

ADDENDUM #2

Project Name:

CCF CTC Tuckpointing Main Building Phase 1

DAS#9114.01

RFB911401-01

Addendum #2

Dated: June 24, 2020

This Addendum forms a part of the bidding and contract documents. This Addendum supersedes and supplements all portions of the original bidding and contract documents dated May 28th, 2020 with which it conflicts.

ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE BID FORM. FAILURE TO DO SO MAY SUBJECT THE BIDDER TO DISQUALIFICATION.

1. GENERAL CLARIFICATIONS

- A. Existing sealant at area H and area I shall be removed/abated by the owner. See attached plan view for area of sealant removal by owner.
- B. Lead paint is noted to be present throughout the building on window components. Contractors shall minimize disturbing the lead paint and follow OSHA regulations while working around window areas.

2. QUESTIONS

- A. What is the construction budget for the project? *A> Construction cost opinion provided by RDG Planning and Design is \$750,000 and Alternate #1 cost opinion is \$85,680.*

3. SUBSTITUTION REQUESTS

- A. No Items.

4. ATTACHMENTS

- A. Area I and Area H sealant removal by owner (Indicated by shaded area).
- B. Terracon Limited Asbestos & Lead-Based Paint Inspection Report, June 11th, 2020, Terracon Proj. No. 05207384 (19 pages)

END OF ADDENDUM

CCF CTC Tuckpointing Main Building Phase 1

AREA K

Removal of existing sealant in this area by owner.

AREA J

Removal of existing sealant in this area by owner.

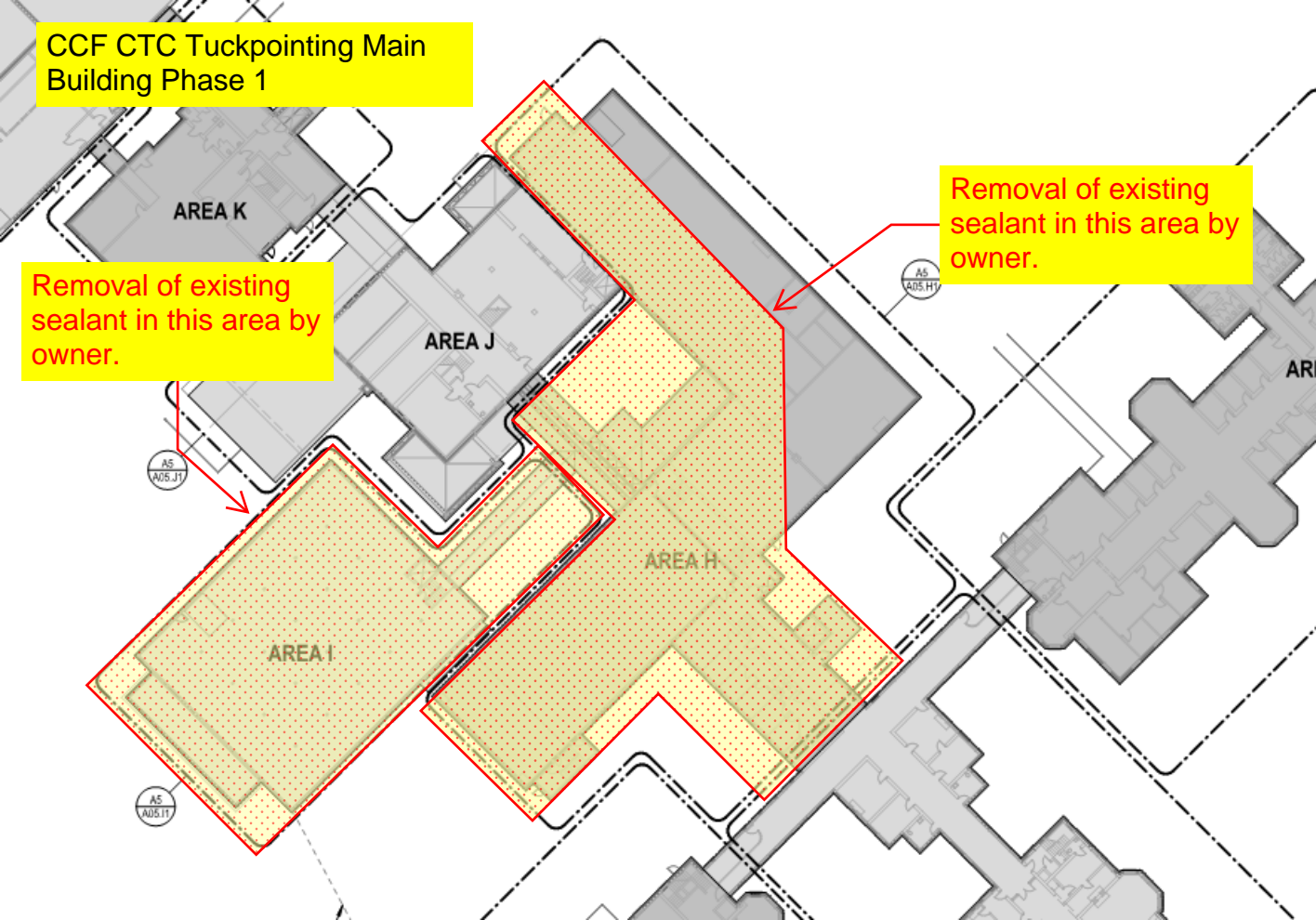
AS
A05.31

AS
A05.HY

AREA I

AREA H

AS
A05.IT



Limited Asbestos & Lead-Based Paint Inspection Report

Clarinda Correctional Facility

Phase 1 – Main Building

2000 North 16th Street

Clarinda, Iowa

June 11, 2020

Terracon Project No. 05207384

Prepared for:

Iowa Department of Administrative Services (DAS)

Des Moines, Iowa

Prepared by:

Terracon Consultants, Inc.

Omaha, Nebraska

terracon.com

Terracon

Environmental



Facilities



Geotechnical



Materials



June 11, 2020

Mr. Josh Herman
Iowa Department of Administrative Services (DAS)
109 SE 13th Street
Des Moines, IA 50319

RE: Limited Asbestos and Lead-Based Paint Inspection

Main Building – Phase I
2000 North 16th Street
Clarinda, Iowa
Project No.: 05207384
DAS Project 9114.01

Dear Mr. Herman:

On June 3rd, 2020, Mr. Phillip Thomas of Terracon Consultants, Inc. (Terracon) conducted limited asbestos and lead-based paint testing at the above referenced property. The purpose of the testing was to determine the presence of asbestos-containing materials (ACMs) and lead-based paint in surfaces that may be disturbed as part of planned brick tuck pointing and sealing activities on the exterior of the main building.

1.0 SCOPE OF SERVICES

Terracon conducted an asbestos inspection in general accordance with the USEPA NESHAP, (40 CFR, Part 61). The purpose of the inspection was to identify and collect samples from suspect asbestos containing materials (ACMs) on the exterior of the building that may be disturbed as part of planned tuck-pointing activities, provide laboratory analysis of collected samples, and identify the condition and location of ACMs. Terracon did not sample materials that were determined by visual inspection to be non-asbestos containing (ex. fiberglass, rubber, foam).

Asbestos testing was limited to accessible brick mortar, window caulk, and window glazing on exterior of the building. The suspect ACMs sampled were representative of homogenous materials observed on the exterior of the building.

Accessible surface coatings on the exterior of the building were tested for the presence of lead-based paint using a portable XRF analyzer.

Terracon Consultants, Inc. 15080 A Circle Omaha, NE 68144
P [402] 330 2202 F [402] 330 7606 terracon.com



2.0 REGULATORY OVERVIEW

2.1 Asbestos

The asbestos NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing building materials prior to demolition or renovation activities. Under NESHAP, ACMs are classified as either friable, Category I non-friable or Category II non-friable ACM. Friable materials are those that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure. Category I non-friable ACM includes packings, gaskets, resilient floor coverings and asphalt roofing products containing more than 1% asbestos. Category II non-friable ACM are materials other than Category I materials that contain more than 1% asbestos.

Friable ACM and Category I and Category II non-friable ACMs that are in poor condition and have become friable; will be subjected to drilling, sanding, grinding, cutting or abrading; or could be crushed or pulverized during anticipated demolition or renovation activities are considered regulated ACM (RACM).

RACM must be removed prior to demolition or renovation activities that will disturb the materials. If the amount of RACM exceeds 260 linear feet of pipe insulation, greater than 160 square feet for other building components, or will generate more than one cubic meter of waste, the owner or operator must provide the State of Iowa with written notification of planned removal activities at least 10 working days prior to the commencement of asbestos abatement activities. Removal of RACM must be conducted by an appropriately accredited and Iowa licensed asbestos abatement contractor. In addition, the landfill receiving the ACM materials must be notified of the asbestos content.

The Occupational Safety and Health Administration (OSHA) Asbestos standards for general industry and construction (29 CFR 1910.1001 and 1926.1101) regulate workplace exposure to asbestos. The OSHA standards require that employee exposures to airborne asbestos fibers must be maintained below 0.1 asbestos fiber per cubic centimeter of air (0.1 f/cc) as an 8-hour time-weighted average (TWA) and 1 f/cc for a 30-minute period referred to as the excursion limit (EL). The OSHA standards classify specific work practices and precautions, require building owners to maintain records of the presence and location of ACM and inform employees who might disturb these materials.

2.2 Lead-Based Paint

Lead is regulated by the EPA, OSHA and the State of Iowa. As previously mentioned, RCRA provides the EPA with the authority to regulate the waste status of demolition or renovation debris, including lead-containing materials. Specific notification and testing requirements must be addressed prior to transporting, treating, storing, or disposing of hazardous wastes. Lead-containing wastes are considered hazardous waste under RCRA if Toxicity Characteristic Leachate Procedure (TCLP) results exceed 5 milligrams per liter (mg/L).

Occupational exposure to lead occurring during construction work, including maintenance activities, painting, alteration and repairs is subject to the OSHA Lead standard (29 CFR 1926.62). The lead standard applies to any detectable concentration of lead in paint, as even small concentrations of lead can result in unacceptable employee exposures depending upon on the method of removal and other workplace conditions.

Construction work covered by 29 CFR 1926.62 includes any repair, renovation or other activities that disturb in-place, lead-containing materials, but does not include routine cleaning and repainting where there is insignificant damage, wear or corrosion of existing lead-containing coatings or substrates. Unless adequately protected, employee exposures to lead must not exceed airborne concentrations greater than (>) 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) averaged over an 8-hour period.

The above overview is not intended to be inclusive of potentially pertinent regulatory information. The relevant EPA, OSHA and State of Iowa standards should be consulted prior to undertaking activities involving the demolition, renovation or maintenance of surfaces coated with LBP or materials that contain lead.

3.0 SUMMARY OF FINDINGS

3.1 Limited Asbestos Inspection

A total of 16 bulk samples were collected from suspect asbestos containing building materials and submitted for laboratory analysis. The collected samples were submitted to IATL International Laboratory, 9000 Commerce Parkway, Suite B, Mount Laurel, New Jersey for analysis by polarized light microscopy (PLM) (USEPA EPA Method 600/R-93/116). A total of 20 individual layers were analyzed from the 16 bulk samples submitted. Two-(2) of the 20 layers analyzed were found to contain asbestos in concentrations greater than one percent (>1%).

Asbestos Materials Summary

The following materials were determined to contain asbestos:

Sample Number	Material Description	Material Location	Asbestos Content
WC-7	Window Caulk (white/tan)	Area I (receiving) – Around Windows throughout the Building	2.4% Chrysotile
WC-8	Window Caulk (white)	Area H – Around Windows throughout the Building	4.9% Chrysotile

It should be reemphasized that although reasonable efforts were made to survey accessible suspect materials, additional suspect but un-sampled materials could be located under existing building materials, in isolated areas or in other concealed or inaccessible areas. Therefore, if suspicious materials are encountered during exterior renovation activities that do not appear to have been characterized as ACM or non-ACM, samples should be collected and analyzed prior to disturbing these materials or the materials can be assumed to be ACM and abated accordingly.

A copy of the laboratory analytical results and chain of custody can be found as an attachment to this report.

3.2 Limited Lead-Based Paint Inspection

Terracon conducted limited lead testing, in accordance with EPA Renovation, Repair & Painting (RRP) requirements for surfaces that may be disturbed by renovation or painting activities. A Heuresis Corp., Model No. Pb200i, XRF analyzer (serial # 2030) (calibration/source date November 9, 2018), was used to determine the concentration of lead in surface coatings. The Heuresis Corp. analyzer uses a Cobalt (Co)-57 radioactive source and an advanced, solid-state radiation detector to generate an x-ray fluorescent spectrum of a surface. The spectrum is analyzed by a microprocessor to eliminate the effects of substrate and other factors such as back scattering to allow a determination of the amount of lead for the surface sampled.

Twenty-four-(24) individual readings (including calibration tests) were taken to identify the presence of lead-based paint in exterior surface coatings. The United States Environmental Protection Agency (USEPA) has established an action level for lead-based paint of 1.0 milligram per square centimeter (mg/cm²). Nine-(9) of the surfaces tested exceeded the action level. A full list of surfaces tested can be found as an attachment to this report.

Lead-Based Paint in Surface Coatings

Component	Location	Condition Assessment
Wood Window Casings, Stops, Sashes (white)	Exterior, Main Building – Areas A, D, E, K, L	Poor
Metal Window Sashes (white)	Exterior, Main Building – Area L	Fair

4.0 GENERAL COMMENTS

This limited asbestos and lead-based paint inspection was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. The results, findings, conclusions and recommendations expressed in this report are based on conditions observed during our limited inspection of the structure. The information contained in this report is relevant to the date on which this inspection was conducted and should not be relied upon to represent conditions at a later date. This report has been prepared on behalf of and exclusively for use by the Iowa Department of Administrative Services (DAS) for specific application to the project as discussed. This report is not a bidding document. Contractors or consultants reviewing this report must draw their own conclusions regarding further investigation or remediation deemed necessary. Terracon does not warrant the work of regulatory agencies, laboratories or other third parties supplying information which may have been used in the preparation of this report. No warranty, expressed or implied, is made.

Should you have any questions regarding this report, please feel free to contact us at (402) 330-2202.

Sincerely,

Terracon Consultants, Inc.

Prepared by:

Phillip Thomas, OHST, CHMM
 Sr. Industrial Hygiene Specialist
 State of IA Asbestos Inspector
 State of IA Lead Inspector

Reviewed by:

Steve Hudson, MS, CIH, CIEC
 Certified Industrial Hygienist
 Certified Indoor Environmental Consultant



Attachments: Asbestos Laboratory Results and Chain of Custody
 XRF Results
 Photo Log
 Staff and Company Certifications

CERTIFICATE OF ANALYSIS

Client: Terracon
15080 A Circle
Omaha NE 68144

Client: TER892

Report Date: 6/9/2020
Report No.: 614430 - PLM Rev #2, 6/11/2020
Project: Clarinda Correctional Facility
Project No.: 05207384

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7018115
Client No.: WC-1

Analyst Observation: Grey Caulk
Client Description: Window Caulk (Grey)

Location: Area D-Around 6 Pane
Aluminum Windows
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7018116
Client No.: M-1

Analyst Observation: Off-White Mortar
Client Description: Brick Mortar

Location: Area F-East Side
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7018117
Client No.: WC-2

Analyst Observation: Grey Caulk
Client Description: Window Caulk (Grey)

Location: Area D-South Side Around
Aluminum Windows (Brown)
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7018118
Client No.: WC-3

Analyst Observation: White Caulk
Client Description: Window Caulk (White)

Location: Area B-South Side, White Vinyl
Of Windows
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7018119
Client No.: M-2

Analyst Observation: Off-White Mortar
Client Description: Brick Mortar

Location: Area B-East Side
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7018120
Client No.: WC-4

Analyst Observation: White Caulk
Client Description: Window Caulk (White)


Location: Area A-South Side-Around Wood
Double Hung W/Aluminum Storm
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: 6/4/2020
Date Analyzed: 06/09/2020
Signature: 
Analyst: Sarah Lipiecki

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Terracon
15080 A Circle
Omaha NE 68144

Client: TER892

Report Date: 6/9/2020
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PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7018121 Client No.: WC-5	Analyst Observation: Black Caulk Client Description: Window Caulk (Brown)	Location: Area A-South Side, Ground Floor Brown Aluminum Windows 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.: 7018122 Client No.: WC-6	Analyst Observation: Off-White Caulk Client Description: Window Caulk (Beige W/Sand Texture Look)	Location: Area C-East Side Around All Windows 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.: 7018123 Client No.: M-3	Analyst Observation: Off-White Mortar Client Description: Brick Mortar	Location: Area E-North Side 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.: 7018124 Client No.: WG-1	Analyst Observation: White Glazing Client Description: Window Glazing (Off-White)	Location: Area E-North Side, Wood Ground Floor Windows 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.: 7018125 Client No.: WC-7	Analyst Observation: White Caulk Client Description: Window Caulk (White)	Location: Area I-West Side 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.: 7018125(L2) Client No.: WC-7	Analyst Observation: Tan Caulk Client Description: Window Caulk (White)	Location: Area I-West Side Facility:
<u>Percent Asbestos:</u> PC 2.4 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 97.6

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

Date Received: 6/4/2020
Date Analyzed: 06/09/2020
Signature:
Analyst: Sarah Lipiecki

Approved By:
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Terracon
15080 A Circle
Omaha NE 68144

Client: TER892

Report Date: 6/9/2020
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Project No.: 05207384

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7018126 **Analyst Observation:** White Caulk **Location:** Area M-South Side
Client No.: WC-8 **Client Description:** Window Caulk (White) **Facility:**
Percent Asbestos: **Percent Non-Asbestos Fibrous Material:** **Percent Non-Fibrous Material:**
None Detected None Detected 100

Lab No.: 7018126(L2) **Analyst Observation:** Tan Caulk **Location:** Area M-South Side
Client No.: WC-8 **Client Description:** Window Caulk (White) **Facility:**
Percent Asbestos: **Percent Non-Asbestos Fibrous Material:** **Percent Non-Fibrous Material:**
PC 4.9 Chrysotile None Detected 95.1

Lab No.: 7018127 **Analyst Observation:** White Glazing **Location:** Area M-South Side
Client No.: WG-2 **Client Description:** Window Glazing (White) **Facility:**
Percent Asbestos: **Percent Non-Asbestos Fibrous Material:** **Percent Non-Fibrous Material:**
None Detected None Detected 100

Lab No.: 7018128 **Analyst Observation:** Off-White Mortar **Location:** Area J-West Side
Client No.: M-4 **Client Description:** Brick Mortar **Facility:**
Percent Asbestos: **Percent Non-Asbestos Fibrous Material:** **Percent Non-Fibrous Material:**
None Detected None Detected 100

Lab No.: 7018129 **Analyst Observation:** White Caulk **Location:** Area K-West Side
Client No.: WC-9 **Client Description:** Window Caulk (White) **Facility:**
Percent Asbestos: **Percent Non-Asbestos Fibrous Material:** **Percent Non-Fibrous Material:**
None Detected None Detected 100

Lab No.: 7018130 **Analyst Observation:** White Glazing **Location:** Area L-West Side
Client No.: WG-3 **Client Description:** Window Glazing (White) **Facility:**
Percent Asbestos: **Percent Non-Asbestos Fibrous Material:** **Percent Non-Fibrous Material:**
None Detected None Detected 100

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

Date Received: 6/4/2020
Date Analyzed: 06/09/2020
Signature:
Analyst: Sarah Lipiecki

Approved By:
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Terracon
15080 A Circle
Omaha NE 68144

Client: TER892

Report Date: 6/9/2020
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Project: Clarinda Correctional Facility
Project No.: 05207384

Appendix to Analytical Report

Customer Contact:

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

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)

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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: Terracon
15080 A Circle
Omaha NE 68144

Client: TER892

Report Date: 6/9/2020
Report No.: 614430 - PLM
Project: Clarinda Correctional Facility
Project No.: 05207384

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).

Chain of Custody

-Bulk Asbestos -

Contact Information

Client Company: Terracon
Office Address: 15080 A Circle
City, State, Zip: Omaha, NE 68144
Fax Number: 402-330-7606
Email Address: phillip.thomas@terracon.com

Project Number: 05207384
Project Name: Clarinda Correctional Facility
Primary Contact: Phillip Thomas
Office Phone: 402-330-2202
Cell Phone: 402-670-3661

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: Separate Layers for Drywall and Joint Compound as well as Composite

* 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: 06/09/2020 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>Phillip Thomas</u>	Date:	<u>6/3/2020</u>	Time:	<u>1400</u>
Received (Name / iATL):	_____	Date:	_____	Time:	_____
Sample Login (Name / iATL):	_____	Date:	_____	Time:	_____
Analysis(Name(s) / iATL):	<u>SLG (A/20)</u>	Date:	_____	Time:	_____
QA/QC Review (Name / iATL):	_____	Date:	_____	Time:	_____
Archived / Released:	_____	QA/QC InterLAB Use:	_____	Date:	_____

RECEIVED

JUN 11 2020

Photo Log

Clarinda Correctional Facility – Main Building ■ Clarinda, Iowa
Date Photos Taken: June 3, 2020 ■ Terracon Project No. 05207384



Photo #1 Sample WC-7. Asbestos Containing White/Tan Window Caulk Around Windows of Area I Building (receiving).



Photo #2 Sample WC-8. Asbestos Containing White Window Caulk Around Window of Area H Building.

PHILLIP THOMAS

DOB: 05-26-1976

Issued: 08-01-2019



This person is licensed to perform asbestos work in the State of Iowa. ID card is intended for official use only and must be present on jobsite.

License Type	Number	Expires
INSPECTOR	19-2889	07-30-2020



Asbestos

Rod A. Roberts

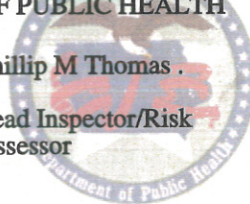
Rod A. Roberts
Labor Commissioner



**IOWA DEPARTMENT
OF PUBLIC HEALTH**

Phillip M Thomas .

**Lead Inspector/Risk
Assessor**



Certification Number: LEAD-INSP10076

Expiration Date: February 28, 2021

Iowa Department of Public Health Bureau of Environmental Health Services Lead Professional Certification

AQS Env. a Terracon Company

15080 A_CIRCLE
OMAHA, NE 68144

is certified as a lead professional firm under Iowa
Administrative Code 641 - Chapter 70

Certification No: LEAD- FIRM11061



Issued: February 28, 2018

Expires: March 01, 2021