Foothills Environmental, Inc.

Industrial Hygiene, Safety & Environmental Services

Asbestos Abatement Work Plan for Floor Tiles and Mastic On Main Floor Visual Arts Building (2022) Casper College, Casper, Wyoming

FEI Project Number: AS21131
December 9, 2021

Foothills Environmental, Inc.

Industrial Hygiene, Safety & Environmental Services

ASBESTOS ABATEMENT WORK PLAN
FOR FLOOR TILES AND MASTIC ON MAIN FLOOR
VISUAL ARTS BUILDING (2022)
CASPER COLLEGE
CASPER, WYOMING

December 9, 2021

Prepared for: **Eric Rulofson, Facilities Operations Director**
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TABLE OF CONTENTS

LIST OF ATTACHMENTS

ASBESTOS ABATEMENT WORK PLAN FOR FLOOR TILES AND MASTIC VISUAL ARTS BUILDING (2022) CASPER COLLEGE CASPER, WYOMING

1 INTRODUCTION

Foothills Environmental, Inc. (FEI) is using information from previous sampling at Visual Arts Building owned by Casper College (CC) located in Casper, Wyoming. The purpose of this project is to remove asbestos-containing materials (ACM) from the floors to allow reuse of the building until demolition in Summer 2022. Removal of ACM flooring includes removal of non-ACM mastic (and cove base) in containment as well. Flooring may be beneath the partition wall floor plates, but Casper College personnel will assist by creating access.

2 SCOPE OF WORK

Work specified herein shall be the removal and disposal of asbestos-containing flooring and mastic at the Site by competent persons trained, knowledgeable, and qualified in the techniques of asbestos abatement. The abatement contractor (Contractor) hired to complete abatement must comply with all applicable federal, state, and local laws and regulations, and be capable of performing the work specified in this Work Plan. In addition, it is the Contractor's responsibility to obtain any necessary permits and make all notifications to Wyoming Department of Environmental Quality (WDEQ) prior to beginning work, and to update notifications as required.

2.1 Asbestos Materials for Abatement

The following table lists locations, materials, percentage, and type(s) of asbestos, as well as the approximate quantities of asbestos to be removed. Drawings of material locations and work areas are located in Attachment 1 and Photographs of materials are in Attachment 2.

TABLE 1
Materials to be removed from Visual Arts Building by Contractor

Material Description	Material Location	Material Type	Friability	Asbestos Content	Approximate Quantity
Floor Tiles and Mastic	102, 102A, 105-107, 109, 111, 115, 118, 121, 122-129, and associated hallways (See Figure 1)	Miscellaneous	Non-Friable	6-8% Chrysotile in tiles ND in Floor Mastic and Cove Base Mastic	Approximately 7,821 sf See drawings and photographs

Refer to drawings in Attachment 1 for locations and types of materials.

Notes:
1. The quantities identified herein are APPROXIMATE. The Contractor is responsible for verifying actual material quantities and site conditions. The Contractor must obtain any permits, provide WDEQ notices and seek approval for any variances that are required to perform the work.
2. Work includes the removal and disposal of identified ACM.
3. Electrical and water services will be provided by the owner.
4. The Contractor is responsible for providing any lifts or scaffolding required for access to ACM for removal. Lift operators must be trained in proper use of the type of lift being used. All personnel utilizing the lift for ACM removal must be trained and tied off at all times with appropriate harnessing and fall protection devices.
5. Scaffolding, if required, will require inspection and sign-off by an OSHA Competent Scaffolding person before initial use and prior to each shift.
6. Casper College personnel will remove most or all of the furniture in the work area. The Contractor is responsible for moving any objects, fixtures, and any objects left in the work area to access ACM for removal.
7. The Contractor is responsible for verifying that electrical lines are identified and are Locked Out and Tagged Out (LOTO) if needed before work is completed around the lines. Coordinate this with CC Safety Officer.
8. The Contractor is responsible for demolition to access ACM where scheduled for removal where necessary.
9. Every effort was made to identify ACM materials; however, other ACM materials may be present beneath or otherwise hidden. If discovered, bring new suspect materials to the attention of the Owner or Owner Representative prior to disturbance of those materials.

2.2 General Work Procedures

General Procedures

- **Remove all items left in work area and pre-clean surfaces. Coordinate removal or covering of any other equipment and attached items. Any breakage must be reported immediately to CC/FEI.**

- Each work area may be monitored utilizing phase contrast microscopy (PCM) as the analytical technique. All air monitoring will be conducted according to the NIOSH 7400 Method.

- Restrooms may only be used in areas where contractor is currently working. If no restrooms are available, contractor must provide temporary restrooms.

- Staging area for equipment and personnel will be at the closest entrance to each work area. A small truck for waste load-out may be parked at each entrance during load out of demolition debris and ACM only. Schedule such activities with CC. Security for any equipment and/or trucks left onsite is the sole responsibility of the contractor. Owner will not be responsible for theft or vandalism of contractor's equipment left onsite.

- Hours of work will be scheduled with CC.

- **The quantities identified herein are approximate. The contractor is responsible for verifying material quantities and site conditions. Any discrepancies or omissions must be brought to the attention of CC prior to acceptance of project. By accepting a contract, contractor agrees with all conditions for completing the work including general work areas, quantities, schedules and procedures.**

- **Project hours** for each work area are listed below:

Hours will be 7:00 a.m. to sunset, Monday-Friday unless otherwise coordinated and approved by CC.

Flooring Removal

Flooring contains 1.5% Chrysotile in Tiles and Non Detected in Black and Tan Mastic. The following procedures must be followed at a minimum, but all work is to be performed according to WDEQ Air Quality Standards and Regulations, Chapter 3 General Emission Standards, Section 8, 3-9 through 3-47, Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), Department of Transportation and all other applicable laws and regulations:

- Securing Work Area
  - Access to the work area should be restricted, such as by asbestos barrier tape around the perimeter of the work area. If barrier tape is used to denote a work area, it should be placed 5 to 10 feet (1.5 to 3 meters) outside of any polyethylene protection used in the work area. Install barrier tape by taping or tying it to fixed objects. Do not block access to any emergency exits, and when asbestos fibers might be released, post OSHA required "danger" signs at all entrances to the work area. For such projects, it might be desirable to have a visual barrier installed several feet in front of warning signs to avoid having warning signs readily visible to occupants. A "keep out of construction area" sign should be posted on visual barriers. A visual barrier would be arranged so that a person who goes past the visual barrier will then see required warning signs.
- General Abatement Sequence
  - The Contractor shall conduct abatement activities in accordance with the following mandatory sequence:

1) Install critical barriers

2) Establish negative pressure

Note: *The removal of non-ACM building materials and components may only take place after negative air pressure is established in the containment work areas.*

3) Construct the decontamination area

4) Pre-clean surfaces

5) Cover fixed objects

6) Construct the containment (full containment if chemicals are used on mastic)

7) Conduct abatement

8) Conduct final visual inspection

9) Conduct final clearance air monitoring

10) Conduct the tear-down

- Respirators and Performing Fit Checks
  - Workers are required to wear respirators. Contractor is required to have a respiratory protection program. Wearers should inspect their respirators before each use of the respirator. Fit checks should be performed in accordance with the Respiratory Protection Program by each worker each time they don a respirator. Both positive and negative pressure fit checks should be performed.
- Protective Clothing
  - Protective clothing for workers shall consist of disposable coveralls, gloves and boots. Coveralls should have hoods and booties attached. They should provide complete coverage of the body with the exception of hands and face.
  - Eye, hearing, and head protection should also be used where needed. Rubber slip-resistant boots or other non-slip footwear is to be worn for all activities. Steel-toed boots should be used in areas where foot hazards exist. Do not use coveralls with loose foot coverings for activities that involve climbing ladders or working on scaffolding.
  - Protective clothing shall be removed as follows:
    - HEPA vacuum all parts of protective clothing while standing at perimeter of drop cloth. Leaving respirator in place, remove protective clothing and fold inside out as it is removed. Place clothing, if contaminated, into a disposal bag and label as ACM waste.
- Decontamination Unit
  - Remote decontamination/changing room is required in close proximity or adjacent to work area. If full containment is used a fully functioning 3-chamber decontamination unit is required.
- Air Monitoring
  - Air monitoring conducted by Contractor during abatement activities shall consist of OSHA personal monitoring.
  - All air monitor pumps shall be pre and post calibrated to a primary standard. Flow rates, times and areas/personnel sampled shall be recorded.

    - Sample results shall be posted prior to beginning the next shift after each day of monitoring.
- Pre-cleaning Work Areas and Wet Wiping
    - Pre-cleaning of work areas shall be performed prior to the start of abatement work activities to remove accumulated debris and dust that could be disturbed during abatement work. Pre-cleaning shall include picking up dust and debris with a HEPA filtered vacuum, as well as wet wiping non-porous surfaces.
- Polyethylene Drop Cloth
    - Preparation of work areas for removal activities shall involve the demarcation of the work area, restricting access to the work area and the use of a polyethylene drop cloth. A single layer of polyethylene shall be spread on the floor of the work area and taped or weighted in place. If floor is a soft material, such as carpet, use caution to prevent tearing of polyethylene under equipment. The drop cloth should cover an area large enough to catch falling debris. If work is to be performed at an elevated level, the drop cloth should be placed on the work platform, or extended at ground level beyond the immediate work location to catch any debris that might be generated.
- Containment and Removal Procedures
    - Set up critical barriers as required on all openings.
    - Set up enclosure using 6 mil polyethelene sheeting.
    - Spray amended water on the materials to be removed to keep dust inside the enclosure to a minimum.
    - Remove wetted flooring materials using hand methods, scraper or directly into HEPA vacuum using hose nozzle. Place pieces in bag without dropping.
    - Using nylon brush, scrub pads, disposable towels and amended water, scrub and wipe down the removal area.
    - All load-out and disposal procedures shall be in accordance with applicable federal, state, and local regulations.
    - Seal exposed ACM around removal area using an appropriate lockdown encapsulant.
    - Wash down inside of enclosure with amended water and wipe as necessary to remove all debris and residue.
    - Summon FEI for visual inspection of mini-containment.
    - Upon successful visual by FEI, remove all objects from containment in preparation for clearance monitoring.

Clearance and Disposal

- Visual Inspection and Clearance Air Monitoring (containments)
    - FEI shall conduct a visual inspection prior to the removal of the containment from each work area.
    - FEI shall verify that there is no debris or residue in the containment or on the polyethylene sheeting drop cloth(s) or splash guards. If visible residue, dust or debris remains, it must be cleaned up using wet wiping and/or HEPA vacuuming before the visual inspection can continue.
    - Containment will be removed after passage of final visual inspection and air monitoring results are below 0.01 f/cc by PCM analysis (at least one sample per containment and at least five to complete the project).

- Waste Transportation, Storage and Disposal
  - Asbestos-containing waste material from the removal activities should be adequately wet in accordance with NESHAP requirements (40 CFR 61.150).
  - All waste should be labeled as required by federal, state and local regulations. Federal regulations requiring labeling of waste include OSHA regulations 29 CFR 1910.1200, 1910.1001 and 1926.1101, EPA's NESHAP regulation 40 CFR 61.150, and the Department of Transportation's Hazardous Materials Regulations 49 CFR 171 and 180.
  - Dispose of waste following procedures required by landfill. Provide waste manifests to CC.

2.3 Inspections by Owner/Owners Representative

1. All inspections shall take place during normal working hours. If inspections occur past normal working hours, the Contractor shall bear the costs incurred by CC/FEI as result of the additional labor of CC/FEI.

2. When the CC/FEI has an on-site representative, the Contractor shall give the CC/FEI advance notice of an impending inspection. Where the CC/FEI does not have an on-site representative, then a 24-hour advance notice of impending inspection is required.

3. If the inspection detects items to be corrected, then the area will be termed "failed" and will need to have corrective action taken by the Contractor.

4. The Contractor must allow for a two (2) hour notice period before the re-inspection of the failed area may begin (this may be waived by CC/FEI). Items of work requiring inspection sign-off by CC/FEI are:

   a. Pre-Abatement (Area Preparation) Inspection. Removal of asbestos and necessary demolition shall not take place until CC/FEI has inspected area preparation work and given approval.
   b. Final Visual Inspection - The area shall not be encapsulated or locked down until CC/FEI has inspected and given approval of the final cleaning and area decontamination. The containment must be completely dry, during the inspection with no water droplets, remains or saturation on polyethylene sheeting or other surfaces in the containment.

5. A punch list of items to be corrected resulting from the "failed" inspection, will be prepared jointly by the Contractor and CC/FEI prior to final acceptance of the project by the CC/FEI. Inspections shall in no way be construed as final or partial acceptance by CC/FEI. Any failure or omission of the CC/FEI to notify the Contractor of defective work shall not excuse Contractor for liability for such defective work.

6. It will be necessary that the Contractor successfully confine fiber release to the designated work area. FEI's obligations are solely to Owner. In meeting such obligations CC/FEI may increase the burdens and expense of the Contractor, his Sub-Contractors or employees, or the surety of them. Nothing in the performance of CC/FEI services in connection with this project implies the undertaking for the benefit of, or which may be enforced by, the Contractor, his Sub-Contractors, or employees, or the surety of any of them. It is not the function of CC/FEI to specify all of the means by which the Contractor will attain the intended results, nor to state all of the environmental conditions that must be present for the safety of workers who are employed to produce the intended results, or for the safety of others during construction. The Contractor shall establish means and environmental conditions that meet applicable laws and regulations.

2.4 Air Monitoring

Outside Work Area: Air monitoring is expected to be completed on a daily basis by FEI during removal (not during setup or final cleaning). If any air sample taken near the Work Area exceeds the EPA background level (clearance level) of 0.01 fibers per cubic centimeter (f/cc) by Phase Contrast Microscopy (PCM) analysis, the Contractor shall immediately and automatically stop all work except corrective action. FEI's Industrial Hygiene Representative will work with the Contractor to determine the source of the high reading and work with the Contractor to determine a course of corrective action.

1. Background Asbestos Level
   a. Air monitoring shall be conducted during normal occupancy and samples shall not be collected in an aggressive manner.
   b. Where PCM is used as the method of analysis the standard is 0.01 f/cc, which is equivalent to 10,000 fibers per cubic meter of air (f/m^3). The NIOSH 7400 Method shall be used to analyze samples. The number of samples to be taken shall be determined by the certified air monitoring specialist. Where TEM is used as the method of analysis, the standard is 70 structures/millimeter^2 (s/mm^2). TEM analysis shall be conducted pursuant to the protocol in 40 C.F.R. Part 763, Appendix A to Subpart E (EPA 1995).
   c. All air monitoring collected for background purposes shall be performed by the Owner's representative who is independent of the Abatement Contractor to avoid possible conflict of interest.
2. In the event that airborne fiber levels outside a Work Area exceed the background level when analyzed by PCM (when verified by TEM), the Contractor shall comply with the following actions. If the high reading was the result of a failure of Work Area isolation measures initiate the following additional actions:
   a. Immediately erect secondary barriers to isolate the affected area from the balance of the building. Erect Critical Barriers at the next existing structural isolation of the involved space (e.g. wall, ceiling, floor). Impart negative pressure in the enclosed area.
   b. Decontaminate the affected area.

c. Require that respiratory protection be worn in affected area until area is cleared for re-occupancy.
d. Leave Critical Barriers in place until completion of work and insure that the operation of the pressure differential system in the work area results in a flow of air from the balance of the building into the affected area.
e. After passage of Visual Inspection in the effected work area remove barriers separating the work area from the affected area. Final air samples will be taken within the affected area.

3. Elevated Ambient Levels – Industrial Hygiene representative will collect air samples in the general work areas prior to work beginning and analyze by PCM. If the analytical result exceeds the 70 s/mm^2 by TEM or 0.01 f/cc by PCM, whichever is applicable, then the existing level determined by the results of sampling will be the background level.
4. In the event that areas beyond the work area become contaminated with asbestos, asbestos-containing dust/debris, and/or visible emissions from the work area, the Contractor shall be responsible for all costs associated with cleaning and subsequent testing (visual inspection, air sampling and bulk analysis) of these areas.
5. If the high reading was the result of other causes initiate corrective action as required by the applicable regulations at the direction of the College.

Effect on Contract Sum: Complete corrective work with no change in the Contract Sum if high airborne fiber counts were caused by Contractor's activities. The Contract Sum and schedule will be adjusted for additional work caused by high airborne fiber counts beyond the Contractor's control. Contractor is responsible for all costs associated with TEM verification where PCM samples exceed 0.01 f/cc, and any subsequent cleaning and additional sampling costs regardless of TEM sample results.

2.5 Material Demolition

Work includes removal of ACM. No other demolition is expected.

3 SCHEDULE

The project is scheduled to begin March 14, 2022 and is to be completed no later than March 18, 2022. The window provides 5 days for completion. Contractor will provide a statement with a bid in order to assure CC the selected contractor can perform the task in the allotted time, and to provide information for scheduled demolition of the facility. Any costs incurred by the owner's representative to be on site after the time indicated to complete the project will be the responsibility of the Contractor. Costs include but are not limited to travel, lodging, analytical fees, per Diem and professional fees. Schedule details are listed below:

Work Schedule Window
Abatement Start Date –March 14, 2022 (Coordinate with CC Project Mgr.)
Abatement Completion – At latest by March 18, 2022

4 SUBMITTALS

The following sections detail the required submittals for the project.

4.1 Plan of Action

Prepare a brief plan of the procedures proposed for use in complying with the requirements of this work plan and all applicable regulations. Include in the plan the general locations and layouts of decontamination areas, the sequencing of asbestos work (work areas), methods to be used to assure the safety of occupants and visitors to the site, disposal plan including staging and waste loadout procedures, and location of approved disposal site. The Contractor is solely responsible for construction means, methods, techniques and sequences, and procedures with respect to complying with applicable regulations.

4.2 Technical Submittals

The contractor shall submit all technical documentation as specified in this section using the list and schedule provided in Table 2 below.

TABLE 2

Pre-start Submittals (Minimum five days prior)	**Daily Submittals**	**Contract Closeout (Two weeks after)**
• Respiratory Protection Program	Daily Field Logs	Disposal Manifests
• Hazard Communication Program	Daily Entry/Exit Sign-in Sheets	Owner's Final Inspection
• Medical Response Program	Visitor Documentation Forms	Change Orders
• Accident Reports		Photographs
• List of Personnel Used		
• Personnel Certifications		
• Project Design (Plan of Action)		
• Project Sequencing and Schedule		
• Disposal Facility Information		
• WDEQ Notice (10 days prior to start of work)		

5 PROJECT COORDINATION

The intent of this project is to remove non-friable ACM prior to planned flooring replacement in the designated work area. The Contractor shall execute the work under this Contract with minimal disturbance to facility activities outside the work area. A schedule shall be coordinated with CC to minimize effects of abatement operations and possible interruptions of power or water. Coordination shall include informal meetings with CC and onsite representatives such as the following:

- **Inspect** areas in which work will be performed, prior to commencement of work. Prepare a listing of damage to structure, surfaces, and equipment or of surrounding areas, which could be misconstrued as damage resulting from the work. Contractor may photograph or videotape existing conditions as necessary to document conditions. Submit to the CC for record purposes prior to starting work.

- **Informal Pre-construction Conference** to be convened by the Contractor prior to start of any work. The conference will be scheduled before start of construction, at a time convenient to CC, but no later than the day of the start of the project. Meet at the project site or convene a telephone conference, or as otherwise directed. Authorized representatives of CC/FEI will be in attendance. An authorized representative of the Contractor and its project supervisor and other concerned parties shall attend the conference. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work. Contractor will document the meeting and distribute meeting minutes no later than three days after the meeting.

- **Project Closeout-** Before requesting final inspection for certification of final acceptance and final payment, a project punchlist must be completed and accepted by CC/FEI. The punchlist shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by CC/FEI.

6 INSURANCE

The Contractor shall procure and maintain insurance as indicated by CC contract documents.

7 QUALIFICATIONS AND LIMITATIONS

FEI completed this work plan in a manner consistent with current professional practices. Information was limited to previous sampling information and analyses described in the report provided by the client.

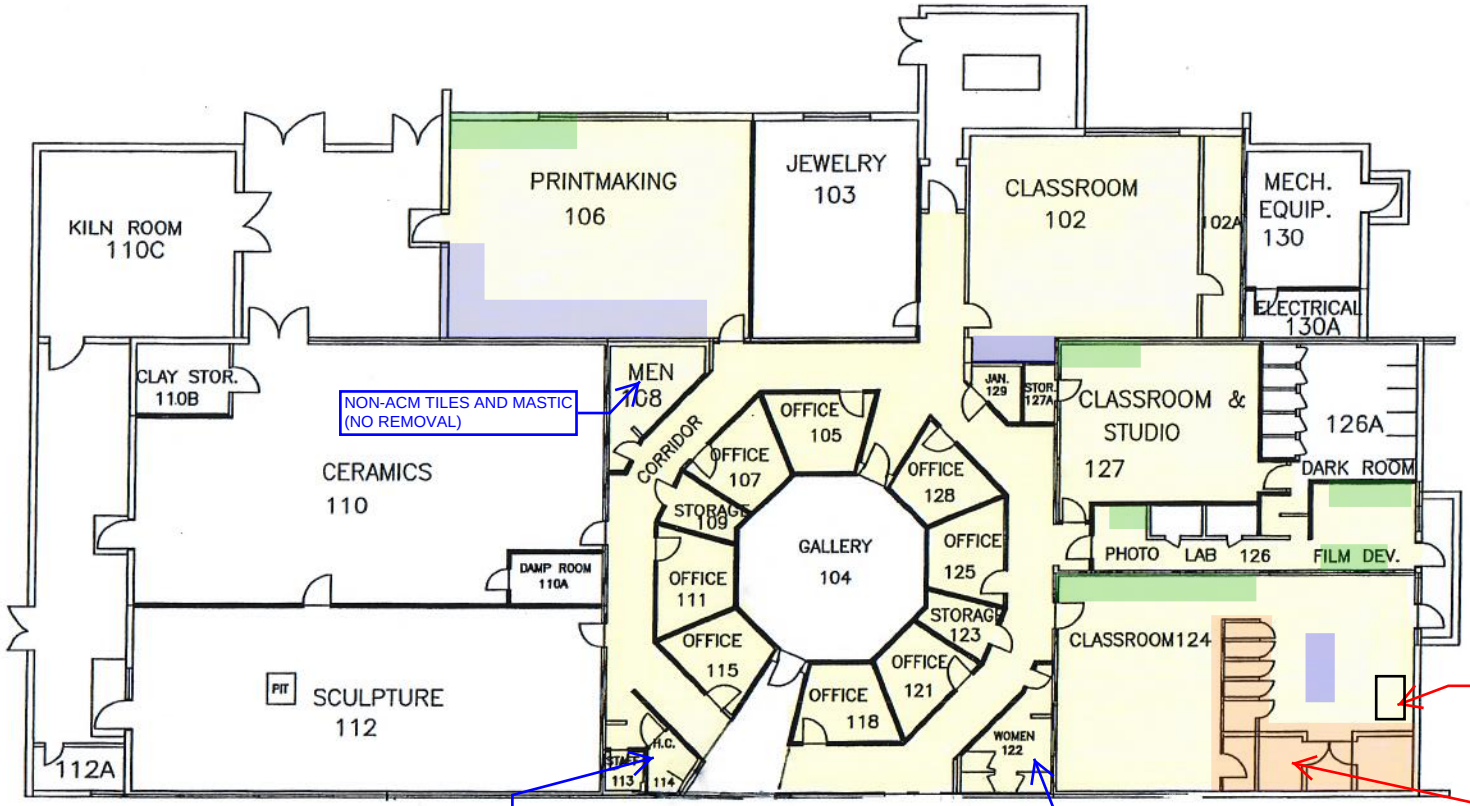
Procedures are prepared for use by the contractor, but do not limit the contractor from performing its work according to any regulations not included in this document.

This report is intended for use only by the client or its designees. Any future use of this report by anyone other than the above-referenced client will require authorization by FEI.

ATTACHMENT 1

DRAWINGS

FIGURE 1 - VISUAL ARTS BUILDING ACM FLOOR ABATEMENT



CABINETS TO BE REMOVED AND REPLACED BY CASPER COLLEGE PERSONNEL

CABINETS TO BE REMOVED AND DISPOSED BY CASPER COLLEGE PERSONNEL

ACM FLOOR TILES TO BE REMOVED
(MASTIC IS NON DETECT)

N

VA

11/29/21

ATTACHMENT 2

PHOTOGRAPHS

APPENDIX C. PHOTOGRAPH OF CONFIRMED ACM
ASBESTOS BUILDING INSPECTION REPORT
GOODSTEIN VISUAL ARTS BUILDING
CASPER COLLEGE, CASPER, WYOMING

Photo 1. Room 106, sample location, Type I-VFT-01 (light tan 12"x12" vinyl floor tile).

ATTACHMENT 3

PREVIOUS INSPECTION DATA

ASBESTOS BUILDING INSPECTION REPORT
GOODSTEIN VISUAL ARTS BUILDING, CASPER COLLEGE
CASPER, WYOMING

November 25, 2020

Project #: 56H-003-001

SUBMITTED BY: Trihydro Corporation

707 West 1st Street, Casper, WY 82601

emailed to Chet Dev, LC 11-30-20

Table of Contents

List of Tables

List of Figures

List of Appendices

List of Acronyms and Abbreviations

>1%	Greater than one percent
<1%	Less than one percent
ACBM	Asbestos-Containing Building Material
ACM	Asbestos-Containing Material
BIR	Building Inspection Report
CFR	Code of Federal Regulations
EPA	United States Environmental Protection Agency
NIST	National Institute of Standards and Technology
NVLAP	National Voluntary Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PLM	Polarized Light Microscopy
Trihydro	Trihydro Corporation

1.0 INTRODUCTION

Trihydro Corporation (Trihydro) has generated this Building Inspection Report (BIR) for Casper College and the Wyoming State Construction Department following the completion of inspection activities at the Goodstein Visual Arts Building, 125 College Drive, Casper, Wyoming. Trihydro conducted the building inspection to determine the presence of asbestos-containing materials (ACM) at the property from October 19, 2020 through October 21, 2020. Figure 1-1 shows the location of the inspected building. The building is a 17,300 square feet (ft^2) building that was constructed in 1977. The inspection was performed to identify ACM that may require removal prior to the planned demolition/renovation of the building.

This BIR details the procedures and methodologies utilized during the project and presents the results of asbestos bulk sampling conducted for determining the location, type, and quantity of ACM present in the building inspected. This assessment was limited to the accessible areas of the building as described in this report. Identified ACM may be subject to removal requirements prior to renovation or demolition of the building. The following sections present a summary of this investigation.

2.0 BUILDING INSPECTION AND ASBESTOS SAMPLING

Wallace Coles and Rob Northem, Trihydro asbestos building inspectors trained in accordance with the United States Environmental Protection Agency (EPA) Model Accreditation Program at the time of performance of the work described herein, inspected the structure for suspect ACM. A copy of Mr. Coles' and Mr. Northem's accreditation are presented in Appendix A of this report. An asbestos inspection is required by federal regulations prior to demolition or renovation of publicly accessible structures. ACM is defined by the EPA as any material containing greater than one percent (>1%) asbestos as determined by the method specified in Appendix A, Subpart F of 40 CFR 763 Section 1 – polarized light microscopy (PLM).

2.1 BUILDING INSPECTION AND ASBESTOS SAMPLING

Bulk samples of various suspect materials observed in the building were collected and submitted to an independent laboratory (EMSL Analytical, Inc. [EMSL]) for asbestos PLM analysis. A total of 60 samples were collected for asbestos analysis from the building. Table 2-1 shows the Bulk Sampling Strategy used to determine the number of samples to collect of each suspect material.

Sampling was conducted by segregating building materials into different groups. For the purposes of this report, building materials were divided into four groups; floors, walls, ceilings, and miscellaneous.

Once materials to be sampled were identified, they were then classified as friable or non-friable. The EPA distinguishes between friable and non-friable forms of asbestos-containing building materials (ACBM). A meaningful distinction exists between friable and non-friable homogeneous materials: friable materials, when dry, can be crumbled or reduced to powder by hand pressure, whereas non-friable materials cannot. Friable materials are more likely to release asbestos fibers into the air when disturbed, especially during renovation and demolition of the building, and must be removed prior to renovation or demolition of buildings where these materials may be impacted. The EPA has identified the following two categories of non-friable material:

- Category I non-friable materials (asbestos-containing packing, gasket, resilient floor covering, or asphalt roofing products) that are in good condition may remain during building demolition provided these materials are not rendered friable during demolition by forces acting upon them.
- Category II non-friable materials (any non-friable material, excluding Category I non-friables) must be removed prior to building demolition if there is NOT a low probability that these materials will remain non-friable during demolition.

The condition of the materials was also assessed during the inspections. Under the Asbestos NESHAP, ACM is classified as either Regulated Asbestos-Containing Materials (RACM) or non-friable. The EPA defines RACM as (a) friable asbestos material, (b) Category I nonfriable 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 nonfriable 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 activities. The condition assessment is used in the determination of the proper ACM management procedure.

2.2 ASBESTOS SAMPLING STRATEGY

Following EPA guidance, a Bulk Sampling Strategy was used to determine the number of samples to be collected of each suspect material. Table 2-1 shows the EPA minimum number of samples to be collected for each type of suspect material.

Trihydro collected bulk samples of the suspect ACM in a random and representative manner, as determined by the inspector. The inspector viewed and assumed that materials in inaccessible locations (e.g., crawl spaces) were similar to those in accessible locations, in order to prevent confined space entry concerns. All collected samples were placed in sealed, labeled containers, and the sample descriptions and locations were recorded.

The building materials were divided into four groups. The building material groups include the following:

- Floors: The floors in the building were observed to be bare concrete, brick, or various types of 12"x12" vinyl floor tile.
- Walls: The walls in the building were observed to be concrete, cinderblock, or gypsum wallboard. A textured material was applied to the gypsum wallboard walls.
- Ceilings: The ceilings in the building were comprised of either exposed concrete or metal roof decking or ceiling tiles. Ceiling tiles included 2'x2' and 2'x4 drop ceiling tiles as well as 12"x12" acoustic ceiling tile.
- Miscellaneous: Miscellaneous materials included applied sealants and repair materials to walls and ductwork.

2.3 CHAIN-OF-CUSTODY RECORD

A chain-of-custody record for all samples was used to track the possession and transfer of each sample from the time of field collection through laboratory analysis. The record contained the following: sample number, signature of collector, date of collection, identification of sampled material, requested laboratory analysis, signatures of individuals in custody of the samples and record of possession.

2.4 ASBESTOS LABORATORY ANALYSIS

Samples were analyzed by EMSL using PLM (EPA Method 600/R-93/116), a bulk sample analysis method. For samples with asbestos detections, a 400-point count analysis was completed. The National Institute of Standards and Technology (NIST) established the National Voluntary Laboratory Accreditation Program (NVLAP) to track laboratory performance. NVLAP provides third-party accreditation to testing and calibration laboratories in response to legislative actions or requests from government agencies or private-sector organizations. NVLAP-accredited laboratories are assessed against the management and technical requirements published in the International Standard, ISO/IEC 17025:2005. While the EPA does not "certify" laboratories, analytical methods follow EPA's recommended protocols using a NVLAP accredited laboratory. Sample materials that contain >1% asbestos, are considered ACM by the EPA. Samples that contain any amount of asbestos greater than non-detected are recognized and covered by the Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1101. Copies of the chain-of-custody forms and laboratory analytical reports can be found in Appendix B.

3.0 SUMMARY OF LABORATORY RESULTS

Asbestos was detected at a concentration of 1.5% by point count in bulk sample, Type I-VFT-01, light tan 12"x12" vinyl floor tile, collected from Room 104, Weaving. The vinyl floor tile is in overall good condition throughout the building with some minor damage in isolated locations.

Asbestos was detected at a concentration of 0.9% by point count in bulk sample MISC-WC-01, window caulk, collected from the window in the film developing room off of Hall 126. When bulk samples contain <1% asbestos, they are not considered ACM and can be disposed of as construction debris. However, samples with asbestos concentrations <1% must be handled in a manner that protects the worker according to OSHA.

Analysis of the remaining bulk samples did not detect the presence of asbestos. Table 3-1 presents a summary of the laboratory data for collected samples. The locations of confirmed ACM can be found on Figure 2-1. A photograph showing the confirmed ACM and its sample location is presented in Appendix C.

4.0 CONCLUSIONS

This report presents the findings of an asbestos building inspection for the Goodstein Visual Arts building located at 125 College Drive in Casper, Wyoming, conducted October 19, 2020 through October 21, 2020. The objective of this inspection was to identify the location and extent of asbestos-containing materials in the subject building, prior to demolition/renovation activities at the building. The inspection confirmed the presence of non-friable ACM (Category I) in vinyl floor tile. Category I non-friable ACM must be handled and disposed of appropriately according to Wyoming Department of Environmental Quality, Air Quality Division. The approximate area of the light tan 12"x12" vinyl floor tile is 7,570 square feet. The floor tile was observed in the following locations:

- Classroom 102
- Classroom 106
- Classroom 116
- Classroom 119
- Classroom 120
- Classroom 124
- Classroom 127
- Teacher Offices
- Janitor's Storage
- Storage Rooms

5.0 QUALIFICATIONS AND LIMITATIONS

Trihydro conducted this investigation in a manner consistent with current professional practices. This assessment was limited to the sampling locations and analyses described in the report. No other sampling or analyses were conducted during this investigation. Only readily accessible spaces, including the roof and mechanical room, were inspected. The crawl space below the building was not inspected; therefore, it is possible that ACM may exist in areas that were inaccessible during this inspection. It is possible that additional reports or investigations could alter the conclusions of this assessment. Materials and areas that were not accessed, sampled, and/or assessed include soils and equipment interiors (e.g., electrical panels).

I certify that I was accredited at the time the subject building inspection was performed. I certify that the building inspections were performed by me and this report was prepared by me or under my direct supervision.

Wallace Coles

Robert Northem

TABLES

TABLE 2-1. BULK SAMPLING STRATEGY
GOODSTEIN VISUAL ARTS BUILDING
CASPER COLLEGE, CASPER, WY

Material	Homogeneous Area	Units	Minimum Number of Samples
Friable Surfacing	Less than 1000	SF	3
	1000 to 5000	SF	5
	more than 5000	SF	7
Thermal System Insulation	- - -	LF / SF / EA	3
Miscellaneous Materials	- - -	LF / SF / EA	1

SF – Square Feet
LF – Linear Feet
EA –Each

TABLE 3-1. ANALYTICAL RESULTS
GOODSTEIN VISUAL ARTS BUILDING
CASPER COLLEGE, CASPER, WY

Sample ID	Material	Location	Layer	Analytical Result (Percent)	Approximate Quantity	Removal Requirements*	Photo Reference
Flooring							
Type I-CB-01	Cove Base	Interior	Cove Base Mastic	ND ND	NA	---	
Type I -VFT-01	**Light Tan 12"x12" Vinyl Floor Tile**	**Interior**	**Vinyl Floor Tile** Mastic	**1.5 PC** ND	**7,600 SF**	**1**	**See Appendix B**
Type III-VFT-01	White 12"x12" Vinyl Floor Tile (patch)	Interior	Vinyl Floor Tile Mastic	ND ND	NA	---	
Type-IV-VFT-01	White Speckled 12"x12" Vinyl Floor Tile	Interior	Vinyl Floor Tile Mastic	ND ND	NA	---	
Type-IV-VFT-02	White Speckled 12"x12" Vinyl Floor Tile	Interior	Vinyl Floor Tile Mastic	ND ND	NA	---	
Type-V-VFT-01	White Speckled 12"x12" Vinyl Floor Tile (patch)	Interior	Vinyl Floor Tile Mastic	ND ND	NA	---	
Type-V-VFT-02	White Speckled 12"x12" Vinyl Floor Tile (patch)	Interior	Vinyl Floor Tile Mastic	ND ND	NA	---	
Type II-VFT-01	Tan 12"x12" Vinyl Floor Tile	Interior	Vinyl Floor Tile Mastic	ND ND	NA	---	
Type-VI-VFT-01	Tan 12"x12" Vinyl Floor Tile	Interior	Vinyl Floor Tile Mastic	ND ND	NA	---	
Type-VI-VFT-02	Tan 12"x12" Vinyl Floor Tile	Interior	Vinyl Floor Tile Mastic	ND ND	NA	---	
Type II-CB-01	White Cove Base	Interior	Cove Base Mastic	ND ND	NA	---	
Type II-CB-02	White Cove Base	Interior	Cove Base Mastic	ND ND	NA	---	
Type III-CB-01	Brown Cove Base	Interior	Cove Base Mastic	ND ND	NA	---	
Type III-CB-02	Brown Cove Base	Interior	Cove Base Mastic	ND ND	NA	---	
Type III-VFT-02	White 12"x12" Vinyl Floor Tile (patch)	Interior	Vinyl Floor Tile Mastic	ND ND	NA	---	
Type VII-VFT-01	White 12"x12" Vinyl Floor Tile (patch)	Interior	Vinyl Floor Tile Mastic	ND ND	NA	---	
Type VII-VFT-02	White 12"x12" Vinyl Floor Tile (patch)	Interior	Vinyl Floor Tile Mastic	ND ND	NA	---	
Type IV-CB-01	Grey Cove Base	Interior	Cove Base Mastic	ND ND	NA	---	
Type IV-CB-02	Grey Cove Base	Interior	Cove Base Mastic	ND ND	NA	---	
Type III-CB-01	Yellow Cove Base	Interior	Cove Base Mastic	ND ND	NA	---	

TABLE 3-1. ANALYTICAL RESULTS
GOODSTEIN VISUAL ARTS BUILDING
CASPER COLLEGE, CASPER, WY

Sample ID	Material	Location	Layer	Analytical Result (Percent)	Approximate Quantity	Removal Requirements*	Photo Reference
Type III-CB-02	Yellow Cove Base	Interior	Cove Base Mastic	ND ND	NA	---	
Type V-CB-01	White Cove Base	Interior	Cove Base	ND	NA	---	
Type V-CB-02	White Cove Base	Interior	Cove Base	ND	NA	---	
Ceilings							
MISC-FB-01	2'x4' Firestop Board	Interior/above light fixtures	Firestop Board	ND	NA	---	
MISC-FB-02	2'x4' Firestop Board	Interior/above light fixtures	Firestop Board	ND	NA	---	
Type I-CT-01	2'x2' Ceiling Tile	Interior	Ceiling Tile	ND	NA	---	
Type I-CT-02	2'x2' Ceiling Tile	Interior	Ceiling Tile	ND	NA	---	
Type II-CT-01	2'x4' Ceiling Tile	Interior	Ceiling Tile	ND	NA	---	
Type II-CT-02	2'x4' Ceiling Tile	Interior	Ceiling Tile	ND	NA	---	
Type III-CT-01	Acoustic Ceiling Tile	Interior	Acoustic Tile	ND	NA	---	
Type III-CT-02	Acoustic Ceiling Tile	Interior	Acoustic Tile	ND	NA	---	

TABLE 3-1. ANALYTICAL RESULTS
GOODSTEIN VISUAL ARTS BUILDING
CASPER COLLEGE, CASPER, WY

Sample ID	Material	Location	Layer	Analytical Result (Percent)	Approximate Quantity	Removal Requirements*	Photo Reference
Walls							
MISC-WRM-01	Cinderblock Wall Repair Material	Interior	Repair Material	ND	NA	---	
Type I-WB-01	Sheetrock Wallboard	Interior	Sheetrock Wallboard	ND ND	NA	---	
Type I-WB-02	Sheetrock Wallboard	Interior	Sheetrock Wallboard	ND	NA	---	
Type II-WB-01	Sheetrock Wallboard	Interior	Sheetrock Wallboard	ND ND	NA	---	
Type II-WB-02	Sheetrock Wallboard	Interior	Sheetrock Wallboard	ND ND	NA	---	
Type III-WB-01	Sheetrock Wallboard	Interior	Sheetrock Wallboard	ND ND	NA	---	
Type III-WB-02	Sheetrock Wallboard	Interior	Sheetrock Wallboard	ND ND	NA	---	
WB-text-05	Wallboard Texture	Interior	Texture	ND	NA	---	
WB-text-01	Wallboard Texture	Interior	Texture	ND	NA	---	
WB-text-02	Wallboard Texture	Interior	Texture Drywall	ND ND	NA	---	
WB-text-03	Wallboard Texture	Interior	Texture	ND	NA	---	
WB-text-04	Wallboard Texture	Interior	Texture	ND	NA	---	
WB-text-06	Wallboard Texture	Interior	Texture	ND	NA	---	
WB-text-07	Wallboard Texture	Interior	Texture	ND	NA	---	
WB-text-08	Wallboard Texture	Interior	Texture	ND	NA	---	
WB-text-09	Wallboard Texture	Interior	Texture	ND	NA	---	
WB-text-10	Wallboard Texture	Interior	Texture	ND	NA	---	
WB-text-11	Wallboard Texture	Interior	Texture	ND	NA	---	
WB-text-12	Wallboard Texture	Interior	Texture	ND	NA	---	
WB-text-13	Wallboard Texture	Interior	Texture	ND	NA	---	

TABLE 3-1. ANALYTICAL RESULTS
GOODSTEIN VISUAL ARTS BUILDING
CASPER COLLEGE, CASPER, WY

Sample ID	Material	Location	Layer	Analytical Result (Percent)	Approximate Quantity	Removal Requirements*	Photo Reference
Miscellaneous							
MISC-VDS-01	Vacuum Duct Sealant	Interior	Duct Sealant	ND	NA	---	
MISC-VDS-02	Vacuum Duct Sealant	Interior	Duct Sealant	ND	NA	---	
MISC-WC-01	**Window Caulk**	**Interior**	**Caulk**	**0.9 PC**	**NA**	**---**	
MISC-WC-02	Window Caulk	Interior	Caulk	ND	NA	---	
RM-01	Roofing Material	Interior	Blue Layer White Layer Yellow Layer Black Layer	ND ND ND ND	NA	---	
RM-02	Roofing Material	Interior	Black Layer	ND	NA	---	
SM-01	Chimney Surfacing Material	Interior	Surfacing Material	ND	NA	---	
SM-02	Chimney Surfacing Material	Interior	Surfacing Material	ND	NA	---	
SM-03	Chimney Surfacing Material	Interior	Surfacing Material	ND	NA	---	

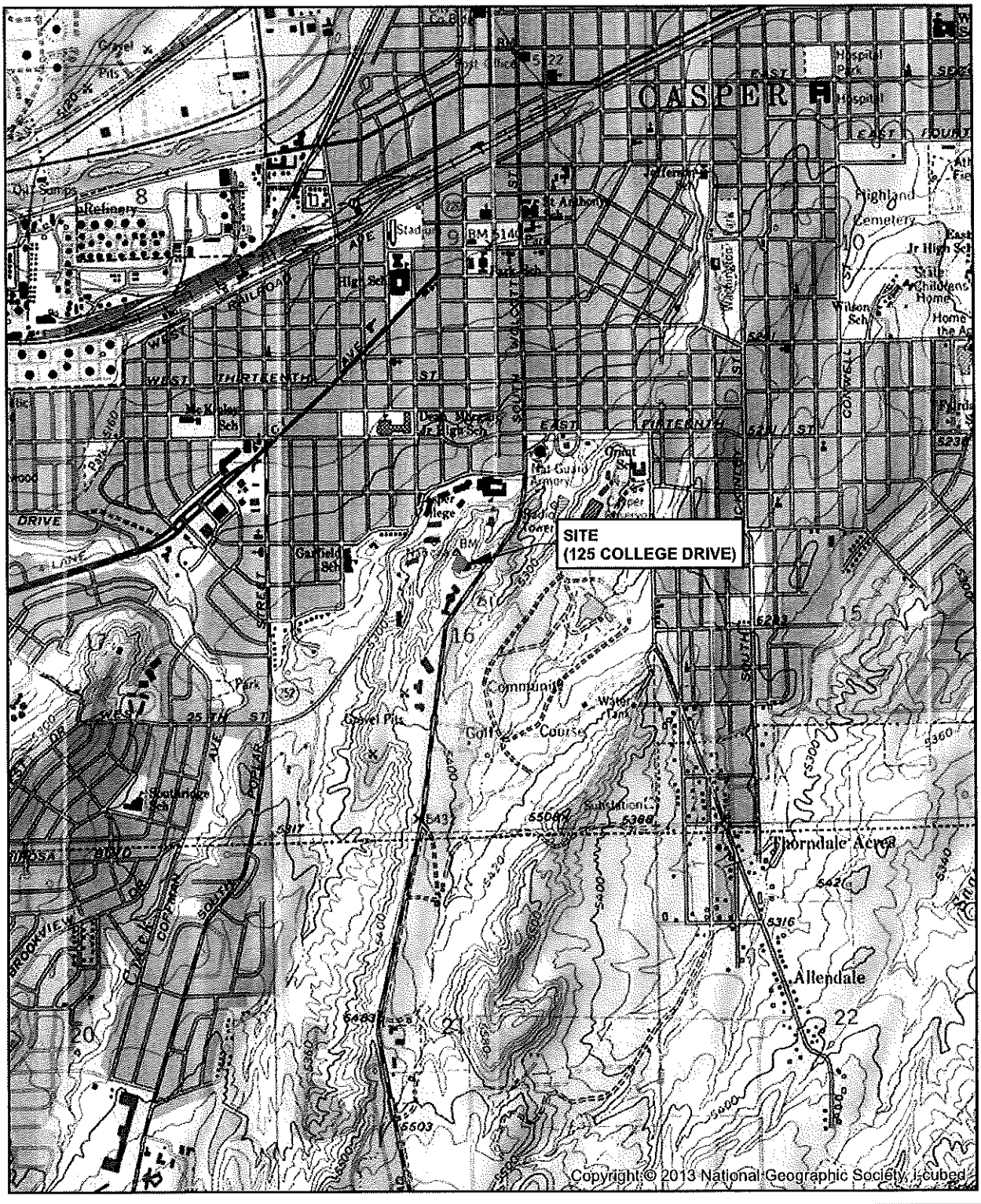
Notes:
SF Square feet
NA Not Applicable
ND Not Detected
PC Point Counted

*Removal Requirements:

1. Non-friable materials must be removed prior to any activities that may render these materials friable. The landfill must be notified that they are receiving non-friable ACM demolition debris.

*– These materials do not contain asbestos and have no removal requirements prior to renovation or demolition.

FIGURES



N

0 2,000'

Trihydro CORPORATION

1252 Commerce Drive
Laramie, WY 82070
www.trihydro.com
(P) 307/745.7474 (F) 307/745.7729

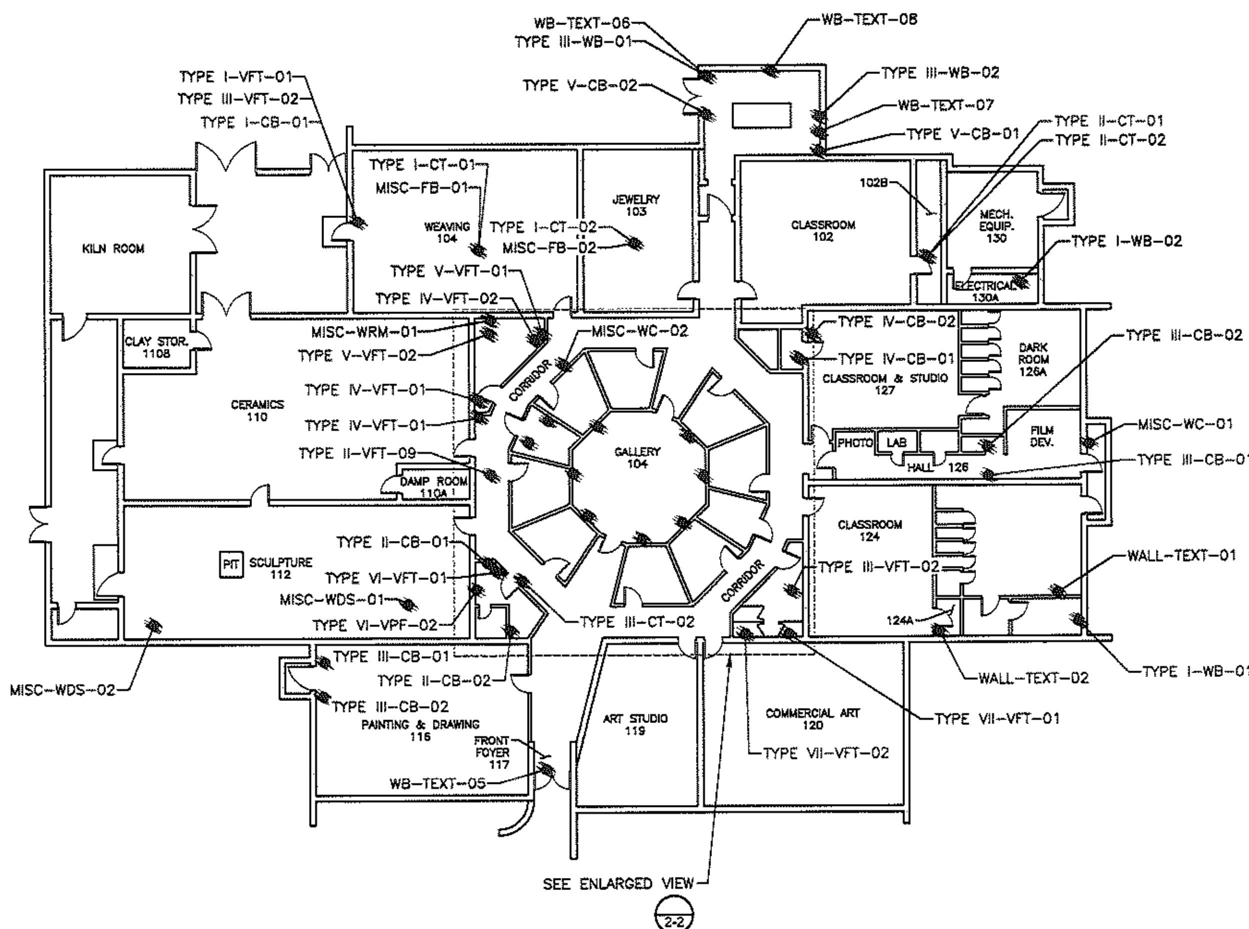
FIGURE 1-1

SITE LOCATION MAP
GOODSTEIN VISUAL ARTS BUILDING
125 COLLEGE DRIVE

WYOMING STATE CONSTRUCTION DEPARTMENT
CASPER COLLEGE
CASPER, WYOMING

Drawn By: DH	Checked By: WC	Scale: 1 " = 2,000 '	Date: 11/13/20	File: Fig1_SiteLocation.mxd

M:\GOV\STATEWIDE\CPC\CASPER COLLEGE\GIS\MAPPING\INSPECTION\REPORT\FIG1_SITELOCATION.MXD



EXPLANATION

TYPE III-CB-02 SAMPLE LOCATION AND IDENTIFICATION

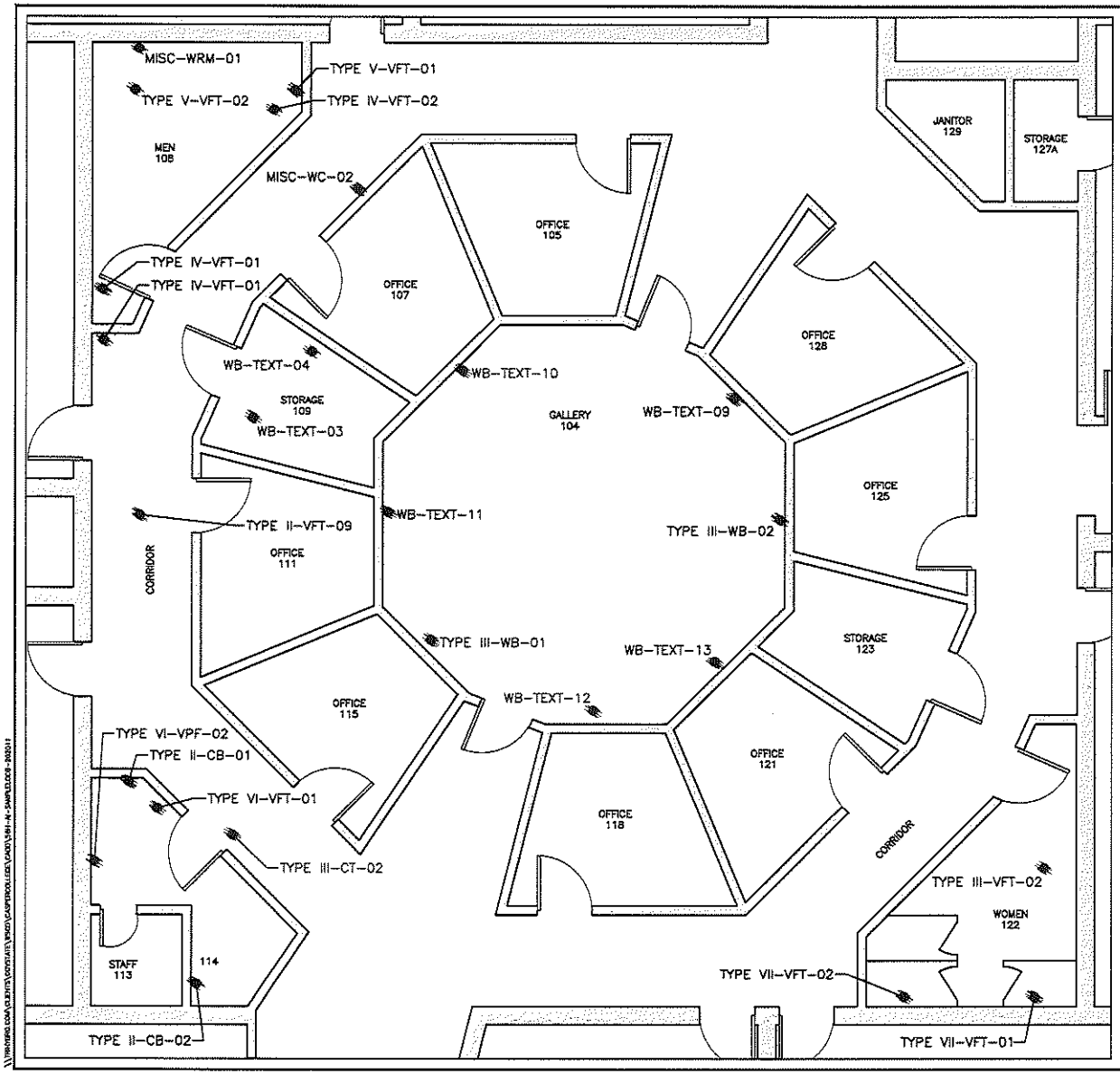
Trihydro
1252 Commerce Drive
Laramie, Wyoming 82070
www.trihydro.com
(P) 307/745.7474 (F) 307/745.7729

FIGURE 2-1

GOODSTEIN VISUAL ARTS BUILDING,
125 COLLEGE DRIVE, SAMPLE LOCATIONS,
ASBESTOS BUILDING INSPECTION

WYOMING STATE CONSTRUCTION DEPARTMENT
CASPER COLLEGE
CASPER, WYOMING

Drawn By: PAC	Checked By: WC	Scale: 1" = ~20'	Date: 11/11/2020	File: 56H-AI-SAMPLELOC202011



EXPLANATION

TYPE III-VFT-02 SAMPLE LOCATION AND IDENTIFICATION

0 ~6'

Trihydro Corporation
1252 Commerce Drive
Laramie, Wyoming 82070
www.trihydro.com
(P) 307/745.7474 (F) 307/745.7729

FIGURE 2-2
ENLARGED VIEW
SAMPLE LOCATIONS
ASBESTOS BUILDING INSPECTION
WYOMING STATE CONSTRUCTION DEPARTMENT
CASPER COLLEGE
CASPER, WYOMING

Drawn By: PAC	Checked By: WC	Scale: 1" = ~6'	Date: 11/11/2020	File: 56H-AI-SAMPLELOCB-202011

APPENDIX A

ASBESTOS BUILDING INSPECTOR CREDENTIALS

CHC Training
Nationwide Training & Certification Experts

www.chctraining.com
303.412.6360
855.60.CERTIFY

1775 West 55th Avenue
Denver, CO 80221,
United States of America

Certificate of Achievement

This certificate is awarded to:

Wallace J. Coles

In recognition of satisfactory completion of the EPA-approved annual asbestos refresher training course under section 206 of the Toxic Substance Control Act (TSCA), Title II entitled:

Building Inspector

Course Completion Date:	August 7, 2020
Examination Date:	August 7, 2020
Expiration Date:	August 7, 2021
Course Hours:	4.0

Danaya N. Benedetto
CEO & Training Program Manager

Credential License ID:
21566357

Verify this Credential

CHC Training® EST. 2007 Accredited Alumni — Safety, Quality, Compliance, Integrity

Aaron Hix
Instructor

CHC Training Certificate No.
R20-0922-AI-O

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855.60.CERTIFY

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Denver, CO 80221,
United States of America

CERTIFICATE OF ACHIEVEMENT

This certificate is awarded to:

ROBERT NORTHEM

In recognition of satisfactory completion of the EPA-approved annual asbestos refresher training course under section 206 of the Toxic Substance Control Act (TSCA), Title II entitled:

BUILDING INSPECTOR

COURSE COMPLETION DATE:	MARCH 13, 2020
EXAMINATION DATE:	MARCH 13, 2020
EXPIRATION DATE:	MARCH 13, 2021
COURSE HOURS:	4.0

Danaya N. Benedetto
CEO & Training Program Manager

Credential License ID:
15238854

CHC TRAINING EST. 2007 ACCREDITED ALUMNI
SAFETY QUALITY COMPLIANCE INTEGRITY

Aaron Hix
Instructor

CHC Training Certificate No.
R20-0139-AI-O

Verify this Credential

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APPENDIX B

LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY RECORD

EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com / cinnasblab@EMSL.com

EMSL Order ID:	042026890
Customer ID:	THYD42
Customer PO:	2020581
Project ID:	

Attn:	Stephanie Whitfield Trihydro Corporation 1252 Commerce Drive Laramie, WY 82070	Phone: Fax: Collected: Received: Analyzed:	(719) 238-0714 (307) 745-7729 11/03/2020 11/25/2020
Proj:	56H-003-001		

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: Type I-CB-01-Cove Base — ***Lab Sample ID:*** **042026890-0001**

Sample Description: White Cove Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type I-CB-01-Mastic — ***Lab Sample ID:*** **042026890-0001A**

Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Brown	0.0%	100.0%	None Detected	

Client Sample ID: Type I-VFT-01-Vinyl Floor Tile — ***Lab Sample ID:*** **042026890-0002**

Sample Description: Light Tan 12"x12" Vinyl Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Beige	0.0%	97.0%	3% Chrysotile	
400 PLM PtCt Grav. Red.	11/25/2020	Beige	0.0%	98.5%	1.5% Chrysotile	

Client Sample ID: Type I-VFT-01-Mastic — ***Lab Sample ID:*** **042026890-0002A**

Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: Type III-VFT-01-Vinyl Floor Tile — ***Lab Sample ID:*** **042026890-0003**

Sample Description: White 12"x12" Vinyl Floor Tile (Patch)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type III-VFT-01-Mastic — ***Lab Sample ID:*** **042026890-0003A**

Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: MISC-FB-01 — ***Lab Sample ID:*** **042026890-0004**

Sample Description: 2'x4' Firestop Board

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	40.0%	60.0%	None Detected	

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EMSL Order ID:	042026890
Customer ID:	THYD42
Customer PO:	2020581
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: Type I-CT-01 ***Lab Sample ID:*** **042026890-0005**
Sample Description: 2'x2' Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	Gray	65.0%	35.0%	None Detected	

Client Sample ID: Type IV-VFT-01-Vinyl Floor Tile ***Lab Sample ID:*** **042026890-0006**
Sample Description: White Speckled 12"x12" Vinyl Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type IV-VFT-01-Mastic ***Lab Sample ID:*** **042026890-0006A**
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: Type IV-VFT-02-Vinyl Floor Tile ***Lab Sample ID:*** **042026890-0007**
Sample Description: White Speckled 12"x12" Vinyl Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type IV-VFT-02-Mastic ***Lab Sample ID:*** **042026890-0007A**
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: Type V-VFT-01-Vinyl Floor Tile ***Lab Sample ID:*** **042026890-0008**
Sample Description: White Speckled 12"x12" Vinyl Floor Tile (Patch)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type V-VFT-01-Mastic ***Lab Sample ID:*** **042026890-0008A**
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: Type V-VFT-02-Vinyl Floor Tile ***Lab Sample ID:*** **042026890-0009**
Sample Description: White Speckled 12"x12" Vinyl Floor Tile (Patch)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	White	0.0%	100.0%	None Detected	

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http://www.EMSL.com / cinnasblab@EMSL.com

EMSL Order ID:	042026890
Customer ID:	THYD42
Customer PO:	2020581
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: Type V-VFT-02-Mastic ***Lab Sample ID:*** **042026890-0009A**
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: MISC-WRM-01 ***Lab Sample ID:*** **042026890-0010**
Sample Description: Cinder Block Wall Repair Material

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type II-VFT-01-Vinyl Floor Tile ***Lab Sample ID:*** **042026890-0011**
Sample Description: Tan 12"x12" Vinyl Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type II-VFT-01-Mastic ***Lab Sample ID:*** **042026890-0011A**
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: MISC-VDS-01 ***Lab Sample ID:*** **042026890-0012**
Sample Description: Vacuum Duct Sealant

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: MISC-VDS-02 ***Lab Sample ID:*** **042026890-0013**
Sample Description: Vacuum Duct Sealant

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type VI- VFT-01-Vinyl Floor Tile ***Lab Sample ID:*** **042026890-0014**
Sample Description: Tan 12"x12" Vinyl Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type VI- VFT-01-Mastic ***Lab Sample ID:*** **042026890-0014A**
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Yellow	0.0%	100.0%	None Detected	

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http://www.EMSL.com / cinnasblab@EMSL.com

EMSL Order ID:	042026890
Customer ID:	THYD42
Customer PO:	2020581
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: Type VI- VFT-02-Vinyl Floor Tile **Lab Sample ID:** 042026890-0015
Sample Description: Tan 12"x12" Vinyl Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type VI- VFT-02-Mastic **Lab Sample ID:** 042026890-0015A
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: Type II-CB-01-Cove Base **Lab Sample ID:** 042026890-0016
Sample Description: White Cove Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type II-CB-01-Mastic **Lab Sample ID:** 042026890-0016A
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: Type II-CB-02-Cove Base **Lab Sample ID:** 042026890-0017
Sample Description: White Cove Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type II-CB-02-Mastic **Lab Sample ID:** 042026890-0017A
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: Type III-CB-01-Cove Base **Lab Sample ID:** 042026890-0018
Sample Description: Brown Cove Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type III-CB-01-Mastic **Lab Sample ID:** 042026890-0018A
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Brown	0.0%	100.0%	None Detected	

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EMSL Order ID:	042026890
Customer ID:	THYD42
Customer PO:	2020581
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: Type III-CB-02-Cove Base ***Lab Sample ID:*** **042026890-0019**

Sample Description: Brown Cove Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	Brown	0.0%	100.0%	None Detected	

Client Sample ID: Type III-CB-02-Mastic ***Lab Sample ID:*** **042026890-0019A**

Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: Type III-VFT-02-Vinyl Floor Tile ***Lab Sample ID:*** **042026890-0020**

Sample Description: White 12"x12" Vinyl Floor Tile (Patch)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type III-VFT-02-Mastic ***Lab Sample ID:*** **042026890-0020A**

Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Clear	0.0%	100.0%	None Detected	

Client Sample ID: Type VII-VFT-01-Vinyl Floor Tile ***Lab Sample ID:*** **042026890-0021**

Sample Description: White 12"x12" Vinyl Floor Tile (Patch)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type VII-VFT-01-Mastic ***Lab Sample ID:*** **042026890-0021A**

Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: Type VII-VFT-02-Vinyl Floor Tile ***Lab Sample ID:*** **042026890-0022**

Sample Description: White 12"x12" Vinyl Floor Tile (Patch)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type VII-VFT-02-Mastic ***Lab Sample ID:*** **042026890-0022A**

Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Yellow	0.0%	100.0%	None Detected	

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Customer ID:	THYD42
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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: MISC-FB-02 ***Lab Sample ID:*** **042026890-0023**
Sample Description: 2'x4' Firestop Board

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: Type I-CT-02 ***Lab Sample ID:*** **042026890-0024**
Sample Description: 2'x2' Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	60.0%	40.0%	None Detected	

Client Sample ID: Type II-CT-01 ***Lab Sample ID:*** **042026890-0025**
Sample Description: 2'x4' Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	Gray	65.0%	35.0%	None Detected	

Client Sample ID: Type II-CT-02 ***Lab Sample ID:*** **042026890-0026**
Sample Description: 2'x4' Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	65.0%	35.0%	None Detected	

Client Sample ID: Type IV-CB-01-Cove Base ***Lab Sample ID:*** **042026890-0027**
Sample Description: Gray Cove Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type IV-CB-01-Mastic ***Lab Sample ID:*** **042026890-0027A**
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Brown	0.0%	100.0%	None Detected	

Client Sample ID: Type IV-CB-02-Cove Base ***Lab Sample ID:*** **042026890-0028**
Sample Description: Gray Cove Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type IV-CB-02-Mastic ***Lab Sample ID:*** **042026890-0028A**
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Brown	0.0%	100.0%	None Detected	

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Customer ID:	THYD42
Customer PO:	2020581
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: Type III-CB-01-Cove Base ***Lab Sample ID:*** **042026890-0029**
Sample Description: Yellow Cove Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: Type III-CB-01-Mastic ***Lab Sample ID:*** **042026890-0029A**
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: Type III-CB-02-Cove Base ***Lab Sample ID:*** **042026890-0030**
Sample Description: Yellow Cove Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type III-CB-02-Mastic ***Lab Sample ID:*** **042026890-0030A**
Sample Description: Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: MISC-WC-01 ***Lab Sample ID:*** **042026890-0031**
Sample Description: Window Caulk

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Tan	0.0%	100.0%	**<1% Chrysotile**	
400 PLM PtCt Grav. Red.	11/25/2020	Tan	0.0%	99.1%	**0.9% Chrysotile**	

Client Sample ID: Type I-WB-01-Joint Compound ***Lab Sample ID:*** **042026890-0032**
Sample Description: Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type I-WB-01-Sheetrock ***Lab Sample ID:*** **042026890-0032A**
Sample Description: Sheetrock Wallboard

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: Type I-WB-02 ***Lab Sample ID:*** **042026890-0033**
Sample Description: Sheetrock Wallboard

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	0.0%	100.0%	None Detected	

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Customer ID:	THYD42
Customer PO:	2020581
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: WB-Text-01 ***Lab Sample ID:*** **042026890-0034**

Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: WB-Text-02-Texture ***Lab Sample ID:*** **042026890-0035**

Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: WB-Text-02-Drywall ***Lab Sample ID:*** **042026890-0035A**

Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: WB-Text-03 ***Lab Sample ID:*** **042026890-0036**

Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: WB-Text-04 ***Lab Sample ID:*** **042026890-0037**

Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: WB-Text-05 ***Lab Sample ID:*** **042026890-0038**

Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: WB-Text-06 ***Lab Sample ID:*** **042026890-0039**

Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: WB-Text-07 ***Lab Sample ID:*** **042026890-0040**

Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	80.0%	20.0%	None Detected	

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Customer ID:	THYD42
Customer PO:	2020581
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: WB-Text-08 ***Lab Sample ID:*** **042026890-0041**
Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type II-WB-01-Joint Compound ***Lab Sample ID:*** **042026890-0042**
Sample Description: Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Tan	0.0%	100.0%	None Detected	

Client Sample ID: Type II-WB-01-Texture ***Lab Sample ID:*** **042026890-0042A**
Sample Description: Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type II-WB-01-Sheetrock ***Lab Sample ID:*** **042026890-0042B**
Sample Description: Sheetrock Wallboard

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: Type II-WB-02-Joint Compound ***Lab Sample ID:*** **042026890-0043**
Sample Description: Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type II-WB-02-Sheetrock ***Lab Sample ID:*** **042026890-0043A**
Sample Description: Sheetrock Wallboard

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: WB-Text-09 ***Lab Sample ID:*** **042026890-0044**
Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: WB-Text-10 ***Lab Sample ID:*** **042026890-0045**
Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

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EMSL Order ID:	042026890
Customer ID:	THYD42
Customer PO:	2020581
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: WB-Text-11 ***Lab Sample ID:*** **042026890-0046**
Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: WB-Text-12 ***Lab Sample ID:*** **042026890-0047**
Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: WB-Text-13 ***Lab Sample ID:*** **042026890-0048**
Sample Description: Wallboard Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type V-CB-01 ***Lab Sample ID:*** **042026890-0049**
Sample Description: White Cove Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type V-CB-02 ***Lab Sample ID:*** **042026890-0050**
Sample Description: White Cove Base

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: MISC-WC-02 ***Lab Sample ID:*** **042026890-0051**
Sample Description: Window Caulk

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: Type III-CT-01 ***Lab Sample ID:*** **042026890-0052**
Sample Description: Acoustic Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	65.0%	35.0%	None Detected	

Client Sample ID: Type III-CT-02 ***Lab Sample ID:*** **042026890-0053**
Sample Description: Acoustic Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	65.0%	35.0%	None Detected	

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EMSL Order ID:	042026890
Customer ID:	THYD42
Customer PO:	2020581
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: RM-01-Layer 1 ***Lab Sample ID:*** **042026890-0054**
Sample Description: Roofing Material

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Blue	0.0%	100.0%	None Detected	

Client Sample ID: RM-01-Layer 2 ***Lab Sample ID:*** **042026890-0054A**
Sample Description: Roofing Material

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: RM-01-Layer 3 ***Lab Sample ID:*** **042026890-0054B**
Sample Description: Roofing Material

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: RM-01-Layer 4 ***Lab Sample ID:*** **042026890-0054C**
Sample Description: Roofing Material

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Black	80.0%	20.0%	None Detected	

Client Sample ID: RM-02 ***Lab Sample ID:*** **042026890-0055**
Sample Description: Roofing Material

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Black	80.0%	20.0%	None Detected	

Client Sample ID: SM-01 ***Lab Sample ID:*** **042026890-0056**
Sample Description: Chimney Surfacing Material

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: SM-02 ***Lab Sample ID:*** **042026890-0057**
Sample Description: Chimney Surfacing Material

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/06/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: SM-03 ***Lab Sample ID:*** **042026890-0058**
Sample Description: Chimney Surfacing Material

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	0.0%	100.0%	None Detected	

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EMSL Order ID:	042026890
Customer ID:	THYD42
Customer PO:	2020581
Project ID:	

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: Type III-WB-01-Joint Compound ***Lab Sample ID:*** **042026890-0059**

Sample Description: Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type III-WB-01-Sheetrock ***Lab Sample ID:*** **042026890-0059A**

Sample Description: Sheetrock Wallboard

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: Type III-WB-02-Joint Compound ***Lab Sample ID:*** **042026890-0060**

Sample Description: Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: Type III-WB-02-Sheetrock ***Lab Sample ID:*** **042026890-0060A**

Sample Description: Sheetrock Wallboard

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	11/09/2020	Gray	0.0%	100.0%	None Detected	

Analyst(s):

Andrew Burke	400 PLM PtCt Grav. Red (2)
Kyle Rich	PLM (52)
Violedah Richardson	PLM (39)

Reviewed and approved by:

Samantha Rundstrom, Laboratory Manager
or Other Approved Signatory

Samples analyzed by EMSL Analytical, Inc Smyrna, GA NVLAP Lab Code 101048-1

Report amended: 11/25/202012:58:05 Replaces initial report from: 11/10/202009:48:31 Reason Code: Client-Additional Analysis

OrderID: 042026890

EMSL ANALYTICAL, INC.
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Asbestos Bulk Building Material Chain of Custody

EMSL Order Number *(lab use only)*: 042026890

Company Name : Trihydro Corporation		**EMSL Customer ID:** THYD42	
Street: 1252 Commerce Drive		**City:** Laramie	**State or Province:** WY
Zip/Postal Code: 82070	**Country:** USA	**Telephone #:** 307-745-7474	**Fax #:**
Report To (Name): Stephanie Whitfield, Rob Northem		**Please Provide Results via:** ☐ Fax ☒ Email	
email Address: swhitfield@trihydro.com; rnorthem@trihydro.com		**Purchase Order Number:** 20Ø581	
Client Project ID: 56H-003-001		**EMSL Project ID** *(internal use only)*:	
State or Province Collected: Wyoming		**CT only** ☐ **Commercial/Taxable** ☐ **Residential/Tax Exempt**	

EMSL-Bill to: ☐ Same ☐ Different - *If bill to is different note instructions in comment. Third party billing requires written authorization from third party*

Turnaround Time (TAT) Options Please Check

☐ 3 Hour	☐ 6 Hour	☐ 24 Hour	☐ 32 Hour*	☐ 48 Hour	☐ 72 Hour	☐ 96 Hour	☒ 1 Week	☐ 2 Week

*32 Hour TAT available for select tests only; samples must be submitted by 11:30am.
Please call ahead for large projects and/or turnaround times 6 hours or less.

PLM - Bulk (reporting limit)	TEM – Bulk
☒ PLM EPA 600/R-93/116 (<1%)	☐ TEM EPA NOB – EPA 600/R-93/116 Section 2.5.5
☐ PLM EPA NOB (<1%)	☐ NY ELAP Method 198.4 non-friable - NY
Point Count ☐ 400 (<0.25%) ☐ 1000 (<0.1%)	☐ Chatfield Protocol (semi-quantitative)
Point Count w/Gravimetric ☐ 400 (<0.25%) ☐ 1000 (<0.1%)	☐ TEM % by Mass – EPA 600/R-93/116 Section 2.5.5
☐ NIOSH 9002 (<1%)	☐ TEM Qualitative via Filtration Prep Technique
☐ NY ELAP Method 198.1- friable - NY	☐ TEM Qualitative via Drop Mount Prep Technique
☐ NY ELAP Method 198.6 NOB- non-friable - NY	**Other tests (please specify)**
☐ NY ELAP Method 198.8- Vermiculite Surfacing Material	
☐ OSHA ID-191 Modified	☐
☐ EMSL Standard Addition Method	

☐ **Positive Stop – Clearly Identify Homogenous Areas (HA)**

Date Sampled: 10/19 – 10/21/2020

Sampler's Name: Wallace Coles, Rob Northem

Sampler's Signature: Robert J. Northem

Sample #	HA #	Sample Location	Material Description
Type I-CB-01	----	See sample location figure	White Cove Base
Type I-VFT-01	----	See sample location figure	Light Tan 12"x12" Vinyl Floor Tile
Type III-VFT-01	----	See sample location figure	White 12"x12" Vinyl Floor Tile (patch)
MISC-FB-01	----	See sample location figure	2'x4' Firestop Board
Type I-CT-01	----	See sample location figure	2'x2' Ceiling Tile
Type IV-VFT-01	----	See sample location figure	White Speckled 12"x12" Vinyl Floor Tile

Client Sample # (s): 6Ø **Total # of Samples:** 6Ø

Relinquished by (Client): [signature] **Date:** 10-26-2020 **Time:** 1500

Received by (Lab): [signature] VPS **Date:** 11/3/2020 **Time:** 945AM

Comments/Special Instructions:

Page 1 of 4

OrderID: 042026890

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number *(lab use only)*:

042026890

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Additional pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	HA #	Sample Location	Material Description
Type IV-VFT-02	----	See sample location figure	White Speckled 12"x12" Vinyl Floor Tile
Type V-VFT-01	----	See sample location figure	White Speckled 12"x12" Vinyl Floor Tile (patch)
Type V-VFT-02	----	See sample location figure	White Speckled 12"x12" Vinyl Floor Tile (patch)
MISC-WRM-01	----	See sample location figure	Cinder Block Wall Repair Material
Type II-VFT-01	----	See sample location figure	Tan 12"x12" Vinyl Floor Tile
MISC-VDS-01	----	See sample location figure	Vacuum Duct Sealant
MISC-VDS-02	----	See sample location figure	Vacuum Duct Sealant
Type VI-VFT-01	----	See sample location figure	Tan 12"x12" Vinyl Floor Tile
Type VI-VFT-02	----	See sample location figure	Tan 12"x12" Vinyl Floor Tile
Type II-CB-01	----	See sample location figure	White Cove Base
Type II-CB-02	----	See sample location figure	White Cove Base
Type III-CB-01	----	See sample location figure	Brown Cove Base
Type III-CB-02	----	See sample location figure	Brown Cove Base
Type III-VFT-02	----	See sample location figure	White 12"x12" Vinyl Floor Tile (patch)
Type VII-VFT-01	----	See sample location figure	White 12"x12" Vinyl Floor Tile (patch)
Type VII-VFT-02	----	See sample location figure	White 12"x12" Vinyl Floor Tile (patch)
MISC-FB-02	----	See sample location figure	2'x4' Firestop Board
Type I-CT-02	----	See sample location figure	2'x2' Ceiling Tile
Type-II-CT-01	----	See sample location figure	2'x4' Ceiling Tile
Type II-CT-02	----	See sample location figure	2'x4' Ceiling Tile
Type IV-CB-01	----	See sample location figure	Grey Cove Base

***Comments/Special Instructions:**

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Additional pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	HA #	Sample Location	Material Description
Type IV-CB-02	----	See sample location figure	Grey Cove Base
Type III-CB-01	----	See sample location figure	Yellow Cove Base
Type III-CB-02	----	See sample location figure	Yellow Cove Base
MISC-WC-01	----	See sample location figure	Window Caulk
Type I-WB-01	----	See sample location figure	Sheetrock Wallboard
Type I-WB-02	----	See sample location figure	Sheetrock Wallboard
WB-Text-01	----	See sample location figure	Wallboard Texture
WB-Text-02	----	See sample location figure	Wallboard Texture
WB-Text-03	----	See sample location figure	Wallboard Texture
WB-Text-04	----	See sample location figure	Wallboard Texture
WB-Text-05	----	See sample location figure	Wallboard Texture
WB-Text-06	----	See sample location figure	Wallboard Texture
WB-Text-07	----	See sample location figure	Wallboard Texture
WB-Text-08	----	See sample location figure	Wallboard Texture
Type II-WB-01	----	See sample location figure	Sheetrock Wallboard
Type II-WB-02	----	See sample location figure	Sheetrock Wallboard
WB-Text-09	----	See sample location figure	Wallboard Texture
WB-Text-10	----	See sample location figure	Wallboard Texture
WB-Text-11	----	See sample location figure	Wallboard Texture
WB-Text-12	----	See sample location figure	Wallboard Texture
WB-Text-13	----	See sample location figure	Wallboard Texture

***Comments/Special Instructions:**

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Additional pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	HA #	Sample Location	Material Description
Type V-CB-01	----	See sample location figure	White Cove Base
Type V-CB-02	----	See sample location figure	White Cove Base
MISC-WC-02	----	See sample location figure	Window Caulk
Type III-CT-01	----	See sample location figure	Acoustic Ceiling Tile
Type III-CT-02	----	See sample location figure	Acoustic Ceiling Tile
RM-01	----	See sample location figure	Roofing Material
RM-02	----	See sample location figure	Roofing Material
SM-01	----	See sample location figure	Chimney Surfacing Material
SM-02	----	See sample location figure	Chimney Surfacing Material
SM-03	----	See sample location figure	Chimney Surfacing Material
Type III-WB-01	----	See sample location figure	Sheetrock Wallboard
Type III-WB-02	----	See sample location figure	Sheetrock Wallboard

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Christy, Sherry 042026890

From: McDonough, Kimberly
Sent: Monday, November 23, 2020 1:26 PM
To: Corporate - Asbestos Login
Subject: 042026890

Client is looking for the 2 positive samples to be analyzed, PLM 400 PC, 24hr TAT, results tomorrow.
Samples:
042026890-0031
042026890-0002

Kimberly McDonough | Sales Representative
EMSL Analytical, Inc. | Charleston SC 29403
Phone: 843-628-3134 | Cell: 843-607-9956

APPENDIX C

PHOTOGRAPH OF CONFIRMED ACM