green	P	NF-I	32 s.f.	Basement	Good
Associated Mastic	P	NF-I			
9" x 9" Floor Tile – Light Tan	P	NF-I	120 s.f.	Basement bedroom	Good
Associated Mastic	N	NF-I			
9" x 9" Floor Tile – Medium Tan	N	NF-I	10 s.f.	Basement bedroom closet	Good
Associated Mastic	N	NF-I			
Vinyl Sheet Flooring – Various Colors	N	NF-II	30 s.f.	Shelf in the closet under the basement stairs, pantry	Good
Associated Adhesive	N	NF-II			
Brown Quarry Floor Tile	N	NF-II	9 s.f.	Front entry	Good
Associated Mortar	N	NF-II			
Associated Grout	N	NF-II			
Ceramic Tile – White/Brown	N	NF-II	25 s.f.	Bathroom floor tiles	Good
Associated Mortar	N	NF-II			
Associated Grout	N	NF-II			
Ceramic Tile – White/Brown	N	NF-II	20 s.f.	Bathroom wall tiles	Good
Associated Mortar	N	NF-II			
Associated Grout	N	NF-II			

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

633 East Taylor Street (Continued)

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Ceramic Tile – Red	N	NF-II	25 s.f.	Kitchen countertops	Good
Associated Mortar	N	NF-II			
Associated Grout	N	NF-II			
Ceramic Tile – Brown	N	NF-II	100 s.f.	Kitchen flooring	Good
Associated Mortar	N	NF-II			
Associated Grout	N	NF-II			
Chimney Brick	N	NF-II	200 s.f.	Chimney and fireplace mantle	Good
Associated Mortar	N	NF-II			
Concrete	N	NF-II	800 s.f.	Basement foundation; walls, floors	Good
Concrete	N	NF-II	400 s.f.	Exterior steps and patio	Good
Leveling Compound	N	NF-II	1 s.f.	Back stoop	Good
Roofing Shingles	N	NF-I	1,300 s.f.	Roof	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

635 East Taylor Street

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Textured Plaster Finish Coat	N	NF-II	950 s.f.	Family room, hallway, dining room	Good
Textured Plaster Base Coat	N	NF-II			
Smooth Plaster Finish Coat	N	NF-II	900 s.f.	Bedrooms, bathroom	Good
Smooth Plaster Base Coat	N	NF-II			
Drywall	N	NF-II	400 s.f.	Basement ceiling	Good
Joint Compound	N	NF-II			
Drywall	N	NF-II	100 s.f.	Basement bathroom	Good
Joint Compound	N	NF-II			
Splotchy Texture	N	NF-II			
Drywall	N	NF-II	400 s.f.	Basement kitchen	Good
Joint Compound	N	NF-II			
Orange Peel Texture	N	NF-II			
Drywall	N	NF-II	600 s.f.	Basement den	Good
Joint Compound	P	NF-II			
Heavy Knock-Down Texture	N	NF-II			
Off-White Vinyl Sheet Flooring	N	NF-II	75 s.f.	Top layer of dining room flooring	Good
Associated Adhesive	N	NF-II			
Grey Floor Tile	P	NF-I	75 s.f.	Bottom layer of dining room flooring	Good
Associated Mastic	P	NF-I			
Yellow Vinyl Sheet Flooring	N	NF-II	50 s.f.	Stairwell/laundry room	Good
Associated Leveling Compound	N	NF-II			

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

635 East Taylor Street (Continued)

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Tan Vinyl Sheet Flooring	N	NF-II	100 s.f.	Basement kitchen	Good
Associated Adhesive	N	NF-II			
Cream Vinyl Sheet Flooring	N	NF-II	15 s.f.	Basement bathroom by toilet	Good
Cove Base Adhesive	N	NF-II	5 s.f.	Basement den	Good
2' x 4' Lay-In Ceiling Tile	N	F	100 s.f.	Basement kitchen	Good
Ceramic Tile	N	NF-II	30 s.f.	Kitchen floor	Good
Associated Mortar	N	NF-II			
Associated Grout	N	NF-II			
Residual Black Mastic	P	NF-I			
White Ceramic Tile	N	NF-II	30 s.f.	Upper floor bathroom floor and shower surround	Good
Associated Mortar	N	NF-II			
Associated Grout	N	NF-II			
Ceramic Tile	N	NF-II	80 s.f.	Basement bathroom, tub surround	Good
Associated Mortar	N	NF-II			
Associated Grout	N	NF-II			
Residual Black Mastic	P	NF-I			
2" x 2" Ceramic Tile	N	NF-II	12 s.f.	Basement bathroom countertop	Good
Associated Mortar	N	NF-II			
Associated Grout	N	NF-II			
Roofing Shingles	N	NF-I	1,500 s.f.	Roof	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

NESHAP ASBESTOS SURVEY SUMMARY
IOANNIS A. LOUGARIS VA MEDICAL CENTER
RENO, NV
TTL PROJECT NO. 2289101

635A East Taylor Street

HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
Drywall	N	NF-II	500 s.f.	Front entry, bedroom 3, family room	Good
Heavy Orange Peel Texture/Joint Compound	N	NF-II			
Drywall	N	NF-II	2,000 s.f.	Kitchen, laundry room, family room, dining room, hall, master bathroom, hall bathroom, bedroom 1, and bedroom 2	Good
Orange Peel Texture/Joint Compound	N	NF-II			
Drywall	N	NF-II	1,500 s.f.	Ceilings throughout	Good
Heavy Knock-Down Texture/Joint Compound	N	NF-II			
Vinyl Sheet Flooring – Yellow Square Pattern	N	NF-II	200 s.f.	Entry, kitchen, laundry room, and hall bathroom	Good
Associated Adhesive	N	NF-II			
Roofing Shingles	N	NF-I	1,600 s.f.	Roof	Good

RESULTS:

P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:

F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Refer to report for a discussion of the areas surveyed and survey limitations for the project.

APPENDIX C

ASBESTOS ANALYTICAL REPORTS

Chain of Custody

– Bulk Asbestos –

Contact Information

Client Company: TTL Associates, Inc.
Office Address: 1915 N 12th Street
City, State, Zip: Toledo, OH 43604
Fax Number: _____
Email Address: hsingh@tlassoc.com

Project Number: 2289101
Project Name: Reno VAMC
Primary Contact: Harjot Singh
Office Phone: 419-214-5058
Cell Phone: _____

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: 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: 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: Non-Building Material*** (Dust, Wipe, Tape)
 - ☐ Soil or Vermiculite Analysis
 - ☐ CARB 435

Special 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: _____
☐ 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): L. Speelman/EICS Date: 11/08/22 Time: _____
 Received (Name / iATL): _____ Date: _____ Time: _____
 Sample Login (Name / iATL): _____ Date: _____ Time: _____
 Analysis(Name(s) / iATL): _____ Date: 11/22/22 Time: NOV 15 2022
 QA/QC Review (Name / iATL): _____ Date: _____ Time: _____
 Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____

Sample Log

—Bulk Asbestos—

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC
Building 3, Decontamination Wing

Sampling Date/Time: 11/3/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525034	Exterior, stucco	
2	7525035	Exterior, stucco	
3	7525036	Exterior stucco	
4	7525037	Exterior stucco	
5	7525038	Patient area 2x2 lay-in ceiling tile	
6	7525039	Staff area, 2x2 lay-in ceiling tile	
7	7525040	Patient area, CMU brick, water proof membrane	
8	7525041	Staff area, CMU brick water proof membrane	
9	7525042	Staff area, CMU brick, water proof membrane	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/22/2022
Report No.: 672672 - PLM
Project: Reno VAMC
Project No.: 2289101

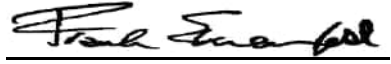
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525034 Client No.: 1	Analyst Observation: Grey Stucco Client Description: Stucco	Location: Exterior 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.: 7525035 Client No.: 2	Analyst Observation: Grey Stucco Client Description: Stucco	Location: Exterior 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.: 7525036 Client No.: 3	Analyst Observation: Grey Stucco Client Description: Stucco	Location: Exterior 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.: 7525037 Client No.: 4	Analyst Observation: Grey Stucco Client Description: Stucco	Location: Exterior 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.: 7525038 Client No.: 5	Analyst Observation: White/Tan/Off-White Ceiling Tile Client Description: 2x2 Lay-In Ceiling Tile	Location: Patient Area Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 1 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 89
Lab No.: 7525039 Client No.: 6	Analyst Observation: White/Tan/Off-White Ceiling Tile Client Description: 2x2 Lay-In Ceiling Tile	Location: Staff Area Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 1 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 89

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Christopher Riffe

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/22/2022
Report No.: 672672 - PLM
Project: Reno VAMC
Project No.: 2289101

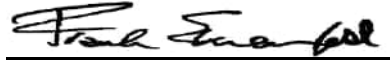
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525040 Client No.: 7	Analyst Observation: Clear/White Vapor Barrier Client Description: CMU Brick Waterproof Membrane	Location: Patient Area 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.: 7525040(L2) Client No.: 7	Analyst Observation: Grey Cementitious Client Description: CMU Brick Waterproof Membrane	Location: Patient Area 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.: 7525041 Client No.: 8	Analyst Observation: Clear/White Vapor Barrier Client Description: CMU Brick Waterproof Membrane	Location: Staff Area 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.: 7525041(L2) Client No.: 8	Analyst Observation: Grey Cementitious Client Description: CMU Brick Waterproof Membrane	Location: Staff Area 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.: 7525042 Client No.: 9	Analyst Observation: Clear/White Vapor Barrier Client Description: CMU Brick Waterproof Membrane	Location: Staff Area 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.: 7525042(L2) Client No.: 9	Analyst Observation: Grey Cementitious Client Description: CMU Brick Waterproof Membrane	Location: Staff Area 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

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Christopher Riffe

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/22/2022
Report No.: 672672 - PLM
Project: Reno VAMC
Project No.: 2289101

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/22/2022
Report No.: 672672 - PLM
Project: Reno VAMC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672672 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

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

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

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

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

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

– Bulk Asbestos –

Contact Information

Client Company: TTL Associates, Inc.

Office Address: 1915 N 12th Street

City, State, Zip: Toledo, OH 43604

Fax Number: _____

Email Address: hsingh@ttlassoc.com

Project Number: 2289101

Project Name: Reno VAMC

Primary Contact: Harjot Singh

Office Phone: 419-214-5058

Cell Phone: _____

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: 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: 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: Non-Building Material *** (Dust, Wipe, Tape)

- ☐ Soil or Vermiculite Analysis *
- ☐ CARB 435

Special 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: _____

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): L Speelman/EICS

Date: 11/08/22

Time: _____

Received (Name / iATL): _____

Date: _____

Time: _____

Sample Login (Name / iATL): _____

Date: _____

Time: NOV 15 2022

Analysis(Name(s) / iATL): MJL

Date: 11-21-22

Time: _____

QA/QC Review (Name / iATL): _____

Date: _____

Time: _____

Archived / Released: _____ QA/QC InterLAB Use: _____

Date: _____

Time: _____

Sample Log

—Bulk Asbestos—

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC
Building 4, Emergency Department

Sampling Date/Time: 11/3/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525491	J1742, Grey 12x12 floor tile, yellow adhesive	
2	7525492	J1741, Grey 12x12 floor tile, yellow adhesive	
3	7525493	J1730, 2x2 fissured lay-in ceiling tile	
4	7525494	J1738, 2x2 fissured lay-in	
5	7525495	J1742, cove base mastic	
6	7525496	J1711 waiting area above ceiling tiles, fireproofing	
7	7525497	J1002 above ceiling tile, fireproofing	
8	7525498	J1001 above ceiling tile, fireproofing	
9	7525499	J1003 above ceiling tiles, fireproofing	
10	7525500	Corridor at J1718 above ceiling tiles, fireproofing	
11	7525501	J1730 above ceiling tiles, fireproofing	
12	7525502	J1739, Smooth wall texture, drywall	
13	7525503	J1742, smooth wall texture, drywall	
14	7525504	J1730, smooth wall texture, drywall	
15	7525505	J1715, smooth wall texture, drywall	
16	7525506	J1001, smooth wall texture, drywall	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672693 - PLM
Project: Reno VMAC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525491	Analyst Observation: Lt Grey Floor Tile	Location: J1742
Client No.: 1	Client Description: Grey12x12 Floor Tile, Yellow Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525491(L2)	Analyst Observation: Yellow Mastic	Location: J1742
Client No.: 1	Client Description: Grey12x12 Floor Tile, Yellow Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Insufficient material provided to verify results.

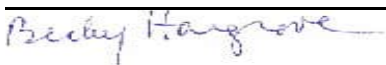
Lab No.: 7525492	Analyst Observation: Lt Grey Floor Tile	Location: J1741
Client No.: 2	Client Description: Grey12x12 Floor Tile, Yellow Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

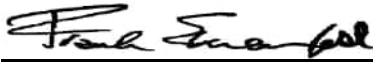
Lab No.: 7525492(L2)	Analyst Observation: Yellow Mastic	Location: J1741
Client No.: 2	Client Description: Grey12x12 Floor Tile, Yellow Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525493	Analyst Observation: Grey/White Ceiling Tile	Location: J1730
Client No.: 3	Client Description: 2x2 Fissured Lay-In	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	80 Cellulose	20

Lab No.: 7525494	Analyst Observation: Grey/White Ceiling Tile	Location: J1738
Client No.: 4	Client Description: 2x2 Fissured Lay-In	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	80 Cellulose	20

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672693 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525495
Client No.: 5

Analyst Observation: Tan Mastic
Client Description: Cove Base Mastic

Location: J1742
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525496
Client No.: 6

Analyst Observation: Grey Spray-On Fireproofing
Client Description: Fireproofing

Location: J1711 - Waiting Area Above
Ceiling Tiles
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
20 Cellulose

Percent Non-Fibrous Material:
80

Surfacing material contains less than 10% vermiculite.

Lab No.: 7525497
Client No.: 7

Analyst Observation: Off-White Spray-On Fireproofing
Client Description: Fireproofing

Location: J1002 Above Ceiling Tile
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
20 Cellulose

Percent Non-Fibrous Material:
80

Surfacing material contains less than 10% vermiculite.

Lab No.: 7525498
Client No.: 8

Analyst Observation: Grey Spray-On Fireproofing
Client Description: Fireproofing

Location: J1001 Above Ceiling Tile
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
20 Cellulose

Percent Non-Fibrous Material:
80

Surfacing material contains less than 10% vermiculite.

Sample received wet

Lab No.: 7525499
Client No.: 9

Analyst Observation: Off-White Spray-On Fireproofing
Client Description: Fireproofing

Location: J1003 Above Ceiling Tiles
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
20 Cellulose

Percent Non-Fibrous Material:
80

Surfacing material contains less than 10% vermiculite.

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


Date Received: 11/15/2022

Date Analyzed: 11/21/2022

Signature:

Analyst: Rebecca Hargrove

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672693 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525500
Client No.: 10

Analyst Observation: Grey Spray-On Fireproofing
Client Description: Fireproofing

Location: Corridor at J1718 Above Ceiling Tiles
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
20 Cellulose

Percent Non-Fibrous Material:
80

Surfacing material contains less than 10% vermiculite.
Sample received wet

Lab No.: 7525501
Client No.: 11

Analyst Observation: Grey Spray-On Fireproofing
Client Description: Fireproofing

Location: J1730 Above Ceiling Tiles
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
20 Cellulose

Percent Non-Fibrous Material:
80

Surfacing material contains less than 10% vermiculite.
Sample received wet

Lab No.: 7525502
Client No.: 12

Analyst Observation: White/Tan Drywall
Client Description: Smooth Wall Texture, Drywall

Location: J1739
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
50 Cellulose

Percent Non-Fibrous Material:
50

Lab No.: 7525502(L2)
Client No.: 12

Analyst Observation: Off-White Joint Compound
Client Description: Smooth Wall Texture, Drywall

Location: J1739
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525503
Client No.: 13

Analyst Observation: White/Tan Drywall
Client Description: Smooth Wall Texture, Drywall

Location: J1742
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
35 Cellulose

Percent Non-Fibrous Material:
65

Lab No.: 7525503(L2)
Client No.: 13

Analyst Observation: Off-White Joint Compound
Client Description: Smooth Wall Texture, Drywall

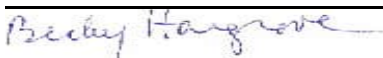
Location: J1742
Facility:

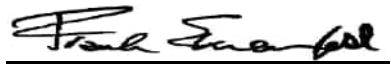
Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

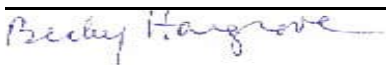
Report Date: 11/21/2022
Report No.: 672693 - PLM
Project: Reno VMAC
Project No.: 2289101

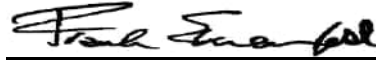
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525504 Client No.: 14	Analyst Observation: White/Tan Drywall Client Description: Smooth Wall Texture, Drywall	Location: J1730 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 35 Cellulose	<u>Percent Non-Fibrous Material:</u> 65
Lab No.: 7525504(L2) Client No.: 14	Analyst Observation: Off-White Joint Compound Client Description: Smooth Wall Texture, Drywall	Location: J1730 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.: 7525505 Client No.: 15	Analyst Observation: White/Tan Drywall Client Description: Smooth Wall Texture, Drywall	Location: J1715 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 25 Cellulose 2 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 73
Lab No.: 7525505(L2) Client No.: 15	Analyst Observation: Off-White Joint Compound Client Description: Smooth Wall Texture, Drywall	Location: J1715 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.: 7525506 Client No.: 16	Analyst Observation: White/Tan Drywall Client Description: Smooth Wall Texture, Drywall	Location: J1001 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 35 Cellulose	<u>Percent Non-Fibrous Material:</u> 65
Lab No.: 7525506(L2) Client No.: 16	Analyst Observation: Off-White Joint Compound Client Description: Smooth Wall Texture, Drywall	Location: J1001 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

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

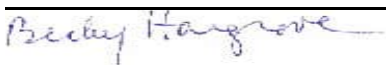
Client: TTL381

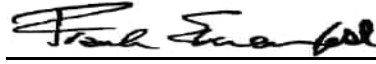
Report Date: 11/21/2022
Report No.: 672693 - PLM
Project: Reno VMAC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525507 Client No.: 17 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White/Tan Drywall Client Description: Smooth Wall Texture, Drywall <u>Percent Non-Asbestos Fibrous Material:</u> 35 Cellulose	Location: J1003 Facility: <u>Percent Non-Fibrous Material:</u> 65
Lab No.: 7525507(L2) Client No.: 17 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Joint Compound Client Description: Smooth Wall Texture, Drywall <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: J1003 Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525508 Client No.: 18 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White/Tan Drywall Client Description: Smooth Wall Texture, Drywall <u>Percent Non-Asbestos Fibrous Material:</u> 30 Cellulose 2 Fibrous Glass	Location: J1713 Facility: <u>Percent Non-Fibrous Material:</u> 68
Lab No.: 7525508(L2) Client No.: 18 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Joint Compound Client Description: Smooth Wall Texture, Drywall <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: J1713 Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525509 Client No.: 19 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey/White Ceiling Tile Client Description: Outlined 2x2 Lay-In Ceiling Tile <u>Percent Non-Asbestos Fibrous Material:</u> 50 Fibrous Glass 30 Cellulose	Location: J1001 Facility: <u>Percent Non-Fibrous Material:</u> 20
Lab No.: 7525510 Client No.: 20 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey/White Ceiling Tile Client Description: Outlined 2x2 Lay-In Ceiling Tile <u>Percent Non-Asbestos Fibrous Material:</u> 50 Fibrous Glass 30 Cellulose	Location: J1002 Corridor Facility: <u>Percent Non-Fibrous Material:</u> 20

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672693 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672693 - PLM
Project: Reno VMAC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672693 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

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

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

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

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

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

–Bulk Asbestos–

Contact Information

Client Company: TTL Associates, Inc.
Office Address: 1915 N 12th Street
City, State, Zip: Toledo, OH 43604
Fax Number: _____
Email Address: hsingh@ttlassoc.com

Project Number: 2289101
Project Name: Reno VAMC
Primary Contact: Harjot Singh
Office Phone: 419-214-5058
Cell Phone: _____

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: 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: 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: Non-Building Material*** (Dust, Wipe, Tape)
☐ Soil or Vermiculite Analysis
☐ CARB 435

Special 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: _____
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): L Speelman/EICS Date: 11/08/22 Time: _____
Received (Name / iATL): _____ Date: _____ Time: _____
Sample Login (Name / iATL): Harjot Singh Date: 11/17/22 Time: NOV 15 2022
Analysis(Name(s) / iATL): _____ Date: _____ Time: _____
QA/QC Review (Name / iATL): _____ Date: _____ Time: _____
Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____

iATL - By [Signature]

Sample Log

—Bulk Asbestos—

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC
Building 5, Mental Health

Sampling Date/Time: 11/3/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525448	K1782, smooth wall texture, drywall	
2	7525449	K1790, smooth wall texture, drywall	
3	7525450	K2034, smooth wall texture, drywall	
4	7525451	K2001, smooth wall texture, drywall	
5	7525452	K2001, smooth wall texture, drywall	
6	7525453	K2001, smooth wall texture, drywall	
7	7525454	K1004, smooth wall texture, drywall, cove base mastic	
8	7525455	K2034, cove base mastic	
9	7525456	K2001, yellow carpet mastic	
10	7525457	K1004, yellow carpet mastic	
11	7525458	K2001, 2x2 lay-in ceiling tile	
12	7525459	K1782, 2x2 lay-in ceiling tile	
13	7525460	K1001(above ceiling tile), HVAC putty	
14	7525461	K1001 (above ceiling tile), HVAC putty	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672690 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525448
Client No.: 1

Percent Asbestos:
None Detected

Analyst Observation: Pink Drywall
Client Description: Smooth Wall Texture, Drywall

Percent Non-Asbestos Fibrous Material:
2 Cellulose
1 Fibrous Glass

Location: K1782
Facility:

Percent Non-Fibrous Material:
97

Lab No.: 7525448(L2)
Client No.: 1

Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Smooth Wall Texture, Drywall

Percent Non-Asbestos Fibrous Material:
None Detected

Location: K1782
Facility:

Percent Non-Fibrous Material:
100

Lab No.: 7525449
Client No.: 2

Percent Asbestos:
None Detected

Analyst Observation: Pink Drywall
Client Description: Smooth Wall Texture, Drywall

Percent Non-Asbestos Fibrous Material:
2 Cellulose
1 Fibrous Glass

Location: K1790
Facility:

Percent Non-Fibrous Material:
97

Lab No.: 7525449(L2)
Client No.: 2

Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Smooth Wall Texture, Drywall

Percent Non-Asbestos Fibrous Material:
None Detected

Location: K1790
Facility:

Percent Non-Fibrous Material:
100

Lab No.: 7525450
Client No.: 3

Percent Asbestos:
None Detected

Analyst Observation: Grey Drywall
Client Description: Smooth Wall Texture, Drywall

Percent Non-Asbestos Fibrous Material:
1 Cellulose

Location: K2034
Facility:

Percent Non-Fibrous Material:
99

Lab No.: 7525450(L2)
Client No.: 3

Percent Asbestos:
None Detected


Analyst Observation: White Joint Compound
Client Description: Smooth Wall Texture, Drywall

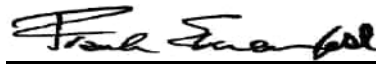
Percent Non-Asbestos Fibrous Material:
None Detected

Location: K2034
Facility:

Percent Non-Fibrous Material:
100

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: David Hayes

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672690 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525451
Client No.: 4

Percent Asbestos:
None Detected

Analyst Observation: Grey Drywall
Client Description: Smooth Wall Texture, Drywall

Percent Non-Asbestos Fibrous Material:
1 Cellulose

Location: K2001
Facility:
Percent Non-Fibrous Material:
99

Lab No.: 7525451(L2)
Client No.: 4

Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Smooth Wall Texture, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

Location: K2001
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7525452
Client No.: 5

Percent Asbestos:
None Detected

Analyst Observation: Grey Drywall
Client Description: Smooth Wall Texture, Drywall
Percent Non-Asbestos Fibrous Material:
1 Cellulose

Location: K2001
Facility:
Percent Non-Fibrous Material:
99

Lab No.: 7525452(L2)
Client No.: 5

Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound/Texture
Client Description: Smooth Wall Texture, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

Location: K2001
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7525453
Client No.: 6

Percent Asbestos:
None Detected

Analyst Observation: Grey Drywall
Client Description: Smooth Wall Texture, Drywall
Percent Non-Asbestos Fibrous Material:
1 Cellulose

Location: K2001
Facility:
Percent Non-Fibrous Material:
99


Lab No.: 7525453(L2)
Client No.: 6

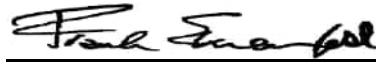
Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Smooth Wall Texture, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

Location: K2001
Facility:
Percent Non-Fibrous Material:
100

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: David Hayes

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381


Report Date: 11/17/2022
Report No.: 672690 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525454 Client No.: 7	Analyst Observation: Pink Drywall Client Description: Smooth Wall Texture, Drywall , Cove Base Mastic	Location: K1004 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 1 Cellulose 1 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 98
Lab No.: 7525454(L2) Client No.: 7	Analyst Observation: White Texture Client Description: Smooth Wall Texture, Drywall , Cove Base Mastic	Location: K1004 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.: 7525454(L3) Client No.: 7	Analyst Observation: Off-White Mastic Client Description: Smooth Wall Texture, Drywall , Cove Base Mastic	Location: K1004 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525455 Client No.: 8	Analyst Observation: Off-White Mastic Client Description: Cove Base Mastic	Location: K2034 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.: 7525456 Client No.: 9	Analyst Observation: Yellow Mastic Client Description: Yellow Carpet Mastic	Location: K2001 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.: 7525457 Client No.: 10	Analyst Observation: Yellow Mastic Client Description: Yellow Carpet Mastic	Location: K1004 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> Trace Cellulose	<u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: David Hayes

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672690 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525457(L2)	Analyst Observation: Grey/Tan Leveling Compound / Mastic	Location: K1004
Client No.: 10	Client Description: Yellow Carpet Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	20 Fibrous Glass 10 Cellulose	70

Layers not separable.

Lab No.: 7525458	Analyst Observation: White/Grey Ceiling Tile	Location: K2001
Client No.: 11	Client Description: 2x2 Lay-In Ceiling Tile	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	75 Cellulose 3 Fibrous Glass	22

Lab No.: 7525459	Analyst Observation: White/Grey Ceiling Tile	Location: K1782
Client No.: 12	Client Description: 2x2 Lay-In Ceiling Tile	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	75 Cellulose 2 Fibrous Glass	23


Lab No.: 7525460	Analyst Observation: White Mastic	Location: K1001 (Above Ceiling Tile)
Client No.: 13	Client Description: HVAC Putty	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

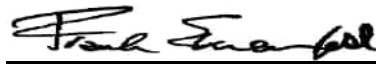
Different Material analyzed than listed on the sample log.

Lab No.: 7525461	Analyst Observation: White Mastic	Location: K1001 (Above Ceiling Tile)
Client No.: 14	Client Description: HVAC Putty	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Different Material analyzed than listed on the sample log.

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: David Hayes

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672690 - PLM
Project: Reno VAMC
Project No.: 2289101

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672690 - PLM
Project: Reno VAMC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672690 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

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

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

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

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Suspension" only.
*With advance notice and confirmation by the laboratory.
**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

-Bulk Asbestos -

Contact Information

Client Company: TTL Associates, Inc.
Office Address: 1915 N 12th Street
City, State, Zip: Toledo, OH 43604
Fax Number: _____
Email Address: hsingh@tlassoc.com

Project Number: 2289101
Project Name: Reno VAMC
Primary Contact: Harjot Singh
Office Phone: 419-214-5058
Cell Phone: _____

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: 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: 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: Non-Building Material*** (Dust, Wipe, Tape)
 ☐ Soil or Vermiculite Analysis*
 ☐ CARB 435

Special 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: _____ ☐ 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): L Speelman/EICS Date: 11/08/22 Time: _____
Received (Name / iATL): _____ Date: _____ Time: _____
Sample Login (Name / iATL): _____ Date: _____ Time: NOV 15 2022
Analysis(Name(s) / iATL): AS 11-16-22 Date: _____ Time: _____
QA/QC Review (Name / iATL): _____ Date: _____ Time: _____
Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____

Sample Log

—Bulk Asbestos—

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC
Building 6, Specialty Clinic

Sampling Date/Time: 11/3/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525462	F1500, 2x2 lay-in ceiling tile	
2	7525463	F2005, 2x2 lay-in ceiling tile	
3	7525464	F1500, Joint compound, drywall	
4	7525465	F1005, wall texture, joint compound drywall	
5	7525466	F2005, joint compound, cove base mastic	
6	7525467	F2005, Drywall	
7	7525468	F2528, Wall texture, joint compound drywall	
8	7525469	F1005, wall texture, joint compound drywall	
9	7525470	F2007, wall texture, joint compound drywall, cove base mastic	
10	7525471	F2005, white cove base mastic	
11	7525472	F2007, grey 12x12 floor tile, yellow adhesive	
12	7525473	F2005, grey 12x12 floor tile yellow adhesive	
13	7525474	F1500, Clear carpet mastic	
14	7525475	Exterior, Stucco	
15	7525476	Exterior, Stucco	
16	7525477	Exterior, Stucco	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/16/2022
Report No.: 672691 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525462
Client No.: 1

Percent Asbestos:
None Detected

Analyst Observation: White Ceiling Tile
Client Description: 2x2 Lay-In Ceiling Tile
Percent Non-Asbestos Fibrous Material:
60 Cellulose
30 Fibrous Glass

Location: F1500
Facility:
Percent Non-Fibrous Material:
10

Lab No.: 7525463
Client No.: 2

Percent Asbestos:
None Detected

Analyst Observation: White Ceiling Tile
Client Description: 2x2 Lay-In Ceiling Tile
Percent Non-Asbestos Fibrous Material:
60 Cellulose
30 Fibrous Glass

Location: F2005
Facility:
Percent Non-Fibrous Material:
10

Lab No.: 7525464
Client No.: 3

Percent Asbestos:
None Detected

Analyst Observation: White Drywall
Client Description: Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
5 Cellulose

Location: F1500
Facility:
Percent Non-Fibrous Material:
95

Lab No.: 7525464(L2)
Client No.: 3

Percent Asbestos:
None Detected

Analyst Observation: White/Tan Joint Compound
Client Description: Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

Location: F1500
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7525465
Client No.: 4

Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Wall Texture, Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

Location: F1005
Facility:
Percent Non-Fibrous Material:
100

No Drywall Present.


Lab No.: 7525465(L2)
Client No.: 4

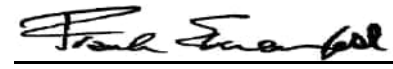
Percent Asbestos:
None Detected

Analyst Observation: White Texture
Client Description: Wall Texture, Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

Location: F1005
Facility:
Percent Non-Fibrous Material:
100

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

Date Received: 11/15/2022
Date Analyzed: 11/16/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/16/2022
Report No.: 672691 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525466	Analyst Observation: Off-White Mastic	Location: F2005
Client No.: 5	Client Description: Joint Compound, Cove Base Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525466(L2)	Analyst Observation: White Joint Compound	Location: F2005
Client No.: 5	Client Description: Joint Compound, Cove Base Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525467	Analyst Observation: White Drywall	Location: F2005
Client No.: 6	Client Description: Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	5 Cellulose	95


Note: No joint compound present

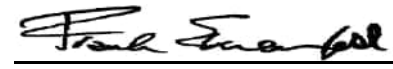
Lab No.: 7525468	Analyst Observation: White Drywall	Location: F2528
Client No.: 7	Client Description: Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	5 Cellulose	95

Lab No.: 7525468(L2)	Analyst Observation: White Joint Compound	Location: F2528
Client No.: 7	Client Description: Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525468(L3)	Analyst Observation: White Texture	Location: F2528
Client No.: 7	Client Description: Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/16/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/16/2022
Report No.: 672691 - PLM
Project: Reno VMAC
Project No.: 2289101

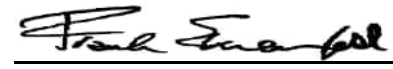
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525469 Client No.: 8	Analyst Observation: White Drywall Client Description: Wall Texture, Joint Compound, Drywall	Location: F1005 Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7525469(L2) Client No.: 8	Analyst Observation: White Joint Compound Client Description: Wall Texture, Joint Compound, Drywall	Location: F1005 Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525469(L3) Client No.: 8	Analyst Observation: White Texture Client Description: Wall Texture, Joint Compound, Drywall	Location: F1005 Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525470 Client No.: 9	Analyst Observation: White Drywall Client Description: Wall Texture, Joint Compound, Drywall, Cove Base Mastic	Location: F2007 Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7525470(L2) Client No.: 9	Analyst Observation: White Joint Compound Client Description: Wall Texture, Joint Compound, Drywall, Cove Base Mastic	Location: F2007 Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525470(L3) Client No.: 9	Analyst Observation: Grey Texture Client Description: Wall Texture, Joint Compound, Drywall, Cove Base Mastic	Location: F2007 Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 11/15/2022
Date Analyzed: 11/16/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381

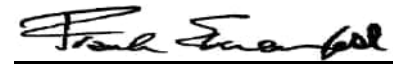
Report Date: 11/16/2022
Report No.: 672691 - PLM
Project: Reno VMAC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525470(L4) Client No.: 9	Analyst Observation: Off-White Mastic Client Description: Wall Texture, Joint Compound, Drywall, Cove Base Mastic	Location: F2007 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.: 7525471 Client No.: 10	Analyst Observation: White Mastic Client Description: White Cove Base Mastic	Location: F2005 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.: 7525471(L2) Client No.: 10	Analyst Observation: White Joint Compound Client Description: White Cove Base Mastic	Location: F2005 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.: 7525472 Client No.: 11	Analyst Observation: Grey Floor Tile Client Description: Grey 12x12 Floor Tile, Yellow Adhesive	Location: F2007 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.: 7525472(L2) Client No.: 11	Analyst Observation: Yellow Adhesive Client Description: Grey 12x12 Floor Tile, Yellow Adhesive	Location: F2007 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.: 7525473 Client No.: 12	Analyst Observation: Grey Floor Tile Client Description: Grey 12x12 Floor Tile, Yellow Adhesive	Location: F2005 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

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

Date Received: 11/15/2022
Date Analyzed: 11/16/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/16/2022
Report No.: 672691 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525473(L2)	Analyst Observation: Yellow Mastic	Location: F2005
Client No.: 12	Client Description: Grey 12x12 Floor Tile, Yellow Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525474	Analyst Observation: Clear Mastic	Location: F1500
Client No.: 13	Client Description: Clear Carpet Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525475	Analyst Observation: Tan Stucco	Location: Exterior
Client No.: 14	Client Description: Stucco	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

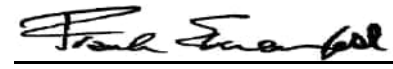
Lab No.: 7525475(L2)	Analyst Observation: Grey Cementitious	Location: Exterior
Client No.: 14	Client Description: Stucco	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	5 Cellulose	95

Lab No.: 7525476	Analyst Observation: Tan Stucco	Location: Exterior
Client No.: 15	Client Description: Stucco	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525476(L2)	Analyst Observation: Grey Cementitious	Location: Exterior
Client No.: 15	Client Description: Stucco	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	5 Cellulose	95

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

Date Received: 11/15/2022
Date Analyzed: 11/16/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381

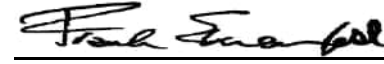
Report Date: 11/16/2022
Report No.: 672691 - PLM
Project: Reno VMAC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525477 Client No.: 16 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Stucco Client Description: Stucco <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Exterior Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525477(L2) Client No.: 16 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey Cementitious Client Description: Stucco <u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	Location: Exterior Facility: <u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7525478 Client No.: 17 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Stucco Client Description: Stucco <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Exterior Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525478(L2) Client No.: 17 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey Cementitious Client Description: Stucco <u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	Location: Exterior Facility: <u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7525479 Client No.: 18 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Stucco Client Description: Stucco <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Exterior Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525479(L2) Client No.: 18 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey Cementitious Client Description: Stucco <u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	Location: Exterior Facility: <u>Percent Non-Fibrous Material:</u> 95

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

Date Received: 11/15/2022
Date Analyzed: 11/16/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/16/2022
Report No.: 672691 - PLM
Project: Reno VMAC
Project No.: 2289101

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/16/2022
Report No.: 672691 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/16/2022
Report No.: 672691 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

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

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

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

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

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

–Bulk Asbestos–

Contact Information

Client Company: TTL Associates, Inc.
Office Address: 1915 N 12th Street
City, State, Zip: Toledo, OH 43604
Fax Number: _____
Email Address: hsingh@tlassoc.com

Project Number: 2289101
Project Name: Reno VAMC
Primary Contact: Harjot Singh
Office Phone: 419-214-5058
Cell Phone: _____

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:

* 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: _____
☐ 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): L Speelman/EICS Date: 11/08/22 Time: _____
 Received (Name / iATL): _____ Date: _____ Time: _____
 Sample Login (Name / iATL): _____ Date: _____ Time: _____
 Analysis(Name(s) / iATL): David Moyer Date: 11/22/22 Time: NOV 15 2022
 QA/QC Review (Name / iATL): _____ Date: _____ Time: _____
 Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____

RECEIVED

Sample Log

–Bulk Asbestos –

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

Blockhouse #12 ← 5
(LS)

Sampling Date/Time: 11/3/22

Blackhouse #5

[illegible]

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672676 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525076
Client No.: 1

Percent Asbestos:
None Detected

Analyst Observation: Pink Drywall
Client Description: Joint Compound, Drywall

Percent Non-Asbestos Fibrous Material:
1 Fibrous Glass

Location: Generator Room
Facility:
Percent Non-Fibrous Material:
99

Lab No.: 7525076(L2)
Client No.: 1

Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Generator Room
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7525077
Client No.: 2

Percent Asbestos:
None Detected

Analyst Observation: Pink Drywall
Client Description: Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
2 Fibrous Glass

Location: Generator Room
Facility:
Percent Non-Fibrous Material:
98

Lab No.: 7525077(L2)
Client No.: 2

Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Generator Room
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7525078
Client No.: 3

Percent Asbestos:
None Detected

Analyst Observation: Pink Drywall
Client Description: Joint Compound, Drywall, Cove Mastic
Percent Non-Asbestos Fibrous Material:
1 Fibrous Glass

Location: Generator Room
Facility:
Percent Non-Fibrous Material:
99


Lab No.: 7525078(L2)
Client No.: 3

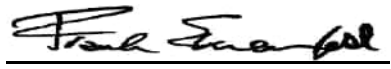
Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Joint Compound, Drywall, Cove Mastic
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Generator Room
Facility:
Percent Non-Fibrous Material:
100

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: David Hayes

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672676 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525079

Client No.: 4

Percent Asbestos:

None Detected

Analyst Observation: Off-White Mastic

Client Description: Cove Base Mastic

Percent Non-Asbestos Fibrous Material:

None Detected

Location: Generator Room

Facility:

Percent Non-Fibrous Material:

100

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

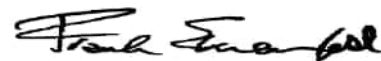
Date Received: 11/15/2022

Date Analyzed: 11/22/2022

Signature:

Analyst: David Hayes

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672676 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672676 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672676 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

2)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

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

3)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

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

4)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

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

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

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

*With advance notice and confirmation by the laboratory.

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

– Bulk Asbestos –

Contact Information

Client Company: TTL Associates, Inc.
Office Address: 1915 N 12th Street
City, State, Zip: Toledo, OH 43604
Fax Number: _____
Email Address: hsingh@tlassoc.com

Project Number: 2289101
Project Name: Reno VAMC
Primary Contact: Harjot Singh
Office Phone: 419-214-5058
Cell Phone: _____

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: 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: 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: Non-Building Material *** (Dust, Wipe, Tape)
 - ☐ Soil or Vermiculite Analysis *
 - ☐ CARB 435

Special 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: _____ ☐ 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>L Speelman/EICS</u>	Date: <u>11/08/22</u>	Time: RECEIVED
Received (Name / iATL): _____	Date: _____	Time: _____
Sample Login (Name / iATL): _____	Date: _____	Time: _____
Analysis(Name(s) / iATL): <u>AS 11.11.22</u>	Date: _____	Time: _____
QA/QC Review (Name / iATL): _____	Date: _____	Time: <u>NOV 15 2022</u>
Archived / Released: _____ QA/QC InterLAB Use: _____	Date: _____	Time: _____

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672674 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525062
Client No.: 1

Analyst Observation: Grey Stucco
Client Description: Stucco

Location: Exterior
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525063
Client No.: 2

Analyst Observation: Tan/Grey Stucco
Client Description: Stucco

Location: Exterior
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525064
Client No.: 3

Analyst Observation: Tan/Grey Stucco
Client Description: Stucco

Location: Exterior
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525065
Client No.: 4

Analyst Observation: Grey Insulation
Client Description: Fireproofing

Location: Interior
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
50 Cellulose

Percent Non-Fibrous Material:
50

This sample contains vermiculite mineral. It is not vermiculite attic insulation, but may be considered for possible future analysis. See attached.

Lab No.: 7525066
Client No.: 5

Analyst Observation: Grey Insulation
Client Description: Fireproofing

Location: Interior
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
50 Cellulose

Percent Non-Fibrous Material:
50

This sample contains vermiculite mineral. It is not vermiculite attic insulation, but may be considered for possible future analysis. See attached.

Lab No.: 7525067
Client No.: 6

Analyst Observation: Grey Insulation
Client Description: Fireproofing

Location: Interior
Facility:


Percent Asbestos:
None Detected

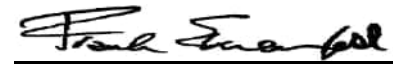
Percent Non-Asbestos Fibrous Material:
50 Cellulose

Percent Non-Fibrous Material:
50

This sample contains vermiculite mineral. It is not vermiculite attic insulation, but may be considered for possible future analysis. See attached.

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/22/2022
Report No.: 672674 - PLM
Project: Reno VAMC
Project No.: 2289101

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/22/2022
Report No.: 672674 - PLM
Project: Reno VAMC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672674 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

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

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

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

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

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Sample Log

–Bulk Asbestos –

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC
Blockhouse #10

Sampling Date/Time: 11/3/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525068	Generator 11, duct caulk	
2	7525069	Generator 11, duct caulk	
3	7525070	Exterior, stucco	
4	7525071	Exterior, stucco	
5	7525072	Exterior, stucco	
6	7525073	Generator room, fireproofing	
7	7525074	Generator room, fireproofing	
8	7525075	Generator room, fireproofing	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672675 - PLM
Project: Reno VAMC
Project No.: 2289101


Client: TTL381

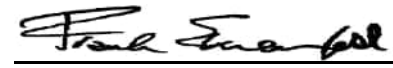
PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525068 Client No.: 1 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey Caulk Client Description: Duct Caulk <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Generator 11 Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525069 Client No.: 2 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey Caulk Client Description: Duct Caulk <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Generator 11 Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525070 Client No.: 3 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey Stucco Client Description: Stucco <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Exterior Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525071 Client No.: 4 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Stucco Client Description: Stucco <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Exterior Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525072 Client No.: 5 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Stucco Client Description: Stucco <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Exterior Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525073 Client No.: 6 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Insulation Client Description: Fireproofing <u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose	Location: Generator Room Facility: <u>Percent Non-Fibrous Material:</u> 50

This sample contains vermiculite mineral. It is not vermiculite attic insulation, but may be considered for possible future analysis. See attached.

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672675 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525074
Client No.: 7

Analyst Observation: Tan Insulation
Client Description: Fireproofing

Location: Generator Room
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
50 Cellulose

Percent Non-Fibrous Material:
50

This sample contains vermiculite mineral. It is not vermiculite attic insulation, but may be considered for possible future analysis. See attached.

Lab No.: 7525075
Client No.: 8

Analyst Observation: Tan Insulation
Client Description: Fireproofing

Location: Generator Room
Facility:


Percent Asbestos:
None Detected

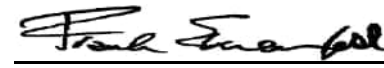
Percent Non-Asbestos Fibrous Material:
50 Cellulose

Percent Non-Fibrous Material:
50

This sample contains vermiculite mineral. It is not vermiculite attic insulation, but may be considered for possible future analysis. See attached.

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/22/2022
Report No.: 672675 - PLM
Project: Reno VAMC
Project No.: 2289101

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/22/2022
Report No.: 672675 - PLM
Project: Reno VAMC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672675 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

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

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

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

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

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

– Bulk Asbestos –

Contact Information

Client Company: TTL Associates, Inc.
Office Address: 1915 N 12th Street
City, State, Zip: Toledo, OH 43604
Fax Number: _____
Email Address: hsingh@tlassoc.com

Project Number: 2289101
Project Name: Reno VAMC
Primary Contact: Harjot Singh
Office Phone: 419-214-5058
Cell Phone: _____

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: 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: 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: Non-Building Material*** (Dust, Wipe, Tape)
 - ☐ Soil or Vermiculite Analysis*
 - ☐ CARB 435

Special 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: _____ ☐ 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): _____ Date: _____ Time: _____

Received (Name / iATL): _____ Date: _____ Time: _____

Sample Login (Name / iATL): _____ Date: _____ Time: NOV 15 2002

Analysis(Name(s) / iATL): 03/11/21/22 Date: _____ Time: _____

QA/QC Review (Name / iATL): _____ Date: _____ Time: _____

Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____

iATL - By WU

Sample Log

–Bulk Asbestos–

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC
Block House #12

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525511	Interior, Lg knock down wall texture, joint compound, drywall	
2	7525512	Interior, Lg knock down wall texture joint compound, drywall	
3	7525513	Interior, Lg knock down wall texture joint compound, drywall	
4	7525514	Interior, Lg knock down wall texture joint compound, drywall	
5	7525515	Interior, Lg knock down wall texture joint compound, drywall	
6	7525516	Exterior, stucco	
7	7525517	Exterior, stucco	
8	7525518	Exterior, stucco	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672694 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525511
Client No.: 1

Analyst Observation: White Drywall
Client Description: Lg Knock Down Wall Texture, Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
5 Cellulose

Location: Interior
Facility:
Percent Non-Fibrous Material:
95

Percent Asbestos:
None Detected

Lab No.: 7525511(L2)
Client No.: 1

Analyst Observation: White Joint Compound
Client Description: Lg Knock Down Wall Texture, Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Interior
Facility:
Percent Non-Fibrous Material:
100

Percent Asbestos:
None Detected

Lab No.: 7525511(L3)
Client No.: 1

Analyst Observation: White Texture
Client Description: Lg Knock Down Wall Texture, Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Interior
Facility:
Percent Non-Fibrous Material:
100

Percent Asbestos:
None Detected

Lab No.: 7525512
Client No.: 2

Analyst Observation: White Drywall
Client Description: Lg Knock Down Wall Texture, Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
5 Cellulose

Location: Interior
Facility:
Percent Non-Fibrous Material:
95

Percent Asbestos:
None Detected

Lab No.: 7525512(L2)
Client No.: 2

Analyst Observation: White Joint Compound
Client Description: Lg Knock Down Wall Texture, Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Interior
Facility:
Percent Non-Fibrous Material:
100

Percent Asbestos:
None Detected


Lab No.: 7525512(L3)
Client No.: 2

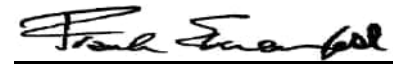
Analyst Observation: White Texture
Client Description: Lg Knock Down Wall Texture, Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Interior
Facility:
Percent Non-Fibrous Material:
100

Percent Asbestos:
None Detected

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672694 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525513
Client No.: 3
Analyst Observation: White Drywall
Client Description: Lg Knock Down Wall Texture, Joint Compound, Drywall
Location: Interior
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
5 Cellulose
Percent Non-Fibrous Material:
95

Note: No joint compound present

Lab No.: 7525513(L2)
Client No.: 3
Analyst Observation: White Texture
Client Description: Lg Knock Down Wall Texture, Joint Compound, Drywall
Location: Interior
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
100

Lab No.: 7525514
Client No.: 4
Analyst Observation: White Drywall
Client Description: Lg Knock Down Wall Texture, Joint Compound, Drywall
Location: Interior
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
5 Cellulose
Percent Non-Fibrous Material:
95


Note: No joint compound present

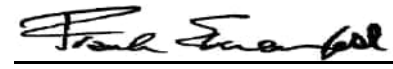
Lab No.: 7525514(L2)
Client No.: 4
Analyst Observation: White Texture
Client Description: Lg Knock Down Wall Texture, Joint Compound, Drywall
Location: Interior
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
100

Lab No.: 7525515
Client No.: 5
Analyst Observation: White Drywall
Client Description: Lg Knock Down Wall Texture, Joint Compound, Drywall
Location: Interior
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
5 Cellulose
Percent Non-Fibrous Material:
95

Note: No joint compound present

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381

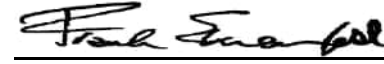
Report Date: 11/21/2022
Report No.: 672694 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525515(L2) Client No.: 5	Analyst Observation: White Texture Client Description: Lg Knock Down Wall Texture, Joint Compound, Drywall	Location: Interior 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.: 7525516 Client No.: 6	Analyst Observation: Tan Stucco Client Description: Stucco	Location: Exterior 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.: 7525516(L2) Client No.: 6	Analyst Observation: Grey Cementitious Client Description: Stucco	Location: Exterior 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.: 7525517 Client No.: 7	Analyst Observation: Tan Stucco Client Description: Stucco	Location: Exterior 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.: 7525517(L2) Client No.: 7	Analyst Observation: Grey Cementitious Client Description: Stucco	Location: Exterior 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.: 7525518 Client No.: 8	Analyst Observation: Tan Stucco Client Description: Stucco	Location: Exterior 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

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672694 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525518(L2)
Client No.: 8

Percent Asbestos:
None Detected


Analyst Observation: Grey Cementitious
Client Description: Stucco

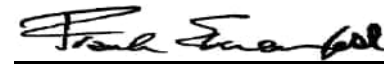
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Exterior
Facility:

Percent Non-Fibrous Material:
100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672694 - PLM
Project: Reno VAMC
Project No.: 2289101

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672694 - PLM
Project: Reno VAMC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672694 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

2)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

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

3)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

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

4)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

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

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

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

*With advance notice and confirmation by the laboratory.

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

–Bulk Asbestos–

Contact Information

Client Company: TTL Associates, Inc.

Office Address: 1915 N 12th Street

City, State, Zip: Toledo, OH 43604

Fax Number: _____

Email Address: hsingh@ttlassoc.com

Project Number: 2289101

Project Name: Reno VAMC

Primary Contact: Harjot Singh

Office Phone: 419-214-5058

Cell Phone: _____

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: 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: 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: Non-Building Material *** (Dust, Wipe, Tape)

- ☐ Soil or Vermiculite Analysis
- ☐ CARB 435

Special 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: _____

☐ 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): L. Speelman/EICS

Date: 11/08/22

Time: _____

Received (Name / iATL): _____

Date: _____

Time: _____

Sample Login (Name / iATL): _____

Date: _____

Time: NOV 15 2022

Analysis(Name(s) / iATL): AS null

Date: _____

Time: _____

QA/QC Review (Name / iATL): _____

Date: _____

Time: _____

Archived / Released: _____ QA/QC InterLAB Use: _____

Date: _____

Time: _____

Sample Log

–Bulk Asbestos–

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC
Building 1 Bridge to Specialty Clinic

Sampling Date/Time: 11/3/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525480	Corridor, joint compound, drywall	
2	7525481	Fire riser room, joint compound drywall	
3	7525482	Corridor, joint compound, drywall	
4	7525483	Corridor, 2x2 lay-in ceiling tile	
5	7525484	Corridor, 2x2 lay-in ceiling tile	
6	7525485	Corridor, cream cove base mastic	
7	7525486	Fire rise room, cream cove base mastic	
8	7525487	Corridor, 12x12 tan floor tile	
9	7525488	Fire riser room, 12x12 tan floor tile	
10	7525489	Fire riser room, yellow adhesive under floor tile	
11	7525490	Corridor, yellow adhesive under floor tile	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672692 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525480 Client No.: 1	Analyst Observation: White Drywall Client Description: Joint Compound, Drywall	Location: Corridor Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 95

Lab No.: 7525480(L2) Client No.: 1	Analyst Observation: White Joint Compound Client Description: Joint Compound, Drywall	Location: Corridor 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.: 7525481 Client No.: 2	Analyst Observation: White Drywall Client Description: Joint Compound, Drywall	Location: Fire Riser Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 95


Note: No joint compound present

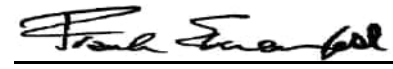
Lab No.: 7525482 Client No.: 3	Analyst Observation: White Drywall Client Description: Joint Compound, Drywall	Location: Corridor Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 95

Lab No.: 7525482(L2) Client No.: 3	Analyst Observation: White Joint Compound Client Description: Joint Compound, Drywall	Location: Corridor 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.: 7525483 Client No.: 4	Analyst Observation: White Ceiling Tile Client Description: 2x2 Lay-In Ceiling Tile	Location: Corridor Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 60 Cellulose 30 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 10

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672692 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525484 Client No.: 5	Analyst Observation: White Ceiling Tile Client Description: 2x2 Lay-In Ceiling Tile	Location: Corridor Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 60 Cellulose 30 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 10

Lab No.: 7525485 Client No.: 6	Analyst Observation: Cream Mastic Client Description: Cream Cove Base Mastic	Location: Corridor 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.: 7525486 Client No.: 7	Analyst Observation: Cream Mastic Client Description: Cream Cove Base Mastic	Location: Fire Rise Room 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.: 7525487 Client No.: 8	Analyst Observation: Tan Floor Tile Client Description: 12x12 Tan Floor Tile	Location: Corridor 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


Note: No mastic present

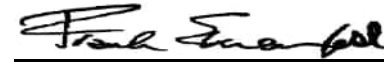
Lab No.: 7525488 Client No.: 9	Analyst Observation: Tan Floor Tile Client Description: 12x12 Tan Floor Tile	Location: Fire Rise Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525489 Client No.: 10	Analyst Observation: Yellow Adhesive Client Description: Yellow Adhesive Under Floor Tile	Location: Fire Rise Room 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

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022

Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672692 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525490

Client No.: 11

Percent Asbestos:

None Detected

Analyst Observation: Yellow Adhesive

Client Description: Yellow Adhesive Under Floor Tile

Percent Non-Asbestos Fibrous Material:

None Detected

Location: Corridor

Facility:

Percent Non-Fibrous Material:

100

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

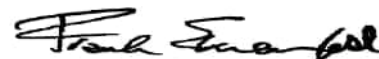
Date Received: 11/15/2022

Date Analyzed: 11/21/2022

Signature:

Analyst: Aidan Becker

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672692 - PLM
Project: Reno VAMC
Project No.: 2289101

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672692 - PLM
Project: Reno VAMC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672692 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

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

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

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

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

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

–Bulk Asbestos–

Contact Information

Client Company: TTL Associates, Inc.
Office Address: 1915 N 12th Street
City, State, Zip: Toledo, OH 43604
Fax Number: _____
Email Address: hsingh@tlassoc.com

Project Number: 2289101
Project Name: Reno VAMC
Primary Contact: Harjot Singh
Office Phone: 419-214-5058
Cell Phone: _____

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: 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: 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: Non-Building Material *** (Dust, Wipe, Tape)
 - ☐ Soil or Vermiculite Analysis *
 - ☐ CARB 435

Special 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: _____

☐ 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): L. Speelman/EICS Date: 11/08/22 Time: _____
Received (Name / iATL): _____ Date: _____ Time: _____
Sample Login (Name / iATL): _____ Date: _____ Time: NOV 15 2022
Analysis (Name(s) / iATL): AS 11/17/22 Date: _____ Time: _____
QA/QC Review (Name / iATL): _____ Date: _____ Time: _____
Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____

Sample Log

–Bulk Asbestos –

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC
I - CLC Corridor

Sampling Date/Time: 11/3/22

[illegible]

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672688 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525433	Analyst Observation: White Joint Compound	Location: East Corridor
Client No.: 1	Client Description: Smooth Wall Texture, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

No Drywall Present.

Lab No.: 7525434	Analyst Observation: White Drywall	Location: East Corridor
Client No.: 2	Client Description: Smooth Wall Texture, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	5 Cellulose	95


Lab No.: 7525434(L2)	Analyst Observation: White Joint Compound	Location: East Corridor
Client No.: 2	Client Description: Smooth Wall Texture, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

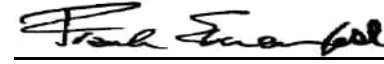
Lab No.: 7525435	Analyst Observation: White Drywall	Location: Center Corridor
Client No.: 3	Client Description: Smooth Wall Texture, Joint Compound	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	5 Cellulose	95

Lab No.: 7525435(L2)	Analyst Observation: White Joint Compound	Location: Center Corridor
Client No.: 3	Client Description: Smooth Wall Texture, Joint Compound	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525436	Analyst Observation: White Stucco	Location: West Corridor
Client No.: 4	Client Description: Stucco	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672688 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525436(L2)	Analyst Observation: Grey Stucco	Location: West Corridor
Client No.: 4	Client Description: Stucco	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525437	Analyst Observation: White Stucco	Location: East Corridor
Client No.: 5	Client Description: Stucco	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

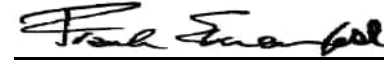
Lab No.: 7525437(L2)	Analyst Observation: Grey Stucco	Location: East Corridor
Client No.: 5	Client Description: Stucco	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525438	Analyst Observation: White Stucco	Location: Center Corridor
Client No.: 6	Client Description: Stucco	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525438(L2)	Analyst Observation: Grey Stucco	Location: Center Corridor
Client No.: 6	Client Description: Stucco	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672688 - PLM
Project: Reno VAMC
Project No.: 2289101

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672688 - PLM
Project: Reno VAMC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672688 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

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

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

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

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

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

– Bulk Asbestos –

Contact Information

Client Company: TTL Associates, Inc.
Office Address: 1915 N 12th Street
City, State, Zip: Toledo, OH 43604
Fax Number: _____
Email Address: hsingh@tlassoc.com

Project Number: 2289101
Project Name: Reno VAMC
Primary Contact: Harjot Singh
Office Phone: 419-214-5058
Cell Phone: _____

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:

* 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: _____

☐ 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): L Speelman/EICS Date: 11/08/22 Time: _____
Received (Name / iATL): _____ Date: _____ Time: _____
Sample Login (Name / iATL): _____ Date: _____ Time: 15:00
Analysis(Name(s) / iATL): 05111722 Date: _____ Time: _____
QA/QC Review (Name / iATL): _____ Date: _____ Time: _____
Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____

Sample Log

–Bulk Asbestos –

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC
CC 1-12 Corridor

Sampling Date/Time: 11/3/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525439	Corridor, drywall	
2	7525440	Corridor, drywall	
3	7525441	Corridor, smooth wall texture	
4	7525442	South end, smooth wall texture yellow cove base mastic	
5	7525443	Corridor, yellow cove base mastic	
6	7525444	South end, white 12x12 floor tile, yellow adhesive	
7	7525445	Corridor, white 12x12 floor tile yellow adhesive	
8	7525446	Corridor, 2x4 lay-in ceiling tile	
9	7525447	Corridor, 2x4 lay-in ceiling tile	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381

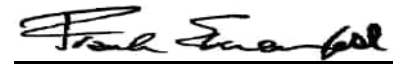
Report Date: 11/17/2022
Report No.: 672689 - PLM
Project: Reno VMAC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525439 Client No.: 1 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Drywall Client Description: Drywall <u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	Location: Corridor Facility: <u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7525439(L2) Client No.: 1 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Joint Compound Client Description: Drywall <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Corridor Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525440 Client No.: 2 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Drywall Client Description: Drywall <u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	Location: Corridor Facility: <u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7525441 Client No.: 3 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Joint Compound Client Description: Smooth Wall Texture <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Corridor Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525442 Client No.: 4 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Joint Compound Client Description: Smooth Wall Texture Yellow Cove Base Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: South End Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525442(L2) Client No.: 4 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Yellow Mastic Client Description: Smooth Wall Texture Yellow Cove Base Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: South End Facility: <u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381

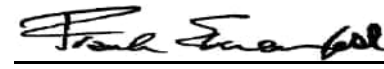
Report Date: 11/17/2022
Report No.: 672689 - PLM
Project: Reno VMAC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525443 Client No.: 5	Analyst Observation: Yellow Mastic Client Description: Yellow Cove Base Mastic	Location: Corridor 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.: 7525444 Client No.: 6	Analyst Observation: White Floor Tile Client Description: White 12x12 Floor Tile, Yellow Adhesive	Location: South End 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.: 7525444(L2) Client No.: 6	Analyst Observation: Yellow Mastic Client Description: White 12x12 Floor Tile, Yellow Adhesive	Location: South End 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.: 7525445 Client No.: 7	Analyst Observation: White Floor Tile Client Description: White 12x12 Floor Tile, Yellow Adhesive	Location: Corridor 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.: 7525445(L2) Client No.: 7	Analyst Observation: Yellow Mastic Client Description: White 12x12 Floor Tile, Yellow Adhesive	Location: Corridor 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.: 7525446 Client No.: 8	Analyst Observation: White Ceiling Tile Client Description: 2x4 Lay-In Ceiling Tile	Location: Corridor Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 60 Cellulose 20 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 20

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672689 - PLM
Project: Reno VMAC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525447

Client No.: 9

Percent Asbestos:

None Detected

Analyst Observation: White Ceiling Tile

Client Description: 2x4 Lay-In Ceiling Tile

Percent Non-Asbestos Fibrous Material:

60 Cellulose

20 Fibrous Glass

Location: Corridor

Facility:

Percent Non-Fibrous Material:

20

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

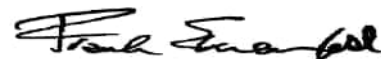
Date Received: 11/15/2022

Date Analyzed: 11/17/2022

Signature:

Analyst: Aidan Becker

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672689 - PLM
Project: Reno VMAC
Project No.: 2289101

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672689 - PLM
Project: Reno VMAC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672689 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

2)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

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

3)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

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

4)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

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

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

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

*With advance notice and confirmation by the laboratory.

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

—Bulk Asbestos—

Contact Information

Client Company: TTL Associates, Inc.

Office Address: 1915 N 12th Street

City, State, Zip: Toledo, OH 43604

Fax Number: _____

Email Address: hsingh@tlassoc.com

Project Number: 2289101

Project Name: Reno VAMC

Primary Contact: Harjot Singh

Office Phone: 419-214-5058

Cell Phone: _____

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: 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

Special Instructions:

- ☐ 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: Non-Building Material*** (Dust, Wipe, Tape)
 - ☐ Soil or Vermiculite Analysis*
 - ☐ CARB 435

* 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: _____

- 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): _____

Received (Name / iATL): _____

Sample Login (Name / iATL): _____

Analysis(Name(s) / iATL): LSP

QA/QC Review (Name / iATL): _____

Archived / Released: _____ QA/QC InterLAB Use: _____

Date: _____

Date: _____

Date: _____

Date: 11-21-02

Date: _____

Date: _____

Time: _____

Time: _____

Time: _____

Time: NOV 15

Time: _____

Time: _____

RECEIVED

Sample Log

—Bulk Asbestos—

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

1000-1040 Wilson Ave, Reno

Sampling Date/Time: 11/4/22

1030 (LS)

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525162	1000-Hall, wall plaster	
2	7525163	1000-Family room, wall plaster	
3	7525164	1020-Top of stairwell, wall plaster	
4	7525165	1020-stairwell, wall plaster	
5	7525166	1020-stairwell, wall plaster	
6	7525167	1030-Family room, wall plaster	
7	7525168	1030-Hall closet, wall plaster	
8	7525169	1000-Kitchen skim coat over plaster	
9	7525170	1030-Kitchen skim coat over plaster	
10	7525171	1030-Kithcen, skim coat over plaster	
11	7525172	1000-Family room, ceramic tile window sill	
12	7525173	1020-Family room, ceramic tile window sill	
13	7525174	1030-Family room, ceramic tile window sill	
14	7525175	1000-Family room windowsill mortar	
15	7525176	1020-Family room windowsill mortar	
16	7525177	1030-Family room windowsill mortar	

Sample Log

—Bulk Asbestos—

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

1000-1030 Wilson Ave, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
17	7525178	1010-Kitchen, cove base mastic	
18	7525179	1020-Kitchen, Cove base mastic	
19	7525180	1020-Kitchen, cove base mastic	
20	7525181	1000-shower tile, mortar	
21	7525182	1000-shower tile, mortar	
22	7525183	1000-shower tile, mortar	
23	7525184	1010-Kitchen, heavy knock down wall texture, plaster	
24	7525185	1010-Kitchen, heavy knock down wall texture, plaster	
25	7525186	1010-Kitchen, heavy knock down wall texture, drywall	
26	7525187	1010-Kitchen, sheet vinyl flooring, adhesive	
27	7525188	1010-Kitchen, sheet vinyl flooring, adhesive	
28	7525189	1010-Kitchen, sheet vinyl flooring, adhesive	
29	7525190	1010-Bathroom, sheet vinyl flooring, adhesive	
30	7525191	1010-Bathroom, sheet vinyl flooring, adhesive	
31	7525192	1010-Bathroom, sheet vinyl flooring, adhesive	
32	7525193	1020-Kitchen, FRP mastic	

Sample Log

—Bulk Asbestos—

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

1000-1030 Wilson Ave, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
33	7525194	1020-Kitchen, FRP mastic	
34	7525195	1020-Kitchen, FRP mastic	
35	7525196	1020-Kitchen, top layer "wood" sheet vinyl flooring	
36	7525197	1020-Kitchen, top layer "wood" sheet vinyl flooring	
37	7525198	1020-Kitchen, top layer "wood" sheet vinyl flooring	
38	7525199	1020-Kitchen, middle layer sheet vinyl flooring, adhesive	
39	7525200	1020-Kitchen, middle layer sheet vinyl flooring, adhesive	
40	7525201	1020-Kitchen, middle layer sheet vinyl flooring, adhesive	
41	7525202	1020-Kitchen, bottom layer floor tile, adhesive	
42	7525203	1020-Kitchen, bottom layer floor tile, adhesive	
43	7525204	1020-Kitchen, bottom layer floor tile, adhesive	
44	7525205	1020-Shower tile, mortar, grout	
45	7525206	1020-Shower tile, mortar, grout	
46	7525207	1020-Shower tile, mortar, grout	
47	7525208	1030-Shower tile, mortar, grout	
48	7525209	1030-Shower tile, mortar, grout	

Sample Log

–Bulk Asbestos–

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

1000-1030 Wilson Ave, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
49	7525210	1030-Shower tile, mortar, grout	
50	7525211	Exterior, E. side, Transite siding	
51	7525212	Exterior, E. side, Transite siding	
52	7525213	Exterior, E. side, Transite siding	
53	7525214	Exterior, CMU brick	
54	7525215	Exterior, CMU brick	
55	7525216	Exterior, CMU brick	
56	7525217	Exterior, CMU mortar	
57	7525218	Exterior, CMU mortar	
58	7525219	Exterior, CMU mortar	
59	7525220	1020-Exterior brick	
60	7525221	1000-Exterior brick	
61	7525222	1030-Exterior brick	
62	7525223	1000-Exterior brick mortar	
63	7525224	1020-Exterior brick mortar	
64	7525225	1030-Exterior brick mortar	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525162	Analyst Observation: Tan Plaster	Location: 1000- Hall Wall
Client No.: 1	Client Description: Wall Plaster	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525162(L2)	Analyst Observation: White Plaster	Location: 1000- Hall Wall
Client No.: 1	Client Description: Wall Plaster	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525163	Analyst Observation: White Plaster	Location: 1000- Family Room
Client No.: 2	Client Description: Wall Plaster	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

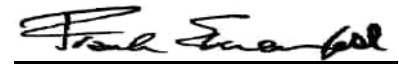
Lab No.: 7525163(L2)	Analyst Observation: Tan Plaster	Location: 1000- Family Room
Client No.: 2	Client Description: Wall Plaster	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525164	Analyst Observation: Tan Plaster	Location: 1020- Top Of Stairwell
Client No.: 3	Client Description: Wall Plaster	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525164(L2)	Analyst Observation: White Plaster	Location: 1020- Top Of Stairwell
Client No.: 3	Client Description: Wall Plaster	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525165 Client No.: 4	Analyst Observation: Tan Plaster Client Description: Wall Plaster	Location: 1020- Stairwell 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.: 7525165(L2) Client No.: 4	Analyst Observation: White Plaster Client Description: Wall Plaster	Location: 1020- Stairwell 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.: 7525166 Client No.: 5	Analyst Observation: Tan Plaster Client Description: Wall Plaster	Location: 1020- Stairwell 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

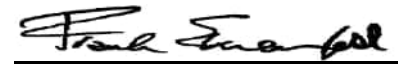
Lab No.: 7525166(L2) Client No.: 5	Analyst Observation: White Plaster Client Description: Wall Plaster	Location: 1020- Stairwell Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525167 Client No.: 6	Analyst Observation: White Plaster Client Description: Wall Plaster	Location: 1030- Family Room 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.: 7525167(L2) Client No.: 6	Analyst Observation: Tan Plaster Client Description: Wall Plaster	Location: 1030- Family Room 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

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381

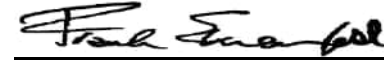
Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525168 Client No.: 7	Analyst Observation: Tan Plaster Client Description: Wall Plaster	Location: 1030- Hall Closet 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.: 7525168(L2) Client No.: 7	Analyst Observation: White Plaster Client Description: Wall Plaster	Location: 1030- Hall Closet 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.: 7525169 Client No.: 8	Analyst Observation: White Plaster Client Description: Skim Coat Over Plaster	Location: 1000- Kitchen 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.: 7525169(L2) Client No.: 8	Analyst Observation: Off-White Plaster Client Description: Skim Coat Over Plaster	Location: 1000- Kitchen 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.: 7525170 Client No.: 9	Analyst Observation: White Joint Compound/Texture Client Description: Skim Coat Over Plaster	Location: 1030- Kitchen 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.: 7525170(L2) Client No.: 9	Analyst Observation: White Tape Client Description: Skim Coat Over Plaster	Location: 1030- Kitchen Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 100 Cellulose	<u>Percent Non-Fibrous Material:</u> None Detected

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

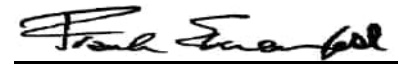
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525170(L3) Client No.: 9	Analyst Observation: White Plaster Client Description: Skim Coat Over Plaster	Location: 1030- Kitchen Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525170(L4) Client No.: 9	Analyst Observation: Off-White Plaster Client Description: Skim Coat Over Plaster	Location: 1030- Kitchen Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525171 Client No.: 10	Analyst Observation: White Joint Compound/Texture Client Description: Skim Coat Over Plaster	Location: 1030- Kitchen Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525171(L2) Client No.: 10	Analyst Observation: White Tape Client Description: Skim Coat Over Plaster	Location: 1030- Kitchen Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 100 Cellulose	<u>Percent Non-Fibrous Material:</u> None Detected
Lab No.: 7525171(L3) Client No.: 10	Analyst Observation: White Plaster Client Description: Skim Coat Over Plaster	Location: 1030- Kitchen Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525171(L4) Client No.: 10	Analyst Observation: Off-White Plaster Client Description: Skim Coat Over Plaster	Location: 1030- Kitchen Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525172	Analyst Observation: Tan/White Ceramic	Location: 1000- Family Room
Client No.: 11	Client Description: Ceramic Tile Window Sill	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525172(L2)	Analyst Observation: White Grout	Location: 1000- Family Room
Client No.: 11	Client Description: Ceramic Tile Window Sill	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525173	Analyst Observation: Tan/White Ceramic	Location: 1020- Family Room
Client No.: 12	Client Description: Ceramic Tile Window Sill	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

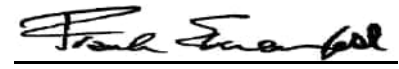
Lab No.: 7525173(L2)	Analyst Observation: White Grout	Location: 1020- Family Room
Client No.: 12	Client Description: Ceramic Tile Window Sill	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525174	Analyst Observation: Tan/White Ceramic	Location: 1030- Family Room
Client No.: 13	Client Description: Ceramic Tile Window Sill	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525174(L2)	Analyst Observation: White Grout	Location: 1030- Family Room
Client No.: 13	Client Description: Ceramic Tile Window Sill	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525175 Client No.: 14	Analyst Observation: Grey/White Mortar Client Description: Window Sill Mortar	Location: 1000- Family Room 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.: 7525176 Client No.: 15	Analyst Observation: Grey/White Mortar Client Description: Window Sill Mortar	Location: 1020- Family Room 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.: 7525177 Client No.: 16	Analyst Observation: Grey/White Mortar Client Description: Window Sill Mortar	Location: 1030- Family Room 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.: 7525178 Client No.: 17	Analyst Observation: Yellow Mastic Client Description: Cove Base Mastic	Location: 1010- Kitchen 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.: 7525179 Client No.: 18	Analyst Observation: Off-White/Yellow Mastic Client Description: Cove Base Mastic	Location: 1020- Kitchen 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.: 7525180 Client No.: 19	Analyst Observation: Off-White Cove Base Client Description: Cove Base Mastic	Location: 1020- Kitchen 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

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525180(L2)	Analyst Observation: Off-White Mastic	Location: 1020- Kitchen
Client No.: 19	Client Description: Cove Base Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525181	Analyst Observation: Off-White/Brown Ceramic	Location: 1000
Client No.: 20	Client Description: Shower Tile Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525181(L2)	Analyst Observation: Grey Mortar	Location: 1000
Client No.: 20	Client Description: Shower Tile Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

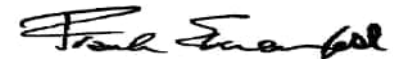
Lab No.: 7525182	Analyst Observation: Off-White/Brown Ceramic	Location: 1000
Client No.: 21	Client Description: Shower Tile Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525182(L2)	Analyst Observation: Grey Mortar	Location: 1000
Client No.: 21	Client Description: Shower Tile Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525183	Analyst Observation: Off-White/Brown Ceramic	Location: 1000
Client No.: 22	Client Description: Shower Tile Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525183(L2)	Analyst Observation: Grey Mortar	Location: 1000
Client No.: 22	Client Description: Shower Tile Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525184	Analyst Observation: Off-White Wall Texture	Location: 1010- Kitchen
Client No.: 23	Client Description: Heavy Knock Down Wall Texture, Plaster	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525184(L2)	Analyst Observation: White Plaster	Location: 1010- Kitchen
Client No.: 23	Client Description: Heavy Knock Down Wall Texture, Plaster	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

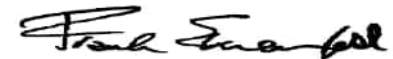
Lab No.: 7525185	Analyst Observation: Off-White Wall Texture	Location: 1010- Kitchen
Client No.: 24	Client Description: Heavy Knock Down Wall Texture, Plaster	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525185(L2)	Analyst Observation: White Plaster	Location: 1010- Kitchen
Client No.: 24	Client Description: Heavy Knock Down Wall Texture, Plaster	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525186	Analyst Observation: Off-White Wall Texture	Location: 1010- Kitchen
Client No.: 25	Client Description: Heavy Knock Down Wall Texture, Plaster	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525186(L2)	Analyst Observation: White Joint Compound/Texture	Location: 1010- Kitchen
Client No.: 25	Client Description: Heavy Knock Down Wall Texture, Plaster	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	5 Cellulose	95

Lab No.: 7525187	Analyst Observation: Grey Vinyl Sheet Flooring	Location: 1010- Kitchen
Client No.: 26	Client Description: Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525187(L2)	Analyst Observation: Clear Mastic	Location: 1010- Kitchen
Client No.: 26	Client Description: Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

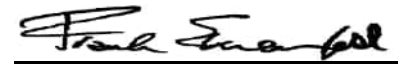
Lab No.: 7525187(L3)	Analyst Observation: White Vinyl Sheet Flooring	Location: 1010- Kitchen
Client No.: 26	Client Description: Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	15 Cellulose	85

Lab No.: 7525188	Analyst Observation: Grey Vinyl Sheet Flooring	Location: 1010- Kitchen
Client No.: 27	Client Description: Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525188(L2)	Analyst Observation: Clear Mastic	Location: 1010- Kitchen
Client No.: 27	Client Description: Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

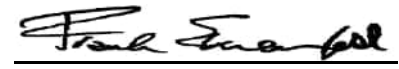
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525188(L3) Client No.: 27	Analyst Observation: White Vinyl Sheet Flooring Client Description: Sheet Vinyl Flooring, Adhesive	Location: 1010- Kitchen Facility:
<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.: 7525188(L4) Client No.: 27	Analyst Observation: White Mastic Client Description: Sheet Vinyl Flooring, Adhesive	Location: 1010- Kitchen 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.: 7525189 Client No.: 28	Analyst Observation: Grey Vinyl Sheet Flooring Client Description: Sheet Vinyl Flooring, Adhesive	Location: 1010- Kitchen 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.: 7525189(L2) Client No.: 28	Analyst Observation: Clear Mastic Client Description: Sheet Vinyl Flooring, Adhesive	Location: 1010- Kitchen 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.: 7525189(L3) Client No.: 28	Analyst Observation: White Vinyl Sheet Flooring Client Description: Sheet Vinyl Flooring, Adhesive	Location: 1010- Kitchen Facility:
<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.: 7525189(L4) Client No.: 28	Analyst Observation: White Mastic Client Description: Sheet Vinyl Flooring, Adhesive	Location: 1010- Kitchen 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

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381

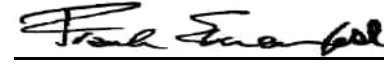
Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525190 Client No.: 29 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey/Black Vinyl Sheet Flooring Client Description: Sheet Vinyl Flooring, Adhesive <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 1010- Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525190(L2) Client No.: 29 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Clear Mastic Client Description: Sheet Vinyl Flooring, Adhesive <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 1010- Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525190(L3) Client No.: 29 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Vinyl Sheet Flooring Client Description: Sheet Vinyl Flooring, Adhesive <u>Percent Non-Asbestos Fibrous Material:</u> 10 Fibrous Glass 5 Synthetic	Location: 1010- Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 85
Lab No.: 7525190(L4) Client No.: 29 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Yellow Mastic Client Description: Sheet Vinyl Flooring, Adhesive <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 1010- Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525191 Client No.: 30 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey/Black Vinyl Sheet Flooring Client Description: Sheet Vinyl Flooring, Adhesive <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 1010- Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525191(L2) Client No.: 30 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Clear Mastic Client Description: Sheet Vinyl Flooring, Adhesive <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 1010- Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525191(L3)	Analyst Observation: Off-White Vinyl Sheet Flooring	Location: 1010- Bathroom
Client No.: 30	Client Description: Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	15 Fibrous Glass 5 Synthetic	80

Lab No.: 7525191(L4)	Analyst Observation: Yellow Mastic	Location: 1010- Bathroom
Client No.: 30	Client Description: Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525192	Analyst Observation: Grey/Black Vinyl Sheet Flooring	Location: 1010- Bathroom
Client No.: 31	Client Description: Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

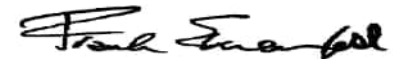
Lab No.: 7525192(L2)	Analyst Observation: Clear Mastic	Location: 1010- Bathroom
Client No.: 31	Client Description: Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525192(L3)	Analyst Observation: Off-White Vinyl Sheet Flooring	Location: 1010- Bathroom
Client No.: 31	Client Description: Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	15 Fibrous Glass 5 Synthetic	80

Lab No.: 7525192(L4)	Analyst Observation: Yellow Mastic	Location: 1010- Bathroom
Client No.: 31	Client Description: Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

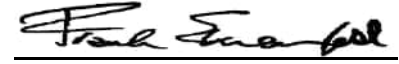
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525193 Client No.: 32	Analyst Observation: Yellow Mastic Client Description: FRP Mastic	Location: 1020- Kitchen 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.: 7525194 Client No.: 33	Analyst Observation: Yellow Mastic Client Description: FRP Mastic	Location: 1020- Kitchen 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.: 7525195 Client No.: 34	Analyst Observation: Yellow Mastic Client Description: FRP Mastic	Location: 1020- Kitchen 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.: 7525196 Client No.: 35	Analyst Observation: Brown/Grey Vinyl Sheet Flooring Client Description: Top Layer "Wood" Sheet Vinyl Flooring	Location: 1020- Kitchen Facility:
<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
Lab No.: 7525196(L2) Client No.: 35	Analyst Observation: Yellow Mastic Client Description: Top Layer "Wood" Sheet Vinyl Flooring	Location: 1020- Kitchen 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.: 7525197 Client No.: 36	Analyst Observation: Brown/Grey Vinyl Sheet Flooring Client Description: Top Layer "Wood" Sheet Vinyl Flooring	Location: 1020- Kitchen Facility:
<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

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525197(L2)	Analyst Observation: Yellow Mastic	Location: 1020- Kitchen
Client No.: 36	Client Description: Top Layer "Wood" Sheet Vinyl Flooring	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525198	Analyst Observation: Brown/Grey Vinyl Sheet Flooring	Location: 1020- Kitchen
Client No.: 37	Client Description: Top Layer "Wood" Sheet Vinyl Flooring	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	15 Cellulose 5 Fibrous Glass	80


Lab No.: 7525198(L2)	Analyst Observation: Yellow Mastic	Location: 1020- Kitchen
Client No.: 37	Client Description: Top Layer "Wood" Sheet Vinyl Flooring	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

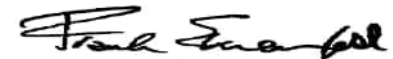
Lab No.: 7525199	Analyst Observation: Lt Tan Vinyl Sheet Flooring	Location: 1020- Kitchen
Client No.: 38	Client Description: Middle Layer Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525199(L2)	Analyst Observation: Yellow/Grey Mastic/Leveling Compound	Location: 1020- Kitchen
Client No.: 38	Client Description: Middle Layer Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	5 Cellulose	95

Lab No.: 7525200	Analyst Observation: Lt Tan Vinyl Sheet Flooring	Location: 1020- Kitchen
Client No.: 39	Client Description: Middle Layer Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525200(L2)	Analyst Observation: Yellow/Grey Mastic/Leveling Compound	Location: 1020- Kitchen
Client No.: 39	Client Description: Middle Layer Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Cellulose	<u>Percent Non-Fibrous Material:</u> 97

Lab No.: 7525201	Analyst Observation: Yellow/Grey Mastic/Leveling Compound	Location: 1020- Kitchen
Client No.: 40	Client Description: Middle Layer Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Cellulose	<u>Percent Non-Fibrous Material:</u> 97


Lab No.: 7525202	Analyst Observation: Tan Floor Tile	Location: 1020- Kitchen
Client No.: 41	Client Description: Bottom Layer Floor Tile, Adhesive	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.: 7525202(L2)	Analyst Observation: Clear/Yellow Mastic	Location: 1020- Kitchen
Client No.: 41	Client Description: Bottom Layer Floor Tile, Adhesive	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.: 7525203	Analyst Observation: Tan Floor Tile	Location: 1020- Kitchen
Client No.: 42	Client Description: Bottom Layer Floor Tile, Adhesive	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.: 7525203(L2)	Analyst Observation: Clear/Yellow Mastic	Location: 1020- Kitchen
Client No.: 42	Client Description: Bottom Layer Floor Tile, Adhesive	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

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

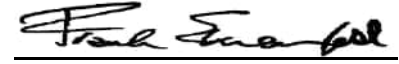
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525204 Client No.: 43	Analyst Observation: Tan Floor Tile Client Description: Bottom Layer Floor Tile, Adhesive	Location: 1020- Kitchen 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.: 7525204(L2) Client No.: 43	Analyst Observation: Clear/Yellow Mastic Client Description: Bottom Layer Floor Tile, Adhesive	Location: 1020- Kitchen 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.: 7525205 Client No.: 44	Analyst Observation: Green/White Ceramic Client Description: Shower Tile, Mortar, Grout	Location: 1020 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.: 7525205(L2) Client No.: 44	Analyst Observation: Lt Grey Mortar Client Description: Shower Tile, Mortar, Grout	Location: 1020 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.: 7525205(L3) Client No.: 44	Analyst Observation: Grey Grout Client Description: Shower Tile, Mortar, Grout	Location: 1020 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.: 7525206 Client No.: 45	Analyst Observation: Green/White Ceramic Client Description: Shower Tile, Mortar, Grout	Location: 1020 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

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525206(L2)	Analyst Observation: Lt Grey Mortar	Location: 1020
Client No.: 45	Client Description: Shower Tile, Mortar, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525206(L3)	Analyst Observation: Grey Grout	Location: 1020
Client No.: 45	Client Description: Shower Tile, Mortar, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525207	Analyst Observation: Green/White Ceramic	Location: 1020
Client No.: 46	Client Description: Shower Tile, Mortar, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

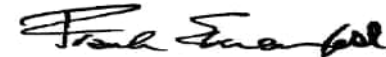
Lab No.: 7525207(L2)	Analyst Observation: Lt Grey Mortar	Location: 1020
Client No.: 46	Client Description: Shower Tile, Mortar, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525207(L3)	Analyst Observation: Grey Grout	Location: 1020
Client No.: 46	Client Description: Shower Tile, Mortar, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525208	Analyst Observation: Pink/White Ceramic	Location: 1030
Client No.: 47	Client Description: Shower Tile, Mortar, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525208(L2)
Client No.: 47

Percent Asbestos:
None Detected

Analyst Observation: Lt Grey Mortar
Client Description: Shower Tile, Mortar, Grout

Percent Non-Asbestos Fibrous Material:
None Detected

Location: 1030
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7525208(L3)
Client No.: 47

Percent Asbestos:
None Detected

Analyst Observation: Grey Grout
Client Description: Shower Tile, Mortar, Grout
Percent Non-Asbestos Fibrous Material:
None Detected

Location: 1030
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7525209
Client No.: 48

Percent Asbestos:
None Detected

Analyst Observation: Pink/White Ceramic
Client Description: Shower Tile, Mortar, Grout
Percent Non-Asbestos Fibrous Material:
None Detected

Location: 1030
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7525209(L2)
Client No.: 48

Percent Asbestos:
None Detected

Analyst Observation: Lt Grey Mortar
Client Description: Shower Tile, Mortar, Grout
Percent Non-Asbestos Fibrous Material:
None Detected

Location: 1030
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7525209(L3)
Client No.: 48

Percent Asbestos:
None Detected

Analyst Observation: Grey Grout
Client Description: Shower Tile, Mortar, Grout
Percent Non-Asbestos Fibrous Material:
None Detected

Location: 1030
Facility:
Percent Non-Fibrous Material:
100

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

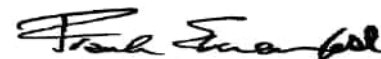
Date Received: 11/15/2022

Date Analyzed: 11/21/2022

Signature:

Analyst: Linda Price

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525210
Client No.: 49

Percent Asbestos:
None Detected

Analyst Observation: Pink Ceramic
Client Description: Shower Tile, Mortar, Grout

Percent Non-Asbestos Fibrous Material:
None Detected

Location: 1030
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7525210(L2)
Client No.: 49

Percent Asbestos:
None Detected

Analyst Observation: White Grout
Client Description: Shower Tile, Mortar, Grout

Percent Non-Asbestos Fibrous Material:
None Detected

Location: 1030
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7525210(L3)
Client No.: 49

Percent Asbestos:
None Detected

Analyst Observation: Dk Grey Mortar
Client Description: Shower Tile, Mortar, Grout

Percent Non-Asbestos Fibrous Material:
None Detected

Location: 1030
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7525210(L4)
Client No.: 49

Percent Asbestos:
None Detected

Analyst Observation: Off-White Cementitious
Client Description: Shower Tile, Mortar, Grout

Percent Non-Asbestos Fibrous Material:
None Detected

Location: 1030
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7525211
Client No.: 50

Percent Asbestos:
20 Chrysotile

Analyst Observation: Grey Cement Product
Client Description: Transite Siding

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Exterior, E. Side
Facility:
Percent Non-Fibrous Material:
80

Lab No.: 7525212
Client No.: 51


Percent Asbestos:
20 Chrysotile

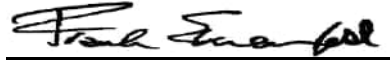
Analyst Observation: Grey Cement Product
Client Description: Transite Siding

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Exterior, E. Side
Facility:
Percent Non-Fibrous Material:
80

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Christopher Riffe

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525213 Client No.: 52	Analyst Observation: Grey Cement Product Client Description: Transite Siding	Location: Exterior, E. Side Facility:
<u>Percent Asbestos:</u> 20 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 80

Lab No.: 7525214 Client No.: 53	Analyst Observation: Grey Cement Block Client Description: CMU Brick	Location: Exterior Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100


Lab No.: 7525215 Client No.: 54	Analyst Observation: Grey Cement Block Client Description: CMU Brick	Location: Exterior Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

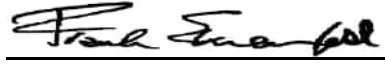
Lab No.: 7525216 Client No.: 55	Analyst Observation: Grey Cement Block Client Description: CMU Brick	Location: Exterior Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525217 Client No.: 56	Analyst Observation: Grey Mortar Client Description: CMU Brick	Location: Exterior Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525218 Client No.: 57	Analyst Observation: Grey Mortar Client Description: CMU Brick	Location: Exterior Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Christopher Riffe

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525219	Analyst Observation: Grey Mortar	Location: Exterior
Client No.: 58	Client Description: CMU Brick	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525220	Analyst Observation: Red Brick	Location: 1020- Exterior
Client No.: 59	Client Description: Brick	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525221	Analyst Observation: Red Brick	Location: 1000- Exterior
Client No.: 60	Client Description: Brick	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

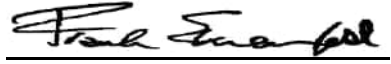
Lab No.: 7525222	Analyst Observation: Red Brick	Location: 1030- Exterior
Client No.: 61	Client Description: Brick	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525223	Analyst Observation: Grey Mortar	Location: 1000- Exterior
Client No.: 62	Client Description: Brick Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525224	Analyst Observation: Grey Mortar	Location: 1020- Exterior
Client No.: 63	Client Description: Brick Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Christopher Riffe

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

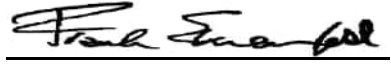
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525225 Client No.: 64	Analyst Observation: Grey Mortar Client Description: Brick Mortar	Location: 1030- Exterior 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.: 7525226 Client No.: 65	Analyst Observation: Grey Concrete Client Description: Concrete	Location: 1030- Driveway 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.: 7525227 Client No.: 66	Analyst Observation: Grey Concrete Client Description: Concrete	Location: 1020- Driveway 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.: 7525228 Client No.: 67	Analyst Observation: Grey Concrete Client Description: Concrete	Location: 1000- Driveway 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.: 7525229 Client No.: 68	Analyst Observation: Off-White/Black Shingle Client Description: Composition Shingle	Location: Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 2 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 98
Lab No.: 7525230 Client No.: 69	Analyst Observation: Off-White/Black Shingle Client Description: Composition Shingle	Location: Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 2 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 98

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Christopher Riffe

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525231

Client No.: 70

Percent Asbestos:

None Detected

Analyst Observation: Off-White/Black Shingle

Client Description: Composition Shingle

Percent Non-Asbestos Fibrous Material:

2 Fibrous Glass

Location: Roof

Facility:

Percent Non-Fibrous Material:

98

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

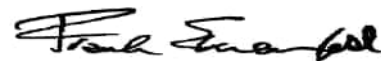
Date Received: 11/15/2022

Date Analyzed: 11/21/2022

Signature:

Analyst: Christopher Riffe

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672679 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

2)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

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

3)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

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

4)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

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

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

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

*With advance notice and confirmation by the laboratory.

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

–Bulk Asbestos–

Contact Information

Client Company: TTL Associates, Inc.
Office Address: 1915 N 12th Street
City, State, Zip: Toledo, OH 43604
Fax Number: _____
Email Address: hsingh@tlassoc.com

Project Number: 2289101
Project Name: Reno VAMC
Primary Contact: Harjot Singh
Office Phone: 419-214-5058
Cell Phone: _____

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: 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: 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: Non-Building Material *** (Dust, Wipe, Tape)
☐ Soil or Vermiculite Analysis *
☐ CARB 435

Special 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: _____
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): _____ Date: _____ Time: _____
Received (Name / iATL): _____ Date: _____ Time: _____
Sample Login (Name / iATL): _____ Date: _____ Time: _____
Analysis(Name(s) / iATL): OS 11.22.22 Date: _____ Time: NOV 15 2022
QA/QC Review (Name / iATL): _____ Date: _____ Time: _____
Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____

RECEIVED

iATL - By MR

Sample Log

–Bulk Asbestos –

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

530 E. Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525080	Bedroom 1, knock down wall texture joint compound, drywall	
2	7525081	2nd floor hall, knock down wall texture joint compound, drywall	
3	7525082	2nd floor bathroom, knock down wall texture, joint compound, drywall	
4	7525083	Entry, wall plaster	
5	7525084	Stairwell, wall plaster	
6	7525085	Kitchen, wall plaster	
7	7525086	Bedroom 3, wall plaster	
8	7525087	Family room, ceiling plaster	
9	7525088	2nd floor bathroom, top layer floor tile, adhesive	
10	7525089	2nd floor bathroom, top layer floor tile, adhesive	
11	7525090	2nd floor bathroom, top layer floor tile, adhesive	
12	7525091	2nd floor bathroom, bottom layer floor tile, adhesive	
13	7525092	2nd floor bathroom, bottom layer floor tile, adhesive	
14	7525093	2nd floor bathroom, bottom layer floor tile, adhesive	
15	7525094	Kitchen counter, ceramic tile, grout, adhesive, caulk	
16	7525095	Kitchen counter, ceramic tile, grout, adhesive, caulk	

Sample Log

–Bulk Asbestos–

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC
530 E. Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
17	7525096	Kitchen counter, ceramic tile, grout, adhesive	
18	7525097	Kitchen floor, ceramic tile, grout	
19	7525098	Kitchen floor, ceramic tile, grout	
20	7525099	Kitchen floor, ceramic tile, grout	
21	7525100	1st floor bathroom, ceramic tile, grout, thinset	
22	7525101	1st floor bathroom, ceramic tile, grout, thinset	
23	7525102	1st floor bathroom, ceramic tile, grout, thinset	
24	7525103	front walkway, concrete	
25	7525104	front steps, concrete	
26	7525105	front steps, concrete	
27	7525106	exterior, brick	
28	7525107	exterior, brick	
29	7525108	exterior, brick	
30	7525109	exterior, mortar	
31	7525110	exterior, mortar	
32	7525111	exterior, mortar	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525080 Client No.: 1	Analyst Observation: White Drywall Client Description: Knock Down Wall Texture Joint Compound, Drywall	Location: Bedroom 1 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 95

Lab No.: 7525080(L2) Client No.: 1	Analyst Observation: White Joint Compound Client Description: Knock Down Wall Texture Joint Compound, Drywall	Location: Bedroom 1 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.: 7525080(L3) Client No.: 1	Analyst Observation: White Texture Client Description: Knock Down Wall Texture Joint Compound, Drywall	Location: Bedroom 1 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.: 7525081 Client No.: 2	Analyst Observation: White Drywall Client Description: Knock Down Wall Texture Joint Compound, Drywall	Location: 2nd Floor Hall Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 95

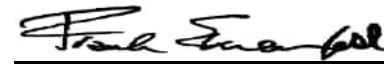
Lab No.: 7525081(L2) Client No.: 2	Analyst Observation: White Joint Compound Client Description: Knock Down Wall Texture Joint Compound, Drywall	Location: 2nd Floor Hall Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525081(L3) Client No.: 2	Analyst Observation: White Texture Client Description: Knock Down Wall Texture Joint Compound, Drywall	Location: 2nd Floor Hall 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

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022

Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381

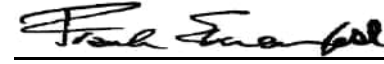
Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525082 Client No.: 3	Analyst Observation: White Drywall Client Description: Knock Down Wall Texture Joint Compound, Drywall	Location: 2nd Floor Bathroom Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7525082(L2) Client No.: 3	Analyst Observation: White Joint Compound Client Description: Knock Down Wall Texture Joint Compound, Drywall	Location: 2nd Floor Bathroom 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.: 7525082(L3) Client No.: 3	Analyst Observation: Blue Texture Client Description: Knock Down Wall Texture Joint Compound, Drywall	Location: 2nd Floor Bathroom 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.: 7525083 Client No.: 4	Analyst Observation: Off-White Plaster Client Description: Wall Plaster	Location: Entry 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.: 7525084 Client No.: 5	Analyst Observation: Off-White Plaster Client Description: Wall Plaster	Location: Stairwell 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.: 7525085 Client No.: 6	Analyst Observation: Off-White Plaster Client Description: Wall Plaster	Location: Kitchen 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

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

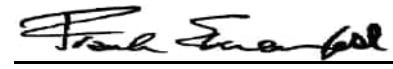
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525086 Client No.: 7	Analyst Observation: Off-White Plaster Client Description: Wall Plaster	Location: Bedroom 3 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.: 7525087 Client No.: 8	Analyst Observation: Off-White Plaster Client Description: Ceiling Plaster	Location: Family Room 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.: 7525088 Client No.: 9	Analyst Observation: Tan Floor Tile Client Description: Top Layer Floor Tile, Adhesive	Location: 2nd Floor Bathroom 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.: 7525088(L2) Client No.: 9	Analyst Observation: Yellow Mastic Client Description: Top Layer Floor Tile, Adhesive	Location: 2nd Floor Bathroom 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.: 7525089 Client No.: 10	Analyst Observation: Tan Floor Tile Client Description: Top Layer Floor Tile, Adhesive	Location: 2nd Floor Bathroom 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.: 7525089(L2) Client No.: 10	Analyst Observation: Yellow Mastic Client Description: Top Layer Floor Tile, Adhesive	Location: 2nd Floor Bathroom 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

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525090	Analyst Observation: Tan Floor Tile	Location: 2nd Floor Bathroom
Client No.: 11	Client Description: Top Layer Floor Tile, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525090(L2)	Analyst Observation: Yellow Mastic	Location: 2nd Floor Bathroom
Client No.: 11	Client Description: Top Layer Floor Tile, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525090(L3)	Analyst Observation: Off-White Mastic	Location: 2nd Floor Bathroom
Client No.: 11	Client Description: Top Layer Floor Tile, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

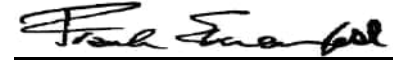
Lab No.: 7525091	Analyst Observation: Tan Vinyl Sheet Flooring	Location: 2nd Floor Bathroom
Client No.: 12	Client Description: Bottom Layer Floor Tile, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	20 Cellulose	80

Lab No.: 7525092	Analyst Observation: Tan Vinyl Sheet Flooring	Location: 2nd Floor Bathroom
Client No.: 13	Client Description: Bottom Layer Floor Tile, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	20 Cellulose	80

Lab No.: 7525092(L2)	Analyst Observation: Yellow Mastic	Location: 2nd Floor Bathroom
Client No.: 13	Client Description: Bottom Layer Floor Tile, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525093 Client No.: 14	Analyst Observation: Tan Vinyl Sheet Flooring Client Description: Bottom Layer Floor Tile, Adhesive	Location: 2nd Floor Bathroom Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 20 Cellulose	<u>Percent Non-Fibrous Material:</u> 80

Lab No.: 7525093(L2) Client No.: 14	Analyst Observation: Yellow Mastic Client Description: Bottom Layer Floor Tile, Adhesive	Location: 2nd Floor Bathroom 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.: 7525094 Client No.: 15	Analyst Observation: Tan Ceramic Client Description: Ceramic Tile, Grout, Adhesive, Caulk	Location: Kitchen Counter 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

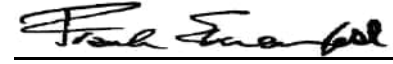
Lab No.: 7525094(L2) Client No.: 15	Analyst Observation: Brown Grout Client Description: Ceramic Tile, Grout, Adhesive, Caulk	Location: Kitchen Counter Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525094(L3) Client No.: 15	Analyst Observation: Yellow Adhesive Client Description: Ceramic Tile, Grout, Adhesive, Caulk	Location: Kitchen Counter 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.: 7525094(L4) Client No.: 15	Analyst Observation: Grey Sealant Client Description: Ceramic Tile, Grout, Adhesive, Caulk	Location: Kitchen Counter 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

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

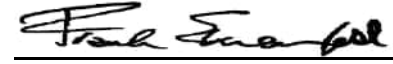
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525095 Client No.: 16 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Ceramic Client Description: Ceramic Tile, Grout, Adhesive, Caulk <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Counter Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525095(L2) Client No.: 16 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Brown Grout Client Description: Ceramic Tile, Grout, Adhesive, Caulk <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Counter Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525095(L3) Client No.: 16 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Yellow Adhesive Client Description: Ceramic Tile, Grout, Adhesive, Caulk <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Counter Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525095(L4) Client No.: 16 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey Sealant Client Description: Ceramic Tile, Grout, Adhesive, Caulk <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Counter Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525096 Client No.: 17 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Ceramic Client Description: Ceramic Tile, Grout, Adhesive, Caulk <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Counter Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525096(L2) Client No.: 17 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Brown Grout Client Description: Ceramic Tile, Grout, Adhesive, Caulk <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Counter Facility: <u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525096(L3) Client No.: 17	Analyst Observation: Yellow Adhesive Client Description: Ceramic Tile, Grout, Adhesive, Caulk	Location: Kitchen Counter 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.: 7525097 Client No.: 18	Analyst Observation: Brown Ceramic Client Description: Ceramic Tile, Grout	Location: Kitchen Floor 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.: 7525097(L2) Client No.: 18	Analyst Observation: Tan Grout Client Description: Ceramic Tile, Grout	Location: Kitchen Floor 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

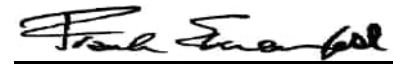
Lab No.: 7525098 Client No.: 19	Analyst Observation: Brown Ceramic Client Description: Ceramic Tile, Grout	Location: Kitchen Floor Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525098(L2) Client No.: 19	Analyst Observation: Tan Grout Client Description: Ceramic Tile, Grout	Location: Kitchen Floor 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.: 7525099 Client No.: 20	Analyst Observation: Brown Ceramic Client Description: Ceramic Tile, Grout	Location: Kitchen Floor 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

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525099(L2)	Analyst Observation: Tan Grout	Location: Kitchen Floor
Client No.: 20	Client Description: Ceramic Tile, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525100	Analyst Observation: White Ceramic	Location: 1st Floor Bathroom
Client No.: 21	Client Description: Ceramic Tile, Grout, Thinset	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525100(L2)	Analyst Observation: Blue Grout	Location: 1st Floor Bathroom
Client No.: 21	Client Description: Ceramic Tile, Grout, Thinset	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

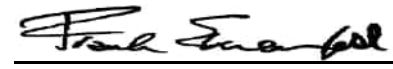
Lab No.: 7525100(L3)	Analyst Observation: White Adhesive	Location: 1st Floor Bathroom
Client No.: 21	Client Description: Ceramic Tile, Grout, Thinset	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525100(L4)	Analyst Observation: White Joint Compound	Location: 1st Floor Bathroom
Client No.: 21	Client Description: Ceramic Tile, Grout, Thinset	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525101	Analyst Observation: White Ceramic	Location: 1st Floor Bathroom
Client No.: 22	Client Description: Ceramic Tile, Grout, Thinset	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525101(L2)	Analyst Observation: Blue Grout	Location: 1st Floor Bathroom
Client No.: 22	Client Description: Ceramic Tile, Grout, Thinset	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525101(L3)	Analyst Observation: White Adhesive	Location: 1st Floor Bathroom
Client No.: 22	Client Description: Ceramic Tile, Grout, Thinset	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525101(L4)	Analyst Observation: White Joint Compound	Location: 1st Floor Bathroom
Client No.: 22	Client Description: Ceramic Tile, Grout, Thinset	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

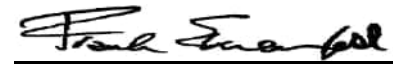
Lab No.: 7525102	Analyst Observation: White Ceramic	Location: 1st Floor Bathroom
Client No.: 23	Client Description: Ceramic Tile, Grout, Thinset	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525102(L2)	Analyst Observation: Blue Grout	Location: 1st Floor Bathroom
Client No.: 23	Client Description: Ceramic Tile, Grout, Thinset	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525102(L3)	Analyst Observation: White Adhesive	Location: 1st Floor Bathroom
Client No.: 23	Client Description: Ceramic Tile, Grout, Thinset	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525102(L4)	Analyst Observation: White Joint Compound	Location: 1st Floor Bathroom
Client No.: 23	Client Description: Ceramic Tile, Grout, Thinset	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525103	Analyst Observation: Grey Concrete	Location: Front Walkway
Client No.: 24	Client Description: Concrete	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525104	Analyst Observation: Grey Concrete	Location: Front Steps
Client No.: 25	Client Description: Concrete	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

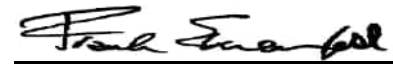
Lab No.: 7525105	Analyst Observation: Grey Concrete	Location: Front Steps
Client No.: 26	Client Description: Concrete	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525106	Analyst Observation: Red Brick	Location: Exterior
Client No.: 27	Client Description: Brick	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525107	Analyst Observation: Red Brick	Location: Exterior
Client No.: 28	Client Description: Brick	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525108 Client No.: 29	Analyst Observation: Red Brick Client Description: Brick	Location: Exterior 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.: 7525109 Client No.: 30	Analyst Observation: Grey Mortar Client Description: Mortar	Location: Exterior 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.: 7525110 Client No.: 31	Analyst Observation: Grey Mortar Client Description: Mortar	Location: Exterior 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

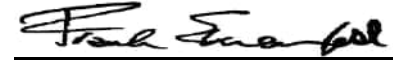
Lab No.: 7525111 Client No.: 32	Analyst Observation: Grey Mortar Client Description: Mortar	Location: Exterior Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525112 Client No.: 33	Analyst Observation: Black Shingle Client Description: Composition Shingle	Location: Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 85

Lab No.: 7525113 Client No.: 34	Analyst Observation: Black Shingle Client Description: Composition Shingle	Location: Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 85

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525114

Client No.: 35

Percent Asbestos:

None Detected

Analyst Observation: Black Shingle

Client Description: Composition Shingle

Percent Non-Asbestos Fibrous Material:

15 Fibrous Glass

Location: Roof

Facility:

Percent Non-Fibrous Material:

85

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

Date Received: 11/15/2022

Date Analyzed: 11/22/2022

Signature:

Analyst: Aidan Becker

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/I198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672677 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

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

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

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

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

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

–Bulk Asbestos –

Contact Information

Client Company: TTL Associates, Inc.
Office Address: 1915 N 12th Street
City, State, Zip: Toledo, OH 43604
Fax Number: _____
Email Address: hsingh@tlassoc.com

Project Number: 2289101
Project Name: Reno VAMC
Primary Contact: Harjot Singh
Office Phone: 419-214-5058
Cell Phone: _____

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: 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: 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: Non-Building Material *** (Dust, Wipe, Tape)
☐ Soil or Vermiculite Analysis *
☐ CARB 435

Special 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: _____ ☐ 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): _____ Date: _____ Time: _____
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: _____

iATL - By MR

Sample Log

–Bulk Asbestos –

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

526 Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525115	Kitchen, Lg knock down wall texture joint compound, drywall	
2	7525116	Family room, Lg knock down wall texture joint compound, drywall	
3	7525117	Hall bathroom, Lg knock down wall texture joint compound, drywall	
4	7525118	Bedroom 1, Lg Knock down wall texture joint compound	
5	7525119	Bedroom 1, Lg Knock down wall texture joint compound	
6	7525120	Master bathroom, smooth wall texture, drywall	
7	7525121	Master bathroom, smooth wall texture, drywall	
8	7525122	Master bathroom, smooth wall texture, drywall	
9	7525123	Basement, HVAC duct wrap	
10	7525124	Basement, HVAC duct wrap	
11	7525125	Basement, HVAC duct wrap	
12	7525126	Basement, HVAC putty	
13	7525127	Basement, HVAC putty	
14	7525128	Basement, HVAC putty	
15	7525129	Kitchen, ceramic floor tile, mortar	
16	7525130	Kitchen, ceramic floor tile, mortar	

Sample Log

–Bulk Asbestos –

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

526 Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
17	7525131	Upstairs bathroom, ceramic floor tile, mortar	
18	7525132	Kitchen, grout	
19	7525133	Hall bathroom, grout	
20	7525134	Upstairs bathroom, grout	
21	7525135	Exterior, brick	
22	7525136	Exterior, brick	
23	7525137	Exterior, brick	
24	7525138	Exterior, mortar	
25	7525139	Exterior, mortar	
26	7525140	Exterior, mortar	
27	7525141	Roof, composition shingle	
28	7525142	Roof, composition shingle	
29	7525143	Roof, composition shingle	
30	7525144	Bedroom 2, stipple wall texture	
31	7525145	Bedroom 2, stipple wall texture	
32	7525146	Bedroom 2, stipple wall texture	

Sample Log

–Bulk Asbestos –

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

526 Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
33	7525147	Shed roof, composition shingle	
34	7525148	Shed roof, composition shingle	
35	7525149	Shed roof, composition shingle	
36	7525150	Shed concrete	
37	7525151	Back walkway concrete	
38	7525152	Back walkway concrete	
39	7525153	M-I-L house roof, composition shingle	"M-I-L"= Mother-in-law
40	7525154	M-I-L house roof, composition shingle	
41	7525155	M-I-L house roof, composition shingle	
42	7525156	M-I-L Bathroom, wall texture, drywall	
43	7525157	M-I-L Bathroom, wall texture, drywall	
44	7525158	M-I-L Bathroom, wall texture, drywall	
45	7525159	M-I-L Family room, ceramic tile	
46	7525160	M-I-L entry, ceramic tile	
47	7525161	M-I-L Family room, ceramic tile	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

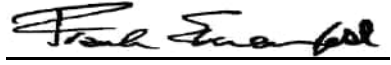
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525115 Client No.: 1	Analyst Observation: White Drywall Client Description: Lg Knock Down Wall Texture Joint Compound, Drywall	Location: Kitchen 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.: 7525115(L2) Client No.: 1	Analyst Observation: White Joint Compound Client Description: Lg Knock Down Wall Texture Joint Compound, Drywall	Location: Kitchen 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.: 7525115(L3) Client No.: 1	Analyst Observation: White Ceiling Texture Client Description: Lg Knock Down Wall Texture Joint Compound, Drywall	Location: Kitchen 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.: 7525116 Client No.: 2	Analyst Observation: White Drywall Client Description: Lg Knock Down Wall Texture Joint Compound, Drywall	Location: Family Room 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.: 7525116(L2) Client No.: 2	Analyst Observation: White Joint Compound Client Description: Lg Knock Down Wall Texture Joint Compound, Drywall	Location: Family Room 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.: 7525116(L3) Client No.: 2	Analyst Observation: White Ceiling Texture Client Description: Lg Knock Down Wall Texture Joint Compound, Drywall	Location: Family Room 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

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381

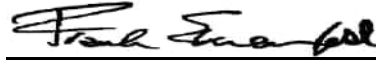
Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525117 Client No.: 3	Analyst Observation: White Drywall Client Description: Lg Knock Down Wall Texture Joint Compound, Drywall	Location: Hall Bathroom Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Cellulose	<u>Percent Non-Fibrous Material:</u> 97
Lab No.: 7525118 Client No.: 4	Analyst Observation: White Ceiling Texture Client Description: Lg Knock Down Wall Texture Joint Compound	Location: Bedroom 1 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.: 7525118(L2) Client No.: 4	Analyst Observation: Yellow Ceiling Tile Client Description: Lg Knock Down Wall Texture Joint Compound	Location: Bedroom 1 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 90 Cellulose	<u>Percent Non-Fibrous Material:</u> 10
Lab No.: 7525119 Client No.: 5	Analyst Observation: White Ceiling Texture Client Description: Lg Knock Down Wall Texture Joint Compound	Location: Bedroom 1 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.: 7525119(L2) Client No.: 5	Analyst Observation: Yellow Ceiling Tile Client Description: Lg Knock Down Wall Texture Joint Compound	Location: Bedroom 1 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 90 Cellulose	<u>Percent Non-Fibrous Material:</u> 10
Lab No.: 7525120 Client No.: 6	Analyst Observation: White Drywall Client Description: Smooth Wall Texture, Drywall	Location: Master Bathroom Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Cellulose	<u>Percent Non-Fibrous Material:</u> 97

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525120(L2)
Client No.: 6

Percent Asbestos:
PC 2.4 Chrysotile

Analyst Observation: White Joint Compound
Client Description: Smooth Wall Texture, Drywall

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Master Bathroom
Facility:
Percent Non-Fibrous Material:
97.6

Lab No.: 7525120(L3)
Client No.: 6

Percent Asbestos:
PC 2.8 Chrysotile

Analyst Observation: White Ceiling Texture
Client Description: Smooth Wall Texture, Drywall

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Master Bathroom
Facility:
Percent Non-Fibrous Material:
97.2

Lab No.: 7525121
Client No.: 7

Percent Asbestos:
None Detected

Analyst Observation: White Drywall
Client Description: Smooth Wall Texture, Drywall

Percent Non-Asbestos Fibrous Material:
2 Cellulose

Location: Master Bathroom
Facility:
Percent Non-Fibrous Material:
98

Lab No.: 7525121(L2)
Client No.: 7

Percent Asbestos:
PC 2.6 Chrysotile

Analyst Observation: White Joint Compound
Client Description: Smooth Wall Texture, Drywall

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Master Bathroom
Facility:
Percent Non-Fibrous Material:
97.4

Lab No.: 7525121(L3)
Client No.: 7

Percent Asbestos:
PC 2.2 Chrysotile

Analyst Observation: White Ceiling Texture
Client Description: Smooth Wall Texture, Drywall

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Master Bathroom
Facility:
Percent Non-Fibrous Material:
97.8

Lab No.: 7525122
Client No.: 8

Percent Asbestos:
None Detected

Analyst Observation: White Drywall
Client Description: Smooth Wall Texture, Drywall

Percent Non-Asbestos Fibrous Material:
2 Cellulose

Location: Master Bathroom
Facility:
Percent Non-Fibrous Material:
98

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

Date Received: 11/15/2022

Date Analyzed: 11/21/2022

Signature:

Analyst: Michael Moore

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525122(L2)	Analyst Observation: White Joint Compound	Location: Master Bathroom
Client No.: 8	Client Description: Smooth Wall Texture, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
PC 2.4 Chrysotile	None Detected	97.6

Lab No.: 7525122(L3)	Analyst Observation: Composite	Location: Master Bathroom
Client No.: 8	Client Description: Smooth Wall Texture, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
PC Trace Chrysotile	Trace Cellulose	100


Lab No.: 7525123	Analyst Observation: Off-White Wrap	Location: Basement
Client No.: 9	Client Description: HVAC Duct Wrap	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
90 Chrysotile	None Detected	10

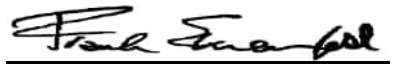
Lab No.: 7525124	Analyst Observation: Off-White Wrap	Location: Basement
Client No.: 10	Client Description: HVAC Duct Wrap	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
90 Chrysotile	None Detected	10

Lab No.: 7525125	Analyst Observation: White Wrap	Location: Basement
Client No.: 11	Client Description: HVAC Duct Wrap	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
90 Chrysotile	None Detected	10

Lab No.: 7525126	Analyst Observation: Off-White Putty	Location: Basement
Client No.: 12	Client Description: HVAC Duct Putty	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525127	Analyst Observation: Off-White Putty	Location: Basement
Client No.: 13	Client Description: HVAC Duct Putty	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525128	Analyst Observation: Off-White Putty	Location: Basement
Client No.: 14	Client Description: HVAC Duct Putty	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525129	Analyst Observation: Off-White Ceramic Tile	Location: Kitchen
Client No.: 15	Client Description: Ceramic Floor Tile	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

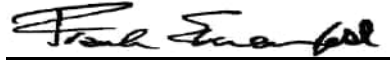
Lab No.: 7525129(L2)	Analyst Observation: White Mortar	Location: Kitchen
Client No.: 15	Client Description: Ceramic Floor Tile, Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525130	Analyst Observation: Off-White Ceramic Tile	Location: Kitchen
Client No.: 16	Client Description: Ceramic Floor Tile, Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525130(L2)	Analyst Observation: White Mortar	Location: Kitchen
Client No.: 16	Client Description: Ceramic Floor Tile, Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

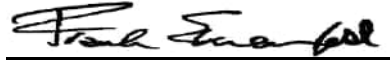
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525131 Client No.: 17	Analyst Observation: Off-White Ceramic Tile Client Description: Ceramic Floor Tile, Mortar	Location: Upstairs Bathroom 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.: 7525131(L2) Client No.: 17	Analyst Observation: White Mortar Client Description: Ceramic Floor Tile, Mortar	Location: Upstairs Bathroom 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.: 7525131(L3) Client No.: 17	Analyst Observation: White Joint Compound Client Description: Ceramic Floor Tile, Mortar	Location: Upstairs Bathroom 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.: 7525132 Client No.: 18	Analyst Observation: Brown Grout Client Description: Grout	Location: Kitchen 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.: 7525133 Client No.: 19	Analyst Observation: Brown Grout Client Description: Grout	Location: Hall Bathroom 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.: 7525133(L2) Client No.: 19	Analyst Observation: White Mortar Client Description: Grout	Location: Hall Bathroom 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

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525134	Analyst Observation: Brown Grout	Location: Upstairs Bathroom
Client No.: 20	Client Description: Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525134(L2)	Analyst Observation: White Mortar	Location: Upstairs Bathroom
Client No.: 20	Client Description: Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525135	Analyst Observation: Red Brick	Location: Exterior
Client No.: 21	Client Description: Brick	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

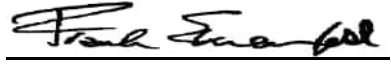
Lab No.: 7525136	Analyst Observation: Red Brick	Location: Exterior
Client No.: 22	Client Description: Brick	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525137	Analyst Observation: Red Brick	Location: Exterior
Client No.: 23	Client Description: Brick	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525138	Analyst Observation: Grey Mortar	Location: Exterior
Client No.: 24	Client Description: Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

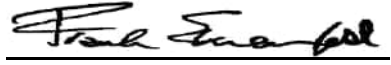
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525139 Client No.: 25	Analyst Observation: Grey Mortar Client Description: Mortar	Location: Exterior 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.: 7525139(L2) Client No.: 25	Analyst Observation: White Mortar Client Description: Mortar	Location: Exterior 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.: 7525140 Client No.: 26	Analyst Observation: Grey Mortar Client Description: Mortar	Location: Exterior 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.: 7525141 Client No.: 27	Analyst Observation: Black Shingle Client Description: Composition Shingle	Location: Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 90
Lab No.: 7525142 Client No.: 28	Analyst Observation: Black Shingle Client Description: Composition Shingle	Location: Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 90
Lab No.: 7525143 Client No.: 29	Analyst Observation: Black Shingle Client Description: Composition Shingle	Location: Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 90

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

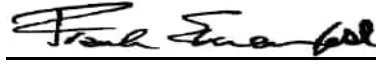
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525144 Client No.: 30 <u>Percent Asbestos:</u> PC 2.2 Chrysotile	Analyst Observation: White Wall Texture Client Description: Stipple Wall Texture <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bedroom 2 Facility: <u>Percent Non-Fibrous Material:</u> 97.8
Lab No.: 7525144(L2) Client No.: 30 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Yellow Ceiling Tile Client Description: Stipple Wall Texture <u>Percent Non-Asbestos Fibrous Material:</u> 90 Cellulose	Location: Bedroom 2 Facility: <u>Percent Non-Fibrous Material:</u> 10
Lab No.: 7525145 Client No.: 31 <u>Percent Asbestos:</u> PC 2.6 Chrysotile	Analyst Observation: White Wall Texture Client Description: Stipple Wall Texture <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bedroom 2 Facility: <u>Percent Non-Fibrous Material:</u> 97.4
Lab No.: 7525146 Client No.: 32 <u>Percent Asbestos:</u> PC 2.6 Chrysotile	Analyst Observation: White Wall Texture Client Description: Stipple Wall Texture <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bedroom 2 Facility: <u>Percent Non-Fibrous Material:</u> 97.4
Lab No.: 7525146(L2) Client No.: 32 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Yellow Ceiling Tile Client Description: Stipple Wall Texture <u>Percent Non-Asbestos Fibrous Material:</u> 90 Cellulose	Location: Bedroom 2 Facility: <u>Percent Non-Fibrous Material:</u> 10
Lab No.: 7525147 Client No.: 33 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Black Shingle Client Description: Composition Shingle <u>Percent Non-Asbestos Fibrous Material:</u> 10 Fibrous Glass	Location: Shed Roof Facility: <u>Percent Non-Fibrous Material:</u> 90

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

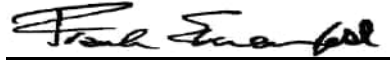
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525148 Client No.: 34 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Black Shingle Client Description: Composition Shingle <u>Percent Non-Asbestos Fibrous Material:</u> 10 Fibrous Glass	Location: Shed Roof Facility: <u>Percent Non-Fibrous Material:</u> 90
Lab No.: 7525149 Client No.: 35 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Black Shingle Client Description: Composition Shingle <u>Percent Non-Asbestos Fibrous Material:</u> 10 Fibrous Glass	Location: Shed Roof Facility: <u>Percent Non-Fibrous Material:</u> 90
Lab No.: 7525150 Client No.: 36 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey Concrete Client Description: Concrete <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Shed Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525151 Client No.: 37 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Concrete Client Description: Concrete <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Back Walkway Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525152 Client No.: 38 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey Concrete Client Description: Concrete <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Back Walkway Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525153 Client No.: 39 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Black Shingle Client Description: Composition Shingle <u>Percent Non-Asbestos Fibrous Material:</u> 10 Fibrous Glass	Location: M-I-L House Roof Facility: <u>Percent Non-Fibrous Material:</u> 90

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525154 Client No.: 40	Analyst Observation: Black Shingle Client Description: Composition Shingle	Location: M-I-L House Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 97

Lab No.: 7525155 Client No.: 41	Analyst Observation: Black Shingle Client Description: Composition Shingle	Location: M-I-L House Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 95


Lab No.: 7525156 Client No.: 42	Analyst Observation: Off-White Wall Texture Client Description: Wall Texture, Drywall	Location: M-I-L Bathroom 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

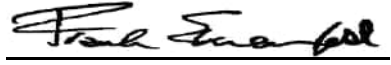
Lab No.: 7525156(L2) Client No.: 42	Analyst Observation: White Drywall Client Description: Wall Texture, Drywall	Location: M-I-L Bathroom Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 2 Cellulose	<u>Percent Non-Fibrous Material:</u> 98

Lab No.: 7525157 Client No.: 43	Analyst Observation: Off-White Wall Texture Client Description: Wall Texture, Drywall	Location: M-I-L Bathroom 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.: 7525157(L2) Client No.: 43	Analyst Observation: White Drywall Client Description: Wall Texture, Drywall	Location: M-I-L Bathroom Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Cellulose	<u>Percent Non-Fibrous Material:</u> 97

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

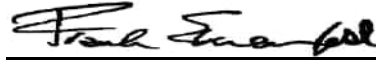
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525158 Client No.: 44	Analyst Observation: Off-White Wall Texture Client Description: Wall Texture, Drywall	Location: M-I-L Bathroom 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.: 7525158(L2) Client No.: 44	Analyst Observation: White Drywall Client Description: Wall Texture, Drywall	Location: M-I-L Bathroom Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Cellulose	<u>Percent Non-Fibrous Material:</u> 97
Lab No.: 7525159 Client No.: 45	Analyst Observation: Grey Ceramic Tile Client Description: Ceramic Tile	Location: M-I-L Family Room 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.: 7525160 Client No.: 46	Analyst Observation: Grey Ceramic Tile Client Description: Ceramic Tile	Location: M-I-L Entry 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.: 7525161 Client No.: 47	Analyst Observation: Grey Ceramic Tile Client Description: Ceramic Tile	Location: M-I-L Family Room 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

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

Date Received: 11/15/2022
Date Analyzed: 11/21/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/21/2022
Report No.: 672678 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

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

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

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

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

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

—Bulk Asbestos—

Contact Information

Client Company: TTL Associates, Inc.

Project Number: 2289101

Office Address: 1915 N 12th Street

Project Name: Reno VAMC

City, State, Zip: Toledo, OH 43604

Primary Contact: Harjot Singh

Fax Number:

Office Phone: 419-214-5058

Email Address: hsingh@tlassoc.com

Cell Phone:

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: 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: 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: Non-Building Material *** (Dust, Wipe, Tape)

- ☐ Soil or Vermiculite Analysis
- ☐ CARB 435

Special 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: _____

☐ 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): _____

Date: _____

Time: _____

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: _____

Sample Log

—Bulk Asbestos—

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

925 Locust Street, Reno

Sampling Date/Time: 11/18/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7529211	Front entry, heavy knock down wall texture, joint comp, drywall	
2	7529212	Living room, heavy knock down wall texture, joint comp, drywall	
3	7529213	Dining room, heavy knock down wall texture, joint comp, drywall	
4	7529214	Living room, Orange peel wall texture, joint compound, drywall	
5	7529215	Living room, Orange peel wall texture, joint compound, drywall	
6	7529216	Living room, Orange peel wall texture, joint compound, drywall	
7	7529217	Kitchen, smooth wall texture, drywall	
8	7529218	Kitchen, smooth wall texture, drywall	
9	7529219	Kitchen, smooth wall texture, drywall	
10	7529220	Bathroom, Heavy Orange Peel texture, Drywall	
11	7529221	Bathroom, Heavy Orange Peel texture, Drywall	
12	7529222	Bathroom, Heavy Orange Peel texture, Drywall	
13	7529223	Bathroom, tan 2x2 ceramic floor tile, thinset	
14	7529224	Bathroom, tan 2x2 ceramic floor tile, thinset	
15	7529225	Bathroom, tan 2x2 ceramic floor tile, thinset	
16	7529226	Kitchen, grey ceramic floor tile	

Sample Log

–Bulk Asbestos–

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

925 Locust Street, Reno

Sampling Date/Time: 11/18/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
17	7529227	Kitchen, grey ceramic floor tile	
18	7529228	Kitchen, grey ceramic floor tile	
19	7529229	Living room, brown ceramic floor tile	
20	7529230	Living room, brown ceramic floor tile	
21	7529231	Living room, brown ceramic floor tile	
22	7529232	Exterior, smooth transite shingle siding	
23	7529233	Exterior, smooth transite shingle siding	
24	7529234	Exterior, smooth transite shingle siding	
25	7529235	Exterior, rough transite shingle siding	
26	7529236	Exterior, rough transite shingle siding	
27	7529237	Exterior, rough transite shingle siding	
28	7529238	Exterior, siding underlayment	
29	7529239	Exterior, siding underlayment	
30	7529240	Exterior, siding underlayment	
31	7529241	Foundation, concrete	
32	7529242	Foundation, concrete	

Sample Log

–Bulk Asbestos –

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

925 Locust Street, Reno

Sampling Date/Time: 11/18/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
33	7529243	Foundation, concrete	
34	7529244	Sidewalk, concrete	
35	7529245	Sidewalk, concrete	
36	7529246	Sidewalk, concrete	
37	7529247	Roof, composition shingle	
38	7529248	Roof, composition shingle	
39	7529249	Roof, composition shingle	
40	7529250	Shed roof, composition shingle	
41	7529251	Shed roof, composition shingle	
42	7529252	Shed roof, composition shingle	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7529211
Client No.: 1

Analyst Observation: White Paint/Texture
Client Description: Heavy Knockdown Wall Texture, Joint Compound, Drywall

Location: Front Entry
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7529211(L2)
Client No.: 1

Analyst Observation: Tan/White Drywall
Client Description: Heavy Knockdown Wall Texture, Joint Compound, Drywall

Location: Front Entry
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
60 Cellulose

Percent Non-Fibrous Material:
40

Note: No joint compound present

Lab No.: 7529212
Client No.: 2

Analyst Observation: White Texture
Client Description: Heavy Knockdown Wall Texture, Joint Compound, Drywall

Location: Living Room
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Note: No joint compound present
No Drywall Present.

Lab No.: 7529213
Client No.: 3

Analyst Observation: White Texture
Client Description: Heavy Knockdown Wall Texture, Joint Compound, Drywall

Location: Dining Room
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7529213(L2)
Client No.: 3

Analyst Observation: White/Tan Drywall
Client Description: Heavy Knockdown Wall Texture, Joint Compound, Drywall

Location: Dining Room
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
50 Cellulose

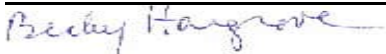
Percent Non-Fibrous Material:
50

Note: No joint compound present

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


Date Received: 11/22/2022

Date Analyzed: 12/01/2022

Signature: 

Analyst: Rebecca Hargrove

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7529214 Client No.: 4	Analyst Observation: White Texture Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Location: Living Room 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.: 7529214(L2) Client No.: 4	Analyst Observation: Tan Drywall Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Location: Living Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose	<u>Percent Non-Fibrous Material:</u> 50

Note: No joint compound present

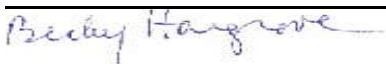
Lab No.: 7529215 Client No.: 5	Analyst Observation: White Texture Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Location: Living Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

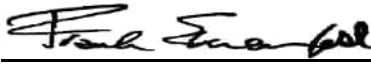
Lab No.: 7529215(L2) Client No.: 5	Analyst Observation: White/Tan Drywall Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Location: Living Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose	<u>Percent Non-Fibrous Material:</u> 50

Note: No joint compound present

Lab No.: 7529216 Client No.: 6	Analyst Observation: White Texture Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Location: Living Room 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

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

Date Received: 11/22/2022
Date Analyzed: 12/01/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7529216(L2)	Analyst Observation: Tan Drywall	Location: Living Room
Client No.: 6	Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 35 Cellulose	<u>Percent Non-Fibrous Material:</u> 65

Note: No joint compound present

Lab No.: 7529217	Analyst Observation: White Texture	Location: Kitchen
Client No.: 7	Client Description: Smooth Wall Texture, Drywall	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.: 7529217(L2)	Analyst Observation: White/Tan Drywall	Location: Kitchen
Client No.: 7	Client Description: Smooth Wall Texture, Drywall	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 35 Cellulose	<u>Percent Non-Fibrous Material:</u> 65

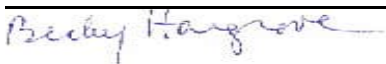
Note: No joint compound present

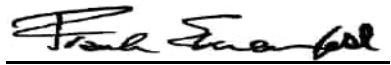
Lab No.: 7529218	Analyst Observation: White/Tan Drywall	Location: Kitchen
Client No.: 8	Client Description: Smooth Wall Texture, Drywall	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose	<u>Percent Non-Fibrous Material:</u> 50

Lab No.: 7529218(L2)	Analyst Observation: White Joint Compound	Location: Kitchen
Client No.: 8	Client Description: Smooth Wall Texture, Drywall	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.: 7529218(L3)	Analyst Observation: White Texture	Location: Kitchen
Client No.: 8	Client Description: Smooth Wall Texture, Drywall	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

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

Date Received: 11/22/2022
Date Analyzed: 12/01/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7529219 Client No.: 9	Analyst Observation: White/Tan Drywall Client Description: Smooth Wall Texture, Drywall	Location: Kitchen Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose 10 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 40

Lab No.: 7529219(L2) Client No.: 9	Analyst Observation: White Joint Compound Client Description: Smooth Wall Texture, Drywall	Location: Kitchen Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7529220 Client No.: 10	Analyst Observation: White Texture Client Description: Heavy Orange Peel Texture, Drywall	Location: Bathroom Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Note: No joint compound present
No Drywall Present.

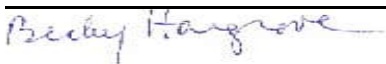
Lab No.: 7529221 Client No.: 11	Analyst Observation: White Texture Client Description: Heavy Orange Peel Texture, Drywall	Location: Bathroom Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

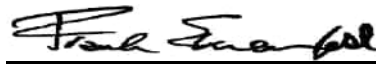
Lab No.: 7529222 Client No.: 12	Analyst Observation: White Texture Client Description: Heavy Orange Peel Texture, Drywall	Location: Bathroom Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7529222(L2) Client No.: 12	Analyst Observation: White/Tan Drywall Client Description: Heavy Orange Peel Texture, Drywall	Location: Bathroom Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 25 Cellulose	<u>Percent Non-Fibrous Material:</u> 75

Note: No joint compound present

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

Date Received: 11/22/2022
Date Analyzed: 12/01/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7529223
Client No.: 13
Analyst Observation: Beige/Brown Ceramic
Client Description: Tan 2x2 Ceramic Floor Tile, Thinset
Location: Bathroom
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
100

Lab No.: 7529223(L2)
Client No.: 13
Analyst Observation: Tan Ceramic
Client Description: Tan 2x2 Ceramic Floor Tile, Thinset
Location: Bathroom
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
100

Lab No.: 7529223(L3)
Client No.: 13
Analyst Observation: White Mortar
Client Description: Tan 2x2 Ceramic Floor Tile, Thinset
Location: Bathroom
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
100

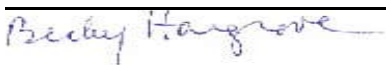
Lab No.: 7529224
Client No.: 14
Analyst Observation: Beige/Brown Ceramic
Client Description: Tan 2x2 Ceramic Floor Tile, Thinset
Location: Bathroom
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
100

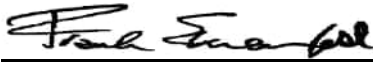
Lab No.: 7529224(L2)
Client No.: 14
Analyst Observation: Off-White Mastic
Client Description: Tan 2x2 Ceramic Floor Tile, Thinset
Location: Bathroom
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
100

Lab No.: 7529225
Client No.: 15
Analyst Observation: Beige/Brown Ceramic
Client Description: Tan 2x2 Ceramic Floor Tile, Thinset
Location: Bathroom
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
100

No Grout Present.

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

Date Received: 11/22/2022
Date Analyzed: 12/01/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7529225(L2)	Analyst Observation: White Mortar	Location: Bathroom
Client No.: 15	Client Description: Tan 2x2 Ceramic Floor Tile, Thinset	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7529226	Analyst Observation: White/Grey Ceramic	Location: Kitchen
Client No.: 16	Client Description: Grey Ceramic Floor Tile	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7529226(L2)	Analyst Observation: Grey Mortar	Location: Kitchen
Client No.: 16	Client Description: Grey Ceramic Floor Tile	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

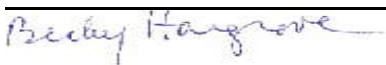
Lab No.: 7529227	Analyst Observation: White/Grey Ceramic	Location: Kitchen
Client No.: 17	Client Description: Grey Ceramic Floor Tile	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

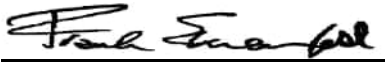
No Mortar Present.

Lab No.: 7529228	Analyst Observation: White/Grey Ceramic	Location: Kitchen
Client No.: 18	Client Description: Grey Ceramic Floor Tile	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7529228(L2)	Analyst Observation: Grey Mortar	Location: Kitchen
Client No.: 18	Client Description: Grey Ceramic Floor Tile	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/22/2022
Date Analyzed: 12/01/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

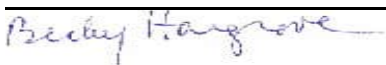
Client: TTL381

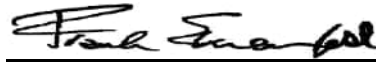
Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7529229 Client No.: 19	Analyst Observation: Red/Grey Ceramic Client Description: Brown Ceramic Floor Tile	Location: Living Room 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.: 7529230 Client No.: 20	Analyst Observation: Red/Grey Ceramic Client Description: Brown Ceramic Floor Tile	Location: Living Room 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.: 7529230(L2) Client No.: 20	Analyst Observation: White Grout Client Description: Brown Ceramic Floor Tile	Location: Living Room 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.: 7529231 Client No.: 21	Analyst Observation: Red/Grey Ceramic Client Description: Brown Ceramic Floor Tile	Location: Living Room 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
No Grout Present.		
Lab No.: 7529232 Client No.: 22	Analyst Observation: Grey Cement Product Client Description: Smooth Transite Shingle Siding	Location: Exterior Facility:
<u>Percent Asbestos:</u> <i>20 Chrysotile</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 80
Lab No.: 7529233 Client No.: 23	Analyst Observation: Grey Cement Product Client Description: Smooth Transite Shingle Siding	Location: Exterior Facility:
<u>Percent Asbestos:</u> <i>20 Chrysotile</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 80

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

Date Received: 11/22/2022
Date Analyzed: 12/01/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

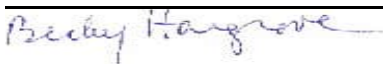
Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

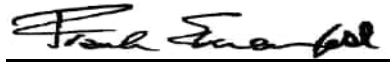
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7529234 Client No.: 24	Analyst Observation: Grey Cement Product Client Description: Smooth Transite Shingle Siding	Location: Exterior Facility:
<u>Percent Asbestos:</u> 20 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 80
Lab No.: 7529235 Client No.: 25	Analyst Observation: Grey Cement Product Client Description: Rough Transite Shingle Siding	Location: Exterior Facility:
<u>Percent Asbestos:</u> 20 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 80
Lab No.: 7529236 Client No.: 26	Analyst Observation: Grey Cement Product Client Description: Rough Transite Shingle Siding	Location: Exterior Facility:
<u>Percent Asbestos:</u> 20 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 80
Lab No.: 7529237 Client No.: 27	Analyst Observation: Grey Cement Product Client Description: Rough Transite Shingle Siding	Location: Exterior Facility:
<u>Percent Asbestos:</u> 20 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 80
Lab No.: 7529238 Client No.: 28	Analyst Observation: Black Tar Paper Client Description: Siding Underlayment	Location: Exterior Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose	<u>Percent Non-Fibrous Material:</u> 50
Lab No.: 7529239 Client No.: 29	Analyst Observation: Black Tar Paper Client Description: Siding Underlayment	Location: Exterior Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose	<u>Percent Non-Fibrous Material:</u> 50

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

Date Received: 11/22/2022
Date Analyzed: 12/01/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

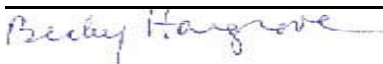
Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

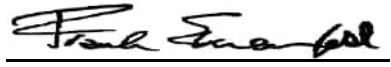
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7529240 Client No.: 30	Analyst Observation: Black Tar Paper Client Description: Siding Underlayment	Location: Exterior Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose	<u>Percent Non-Fibrous Material:</u> 50
Lab No.: 7529241 Client No.: 31	Analyst Observation: Grey Concrete Client Description: Concrete	Location: Foundation 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.: 7529242 Client No.: 32	Analyst Observation: Grey Concrete Client Description: Concrete	Location: Foundation 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.: 7529243 Client No.: 33	Analyst Observation: Grey Concrete Client Description: Concrete	Location: Foundation 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.: 7529244 Client No.: 34	Analyst Observation: Grey Concrete Client Description: Concrete	Location: Sidewalk 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.: 7529245 Client No.: 35	Analyst Observation: Grey Concrete Client Description: Concrete	Location: Sidewalk 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

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

Date Received: 11/22/2022
Date Analyzed: 12/01/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

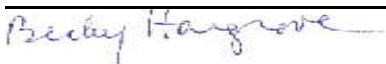
Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

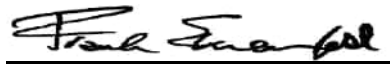
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7529246 Client No.: 36	Analyst Observation: Grey Concrete Client Description: Concrete	Location: Sidewalk 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.: 7529247 Client No.: 37	Analyst Observation: Grey/Green Shingle Client Description: Composition Shingle	Location: Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 85
Lab No.: 7529248 Client No.: 38	Analyst Observation: Grey/Green Shingle Client Description: Composition Shingle	Location: Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 85
Lab No.: 7529249 Client No.: 39	Analyst Observation: Grey/Green Shingle Client Description: Composition Shingle	Location: Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 85
Lab No.: 7529250 Client No.: 40	Analyst Observation: Black/Red/Brown Shingle Client Description: Composition Shingle	Location: Shed Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 85
Lab No.: 7529251 Client No.: 41	Analyst Observation: Black/Red/Brown Shingle Client Description: Composition Shingle	Location: Shed Roof Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 85

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

Date Received: 11/22/2022
Date Analyzed: 12/01/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7529252

Client No.: 42

Percent Asbestos:

None Detected

Analyst Observation: Black/Red/Brown Shingle

Client Description: Composition Shingle

Percent Non-Asbestos Fibrous Material:

15 Fibrous Glass

Location: Shed Roof

Facility:

Percent Non-Fibrous Material:

85

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

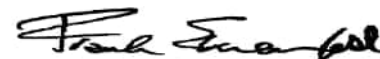
Date Received: 11/22/2022

Date Analyzed: 12/01/2022

Signature:

Analyst: 
Rebecca Hargrove

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/I198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 12/1/2022
Report No.: 673134 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

2)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

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

3)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

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

4)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

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

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

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

*With advance notice and confirmation by the laboratory.

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.



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: TTL Associates, Inc.
Office Address: 1915 N 12th Street
City, State, Zip: Toledo, OH 43604
Fax Number: _____
Email Address: hsingh@ttlassoc.com

Project Number: 2289101
Project Name: Reno VAMC
Primary Contact: Harjot Singh
Office Phone: 419-214-5058
Cell Phone: _____

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:

* 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: _____

☐ 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): _____ Date: _____ Time: _____
Received (Name / iATL): _____ Date: _____ Time: _____
Sample Login (Name / iATL): _____ Date: _____ Time: _____
Analysis(Name(s) / iATL): LSP Date: 11-20-20 Time: NOV 15 2022
QA/QC Review (Name / iATL): _____ Date: _____ Time: _____
Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____

RECEIVED

IATL-By

Sample Log

–Bulk Asbestos –

Client: **TTL Associates, Inc.** Project: **2289101 - Reno VAMC**

633 E. Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525519	Family room, plaster	
2	7525520	Dining room, plaster	
3	7525521	Hallway, plaster	
4	7525522	Front bedroom, plaster	
5	7525523	Back bedroom, plaster	
6	7525524	Basement closet, joint compound drywall	
7	7525525	Basement closet, joint compound drywall	
8	7525526	Basement closet, joint compound drywall	
9	7525527	Basement bedroom closet, joint compound, drywall	
10	7525528	Basement bedroom closet, joint compound, drywall	
11	7525529	Basement bedroom closet, joint compound, drywall	
12	7525530	Basement HVAC duct joint tape	
13	7525531	Basement HVAC duct joint tape	
14	7525532	Basement HVAC duct joint tape	
15	7525533	Basement, green 9x9 floor tile black mastic	
16	7525534	Basement, green 9x9 floor tile, black mastic	



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

Sample Log

—Bulk Asbestos—

Client: **TTL Associates, Inc.** Project: **2289101 - Reno VAMC**

633 E. Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
17	7525535	Basement, green 9x9 floor tile, black mastic	
18	7525536	Basement bedroom, lt tan 9x9 floor tile, black mastic	
19	7525537	Basement bedroom, lt tan 9x9 floor tile, black mastic	
20	7525538	Basement bedroom, lt tan 9x9 floor tile, black mastic	
21	7525539	Basement bedroom closet, med tan floor tile, black mastic	
22	7525540	Basement bedroom closet, med tan floor tile, black mastic	
23	7525541	Basement bedroom closet, med tan floor tile, black mastic	
24	7525542	Basement closet shelf, tan and green sheet vinyl flooring	<1 ft2
25	7525543	Basement closet shelf, grey and yellow sheet vinyl flooring	<1ft2
26	7525544	Basement closet shelf, green sheet vinyl flooring	
27	7525545	Pantry, green sheet vinyl flooring	
28	7525546	Pantry, green sheet vinyl flooring	
29	7525547	Front entry, quarry floor tile, mortar	
30	7525548	Front entry, quarry floor tile, mortar	
31	7525549	Front entry, quarry floor tile, mortar	
32	7525550	Front entry, grout	

Sample Log

—Bulk Asbestos—

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

633 E. Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
33	7525551	Front entry, grout	
34	7525552	Front entry, grout	
35	7525553	Bathroom floor tile, mortar	
36	7525554	Bathroom floor tile, mortar	
37	7525555	Bathroom floor tile, mortar	
38	7525556	Bathroom floor tile grout	
39	7525557	Bathroom floor tile grout	
40	7525558	Bathroom floor tile grout	
41	7525559	Bathroom wall tile, mortar, grout	
42	7525560	Bathroom wall tile, mortar, grout	
43	7525561	Bathroom wall tile, mortar, grout	
44	7525562	Kitchen countertop tile, mortar, grout	
45	7525563	Kitchen countertop tile, mortar grout	
46	7525564	Kitchen countertop tile, mortar, grout	
47	7525565	Kitchen floor tile	
48	7525566	kitchen floor tile	

Sample Log

—Bulk Asbestos—

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

633 E. Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
49	7525567	Kitchen floor tile	
50	7525568	Kitchen floor tile grout	
51	7525569	Kitchen floor tile grout	
52	7525570	Kitchen floor tile grout	
53	7525571	Basement, chimney, brick	
54	7525572	Basement, chimney, brick	
55	7525573	Basement, chimney, brick	
56	7525574	Basement, chimney, mortar	
57	7525575	Basement, chimney, mortar	
58	7525576	Basement, chimney, mortar	
59	7525577	basement foundation walls, concrete	
60	7525578	basement foundation walls, concrete	
61	7525579	basement foundation walls concrete	
62	7525580	Back patio, concrete	
63	7525581	Back patio, concrete	
64	7525582	Back patio, concrete	



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

Sample Log

–Bulk Asbestos –

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

633 E. Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
65	7525583	Back stoop, leveling compound	>1ft2
66	7525584	Roof, composition shingle	
67	7525585	Roof, composition shingle	
68	7525586	Roof, composition shingle	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

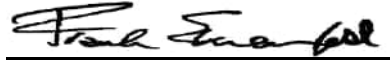
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525519 Client No.: 1	Analyst Observation: White Plaster Client Description: Plaster	Location: Family Room 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.: 7525519(L2) Client No.: 1	Analyst Observation: Green Plaster Client Description: Plaster	Location: Family Room 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.: 7525520 Client No.: 2	Analyst Observation: White Plaster Client Description: Plaster	Location: Dining Room 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.: 7525520(L2) Client No.: 2	Analyst Observation: Green Plaster Client Description: Plaster	Location: Dining Room 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.: 7525521 Client No.: 3	Analyst Observation: White Plaster Client Description: Plaster	Location: Hallway 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.: 7525521(L2) Client No.: 3	Analyst Observation: Green Plaster Client Description: Plaster	Location: Hallway 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

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381

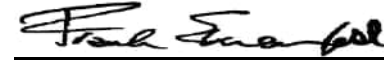
Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525522 Client No.: 4	Analyst Observation: White Plaster Client Description: Plaster	Location: Front Bedroom 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.: 7525522(L2) Client No.: 4	Analyst Observation: Tan Plaster Client Description: Plaster	Location: Front Bedroom 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.: 7525523 Client No.: 5	Analyst Observation: White Plaster Client Description: Plaster	Location: Back Bedroom 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.: 7525523(L2) Client No.: 5	Analyst Observation: Tan Plaster Client Description: Plaster	Location: Back Bedroom 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.: 7525524 Client No.: 6	Analyst Observation: White/Brown Drywall Client Description: Joint Compound Drywall	Location: Basement Closet Facility:
<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.: 7525524(L2) Client No.: 6	Analyst Observation: White Joint Compound Client Description: Joint Compound Drywall	Location: Basement Closet 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

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525524(L3)	Analyst Observation: White Tape	Location: Basement Closet
Client No.: 6	Client Description: Joint Compound Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	100 Cellulose	None Detected

Lab No.: 7525525	Analyst Observation: White/Brown Drywall	Location: Basement Closet
Client No.: 7	Client Description: Joint Compound Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	10 Cellulose	90


Lab No.: 7525525(L2)	Analyst Observation: White Joint Compound	Location: Basement Closet
Client No.: 7	Client Description: Joint Compound Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525525(L3)	Analyst Observation: White Tape	Location: Basement Closet
Client No.: 7	Client Description: Joint Compound Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	100 Cellulose	None Detected

Lab No.: 7525526	Analyst Observation: White/Brown Drywall	Location: Basement Closet
Client No.: 8	Client Description: Joint Compound Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	10 Cellulose	90

Lab No.: 7525526(L2)	Analyst Observation: White Joint Compound	Location: Basement Closet
Client No.: 8	Client Description: Joint Compound Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525526(L3)
Client No.: 8

Analyst Observation: White Tape
Client Description: Joint Compound Drywall

Location: Basement Closet
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
100 Cellulose

Percent Non-Fibrous Material:
None Detected

Lab No.: 7525527
Client No.: 9

Analyst Observation: White Joint Compound
Client Description: Joint Compound Drywall

Location: Basement Bedroom Closet
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525527(L2)
Client No.: 9

Analyst Observation: Tan/Grey Tape
Client Description: Joint Compound Drywall

Location: Basement Bedroom Closet
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
100 Cellulose

Percent Non-Fibrous Material:
None Detected

Lab No.: 7525528
Client No.: 10

Analyst Observation: White Joint Compound
Client Description: Joint Compound Drywall

Location: Basement Bedroom Closet
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525528(L2)
Client No.: 10

Analyst Observation: Tan/Grey Tape
Client Description: Joint Compound Drywall

Location: Basement Bedroom Closet
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
100 Cellulose

Percent Non-Fibrous Material:
None Detected

Lab No.: 7525529
Client No.: 11

Analyst Observation: White Joint Compound
Client Description: Joint Compound Drywall

Location: Basement Bedroom Closet
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

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

Date Received: 11/15/2022

Date Analyzed: 11/20/2022

Signature:

Analyst: Linda Price

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525529(L2) Client No.: 11 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan/Grey Tape Client Description: Joint Compound Drywall <u>Percent Non-Asbestos Fibrous Material:</u> 100 Cellulose	Location: Basement Bedroom Closet Facility: <u>Percent Non-Fibrous Material:</u> None Detected
--	--	---

Lab No.: 7525530 Client No.: 12 <u>Percent Asbestos:</u> <i>75 Chrysotile</i>	Analyst Observation: Grey/White Tape Client Description: HVAC Duct Joint Tape <u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	Location: Basement Facility: <u>Percent Non-Fibrous Material:</u> 20
--	--	---


Lab No.: 7525531 Client No.: 13 <u>Percent Asbestos:</u> <i>80 Chrysotile</i>	Analyst Observation: Grey/White Tape Client Description: HVAC Duct Joint Tape <u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	Location: Basement Facility: <u>Percent Non-Fibrous Material:</u> 15
--	--	---

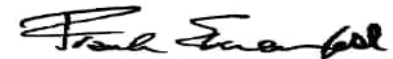
Lab No.: 7525532 Client No.: 14 <u>Percent Asbestos:</u> <i>80 Chrysotile</i>	Analyst Observation: Grey/White Tape Client Description: HVAC Duct Joint Tape <u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	Location: Basement Facility: <u>Percent Non-Fibrous Material:</u> 15
--	--	---

Lab No.: 7525533 Client No.: 15 <u>Percent Asbestos:</u> <i>PC 3.8 Chrysotile</i>	Analyst Observation: Green Floor Tile Client Description: Green 9x9 Floor Tile, Black Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Basement Facility: <u>Percent Non-Fibrous Material:</u> 96.2
--	---	---

Lab No.: 7525533(L2) Client No.: 15 <u>Percent Asbestos:</u> <i>PC 1.5 Chrysotile</i>	Analyst Observation: Black Mastic Client Description: Green 9x9 Floor Tile, Black Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Basement Facility: <u>Percent Non-Fibrous Material:</u> 98.5
--	---	---

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

Date Received: 11/15/2022
 Date Analyzed: 11/20/2022
 Signature: 
 Analyst: Linda Price

Approved By: 
 Frank E. Ehrenfeld, III
 Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

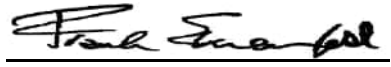
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525534 Client No.: 16 <u>Percent Asbestos:</u> PC 3.5 Chrysotile	Analyst Observation: Green Floor Tile Client Description: Green 9x9 Floor Tile, Black Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Basement Facility: <u>Percent Non-Fibrous Material:</u> 96.5
Lab No.: 7525534(L2) Client No.: 16 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Black Mastic Client Description: Green 9x9 Floor Tile, Black Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Basement Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525535 Client No.: 17 <u>Percent Asbestos:</u> PC 3.7 Chrysotile	Analyst Observation: Green Floor Tile Client Description: Green 9x9 Floor Tile, Black Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Basement Facility: <u>Percent Non-Fibrous Material:</u> 96.3
Lab No.: 7525535(L2) Client No.: 17 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Black Mastic Client Description: Green 9x9 Floor Tile, Black Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Basement Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525536 Client No.: 18 <u>Percent Asbestos:</u> PC 1.8 Chrysotile	Analyst Observation: Lt Tan Floor Tile Client Description: Lt Tan 9x9 Floor Tile, Black Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Basement Bedroom Facility: <u>Percent Non-Fibrous Material:</u> 98.2
Lab No.: 7525536(L2) Client No.: 18 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Black Mastic Client Description: Lt Tan 9x9 Floor Tile, Black Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Basement Bedroom Facility: <u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525537
Client No.: 19
Analyst Observation: Lt Tan Floor Tile
Client Description: Lt Tan 9x9 Floor Tile, Black Mastic
Location: Basement Bedroom
Facility:
Percent Asbestos:
PC 1.5 Chrysotile
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
98.5

Lab No.: 7525537(L2)
Client No.: 19
Analyst Observation: Black Mastic
Client Description: Lt Tan 9x9 Floor Tile, Black Mastic
Location: Basement Bedroom
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
100


Lab No.: 7525538
Client No.: 20
Analyst Observation: Lt Tan Floor Tile
Client Description: Lt Tan 9x9 Floor Tile, Black Mastic
Location: Basement Bedroom
Facility:
Percent Asbestos:
PC 1.7 Chrysotile
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
98.3

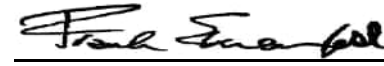
Lab No.: 7525538(L2)
Client No.: 20
Analyst Observation: Black Mastic
Client Description: Lt Tan 9x9 Floor Tile, Black Mastic
Location: Basement Bedroom
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
100

Lab No.: 7525539
Client No.: 21
Analyst Observation: Tan Floor Tile
Client Description: Med Tan Floor Tile, Black Mastic
Location: Basement Bedroom Closet
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
100

Lab No.: 7525539(L2)
Client No.: 21
Analyst Observation: Black Mastic
Client Description: Med Tan Floor Tile, Black Mastic
Location: Basement Bedroom Closet
Facility:
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected
Percent Non-Fibrous Material:
100

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101


Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525540 Client No.: 22	Analyst Observation: Tan Floor Tile Client Description: Med Tan Floor Tile, Black Mastic	Location: Basement Bedroom Closet 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.: 7525540(L2) Client No.: 22	Analyst Observation: Black Mastic Client Description: Med Tan Floor Tile, Black Mastic	Location: Basement Bedroom Closet 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.: 7525541 Client No.: 23	Analyst Observation: Tan Floor Tile Client Description: Med Tan Floor Tile, Black Mastic	Location: Basement Bedroom Closet 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.: 7525541(L2) Client No.: 23	Analyst Observation: Black Mastic Client Description: Med Tan Floor Tile, Black Mastic	Location: Basement Bedroom Closet 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.: 7525542 Client No.: 24	Analyst Observation: Tan/Green/Black Vinyl Sheet Flooring Client Description: Tan And Green Sheet Vinyl Flooring	Location: Basement Closet Shelf Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose	<u>Percent Non-Fibrous Material:</u> 50
Lab No.: 7525542(L2) Client No.: 24	Analyst Observation: Yellow/Tan Mastic Client Description: Tan And Green Sheet Vinyl Flooring	Location: Basement Closet Shelf 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

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525543 Client No.: 25	Analyst Observation: Grey/Yellow/Brown/Black Vinyl Sheet Flooring Client Description: Grey And Yellow Sheet Vinyl Flooring	Location: Basement Closet Shelf Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 55 Cellulose	<u>Percent Non-Fibrous Material:</u> 45

Lab No.: 7525544 Client No.: 26	Analyst Observation: Green/Black Vinyl Sheet Flooring Client Description: Green Sheet Vinyl Flooring	Location: Basement Closet Shelf Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 45 Cellulose	<u>Percent Non-Fibrous Material:</u> 55


Lab No.: 7525545 Client No.: 27	Analyst Observation: Green/Black Vinyl Sheet Flooring Client Description: Green Sheet Vinyl Flooring	Location: Pantry Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 45 Cellulose	<u>Percent Non-Fibrous Material:</u> 55

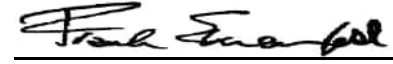
Lab No.: 7525546 Client No.: 28	Analyst Observation: Green/Black Vinyl Sheet Flooring Client Description: Green Sheet Vinyl Flooring	Location: Pantry Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 55 Cellulose	<u>Percent Non-Fibrous Material:</u> 45

Lab No.: 7525547 Client No.: 29	Analyst Observation: Brown Quarry Tile Client Description: Quarry Floor Tile, Mortar	Location: Front Entry 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.: 7525547(L2) Client No.: 29	Analyst Observation: Tan Mortar Client Description: Quarry Floor Tile, Mortar	Location: Front Entry 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

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525548 Client No.: 30	Analyst Observation: Brown Quarry Tile Client Description: Quarry Floor Tile, Mortar	Location: Front Entry 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.: 7525548(L2) Client No.: 30	Analyst Observation: Tan Mortar Client Description: Quarry Floor Tile, Mortar	Location: Front Entry 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.: 7525549 Client No.: 31	Analyst Observation: Brown Quarry Tile Client Description: Quarry Floor Tile, Mortar	Location: Front Entry 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

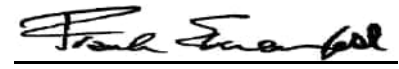
Lab No.: 7525549(L2) Client No.: 31	Analyst Observation: Tan Mortar Client Description: Quarry Floor Tile, Mortar	Location: Front Entry Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525550 Client No.: 32	Analyst Observation: Brown Grout Client Description: Grout	Location: Front Entry 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.: 7525551 Client No.: 33	Analyst Observation: Brown Grout Client Description: Grout	Location: Front Entry 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

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525552	Analyst Observation: Brown Grout	Location: Front Entry
Client No.: 34	Client Description: Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525553	Analyst Observation: Brown/White Ceramic	Location: Bathroom
Client No.: 35	Client Description: Floor Tile, Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525553(L2)	Analyst Observation: Grey Mortar	Location: Bathroom
Client No.: 35	Client Description: Floor Tile, Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

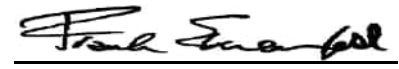
Lab No.: 7525554	Analyst Observation: Brown/White Ceramic	Location: Bathroom
Client No.: 36	Client Description: Floor Tile, Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525554(L2)	Analyst Observation: Grey Mortar	Location: Bathroom
Client No.: 36	Client Description: Floor Tile, Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525555	Analyst Observation: Brown/White Ceramic	Location: Bathroom
Client No.: 37	Client Description: Floor Tile, Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525555(L2)	Analyst Observation: Grey Mortar	Location: Bathroom
Client No.: 37	Client Description: Floor Tile, Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525556	Analyst Observation: Brown/Grey Grout	Location: Bathroom
Client No.: 38	Client Description: Floor Tile, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525557	Analyst Observation: Brown/Grey Grout	Location: Bathroom
Client No.: 39	Client Description: Floor Tile, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

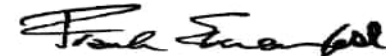
Lab No.: 7525558	Analyst Observation: Brown/Grey Grout	Location: Bathroom
Client No.: 40	Client Description: Floor Tile, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525559	Analyst Observation: Brown/White Ceramic	Location: Bathroom
Client No.: 41	Client Description: Wall Tile, Mortar, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525559(L2)	Analyst Observation: Tan Mortar	Location: Bathroom
Client No.: 41	Client Description: Wall Tile, Mortar, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381

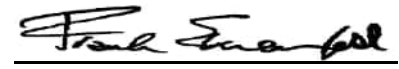
Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525559(L3) Client No.: 41 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Grout Client Description: Wall Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525559(L4) Client No.: 41 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Lt Grey Plaster Client Description: Wall Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525560 Client No.: 42 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Brown/White Ceramic Client Description: Wall Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525560(L2) Client No.: 42 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Mortar Client Description: Wall Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525560(L3) Client No.: 42 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Grout Client Description: Wall Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525561 Client No.: 43 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Brown/White Ceramic Client Description: Wall Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381

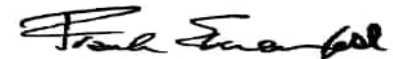
Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525561(L2) Client No.: 43 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Mortar Client Description: Wall Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525561(L3) Client No.: 43 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Grout Client Description: Wall Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525562 Client No.: 44 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Orange/Brown Quarry Tile Client Description: Countertop Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525562(L2) Client No.: 44 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey Mortar Client Description: Countertop Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> 5 Other	Location: Kitchen Facility: <u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7525562(L3) Client No.: 44 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Brown Grout Client Description: Countertop Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525563 Client No.: 45 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Orange/Brown Quarry Tile Client Description: Countertop Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Facility: <u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525563(L2)	Analyst Observation: Grey Mortar	Location: Kitchen
Client No.: 45	Client Description: Countertop Tile, Mortar, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	5 Other	95

Lab No.: 7525563(L3)	Analyst Observation: Brown Grout	Location: Kitchen
Client No.: 45	Client Description: Countertop Tile, Mortar, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525564	Analyst Observation: Orange/Brown Quarry Tile	Location: Kitchen
Client No.: 46	Client Description: Countertop Tile, Mortar, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

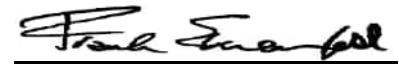
Lab No.: 7525564(L2)	Analyst Observation: Grey Mortar	Location: Kitchen
Client No.: 46	Client Description: Countertop Tile, Mortar, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	5 Other	95

Lab No.: 7525564(L3)	Analyst Observation: Brown Grout	Location: Kitchen
Client No.: 46	Client Description: Countertop Tile, Mortar, Grout	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525565	Analyst Observation: Brown Ceramic	Location: Kitchen
Client No.: 47	Client Description: Floor Tile	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

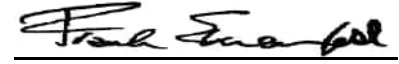
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525566 Client No.: 48	Analyst Observation: Brown Ceramic Client Description: Floor Tile	Location: Kitchen 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.: 7525567 Client No.: 49	Analyst Observation: Brown Ceramic Client Description: Floor Tile	Location: Kitchen 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.: 7525568 Client No.: 50	Analyst Observation: Brown Grout Client Description: Floor Tile Grout	Location: Kitchen 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.: 7525569 Client No.: 51	Analyst Observation: Brown Grout Client Description: Floor Tile Grout	Location: Kitchen 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.: 7525570 Client No.: 52	Analyst Observation: Brown Grout Client Description: Floor Tile Grout	Location: Kitchen 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.: 7525571 Client No.: 53	Analyst Observation: Brown/White Brick Client Description: Chimney, Brick	Location: Basement 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

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525572	Analyst Observation: Brown/White Brick	Location: Basement
Client No.: 54	Client Description: Chimney, Brick	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525573	Analyst Observation: Brown/White Brick	Location: Basement
Client No.: 55	Client Description: Chimney, Brick	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525574	Analyst Observation: Grey Mortar	Location: Basement
Client No.: 56	Client Description: Chimney, Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7525575	Analyst Observation: Grey Mortar	Location: Basement
Client No.: 57	Client Description: Chimney, Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525576	Analyst Observation: Grey Mortar	Location: Basement
Client No.: 58	Client Description: Chimney, Mortar	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525577	Analyst Observation: Grey Concrete	Location: Basement Foundation Walls
Client No.: 59	Client Description: Concrete	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101


Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525578 Client No.: 60	Analyst Observation: Grey Concrete Client Description: Concrete	Location: Basement Foundation Walls 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.: 7525579 Client No.: 61	Analyst Observation: Grey Concrete Client Description: Concrete	Location: Basement Foundation Walls 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.: 7525580 Client No.: 62	Analyst Observation: Grey Concrete Client Description: Concrete	Location: Back Patio 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.: 7525581 Client No.: 63	Analyst Observation: Grey Concrete Client Description: Concrete	Location: Back Patio 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.: 7525582 Client No.: 64	Analyst Observation: Grey Concrete Client Description: Concrete	Location: Back Patio 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.: 7525583 Client No.: 65	Analyst Observation: Grey Leveling Compound Client Description: Leveling Compound	Location: Back Stoop 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

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

Date Received: 11/15/2022
Date Analyzed: 11/20/2022
Signature: 
Analyst: Linda Price

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525584
Client No.: 66

Analyst Observation: Black/Brown Shingle
Client Description: Composition Shingle

Location: Roof
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
35 Fibrous Glass

Percent Non-Fibrous Material:
65

Lab No.: 7525585
Client No.: 67

Analyst Observation: Black/Brown Shingle
Client Description: Composition Shingle

Location: Roof
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
25 Fibrous Glass

Percent Non-Fibrous Material:
75

Lab No.: 7525586
Client No.: 68

Analyst Observation: Black/Brown Shingle
Client Description: Composition Shingle

Location: Roof
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
30 Fibrous Glass

Percent Non-Fibrous Material:
70

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

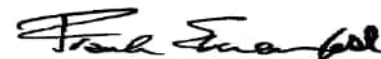
Date Received: 11/15/2022

Date Analyzed: 11/20/2022

Signature:

Analyst: Linda Price

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/20/2022
Report No.: 672695 - PLM
Project: Reno VMAC
Project No.: 2289101

Client: TTL381

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

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

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

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

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

—Bulk Asbestos—

Contact Information

Client Company: <u>TTL Associates, Inc.</u>	Project Number: <u>2289101</u>
Office Address: <u>1915 N 12th Street</u>	Project Name: <u>Reno VAMC</u>
City, State, Zip: <u>Toledo, OH 43604</u>	Primary Contact: <u>Harjot Singh</u>
Fax Number: _____	Office Phone: <u>419-214-5058</u>
Email Address: <u>hsingh@ttlassoc.com</u>	Cell Phone: _____

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 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 |
|---|--|

Special 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: _____ ☐ 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): _____	Date: _____	Time: _____
Received (Name / iATL): _____	Date: _____	Time: _____
Sample Login (Name / iATL): _____	Date: _____	Time: _____
Analysis(Name(s) / iATL): <u>AS/11-16-22</u>	Date: _____	Time: <u>NOV 15</u>
QA/QC Review (Name / iATL): _____	Date: _____	Time: _____
Archived / Released: _____	QA/QC InterLAB Use: _____	Date: _____

Chain of Custody

—Bulk Asbestos—

Contact Information

Client Company: TTL Associates, Inc.
Office Address: 1915 N 12th Street
City, State, Zip: Toledo, OH 43604
Fax Number: _____
Email Address: hsingh@tlassoc.com

Project Number: 2289101
Project Name: Reno VAMC
Primary Contact: Harjot Singh
Office Phone: 419-214-5058
Cell Phone: _____

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: 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: 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: Non-Building Material *** (Dust, Wipe, Tape)
☐ Soil or Vermiculite Analysis
☐ CARB 435

Special 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: _____
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): _____ Date: _____ Time: _____
Received (Name / iATL): _____ Date: _____ Time: _____
Sample Login (Name / iATL): _____ Date: _____ Time: _____
Analysis(Name(s) / iATL): msd Date: 11-17-07 Time: NOV 15 2007
QA/QC Review (Name / iATL): _____ Date: _____ Time: _____
Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____

Sample Log

—Bulk Asbestos—

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

635 Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525375	Family room, wall plaster	
2	7525376	Hall from family room, wall plaster	
3	7525377	Hall to front bedroom, wall plaster	
4	7525378	Back bedroom closet, smooth wall plaster	
5	7525379	Bathroom, smooth wall plaster	
6	7525380	Front bedroom closet, smooth wall plaster	
7	7525381	Basement den, smooth ceiling texture, drywall	
8	7525382	Basement clothing closet, smooth ceiling texture, drywall	
9	7525383	Basement den, smooth ceiling texture	
10	7525384	Basement bathroom, splotchy wall texture, joint compound, drywall	
11	7525385	Basement bathroom, splotchy wall texture, joint compound, drywall	
12	7525386	Basement bathroom, splotchy wall texture, joint compound, drywall	
13	7525387	Basement kitchen, orange peel wall texture, joint compound, drywall	
14	7525388	Basement kitchen, orange peel wall texture, joint compound, drywall	
15	7525389	Basement kitchen, orange peel wall texture, joint compound, drywall	
16	7525390	Basement den, heavy knock down wall texture, joint compound, drywall	

11/16
ABT
Stewart

Sample Log

—Bulk Asbestos—

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC
635 Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
17	7525391	Basement den, heavy knock down wall texture, joint compound, drywall	
18	7525392	Basement den, heavy knock down wall texture, joint compound, drywall	
19	7525393	Dining room, top layer sheet vinyl flooring, adhesive	
20	7525394	Dining room, top layer sheet vinyl flooring, adhesive	
21	7525395	Dining room, top layer sheet vinyl flooring, adhesive	
22	7525396	Dining room, bottom layer floor tile, black mastic	
23	7525397	Dining room, bottom layer floor tile, black mastic	
24	7525398	Dining room, bottom layer floor tile, black mastic	
25	7525399	Stairwell storage room, sheet vinyl flooring	
26	7525400	Stairwell storage room, sheet vinyl flooring	
27	7525401	Stairwell storage room, sheet vinyl flooring	
28	7525402	Basement kitchen, sheet vinyl flooring	
29	7525403	Basement kitchen, sheet vinyl flooring	
30	7525404	Basement kitchen, sheet vinyl flooring	
31	7525405	Basement bathroom, sheet vinyl flooring	
32	7525406	Basement bathroom, sheet vinyl flooring	

Sample Log

—Bulk Asbestos—

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

635 Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
33	7525407	Basement bathroom sheet vinyl flooring	
34	7525408	Basement den, cove base mastic	
35	7525409	Basement den, cove base mastic	
36	7525410	Basement den, cove base mastic	
37	7525411	Basement kitchen, 2x4 lay-in ceiling tile	
38	7525412	Basement kitchen, 2x4 lay-in ceiling tile	
39	7525413	Basement kitchen, 2x4 lay-in ceiling tile	
40	7525414	Kitchen floor, ceramic tile, mortar	
41	7525415	Kitchen floor, ceramic tile, mortar, grout	
42	7525416	Kitchen floor, ceramic tile, mortar grout	
43	7525417	Top floor bathroom shower surround ceramic tile, mortar	
44	7525418	Top floor bathroom shower surround ceramic tile, mortar	
45	7525419	Top floor bathroom shower surround ceramic tile, mortar	
46	7525420	Basement tub surround, ceramic tile grout, adhesive	
47	7525421	Basement tub surround, ceramic tile grout, adhesive	
48	7525422	Basement tub surround, ceramic tile adhesive	

Sample Log

–Bulk Asbestos–

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC
635 Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
49	7525423	Basement tub surround, grout	
50	7525424	Basement bathroom countertop ceramic tile, adhesive, thinset	
51	7525425	Basement bathroom countertop ceramic tile, adhesive, thinset	
52	7525426	Basement bathroom countertop ceramic tile, adhesive, thinset	
53	7525427	Basement bathroom countertop grout	
54	7525428	Basement bathroom countertop grout	
55	7525429	Basement bathroom countertop grout	
56	7525430	Roof, composition shingle	
57	7525431	Roof, composition shingle	
58	7525432	Roof, composition shingle	

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525375 Client No.: 1	Analyst Observation: White Plaster Client Description: Wall Plaster	Location: Family Room Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525375(L2) Client No.: 1	Analyst Observation: Off-White Plaster Client Description: Wall Plaster	Location: Family Room Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100


Lab No.: 7525376 Client No.: 2	Analyst Observation: White Plaster Client Description: Wall Plaster	Location: Hall From Family Room Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

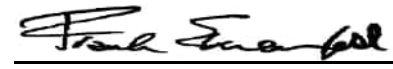
Lab No.: 7525377 Client No.: 3	Analyst Observation: White Plaster Client Description: Wall Plaster	Location: Hall to Front Bedroom Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525377(L2) Client No.: 3	Analyst Observation: Off-White Plaster Client Description: Wall Plaster	Location: Hall to Front Bedroom Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525378 Client No.: 4	Analyst Observation: White Plaster Client Description: Smooth Wall Plaster	Location: Back Bedroom Closet Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 11/15/2022
Date Analyzed: 11/16/2022
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525378(L2)
Client No.: 4

Percent Asbestos:
None Detected

Analyst Observation: Off-White Plaster
Client Description: Smooth Wall Plaster

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Back Bedroom Closet
Facility:

Percent Non-Fibrous Material:
100

Lab No.: 7525379
Client No.: 5

Percent Asbestos:
None Detected

Analyst Observation: White Plaster
Client Description: Smooth Wall Plaster

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Bathroom
Facility:

Percent Non-Fibrous Material:
100

Lab No.: 7525379(L2)
Client No.: 5

Percent Asbestos:
None Detected

Analyst Observation: Off-White Plaster
Client Description: Smooth Wall Plaster

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Bathroom
Facility:

Percent Non-Fibrous Material:
100

Lab No.: 7525380
Client No.: 6

Percent Asbestos:
None Detected

Analyst Observation: White Plaster
Client Description: Smooth Wall Plaster

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Front Bedroom Closet
Facility:

Percent Non-Fibrous Material:
100

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

Date Received: 11/15/2022

Date Analyzed: 11/16/2022

Signature: 

Analyst: Aidan Becker

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525381
Client No.: 7

Percent Asbestos:
None Detected

Analyst Observation: White/Tan Drywall
Client Description: Smooth Ceiling Texture Drywall

Percent Non-Asbestos Fibrous Material:
70 Cellulose

Location: Basement Den
Facility:

Percent Non-Fibrous Material:
30

Lab No.: 7525381(L2)
Client No.: 7

Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Smooth Ceiling Texture Drywall

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Basement Den
Facility:

Percent Non-Fibrous Material:
100

Lab No.: 7525382
Client No.: 8

Percent Asbestos:
None Detected

Analyst Observation: White/Tan Drywall
Client Description: Smooth Ceiling Texture Drywall

Percent Non-Asbestos Fibrous Material:
50 Cellulose

Location: Basement Clothing Closet
Facility:

Percent Non-Fibrous Material:
50

Lab No.: 7525382(L2)
Client No.: 8

Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Smooth Ceiling Texture Drywall

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Basement Clothing Closet
Facility:

Percent Non-Fibrous Material:
100

Lab No.: 7525383
Client No.: 9

Percent Asbestos:
None Detected

Analyst Observation: White/Tan Drywall
Client Description: Smooth Ceiling Texture

Percent Non-Asbestos Fibrous Material:
70 Cellulose

Location: Basement Den
Facility:

Percent Non-Fibrous Material:
30

Lab No.: 7525383(L2)
Client No.: 9

Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Smooth Ceiling Texture

Percent Non-Asbestos Fibrous Material:
None Detected


Location: Basement Den
Facility:

Percent Non-Fibrous Material:
100

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

Date Received: 11/15/2022

Date Analyzed: 11/17/2022

Signature: 

Analyst: Rebecca Hargrove

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525384	Analyst Observation: Tan Drywall	Location: Basement Bathroom
Client No.: 10	Client Description: Splotchy Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	20 Cellulose	80

Lab No.: 7525384(L2)	Analyst Observation: Off-White Joint Compound	Location: Basement Bathroom
Client No.: 10	Client Description: Splotchy Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525384(L3)	Analyst Observation: Off-White Texture	Location: Basement Bathroom
Client No.: 10	Client Description: Splotchy Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

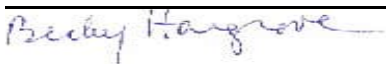
Lab No.: 7525385	Analyst Observation: White/Tan Drywall	Location: Basement Bathroom
Client No.: 11	Client Description: Splotchy Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	25 Cellulose	75

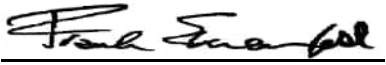
Note: No joint compound present

Lab No.: 7525385(L2)	Analyst Observation: Off-White Texture	Location: Basement Bathroom
Client No.: 11	Client Description: Splotchy Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525386	Analyst Observation: Tan Drywall	Location: Basement Bathroom
Client No.: 12	Client Description: Splotchy Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	50 Cellulose	50

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525386(L2)	Analyst Observation: Off-White Joint Compound	Location: Basement Bathroom
Client No.: 12	Client Description: Splotchy Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525386(L3)	Analyst Observation: Off-White Texture	Location: Basement Bathroom
Client No.: 12	Client Description: Splotchy Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

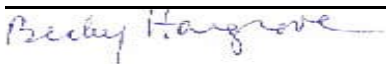
Lab No.: 7525387	Analyst Observation: White/Tan Drywall	Location: Basement Kitchen
Client No.: 13	Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	50 Cellulose	50

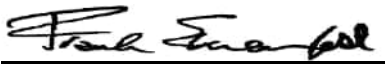
Lab No.: 7525387(L2)	Analyst Observation: White Joint Compound	Location: Basement Kitchen
Client No.: 13	Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525387(L3)	Analyst Observation: White Texture	Location: Basement Kitchen
Client No.: 13	Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525388	Analyst Observation: White/Tan Drywall	Location: Basement Kitchen
Client No.: 14	Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	35 Cellulose	65

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525388(L2)	Analyst Observation: White Drywall	Location: Basement Kitchen
Client No.: 14	Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525388(L3)	Analyst Observation: White Texture	Location: Basement Kitchen
Client No.: 14	Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

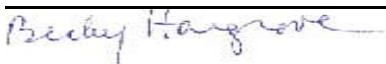
Lab No.: 7525389	Analyst Observation: White/Tan Drywall	Location: Basement Kitchen
Client No.: 15	Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	50 Cellulose	50

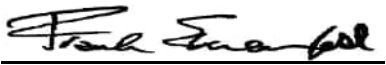
Lab No.: 7525389(L2)	Analyst Observation: White Joint Compound	Location: Basement Kitchen
Client No.: 15	Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525389(L3)	Analyst Observation: White Texture	Location: Basement Kitchen
Client No.: 15	Client Description: Orange Peel Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525390	Analyst Observation: White/Tan Drywall	Location: Basement Den
Client No.: 16	Client Description: Heavy Knock Down Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	20 Cellulose	80

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525390(L2)	Analyst Observation: Tan Joint Compound	Location: Basement Den
Client No.: 16	Client Description: Heavy Knock Down Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
PC 2.2 Chrysotile	None Detected	97.8

Lab No.: 7525390(L3)	Analyst Observation: White Texture	Location: Basement Den
Client No.: 16	Client Description: Heavy Knock Down Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	None Detected	100

Lab No.: 7525391	Analyst Observation: White/Tan Drywall	Location: Basement Den
Client No.: 17	Client Description: Heavy Knock Down Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	35 Cellulose	65

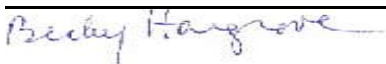
Lab No.: 7525391(L2)	Analyst Observation: Tan Joint Compound	Location: Basement Den
Client No.: 17	Client Description: Heavy Knock Down Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
PC 1.5 Chrysotile	None Detected	98.5

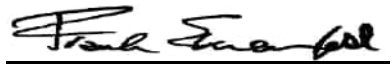
Insufficient material provided to verify results.

Lab No.: 7525391(L3)	Analyst Observation: White Joint Compound	Location: Basement Den
Client No.: 17	Client Description: Heavy Knock Down Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	None Detected	100

Lab No.: 7525391(L4)	Analyst Observation: Off-White Texture	Location: Basement Den
Client No.: 17	Client Description: Heavy Knock Down Wall Texture, Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525392 Client No.: 18	Analyst Observation: White/Tan Drywall Client Description: Heavy Knock Down Wall Texture, Joint Compound, Drywall	Location: Basement Den Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose	<u>Percent Non-Fibrous Material:</u> 50

Lab No.: 7525392(L2) Client No.: 18	Analyst Observation: White Joint Compound Client Description: Heavy Knock Down Wall Texture, Joint Compound, Drywall	Location: Basement Den Facility:
<u>Percent Asbestos:</u> <i>PC 1.4 Chrysotile</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 98.6

Lab No.: 7525392(L3) Client No.: 18	Analyst Observation: Off-White Texture Client Description: Heavy Knock Down Wall Texture, Joint Compound, Drywall	Location: Basement Den 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

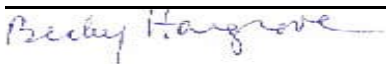
Lab No.: 7525393 Client No.: 19	Analyst Observation: Off-White Vinyl Sheet Flooring Client Description: Top Layer Sheet Vinyl Flooring, Adhesive	Location: Dining Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Cellulose 1 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 84

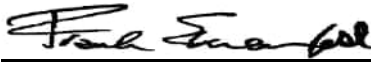
Lab No.: 7525393(L2) Client No.: 19	Analyst Observation: Tan Mastic Client Description: Top Layer Sheet Vinyl Flooring, Adhesive	Location: Dining Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525394 Client No.: 20	Analyst Observation: Off-White Vinyl Sheet Flooring Client Description: Top Layer Sheet Vinyl Flooring, Adhesive	Location: Dining Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 1 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 89

Note: No mastic present

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525395	Analyst Observation: Off-White Vinyl Sheet Flooring	Location: Dining Room
Client No.: 21	Client Description: Top Layer Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	20 Cellulose 2 Fibrous Glass	78

Lab No.: 7525395(L2)	Analyst Observation: Tan Mastic	Location: Dining Room
Client No.: 21	Client Description: Top Layer Sheet Vinyl Flooring, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525396	Analyst Observation: Grey Floor Tile	Location: Dining Room
Client No.: 22	Client Description: Bottom Layer Floor Tile, Black Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>PC 1.9 Chrysotile</i>	None Detected	98.1

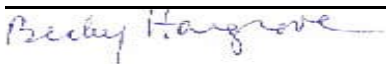
Lab No.: 7525396(L2)	Analyst Observation: Black Mastic	Location: Dining Room
Client No.: 22	Client Description: Bottom Layer Floor Tile, Black Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>PC 2.5 Chrysotile</i>	None Detected	97.5

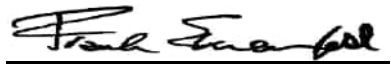
Lab No.: 7525397	Analyst Observation: Green Floor Tile	Location: Dining Room
Client No.: 23	Client Description: Bottom Layer Floor Tile, Black Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>PC 6.3 Chrysotile</i>	None Detected	93.7

Note: Insufficient mastic provided for analysis.

Lab No.: 7525398	Analyst Observation: Tan Floor Tile	Location: Dining Room
Client No.: 24	Client Description: Bottom Layer Floor Tile, Black Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>PC 4.7 Chrysotile</i>	None Detected	95.3

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525398(L2)	Analyst Observation: Black Mastic	Location: Dining Room
Client No.: 24	Client Description: Bottom Layer Floor Tile, Black Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
PC 3.8 Chrysotile	None Detected	96.2

Insufficient material provided to verify results.

Lab No.: 7525399	Analyst Observation: Off-White Vinyl Sheet Flooring	Location: Stairwell Storage Room
Client No.: 25	Client Description: Sheet Vinyl Flooring	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	10 Cellulose	90

Note: No mastic present

Lab No.: 7525400	Analyst Observation: Off-White Vinyl Sheet Flooring	Location: Stairwell Storage Room
Client No.: 26	Client Description: Sheet Vinyl Flooring	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	20 Cellulose	80

Lab No.: 7525400(L2)	Analyst Observation: Tan/White Mastic/Leveling Compound	Location: Stairwell Storage Room
Client No.: 26	Client Description: Sheet Vinyl Flooring	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	None Detected	100

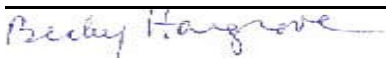
Layers not separable.

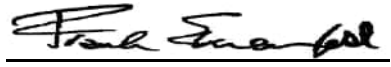
Lab No.: 7525401	Analyst Observation: Off-White Vinyl Sheet Flooring	Location: Stairwell Storage Room
Client No.: 27	Client Description: Sheet Vinyl Flooring	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	20 Cellulose	80

Lab No.: 7525401(L2)	Analyst Observation: Tan/White Mastic/Leveling Compound	Location: Stairwell Storage Room
Client No.: 27	Client Description: Sheet Vinyl Flooring	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	None Detected	100

Layers not separable.

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525402
Client No.: 28

Analyst Observation: Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl Flooring

Location: Basement Kitchen
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
10 Cellulose

Percent Non-Fibrous Material:
90

Note: No mastic present

Lab No.: 7525403
Client No.: 29

Analyst Observation: Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl Flooring

Location: Basement Kitchen
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
15 Cellulose

Percent Non-Fibrous Material:
85

Lab No.: 7525403(L2)
Client No.: 29

Analyst Observation: Tan Mastic
Client Description: Sheet Vinyl Flooring

Location: Basement Kitchen
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Insufficient material provided to verify results.

Lab No.: 7525404
Client No.: 30

Analyst Observation: Tan/Off-White Vinyl Sheet Flooring
Client Description: Sheet Vinyl Flooring

Location: Basement Kitchen
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
20 Cellulose
1 Fibrous Glass

Percent Non-Fibrous Material:
79

Note: No mastic present

Lab No.: 7525405
Client No.: 31

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

Location: Basement Bathroom
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
10 Cellulose
1 Fibrous Glass


Percent Non-Fibrous Material:
89

Note: No mastic present

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

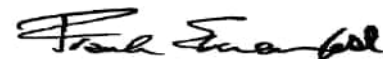
Date Received: 11/15/2022

Date Analyzed: 11/17/2022

Signature: 

Analyst: Rebecca Hargrove

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525406	Analyst Observation: Off-White Vinyl Sheet Flooring	Location: Basement Bathroom
Client No.: 32	Client Description: Sheet Vinyl Flooring	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	2 Cellulose	98

Note: No mastic present

Lab No.: 7525407	Analyst Observation: Off-White Vinyl Sheet Flooring	Location: Basement Bathroom
Client No.: 33	Client Description: Sheet Vinyl Flooring	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	5 Cellulose	95

Note: No mastic present

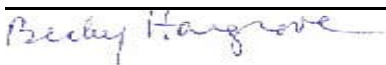
Lab No.: 7525408	Analyst Observation: Tan Mastic	Location: Basement Den
Client No.: 34	Client Description: Cove Base Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	None Detected	100

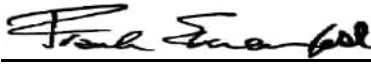
Lab No.: 7525409	Analyst Observation: Tan Mastic	Location: Basement Den
Client No.: 35	Client Description: Cove Base Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	None Detected	100

Lab No.: 7525410	Analyst Observation: Tan Mastic	Location: Basement Den
Client No.: 36	Client Description: Cove Base Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	None Detected	100

Lab No.: 7525411	Analyst Observation: Grey/White Ceiling Tile	Location: Basement Kitchen
Client No.: 37	Client Description: 2x4 Lay-In Ceiling Tile	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	75 Cellulose 5 Fibrous Glass	20

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525412 Client No.: 38	Analyst Observation: Grey/White Ceiling Tile Client Description: 2x4 Lay-In Ceiling Tile	Location: Basement Kitchen Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 75 Cellulose 5 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 20

Lab No.: 7525413 Client No.: 39	Analyst Observation: Grey/White Ceiling Tile Client Description: 2x4 Lay-In Ceiling Tile	Location: Basement Kitchen Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 75 Cellulose 5 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 20

Lab No.: 7525414 Client No.: 40	Analyst Observation: Off-White Ceramic Client Description: Ceramic Tile, Mortar	Location: Kitchen Floor 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

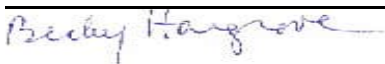
Lab No.: 7525414(L2) Client No.: 40	Analyst Observation: Grey Mortar Client Description: Ceramic Tile, Mortar	Location: Kitchen Floor Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

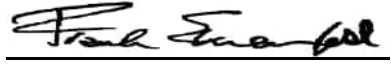
Lab No.: 7525414(L3) Client No.: 40	Analyst Observation: Black Mastic Client Description: Ceramic Tile, Mortar	Location: Kitchen Floor Facility:
<u>Percent Asbestos:</u> <i>PC 1.6 Chrysotile</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 98.4

Insufficient material provided to verify results.

Lab No.: 7525415 Client No.: 41	Analyst Observation: Off-White Ceramic Client Description: Ceramic Tile, Mortar, Grout	Location: Kitchen Floor 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

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525415(L2) Client No.: 41 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Grout Client Description: Ceramic Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Floor Facility: <u>Percent Non-Fibrous Material:</u> 100
--	---	---

Lab No.: 7525415(L3) Client No.: 41 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey Mortar Client Description: Ceramic Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Floor Facility: <u>Percent Non-Fibrous Material:</u> 100
--	---	---

Lab No.: 7525415(L4) Client No.: 41 <u>Percent Asbestos:</u> PC 2.9 Chrysotile	Analyst Observation: Black Mastic Client Description: Ceramic Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Floor Facility: <u>Percent Non-Fibrous Material:</u> 97.1
--	--	--

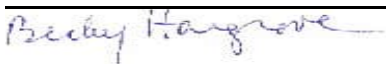
Insufficient material provided to verify results.

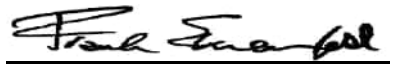
Lab No.: 7525416 Client No.: 42 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Ceramic Client Description: Ceramic Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Floor Facility: <u>Percent Non-Fibrous Material:</u> 100
--	---	---

Lab No.: 7525416(L2) Client No.: 42 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Grout Client Description: Ceramic Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Floor Facility: <u>Percent Non-Fibrous Material:</u> 100
--	---	---

Lab No.: 7525416(L3) Client No.: 42 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey Mortar Client Description: Ceramic Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Floor Facility: <u>Percent Non-Fibrous Material:</u> 100
--	---	---

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

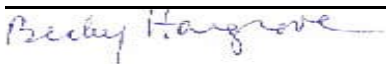
Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

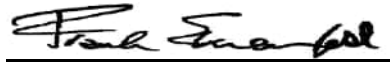
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525416(L4) Client No.: 42 <u>Percent Asbestos:</u> PC 4.1 Chrysotile	Analyst Observation: Black Mastic Client Description: Ceramic Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Kitchen Floor Facility: <u>Percent Non-Fibrous Material:</u> 95.9
Lab No.: 7525417 Client No.: 43 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Ceramic Client Description: Ceramic Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Top Floor Bathroom Shower Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525417(L2) Client No.: 43 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Lt Grey Grout Client Description: Ceramic Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Top Floor Bathroom Shower Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525417(L3) Client No.: 43 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey/White Mortar Client Description: Ceramic Tile, Mortar, Grout <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Top Floor Bathroom Shower Facility: <u>Percent Non-Fibrous Material:</u> 100
<i>Layers not separable.</i>		
Lab No.: 7525418 Client No.: 44 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Ceramic Client Description: Ceramic Tile, Mortar <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Top Floor Bathroom Shower Surround Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7525418(L2) Client No.: 44 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Lt Grey Grout Client Description: Ceramic Tile, Mortar <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Top Floor Bathroom Shower Surround Facility: <u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525418(L3)
Client No.: 44

Analyst Observation: Grey/White Mortar
Client Description: Ceramic Tile, Mortar

Location: Top Floor Bathroom Shower Surround

Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Layers not separable.

Lab No.: 7525419
Client No.: 45

Analyst Observation: White Ceramic
Client Description: Ceramic Tile, Mortar

Location: Top Floor Bathroom Shower Surround

Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525419(L2)
Client No.: 45

Analyst Observation: Lt Grey Grout
Client Description: Ceramic Tile, Mortar

Location: Top Floor Bathroom Shower Surround

Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525419(L3)
Client No.: 45

Analyst Observation: Grey/White Mortar
Client Description: Ceramic Tile, Mortar

Location: Top Floor Bathroom Shower Surround

Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Layers not separable.

Lab No.: 7525420
Client No.: 46

Analyst Observation: White Ceramic
Client Description: Ceramic Tile, Grout, Adhesive

Location: Basement Tub Surround

Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525420(L2)
Client No.: 46

Analyst Observation: Brown Grout
Client Description: Ceramic Tile, Grout, Adhesive

Location: Basement Tub Surround

Facility:

Percent Asbestos:
None Detected

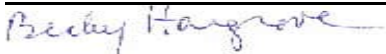
Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

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

Date Received: 11/15/2022

Date Analyzed: 11/17/2022

Signature: 

Analyst: Rebecca Hargrove

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525420(L3)	Analyst Observation: Grey Mortar	Location: Basement Tub Surround
Client No.: 46	Client Description: Ceramic Tile, Grout, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	2 Wollastonite	98

Lab No.: 7525421	Analyst Observation: White Ceramic	Location: Basement Tub Surround
Client No.: 47	Client Description: Ceramic Tile, Grout, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

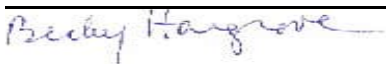
Lab No.: 7525421(L2)	Analyst Observation: Brown Grout	Location: Basement Tub Surround
Client No.: 47	Client Description: Ceramic Tile, Grout, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

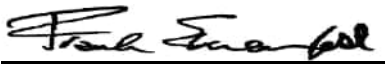
Lab No.: 7525421(L3)	Analyst Observation: Tan Mortar	Location: Basement Tub Surround
Client No.: 47	Client Description: Ceramic Tile, Grout, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7525421(L4)	Analyst Observation: Black Mastic	Location: Basement Tub Surround
Client No.: 47	Client Description: Ceramic Tile, Grout, Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>PC 5.3 Chrysotile</i>	None Detected	94.7

Lab No.: 7525422	Analyst Observation: White Ceramic	Location: Basement Tub Surround
Client No.: 48	Client Description: Ceramic Tile Adhesive	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525422(L2)
Client No.: 48

Analyst Observation: Brown Grout
Client Description: Ceramic Tile Adhesive

Location: Basement Tub Surround
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525422(L3)
Client No.: 48

Analyst Observation: Grey/Brown Mortar
Client Description: Ceramic Tile Adhesive

Location: Basement Tub Surround
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
2 Wollastonite

Percent Non-Fibrous Material:
98

Lab No.: 7525423
Client No.: 49

Analyst Observation: Brown Grout
Client Description: Grout

Location: Basement Tub Surround
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525424
Client No.: 50

Analyst Observation: Brown/White Ceramic
Client Description: Ceramic Tile. Adhesive, Thinset

Location: Basement Bathroom Counter Top
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525424(L2)
Client No.: 50

Analyst Observation: Tan Mastic
Client Description: Ceramic Tile. Adhesive, Thinset

Location: Basement Bathroom Counter Top
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
5 Wollastonite

Percent Non-Fibrous Material:
95

Lab No.: 7525425
Client No.: 51

Analyst Observation: Brown/White Ceramic
Client Description: Ceramic Tile. Adhesive, Thinset

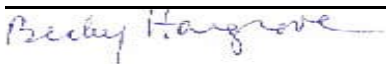
Location: Basement Bathroom Counter Top
Facility:

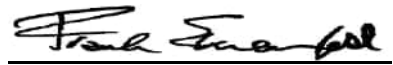
Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

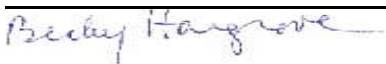
Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

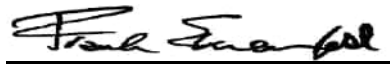
Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525425(L2) Client No.: 51	Analyst Observation: Tan Mastic Client Description: Ceramic Tile. Adhesive, Thinset	Location: Basement Bathroom Counter Top Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Wollastonite	<u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7525426 Client No.: 52	Analyst Observation: Brown/White Ceramic Client Description: Ceramic Tile. Adhesive, Thinset	Location: Basement Bathroom Counter Top 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.: 7525426(L2) Client No.: 52	Analyst Observation: Tan Mastic Client Description: Ceramic Tile. Adhesive, Thinset	Location: Basement Bathroom Counter Top Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Wollastonite	<u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7525427 Client No.: 53	Analyst Observation: Brown Grout Client Description: Grout	Location: Basement Bathroom Counter Top 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.: 7525428 Client No.: 54	Analyst Observation: Brown Grout Client Description: Grout	Location: Basement Bathroom Counter Top 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.: 7525429 Client No.: 55	Analyst Observation: Brown Grout Client Description: Grout	Location: Basement Bathroom Counter Top 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

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525430
Client No.: 56

Percent Asbestos:
None Detected

Analyst Observation: Red/Black Shingle
Client Description: Composition Shingle

Percent Non-Asbestos Fibrous Material:
15 Fibrous Glass

Location: Roof
Facility:

Percent Non-Fibrous Material:
85

Lab No.: 7525430(L2)
Client No.: 56

Percent Asbestos:
None Detected

Analyst Observation: Grey/Black Shingle
Client Description: Composition Shingle

Percent Non-Asbestos Fibrous Material:
15 Fibrous Glass

Location: Roof
Facility:

Percent Non-Fibrous Material:
85

Lab No.: 7525431
Client No.: 57

Percent Asbestos:
None Detected

Analyst Observation: Grey/Black Shingle
Client Description: Composition Shingle

Percent Non-Asbestos Fibrous Material:
15 Fibrous Glass

Location: Roof
Facility:

Percent Non-Fibrous Material:
85

Lab No.: 7525432
Client No.: 58

Percent Asbestos:
None Detected

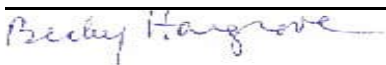
Analyst Observation: Grey/Black Shingle
Client Description: Composition Shingle

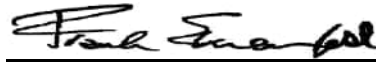
Percent Non-Asbestos Fibrous Material:
15 Fibrous Glass

Location: Roof
Facility:

Percent Non-Fibrous Material:
85

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

Date Received: 11/15/2022
Date Analyzed: 11/17/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/17/2022
Report No.: 672687 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

2)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

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

3)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

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

4)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

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

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

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

*With advance notice and confirmation by the laboratory.

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

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

—Bulk Asbestos—

Contact Information

Client Company: <u>TTL Associates, Inc.</u> Office Address: <u>1915 N 12th Street</u> City, State, Zip: <u>Toledo, OH 43604</u> Fax Number: _____ Email Address: <u>hsingh@tlassoc.com</u>	Project Number: <u>2289101</u> Project Name: <u>Reno VAMC</u> Primary Contact: <u>Harjot Singh</u> Office Phone: <u>419-214-5058</u> Cell Phone: _____
---	---

PLM Instructions:

- | | |
|---|--|
| <input checked="" type="checkbox"/> PLM: Bulk Asbestos Building Materials EPA 600 R-93/116, 1993
<input type="checkbox"/> PLM: Bulk Asbestos Building Materials EPA 600 M-4/82-020, 1982
<input type="checkbox"/> PLM: Bulk Asbestos Building Materials NIOSH 9002, 1985
<input type="checkbox"/> PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.1, 2002
<input type="checkbox"/> PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.6, 2010
<input type="checkbox"/> TEM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.4, 2009

<input type="checkbox"/> PLM: Point Counting
<input type="checkbox"/> PC: via ELAP 198.1
<input 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
<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 | <input type="checkbox"/> PLM: Analyze Until Positive (Positive Stop)
<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
<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)
<input type="checkbox"/> Soil or Vermiculite Analysis *
<input type="checkbox"/> CARB 435 |
|---|--|

Special 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: _____ ☐ 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): _____	Date: _____	Time: _____	RECEIVED
Received (Name / iATL): _____	Date: _____	Time: _____	
Sample Login (Name / iATL): _____	Date: _____	Time: _____	
Analysis (Name(s) / iATL): <u>Harjot Singh</u>	Date: <u>11/13/22</u>	Time: <u>NOV 15 2022</u>	
QA/QC Review (Name / iATL): _____	Date: _____	Time: _____	
Archived / Released: _____	QA/QC InterLAB Use: _____	Date: _____	Time: _____

Sample Log

–Bulk Asbestos –

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

635A Taylor St, Reno

Sampling Date/Time: 11/4/22

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
1	7525043	Kitchen hall, heavy orange peel wall texture joint compound, drywall	
2	7525044	Bedroom 3, heavy orange peel wall texture joint compound, drywall	
3	7525045	Bedroom 3, heavy orange peel wall texture joint compound, drywall	
4	7525046	Entry closet, orange peel wall texture, joint compound, drywall	
5	7525047	Dining room, orange peel wall texture joint compound, drywall	
6	7525048	Kitchen, orange peel wall texture, joint compound, drywall	
7	7525049	Bedroom 1, orange peel wall texture joint compound, drywall	
8	7525050	Bedroom 2, orange peel wall texture joint compound, drywall	
9	7525051	Family room, heavy knock down ceiling texture, joint compound, drywall	
10	7525052	Family room, heavy knock down ceiling texture, joint compound, drywall	
11	7525053	Hall, heavy knock down ceiling texture joint compound, drywall	
12	7525054	Bedroom 3, heavy knock down ceiling texture, joint compound, drywall	
13	7525055	Bedroom 2, heavy knock down ceiling texture, joint compound, drywall	
14	7525056	Family room entry, yellow square sheet vinyl flooring, yellow adhesive	
15	7525057	Kitchen, yellow square sheet vinyl flooring, yellow adhesive	
16	7525058	Hall bathroom, yellow square sheet vinyl flooring	

Sample Log

–Bulk Asbestos –

Client: TTL Associates, Inc. Project: 2289101 - Reno VAMC

635A Taylor St, Reno

Sampling Date/Time: 11/4/22

[illegible]

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Client: TTL381

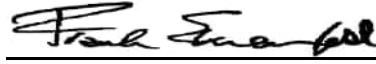
Report Date: 11/22/2022
Report No.: 672673 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525043 Client No.: 1	Analyst Observation: White Drywall Client Description: Heavy Orange Peel Wall Texture Joint Compound, Drywall	Location: Kitchen Hall Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 2 Fibrous Glass 1 Cellulose	<u>Percent Non-Fibrous Material:</u> 97
Lab No.: 7525043(L2) Client No.: 1	Analyst Observation: White Texture/Joint Compound Client Description: Heavy Orange Peel Wall Texture Joint Compound, Drywall	Location: Kitchen Hall 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.: 7525044 Client No.: 2	Analyst Observation: White Drywall Client Description: Heavy Orange Peel Wall Texture Joint Compound, Drywall	Location: Bedroom 3 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 1 Fibrous Glass 1 Cellulose	<u>Percent Non-Fibrous Material:</u> 98
Lab No.: 7525044(L2) Client No.: 2	Analyst Observation: White Texture/Joint Compound Client Description: Heavy Orange Peel Wall Texture Joint Compound, Drywall	Location: Bedroom 3 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.: 7525045 Client No.: 3	Analyst Observation: White Drywall Client Description: Heavy Orange Peel Wall Texture Joint Compound, Drywall	Location: Bedroom 3 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 2 Fibrous Glass 1 Cellulose	<u>Percent Non-Fibrous Material:</u> 97

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: David Hayes

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/22/2022
Report No.: 672673 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525045(L2)	Analyst Observation: White Texture/Joint Compound	Location: Bedroom 3
Client No.: 3	Client Description: Heavy Orange Peel Wall Texture Joint Compound, Drywall	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.: 7525046	Analyst Observation: White Drywall	Location: Entry Closet
Client No.: 4	Client Description: Orange Peel Wall Texture Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 2 Fibrous Glass Trace Cellulose	<u>Percent Non-Fibrous Material:</u> 98

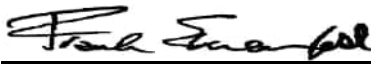
Lab No.: 7525046(L2)	Analyst Observation: White Texture/Joint Compound	Location: Entry Closet
Client No.: 4	Client Description: Orange Peel Wall Texture Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7525047	Analyst Observation: White Drywall	Location: Dining Room
Client No.: 5	Client Description: Orange Peel Wall Texture Joint Compound, Drywall	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 1 Fibrous Glass 1 Cellulose	<u>Percent Non-Fibrous Material:</u> 98

Lab No.: 7525047(L2)	Analyst Observation: White Texture/Joint Compound	Location: Dining Room
Client No.: 5	Client Description: Orange Peel Wall Texture Joint Compound, Drywall	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

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: David Hayes

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604


Report Date: 11/22/2022
Report No.: 672673 - PLM
Project: Reno VAMC
Project No.: 2289101


Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525048 Client No.: 6	Analyst Observation: White Drywall Client Description: Orange Peel Wall Texture Joint Compound, Drywall	Location: Kitchen Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 2 Fibrous Glass 1 Cellulose	<u>Percent Non-Fibrous Material:</u> 97
Lab No.: 7525048(L2) Client No.: 6	Analyst Observation: White Texture/Joint Compound Client Description: Orange Peel Wall Texture Joint Compound, Drywall	Location: Kitchen 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.: 7525049 Client No.: 7	Analyst Observation: White Drywall Client Description: Orange Peel Wall Texture Joint Compound, Drywall	Location: Bedroom 1 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 2 Fibrous Glass Trace Cellulose	<u>Percent Non-Fibrous Material:</u> 98
Lab No.: 7525049(L2) Client No.: 7	Analyst Observation: White Texture/Joint Compound Client Description: Orange Peel Wall Texture Joint Compound, Drywall	Location: Bedroom 1 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.: 7525050 Client No.: 8	Analyst Observation: White Drywall Client Description: Orange Peel Wall Texture Joint Compound, Drywall	Location: Bedroom 2 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

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: David Hayes

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672673 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525050(L2)
Client No.: 8

Analyst Observation: White Texture/Joint Compound
Client Description: Orange Peel Wall Texture Joint Compound, Drywall

Location: Bedroom 2
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525051
Client No.: 9

Analyst Observation: White Drywall
Client Description: Heavy Knock Down Ceiling Texture, Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
2 Fibrous Glass

Location: Family Room
Facility:

Percent Asbestos:
None Detected

Percent Non-Fibrous Material:
98

This sample contains vermiculite mineral. It is not vermiculite attic insulation, but may be considered for possible future analysis. See attached.

Lab No.: 7525051(L2)
Client No.: 9

Analyst Observation: White Ceiling Texture
Client Description: Heavy Knock Down Ceiling Texture, Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Family Room
Facility:

Percent Asbestos:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7525052
Client No.: 10

Analyst Observation: White Drywall
Client Description: Heavy Knock Down Ceiling Texture, Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
2 Fibrous Glass
Trace Cellulose

Location: Family Room
Facility:

Percent Asbestos:
None Detected

Percent Non-Fibrous Material:
98

This sample contains vermiculite mineral. It is not vermiculite attic insulation, but may be considered for possible future analysis. See attached.

Lab No.: 7525052(L2)
Client No.: 10


Analyst Observation: White Ceiling Texture
Client Description: Heavy Knock Down Ceiling Texture, Joint Compound, Drywall
Percent Non-Asbestos Fibrous Material:
None Detected

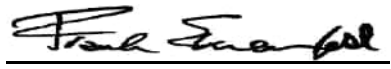
Location: Family Room
Facility:

Percent Asbestos:
None Detected

Percent Non-Fibrous Material:
100

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: David Hayes

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/22/2022
Report No.: 672673 - PLM
Project: Reno VAMC
Project No.: 2289101

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525053 Client No.: 11 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Drywall Client Description: Heavy Knock Down Ceiling Texture, Joint Compound, Drywall <u>Percent Non-Asbestos Fibrous Material:</u> 3 Fibrous Glass Trace Cellulose	Location: Hall Facility: <u>Percent Non-Fibrous Material:</u> 97
--	---	---

This sample contains vermiculite mineral. It is not vermiculite attic insulation, but may be considered for possible future analysis. See attached.

Lab No.: 7525053(L2) Client No.: 11 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Ceiling Texture Client Description: Heavy Knock Down Ceiling Texture, Joint Compound, Drywall <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Hall Facility: <u>Percent Non-Fibrous Material:</u> 100
--	--	--

Lab No.: 7525054 Client No.: 12 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Drywall Client Description: Heavy Knock Down Ceiling Texture, Joint Compound, Drywall <u>Percent Non-Asbestos Fibrous Material:</u> 2 Fibrous Glass Trace Cellulose	Location: Bedroom 3 Facility: <u>Percent Non-Fibrous Material:</u> 98
--	---	--


This sample contains vermiculite mineral. It is not vermiculite attic insulation, but may be considered for possible future analysis. See attached.

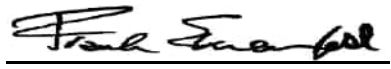
Lab No.: 7525054(L2) Client No.: 12 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Ceiling Texture Client Description: Heavy Knock Down Ceiling Texture, Joint Compound, Drywall <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bedroom 3 Facility: <u>Percent Non-Fibrous Material:</u> 100
--	--	---

Lab No.: 7525055 Client No.: 13 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Texture/Joint Compound Client Description: Heavy Knock Down Ceiling Texture, Joint Compound, Drywall <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Bedroom 2 Facility: <u>Percent Non-Fibrous Material:</u> 100
--	---	---

No Drywall Present,

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: David Hayes

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672673 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525056 Client No.: 14	Analyst Observation: Yellow Vinyl Sheet Flooring Client Description: Yellow Square Sheet Vinyl Flooring, Yellow Adhesive	Location: Family Room Entry Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 25 Cellulose 3 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 72


Lab No.: 7525056(L2) Client No.: 14	Analyst Observation: Off-White Mastic Client Description: Yellow Square Sheet Vinyl Flooring, Yellow Adhesive	Location: Family Room Entry 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

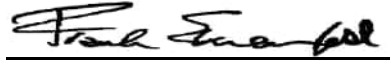
Lab No.: 7525057 Client No.: 15	Analyst Observation: Off-White/Grey Vinyl Sheet Flooring Client Description: Yellow Square Sheet Vinyl Flooring, Yellow Adhesive	Location: Kitchen Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 25 Cellulose 3 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 72

Lab No.: 7525057(L2) Client No.: 15	Analyst Observation: Off-White Mastic Client Description: Yellow Square Sheet Vinyl Flooring, Yellow Adhesive	Location: Kitchen 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.: 7525058 Client No.: 16	Analyst Observation: Off-White/Grey Vinyl Sheet Flooring Client Description: Yellow Square Sheet Vinyl Flooring	Location: Hall Bathroom Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 20 Cellulose 3 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 77

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

Date Received: 11/15/2022
Date Analyzed: 11/22/2022
Signature: 
Analyst: David Hayes

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672673 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7525059
Client No.: 17

Analyst Observation: Black Shingle
Client Description: Composition Shingle

Location: Roof
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
25 Fibrous Glass

Percent Non-Fibrous Material:
75

Lab No.: 7525060
Client No.: 18

Analyst Observation: Black Shingle
Client Description: Composition Shingle

Location: Roof
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
25 Fibrous Glass

Percent Non-Fibrous Material:
75

Lab No.: 7525061
Client No.: 19

Analyst Observation: Black Shingle
Client Description: Composition Shingle

Location: Roof
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
25 Fibrous Glass

Percent Non-Fibrous Material:
75

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

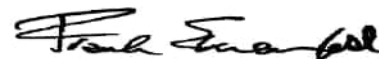
Date Received: 11/15/2022

Date Analyzed: 11/22/2022

Signature: 

Analyst: David Hayes

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/22/2022
Report No.: 672673 - PLM
Project: Reno VAMC
Project No.: 2289101

Appendix to Analytical Report

Customer Contact: Sara Vogelpohl

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Kelly Klippel

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
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

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

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

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Client: TTL381

Report Date: 11/22/2022
Report No.: 672673 - PLM
Project: Reno VAMC
Project No.: 2289101

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

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

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

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

Disclaimers / Qualifiers:

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

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

Recommendations for Vermiculite Analysis:

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

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

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

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

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

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

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: TTL Associates Inc.
1915 N. 12th Street
Toledo OH 43604

Report Date: 11/22/2022
Report No.: 672673 - PLM
Project: Reno VAMC
Project No.: 2289101

Client: TTL381

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

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

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

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

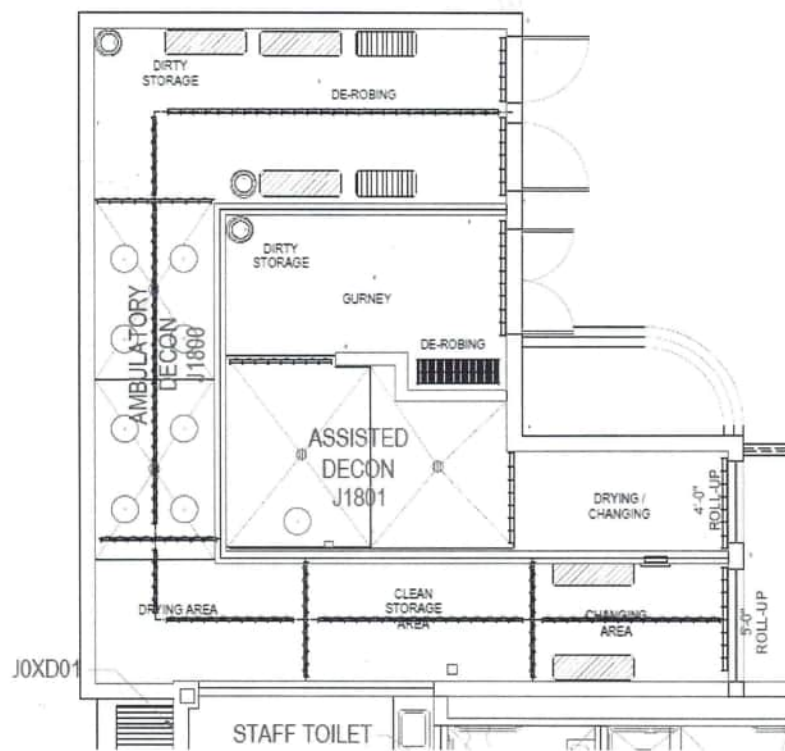
**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

APPENDIX D
SAMPLE LOCATION MAPS

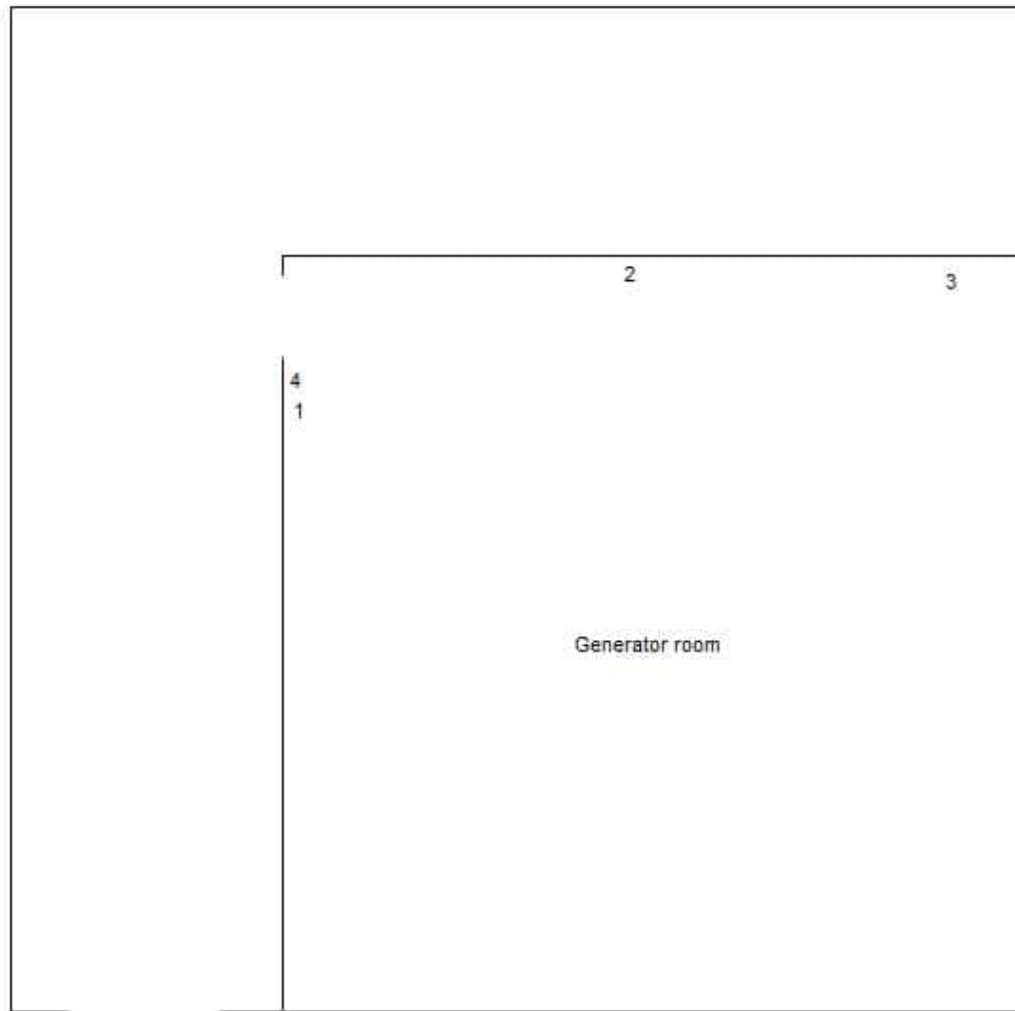


BLDG 3

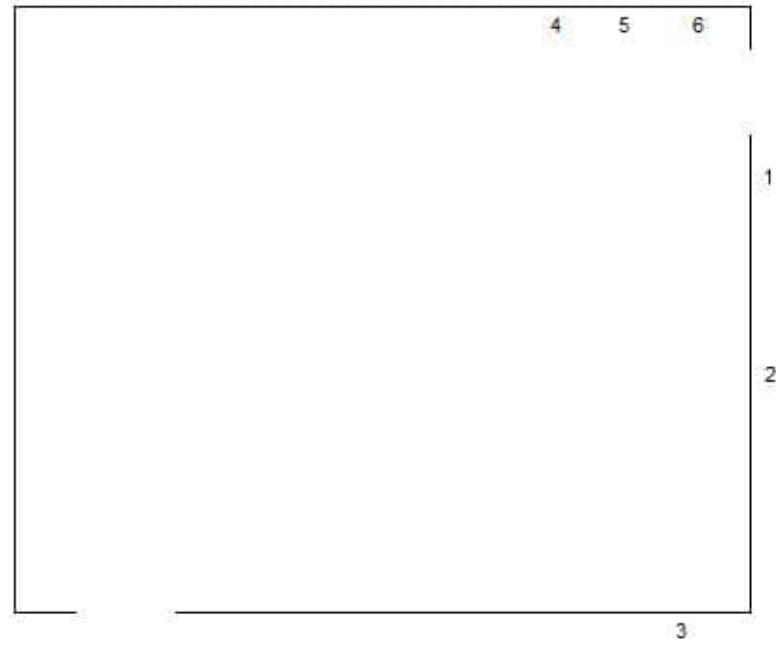


Building 4

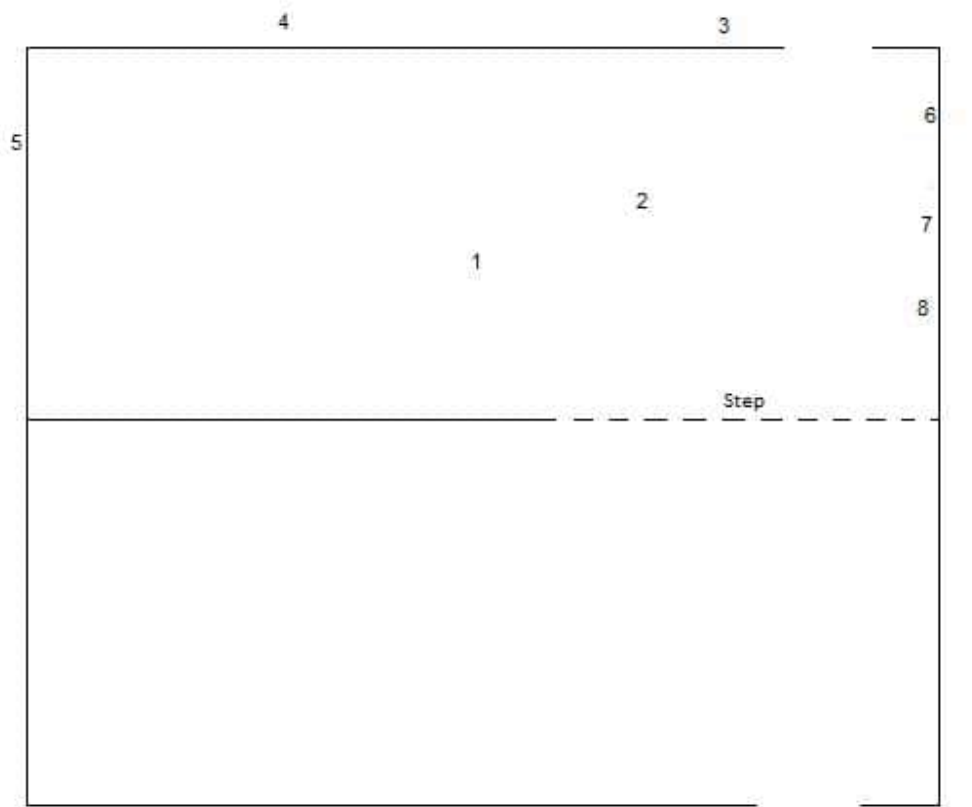
Blockhouse 5



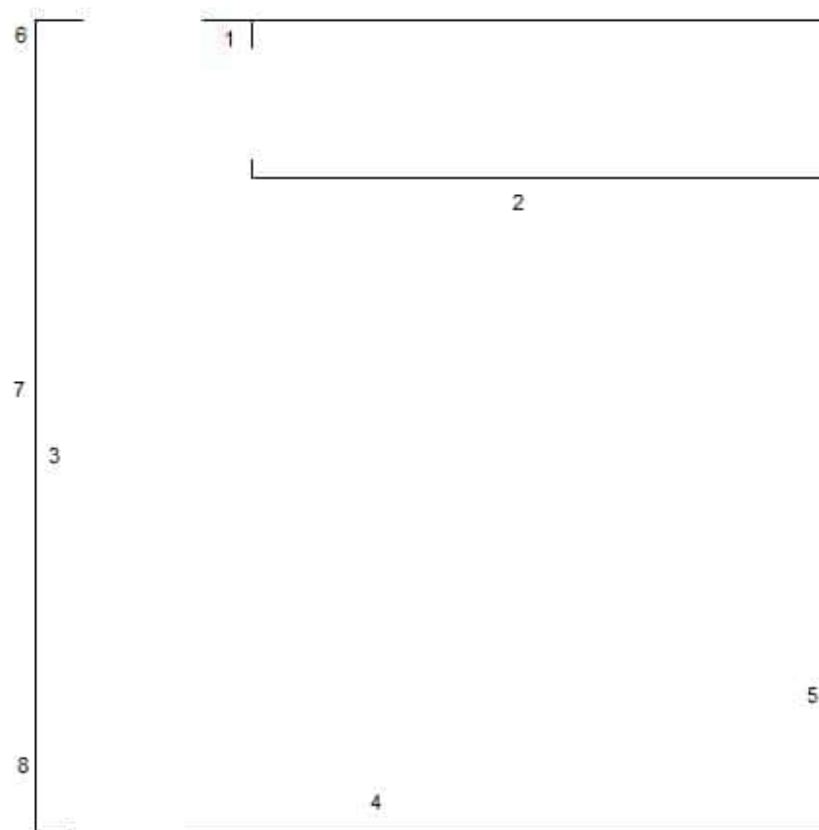
Blockhouse 6



Blockhouse 10



Blockhouse #12



Floor plan of the Corridor Between Buildings 1 & 6. The plan shows a central corridor labeled "CORRIDOR F2C08" with a "RAMP" arrow pointing left. To the left of the corridor is a "LANDING" area with a "RAMP" arrow pointing down. To the right of the corridor is another "LANDING" area with a "RAMP" arrow pointing left. Further right is a "FIRE SPRINKLER C2-7A" area. At the top right is an "ELECTRICAL F2475" room. At the bottom left is a "MECHANICAL ROOM". Various rooms are numbered: 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

F2476

ELECTRICAL
F2475

FIRE
SPRINKLER
C2-7A

LANDING

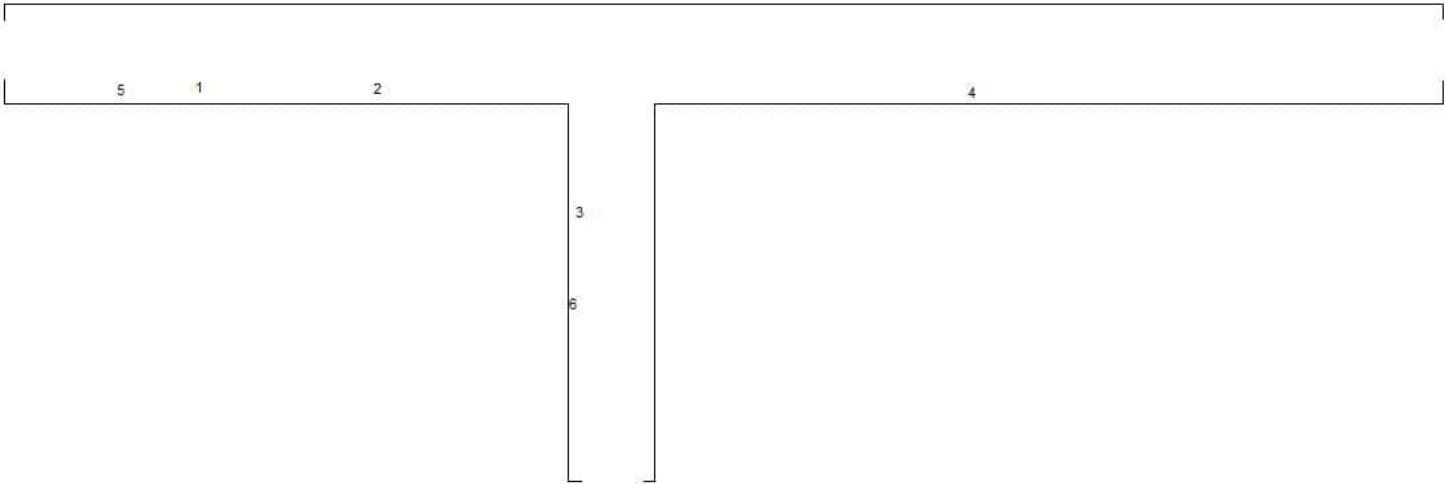
CORRIDOR
F2C08

LAVONGI

NEC

6
18 11

T-Shaped Corridor from 1-CLC

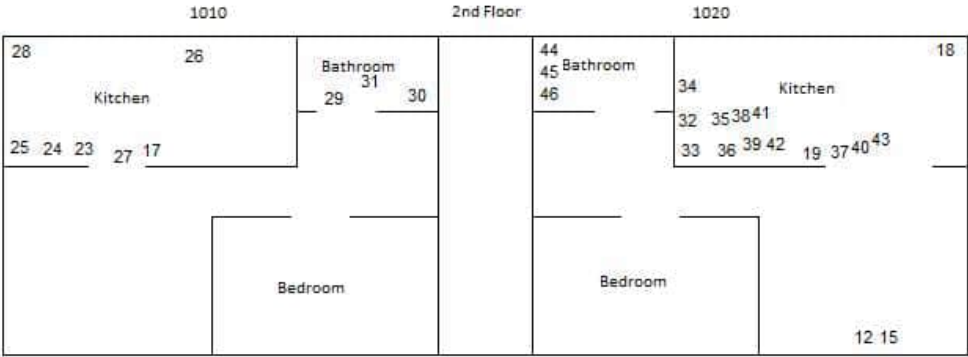
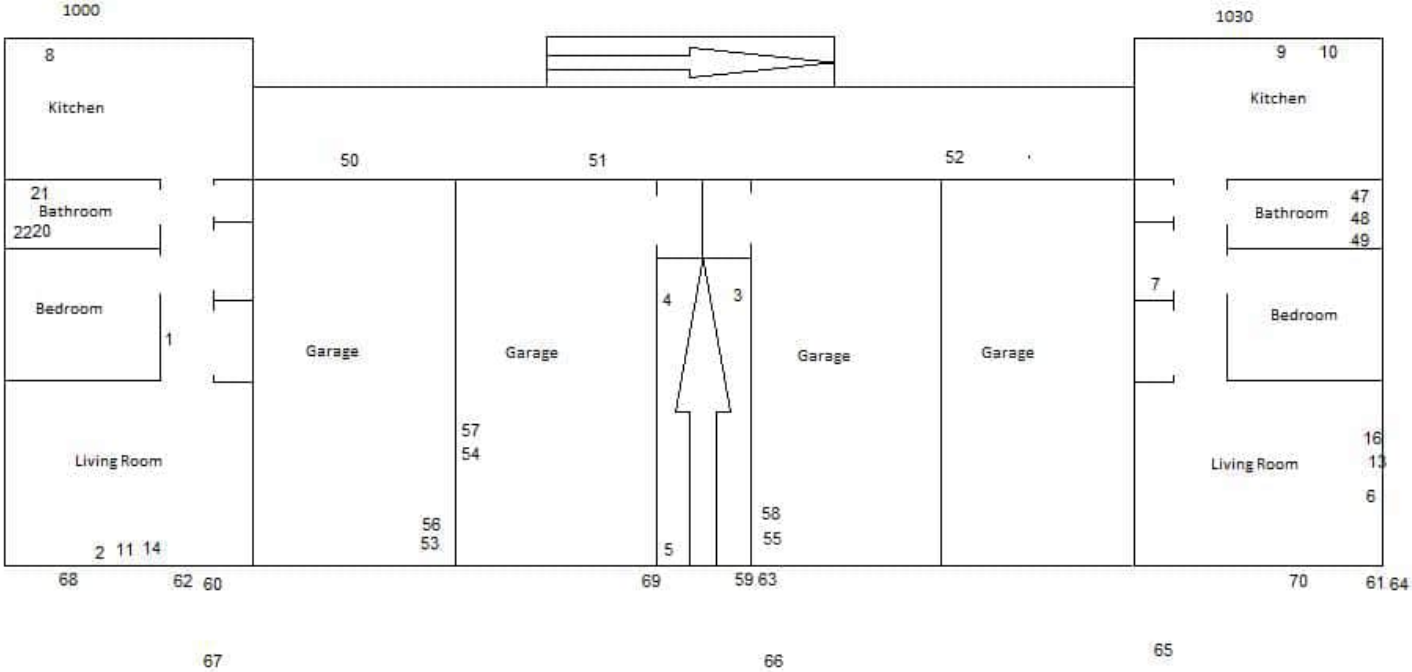


Corridor Between Building 1 & 12



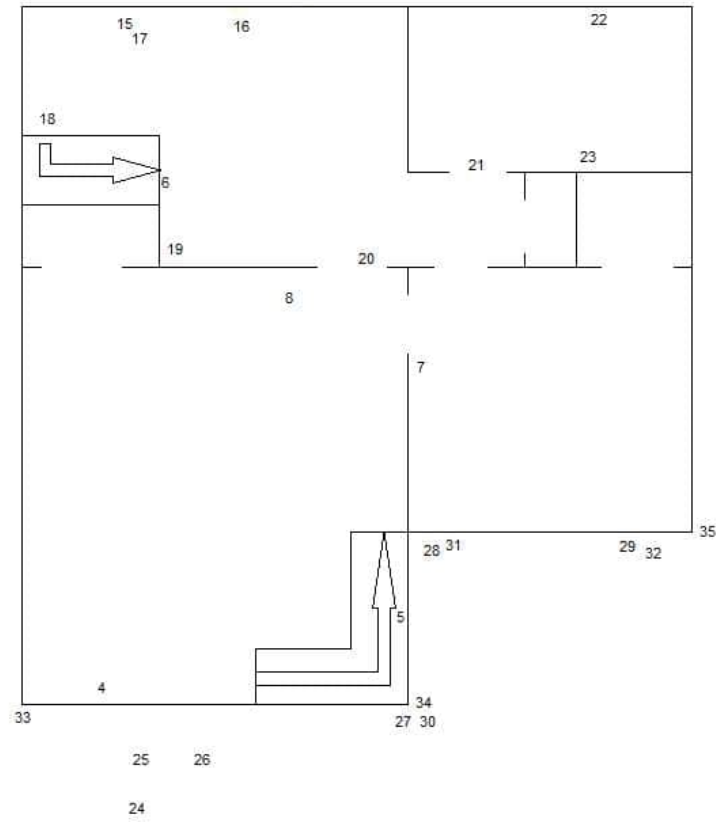
1000/1010/1020/1030 Wilson Avenue

1st Floor

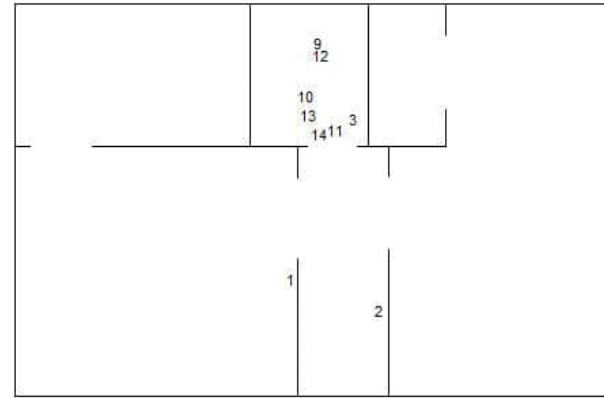


530 Taylor Street

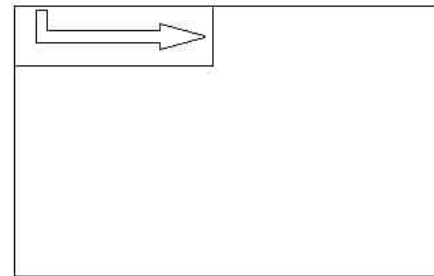
1st Floor



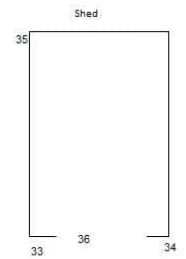
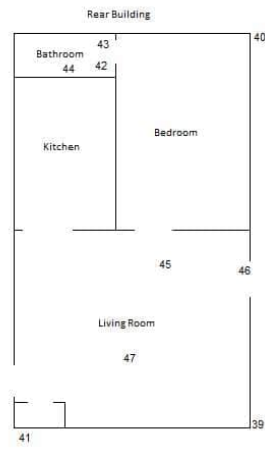
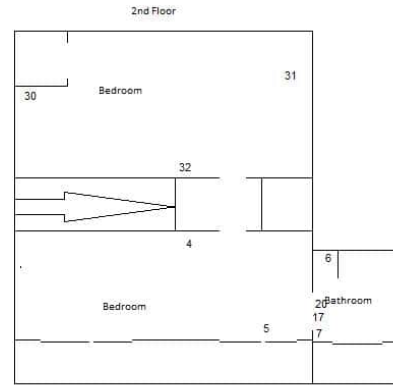
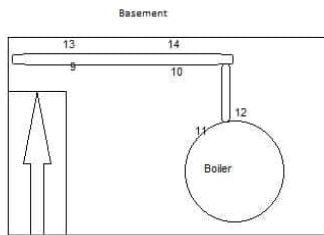
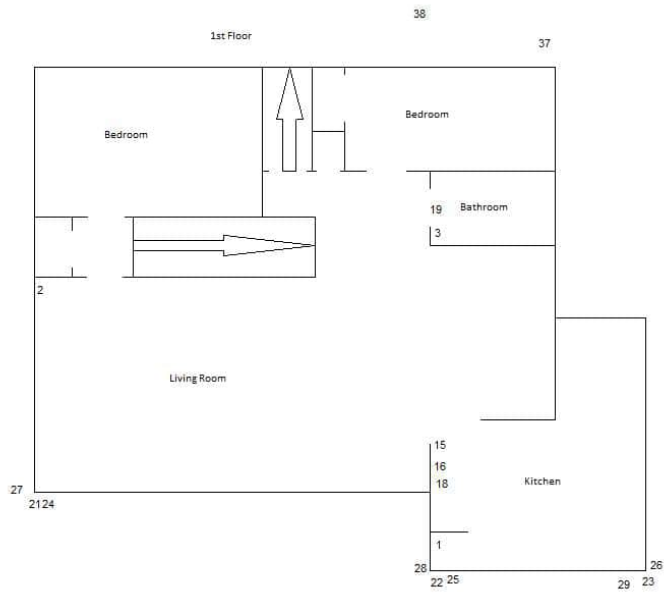
2nd Floor



Basement



526 E. Taylor St





925 Locust Avenue

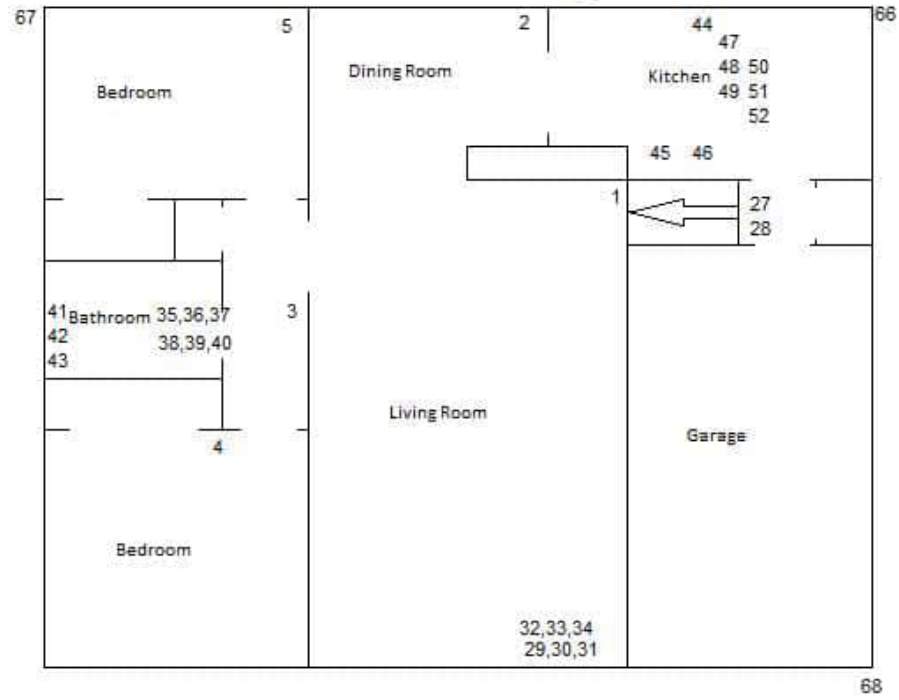
633 Taylor St

62

63

64

65



Basement

