ASBESTOS CONTAINING MATERIAL SURVEY REPORT
OF
HISTORIC BULLION PLAZA CULTURAL CENTER AND MUSEUM

FUNDED BY: COPPER CORRIDOR BLIGHT BUSTERS
USEPA BROWNFIELDS COALITION ASSESSMENT GRANT

150 NORTH PLAZA CIRCLE
MIAMI, GILA COUNTY, ARIZONA 85539
APN: 204-15-012A

ATLAS PROJECT NO. 1052000242, PHASE 4

REPORT DATE: February 10, 2023

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Project Responsibility

This report has been prepared consistent with good customary industry practices for the evaluation of asbestos-containing materials (ACM) in structures scheduled for renovation. Atlas Technical Consultants LLC (Atlas) presents the data from this Asbestos Survey, based on the conditions observed during the site survey conducted from November 16 through November 18, 2022. Atlas makes no determinations and warrants no conclusions beyond those stated herein. Further, Atlas submits this report to Copper Corridor Blight Busters Coalition (CC BB Coalition) for the exclusive use of CC BB Coalition and the United States Environmental Protection Agency (USEPA) Region IX.

Atlas appreciates this opportunity to assist CC BB Coalition with this project. Thank you for allowing our firm to perform these consulting services. Your business is important to us and we sincerely appreciate your patronage. Please contact the undersigned if you have any questions or need additional information.

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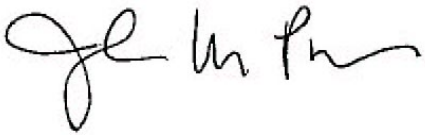

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Executive Summary

The Copper Corridor Blight Busters Coalition (CC BB Coalition) authorized Atlas Technical Consultants LLC (Atlas) to conduct an Asbestos Survey, collectively referred to as "the Survey," of the Historic Bullion Plaza Cultural Center and Museum; hereinafter, referred to as the Site. The assessment was funded by the United States Environmntal Protection agendy (USEPA) Grant awarded to the CCBB Coalition. The purpose of the Survey was to determine the asbestos content of suspect asbestos-containing materials (ACMs) that may be impacted by future renovations, additions or demolitions of the structures at the Site.

Mr. Chad Wells and Mr. Thomas Nelson, Atlas Asbestos Hazard Emergency Response Act (AHERA) accredited building inspectors, conducted this survey from November 16 to November 18, 2022. A summary of the identifed ACM at the Site during Atlas' Survey are noted in Tables E-1.

Table E-1: Identifed ACM Historic Bullion Plaza Cultural Center and Museum

Summary of Identified ACM Historic Bullion Plaza Cultural Center and Museum 150 North Plaza Circle Miami, Arizona 85539 Survey Date: November 16-18, 2022							
Sample No.	Homogenous Material	Material Location	Asbestos Content	Friable	Condition	Quantity	NESHAP Category
*F19-A *F19-B *F19-C	Floor Tile & Mastic – 12"x12", Cream with Light Gray Streaks and Black Mastic	1st Floor Breakroom Bathroom (2 rooms)	Floor Tile - 2.30 to 2.53% % Chrysotile by TEM Black Mastic – 1.08 to 1.25% Chrysotile by TEM	No	Good	60 SF	CAT I/CAT II
*M1-A *M1-B *M1-C	**Pipe Insulation –White Powdery Chalky	Basement / Crawl Space	Pipe Insulation = 50% Chrysotile by TEM	Yes	Fair to Poor	600 LF	RACM
*% = Percent; SF = Square Feet; CAT I = Category I Non-Friable ACM; CAT II = Category II Non-Friable ACM; RACM = Regulated Asbestos Containing Material; PLM=Polarized Light Microscopy; TEM= Transmission Electron Microscopy; * = Sample also analyzed by TEM*							

The results of this Survey indicate that ACM is present within Building and must be removed/abated prior to renovation and/or demolition.–

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1 Project Information

The Copper Corridor Blight Busters Coalition (CC BB Brownfields Coalition) authorized Atlas Technical Consultants LLC (Atlas) to conduct an asbestos survey at the historic Bullion Plaza Cultural Center and Museum located at 150 North Plaza Circle in Miami, Gila County, Arizona; hereinafter, referred to as the Site. The purpose of the Survey was to determine the asbestos content of suspect asbestos-containing materials (ACMs) that may be impacted by the upcoming planned renovation and/or demolition of the structures at the Site.

This Survey was conducted in general accordance with CC BB Coalition Sampling and Analysis Plan, dated April 30, 2022, and approved by the United States Environmental Protection Agency (USEPA) in July 2022.

Mr. Chad Wells and Mr. Thomas Nelson, Atlas USEPA Asbestos Hazard Emergency Response Act (AHERA) accredited building inspectors, conducted this survey from November 16 to November 19, 2022. Copies of their certifications are included in Appendix A.

1.1 Site Description

The Site is located at 150 North Plaza Circle, Miami, Gila County, Arizona 85539. The Site is improved with one approximately 48,000 square-foot two-story building with a basement. The historic building was designed by Henry C. Trost Architects and Engineers of El Paso, Texas with a neoclassical architectural design. The building was constructed in 1923 and was opened as a grammar school from 1934 until 1994. In 1997, the Town of Miami purchased Bullion Plaza from the school district and committed to using it as a cultural center and museum. The building was accepted for listing in the National Register of Historic Places in 2000. The surrounding area primarily consists of residential and commercial uses. The Site Plan with floor plan layouts are included in Appendix B.

1.2 Asbestos Hazard Background

Asbestos is a hazardous substance. Its condition, handling and disposal are regulated by Federal, State, and local agencies. ACMs generally do not pose a health threat unless the asbestos fibers are disturbed, become airborne and are inhaled. Contractors working in an area where asbestos is present must be informed of the type and location of ACMs. Abatement of ACMs, including non-friable ACMs, must be performed by a licensed, certified and registered asbestos abatement contractor in accordance with State and Federal Occupational Safety and Health Administration (OSHA) and local air quality management regulations.

2 Asbestos Survey

CC BB Brownfields Coalition authorized Atlas to perform an Asbestos Survey (the Survey), at the Site. The purpose of this Survey was to identify ACM that may be impacted by future renovation and/or demolition of the building. The asbestos survey was performed between November 16 and November 18, 2022, by Mr. Chad Wells, and Mr. Thomas Nelson, Atlas AHERA accredited building inspectors.

The Survey was conducted in compliance with all applicable Federal, State and local regulations including regulations promulgated under the USEPA AHERA, the National Emissions Standard for Hazardous Air Pollutants (NESHAP) and the OSHA Construction Industry Standard as defined in 29 Code of Federal Regulations (CFR) 1926.1101.

2.1 Prior Asbestos Sampling Reports

Atlas was provided a prior asbestos survey report for the Site, *Asbestos and Lead Survey Report of 150 North Plaza Circle in Miami, Arizona* by AMEC Foster Wheeler Environment & Infrastructure, Inc. (AMEC) dated October 20, 2016. The 2016 prior asbestos survey report sampled only the basement level of the Site, which included four areas described as entry, boiler room, left room and right room as well as crawlspace under two wings of the building. AMEC identified 17 suspect ACMs and collected a total of 45 samples during the survey. Of the 15 suspect materials, five were identified as ACMs. The table below summarizes the ACMs identified by AMEC in the October 2016 survey report.

Summary of ACMs Identified by AMEC
Historic Bullion Plaza Cultural Center and Museum
150 North Plaza Circle
Miami, Arizona 85539
Survey Date: October 2016

Sample No.	Homogenous Material	Material Location	Asbestos Content	Friable	Condition	Quantity	NESHAP Category
3A-C	Pipe Run Insulation Straight Runs	Basement - Straight Runs throughout basement and crawlspaces	50-80 % Chrysotile	Yes	Poor	400 SF	RACM
4A-C	Pipe Elbows	Basement – Pipe Elbows	10-20% Chrysotile	Yes	Poor	15 Each	RACM
15A-C	Gray Gasket	Basement –Boiler Room Gasket	30-40% Chrysotile	No	Fair	2 Each	CAT 1
Assumed ACM	Boiler Insulation Wrap	Basement –Boiler Room	Assumed ACM	Yes	Fair	2 Each	RACM
Assumed ACM	Disposed Bags of Removed Building Materials	Basement	Assumed ACM	No	NA	NA	CAT I

% = Percent; SF = Square Feet; CAT I = Category I Non-Friable ACM; CAT II = Category II Non-Friable ACM; RACM = Regulated Asbestos Containing Material; ND = Non-detect, NA = Not applicable

AMEC noted that pipe run insulation was in poor condition and had deteriorated in the basement rooms and crawlspaces. Give the condition, it is possible the surrounding building materials, material stored in the areas and the bare soil may be impacted by asbestos from the deteriorated pipe insulation.

AMEC recommended that ACMs be removed by a licensed asbestos abatement contractor. Surfaces in the basement and materials stored in the basement should be cleaned of visible dust which may contain asbestos. The crawlspaces should also be cleaned by an abatement contractor.

In addition to this prior report, Atlas was provided email correspondence and abatement bids for the Site. In an email dated November 14, 2017, from Mr. Dylan Whitwer, Environmental Specialist with GeoTek, Inc

to Arizona Department of Environmental Quality (ADEQ) and Town of Miami representatives, Mr Whitwer stated "last, week the remainder of the TSI, boiler, associated pipe runs/elbow, ACM debris bags and other miscellaneous debris were abated and disposed of at their appropriate landfills." GeoTek was reportedly waiting for the landfills to send back the signed waste manifest.

During the survey, Atlas verified with Mr. Thomas N. Foster, Executive Director and Founding Member of Bullion Plaza Cultural Center and Museum, stated that the boiler wrap insulation/boiler, gaskets, pipe elbows and pipe run insulation were abated in the Basement boiler room in 2017. Additionally, the bags of removed building materials that were assumed ACM were also abated. The boiler wrap insulation, boiler, gaskets, pipe elbows and pipe run insulation were not present in the basement boiler room during Atlas' 2022 survey. Atlas requested that ADEQ, Gila County and the Town of Miami provide any records or report of the 2017 abatement activities. Aside from the email GeoTek, Inc dated, November 14, 2017 discussed above no other records of the abatement activities were provided to Atlas for review.

2.2 Asbestos Sampling Methodology

The location of samples collected for laboratory analysis of asbestos content are shown on the sample location maps included in Appendix B. These plans show the location of floor and wall samples, ceiling samples, and samples of miscellaneous material. Appendix B also contains ACM location maps based on the results of this Survey.

2.2.1 Homogeneous Areas

Prior to collecting any samples, homogeneous areas (HAs) were identified and listed to develop a sampling strategy. An HA can be described as one or more areas of material that are similar in appearance and texture and that have the same installation date and function. The actual number of samples collected from each HA may vary, based on the type of material and the professional judgment of the inspector.

2.2.2 Condition Assessment Factors

From the list of suspect homogeneous materials, a condition assessment was performed for each material on the list. A condition assessment includes evaluating the condition and determining the friability of each material. By definition, "friable" materials are those that can be crumbled or reduced to powder by hand pressure when dry. Each material on the list was further classified into one of three categories, which have specific sampling requirements for each category.

Surfacing Materials:	Refers to spray-applied or troweled surfaces such as plaster ceilings and walls, fireproofing, textured paints, textured plasters, and spray-applied acoustical surfaces.
Thermal System Insulation:	Refers to insulation used to inhibit heat gain or loss on pipes, boilers, tanks, ducts, and various other building components.
Miscellaneous Materials:	Refers to friable and non-friable products and materials that do not fit in any of the above two categories such as resilient floor covering, baseboards, mastics, adhesives, roofing material, caulking, glazing, and siding. This category also contains wallboard and ceiling tile.

All confirmed ACMs were then assessed by their condition as good, fair, or poor (damaged). Material with localized significant damage was also assessed as poor when observed.

2.2.3 Sampling Strategy

The survey was conducted in general accordance with the AHERA requirements using a minimum number of samples collected from each HA, which also meets the sampling requirement found in 29 CFR 1926.1101.

Sampling strategy was executed with primary emphasis on the "3-5-7 rule." Sample collection depends on the category that the HA falls into and the amount of material present, as shown in the table below.

Table 2-1 Asbestos Sampling Strategy

AHERA GUIDELINES FOR DETERMINING THE NUMBER OF SAMPLES TO BE COLLECTED		
HA CATEGORY	HA SIZE	SAMPLES REQUIRED
Surfacing Materials	<1,000 SF	3
	1,000 – 5,000 SF	5
	>5,000 SF	7 or more
Thermal System Insulation	No Stipulation	3+ (Must also sample all repair patches)
Miscellaneous Materials	No Stipulation	Per AHERA, these materials must be sampled "in a manner sufficient to determine whether or not they contain asbestos" typically 1 – 3 samples based upon inspector judgment.
SF= square feet		

Once the HAs were identified for each similar material, the required quantity of bulk samples of each suspect ACM were collected for subsequent analysis. Bulk samples were collected by spraying the suspect material with water, where appropriate, removing a small portion of the material and placing it into a laboratory-provided or generic zip-lock plastic bag. Sample containers were marked with a unique identification number, which is also noted in the field notes. Materials visually determined to be non-asbestos (i.e., unpainted metal, glass, wood, etc.) by the accredited inspector were not sampled. Samples were handled according to accepted procedures for the collection, packaging, chain-of-custody documentation and transport of bulk samples to the laboratory for analysis.

Miscellaneous materials require adequately representative sampling, which is typically done by collecting from one to three samples per material. Inspectors typically rely on other survey observations such as the condition, friability, and quantity of material to determine what would be a sufficient amount of samples to accurately evaluate the presence or absence of asbestos content.

Atlas collected a total of 119 bulk samples at the Site that were analyzed by the analytical laboratory as 180 layers based on the number of distinct layers (materials) associated with each bulk sample. For example, floor tile and associated mastic are collected as one bulk sample, but are analyzed as two distinct materials by the asbestos laboratory as required by National Voluntary Laboratory Accreditation Program (NVLAP) guidelines.

Samples were submitted to Eurofins EMLab P&K (EMLab) in Phoenix, Arizona EMLab is NVLAP-accredited laboratory for asbestos analysis. EMLab NVLAP code is 500031-0. A copy of the accreditation for EMLab is included in Appendix A.

A total of 180 samples were submitted to EMLab for analysis using Polarized Light Microscopy (PLM) in accordance with the USEPA *"Method for the Determination of Asbestos in Bulk Building Materials" (USEPA/600/R93/116, July 1993)*.

Any material that was determined to contain less than one percent (<1%) asbestos by PLM is not considered to contain asbestos. Conversely, materials that tested greater than one percent (>1%) asbestos are ACM and must be handled according to OSHA, USEPA, and applicable state NESHAP and local regulations.

Friable materials often require additional analyses to determine asbestos content. If friable materials are determined, via PLM analytical method, to be "non-detectable (ND) for asbestos fibers," no further verification of the sample results are needed. If friable materials are determined, via PLM analytical method, to contain "Trace" or less than 10% asbestos, the material may require further verification of the amount by Point Counting Methods. The Point Count method has a greater precision range than the standard PLM method. By subjecting the material exhibiting trace amounts of asbestos fiber to further Point Count analyses, a refinement of the asbestos content may be achieved and potentially the elimination of a material from ACM status may result. Materials analysed by PLM as less than 1% were sent for 400 point count analysis to determine if they needed to be classified as ACM.

For non-friable materials, when the amount of asbestos in the sample material is reported at greater than 1% by PLM analysis, no further verification of the sample results by alternative methods of identification such as Transmission Electron Microscopy (TEM) Chatfield method is recommended.

For non-friable materials, when the amount of asbestos in the sample material is reported as "None-Detected" or less than 1% by PLM analysis, due to the difficulty in analyzing non-friable or resinously bound materials, Atlas recommends that these types of materials, which were reported as non-ACMs by PLM, be analyzed using TEM Chatfield method. Floor tiles that were analysed as non-detect by PLM were submitted for TEM Chatfield analysis to verify that they did not contain asbestos.

Materials determined by laboratory analyses to contain asbestos were properly classified as either Regulated Asbestos Containing Materials (RACM), Non-Friable Category I (CAT I) or Non-Friable Category II (CAT II), per USEPA NESHAP regulations, Title 40 CFR Part 61, Subpart M, Asbestos.

2.3 Results of Asbestos Survey

Results of laboratory analysis of samples are included in Appendix C. Asbestos Sample Location Maps and ACM Location Maps are included in Appendix B. Atlas has presented the appropriate NESHAP categories for identified ACM in the following tables to assist with the planning of future renovation and/or demolition activities. The NESHAP category was not determined for non-ACM building materials.

A total of 119 representative bulk samples of suspect ACMs were collected from 35 identified HAs at the Site. Subsequent laboratory analyses determined that 33 of the HAs were not considered ACM. Laboratory analyses confirmed two HA was identified as an ACM. Atlas has denoted the applicable NESHAP categories of CAT I, CAT II or RACM for the identified ACM.

Table 2-2 Asbestos Sampling Results

Summary of Identified ACM Historic Bullion Plaza Cultural Center and Museum 150 North Plaza Circle Miami, Arizona 85539 Survey Date: November 16-18, 2022							
Sample No.	Homogenous Material	Location/ Functional Space	Asbestos Content	Friable	Condition	Approx. Quantity	NESHAP Category
Flooring Materials							
F1-A F1-B F1-C	Residual Floor Mastic – Yellow (over plank flooring)	Rooms - 243, 250, 251, 254	ND	No	NA	NA	NA
F2-A F2-B F2-C	Carpet & Mastic – Blue Fibrous with Yellow Mastic	Rooms -244, 246, 1st Floor George and Hazel Cox Room, Native American Exhibit	ND	No	NA	NA	NA
F3-A F3-B F3-C	Carpet & Mastic – Rust Fibrous with Yellow Mastic	South 2nd Floor Corridor Hall, North Hall, 2nd Floor South Stairwell Landing	ND	No	NA	NA	NA
F4-A F4-B F4-C	Stair Tread and Mastic – Red with Black Mastic	Stairwells	ND	No	NA	NA	NA
F5-A F5-B F5-C	Carpet & Mastic - Burgundy Carpet with Yellow Mastic and Light Brown Woven Material	North 2nd Floor Corridor	ND	No	NA	NA	NA
F6-A F6-B F6-C	Vinyl Sheet Flooring, 3'x3' Sections, Light Gray Marble	2nd Floor Lobby	ND	No	NA	NA	NA
*F7-A *F7-B *F7-C	Floor Tile & Mastic – 12"x12' Red with Mottling Tile and Yellow Mastic	Stairwell Landing (3)	ND	No	NA	NA	NA
F8-A F8-B F8-C	Flooring Coating- Beige	1st Floor Lobby behind Stairwell Center Exit Area	ND	No	NA	NA	NA
F9-A F9-B F9-C	Carpet & Mastic – Brown Fibrous with Yellow Mastic and Light Brown Woven Material	1st Floor Lobby, Research Room, Gift Shop	ND	No	NA	NA	NA
F10-A F10-B F10-C	Vinyl Sheet Flooring - Multi-Colored Green, Beige, Tan	Military, Inspiration Hospital Area	ND	No	NA	NA	NA
F11-A F11-B F11-C	Epoxy Coated Concrete with Expansion Joint	Mining Hall	ND	No	NA	NA	NA
F12-A F12-B F12-C	Ceramic Tile & Grout – Mosaic Brown and Beige	Men/Boys & Women's/Girls Restrooms	ND	No	NA	NA	NA
F13-A F13-B F13-C	Carpet & Mastic – Tan Fibrous with Yellow Mastic	Mineral Hall	ND	No	NA	NA	NA

Summary of Identified ACM Historic Bullion Plaza Cultural Center and Museum 150 North Plaza Circle Miami, Arizona 85539 Survey Date: November 16-18, 2022							
Sample No.	Homogenous Material	Location/ Functional Space	Asbestos Content	Friable	Condition	Approx. Quantity	NESHAP Category
F14-A F14-B F14-C	Carpet & Mastic – Green Fibrous with Yellow Mastic	Governor Rose Moffott Exhibit and Slavic Cultural Exhibit	ND	No	NA	NA	NA
F15-A F15-B F15-C	Vinyl Sheet Flooring – Light Gray Tile Marble-like Design	Slavic Cultural Exhibit	ND	No	NA	NA	NA
F16-A F16-B F16-C	Ceramic Tile & Grout – 2'x2', Tan Tile with Gray Grout	South Exit, 1st Floor	ND	No	NA	NA	NA
F17-A F17-B F17-C	Carpet & Mastic – Beige Fibrous with Yellow Mastic	Library/Archives	ND	No	NA	NA	NA
F18-A F18-B F18-C	Concrete Gray with Multilayered Coating	Foundation, Basement	ND	No	NA	NA	NA
*F19-A *F19-B *F19-C	Floor Tile & Mastic – 12"x12", Cream with Light Gray Streaks and Black Mastic	1st Floor Breakroom Bathroom (2 rooms)	Floor Tile - 2.30 to 2.53% % Chrysotile by TEM Black Mastic – 1.08 to 1.25% Chrysotile by TEM	No	Good	60 SF	CAT I/ CAT II
F20-A F20-B F20-C	Ceramic Tile - 1" White, Octagon Shape	Custodial Closet	ND	No	NA	NA	NA
Wall Systems							
W1-A W1-B W1-C W1-D W1-E W1-F W1-G	Plaster Walls – Eggshell Texture Finish, Skim Coat with Multilayered Paint	Walls Throughout	ND	No	NA	NA	NA
W2-A W2-B W2-C W2-D W2-E	Plaster Walls – Sandy Texture Finish with White Paint	Room Closest in Selected Room – 243, 244, 245, 242, 246, 248, 249, 253, 250, 251, 1st Floor Slavic Cultural Exhibit, George & Hazel Cox Ranching Exhibit	ND	No	NA	NA	NA
W3-A W3-B W3-C	Vinyl Covered Drywall – White (Faux Brick)	1st Floor Mexican Cultural/Local Exhibit, Fire Exhibit, Military, Inspiration Hospital Area	ND	No	NA	NA	NA
W4-A W4-B W4-C	4" Black Covebase & Brown Mastic -	1st Floor Lobby, 2nd Floor Corridor and Halls	ND	No	NA	NA	NA
W5-A W5-B W5-C	Glazed Wall Tile – 6" White Tile	Men/Boys & Women's/Girls Restrooms	ND	No	NA	NA	NA
W6-A W6-B W6-C	Concrete- Gray	Basement Wall Throughout	ND	No	NA	NA	NA
W7-A W7-B W7-C	Brick & Mortar – Red Brick with Gray Mortar and White Compound with Yellow Mastic	Basement Walls	ND	No	NA	NA	NA

Summary of Identified ACM Historic Bullion Plaza Cultural Center and Museum 150 North Plaza Circle Miami, Arizona 85539 Survey Date: November 16-18, 2022							
Sample No.	Homogenous Material	Location/ Functional Space	Asbestos Content	Friable	Condition	Approx. Quantity	NESHAP Category
Ceiling Materials							
C1-A C1-B C1-C C1-D C1-E C1-F C1-G	Plaster Ceiling – Eggshell Texture	Ceiling Throughout Building – above drop ceilings as well as 1st and 2nd Floors	ND	No	NA	NA	NA
C2-A C2-B C2-C C2-D C2-E C2-F C2-G	Acoustical Ceiling Panel – 2'x4', pinhole and fissures	1st Floor Lobby and Corridors, 2nd Floor Lobby and Corridors/Halls	ND	Yes	NA	NA	NA
C3-A C3-B C3-C	Fiberboard Ceiling – Cork-like with multilayered paint	1st Floor Inspiration Room	ND	No	NA	NA	NA
C4-A C4-B C4-C	Concrete –Gray	Basement Ceiling Throughout	ND	No	NA	NA	NA
Miscellaneous Materials							
*M1-A *M1-B *M1-C	**Pipe Insulation –White Powdery Chalky	Basement / Crawl Space	Pipe Insulation = 50% Chrysotile by TEM	Yes	Fair to Poor	600 LF	RACM
M2-A M2-B M2-C	Patch Material – White, Chalky	Basement	ND	No	NA	NA	NA
M3-A M3-B M3-C	Window Glazing Compound - Red/Gray, Brittle with Gray Non-Fibrous Material	Basement Window (2)	ND	No	NA	NA	NA
M4-A M4-B M4-C	Transite Panel – Green (Chalk Boards)	2nd Floor – Rooms – 243, 246	ND	No	NA	NA	NA

*ND = Non Detect; NA = Not Applicable; SF = Square Feet; TEM = Transmission Electron Microscopy; * = Sample also analyzed by TEM; Friability, Condition, quantity, and NESHAP categories provided for ACMs only.* ***Bold*** *indicates ACM. Bulk sample colors observed in the field may not reflect colors identified within the lab report.*

**It should be noted that the pipe insulation in the Basement and Crawl Space was noted to be in fair to poor condition and had deteriorated in the crawlspace. Given the condition of the pipe insulation, it is possible that the surrounding materials and the bare soil may be impacted by asbestos from the deteriorated pipe insulation.

2.4 Sampling Limitations and Exclusions

Atlas was unable to conduct a destructive investigation (cutting selective access holes in walls, ceilings, pipe chases, mechanical equipment, etc.) to assess concealed materials that were not readily apparent. Atlas could not conduct fully destructive investigation on floors to identify multi-layered tile/underlayment systems/concealed paper, vapor barriers, floor tiles/mastics under wood floor systems even though we attempted to classify multiple layers when noted. Atlas was unable to conduct destructive investigation of doors in the building to determine if the doors were insulated for fire-rating purposes.

Additional ACM may be present at the Site in inaccessible or concealed spaces. These spaces include, but are not limited to, pipe chases, spaces between wall/ceiling/door/floor cavities, interior of mechanical components such as boiler cavities, interior ducts, beneath foundation pads, etc. If the buildings are being demolished, Atlas recommends that all unidentified materials should be treated as assumed ACM, until analytical tests prove otherwise.

As agreed with the CC BB Brownfields Coalition, prior to the commencement of this ACM survey, Atlas was to exclude sampling of the roofing. Under separate cover, Atlas will provide an ACM Operations and Maintenance Plan for the inaccessible, concealed, and roofing areas excluded from the survey.

Prior to any disturbance of the assumed ACMs in this report, Atlas recommends sampling them to test for the presence of asbestos.

A lead-based paint survey was conducted at the Site as part of this scope of work. Information regarding the lead-based paint survey results will be presented in a separate report.

2.5 Asbestos Regulatory Standards

OSHA and USEPA regulate airborne levels of asbestos fibers. These governmental agencies have promulgated standards for permissible airborne concentrations of asbestos fibers and specific requirements for repair and abatement. The laws are designed to protect the worker (OSHA) and the general environment (USEPA). In addition, each state may have adopted its own requirements, which may be more stringent than those called for by OSHA or the USEPA.

OSHA established an asbestos general industry standard in 1971, primarily directed toward industrial applications, as found in 29 CFR 1910.1001. In response to the growing asbestos abatement industry and the additional concern regarding asbestos exposure, a standard for the construction industry (29 CFR 1926.58) became effective on July 21, 1986. These standards specifically outline asbestos removal procedures, respirator selection and fit testing, air sampling, the analysis of asbestos air samples, and employee protection from exposure to airborne asbestos fibers. The standards include a time-weighted average (TWA) permissible exposure limit (PEL) of 0.2 fibers per cubic centimeter of air (f/cc), and a short-term excursion limit of 1.0 f/cc. Concentrations above these levels require specific employer-initiated activities such as instituting a respiratory protection program and medical surveillance for exposed employees.

OSHA changed these standards in October of 1994 to include the reduction of the PEL for an 8-hour TWA to 0.1 f/cc in its revised construction industry standard of 29 CFR 1926.1101 and the revised general industry standard 29 CFR 1910.1001. These revisions specify that building owners are now required to communicate to employees, subcontractors, and tenants the location and quantity of ACM identified in this survey.

The USEPA has established regulations regarding renovation and demolition projects. These regulations are known as the Asbestos NESHAP regulations found in Title 40, CFR, Part 61, Subpart M. The USEPA Asbestos NESHAP regulations require a thorough inspection for the presence of asbestos prior to any demolition and/or renovation activity. If any asbestos is identified over the established threshold amounts, the USEPA requires a renovation notification to the proper regulatory jurisdiction, proper handling and disposal of any friable ACM or RACM, and the deposit of the asbestos-containing waste material (ACWM) at an approved landfill. In addition, if any structural or load-bearing demolition (total or partial demolition of the building) will occur during the course of the project, a demolition notification must be submitted to the proper regulatory jurisdiction and the friable ACM or RACM must be removed prior to the demolition activity.

Because the Site is located in Gila County, it falls within the ADEQ NESHAP program jurisdiction. According to the ADEQ asbestos NESHAP program, for all demolitions (even when no asbestos is present) and renovation activities involving threshold amounts of RACM, provide the Asbestos NESHAP agency overseeing the project site with a NESHAP notification at least 10 working days prior to the demolition or renovation activity. Threshold amounts of RACM are:

- 260 linear feet or more on pipes
- 160 square feet or more on other facility components
- 35 cubic feet or more off facility components

There are no state notification or permitting fees involved with this program for jurisdictional counties.

2.6 Asbestos Recommendations and Conclusions

Atlas recommends that identified ACM be removed by a qualified asbestos abatement contractor prior to the renovation and/or demolition of the Site buildings.

Atlas recommends an Asbestos Abatement Specification be prepared for use in obtaining bids for the asbestos abatement and subsequent demolition of the buildings.

Contractors and employees working in this building should be made aware of the possibility that concealed ACMs may be found during demolition. They should be advised not to disturb known or suspect ACMs without owner approval.

At the present time, if any renovation or demolition activities are planned and additional suspect ACM is encountered in inaccessible or concealed areas, these materials should be assumed to be ACMs and treated as such until properly sampled by a qualified individual.

The USEPA has not prohibited the manufacture and import of miscellaneous materials containing asbestos, such as vinyl floorings, mastics, roofing materials, etc. As a result, any future replacement materials should be checked for the presence of asbestos prior to installation.

2.7 Asbestos Assumptions and Limitations

The results, findings, conclusions, and recommendations expressed in the report are based only on conditions that were noted during Atlas' survey of the Site. This survey was conducted from November 16 through November 18, 2022.

The selection of sample locations and frequency of sampling was based on Atlas' observations and the assumption that like materials in the same area were homogeneous in content. Destructive investigation was not conducted at the Site. Concealed ACMs may exist in areas not accessible during the inspection. Reasonable efforts have been made by Atlas personnel to locate and sample all suspect ACM. However, the existence of unique or concealed ACM and debris is a possibility. If any additional suspect ACM, not listed in the Survey, will be impacted during future demolition and/or renovation activities, Atlas recommends additional sampling of any suspect ACM.

The report is designed to aid the client in understanding the extent of ACM issues as they pertain to the planned renovation and/or demolition of the buildings. Atlas does not warrant, guarantee or profess to have the ability to locate or identify all ACM in a facility. The intent of this report is to be used in planning for the specific renovation/demolition project only, and is based on the scope of work provided to Atlas by the CC BB Brownfields Coalition. Should the scope of the project change, Atlas recommends that an

additional investigation, including but not limited to, a review of the revised scope of work be performed to determine if ACM or suspect ACM will be impacted.

Appendix A

Certifications: Atlas Staff and Analytical Laboratories

THE ASBESTOS INSTITUTE

Certifies that

Thomas Nelson

has attended and received instruction in the EPA approved course

AHERA Building Inspector Initial

on

November 7-9 2022

and successfully completed and passed the competency exam.

Certificate:
4380-14993-110922

Date of Examination:
09-Nov-2022

Date of Expiration:
09-Nov-2023

William T. Cavness
Director

Approved Instructor

THE ASBESTOS INSTITUTE
20033 N. 19th Ave, Building 6, Phoenix, AZ 85027
602-864-6564 – www.theasbestosinstitute.com

This training meets all requirements for asbestos certification under Toxic Substance Control Act Title II.

THE ASBESTOS INSTITUTE

Certifies that

Chad Wells

has attended and received instruction in the EPA approved course

AHERA Building Inspector Refresher

on

July 26, 2022

and successfully completed and passed the competency exam.

Certificate:
ON-4644-12331-072622

Date of Examination:
26-Jul-2022
Date of Expiration:
26-Jul-2023

William T. Cavness
Director

Approved Instructor

THE ASBESTOS INSTITUTE
20033 N. 19th Ave, Building 6, Phoenix, AZ 85027
602-864-6564 – www.theasbestosinstitute.com

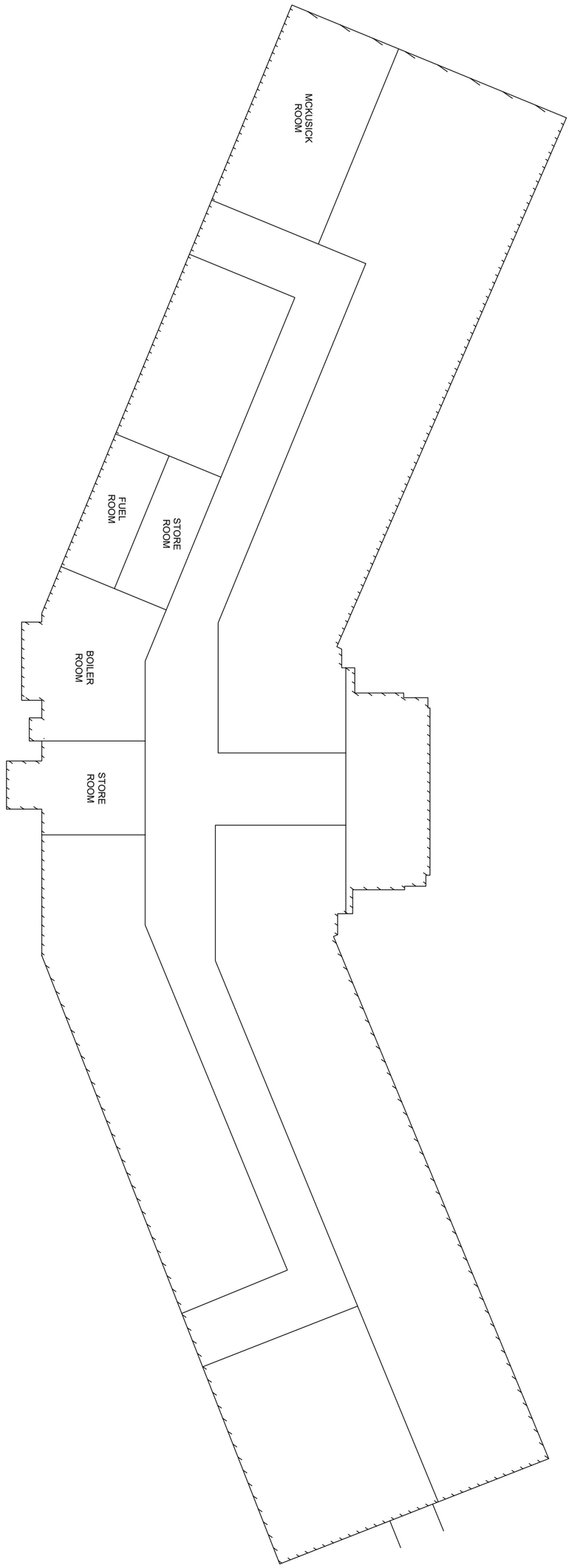
This training meets all requirements for asbestos certification under Toxic Substance Control Act Title II.

Appendix B

Site Plan, Asbestos Sample Location Maps, ACM Location Maps

S:\Projects-BST\Gila County\1052000242 Gila County Grant\Phase 4 Bullion Plaza\CADD\1_SPLN_BASEMENT.dwg

NOT TO SCALE
NOTE: ALL LOCATIONS ARE APPROXIMATE

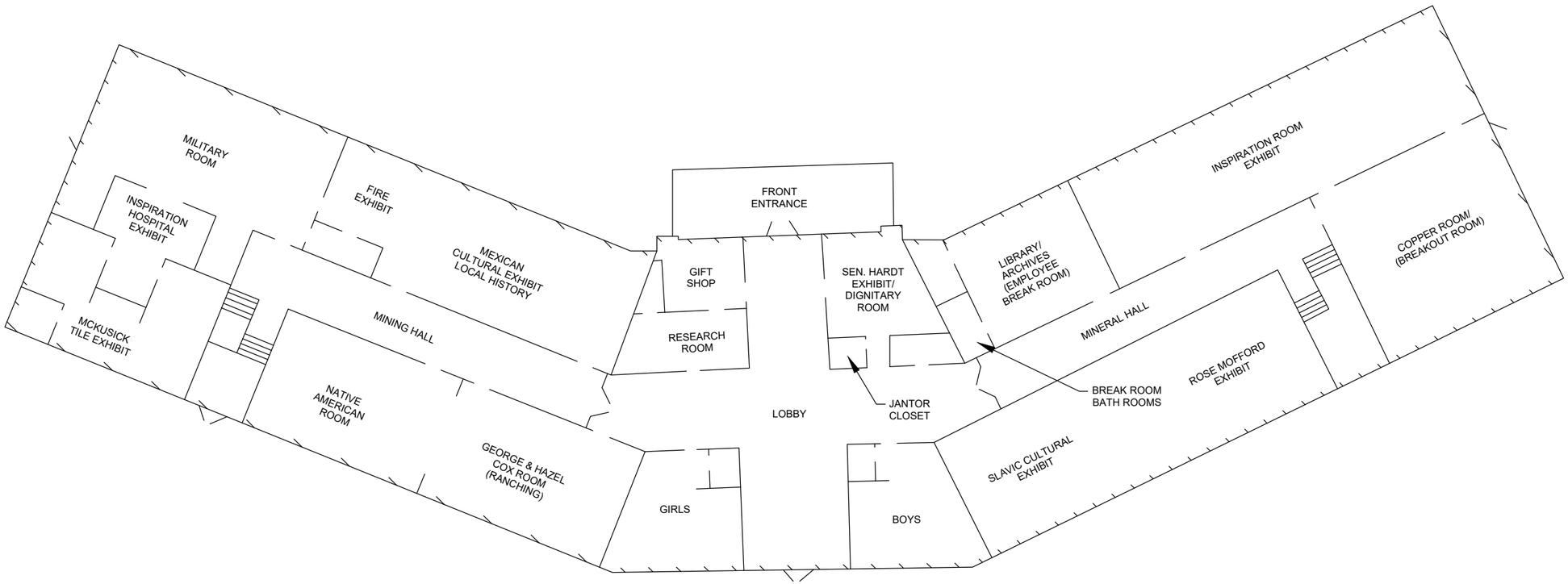


SITE PLAN
BASEMENT

BULLION PLAZA CULTURAL CENTER & MUSEAUM
150 N. PLAZA CIRCLE
MIAMI, AZ

PROJECT NUMBER: 1052000242		DATE: 1/10/23	FIGURE
APPROVED BY: TH		DRAWN BY: BK	1

ATLAS
9185 S. Farmer Ave., Ste. #111
Tempe, Arizona 85284-2912
Ph: (480) 894-2056 *** Fax: (480) 894-2497



NOT TO SCALE
NOTE: ALL LOCATIONS ARE APPROXIMATE

S:\Projects-BST\Gila County\1052000242 Gila County Grant\Phase 4 Bullion Plaza\CADD\2_SPLN_FLR1.dwg

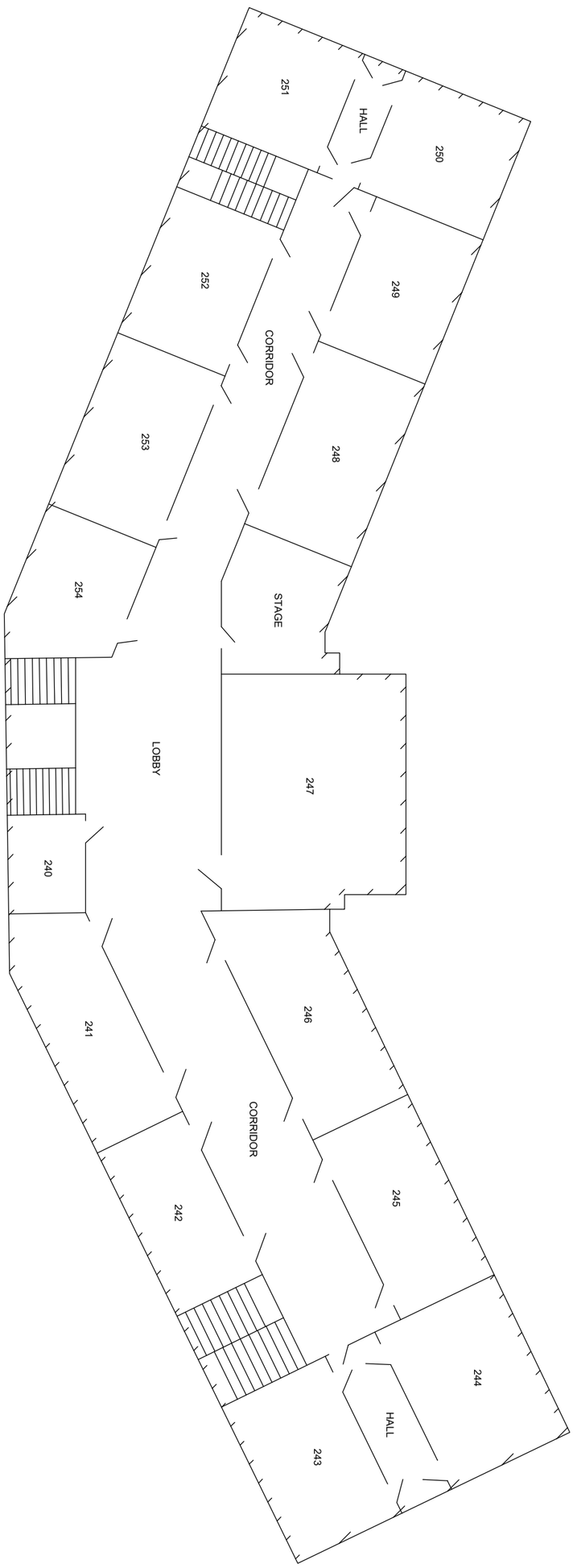
PROJECT NUMBER: 1052000242		DATE: 1/10/23	FIGURE 2
APPROVED BY: TH		DRAWN BY: BK	

ATLAS
9185 S. Farmer Ave., Ste. #111
Tempe, Arizona 85284-2912
Ph: (480) 894-2056 *** Fax: (480) 894-2497

SITE PLAN
FIRST FLOOR
BULLION PLAZA CULTURAL CENTER & MUSEUM
150 N. PLAZA CIRCLE
MIAMI, AZ

S:\Projects-BST\Gila County\1052000242 Gila County Grant\Phase 4 Bullion Plaza\CADD\3_SPLN_FLR2.dwg

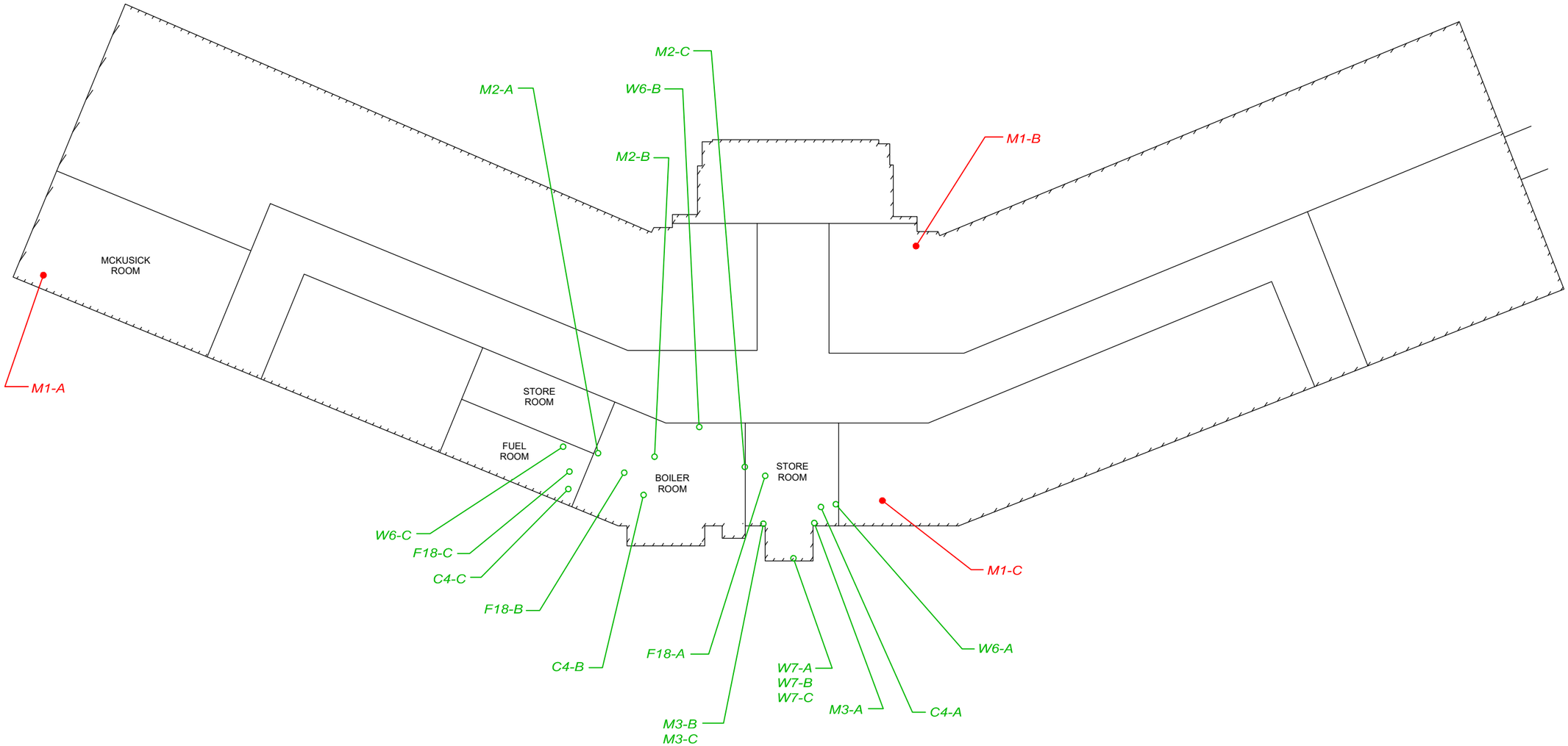
NOT TO SCALE
NOTE: ALL LOCATIONS ARE APPROXIMATE



SITE PLAN
SECOND FLOOR
BULLION PLAZA CULTURAL CENTER & MUSEUM
150 N. PLAZA CIRCLE
MIAMI, AZ

PROJECT NUMBER: 1052000242		DATE: 1/10/23	FIGURE
APPROVED BY: TH		DRAWN BY: BK	3

ATLAS
9185 S. Farmer Ave., Ste. #111
Tempe, Arizona 85284-2912
Ph: (480) 894-2056 *** Fax: (480) 894-2497



LEGEND

- ACM NEGATIVE SAMPLE
- ACM POSITIVE SAMPLE

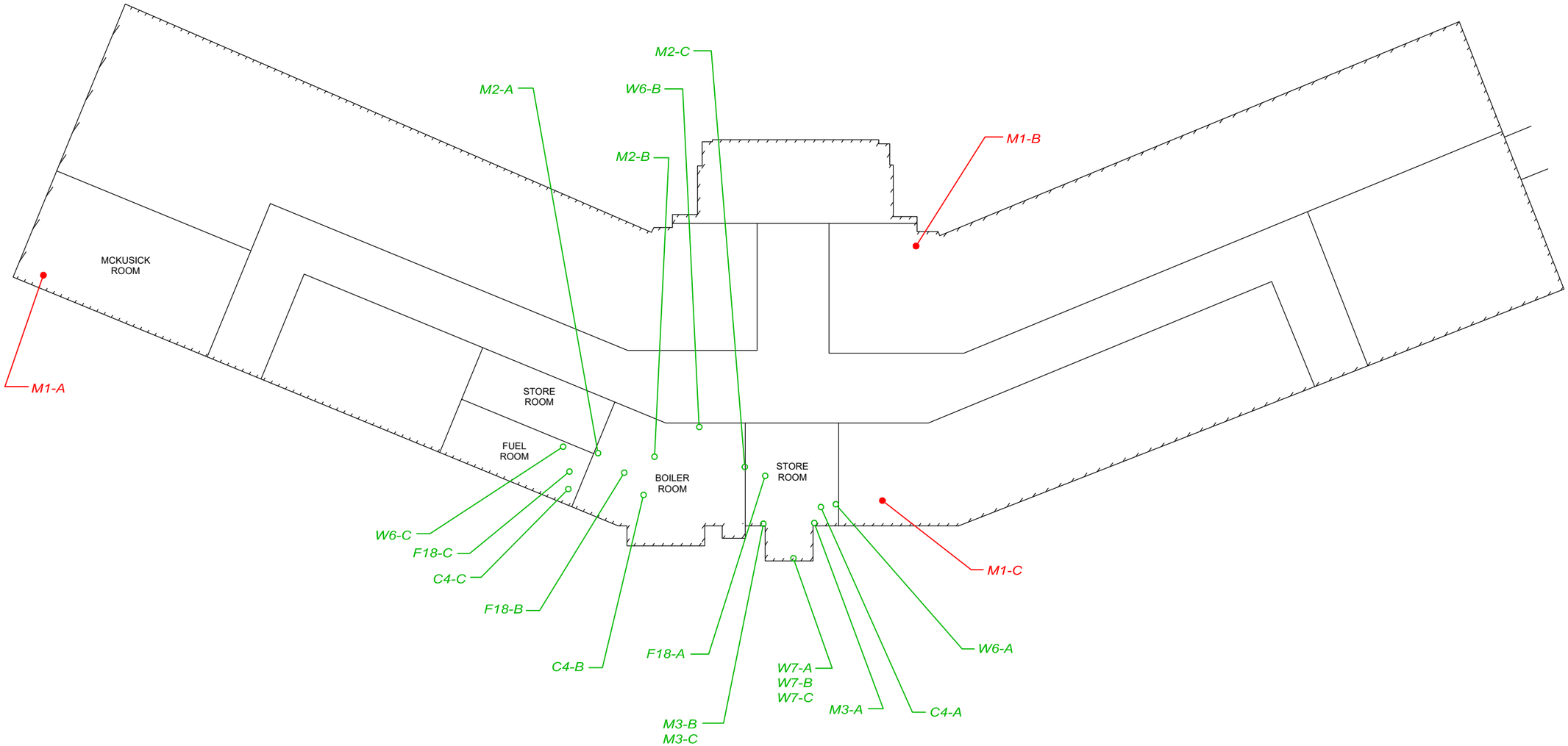
NOT TO SCALE
NOTE: ALL LOCATIONS ARE APPROXIMATE

S:\Projects-BST\Gila County\1052000242 Gila County Grant\Phase 4 Bullion Plaza\CADD\4_SMP_BASEMENT.dwg

PROJECT NUMBER: 1052000242
APPROVED BY: TH
DATE: 12/16/22
DRAWN BY: BK
FIGURE 4

ATLAS
9185 S. Farmer Ave., Ste. #111
Tempe, Arizona 85284-2912
Ph: (480) 894-2056 *** Fax: (480) 894-2497

SAMPLE LOCATION MAP
BASEMENT
BULLION PLAZA CULTURAL CENTER & MUSEAUM
150 N. PLAZA CIRCLE
MIAMI, AZ



LEGEND

- ACM NEGATIVE SAMPLE
- ACM POSITIVE SAMPLE

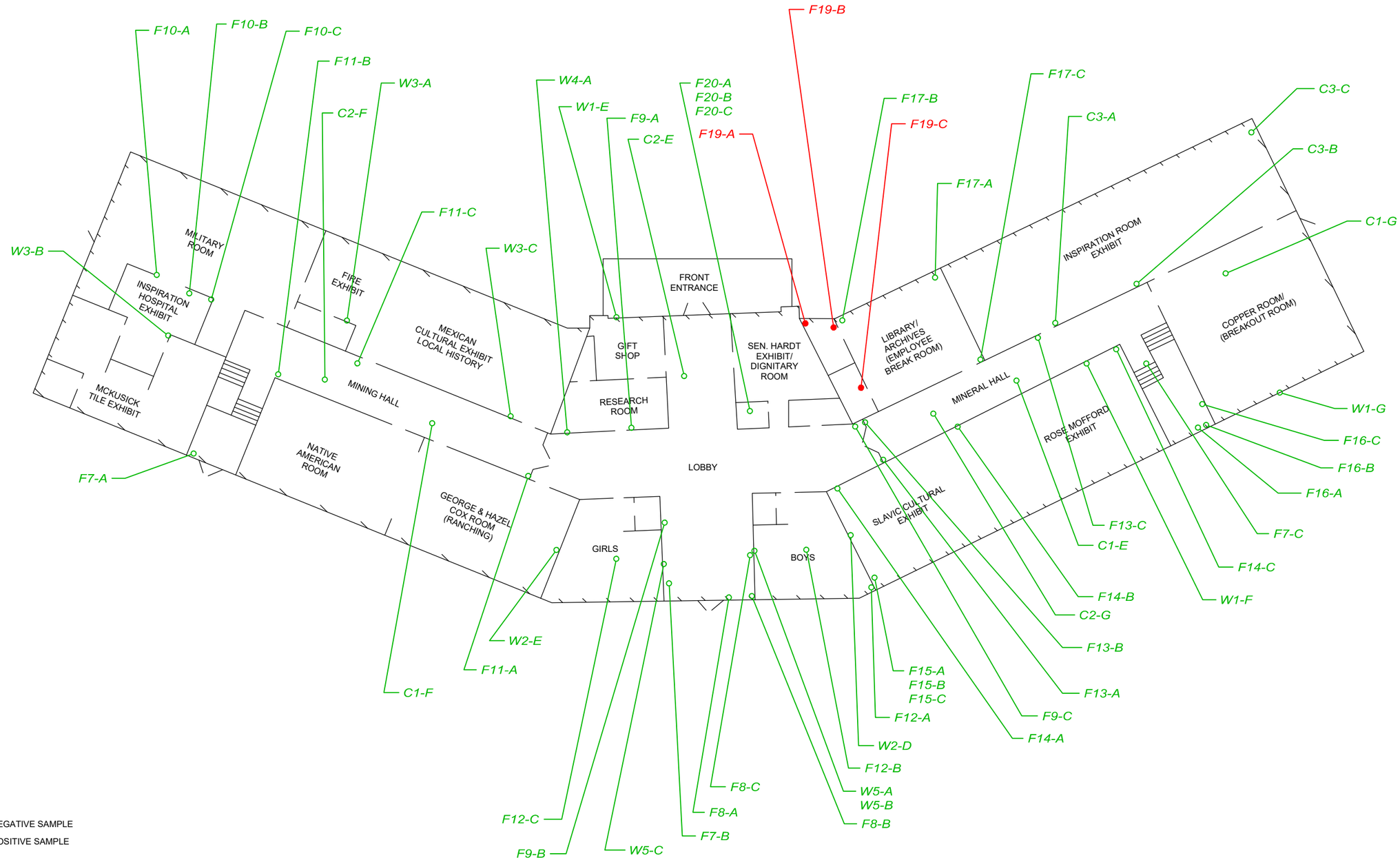
NOT TO SCALE
NOTE: ALL LOCATIONS ARE APPROXIMATE

S:\Projects-BST\Gila County\1052000242 Gila County Grant\Phase 4 Bullion Plaza\CADD\4_SMP_BASEMENT.dwg

PROJECT NUMBER: 1052000242
APPROVED BY: TH
DATE: 12/16/22
DRAWN BY: BK
FIGURE 4

ATLAS
9185 S. Farmer Ave., Ste. #111
Tempe, Arizona 85284-2912
Ph: (480) 894-2056 *** Fax: (480) 894-2497

SAMPLE LOCATION MAP
BASEMENT
BULLION PLAZA CULTURAL CENTER & MUSEAUM
150 N. PLAZA CIRCLE
MIAMI, AZ



LEGEND

- ACM NEGATIVE SAMPLE
- ACM POSITIVE SAMPLE

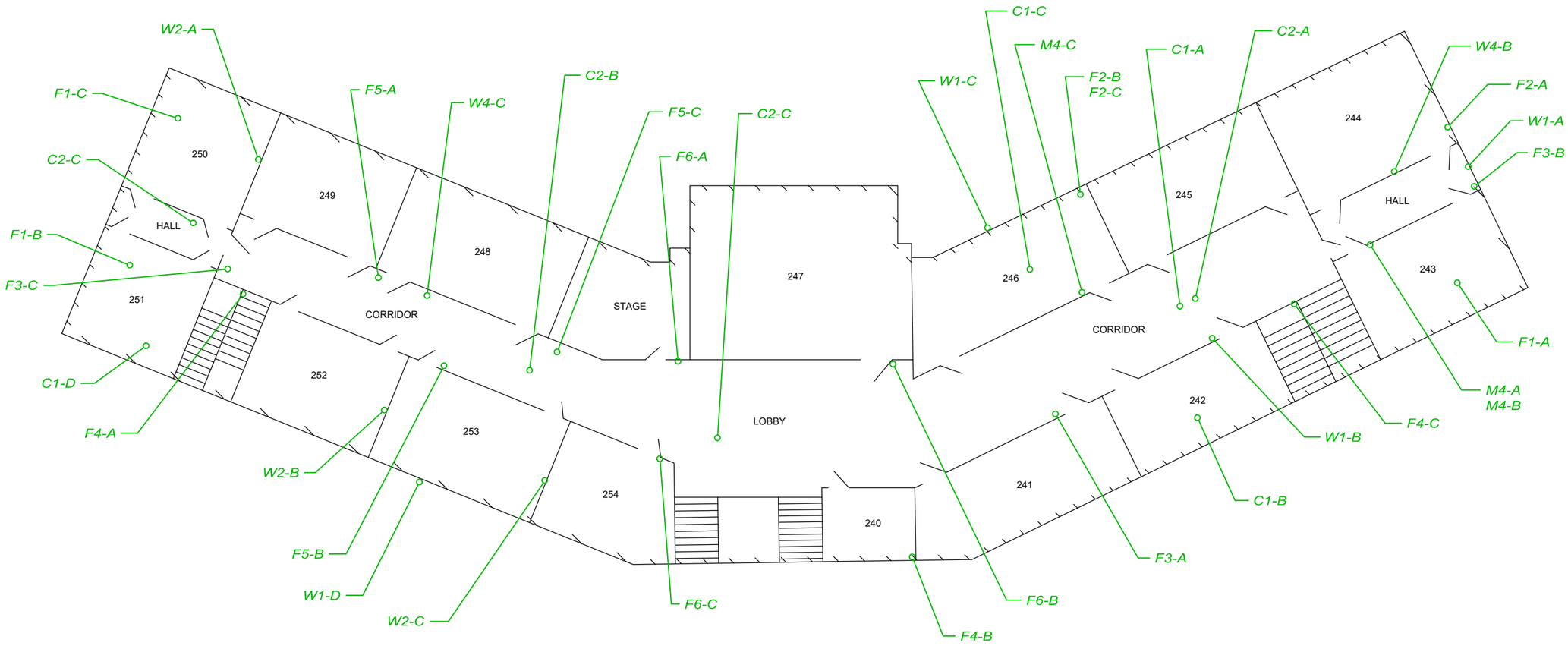
NOT TO SCALE
NOTE: ALL LOCATIONS ARE APPROXIMATE

S:\Projects-BST\Gila County\1052000242 Gila County Grant\Phase 4 Bullion Plaza\CADD\5_SMP_FLR1.dwg

PROJECT NUMBER: 1052000242
APPROVED BY: TH
DATE: 12/16/22
DRAWN BY: BK
FIGURE 5

ATLAS
9185 S. Farmer Ave., Ste. #111
Tempe, Arizona 85284-2912
Ph: (480) 894-2056 *** Fax: (480) 894-2497

SAMPLE LOCATION MAP
FIRST FLOOR
BULLION PLAZA CULTURAL CENTER & MUSEUM
150 N. PLAZA CIRCLE
MIAMI, AZ



LEGEND

- ACM NEGATIVE SAMPLE

NOT TO SCALE
NOTE: ALL LOCATIONS ARE APPROXIMATE

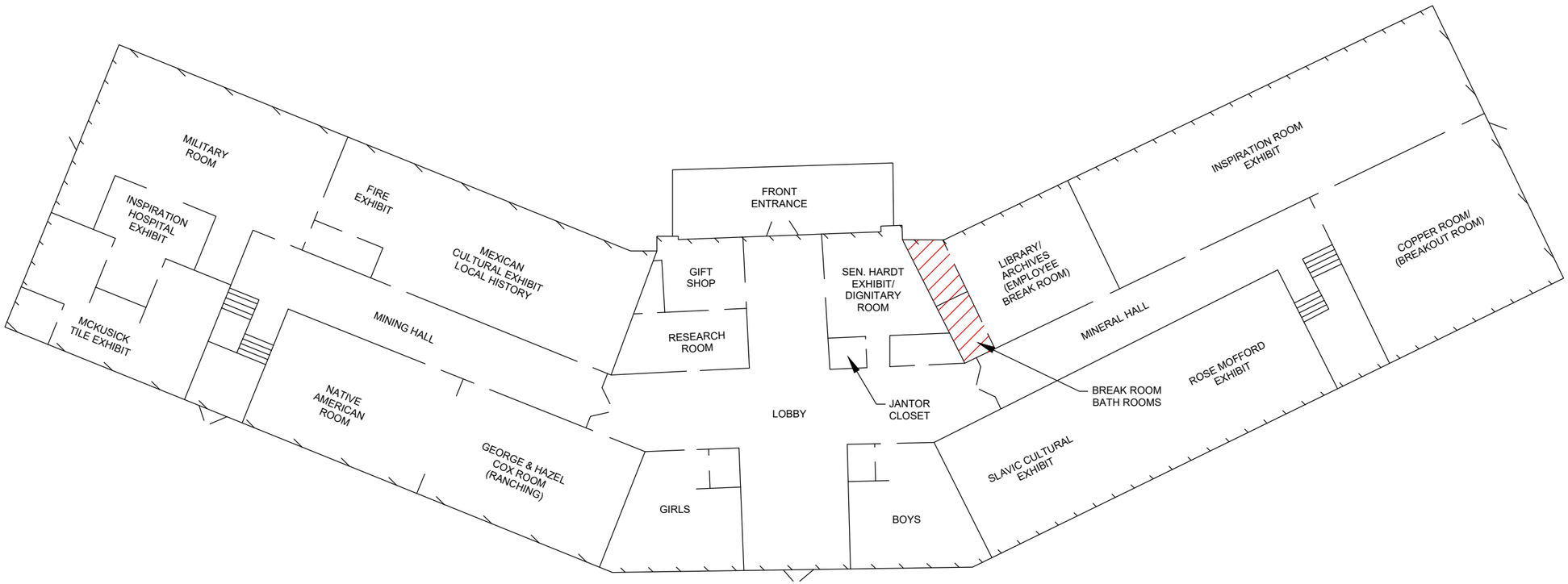
SAMPLE LOCATION MAP
SECOND FLOOR
BULLION PLAZA CULTURAL CENTER & MUSEUM
150 N. PLAZA CIRCLE
MIAMI, AZ

FIGURE **6**

DATE: 12/15/22
DRAWN BY: BK
APPROVED BY: TH
PROJECT NUMBER: 1052000242

ATLAS
9185 S. Farmer Ave., Ste. #111
Tempe, Arizona 85284-2912
Ph: (480) 894-2056 *** Fax: (480) 894-2497

S:\Projects-BST\Gila County\1052000242 Gila County Grant\Phase 4 Bullion Plaza\CADD\6_SMP_FLR2.dwg



LEGEND

F19 - ACM FLOOR TILE, CREAM WITH LIGHT GRAY STREAKS & BLACK MASTIC, 2% CHRYSOTILE (~60 S.F.)

NOT TO SCALE

NOTE: ALL LOCATIONS ARE APPROXIMATE

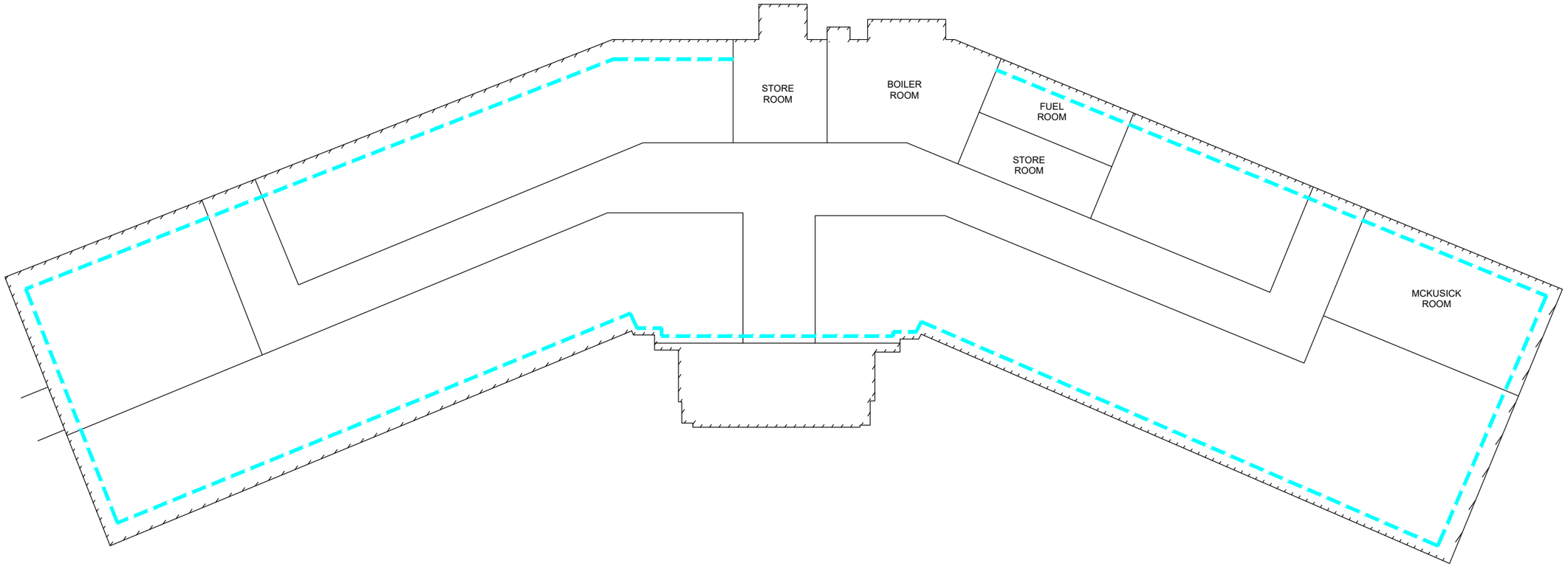
S:\Projects-BST\Gila County\1052000242 Gila County Grant\Phase 4 Bullion Plaza\CADD\7_ACM_FLR1.dwg

PROJECT NUMBER: 1052000242 | DATE: 12/16/22 | FIGURE 7

APPROVED BY: TH | DRAWN BY: BK

ATLAS
9185 S. Farmer Ave., Ste. #111
Tempe, Arizona 85284-2912
Ph: (480) 894-2056 *** Fax: (480) 894-2497

ACM LOCATION MAP
FIRST FLOOR
BULLION PLAZA CULTURAL CENTER & MUSEUM
150 N. PLAZA CIRCLE
MIAMI, AZ



LEGEND

M1 - ACM PIPE INSULATION, WHITE POWDERY, CHALKY, 50% CHRYSOTILE (~600 L. F.)

NOT TO SCALE

NOTE: ALL LOCATIONS ARE APPROXIMATE

S:\Projects-BST\Gila County\1052000242 Gila County Grant\Phase 4 Bullion Plaza\CADD\8_ACM_BASEMENT.dwg

PROJECT NUMBER:	1052000242
APPROVED BY:	TH
DATE:	12/16/22
DRAWN BY:	BK
FIGURE	8

ATLAS
9185 S. Farmer Ave., Ste. #111
Tempe, Arizona 85284-2912
Ph: (480) 894-2056 *** Fax: (480) 894-2497

ACM LOCATION MAP
BASEMENT
BULLION PLAZA CULTURAL CENTER & MUSEAUM
150 N. PLAZA CIRCLE
MIAMI, AZ

Appendix C

Analytical Laboratory Reports and Chain-of-Custody Documentation

eurofins | Built Environment Testing

Report for:

Robyn Steiner
Atlas Technical Consultants LLC: AZ
9185 S Farmer Ave Suite 111
Tempe, AZ 85284

Regarding: Eurofins Aerotech Built Environment Testing, Inc.
Project: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ
EML ID: 3090316

Approved by:

Approved Signatory
Renee Luna-Trepczynski

Dates of Analysis:
Asbestos PLM: 11-29-2022

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 500031-0

Eurofins Aerotech Built Environment Testing, Inc.
1501 West Knudsen Drive, Phoenix, AZ 85027
(800) 651-4802 www.eurofinsus.com/Built

Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

Summary of Samples with Asbestos Detected

Total Samples Submitted:	119
Total Samples Analyzed:	119
Total Layers Analyzed:	180

Total Samples with Layer Asbestos Content > 1%: 6

F19-A, Floor Tile & Mastic
Off-White Floor Tile
Black Mastic
F19-B, Floor Tile & Mastic
Off-White Floor Tile
Black Mastic
F19-C, Floor Tile & Mastic
Off-White Floor Tile
Black Mastic
M1-A, Pipe Insulation
Gray Pipe Insulation
M1-B, Pipe Insulation
Gray Pipe Insulation
M1-C, Pipe Insulation
Gray Pipe Insulation

Total Samples with Layer Asbestos Content < 1%: 0

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

Eurofins Aerotech Built Environment Testing, Inc.
1501 West Knudsen Drive, Phoenix, AZ 85027
(800) 651-4802 www.eurofinsus.com/Built

Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: F1-A, Residual Floor Mastic Lab ID-Version‡: 14918765-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Sample Composite Homogeneity:	Good

Location: F1-B, Residual Floor Mastic Lab ID-Version‡: 14918766-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Sample Composite Homogeneity:	Good

Location: F1-C, Residual Floor Mastic Lab ID-Version‡: 14918767-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Sample Composite Homogeneity:	Good

Location: F2-A, Carpet & Mastic Lab ID-Version‡: 14918768-1

Sample Layers	Asbestos Content
Blue Carpet	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	90% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins Aerotech Built Environment Testing, Inc.
1501 West Knudsen Drive, Phoenix, AZ 85027
(800) 651-4802 www.eurofinsus.com/Built

Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: F2-B, Carpet & Mastic

Lab ID-Version‡: 14918769-1

Sample Layers	Asbestos Content
Blue Carpet	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	90% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: F2-C, Carpet & Mastic

Lab ID-Version‡: 14918770-1

Sample Layers	Asbestos Content
Blue Carpet	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	90% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: F3-A, Carpet & Mastic

Lab ID-Version‡: 14918771-1

Sample Layers	Asbestos Content
Red Carpet	ND
Yellow Mastic	ND
Light Brown Woven Material	ND
Composite Non-Asbestos Content:	75% Synthetic Fibers 15% Cellulose
Sample Composite Homogeneity:	Poor

Location: F3-B, Carpet & Mastic

Lab ID-Version‡: 14918772-1

Sample Layers	Asbestos Content
Red Carpet	ND
Yellow Mastic	ND
Light Brown Woven Material	ND
Composite Non-Asbestos Content:	75% Synthetic Fibers 15% Cellulose
Sample Composite Homogeneity:	Poor

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins Aerotech Built Environment Testing, Inc.
1501 West Knudsen Drive, Phoenix, AZ 85027
(800) 651-4802 www.eurofinsus.com/Built

Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: F3-C, Carpet & Mastic Lab ID-Version‡: 14918773-1

Sample Layers	Asbestos Content
Red Carpet	ND
Yellow Mastic	ND
Light Brown Woven Material	ND
Composite Non-Asbestos Content:	75% Synthetic Fibers 15% Cellulose
Sample Composite Homogeneity:	Poor

Location: F4-A, Stair Tread & Mastic Lab ID-Version‡: 14918774-1

Sample Layers	Asbestos Content
Red Flooring	ND
Dark Brown Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: F4-B, Stair Tread & Mastic Lab ID-Version‡: 14918775-1

Sample Layers	Asbestos Content
Red Flooring	ND
Dark Brown Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: F4-C, Stair Tread & Mastic Lab ID-Version‡: 14918776-1

Sample Layers	Asbestos Content
Red Flooring	ND
Dark Brown Mastic	ND
Sample Composite Homogeneity:	Moderate

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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(800) 651-4802 www.eurofinsus.com/Built

Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: F5-A, Carpet & Mastic

Lab ID-Version‡: 14918777-1

Sample Layers	Asbestos Content
Red Carpet	ND
Yellow Mastic	ND
Light Brown Woven Material	ND
Composite Non-Asbestos Content:	75% Synthetic Fibers 15% Cellulose
Sample Composite Homogeneity:	Poor

Location: F5-B, Carpet & Mastic

Lab ID-Version‡: 14918778-1

Sample Layers	Asbestos Content
Red Carpet	ND
Yellow Mastic	ND
Light Brown Woven Material	ND
Composite Non-Asbestos Content:	75% Synthetic Fibers 15% Cellulose
Sample Composite Homogeneity:	Poor

Location: F5-C, Carpet & Mastic

Lab ID-Version‡: 14918779-1

Sample Layers	Asbestos Content
Red Carpet	ND
Yellow Mastic	ND
Light Brown Woven Material	ND
Composite Non-Asbestos Content:	75% Synthetic Fibers 15% Cellulose
Sample Composite Homogeneity:	Poor

Location: F6-A, Vinyl Sheet Flooring

Lab ID-Version‡: 14918780-1

Sample Layers	Asbestos Content
Light Gray Sheet Flooring	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins Aerotech Built Environment Testing, Inc.
1501 West Knudsen Drive, Phoenix, AZ 85027
(800) 651-4802 www.eurofinsus.com/Built

Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: F6-B, Vinyl Sheet Flooring Lab ID-Version‡: 14918781-1

Sample Layers	Asbestos Content
Light Gray Sheet Flooring	ND
Sample Composite Homogeneity:	Good

Location: F6-C, Vinyl Sheet Flooring Lab ID-Version‡: 14918782-1

Sample Layers	Asbestos Content
Light Gray Sheet Flooring	ND
Sample Composite Homogeneity:	Good

Location: F7-A, Floor Tile & Mastic Lab ID-Version‡: 14918783-1

Sample Layers	Asbestos Content
Red Floor Tile	ND
Yellow Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: F7-B, Floor Tile & Mastic Lab ID-Version‡: 14918784-1

Sample Layers	Asbestos Content
Red Floor Tile	ND
Yellow Mastic	ND
Sample Composite Homogeneity:	Moderate

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins Aerotech Built Environment Testing, Inc.
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(800) 651-4802 www.eurofinsus.com/Built

Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: F7-C, Floor Tile & Mastic Lab ID-Version‡: 14918785-1

Sample Layers	Asbestos Content
Red Floor Tile	ND
Yellow Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: F8-A, Floor Coating Lab ID-Version‡: 14918786-1

Sample Layers	Asbestos Content
Gray Coating	ND
Sample Composite Homogeneity:	Good

Location: F8-B, Floor Coating Lab ID-Version‡: 14918787-1

Sample Layers	Asbestos Content
Gray Coating	ND
Sample Composite Homogeneity:	Good

Location: F8-C, Floor Coating Lab ID-Version‡: 14918788-1

Sample Layers	Asbestos Content
Gray Coating	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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(800) 651-4802 www.eurofinsus.com/Built

Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: F9-A, Carpet & Mastic

Lab ID-Version‡: 14918789-1

Sample Layers	Asbestos Content
Red Carpet	ND
Yellow Mastic	ND
Light Brown Woven Material	ND
Composite Non-Asbestos Content:	75% Synthetic Fibers 15% Cellulose
Sample Composite Homogeneity:	Poor

Location: F9-B, Carpet & Mastic

Lab ID-Version‡: 14918790-1

Sample Layers	Asbestos Content
Red Carpet	ND
Yellow Mastic	ND
Light Brown Woven Material	ND
Composite Non-Asbestos Content:	75% Synthetic Fibers 15% Cellulose
Sample Composite Homogeneity:	Poor

Location: F9-C, Carpet & Mastic

Lab ID-Version‡: 14918791-1

Sample Layers	Asbestos Content
Red Carpet	ND
Yellow Mastic	ND
Light Brown Woven Material	ND
Composite Non-Asbestos Content:	75% Synthetic Fibers 15% Cellulose
Sample Composite Homogeneity:	Poor

Location: F10-A, Vinyl Sheet Flooring

Lab ID-Version‡: 14918792-1

Sample Layers	Asbestos Content
Multicolored Sheet Flooring	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

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ASBESTOS PLM REPORT

Location: F10-B, Vinyl Sheet Flooring Lab ID-Version‡: 14918793-1

Sample Layers	Asbestos Content
Multicolored Sheet Flooring	ND
Sample Composite Homogeneity:	Good

Location: F10-C, Vinyl Sheet Flooring Lab ID-Version‡: 14918794-1

Sample Layers	Asbestos Content
Multicolored Sheet Flooring	ND
Sample Composite Homogeneity:	Good

Location: F11-A, Epoxy Coated Concrete Lab ID-Version‡: 14918795-1

Sample Layers	Asbestos Content
Gray Concrete Epoxy	ND
Gray Concrete	ND
Sample Composite Homogeneity:	Moderate

Location: F11-B, Epoxy Coated Concrete Lab ID-Version‡: 14918796-1

Sample Layers	Asbestos Content
Gray Concrete Epoxy	ND
Gray Concrete	ND
Sample Composite Homogeneity:	Moderate

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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ASBESTOS PLM REPORT

Location: F11-C, Epoxy Coated Concrete Lab ID-Version‡: 14918797-1

Sample Layers	Asbestos Content
Gray Concrete Epoxy	ND
Gray Concrete	ND
Sample Composite Homogeneity:	Moderate

Location: F12-A, Ceramic Tile & Grout Lab ID-Version‡: 14918798-1

Sample Layers	Asbestos Content
Beige Ceramic Tile Debris	ND
Sample Composite Homogeneity:	Good

Location: F12-B, Ceramic Tile & Grout Lab ID-Version‡: 14918799-1

Sample Layers	Asbestos Content
Beige Ceramic Tile Debris	ND
Sample Composite Homogeneity:	Good

Location: F12-C, Ceramic Tile & Grout Lab ID-Version‡: 14918800-1

Sample Layers	Asbestos Content
Beige Ceramic Tile Debris	ND
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT

Location: F13-A, Carpet & Mastic Lab ID-Version‡: 14918801-1

Sample Layers	Asbestos Content
Brown Carpet	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	30% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: F13-B, Carpet & Mastic Lab ID-Version‡: 14918802-1

Sample Layers	Asbestos Content
Brown Carpet	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	30% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: F13-C, Carpet & Mastic Lab ID-Version‡: 14918803-1

Sample Layers	Asbestos Content
Brown Carpet	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	30% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: F14-A, Carpet & Mastic Lab ID-Version‡: 14918804-1

Sample Layers	Asbestos Content
Green Carpet	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	30% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT

Location: F14-B, Carpet & Mastic Lab ID-Version‡: 14918805-1

Sample Layers	Asbestos Content
Green Carpet	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	30% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: F14-C, Carpet & Mastic Lab ID-Version‡: 14918806-1

Sample Layers	Asbestos Content
Green Carpet	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	30% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: F15-A, Vinyl Sheet Flooring Lab ID-Version‡: 14918807-1

Sample Layers	Asbestos Content
Light Gray Sheet Flooring with Fibrous Backing	ND
Composite Non-Asbestos Content:	5% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Good

Location: F15-B, Vinyl Sheet Flooring Lab ID-Version‡: 14918808-1

Sample Layers	Asbestos Content
Light Gray Sheet Flooring with Fibrous Backing	ND
Composite Non-Asbestos Content:	5% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT

Location: F15-C, Vinyl Sheet Flooring

Lab ID-Version‡: 14918809-1

Sample Layers	Asbestos Content
Light Gray Sheet Flooring with Fibrous Backing	ND
Composite Non-Asbestos Content:	5% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Good

Location: F16-A, Ceramic Tile & Grout

Lab ID-Version‡: 14918810-1

Sample Layers	Asbestos Content
Beige Ceramic Tile	ND
Gray Grout	ND
Sample Composite Homogeneity:	Moderate

Location: F16-B, Ceramic Tile & Grout

Lab ID-Version‡: 14918811-1

Sample Layers	Asbestos Content
Beige Ceramic Tile	ND
Gray Grout	ND
Sample Composite Homogeneity:	Moderate

Location: F16-C, Ceramic Tile & Grout

Lab ID-Version‡: 14918812-1

Sample Layers	Asbestos Content
Beige Ceramic Tile	ND
Gray Grout	ND
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT

Location: F17-A, Carpet & Mastic Lab ID-Version‡: 14918813-1

Sample Layers	Asbestos Content
Brown/Gray Carpet	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	25% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: F17-B, Carpet & Mastic Lab ID-Version‡: 14918814-1

Sample Layers	Asbestos Content
Brown/Gray Carpet	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	25% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: F17-C, Carpet & Mastic Lab ID-Version‡: 14918815-1

Sample Layers	Asbestos Content
Brown/Gray Carpet	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	25% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: F18-A, Concrete Lab ID-Version‡: 14918816-1

Sample Layers	Asbestos Content
Gray Concrete with Multilayered Coating	ND
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT

Location: F18-B, Concrete Lab ID-Version‡: 14918817-1

Sample Layers	Asbestos Content
Gray Concrete with Multilayered Coating	ND
Sample Composite Homogeneity:	Good

Location: F18-C, Concrete Lab ID-Version‡: 14918818-1

Sample Layers	Asbestos Content
Gray Concrete with Multilayered Coating	ND
Sample Composite Homogeneity:	Good

Location: F19-A, Floor Tile & Mastic Lab ID-Version‡: 14918819-1

Sample Layers	Asbestos Content
Off-White Floor Tile	< 1% Chrysotile
Black Mastic	2% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: F19-B, Floor Tile & Mastic Lab ID-Version‡: 14918820-1

Sample Layers	Asbestos Content
Off-White Floor Tile	< 1% Chrysotile
Black Mastic	2% Chrysotile
Sample Composite Homogeneity:	Moderate

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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ASBESTOS PLM REPORT

Location: F19-C, Floor Tile & Mastic Lab ID-Version‡: 14918821-1

Sample Layers	Asbestos Content
Off-White Floor Tile	< 1% Chrysotile
Black Mastic	2% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: F20-A, Ceramic Tile Lab ID-Version‡: 14918822-1

Sample Layers	Asbestos Content
White Ceramic Tile	ND
Sample Composite Homogeneity:	Good

Location: F20-B, Ceramic Tile Lab ID-Version‡: 14918823-1

Sample Layers	Asbestos Content
White Ceramic Tile	ND
Sample Composite Homogeneity:	Good

Location: F20-C, Ceramic Tile Lab ID-Version‡: 14918824-1

Sample Layers	Asbestos Content
White Ceramic Tile	ND
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT

Location: W1-A, Plaster Walls Lab ID-Version‡: 14918825-1

Sample Layers	Asbestos Content
Brown/Gray Plaster with Multilayered Paint	ND
Sample Composite Homogeneity:	Good

Location: W1-B, Plaster Walls Lab ID-Version‡: 14918826-1

Sample Layers	Asbestos Content
Brown/Gray Plaster with Multilayered Paint	ND
Sample Composite Homogeneity:	Good

Location: W1-C, Plaster Walls Lab ID-Version‡: 14918827-1

Sample Layers	Asbestos Content
Brown/Gray Plaster with Multilayered Paint	ND
Sample Composite Homogeneity:	Good

Location: W1-D, Plaster Walls Lab ID-Version‡: 14918828-1

Sample Layers	Asbestos Content
White Skim Coat with Multilayered Paint	ND
Brown/Gray Base Coat	ND
Sample Composite Homogeneity:	Moderate

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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ASBESTOS PLM REPORT

Location: W1-E, Plaster Walls Lab ID-Version‡: 14918829-1

Sample Layers	Asbestos Content
White Skim Coat with Multilayered Paint	ND
Brown/Gray Base Coat	ND
Sample Composite Homogeneity:	Moderate

Location: W1-F, Plaster Walls Lab ID-Version‡: 14918830-1

Sample Layers	Asbestos Content
White Plaster with Pink Paint	ND
Sample Composite Homogeneity:	Good

Location: W1-G, Plaster Walls Lab ID-Version‡: 14918831-1

Sample Layers	Asbestos Content
White Plaster with Pink Paint	ND
Sample Composite Homogeneity:	Good

Location: W2-A, Plaster Walls Lab ID-Version‡: 14918832-1

Sample Layers	Asbestos Content
Brown/Gray Plaster with White Paint	ND
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT

Location: W2-B, Plaster Walls Lab ID-Version‡: 14918833-1

Sample Layers	Asbestos Content
Brown/Gray Plaster with White Paint	ND
Sample Composite Homogeneity:	Good

Location: W2-C, Plaster Walls Lab ID-Version‡: 14918834-1

Sample Layers	Asbestos Content
Brown/Gray Plaster with White Paint	ND
Sample Composite Homogeneity:	Good

Location: W2-D, Plaster Walls Lab ID-Version‡: 14918835-1

Sample Layers	Asbestos Content
Brown/Gray Plaster with White Paint	ND
Sample Composite Homogeneity:	Good

Location: W2-E, Plaster Walls Lab ID-Version‡: 14918836-1

Sample Layers	Asbestos Content
Brown/Gray Plaster with White Paint	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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ASBESTOS PLM REPORT

Location: W3-A, Vinyl Covered Drywall Lab ID-Version‡: 14918837-1

Sample Layers	Asbestos Content
White Skim Coat with Gray Paint	ND
Sample Composite Homogeneity:	Good

Location: W3-B, Vinyl Covered Drywall Lab ID-Version‡: 14918838-1

Sample Layers	Asbestos Content
White Skim Coat with Gray Paint	ND
Sample Composite Homogeneity:	Good

Location: W3-C, Vinyl Covered Drywall Lab ID-Version‡: 14918839-1

Sample Layers	Asbestos Content
White Skim Coat with Gray Paint	ND
Sample Composite Homogeneity:	Good

Location: W4-A, Cove Base & Mastic Lab ID-Version‡: 14918840-1

Sample Layers	Asbestos Content
Black Baseboard	ND
Dark Brown Mastic	ND
Sample Composite Homogeneity:	Moderate

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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ASBESTOS PLM REPORT

Location: W4-B, Cove Base & Mastic Lab ID-Version‡: 14918841-1

Sample Layers	Asbestos Content
Black Baseboard	ND
Dark Brown Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: W4-C, Cove Base & Mastic Lab ID-Version‡: 14918842-1

Sample Layers	Asbestos Content
Black Baseboard	ND
Dark Brown Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: W5-A, Glazed Wall Tile Lab ID-Version‡: 14918843-1

Sample Layers	Asbestos Content
White Cementitious Material	ND
Sample Composite Homogeneity:	Good

Location: W5-B, Glazed Wall Tile Lab ID-Version‡: 14918844-1

Sample Layers	Asbestos Content
White Cementitious Material	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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ASBESTOS PLM REPORT

Location: W5-C, Glazed Wall Tile Lab ID-Version‡: 14918935-1

Sample Layers	Asbestos Content
White Cementitious Material	ND
Sample Composite Homogeneity:	Good

Location: W6-A, Concrete Lab ID-Version‡: 14918936-1

Sample Layers	Asbestos Content
Off-White Compound with Multilayered Paint	ND
Gray Concrete	ND
Sample Composite Homogeneity:	Moderate

Location: W6-B, Concrete Lab ID-Version‡: 14918937-1

Sample Layers	Asbestos Content
Off-White Compound with Multilayered Paint	ND
Gray Concrete	ND
Sample Composite Homogeneity:	Moderate

Location: W6-C, Concrete Lab ID-Version‡: 14918938-1

Sample Layers	Asbestos Content
Off-White Compound with Multilayered Paint	ND
Gray Concrete	ND
Sample Composite Homogeneity:	Moderate

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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ASBESTOS PLM REPORT

Location: W7-A, Brick & Mortar

Lab ID-Version‡: 14918939-1

Sample Layers	Asbestos Content
White Compound with Yellow Mastic	ND
Gray Brick	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Poor

Location: W7-B, Brick & Mortar

Lab ID-Version‡: 14918940-1

Sample Layers	Asbestos Content
White Compound with Yellow Mastic	ND
Gray Brick	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Poor

Location: W7-C, Brick & Mortar

Lab ID-Version‡: 14918941-1

Sample Layers	Asbestos Content
White Compound with Yellow Mastic	ND
Gray Brick	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Poor

Location: C1-A, Plaster Ceilings

Lab ID-Version‡: 14918942-1

Sample Layers	Asbestos Content
Gray Plaster with Multilayered Paint	ND
Sample Composite Homogeneity:	Good

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Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: C1-B, Plaster Ceilings Lab ID-Version‡: 14918943-1

Sample Layers	Asbestos Content
Gray Plaster with Multilayered Paint	ND
Sample Composite Homogeneity:	Good

Location: C1-C, Plaster Ceilings Lab ID-Version‡: 14918944-1

Sample Layers	Asbestos Content
Gray Plaster with Multilayered Paint	ND
Sample Composite Homogeneity:	Good

Location: C1-D, Plaster Ceilings Lab ID-Version‡: 14918945-1

Sample Layers	Asbestos Content
Gray Plaster with Multilayered Paint	ND
Sample Composite Homogeneity:	Good

Location: C1-E, Plaster Ceilings Lab ID-Version‡: 14918946-1

Sample Layers	Asbestos Content
Gray Plaster with Multilayered Paint	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins Aerotech Built Environment Testing, Inc.
1501 West Knudsen Drive, Phoenix, AZ 85027
(800) 651-4802 www.eurofinsus.com/Built

Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: C1-F, Plaster Ceilings

Lab ID-Version‡: 14918947-1

Sample Layers	Asbestos Content
Gray Plaster with Multilayered Paint	ND
Sample Composite Homogeneity:	Good

Location: C1-G, Plaster Ceilings

Lab ID-Version‡: 14918948-1

Sample Layers	Asbestos Content
Gray Plaster with Multilayered Paint	ND
Sample Composite Homogeneity:	Good

Location: C2-A, Acoustical Ceiling Panes

Lab ID-Version‡: 14918949-1

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	40% Cellulose 20% Glass Fibers
Sample Composite Homogeneity:	Good

Location: C2-B, Acoustical Ceiling Panes

Lab ID-Version‡: 14918950-1

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	40% Cellulose 20% Glass Fibers
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: C2-C, Acoustical Ceiling Panes

Lab ID-Version‡: 14918951-1

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	40% Cellulose 20% Glass Fibers
Sample Composite Homogeneity:	Good

Location: C2-D, Acoustical Ceiling Panes

Lab ID-Version‡: 14918952-1

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	40% Cellulose 20% Glass Fibers
Sample Composite Homogeneity:	Good

Location: C2-E, Acoustical Ceiling Panes

Lab ID-Version‡: 14918953-1

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	40% Cellulose 20% Glass Fibers
Sample Composite Homogeneity:	Good

Location: C2-F, Acoustical Ceiling Panes

Lab ID-Version‡: 14918954-1

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	40% Cellulose 20% Glass Fibers
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: C2-G, Acoustical Ceiling Panes

Lab ID-Version‡: 14918955-1

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	40% Cellulose 20% Glass Fibers
Sample Composite Homogeneity:	Good

Location: C3-A, Fiberboard Ceiling

Lab ID-Version‡: 14918956-1

Sample Layers	Asbestos Content
Brown Fiberboard with Multilayered Paint	ND
Composite Non-Asbestos Content:	80% Cellulose
Sample Composite Homogeneity:	Good

Location: C3-B, Fiberboard Ceiling

Lab ID-Version‡: 14918957-1

Sample Layers	Asbestos Content
Brown Fiberboard with Multilayered Paint	ND
Composite Non-Asbestos Content:	80% Cellulose
Sample Composite Homogeneity:	Good

Location: C3-C, Fiberboard Ceiling

Lab ID-Version‡: 14918958-1

Sample Layers	Asbestos Content
Brown Fiberboard with Multilayered Paint	ND
Composite Non-Asbestos Content:	80% Cellulose
Sample Composite Homogeneity:	Good

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Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: C4-A, Concrete Lab ID-Version‡: 14918959-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: C4-B, Concrete Lab ID-Version‡: 14918960-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: C4-C, Concrete Lab ID-Version‡: 14918961-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: M1-A, Pipe Insulation Lab ID-Version‡: 14918962-1

Sample Layers	Asbestos Content
Gray Pipe Insulation	50% Chrysotile
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: M1-B, Pipe Insulation Lab ID-Version‡: 14918963-1

Sample Layers	Asbestos Content
Gray Pipe Insulation	50% Chrysotile
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Location: M1-C, Pipe Insulation Lab ID-Version‡: 14918964-1

Sample Layers	Asbestos Content
Gray Pipe Insulation	50% Chrysotile
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Location: M2-A, Patch Material Lab ID-Version‡: 14918965-1

Sample Layers	Asbestos Content
White Compound	ND
Sample Composite Homogeneity:	Good

Location: M2-B, Patch Material Lab ID-Version‡: 14918966-1

Sample Layers	Asbestos Content
White Compound	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: M2-C, Patch Material

Lab ID-Version‡: 14918967-1

Sample Layers	Asbestos Content
White Compound	ND
Sample Composite Homogeneity:	Good

Location: M3-A, Window Glazing Compound

Lab ID-Version‡: 14918968-1

Sample Layers	Asbestos Content
Red Window Glazing	ND
Composite Non-Asbestos Content:	< 1% Cellulose < 1% Wollastonite
Sample Composite Homogeneity:	Good

Location: M3-B, Window Glazing Compound

Lab ID-Version‡: 14918969-1

Sample Layers	Asbestos Content
Red Window Glazing	ND
Gray Non-Fibrous Material	ND
Composite Non-Asbestos Content:	< 1% Cellulose < 1% Wollastonite
Sample Composite Homogeneity:	Moderate

Location: M3-C, Window Glazing Compound

Lab ID-Version‡: 14918970-1

Sample Layers	Asbestos Content
Red Window Glazing	ND
Gray Non-Fibrous Material	ND
Composite Non-Asbestos Content:	< 1% Cellulose < 1% Wollastonite
Sample Composite Homogeneity:	Moderate

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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Client: Atlas Technical Consultants LLC: AZ
C/O: Robyn Steiner
Re: ADEQ Bullion Plaza Cultural center; 150 N. Plaza Circle, Miami, AZ

Date of Sampling: 11-18-2022
Date of Receipt: 11-21-2022
Date of Report: 11-29-2022

ASBESTOS PLM REPORT

Location: M4-A, Transite Panels Lab ID-Version‡: 14918971-1

Sample Layers	Asbestos Content
Black Transite Panel with Green Paint	ND
Sample Composite Homogeneity:	Good

Location: M4-B, Transite Panels Lab ID-Version‡: 14918972-1

Sample Layers	Asbestos Content
Black Transite Panel with Green Paint	ND
Sample Composite Homogeneity:	Good

Location: M4-C, Transite Panels Lab ID-Version‡: 14918973-1

Sample Layers	Asbestos Content
Black Transite Panel with Green Paint	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

ATLAS

9185 South Farmer Avenue, Suite 111
Tempe, Arizona 85284
Phone: (480) 894-2056
Fax: (480) 894-2497

003090316

- CHAIN OF CUSTODY

Project Name: ADEQ Bullion Plaza Cultural Center + Museum Project Number: 1052000242

Project Location: 150 N. Plaza Circle, Miami, AZ Sample Date: 11/18/2022

Turn-Around Time/Due Date: Normal Turn Around Time

Special Instructions: Contact - Robyn Steiner, robyn.steiner@oncatlas.com

Samples Collected by: Chad Wells (Print Name) (Signature)

SAMPLE NUMBER	LAB ID	MATERIAL DESCRIPTION	SAMPLE LOCATION
F1-A		Residual Floor Mastic	
B		"	
C		"	
F2-A		Carpet + Mastic	
B		"	
C		"	
F3-A		Carpet + Mastic	
B		"	
C		"	
F4-A		Stair Tread + Mastic	
B		"	
C		"	
F5-A		Carpet + Mastic	
B		"	
C		"	
F6-A		Vinyl Sheet Flooring	
B		"	
C		"	
F7-A		Floor Tile + Mastic	
B		"	
C		"	
F8-A		Floor Coating	
B		"	
C		"	
F9-A		Carpet + Mastic	
B		"	
C		"	
F10-A		Vinyl Sheet Flooring	
B		"	
C		"	

Relinquished by:	Received by:	Date/Time:
(Print) Chad Wells	(Print)	11-21-22
(Signature)	(Signature)	9:45 am

ATLAS
9185 South Farmer Avenue, Suite 111
Tempe, Arizona 85284
Phone: (480) 894-2056
Fax: (480) 894-2497

003090316

LM - CHAIN OF CUSTODY

Project Name: ADEQ · Bullion Plaza Cultural Center + Museum Project Number: 1052000242

Project Location: 150 N. Plaza Circle, Miami, AZ Sample Date: 11/18/2022

Turn-Around Time/Due Date: Normal Turn Around Time

Special Instructions: Contact - Robyn Steiner, robyn.steiner@oncatlas.com

Samples Collected by: Chad Wells (Print Name) (Signature)

SAMPLE NUMBER	LAB ID	MATERIAL DESCRIPTION	SAMPLE LOCATION
F11-A		Epoxy Coated Concrete	
B		"	
C		"	
F12-A		Ceramic Tile + Grout	
B		"	
C		"	
F13-A		Carpet + Mastic	
B		"	
C		"	
F14-A		Carpet + Mastic	
B		"	
C		"	
F15-A		Vinyl Sheet Flooring	
B		"	
C		"	
F16-A		Ceramic Tile + Grout	
B		"	
C		"	
F17-A		Carpet + Mastic	
B		"	
C		"	
F18-A		Concrete	
B		"	
C		"	
F19-A		Floor Tile + Mastic	
B		"	
C		"	
F20-A		Ceramic Tile	
B		"	
C		"	

Relinquished by:	Received by:	Date/Time:
(Print) Chad Wells	(Print)	
(Signature)	(Signature)	

ATLAS
9185 South Farmer Avenue, Suite 111
Tempe, Arizona 85284
Phone: (480) 894-2056
Fax: (480) 894-2497

003090316

LM - CHAIN OF CUSTODY

Project Name: ADEQ · Bullion Plaza Cultural Center + Museum Project Number: 1052000242

Project Location: 150 N. Plaza Circle, Miami, AZ Sample Date: 11/18/2022

Turn-Around Time/Due Date: Normal Turn Around Time

Special Instructions: Contact - Robyn Steiner, robyn.steiner@oncatlas.com

Samples Collected by: Chad Wells (Print Name) (Signature)

SAMPLE NUMBER	LAB ID	MATERIAL DESCRIPTION	SAMPLE LOCATION
W1-A		Plaster walls	
B		"	
C		"	
D		"	
E		"	
F		"	
G		"	
W2-A		Plaster walls	
B		"	
C		"	
D		"	
E		"	
W3-A		Vinyl Covered Drywall	
B		"	
C		"	
W4-A		Cove Base + Mastic	
B		"	
C		"	
W5-A		Glazed Wall Tile	
B		"	
C		"	
W6-A		Concrete	
B		"	
C		"	
W7-A		Brick + Mortar	
B		"	
C		"	
C1-A		Plaster Ceilings	
B		"	
C		"	

Relinquished by:	Received by:	Date/Time:
(Print) Chad Wells	(Print)	
(Signature)	(Signature)	

ATLAS
9185 South Farmer Avenue, Suite 111
Tempe, Arizona 85284
Phone: (480) 894-2056
Fax: (480) 894-2497

003090316

_M - CHAIN OF CUSTODY

Project Name: ADEQ Bullion Plaza Cultural Center + Museum Project Number: 1052000242

Project Location: 150 N. Plaza Circle, Miami, AZ Sample Date: 11/18/2022

Turn-Around Time/Due Date: Normal Turn Around Time

Special Instructions: Contact - Robyn Steiner, robyn.steiner@oncatlas.com

Samples Collected by: Chad Wells (Print Name) (Signature)

SAMPLE NUMBER	LAB ID	MATERIAL DESCRIPTION	SAMPLE LOCATION
C1 - D		Plaster Ceilings	
E		"	
F		"	
G		"	
C2 - A		Acoustical Ceiling Panels	
B		"	
C		"	
D		"	
E		"	
F		"	
G		"	
C3 - A		Fiberboard Ceiling	
B		"	
C		"	
C4 - A		Concrete	
B		"	
C		"	
M1 - A		Pipe Insulation	
B		"	
C		"	
M2 - A		Patch Material	
B		"	
C		"	
M3 - A		Window Glazing Compound	
B		"	
C		"	
M4 - A		Transite Panels	
B		"	
C		"	

Relinquished by:	Received by:	Date/Time:
(Print) Chad Wells	(Print)	
(Signature)	(Signature)	

eurofins | Built Environment Testing

Report for:

Robyn Steiner
Atlas Technical Consultants LLC: AZ
9185 S Farmer Ave Suite 111
Tempe, AZ 85284

Regarding: Eurofins Aerotech Built Environment Testing, Inc.
Project: ADEQ Bullion Plaza Cultural Center; 150 N. Plaza Circle, Miami, AZ
EML ID: 3090316

Approved by:

Operations Manager
Joshua Cox

Dates of Analysis:
Asbestos PLM: 11-29-2022
Asbestos TEM Chatfield (sub-contracted): 12-29-2022

Project SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested.

Eurofins J3 Resources, Inc.
6110 W. 34th Street, Houston, Texas 77092
Phone: (713) 290-0221 Fax: (713) 290-0248
j3resources.com

eurofins | J3 Resources

Bulk Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM)
EPA 600/R-93/116 – Section 2.5.5.2 (Chatfield Semi-Quantitative)

Shannon Nast
Eurofins Aerotech
1501 W Knudsen Drive
Phoenix, AZ 85027

EJ3 Order #: JH22142684
Project #: 3090316
Receipt Date: 21-Dec-2022
Analysis Date: 29-Dec-2022
Report Date: 29-Dec-2022

EMLab ID 3090316

Client ID	Material Description	Percent Organics	Percent Carbonate	Percent Residue	Asbestos Type(s)	Percent Asbestos
F7-A	Floor Tile	10.83%	87.25%	1.92%	**None Detected**	**<0.01%**
F7-A	Mastic	50.77%	1.54%	47.69%	**None Detected**	**<0.01%**
F7-B	Floor Tile	10.87%	87.44%	1.70%	**None Detected**	**<0.01%**
F7-B	Mastic	42.27%	16.49%	41.24%	**None Detected**	**<0.01%**
F7-C	Floor Tile	9.92%	88.94%	1.14%	**None Detected**	**<0.01%**
F7-C	Mastic	48.15%	5.56%	46.30%	**None Detected**	**<0.01%**
F19-A	Floor Tile	17.89%	69.40%	12.71%	**Chrysotile**	**2.54%**
F19-A	Mastic	65.67%	12.69%	21.64%	**Chrysotile**	**1.08%**
F19-B	Floor Tile	21.56%	66.71%	11.73%	**Chrysotile**	**2.35%**
F19-B	Mastic	50.47%	27.10%	22.43%	**Chrysotile**	**1.12%**
F19-C	Floor Tile	23.00%	65.50%	11.50%	**Chrysotile**	**2.30%**
F19-C	Mastic	52.68%	22.32%	25.00%	**Chrysotile**	**1.25%**
M1-A	Pipe Insulation	35.34%	21.85%	42.81%	**Chrysotile**	**17.12%**
M1-B	Pipe Insulation	30.59%	24.08%	45.34%	**Chrysotile**	**18.13%**
M1-C	Pipe Insulation	34.72%	14.35%	50.93%	**Chrysotile**	**20.37%**

Analyst: Scott M. Ward

Scott M. Ward, Ph. D. **Lab Director**

NVLAP Lab Code: 200525-0; TDSHS License: 30-0273

Revision #v9/MF
Revision Date: 8/27/2021

IH CHAIN OF CUSTODY

eurofins | J3 Resources

☐ Open Lab Fee

Eurofins J3 Order # (Lab Use only) 142684

Submitter Name:	Shannon Nast	**Bill to:**	Eurofins Aerotech
Company:	Eurofins EMLab P&K Phoenix	**Address:**	
Address:	1501 W Knudsen Drive		
		City/State:	**Zip:**
City/State:	Phoenix AZ **Zip:** 85027	**PO #:**	

Project Information

Project Name: EMLab ID 3090316	Project Manager: Shannon Nast
Project #:	Telephone – Office/Cell
Reports - Email Address: Shannon.Nast@et.eurofinsus.com	
Invoice - Email Address:	Notification By: Email: ☐ Verbal: ☐
Special Instructions: Chatfield method	

Turnaround Times – Please Select One

Emergency* ☐	1 Day ☐	2 Day ☐	3 Day ☐	5 Day ☑

ASBESTOS

PLM - Bulk	PCM - Air	TEM - Air	TEM - Bulk	TEM - Water	TEM - Dust	TEM/PLM Soil/Vermiculite/Ore
EPA 600/R-93/116 ○ Visual Estimation (<1%) ○ 400 Point Count 0.25% ○ 1,000 Point Count 0.1% ○ Gravimetric Reduction ○ Matrix Reduction (+/-) ○ **NIOSH 9002** ○ **OSHA ID-191**	○ **NIOSH 7400** ○ **ASTM D7201** ○ **ISO 8672** ○ **OSHA ID-160**	○ **AHERA** ○ **NIOSH 7402** ○ **ASTM D6281** ○ **ISO 10312** ○ **ISO 13794**	⊗ Gravimetric Reduction (<1%) ○ Matrix Reduction (+/-) ○ Qualitative (+/-) ○ Drop Mount ○ Filtration	○ **EPA 100.2** Drinking Water ○ >10 µm fibers ○ ≥0.5 µm fibers ○ **EPA 100.2** Effluent / WW Received on ice: ○ Yes ○ No Temp: _____	○ **ASTM D5755** Microvac ○ **ASTM D6480** Wipe ○ **600/J-93/167** Carpet - EPA ○ Bulk Dust Qualitative	○ **ASTM 7521**-TEM (+/-) ○ **ASTM 7521**-TEM (<1%) ○ **CARB 435**-Modified ○ Soil – PLM Only (+/-) ○ Vermiculite - TEM (+/-) ○ Vermiculite-Cincinnati ○ Erionite ID

METALS

Flame AA	Graphite Furnace AA - LEAD	ICP
○ Lead in Paint – **SW846 7420/3050B** ○ Lead in Air – **NIOSH 7082** ○ Lead in Wipes – **SW846 7420/3050B** ○ Lead in Soil – **SW846 7420/3050B** ○ TCLP – **SW846-7420/1311**	○ Drinking Water – **EPA 200.9** ○ Wastewater – **SW846-7421** ○ Soil/Sludge – **SW846-7421** ○ Air – **NIOSH 7105**	○ Elements in Air – **NIOSH 7300** ○ Wipe/Soil – **SW846-6010B** ○ Effluent – **SW846-6010B** ○ Welding Fume – **NIOSH 7300M**

SILICA/PARTICULATES

X-Ray Diffraction / Gravimetric / Combustion Byproduct
○ Respirable Crystalline Silica **NIOSH 7500 / OSHA 142** ○ **NIOSH 0500** – Total Particulates ○ **NIOSH 0600** – Respirable Particulates **ASTM 6602 - CBP** ○ PLM ○ TEM ○ SEM

Total Number of Samples Submitted: 15

Positive Stop: ⊡ NO ☐ YES ○ By Layer ○ By Sample

Signatures

Relinquished By:	[signature]	**Date:** 12/20/22	**Time:** 3:00 pm
Received By:	[signature]	**Date:** 12/21/22	**Time:** 11:30 AM
Relinquished By:		**Date:**	**Time:**
Received By:		**Date:**	**Time:**

** Emergency TAT requires prior lab notification. All samples analyzed outside normal business hours are charged at Emergency rate.*
***TAT's are in Business Days rather than Hours (i.e.1 Day TAT = End of Next Business Day)*

Revision #v7/MF
Revision Date: 3/09/2020

IH CHAIN OF CUSTODY

eurofins | J3 Resources

Project Name EMLab ID 3090316
Project Number _____

Page ____ of ____

SAMPLE IDENTIFICATION

SAMPLE NUMBER	SAMPLE LOCATION / MATERIAL	VOLUME/CONDITION
F7-A	Floor Tile & Mastic	
F7-B	Floor Tile & Mastic	
F7-C	Floor Tile & Mastic	
F19-A	Floor Tile & Mastic	
F19-B	Floor Tile & Mastic	
F19-C	Floor Tile & Mastic	
M1-A	Pipe Insulation	
M1-B	Pipe Insulation	
M1-C	Pipe Insulation	

Comments/Special Instructions:

Eurofins J3 Resources, Inc. • 6110 West 34th Street • Houston, Texas 77092 • tel: 713-290-0221 • fax: 713-290-0248
Eurofins J3 Resources, Inc. • 3113 Red Bluff Road • Pasadena, Texas 77503 • tel: 713-290-0223 • fax: 713-290-0248

Appendix D

Prior Reports

Asbestos and Lead Survey Report of Findings
150 North Plaza Circle
Miami, Arizona

Prepared for:

Arizona Department of Environmental Quality
1100 West Washington Street
Phoenix, Arizona 85007

Prepared by:

Amec Foster Wheeler Environment & Infrastructure, Inc.
4600 East Washington Street, Suite 600
Phoenix, Arizona

October 20, 2016

Project No. 14-2016-2027

October 20, 2016
Project No. 14-2016-2027

Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, Arizona 85007

Attn: Ms. Jennie E. Curé

Re: Asbestos and Lead Survey Report of Findings
FY17 ABRC TO – Bullion Plaza Cultural Center & Museum – Basement Areas
150 North Plaza Circle
Miami, Arizona
ADEQ No: ADEQ14-076786

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) is pleased to submit this report of findings for the asbestos and lead survey conducted for the basement areas of the Bullion Plaza Cultural Center and Museum located at 150 North Plaza Circle in Miami, Arizona. Amec Foster Wheeler has performed the work outlined in the report's scope of services.

This report describes the scope, procedures, summary of findings, and qualifications of the asbestos survey. The types, locations, and estimated quantities of asbestos and lead-containing materials are identified. Additionally, laboratory analysis reports and personnel accreditations are included in the report appendices.

Amec Foster Wheeler appreciates this opportunity to provide professional consulting services to the Arizona Department of Environmental Quality and we look forward to continuing our relationship.

Respectfully submitted,

Amec Foster Wheeler
Environment & Infrastructure, Inc.

Pamela Walrath
EPA Building Inspector

Reviewed by:

Tim Ostapuk, CIEC
Senior Project Manager

4600 East Washington Street, Suite 600
Phoenix, Arizona 85034
Tel (602) 733-6000
Fax (602)733-6100
www.amecfw.com

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EXECUTIVE SUMMARY

At the request of the Arizona Department of Environmental Quality (ADEQ), Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) is providing this Asbestos and Lead Survey Report of Findings for the basement area of the Bullion Plaza Cultural Center & Museum located at 150 North Plaza Circle in Miami, Arizona (the site). The basement is comprised of four areas described as entry, boiler room, left room and right room as well as a crawlspace under the two wings of the building. Our survey is intended to provide information to ADEQ regarding the presence and location of asbestos-containing materials (ACMs) and lead-based paint that comprise these areas.

Of the 15 suspect materials identified by Amec Foster Wheeler, five (5) of the materials were determined by laboratory analysis to contain asbestos in excess of one percent (1%) or assumed to contain asbestos. Materials containing more than 1% are considered asbestos containing as defined by the United States Environmental Protection Agency (USEPA) and Occupational Safety and Health Administration. The five ACMs identified are:

- Material #3 (Thermal Systems Insulation (TSI), Straight Runs – Approximately 400 linear feet (lin. ft.) – Throughout Basement and Crawlspaces.
- Material #4 (Thermal Systems Insulation (TSI), Elbows) - Approximately 15 each – Throughout Basement Spaces (including confined space).
- Material #15 (Miscellaneous, Category I Non-Friable): Gray Gaskets – Approximately 2 each – Boiler room on equipment
- Assumed ACM (Thermal Systems Insulation (TSI), Boiler Insulation Wrap – Approximately 2 each – On Boiler Equipment
- Assumed ACM (Miscellaneous, Category I Non-Friable), Disposal Bags of Removed Building Material – Approximately 20 each

The building components tested for lead-based paints had concentrations of lead ranging from 200 to 3,900 parts per million (ppm). All of the building components tested by paint chip analysis contained concentrations of lead less than 5,000 parts per million milligrams (ppm) and or 0.5% by weight. Paint that contains concentrations of lead equal to or greater than 5,000 ppm and or 0.5% by weight is considered lead-based paint as defined by the United States Department of Housing and Urban Development and the USEPA. However, any detectable lead in paint makes it lead paint for purposes of complying with OSHA regulations and determining worker exposure.

1.0 PROJECT INFORMATION

At the request of the Arizona Department of Environmental Quality (ADEQ), Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) is providing this Asbestos and Lead Survey Report of Findings for the basement areas located at 150 North Plaza Circle in Miami, Arizona (the site) (**Figure 1**). The basement is comprised of four areas described as entry, boiler room, left room and right room as well as a crawlspace under the two wings of the building.

General construction of the basement consists of concrete floors and walls and plaster ceiling. Boilers are present in the boiler room and pipe runs extend from the boiler systems into the crawlspaces under each wing of the building. The pipe run insulation was generally in poor condition and had deteriorated in the basement rooms and crawlspaces. Disposal bags of removed building materials from other areas of the site were stored on the entry of the basement.

2.0 SCOPE OF SERVICES

2.1 Asbestos Survey

The scope of services for the asbestos survey included an inspection that consisted of bulk sampling and laboratory analyses of the building materials that comprised the basement areas located at the site. The primary intent of Amec Foster Wheeler's services was to assess the presence, extent, and condition of suspect asbestos-containing materials (ACM) in the structures (refer to **Figure 2**). Suspect ACM is defined as those classes of materials that have, in the past, been known to contain asbestos and in some formulations.

Amec Foster Wheeler's services included a physical inspection of the building materials that comprised the structure and the collection and analysis of samples to assess the presence of ACM. In accordance with the Asbestos Hazard Emergency Response Act (AHERA) protocol and American Society for Testing and Materials (ASTM) E 2356-14, "Standard Practices for Comprehensive Building Asbestos Survey," homogeneous areas (HAs) of suspect materials were classified as thermal systems insulation (TSI) and miscellaneous . Identified suspect materials were physically evaluated to determine friability.

The inspection included the identification of both "Friable" and nonfriable materials. Friable materials are those, which when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. These materials were classified as regulated ACM, Category I nonfriable ACM, or Category II nonfriable ACM in accordance with National Emission Standard for Hazardous Air Pollutants regulations.

The field portion of the work included a visual inspection of the interior of the basement areas at the site and the collection and analysis of samples of suspect ACM.

Amec Foster Wheeler's certified AHERA Building Inspector, Ms. Pam Walrath (AHERA Certification #10051-1159397-143233), conducted the field portion of the work on September 27, 2016. A copy of her accreditation is available in **Appendix A**.

During the survey, suspect materials were noted and grouped by HA. For bulk sampling purposes, an HA is defined as an area that contains materials suspect of containing asbestos that seem by

texture and color to be uniform and applied or installed during the same general time period. Amec Foster Wheeler's inspectors also evaluated the friability of each material by physically assessing each of the suspect materials.

Amec Foster Wheeler collected bulk samples from the building materials identified during the asbestos survey shown in **Table 1**. The materials sampled, along with their physical characteristics, were collected in general accordance with AHERA bulk sampling and ASTM protocols as they apply to the number of samples for each HA. Samples were collected by Amec Foster Wheeler's accredited building inspector, the samples were labeled, and appropriate chain-of-custody documentation was completed.

Samples were delivered to Fiberquant Analytical Services, Inc. (Fiberquant) in Phoenix, Arizona, for visual inspection and microscopic analysis. Samples were analyzed using polarized light microscopy (PLM) coupled with dispersion staining as outlined in United States Environmental Protection Agency (USEPA) Method 600/R-93/116.

The percentage quantification of individual sample constituents was determined by visual estimation. Under regulations promulgated by the USEPA, ACMs are defined as those materials that contain more than one percent (1%) of specified asbestiform minerals. Bulk samples determined to contain more than 1% of specified asbestiform minerals are referred to as "positive." All the bulk samples collected during the inspection were analyzed. Material samples that were less than five percent (5%) asbestos-containing by PLM were analyzed using the point count method.

2.2 Lead Survey

Paint chips were collected of painted building components at the site. The materials sampled are listed in **Table 2**. The paint chip samples were delivered to Fiberquant for Atomic Absorption Flame (AAF) analysis.

3.0 SUMMARY OF ASBESTOS AND LEAD ANALYSIS

3.1 Asbestos Sampling Results

Of the 17 suspect materials identified by Amec Foster Wheeler, five (5) of the materials were determined by laboratory analysis to contain asbestos in excess of 1%. Materials containing more than 1% are considered asbestos containing as defined by the USEPA and Occupational Safety and Health Administration (OSHA). Copies of Fiberquant's laboratory reports are included in **Appendix B**.

- Material #3 (Thermal Systems Insulation (TSI), Straight Runs – Approximately 400 linear feet (lin. ft.) – Throughout Basement and Crawlspaces. The pipe run insulation was generally in poor condition and had deteriorated in the basement rooms and crawlspaces. The surrounding building surfaces and items stored in the basement and bare soil of the crawlspaces may be impacted by asbestos from the pipe insulation.
- Material #4 (Thermal Systems Insulation (TSI), Elbows) - Approximately 15 each – Throughout Basement Spaces (including confined space).

- Material #15 (Miscellaneous, Category I Non-Friable): Gray Gaskets – Approximately 2 each – Boiler room on equipment.
- Assumed ACM (Thermal Systems Insulation (TSI), Boiler Insulation Wrap – Approximately 2 each – On Boiler Equipment.
- Assumed ACM (Miscellaneous, Category I Non-Friable), Disposal Bags of Removed Building Material – Approximately 20 each.

3.2 Lead Survey Results

The building components tested for lead-based paints had concentrations of lead ranging from 200 to 3,900 parts per million (ppm). All of the building components tested by paint chip analysis contained concentrations of lead less than 5,000 parts ppm and or 0.5% by weight. Paint that contains concentrations of lead equal to or greater than 5,000 ppm and or 0.5% by weight is considered lead-based paint as defined by the United States Department of Housing and Urban Development and the USEPA. However, any detectable lead in paint makes it lead paint for purposes of complying with OSHA regulations and determining worker exposure. Fiberquant's results for AAF analysis report is provided in **Appendix B**.

4.0 SUMMARY AND RECOMMENDATIONS

- The following building materials at the basement areas contain asbestos at concentrations that would meet the definition of asbestos-containing material:
- Material #3 (Thermal Systems Insulation (TSI), Straight Runs – Approximately 400 linear feet (lin. ft.) – Throughout Basement and Crawlspaces.
- Material #4 (Thermal Systems Insulation (TSI), Elbows) - Approximately 15 each – Throughout Basement Spaces (including confined space).
- Material #15 (Miscellaneous, Category I Non-Friable): Gray Gaskets – Approximately 2 each – Boiler room on equipment.
- Assumed ACM (Thermal Systems Insulation (TSI), Boiler Insulation Wrap – Approximately 2 each – On Boiler Equipment.
- Assumed ACM (Miscellaneous, Category I Non-Friable), Disposal Bags of Removed Building Material – Approximately 20 each.
- The building components tested for lead-based paints had concentrations of lead ranging from 200 to 3,900 ppm. Of all the paint chips collected none were at concentrations at or above the 5,000 ppm that would be considered lead based paint. However, any detectable lead in paint makes it lead paint for purposes of complying with OSHA regulations and determining worker exposure.
- The identified ACM should be removed by a licensed asbestos abatement contractor. The surfaces of the basement as well as the items that are stored in the basement should be cleaned of any visible ducts that may contain asbestos. The crawlspace should also be

cleaned by the abatement contractor. The surfaces with lead-containing paint should also be removed if it is to be impacted by future renovation activities.

- The costs to remove the ACM will be determined following a future bid walk with abatement contractors.
- If any suspect materials not identified during this survey are to be disturbed during future construction activities, these materials should be inspected by an accredited AHERA Building Inspector or USEPA Lead Risk Assessor for the collection and analysis of asbestos or lead.

5.0 LIMITATIONS

Amec Foster Wheeler has endeavored to observe the existing conditions associated with areas described in this report using generally-accepted procedures and the degree of care that is ordinary for others performing similar services. Regardless of the thoroughness of any inspection, there is always a possibility that some areas containing asbestos or lead may be inaccessible or different in composition from those at specific sample locations. Therefore, conditions at individual locations may not be as anticipated. The findings presented in this report are relevant to the dates of our site work and the scope of included services and should not be relied on to represent conditions at substantially-later dates.

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wheeler

TABLES

Table 1
Amec Foster Wheeler Sample Information and Results

Sample Numbers	HA Description and Location	Friable	Primary Color	Texture	Secondary Color	Condition	ACM?
Basement Areas – September 27, 2016							
1 A – C	Tan Wall Adhesive	No	Tan	Smooth	None	Good	No
2 A – C	Concrete Wall – Throughout Rooms	No	Gray	Hard	None	Fair	No
3 A - C	**Pipe Run Insulation – Straight Runs**	**Yes**	**Crème**	**Hard**	**White**	**Poor**	**50 – 80% Chrysotile**
4 A – C	**Pipe Elbows**	**Yes**	**Crème**	**Hard**	**White**	**Poor**	**10 - 20% Chrysotile**
5 A – C	Stair Concrete	No	Gray	Hard	Gray	Fair	No
6 A – C	Foundation	No	Gray	Hard	White	Poor	No
7 A – C	Concrete Deck – Entry	No	Gray	Hard	None	Good	No
8 A – C	Wall Patch – Entry	No	White	Hard	None	Fair	No
9 A – C	Gasket – Red	No	Red	Pliable	None	Fair	No

Sample Numbers	HA Description and Location	Friable	Primary Color	Texture	Secondary Color	Condition	ACM?
Basement Areas – September 27, 2016							
10 A – C	Plaster Ceiling – Boiler Room	Yes	Tan	Rough	White	Poor	No
11 A – C	Plaster Patch – Boiler Room	Yes	Tan	Rough	White	Poor	No
12 A – C	Window Putty	No	Red	Hard	None	Poor	No
13 A – C	Troweled Plaster Ceiling	No	Tan	Rough	None	Fair	No
14 A – C	White Patch – Ceiling	No	White	Hard	N/A	Fair	No
15 A – C	**Gasket – Gray**	**No**	**Gray**	**Hard**	**None**	**Fair**	**30 – 40% Chrysotile**
Assumed ACM	**Boiler Insulation Wrap**	**No**	**White**	**Soft**	**White**	**Fair**	**Assumed ACM**
Assumed ACM	**Disposal Bags of Removed Building Materials**	**Yes**	**Unknown**	**Unknown**	**Unknown**	**N/A**	**Assumed ACM**

Table 2

Lead Paint Chip Samples and Results

Sample Numbers	HA Description and Location	Primary Color	Texture	Secondary Color	Condition	Lead Results (ppm)
ADEQ-Pb-01	White Wall	White	Rough	None	Fair	200
ADEQ-Pb-02	Gray on Stairs	Gray	Smooth	None	Fair	3,800
ADEQ-Pb-03	Varnished Door	Varnish	Smooth	None	Good	3,900
ADEQ-Pb-04	Gray Paint on Wall	Gray	Smooth	None	Fair	1,600
ADEQ-Pb-05	Silver Pipe	Silver	Smooth	Black	Fair	1,700

Notes:
HA = homogenous area
ID = identification
ppm = parts per million
BRL = Below Reportable Limits

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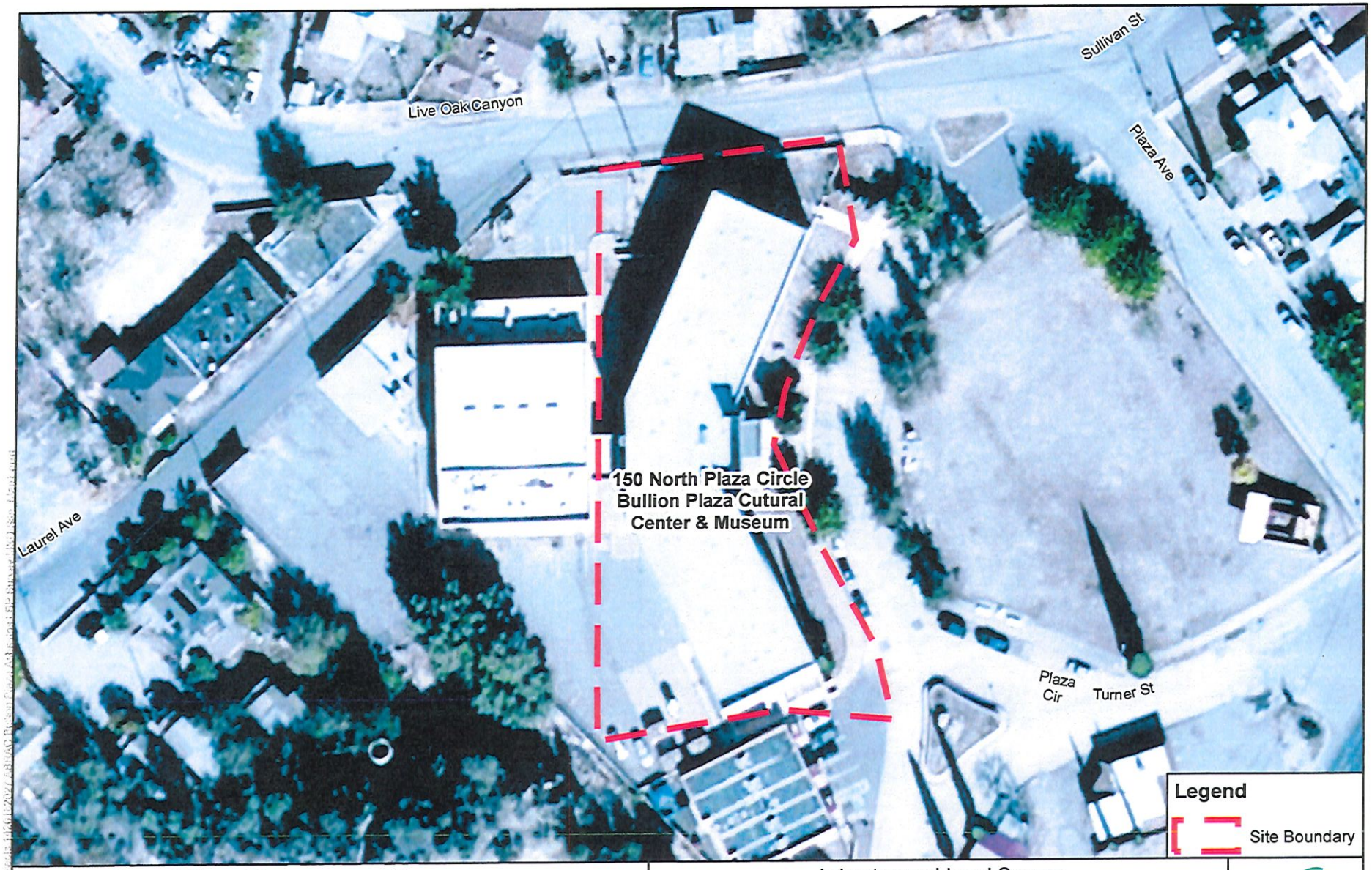
FIGURES



0 37.5 75 150 Feet

Job No.:	1420162027
PM:	TO
Date:	10/3/2016
Scale:	1" = 75 feet

N

The map shown here has been created with all due and reasonable care and is strictly for use with Amec Foster Wheeler Project Number 1420162027. This map has not been certified by a licensed land surveyor, and any third party use of this map comes without warranties of any kind. Amec Foster Wheeler assumes no liability, direct or indirect, whatsoever for any such third party or unintended use.

Asbestos and Lead Survey
150 North Plaza Circle
Bullion Plaza Cultural Center & Museum

Site Map

FIGURE 1

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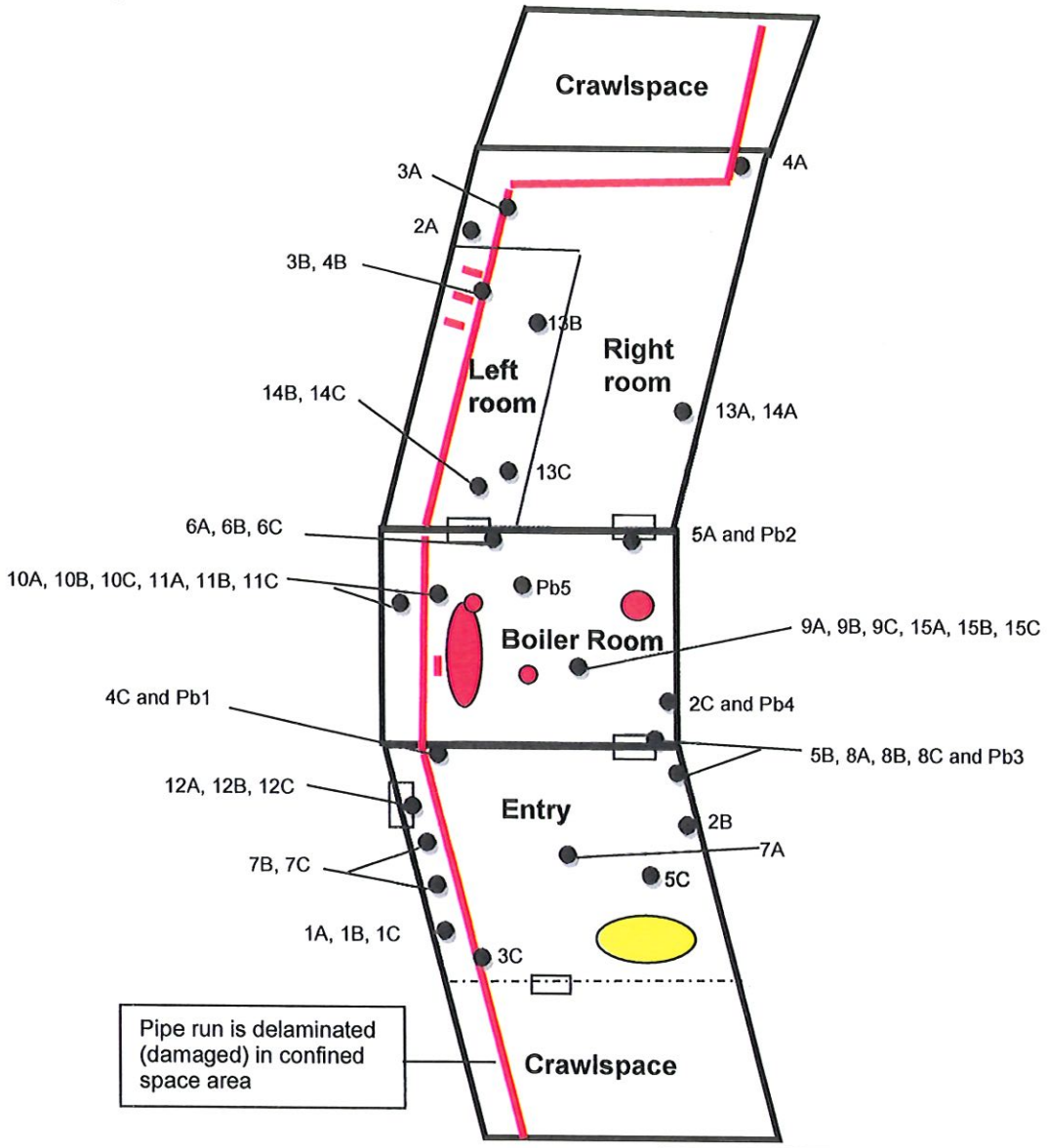

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	PM:	Tim O.	Bullion Plaza Cultural Center and Museum 150 North Plaza Circle Miami, Arizona	Figure 2
	Design:	Pam W.		
	Date			

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wheeler

APPENDIX A

PERSONNEL ACCREDITATIONS

10051-1159397-143233

THE ASBESTOS INSTITUTE

Certifies that PAM WALRATH

has attended the EPA approved course

Building Inspector Refresher

and successfully passed and completed
the competency exam.

This training meets all requirements for asbestos
accreditation under TSCA Title II.

Issue Date : 09-Dec 2015

Expiration Date : 09-Dec 2016

THE ASBESTOS INSTITUTE
arizona · california · nevada
EST. 1988

Approved Instructor

20033 N. 19th Avenue, Building 6, Phoenix, AZ 85027
602 -8 64 - 6564 · www.theasbestosinstitute.com

APPENDIX B

FIBERQUANT ANALYTICAL SERVICES LABORATORY REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

FIBERQUANT ANALYTICAL SERVICES

Atomic Absorption Spectrometer (AAS) Analysis of Paint

JobNumber: **201609830**

Client: **AMEC FOSTER WHEELER**

4600 E WASHINGTON STE# 600

PHOENIX, AZ 85034-0000

Office Phone: (602) 733-6000

FAX: (602) 733-6100

 # Samples: 5 AA **Rec:** 9/27/2016 **Method:** Modified SW 846 3050b/7420 Pb in paint by weight AA Analysis

Client Job: 14-2016-2027 **PO Number:** Pending

Report Date: 9/30/2016 **Date Analyzed:** 9/30/2016 **Routing Number:** -

Method and Analysis Information: **Fiberquant Internal SOP:** AApw

The received samples were analyzed for Pb (total) using "Test Methods for Evaluating Solid Waste" (SW 846, December 1996 updates). The extraction/digestion method was SW 3050b. The analytical method is "flame atomic absorption, direct aspiration", SW 7420.. Briefly the procedures are as follows. The incoming paint samples are first homogenized by mixing and crushing. A sub-sample is weighed to 0.0001 gm into a 50ml centrifuge tube. To the run stream are added the quality assurance samples described below. Six mls of concentrated HNO3 and one ml of 30% H2O2 are added to each container. The tubes are caped and heated for 1 hour at 95 deg. C. After cooling, the contents of the centrifuge tube are brought up to exactly 25 mls, completing the digestion/extraction.

The sample and quality assurance extractions are then analyzed on a TJA M5 flame atomic absorption spectrometer. The wavelengths and other instrumental settings are set according to the manufacturer's recommendations, or as otherwise specified in the published method. Absorptions are recorded from sample and standard solutions. A calibration curve is fitted to at least three standard solutions, and the concentrations of the sample extracts are calculated from the curve. The ppm (ug/gm) and weight percent for each sample is calculated from the sub-sample weight, extract volume, and extract concentration.

The results from this analysis is generally compared to either the HUD guidelines, in which a sample is positive if it contains >0.5% (5000 ppm) Pb, or the Consumer Products Safety Commission (CPSC) limit, in which a paint or surface coating containing greater than 90 ppm is defined as lead-containing. The expected coefficient of variation for this method is approximately 20-30%. The results are reported to two significant figures. The Sample Reporting Limit (RL) listed below is twice the Sample Detection Limit, which is calculated for each sample from the experimentally determined Method Detection Limit. The limit of reliable quantitatiion is generally regarded as five to ten times the limit of detection. Therefore, samples smaller than 0.1 gm may give results too near the CPSC standard to be reliable. Problems in analysis or other information is provided in the "Analytical Notes" below. Blanks, if analyzed, are treated the same as samples and are not used for correcting non-blank results.

The following on-going quality assurance program was followed to ensure reproducible and dependable results: All analysts are degreed chemists trained extensively in-house for at least six months prior to un-supervised runs. Blank matrix samples are analyzed at a rate of 5% (at least one per run). Reference standards are analyzed at a rate of 5% (at least one per run), and compared to statistical records via control charts. Spiked matrix samples are analyzed at a rate of 5% (at least one per run), and compared to statistical records via control charts. Duplicate samples are analyzed at a rate of 5% (at least one per run), and compared to statistical records via control charts. For each instrumental run, the spectrometer is checked for sensitivity and stability. The calibration standards are made fresh weekly, and checked each run against a calibration verification standard from another source. All calculations are performed twice - once in a calibration spreadsheet, and once during the report generation, and also checked by hand. All quality checks performed for these samples were in control except as detailed in the "Analytical Notes" below. Fiberquant participates in the Environmental Lead Proficiency Analytical Testing (ELPAT) program, is accredited by AIHA-LAP, LLC for environmental lead in paint (Lab # 101593), and is recognized by the National Lead Laboratory Accreditation Program (NLLAP) for the analysis of Pb in paint. Accreditation does not imply endorsement by the EPA, any other United States governmental agency or any private agency or association. Each lab analysis refers only to the sample tested, and may not, due to the sampling process, be representative of the material sampled. This report may not be reproduced except in full, without the approval of Fiberquant Analytical Services.

Some results may have been calculated using client supplied data, such as volume or area sampled, for which Fiberquant assumes no liability for accuracy.

Job Analysis Notes:

Calibration Curve:

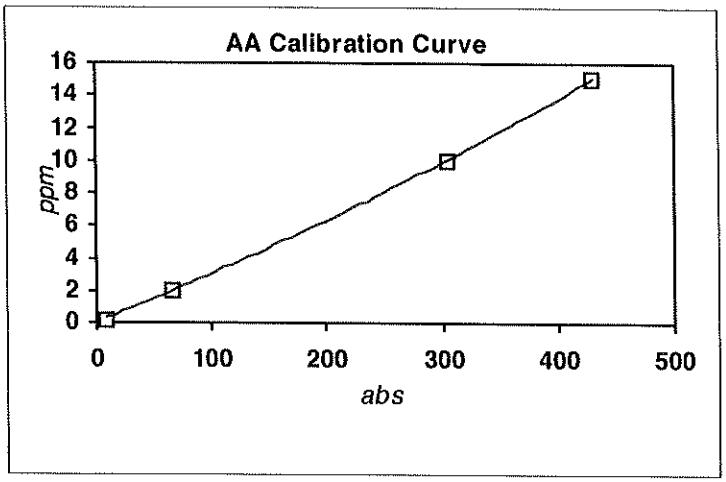
Pb

Run # 11912 ***9/29/2016***

Instrument: M5-2

Standards:	ppm	avg. mAbs.
1	0.2	8
2	2	66
3	10	304
4	15	431

ax2	0.00001416
bx	0.02866955
c	0.00102403
R2	0.99997368



Analysis Results:

Job Number:	201609830

AApw

Lab Number	Client Number	Date	Condition	Weight (gm)	ug/ml	ml	Dil	Analyte	wt %	ppm	RL(ppm)
2016-09830- 1	Pb 1	9/27/2016	acceptable	0.1518	1.2301	25	1	Pb	0.02	200	33
2016-09830- 2	Pb 2	9/27/2016	acceptable	0.0928	14.216	25	1	Pb	0.38	3800	54
2016-09830- 3	Pb 3	9/27/2016	acceptable	0.0156	2.4162	25	1	Pb	0.39	3900	320
2016-09830- 4	Pb 4	9/27/2016	acceptable	0.1443	9.322	25	1	Pb	0.16	1600	35
2016-09830- 5	Pb 5	9/27/2016	acceptable	0.0462	3.1358	25	1	Pb	0.17	1700	110

Martin Esquer

Analyst: MARTIN A. ESQUER

Printed: 30-Sep-16

Original Print Date: 30-Sep-16

Larry S. Pierce

Larry S. Pierce, Approved Accreditation Signatory

FIBERQUANT ANALYTICAL SERVICES

Fiberquant Analytical Services 5025 S. 33rd St.; Phoenix, AZ 85040; Phone: 602-276-6139; FAX: 602-276-4558; info@fiberquant.com

Analysis Request/Chain-of-Custody Form

Submitted by (Company)	AMEC FOSTER WHEELER
Address	4600 E. WASHINGTON STE 600
City, State, Zip Code	Phx AZ
Phone	FAX
Email	pam.walrath@amecfw.com

Invoice to (Company)	AMEC FW
Address	
City, State, Zip Code	
Phone	FAX

Contact (print)	PAM WALRATH
Sampled by (signature)	
Job Number or Project Name	14-2016-2027
PO Number	

<Analysis Method Requested> ONLY ONE METHOD per COC			Turn-around-time (circle one)			
			Rush		Norm	Ext.
Asbestos by PLM	Method > Improved Interim		Urgent Rush <3 hrs	<6 hrs	1-3 days	15-30 days
	Analyze > All ATPF					
	If ATPF then > by Layer by Sample					
	Single Layer Protocol > Yes No					
Fibers by PCM	Method > 7400 (Area) ORM (Personal)		<4 hrs		24 hrs	-
Asbestos by TEM	In Air > AHERA Mod. AHERA		<6 hrs		24 hrs	3-5 days
	In Water* > Water Sludge		1-2 days		3-5 days	N/A
	In Bulk (Annex2) > Chatfield Full Quant.					
	In Dust > ASTM D5755		3-5 days		5-10 days	N/A
Pb by FLAA	Analyte > Pb Other		<6 hrs		2-3 days	N/A
	Matrix > Filter > MCE FG					
	Paint > by Area (mg/cm²) by Weight (ppm)					
	Soil >					
	Wipe >					
	Initial here certifying wipes used are ASTM E1792 compliant ____					
Fungi	Air Sample > Zefon Aller Other		<6 hrs		1-2 days	N/A
	Bulk > Sample Swab					
	Tape Lift > Qualitative (% & type)					
	Quantitative (type/cm2)					
Soot	ASTM D6602-03b	Optical	<6 hrs		1-2 days	N/A
		Optical & TEM	1-2 days		3-5 days	N/A
Other			Call		Call	

Sample # (1 per line)	Description/Location	Sample Date	Sample Time	Vol. or Area
1) Pb1	WHITE WALL	9/27/16		BY WEIGHT
2) Pb2	GRAY ON STAIRS			
3) Pb3	VARNISHED DOOR			
4) Pb4	GRAY PAINT ON WALL			
5) Pb5	SILVER PIPE			
6)				
7)				
8)				
9)				
10)				
11)				
12)				
13)				
14)				
15)				
16)				
17)				
18)				
19)				
20)				

1)Relinquished by:	Date: 9/27/16	Time: 2:50	3)Relinquished by:	Date:	Time:
2)Received by:	Date: 9/27/16	Time: 2:50	4)Received by:	Date:	Time:
* TEM Water: Sampler's name: Certified by State of Arizona	Print Name		Fiberquant assigned Job Number>	20160930	
Review of Analysis Request (Initials):				Page of	

Note: Data completed by client (including number and identity of samples) is assumed to be correct until it is verified at time of sample preparation.

FIBERQUANT ANALYTICAL SERVICES

Polarized Light Microscope (PLM) Analysis for Asbestos in Bulk Sample

JobNumber: 201609831

Client: AMEC FOSTER WHEELER

4600 E WASHINGTON STE# 600

PHOENIX, AZ 85034-0000

Office Phone: (602) 733-6000
FAX: (602) 733-6100

 # Samples: 45 PLM **Rec:** 9/27/2016 **Method:** EPA 600/R-93/116 The "New" Method; see below

Client Job: 14-2016-2027 **PO Number:** Pending

Report Date: 9/29/2016 **Date Analyzed:** 9/28/2016 **Routing Number:** -

Method and Analysis Information: **Fiberquant Internal SOP:** PLMn

Each bulk sample is first dissected under a 7-30x magnification stereo-microscope. This examination is used to determine the general type of sample, how many and what type of layers it has, and initial estimates of fiber types and quantities. Second, liquid media mounts are made of each layer - such mounts may be of selected fibers (used solely for identification purposes) or may be representative of the layer as a whole (used for quantitation purposes). The mounts may be made in a synthetic Canadian balsam, one of several solvents, or in refractive index oils (media of known refractive index). Generally, a variety of different mounts are made: some optimized for fiber visibility, some optimized for fiber identification, and some optimized for fiber quantitation. The mounted slides are then examined at 50-400x magnification on a Nikon Labphot-pol microscope. Optical characteristics are used to identify each observed fiber type; the optical data are contained for each sample on its detail analysis sheet, attached.

Current EPA and NESHAP regulations designate a result of <=1 % asbestos as "negative" and >1 % asbestos as "positive". Samples containing layers that have been determined to be "positive" may have to be handled differently during a renovation or demolition than samples whose layers have been determined to be "negative."

The method of fiber identification and quantitation is the "Standard Operating Procedures for the Analysis of Asbestos in Bulk Samples using Polarized Light Microscopy", Chapter 7 of the Quality Assurance and Management Manual. This SOP and its associated reporting have been designed to satisfy all requirements in both EPA Method 600/M4-82-020 (The Interim Method) and EPA Method 600/R-93/116 (The New Method). The Interim Method is the required method for AHERA (US EPA 40 CFR Pt. 763), but this method calls for the reporting of composited results of multi-layered samples that is no longer an acceptable reporting practice in most circumstances. Current EPA rules, such as NESHAP (US EPA 40CFT Pt. 61), as well as NVLAP accreditation policies, call for separate reporting for each layer of multi-layered samples. The New Method contains the same procedures for identification and quantification of asbestos as does the Interim Method, except that multi-layered samples are reported to comply with the latest US EPA rule. Fiberquant not only reports the asbestos content of each layer of multi-layered samples separately (satisfying current EPA and NVLAP reporting requirements), but Fiberquant also reports what percentage of the sample each layer comprises. Therefore, the results may be arithmetically composited to satisfy the reporting requirements of the Interim Method. The method of fiber quantitation is an estimation technique in which the analysts quantitation is routinely calibrated by reference quantitation standards, and which has been shown to be equivalent in precision and accuracy to point counting. Friability is estimated for the purposes of deciding when to point count. Friabilities determined in the field take precedence over those determined in the laboratory. Those sample layers which are friable and estimated by the analyst to contain <= 1% asbestos are point counted using 400 points. Such point counting is required by NESHAP (National Emission Standards for Hazardous Air Polutants, Nov. 1990) in order to rely on analytical results that are <= 1%. The coefficient of variation for the estimation quantitation technique is 100% in the range 0-5%. This means that PLM analysis is not capable of conclusively determining whether a layer containing close to 1% asbestos is actually "positive" or "negative". For this reason, Fiberquant refers to results where asbestos was detected but <= 1% as "borderline negative", and results where asbestos was >1 % but <= 2% as "borderline positive" to indicate the uncertainty in assigning a "positive" or "negative" label. In the sample summary, "ND" means that no asbestos was detected during the analysis. A "Tr" or "Trace" of asbestos reported is defined for our purposes as the detection of several asbestos fibers during the analysis; this level would be right at the limit of detection for the method. Trace is only reported on the analysis detail - in the summary a trace would be reported as <=1%. The limit of detection (the smallest % of asbestos that can be detected) varies greatly depending on the matrix in which the asbestos is found. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 1% stated in the method. During the analysis, the analyst, for Fiberquant identification purposes only, determines the "apparent sample type" and "apparent layer types." It must be emphasized that these types are only what is apparent. Often, different materials appear similar or identical after sampling, so the analyst may assign a type other than what was sampled.

Floor tiles present a special problem for PLM asbestos analysis. Floor tile can contain chrysotile fibers so thin that they cannot be resolved by optical methods. In such a case, we may observe a percentage of asbestos which is lower than the actual percentage, or not observe asbestos at all when some is present. For this reason, floor tiles reported as negative should be confirmed to be negative using transmission electron microscope (TEM) analysis. Likewise, vermiculite insulation materials containing traces of asbestiform asbestos present a problem for routine PLM analysis - the amphiboles are sometimes present in trace amounts inhomogeneously distributed. For this reason, loose vermiculite samples reported as negative should be confirmed to contain no amphibole using hydroseparation techniques.

The samples were analyzed under the following ongoing quality assurance program: Blank samples are routinely analyzed to maintain contamination-free materials. Each analyst has at least a bachelor's degree in physical science, and has also completed extensive training specific to asbestos analysis for 1-3 months before being allowed to analyze client samples. Qualitative reference samples are routinely analyzed to assure that analysts can identify asbestos and asbestos-look-alike fibers. Quantitative reference samples are routinely analyzed to calibrate and characterize the

estimation procedure. Microscope alignment is checked each day. Refractive index oils are calibrated at least quarterly. At least 10% of client samples are re-analyzed from scratch by a different analyst than the original, and any discrepancies are resolved for the sample and similar sample types before the results are reported. All quality checks performed for these samples were in control except as detailed in the "Analytical Notes" below. All analysts participate in interlab round robins and proficiency testing to assure competence. Fiberquant is accredited by NVLAP (Lab #101031) for the analysis of bulk samples for asbestos using PLM. Accreditation does not imply endorsement by the EPA, any other United States governmental agency or any private agency or association. Each lab analysis refers only to the sample tested, and may not, due to the sampling process, be representative of the material sampled. This report may not be reproduced except in full, without the approval of Fiberquant Analytical Services.

Some results may have been calculated using client supplied data, such as volume or area sampled, for which Fiberquant assumes no liability for accuracy.

Job Analysis Notes:

PLM Analysis Summary: **Job Number: 201609831** 14-2016-2027

Sample Number / Layer	Color	Apparent Layer Type *	Lab Number / Asbestos Results	Apparent Sample Type *	Positive Layer Yes or No
Sample # 1A			2016-09831- 1	Adhesive/caulk	Positive Layer? No
Layer # 1	tan	mastic	*no asbestos detected*		
Layer # 2	white	texture/joint compound	*no asbestos detected*		
Sample # 1B			2016-09831- 2	Adhesive/caulk	Positive Layer? No
Layer # 1	tan	mastic	*no asbestos detected*		
Layer # 2	white	texture/joint compound	*no asbestos detected*		
Sample # 1C			2016-09831- 3	Adhesive/caulk	Positive Layer? No
Layer # 1	tan	mastic	*no asbestos detected*		
Layer # 2	white	texture/joint compound	*no asbestos detected*		
Sample # 2A			2016-09831- 4	Cementitious	Positive Layer? No
Layer # 1	gray	concrete	*no asbestos detected*		
Layer # 2	off-white	miscellaneous	*no asbestos detected*		
Sample # 2B			2016-09831- 5	Cementitious	Positive Layer? No
Layer # 1	gray	paint	*no asbestos detected*		
Layer # 2	gray	concrete	*no asbestos detected*		
Sample # 2C			2016-09831- 6	Cementitious	Positive Layer? No
Layer # 1	gray	paint	*no asbestos detected*		
Layer # 2	gray	concrete	*no asbestos detected*		
Sample # 3A			2016-09831- 7	TSI	Positive Layer? Yes
Layer # 1	off-white	duct tape	*60-70% chrysotile asbestos*		
Sample # 3B			2016-09831- 8	TSI	Positive Layer? Yes
Layer # 1	off-white	duct tape	*50-60% chrysotile asbestos*		
Sample # 3C			2016-09831- 9	TSI	Positive Layer? Yes
Layer # 1	off-white	duct tape	*70-80% chrysotile asbestos*		
Sample # 4A			2016-09831- 10	TSI	Positive Layer? Yes
Layer # 1	off-white	insulation wrap	*no asbestos detected*		
Layer # 2	gray	insulation mud	*10-20% chrysotile asbestos*		
Sample # 4B			2016-09831- 11	TSI	Positive Layer? Yes
Layer # 1	off-white	insulation wrap	*no asbestos detected*		
Layer # 2	gray	insulation mud	*10-20% chrysotile asbestos*		
Sample # 4C			2016-09831- 12	TSI	Positive Layer? Yes
Layer # 1	off-white	paint	*no asbestos detected*		
Layer # 2	white	texture/joint compound	*no asbestos detected*		
Layer # 3	off-white	insulation wrap	*no asbestos detected*		
Layer # 4	gray	insulation mud	*10-20% chrysotile asbestos*		
Sample # 5A			2016-09831- 13	Cementitious	Positive Layer? No
Layer # 1	gray	concrete	*no asbestos detected*		
Sample # 5B			2016-09831- 14	Cementitious	Positive Layer? No
Layer # 1	gray	paint	*no asbestos detected*		
Layer # 2	gray	concrete	*no asbestos detected*		
Sample # 5C			2016-09831- 15	Cementitious	Positive Layer? No
Layer # 1	gray	paint	*no asbestos detected*		
Layer # 2	gray	concrete	*no asbestos detected*		
Sample # 6A			2016-09831- 16	Cementitious	Positive Layer? No
Layer # 1	gray	concrete	*no asbestos detected*		
Sample # 6B			2016-09831- 17	Cementitious	Positive Layer? No
Layer # 1	gray	concrete	*no asbestos detected*		
Sample # 6C			2016-09831- 18	Cementitious	Positive Layer? No
Layer # 1	gray	concrete	*no asbestos detected*		
Sample # 7A			2016-09831- 19	Cementitious	Positive Layer? No
Layer # 1	white	sealant	*no asbestos detected*		
Layer # 2	gray	concrete	*no asbestos detected*		
Sample # 7B			2016-09831- 20	Cementitious	Positive Layer? No
Layer # 1	white	sealant	*no asbestos detected*		
Layer # 2	gray	concrete	*no asbestos detected*		

Sample # **7C**			2016-09831- 21	Cementitious	Positive Layer? No
Layer # 1	white	sealant	*no asbestos detected*		
Layer # 2	gray	concrete	*no asbestos detected*		
Sample # **8A**			2016-09831- 22	Wall System	Positive Layer? No
Layer # 1	tan	texture/joint compound	*no asbestos detected*		
Sample # **8B**			2016-09831- 23	Wall System	Positive Layer? No
Layer # 1	tan	texture/joint compound	*no asbestos detected*		
Sample # **8C**			2016-09831- 24	Wall System	Positive Layer? No
Layer # 1	tan	texture/joint compound	*no asbestos detected*		
Sample # **9A**			2016-09831- 25	Adhesive/caulk	Positive Layer? No
Layer # 1	red	gasket	*no asbestos detected*		
Sample # **9B**			2016-09831- 26	Adhesive/caulk	Positive Layer? No
Layer # 1	red	gasket	*no asbestos detected*		
Sample # **9C**			2016-09831- 27	Adhesive/caulk	Positive Layer? No
Layer # 1	red	gasket	*no asbestos detected*		
Sample # **10A**			2016-09831- 28	Wall System	Positive Layer? No
Layer # 1	off-white	plaster	*no asbestos detected*		
Sample # **10B**			2016-09831- 29	Wall System	Positive Layer? No
Layer # 1	off-white	paint	*no asbestos detected*		
Layer # 2	white	plaster (top coat)	*no asbestos detected*		
Layer # 3	tan	plaster (scratch coat)	*no asbestos detected*		
Sample # **10C**			2016-09831- 30	Wall System	Positive Layer? No
Layer # 1	off-white	paint	*no asbestos detected*		
Layer # 2	white	plaster (top coat)	*no asbestos detected*		
Layer # 3	tan	plaster (scratch coat)	*no asbestos detected*		
Sample # **11A**			2016-09831- 31	Wall System	Positive Layer? No
Layer # 1	off-white	plaster	*no asbestos detected*		
Sample # **11B**			2016-09831- 32	Wall System	Positive Layer? No
Layer # 1	off-white	plaster	*no asbestos detected*		
Sample # **11C**			2016-09831- 33	Wall System	Positive Layer? No
Layer # 1	off-white	plaster	*no asbestos detected*		
Sample # **12A**			2016-09831- 34	Adhesive/caulk	Positive Layer? No
Layer # 1	red	sealant	*no asbestos detected*		
Sample # **12B**			2016-09831- 35	Adhesive/caulk	Positive Layer? No
Layer # 1	red	sealant	*no asbestos detected*		
Sample # **12C**			2016-09831- 36	Adhesive/caulk	Positive Layer? No
Layer # 1	red	sealant	*no asbestos detected*		
Sample # **13A**			2016-09831- 37	Wall System	Positive Layer? No
Layer # 1	off-white	plaster	*no asbestos detected*		
Sample # **13B**			2016-09831- 38	Wall System	Positive Layer? No
Layer # 1	off-white	plaster	*no asbestos detected*		
Sample # **13C**			2016-09831- 39	Wall System	Positive Layer? No
Layer # 1	off-white	plaster	*no asbestos detected*		
Sample # **14A**			2016-09831- 40	Wall System	Positive Layer? No
Layer # 1	white	powder	*no asbestos detected*		
Sample # **14B**			2016-09831- 41	Wall System	Positive Layer? No
Layer # 1	white	powder	*no asbestos detected*		
Sample # **14C**			2016-09831- 42	Wall System	Positive Layer? No
Layer # 1	white	powder	*no asbestos detected*		
Sample # **15A**			2016-09831- 43	Insulation	Positive Layer? Yes
Layer # 1	gray	gasket	*30-40% chrysotile asbestos*		
Sample # **15B**			2016-09831- 44	Insulation	Positive Layer? Yes
Layer # 1	gray	gasket	*30-40% chrysotile asbestos*		
Sample # **15C**			2016-09831- 45	Insulation	Positive Layer? Yes
Layer # 1	gray	gasket	*30-40% chrysotile asbestos*		

* Apparent Sample Types and Apparent Layer Types are as they appeared to the analyst. Since many types of materials appear similar after sampling damage, the apparent type of material may not be the actual type of material.

Sample 1A **Lab Number** 2016-09831- 1 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** Adhesive/caulk Non-fibrous Solid
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 6
Non-Fibrous Components (in approx. decreasing order): filler, polymer,

Layers

#	Layer Type	%	Color	Friability
1	mastic	40	tan	1
2	texture/joint compound	60	white	3
	Total %	100		

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations: Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using solvent.

Sample 1B **Lab Number** 2016-09831- 2 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** Adhesive/caulk Non-fibrous Solid
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 6
Non-Fibrous Components (in approx. decreasing order): filler, polymer,

Layers

#	Layer Type	%	Color	Friability
1	mastic	40	tan	1
2	texture/joint compound	60	white	3
	Total %	100		

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations: Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using solvent.

Sample 1C **Lab Number** 2016-09831- 3 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** Adhesive/caulk Non-fibrous Solid
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 6
Non-Fibrous Components (in approx. decreasing order): filler, polymer,

Layers

#	Layer Type	%	Color	Friability
1	mastic	40	tan	1
2	texture/joint compound	60	white	3
	Total %	100		

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations: Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using solvent.

Sample 2A **Lab Number** 2016-09831- 4 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** Cementitious Non-fibrous Solid
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 5
Non-Fibrous Components (in approx. decreasing order): powder, rock,

Layers

#	Layer Type	%	Color	Friability
1	concrete	80	gray	1
2	miscellaneous	20	off-white	1
	Total %	100		

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations	Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 2B **Lab Number** 2016-09831- 5 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** Cementitious Non-fibrous Solid
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 4
Non-Fibrous Components (in approx. decreasing order): powder, rock,

Layers

#	Layer Type	%	Color	Friability
1	paint	2	gray	1
2	concrete	98	gray	1
	Total %	100		

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations	Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 2C **Lab Number** 2016-09831- 6 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** Cementitious Non-fibrous Solid
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 4
Non-Fibrous Components (in approx. decreasing order): powder, rock,

Layers

#	Layer Type	%	Color	Friability
1	paint	2	gray	1
2	concrete	98	gray	1
	Total %	100		

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations	Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 3A **Lab Number** 2016-09831- 7 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** TSI Fibrous Mat
Homogeneous Yes **# Layers** 1 **Pos Layer?** Yes **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): binder, ,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber					
					Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	duct tape	100	off-white	3	60-70%	20-30%	-	-	-	-
	Total %	100		Overall %	60-70%	20-30%	-	-	-	-
				Fiber Identification:	chrysotile asbestos	cellulose fiber				

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations				
									Oil	Col Par	Col Per	RI Par	RI Per
1	chrysotile asbestos	W	A	N	N	L	+	P	1.550	db/ly	sb/o	1.561	1.553
2	cellulose fiber	W	F	N	N	H	+	U					
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps.

Sample 3B **Lab Number** 2016-09831- 8 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** TSI Fibrous Mat
Homogeneous Yes **# Layers** 1 **Pos Layer?** Yes **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): binder, ,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber					
					Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	duct tape	100	off-white	3	50-60%	30-40%	-	-	-	-
	Total %	100		Overall %	50-60%	30-40%	-	-	-	-
				Fiber Identification:	chrysotile asbestos	cellulose fiber				

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations				
									Oil	Col Par	Col Per	RI Par	RI Per
1	chrysotile asbestos	W	A	N	N	L	+	P	1.550	db/ly	sb/o	1.561	1.553
2	cellulose fiber	W	F	N	N	H	+	U					
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps.

Sample 3C **Lab Number** 2016-09831- 9 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** TSI Fibrous Mat
Homogeneous Yes **# Layers** 1 **Pos Layer?** Yes **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): binder, ,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber					
					Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	duct tape	100	off-white	3	70-80%	2-5%	-	-	-	-
	Total %	100		Overall %	70-80%	2-5%	-	-	-	-
				Fiber Identification:	chrysotile asbestos	cellulose fiber				

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations				
									Oil	Col Par	Col Per	RI Par	RI Per
1	chrysotile asbestos	W	A	N	N	L	+	P	1.550	db/ly	sb/o	1.561	1.553
2	cellulose fiber	W	F	N	N	H	+	U					
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps.

Sample 4A **Lab Number** 2016-09831- 10 **Sampled:** 9/27/2016 **Condition:** acceptable

Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** TSI Fibrous Mat

Homogeneous No **# Layers** 2 **Pos Layer?** Yes **# Sub-Samples** 5

Non-Fibrous Components (in approx. decreasing order): powder, powder,

Layers

#	Layer Type	%	Color	Friability
1	insulation wrap	20	off-white	2
2	insulation mud	80	gray	3
	Total %	100	**Overall %**	

Percents of Each Fiber					
Fib 1	**Fib 2**	**Fib 3**	**Fib 4**	**Fib 5**	**Fib 6**
40-50%	n.d.	-	-	-	-
n.d.	10-20%	-	-	-	-
5-10%	10-20%	-	-	-	-
Fiber Identification:	cellulose fiber	chrysotile asbestos			

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	cellulose fiber	W	F	N	N	H	+	U
2	chrysotile asbestos	W	A	N	N	L	+	P
3								
4								
5								
6								

Refractive Index Determinations

Oil	Col Par	Col Per	RI Par	RI Per
1.550	db/ly	sb/o	1.561	1.553

Sample Analytical Note

Procedure: tweased apart using forceps. Procedure: dissolution of polymer matrix using solvent.

Sample 4B **Lab Number** 2016-09831- 11 **Sampled:** 9/27/2016 **Condition:** acceptable

Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** TSI Fibrous Mat

Homogeneous No **# Layers** 2 **Pos Layer?** Yes **# Sub-Samples** 5

Non-Fibrous Components (in approx. decreasing order): powder, powder,

Layers

#	Layer Type	%	Color	Friability
1	insulation wrap	20	off-white	2
2	insulation mud	80	gray	3
	Total %	100	**Overall %**	

Percents of Each Fiber					
Fib 1	**Fib 2**	**Fib 3**	**Fib 4**	**Fib 5**	**Fib 6**
40-50%	n.d.	-	-	-	-
n.d.	10-20%	-	-	-	-
5-10%	10-20%	-	-	-	-
Fiber Identification:	cellulose fiber	chrysotile asbestos			

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	cellulose fiber	W	F	N	N	H	+	U
2	chrysotile asbestos	W	A	N	N	L	+	P
3								
4								
5								
6								

Refractive Index Determinations

Oil	Col Par	Col Per	RI Par	RI Per
1.550	db/ly	sb/o	1.561	1.553

Sample Analytical Note

Procedure: tweased apart using forceps. Procedure: dissolution of polymer matrix using solvent.

Sample 4C **Lab Number** 2016-09831- 12 **Sampled:** 9/27/2016 **Condition:** acceptable

Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** TSI Fibrous Mat

Homogeneous No **# Layers** 4 **Pos Layer?** Yes **# Sub-Samples** 10

Non-Fibrous Components (in approx. decreasing order): powder, powder,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber					
					Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	paint	1	off-white	1	n.d.	n.d.	-	-	-	-
2	texture/joint compound	5	white	3	n.d.	n.d.	-	-	-	-
3	insulation wrap	19	off-white	2	40-50%	n.d.	-	-	-	-
4	insulation mud	75	gray	3	n.d.	10-20%	-	-	-	-
	Total %	100	**Overall %**		5-10%	10-20%	-	-	-	-
			Fiber Identification:		cellulose fiber	chrysotile asbestos				

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations				
									Oil	Col Par	Col Per	RI Par	RI Per
1	cellulose fiber	W	F	N	N	H	+	U					
2	chrysotile asbestos	W	A	N	N	L	+	P	1.550	db/ly	sb/o	1.561	1.553
3													
4													
5													
6													

Sample Analytical Note

Procedure: tweased apart using forceps. Procedure: dissolution of polymer matrix using solvent.

Sample 5A **Lab Number** 2016-09831- 13 **Sampled:** 9/27/2016 **Condition:** acceptable

Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** Cementitious Non-fibrous Solid

Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3

Non-Fibrous Components (in approx. decreasing order): powder, rock,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber					
					Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	concrete	100	gray	1	n.d.	-	-	-	-	-
	Total %	100	**Overall %**		n.d.	-	-	-	-	-
			Fiber Identification:		none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations				
									Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note

Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 5B **Lab Number** 2016-09831- 14 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** Cementitious Non-fibrous Solid
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 4
Non-Fibrous Components (in approx. decreasing order): powder, rock,

Layers

#	Layer Type	%	Color	Friability
1	paint	2	gray	1
2	concrete	98	gray	1
	Total %	100	**Overall %**	

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations	Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 5C **Lab Number** 2016-09831- 15 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/28/2016 **An?** OK **Apparent Smp Type** Cementitious Non-fibrous Solid
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 4
Non-Fibrous Components (in approx. decreasing order): powder, rock,

Layers

#	Layer Type	%	Color	Friability
1	paint	2	gray	1
2	concrete	98	gray	1
	Total %	100	**Overall %**	

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations	Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 6A **Lab Number** 2016-09831- 16 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Cementitious Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, rock,

Layers

#	Layer Type	%	Color	Friability
1	concrete	100	gray	1
	Total %	100	**Overall %**	

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations	Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 6B **Lab Number** 2016-09831- 17 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Cementitious Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, rock,

Layers

#	Layer Type	%	Color	Friability
1	concrete	100	gray	1
	Total %	100		

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations

Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 6C **Lab Number** 2016-09831- 18 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Cementitious Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, rock,

Layers

#	Layer Type	%	Color	Friability
1	concrete	100	gray	1
	Total %	100		

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations

Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 7A **Lab Number** 2016-09831- 19 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Cementitious Non-fibrous Solid
Homogeneous Yes **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, rock,

Layers

#	Layer Type	%	Color	Friability
1	sealant	40	white	1
2	concrete	60	gray	1
	Total %	100		

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations

Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 7B **Lab Number** 2016-09831- 20 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Cementitious Non-fibrous Solid
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 4
Non-Fibrous Components (in approx. decreasing order): powder, rock,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber: Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	sealant	40	white	1	n.d.	-	-	-	-	-
2	concrete	60	gray	1	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations: Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 7C **Lab Number** 2016-09831- 21 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Cementitious Non-fibrous Solid
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 4
Non-Fibrous Components (in approx. decreasing order): powder, rock,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber: Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	sealant	40	white	1	n.d.	-	-	-	-	-
2	concrete	60	gray	1	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations: Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 8A **Lab Number** 2016-09831- 22 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, ,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber: Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	texture/joint compound	100	tan	3	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations: Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 8B **Lab Number** 2016-09831- 23 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, ,

Layers

#	Layer Type	%	Color	Friability
1	texture/joint compound	100	tan	3
	Total %	100		**Overall %**

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations	Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 8C **Lab Number** 2016-09831- 24 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, ,

Layers

#	Layer Type	%	Color	Friability
1	texture/joint compound	100	tan	3
	Total %	100		**Overall %**

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations	Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 9A **Lab Number** 2016-09831- 25 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Adhesive/caulk Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): filler, binder,

Layers

#	Layer Type	%	Color	Friability
1	gasket	100	red	1
	Total %	100		**Overall %**

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations	Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using solvent.

Sample 9B **Lab Number** 2016-09831- 26 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Adhesive/caulk Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): filler, binder,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	gasket	100	red	1	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using solvent.

Sample 9C **Lab Number** 2016-09831- 27 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Adhesive/caulk Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): filler, binder,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	gasket	100	red	1	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using solvent.

Sample 10A **Lab Number** 2016-09831- 28 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, rock, polymer

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	plaster	100	off-white	2	<=1%	-	-	-	-	-
	Total %	100		Overall %	<=1%	-	-	-	-	-
				Fiber Identification:	cellulose fiber					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations Oil	Col Par	Col Per	RI Par	RI Per
1	cellulose fiber	W	F	N	N	H	+	U					
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 10B **Lab Number** 2016-09831- 29 **Sampled:** 9/27/2016 **Condition:** acceptable

Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid

Homogeneous No **# Layers** 3 **Pos Layer?** No **# Sub-Samples** 7

Non-Fibrous Components (in approx. decreasing order): powder, rock, binder

Layers

#	Layer Type	%	Color	Friability
1	paint	5	off-white	1
2	plaster (top coat)	5	white	2
3	plaster (scratch coat)	90	tan	2
	Total %	100	**Overall %**	

Percents of Each Fiber

	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	n.d.	-	-	-	-	-
2	n.d.	-	-	-	-	-
3	<=1%	-	-	-	-	-
Overall %	<=1%	-	-	-	-	-
Fiber Identification:	cellulose fiber					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	cellulose fiber	W	F	N	N	H	+	U
2								
3								
4								
5								
6								

Refractive Index Determinations

Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note

Procedure: tweased apart using forceps. Procedure: dissolution of paint matrix using solvent. Procedure: dissolution of plaster matrix using acid.

Sample 10C **Lab Number** 2016-09831- 30 **Sampled:** 9/27/2016 **Condition:** acceptable

Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid

Homogeneous No **# Layers** 3 **Pos Layer?** No **# Sub-Samples** 7

Non-Fibrous Components (in approx. decreasing order): powder, rock, binder

Layers

#	Layer Type	%	Color	Friability
1	paint	1	off-white	1
2	plaster (top coat)	1	white	2
3	plaster (scratch coat)	98	tan	2
	Total %	100	**Overall %**	

Percents of Each Fiber

	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	n.d.	-	-	-	-	-
2	n.d.	-	-	-	-	-
3	<=1%	-	-	-	-	-
Overall %	<=1%	-	-	-	-	-
Fiber Identification:	cellulose fiber					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	cellulose fiber	W	F	N	N	H	+	U
2								
3								
4								
5								
6								

Refractive Index Determinations

Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note

Procedure: tweased apart using forceps. Procedure: dissolution of paint matrix using solvent. Procedure: dissolution of plaster matrix using acid.

Sample 11A **Lab Number** 2016-09831- 31 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, rock, polymer

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	plaster	100	off-white	2	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 11B **Lab Number** 2016-09831- 32 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, rock, polymer

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	plaster	100	off-white	2	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 11C **Lab Number** 2016-09831- 33 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, rock, polymer

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	plaster	100	off-white	2	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 12A **Lab Number** 2016-09831- 34 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Adhesive/caulk Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): filler, binder,

Layers

#	Layer Type	%	Color	Friability
1	sealant	100	red	1
	Total %	100		

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations	Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using solvent.

Sample 12B **Lab Number** 2016-09831- 35 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Adhesive/caulk Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): filler, binder,

Layers

#	Layer Type	%	Color	Friability
1	sealant	100	red	1
	Total %	100		

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations	Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using solvent.

Sample 12C **Lab Number** 2016-09831- 36 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Adhesive/caulk Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): filler, binder,

Layers

#	Layer Type	%	Color	Friability
1	sealant	100	red	1
	Total %	100		

Percents of Each Fiber	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
	n.d.	-	-	-	-	-
Overall %	n.d.	-	-	-	-	-
Fiber Identification:	none					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext
1	none							
2								
3								
4								
5								
6								

Refractive Index Determinations	Oil	Col Par	Col Per	RI Par	RI Per

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using solvent.

Sample 13A **Lab Number** 2016-09831- 37 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, rock, polymer

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber					
					Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	plaster	100	off-white	2	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations				
									Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 13B **Lab Number** 2016-09831- 38 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, rock, polymer

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber					
					Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	plaster	100	off-white	2	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations				
									Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 13C **Lab Number** 2016-09831- 39 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, rock, polymer

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber					
					Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	plaster	100	off-white	2	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations				
									Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 14A **Lab Number** 2016-09831- 40 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, ,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber: Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	powder	100	white	4	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations: Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 14B **Lab Number** 2016-09831- 41 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, ,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber: Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	powder	100	white	4	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations: Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 14C **Lab Number** 2016-09831- 42 **Sampled:** 9/27/2016 **Condition:** acceptable
Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Wall System Non-fibrous Solid
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, ,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber: Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	powder	100	white	4	n.d.	-	-	-	-	-
	Total %	100		Overall %	n.d.	-	-	-	-	-
				Fiber Identification:	none					

Fibers		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations: Oil	Col Par	Col Per	RI Par	RI Per
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
Procedure: tweased apart using forceps. Procedure: dissolution of matrix using dilute HCl acid.

Sample 15A **Lab Number** 2016-09831- 43 **Sampled:** 9/27/2016 **Condition:** acceptable

Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Insulation Fibrous Mat

Homogeneous Yes **# Layers** 1 **Pos Layer?** Yes **# Sub-Samples** 3

Non-Fibrous Components (in approx. decreasing order): binder, ,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber					
					Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	gasket	100	gray	1	30-40%	-	-	-	-	-
	Total %	100		Overall %	30-40%	-	-	-	-	-
				Fiber Identification:	chrysotile asbestos					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations				
									Oil	Col Par	Col Per	RI Par	RI Per
1	chrysotile asbestos	W	A	N	N	L	+	P	1.550	db/ly	sb/o	1.561	1.553
2													
3													
4													
5													
6													

Sample Analytical Note

Procedure: tweased apart using forceps.

Sample 15B **Lab Number** 2016-09831- 44 **Sampled:** 9/27/2016 **Condition:** acceptable

Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Insulation Fibrous Mat

Homogeneous Yes **# Layers** 1 **Pos Layer?** Yes **# Sub-Samples** 3

Non-Fibrous Components (in approx. decreasing order): binder, ,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber					
					Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	gasket	100	gray	1	30-40%	-	-	-	-	-
	Total %	100		Overall %	30-40%	-	-	-	-	-
				Fiber Identification:	chrysotile asbestos					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations				
									Oil	Col Par	Col Per	RI Par	RI Per
1	chrysotile asbestos	W	A	N	N	L	+	P	1.550	db/ly	sb/o	1.561	1.553
2													
3													
4													
5													
6													

Sample Analytical Note

Procedure: tweased apart using forceps.

Sample 15C **Lab Number** 2016-09831- 45 **Sampled:** 9/27/2016 **Condition:** acceptable

Analyzed By MCJ 9/29/2016 **An?** OK **Apparent Smp Type** Insulation Fibrous Mat

Homogeneous Yes **# Layers** 1 **Pos Layer?** Yes **# Sub-Samples** 3

Non-Fibrous Components (in approx. decreasing order): binder, ,

Layers

#	Layer Type	%	Color	Friability	Percents of Each Fiber					
					Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	gasket	100	gray	1	30-40%	-	-	-	-	-
	Total %	100		Overall %	30-40%	-	-	-	-	-
				Fiber Identification:	chrysotile asbestos					

Fibers

		Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Refractive Index Determinations				
									Oil	Col Par	Col Per	RI Par	RI Per
1	chrysotile asbestos	W	A	N	N	L	+	P	1.550	db/ly	sb/o	1.561	1.553
2													
3													
4													
5													
6													

Sample Analytical Note

Procedure: tweased apart using forceps.

Fr=Friability: 1=very non-friable; 2= non-friable; 3=friable; 4=highly friable
Colors: B=black;BL=blue;BR=brown;CL=clear;G=Green;GY=gray;OR=orange;OW=off-white;PN=pink;PU=purple;R=red;TN=tan;W=white;Y=yellow;V=various
Fiber Morphology: A=fine fibers/bundles, white, sinewy, flexible; B=fine fibers/bundles, w-br, straight, broomed ends; C=fine fibers/bundles, blue, straight, broomed ends; D=fine to coarse fibers, CL-B, brittle; E=coarse fibers,CL or dyed, striated; F=coarse fibers or splinters, W-BR, ribbon-like; G=lath-like or shards, low aspect ratio, may taper
Iso=isotropism - may be yes or no; Pleo=pleochroism - may be yes or no; Bi=birefringence - may be None, Low, Medium or High
Elg=sign of elongation - may be +, - or B (both); Ext=extinction - may be Parallel, Oblique, None or Undulating; Oil=medium used to for dispersion staining
Col Par=dispersion staining colors parallel to the fiber (fiber/halo): b/w=black/white; dg/py=dark gray/pale yellow; vg/y=violet gray/yellow; db/ly=dark blue/lemon yellow; vb/g= vivid blue/gold; sb/o=sky blue/orange; pb/r=pale blue/red; gb/dr=gray blue/dark red; w/b=white/black. Col Perp=same only perpendicular to fiber.
RI Par=refractive index parallel to fiber; RI Perp=refractive index perpendicular to fiber

Analyst: MARK C. JEFFERSON

Printed: 29-Sep-16

Original Print Date: 29-Sep-16

Larry S. Pierce, Approved Accreditation Signatory

FIBERQUANT ANALYTICAL SERVICES

Fiberquant Analytical Services 5025 S. 33rd St.;
Phoenix, AZ 85040; Phone: 602-276-6139; FAX: 602-276-4558;
info@fiberquant.com

Analysis Request/Chain-of-Custody Form

Submitted by (Company): AMEC FOSTER WHEELER
Address: 4600 E. WASHINGTON STE 600
City, State, Zip Code: PHX AZ
Phone: | FAX:
Email:

Invoice to (Company): AMEC FW
Address:
City, State, Zip Code:
Phone: | FAX:

Contact (print): PAM WALRATH
Sampled by (signature):
Job Number or Project Name: 14-2016-2027
PO Number:

<Analysis Method Requested> ONLY ONE METHOD per COC			Turn-around-time (circle one) Rush		Norm	Ext.
Asbestos by PLM	Method > Improved	Interim	Urgent Rush <3 hrs	<6 hrs	1-3 days	15-30 days
	Analyze > All	ATPF				
	If ATPF then > by Layer	by Sample				
	Single Layer Protocol > Yes	No				
Fibers by PCM	Method > 7400 (Area)	ORM (Personal)	<4 hrs		24 hrs	-
Asbestos by TEM	In Air > AHERA	Mod. AHERA	<6 hrs		24 hrs	3-5 days
	In Water* > Water	Sludge	1-2 days		3-5 days	N/A
	In Bulk (Annex2) > Chatfield	Full Quant.				
	In Dust > ASTM D5755		3-5 days		5-10 days	N/A
Pb by FLAA	Analyte > Pb	Other	<6 hrs		2-3 days	N/A
	Matrix > Filter > MCE	FG				
	Paint > by Area (mg/cm²)	by Weight (ppm)				
	Soil >					
	Wipe >					
	Initial here certifying wipes used are ASTM E1792 compliant					
Fungi	Air Sample > Zefon	Aller Other	<6 hrs		1-2 days	N/A
	Bulk > Sample	Swab				
	Tape Lift > Qualitative (% & type)					
	Quantitative (type/cm2)					
Soot	ASTM D6602-03b	Optical	<6 hrs		1-2 days	N/A
		Optical & TEM	1-2 days		3-5 days	N/A
Other			Call		Call	

Sample # (1 per line)	Description/Location	Sample Date	Sample Time	Vol. or Area
1) 1 A-C	TAN WALL ADHESIVE	9/27/16		
2) 2 A-C	CONCRETE WALL			
3) 3 A-C	PIPE RUN INSULATION - STRAIGHT			
4) 4 A-C	PIPE ELBOWS			
5) 5 A-C	STAIRS			
6) 6 A-C	FOUNDATION			
7) 7 A-C	CONCRETE DECK - FENTRY			
8) 8 A-C	WALL PATCH - FENTRY			
9) 9 A-C	GASKETS - RED			
10) 10 A-C	PLASTER CEILING - BOILER ROOM			
11) 11 A-C	PLASTER PATCH - BOILER ROOM			
12) 12 A-C	WINDOW PUTTY			
13) 13 A-C	TROWELED PLASTER			
14) 14 A-C	WHITE PATCH - CEILING & WALL			
15) 15 A-C	GASKETS - GRAY			
16)				
17)				
18)				
19)				
20)				

1)Relinquished by:	Date: 9/27/16	Time:	3)Relinquished by:	Date:	Time:
2)Received by:	Date: 9/27/16	Time: 959	4)Received by:	Date:	Time:
* TEM Water: Samplers name required by State of Arizona	Print Name		Fiberquant assigned Job Number>	20160983 1	
Review of Analysis Request (Initials):				Page of	

Note: Data completed by client (including number and identity of samples) is assumed to be correct until it is verified at time of sample preparation.

RECEIVED
AUG 31 2022
By

30th August 2022

Hello Teresa,

Please find enclosed ...Material I have in my file here at Bullion. I'm sure the Town of Miami has more complete documentation if needed. Hopefully, some of this will be helpful for you.

I thought Jennie's comment on incorporating the crawl space into the basement project was interesting. Time has passed, budgets changed, maybe now is the time to finish the project off and clean up the remaining mess.

By the way - Bullion Plaza is leased from the Town of Miami by BPCCM, and I am not employed by the Town, although we work together at various times. So as we move forward we will need to bring them into the conversation.

Enjoyed talking with you and thanks for your time.

Regards,

Thomas N. Foster
Executive Director
Bullion Plaza Cultural Center & Museum
PO Box 786
Miami, Arizona 85539

Mobile: 602.432.7474

BULLION PLAZA CULTURAL CENTER & MUSEUM
928-473-3700

2016

ADEQ

Basement

$7,835.00

Town of Miami

Bullion Plaza Museum

Vikins

Native

Vikins

CRS

REMEDIATION, EMERGENCY AND CONSTRUCTION SERVICES

CRS 24/7 Emergency Response

333 East Osborn Road
Suite 300
Phoenix, AZ 85012

Cell: 602-478-7672

KEN KNUTSON
Senior Estimator
ken.knutson@crs-info.com
www.crs-info.com
Arizona Contractors License 275441
1GPA #14-156 / AZ State Contract Number ADSP012-033251

TOWN OF MIAMI
"Copper Center of the World"

500 W. Sullivan St.
Miami, AZ 85539
928-473-4403

July 22, 2016

Jennie Curé
Brownfields Coordinator
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, AZ 85007

Dear Ms. Curé

The Town of Miami requests funding in the amount of $7, 835 for a State Response Grant (SRG) from the Arizona Department of Environmental Quality (ADEQ) Brownfields Program to perform an asbestos and lead based paint survey on the basement of the Historic Bullion Plaza School Building (BPS). The BPS is located on a 2.0 acre property at 150 N. Plaza Circle, Miami, AZ. The site is not located in a WQARF or Superfund area and the Town of Miami is not a responsible party for the contamination. ADEQ will be the project manager under the Arizona Brownfields Response Contract (ABRC).

The Site

The site is located at 150 N Plaza Circle, Miami, Arizona. The site is 2.0 acres with Gila County assessor parcel number 204-15-012A. The Town of Miami currently owns the property, having purchased it from the Miami Unified School District #40 in 1997.

The Redevelopment

The BPS, which is a historical structure listed on the National Registry of Historic Places, is significant for its association with the history of Mexican American and Native American school segregation in Arizona and as an example of late Neo-Classical Revival architecture in public buildings in Miami. The BPS currently houses the Bullion Plaza Cultural Center and Museum (BPCCM), a 501(c)3 non-profit organization. The Museum's exhibits document the economic, social and cultural history of Miami. The BPCCM offers the use of their meeting and conference rooms for public and commercial events. The BPCCM regularly hosts a speaking series on historical and educational topics. The BPCCM, working with the Town of Miami has sought and received grants that have been used to abate hazardous materials throughout the building, restore the interior and exterior of the building and create new exhibits for the Museum. The basement of BPS has remained off limits due the dangers posed by asbestos and lead paint contamination. The future use of the BPS basement following abatement of asbestos and lead-based paint is to renovate the building allowing the Museum to expand its exhibit space to provide a site for a proposed underground mine tunnel display. The Town and the BPCCM believe that the renovation of the Bullion Plaza School will generate interest in preservation of historical buildings in Miami leading to the development of commercial businesses and other viable activities benefiting the community.

Dale Metz, Town of Miami Civil Engineering Technician, will be the key contact person to receive site update and any correspondence form ADEQ.

Fwd: Bullion Plaza School Grant

Friday, July 21, 2017 3:20 PM

From: "D Metz" <dmetzmiami@gmail.com>

To: "Tom Foster" <az.terr1912@yahoo.com>

---------- Forwarded message ----------
From: **Jennie E. Curé** <Cure.Jennie@azdeq.gov>
Date: Tue, Jul 18, 2017 at 2:32 PM
Subject: RE: Bullion Plaza School Grant
To: D Metz <dmetzmiami@gmail.com>

Hello Dale,

I have $62,850 in the budget for the abatement project on the museum. I am working on getting projects lined up and would like to be able to receive your grant request the week of August 14. Please send in the request letter asking for the $62,850 and I can start the paperwork that week. If you put it in the mail on Friday, August 11 that should work. Use the previous letter for a template but ask for the $62,850 for asbestos abatement.

Please do not hesitate to contact me with any questions or concerns you may have.

Sincerely,

Jennie

From: D Metz [mailto:dmetzmiami@gmail.com]
Sent: Tuesday, July 18, 2017 2:25 PM
To: Jennie E. Curé <Cure.Jennie@azdeq.gov>
Subject: Bullion Plaza School Grant

Hi Jennie,

Tom Foster is applying for a USDA grant to install an elevator in the building to make all levels handicapped accessible. If he can show other money or grants being invested in the building it will improve the chances for approval. Are there any funds set aside for the upcoming abatement project that we can show as an authorized grant? If so what amount can we list? Thanks for any help you can provide.

Regards,

Dale Metz
Town of Miami

Subject: Proposal - Bullion Plaza Boiler & Storage Abatement

From: Kristy Huggins (KHuggins@nativeaz.com)

To: az.terr1912@yahoo.com;

Cc: JRiggs@nativeaz.com; DKnutson@nativeaz.com;

Date: Monday, March 30, 2015 9:39 AM

Good morning Mr. Foster,

Native's proposal for asbestos abatement at the Bullion Plaza is attached. Please contact us with any questions.

Thank you,

Kristy Huggins

Project Manager

Native Environmental, LLC

602.254.0122 Phone

602.254.0144 Fax

602.570.3115 Cell

khuggins@nativeaz.com

NATIVE Environmental, LLC

"Environmental Solutions for the Next Generation"

Agreement Between Contractor and Owner

Native Environmental, LLC
3250 S. 35th Ave. - Phoenix, AZ 85009
Office (602) 254-0122 Fax (602) 254-0144

Bid Number: JR15-123

THIS AGREEMENT, entered into Monday, March 30, 2015 by and between Native Environmental and ATTN:

Client Information	Project Information
Thomas N. Foster **Executive Director** **Bullion Plaza Cultural Center & Museum** **az.terr1912@yahoo.com**	**Project Name: Boiler & Storage Abatement** **Project Location: Bullion Plaza**

THE PARTIES AGREE TO THE FOLLOWING:

1. **Scope of Work:** Native Environmental agrees to provide the following Contracting Services:

A. Basement Stairwell

Remove and dispose of bags containing asbestos material. HEPA vacuum and wet-wipe the area

Bid Price	Tax	Other	Total
$1,150.00	N/A	N/A	$1,150.00

B. Boiler – Asbestos Abatement

Bid Price	Tax	Other	Total
$9,700.00	N/A	N/A	$9,700.00

C. Boiler – Cut & Remove

Bid Price	Tax	Other	Total
$4,300.00	N/A	N/A	$4,300.00

D. Room 3 – NW Room: Remove 20 LF of fallen 8" TSI. HEPA vac and wet-wipe all surfaces.
NOTE: This room should be immediately sealed due to the high amounts of airborne asbestos

Bid Price	Tax	Other	Total
$3,300.00	N/A	N/A	$3,300.00

E. Room 4 – NE Storage

Remove 30 LF of 8" TSI. HEPA vac and wet-wipe all surfaces

Bid Price	Tax	Other	Total
$2,300.00	N/A	N/A	$2,300.00

2. **Price includes:** All labor, materials, personal protective equipment, air monitoring, vehicles, transportation, and travel/per diem as applicable to the scope of work.

3. **Schedule:** This job will be performed Monday through Friday, during the hours necessary to meet your schedule unless prior arrangements have been made. Please keep in mind that weekend and holiday work may incur additional overtime costs.

4. Payment for Invoices is due 30 days from the invoice date. Interest shall accrue on past due invoices at 2% per month or no greater than 24% annually on all unpaid invoices.

5. Any alterations or deviations from the specified scope of work will be completed upon written consent from authorized personnel. This proposal shall become part of the contract document and by signing, you agree to all conditions listed within.

6. Bid price is good for 60 calendar days, at which time Owner and Native Environmental can confer with one another on current market price.

NOTES:

A. Compliance with Federal, State and Local regulations.
B. Per occurrence $5 million A++ rated Insurance.
C. Arizona Contractors License #161563
D. MSHA Contractor ID U916

Native Environmental appreciates the opportunity to bid on your work. If you have any questions or concerns regarding the content of this proposal please do not hesitate one of our Estimators

_____

Submitted by:
Jon Riggs
Native Environmental, LLC

_____

Accepted by:

Date: _____

Fwd: Proposal with abatement contractor price included Wednesday, January 4, 2017 1:58 PM

From: "D Metz" <dmetzmiami@gmail.com>

To: "Tom Foster" <az.terr1912@yahoo.com>

1 Files 57KB Download All

PDF 57KB

PV16-12-10 Miami Bullion.pdf

Save

Tom,

Here is the proposal for the BPM&CC abatement. Let me know if you have any questions.

Dale

---------- Forwarded message ----------
From: **Walrath, Pam** <pam.walrath@amecfw.com>
Date: Wed, Jan 4, 2017 at 1:22 PM
Subject: Proposal with abatement contractor price included
To: "dmetzmiami@gmail.com" <dmetzmiami@gmail.com>
Cc: "Jennie E. Curé" <Cure.Jennie@azdeq.gov>, "Ostapuk, Tim" <Tim.Ostapuk@amecfw.com>

Dale,
Please find attached the proposal for the Miami Bullion Cultural Center Basement abatement work.
Please let me know if you have any questions and Happy New Year!

Best Regards,

Pamela Walrath
Environmental Scientist
AMEC Foster Wheeler
Environment & Infrastructure Americas
4600 E. Washington Street, Suite 600
Phoenix, Az 85034-1917, USA
T + 1 602-733-6091 M + 480-217-1225
pam.walrath@amecfw.com
www.amecfw.com

amec foster wheeler

Begin June July 2017
Basement Abatement
Called Dale Metz OK

Proposal
Time and Materials Price

Amec Foster Wheeler Environment & Infrastructure, Inc.
4600 East Washington Street, Suite 600
Phoenix, Arizona 85034
Phone: 602-733-6000 Fax: 602-733-6110

amec foster wheeler

PARTIES

This project coordinated this 4th day of January 2017, between:

Town of Miami	and	**Amec Foster Wheeler Environment & Infrastructure, Inc.**
500 West Sullivan Street		4600 East Washington Street, Suite 600
Miami, Arizona 85539		Phoenix, Arizona 85034
Attn: Mr. Dale Metz		Attn: Mrs. Pam Walrath
hereinafter called "Client"		hereinafter called "Amec Foster Wheeler"

PROJECT

Client engages Amec Foster Wheeler Environment and Infrastructure, Inc. (Amec Foster Wheeler) to provide services in connection with this proposal, PV16-12-10 dated January 4, 2017.

For the following site:

Asbestos and Lead Abatement Oversight
Miami Bullion Plaza and Cultural Center – Basement (Phase 1) & Crawlspace (Phase 2)
150 North Plaza Circle, Miami AZ

SCOPE OF SERVICES

Amec Foster Wheeler understands that the Client is requesting asbestos abatement and lead stabilization oversight of materials located in the four rooms of the basement and crawlspaces of Miami Bullion Cultural Center (the site). The abatement and stabilization will be performed in two phases: Phase I will include materials located in the four rooms of the basement and Phase II will include the pipe run insulation located in the crawlspaces.

Phase I Materials:

- Material #3 (Thermal Systems Insulation (TSI), Straight Runs – Approximately 400 linear feet (lin. ft.) – Throughout Basement and Crawlspaces.
- Material #4 (Thermal Systems Insulation (TSI), Elbows) - Approximately 15 each – Throughout Basement Spaces (including confined space).
- Material #15 (Miscellaneous, Category I Non-Friable): Gray Gaskets – Approximately 2 each – Boiler Room on Equipment.
- Assumed ACM (Thermal Systems Insulation (TSI), Boiler Insulation Wrap – Approximately 2 each – On Boiler Equipment.
- Assumed ACM (Miscellaneous, Category I Non-Friable), Disposal Bags of Removed Building Material – Approximately 20 each
- Lead containing white wall (200 ppm)
- Lead containing gray on stairs (3,800 ppm)
- Lead containing varnished door (3,900 ppm)
- Lead containing gray paint on wall (1,600 ppm)
- Lead containing silver pipe (1,700 ppm)

Phase II Materials:

- Material #3 (Thermal Systems Insulation (TSI), Straight Runs – Approximately 400 linear feet (lin. ft.) – Throughout Basement and Crawlspaces.
- Material #4 (Thermal Systems Insulation (TSI), Elbows) - Approximately 15 each – Throughout Basement Spaces (including confined space).

For each phase of work Amec Foster Wheeler will perform the following tasks:

Task 1
Amec Foster Wheeler will attend a pre-abatement meeting on-site. The meeting will include members of Town of Miami, Arizona Department of Environmental Quality and the abatement contractor.

Amec Foster Wheeler will prepare an Asbestos and Lead Abatement Work Plan, which will include sections relating to the summary of work, job site administration, codes and regulations, worker protection, work area preparation, asbestos and lead removal procedures, waste disposal, project clearance and submittals. Amec Foster Wheeler will provide copies of the Asbestos and Lead Abatement Work Plan to the asbestos and lead abatement contractor.

Task 2
Amec Foster Wheeler will provide an Asbestos Hazard Emergency Response Act-certified Contractor/Supervisor (C/S) to perform full-time oversight. The C/S will observe abatement contractor's work while abatement activities are being performed. During the removal and cleaning phases of the abatement, Amec Foster Wheeler will collect area air samples from outside the work Area to provide an indication of the effectiveness of the contractor's abatement and cleaning methods. Air Samples will be analyzed by Fiberquant Analytical Services in general accordance with the NIOSH 7400 Method for Phase Contrast Microscopy (PCM) on a RUSH turnaround, to determine airborne fiber concentrations. The abatement contractor will be responsible for personal air monitoring required for the health and safety of its own workers.

Following the abatement contractor's completion of abatement activities, Amec Foster Wheeler will conduct a visual inspection of the containment area to determine that all surfaces are free of debris, residue, dust, or other visible matter. The final visual will be performed in general accordance with the "Standard Practice for Visual Inspection of Asbestos Abatement Projects," ASTM Designation: E 1368-14.
After the C/S determines that the containment areas are visually clean, final clearance air samples will be collected, which will be analyzed using PCM methodology in accordance with the method specified in the Work Procedure. Following visual and final air clearances, Amec Foster Wheeler will document and ensure the completion of any punch list items.

Task 3
At the completion of the project, Amec Foster Wheeler will document the abatement activities in a Final Report of Abatement. The report will include a summary project information, contractor abatement reports and close-out documentation, field and photographic documentation, air sampling results, and consultant's accreditations. Amec Foster Wheeler will provide the Client with one original and one electronic copy of the final report.

Client agrees that all services not expressly included are excluded from Amec Foster Wheeler's Scope of Services.

COMPENSATION

Phase 1 – Cost Estimate for Miami Bullion Plaza and Cultural Center – Basement				
Task 1 – Pre-Abatement Meeting and Development of Abatement Work Plan	**Units**	**Quantity**	**Unit Cost**	**Totals**
Professional Level III	hour	8	$126.00	$1,008.00
Professional Level II	hour	12	$94.50	$1,134.00
Support Staff III	hour	4	$63.00	$252.00
Task 1 Subtotal				**$2,394.00**
Task 2 - Asbestos Removal and Lead Stabilization Oversight	**Units**	**Quantity**	**Unit Cost**	**Totals**
Professional Level III	hour	8	$126.00	$1,008.00

Professional Level II	hour	120	$94.50	$11,340.00
Support Staff III	hour	6	$63.00	$378.00
Travel Expenses	lump	1	$1,200	$1,200.00
PLM Analysis	each	45	$17.25	$776.25
Shipping Costs	lump	1	$200.00	$200.00
Task 2 Subtotal				**$14,902.25**
Task 3 - Report Preparation	**Units**	**Quantity**	**Unit Cost**	**Totals**
Professional Level III	hour	4	$126.00	$504.00
Professional Level II	hour	10	$94.50	$945.00
Support Staff III	hour	8	$63.00	$504.00
Task 3 Subtotal				**$1,953.00**
Amec Foster Wheeler Phase 1 TOTAL				**$19,249.25**

Phase 2 – Cost Estimate for Miami Bullion Plaza and Cultural Center – Crawlspace (Phase 2)				
Task 1 – Pre-Abatement Meeting and Development of Abatement Work Plan	**Units**	**Quantity**	**Unit Cost**	**Totals**
Professional Level III	hour	8	$126.00	$1,008.00
Professional Level II	hour	12	$94.50	$1,134.00
Support Staff III	hour	6	$63.00	$378.00
Task 1 Subtotal				**$2,520.00**
Task 2 - Asbestos Removal	**Units**	**Quantity**	**Unit Cost**	**Totals**
Professional Level III	hour	8	$126.00	$1,008.00
Professional Level II	hour	130	$94.50	$12,285.00
Support Staff III	hour	8	$63.00	$504.00
Travel Expenses	lump	1	$1,200	$1,200.00
PLM Analysis	each	45	$17.25	$776.25
Shipping Costs	lump	1	$200.00	$200.00
Task 2 Subtotal				**$15,973.25**
Task 3 - Report Preparation	**Units**	**Quantity**	**Unit Cost**	**Totals**
Professional Level III	hour	4	$126.00	$504.00
Professional Level II	hour	10	$94.50	$945.00
Support Staff III	hour	8	$63.00	$504.00
Task 3 Subtotal				**$1,953.00**
TOTAL				**$20,446.25**
Amec Foster Wheeler Phase 1 and Phase 2 Total				***$39,695.50***
Total Project Cost's Breakdown				
CRS Environmental Phase 1				*$34,987.00*
CRS Environmental Phase 2				*$112,000.00*
CRS Phase 1 and Phase 2 TOTAL				*146,987.00*
Project Estimate with Amec Foster Wheeler and CRS Environmental Totals TOTAL				***$186,682.50***

Amec Foster Wheeler's fees will be based on our Statewide Environmental Consulting Services for Asbestos and Lead No. **ADEQ17-140276**. This proposal is valid for 90 days from the date of issuance. If notice to proceed is received after that period, Amec Foster Wheeler reserves the right to review this proposal and revise costs in response to changed assumptions or increases in material or labor costs as a result of economic changes.

Fwd: Bullion Plaza School Monday, December 19, 2016 5:10 PM

From: "D Metz" <dmetzmiami@gmail.com>

To: "Tom Foster" <az.terr1912@yahoo.com>

Tom, FYI

Dale

---------- Forwarded message ----------
From: **Jennie E. Curé** <Cure.Jennie@azdeq.gov>
Date: Mon, Dec 19, 2016 at 2:08 PM
Subject: RE: Bullion Plaza School
To: D Metz <dmetzmiami@gmail.com>
Cc: "pam.walrath@amecfw.com" <pam.walrath@amecfw.com>

Dale,

I have bids in from three contractors for the abatement of the basement and crawl space. The crawl space will be a difficult and expensive project and I do not believe a good use of the Brownfields grant funds, therefore when we do the project we will be providing funding for the basement only. The basement project bid from CRS for the abatement was the most accurate and reasonable at $34,987.00. The oversight portion of the project was bid at $19,250 by AMEC. Due to the total combined cost of $54,237.00 for the basement project I will award funding with FY18 grant funds which will be available in July, 2017. As we approach that date I will be in touch to request an application for the project. If anything changes with the status of currently available funds I will notify you.

Happy Holidays,

Sincerely,

Jennie

Jennie E. Curé
Brownfields Coordinator
Voluntary Remediation Program Unit/Remedial Projects Section
AZ Department of Environmental Quality
1110 W. Washington St.
Phoenix, AZ 85007
(602) 771-2296
jec@azdeq.gov
www.azdeq.gov
Environmental Resources Roadshows support citizen efforts to maintain and beautify community.
Learn more here.

From: D Metz [mailto:dmetzmiami@gmail.com]
Sent: Monday, December 19, 2016 1:50 PM
To: Jennie E. Curé <Cure.Jennie@azdeq.gov>
Subject: Bullion Plaza School

Hi Jennie,

I have been out of Town for the last two weeks and I haven't heard from anyone since the walk thru. Has there been any progress on the abatement bids?

Dale Metz
Town of Miami

Compose

ADEQ
Arizona Department
of Environmental Quality

Another Project Partially Funded By The Arizona Department of Environmental Quality's Brownfields Program

ADEQ Brownfields Grant: Town of Miami
Asbestos and Lead Based Paint Abatement
Old Bullion Plaza School

ADEQ Contract No: ADEQ18-182186

Si usted tiene preguntas, o para informacion en espaiiol sobre este proyecto, por favor llamar al Maria Lopez, Town of Miami, 928-473-4403

The Arizona Department of Environmental Quality (ADEQ) is providing funding on behalf of the Town of Miami through a Brownfields State Response Grant to conduct Asbestos and Lead Based Paint Abatement at the Old Bullion Plaza School, 150 N Plaza Circle, Miami, Arizona beginning on October 23rd 2017.

FOR MORE INFORMATION PLEASE CONTACT:
Dale Metz Town of Miami 928-473-9024

Bullion Plaza Update

Tuesday, November 14, 2017 11:18 AM

From: "Dylan Whitwer" <dwhitwer@geotekusa.com>

To: "jec@azdeq.gov" <jec@azdeq.gov> "dmetzmiami@gmail.com" <dmetzmiami@gmail.com>
"AZ.terr1912@yahoo.com" <AZ.terr1912@yahoo.com>

Cc: "steve.beirl@crs-info.com" <steve.beirl@crs-info.com> "Tod Whitwer" <twhitwer@geotekusa.com>

All –

I wanted to give a quick project update:

Last week, the remainder of the TSI, boiler, associated pipe runs/elbows, ACM debris bags, and other miscellaneous debris were abated and disposed of at their appropriate landfills. The PCB-containing light ballasts were removed from the second floor and basement and also disposed of.

Yesterday, the gray lead-containing paint on the stairs was scraped and painted over. I obtained my lead wipe clearance samples and submitted them to the laboratory.

At this point we are waiting on the landfills to send back their signed waste manifests as well as waiting for the laboratory results from the lead wipe samples. We anticipate to have the manifests/laboratory reports returned to us by the end of this week or early next week. We will submit the draft report to the Town of Miami/ADEQ by mid-to-late next week. Please let me know if this schedule is acceptable.

In addition, the link below is photographs I obtained throughout the project. Please feel free to download and use as you see best fit.
https://www.dropbox.com/sh/r0d0kxtdblw5bbn/AABeReOaT3MNNV3NhvvTncHGa?dl=0

Please let me know if you have any comments or concerns.

Thank you,

Dylan Whitwer
Environmental Specialist
GeoTek, Inc.
4050 East Cotton Center Boulevard, Suite 49
Phoenix, Arizona 85040
Cell: (623) 556-6455

GEOTEK

SPRAY SYSTEMS ENVIRONMENTAL

Environmental Response, Inc.

A Wholly Owned Subsidiary of Spray Systems Environmental

Colorado Lic. #81-0443330
Nevada Lic. #30882, New Mexico Lic. #60610
Arizona Lic. ROC 244331, ROC 244330 Commercial & Residential • USDOT #548193
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EMERGENCY RESPONSE • HAZARDOUS MATERIAL TRANSPORTER
WEB SITE: WWW.SPRAYSYSTEMSERI.COM

JON VARRELMAN
Supervisor

2202 W. Medtronic Way, Suite 108
Tempe, AZ 85281
Email: jvarrelman@spray-eri.com

Office: (480) 967-8300
Mobile: (602) 757-6886
Fax: (480) 894-1966

Basement Walk
thru —
21 Nov. Monday
Basement.
Billion Plaza.

REMEDIATION, EMERGENCY AND CONSTRUCTION SERVICES

CRS 24/7 Emergency Response

333 East Osborn Road
Suite 300
Phoenix, AZ 85012

Cell: 602-478-7672

KEN KNUTSON
Senior Estimator
ken.knutson@crs-info.com
www.crs-info.com
Arizona Contractors License 275441
1GPA #14-156 / AZ State Contract Number ADSP012-033251

Viking
Specialty Contracting

Jeff Burns

Jeff@Viking-az.com | C: 602-686-2886 | O: 480-568-8228
Physical: 1008A E. Vista Del Cerro Dr., Tempe, AZ 85281
Billing: 25249 S. 194th St., Queen Creek, AZ 85142
License: KB-1 ROC283086

TOWN OF MIAMI
"Copper Center of the World"

Joshua Derhammer
ANIMAL CONTROL & CODE ENFORCEMENT

MIAMI TOWN HALL
500 W. Sullivan Street
Miami, AZ 85539

Phone: (928) 473-9052
Fax: (928) 473-3003
Animal- miamiaco@cableone.net
Code- miamicodeenforcement@cableone.net

Fwd: Bid Walk for Bullion Cultural Center and Museum, Miami Az

Monday, October 24, 2016 4:22 PM

From: "D Metz" <dmetzmiami@gmail.com>

To: "Tom Foster" <az.terr1912@yahoo.com>

Full Headers Printable View

2 Files 2 MB Download All

PDF 2 MB — Asbestos Report of Findings_ — Save

ICS 2KB — invite.ics — Save

Tom, here is the asbestos and lead paint survey report. The pre bid walk through is scheduled for 10:00 am on November 11th.

Dale Metz
Town of Miami

---------- Forwarded message ----------
From: **Walrath, Pam** <pam.walrath@amecfw.com>
Date: Mon, Oct 24, 2016 at 9:33 AM
Subject: Bid Walk for Bullion Cultural Center and Museum, Miami Az
To: "chad@spray-eri.com" <chad@spray-eri.com>, "jeff@viking-az.com" <jeff@viking-az.com>, "Ken Knutson (ken.knutson@crs-info.com)" <ken.knutson@crs-info.com>, "Jennie E. Cure' (jec@azdeq.gov)" <jec@azdeq.gov>, "Ostapuk, Tim" <Tim.Ostapuk@amecfw.com>, "dmetzmiami@gmail.com" <dmetzmiami@gmail.com>

All,
Please find the report of findings for the project listed above. The bid walk will be November 11th and out of town so please allow time for travel and possible road construction in that area. Let me know if you have any questions. Parking is limited in the front with additional parking behind the building. Thank you!!

amec foster wheeler