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## Technical Memorandum

February 1, 2024

### **Asbestos Data Summary – Behavioral & Social Sciences Building Rooms: M-0A, M-0B, E/T-1A, C-5a, H-6 and Roof Exhaust**

The California State Polytechnic University, Humboldt (Humboldt) Facilities Management (FM) Planning, Construction & Design (PDC) division collected bulk samples of suspect Asbestos Containing Material (ACM) at the Behavioral & Social Sciences (BSS) Building on January 24, 2024.

This memorandum summarizes the sampling analytical findings and provides conclusions based on these data. The location of samples collected at the BSS Building as well as the distribution of any ACM identified at the site are depicted on the attached figures (Attachment A).

#### **Site Description**

The BSS Building, Humboldt Building Number 089, is located at the following street address:

- 1605 Union Street, Arcata, CA 95521

The BSS Building was constructed in 2006. The building has approximately 80,341 of useable square feet. The interior walls, ceilings, ducting, insulation, and interior mechanical systems within the following rooms were sampled at the BSS Building and are herein defined as the project site: M-0A, M-0B, E/T-1A, C-5a, H-6 and Roof Exhaust.

The project site interior flooring generally consists of exposed concrete. Interior walls generally consist of gypsum board and joint compound. Walls in mechanical spaces are generally untextured and unpainted. The ceilings generally consist of gypsum board and joint compound or exposed pan deck exposed I-beams. Structural members are coated with spray-applied fire resistant material (i.e., fireproofing). Planview figures depicting the project site are attached (Attachment A). Site photographs are also attached (Attachment B).

#### **Survey Description**

A total 32 samples were collected of suspect ACM throughout the project site. Some samples consisted of multiple unique layers of material. The samples collected at the project site are listed in Table 1. The sample locations are depicted on the attached figures (Attachment B). The ACM sampling was conducted in general accordance with the United States Environmental Protection Agency (USEPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations.

#### **Laboratory Data**

Bulk samples collected from project site were sent to SGS Forensic Laboratories, an accredited laboratory located in Hayward, California. Suspect ACM samples were analyzed for asbestos content via Polarized Light Microscopy (PLM) using USEPA Method 600/R-93-R. The PLM data are summarized in Table 1. The PLM analytical reports are attached (Attachment C).

Technical Memorandum  
 Asbestos Data Summary – BSS Building Boiler Replacement

**Findings**

The PLM laboratory analytical data for project site is summarized in Table 1 (below). Table 1 includes the location, material type, analytical result, and applicable regulatory designations for each suspect ACM sample collected at project site. Samples that do not contain asbestos above the PLM detection limit are reported by the laboratory as non-detect (ND) and are listed in Table 1 as ND. Samples reported to contain asbestos are identified in Table 1 by the asbestos content (percent asbestos) and emphasized using bold text.

<b>Table 1 – Asbestos Data Summary</b>						
<b>Sample Number</b>	<b>Location</b>	<b>Material</b>	<b>Laboratory Result</b>	<b>Material Category</b>	<b>Cal/OSHA Work Class</b>	<b>Waste Designation</b>
BSS-1	M-0B - 8" Vertical HWR at N. Boiler	TSI Run (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-2	M-0B - 4" Vertical Domestic Cold Water NW Center	TSI Run (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-3	M-0B - 4" Industrial Cold Water NW Corner	TSI Run (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-4	M-0B - 8" 90° Vertical HWR at N. Boiler N Side	TSI Elbow (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-5	M-0B - 12" Horizontal HWR at Valve	TSI Fitting Sleeve (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-6	M-0B - 4" Vertical HWS NE Hot Water Heater	TSI Run (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-7	M-0B - 4" Vertical HWR NE Hot Water Heater	TSI Run (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-8	M-0B - 24" Pressure Tank N Wall SE Corner	TSI (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-9	M-0B - S Boiler N Side HWS Plastic Cover	Caulking (White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-10	M-0B - S Boiler 8" 90° HWR	TSI Elbow (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-11	M-0B - S Wall Center 6" Hole	Fire Caulking	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-12	M-0B - NW Corner 2.5" Horizontal CW	Pipe Thread Compound	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-13	M-0B - N Wall W Side at 8" Pressure Reducer	8" Flange Gasket	ND	Not ACM or RACM	NA	Not Asbestos Waste

Technical Memorandum  
 Asbestos Data Summary – BSS Building Boiler Replacement

<b>Table 1 – Asbestos Data Summary</b>						
<b>Sample Number</b>	<b>Location</b>	<b>Material</b>	<b>Laboratory Result</b>	<b>Material Category</b>	<b>Cal/OSHA Work Class</b>	<b>Waste Designation</b>
BSS-14	M-0B - NW Pressure Tank 2" Vertical	TSI Run (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-15	M-0B - S Center Ceiling	FG Batt (Orange)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-16	M-0B - NE 10" Gas Supply Line	10" Flange Gasket (Red)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-17	M-0B - W Wall NW Corner	Drywall (White) + Joint Compound (White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-18	M-0B - E Wall Center	Drywall (White) + Joint Compound (White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-19	M-0A - Ceiling Chase Center W Side	2 Layers Drywall (White) + Joint Compound (White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-20	M-0A - Ceiling Chase Center W Side	FG Batt (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-21	M-0A - Ceiling Chase Center W Side	FG Coated (Yellow) Drywall (White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-22	E/T-1A - S Wall Of Vertical Chase SW Corner	4" Base (Grey) + Mastic	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-23	E/T-1A - S Wall Of Vertical Chase SW Corner	Drywall (White) + Joint Compound (White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-24	C-5A - N Wall Of Vertical Chase NW Corner	Drywall (White) + Joint Compound (White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-25	H-6 - SW Corner I-Beam	SFRM (Off White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-26	H-6 - SW Corner I-Beam	SFRM (Tan Patch)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-27	H-6 - SW Corner Column	SFRM (Off White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-28	Roof @ Exhaust Vent Metal Roof	Roof Coating (Green)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-29	Roof @ N Exhaust Vent Bolt Sealant	Caulking (Grey)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-30	Roof @ N Exhaust Vent Bolt Sealant Patch	Caulking (White)	ND	Not ACM or RACM	NA	Not Asbestos Waste

Technical Memorandum  
 Asbestos Data Summary – BSS Building Boiler Replacement

<b>Table 1 – Asbestos Data Summary</b>						
<b>Sample Number</b>	<b>Location</b>	<b>Material</b>	<b>Laboratory Result</b>	<b>Material Category</b>	<b>Cal/OSHA Work Class</b>	<b>Waste Designation</b>
BSS-31	Roof @ S Exhaust Vent Bolt Sealant	Caulking (Grey)	ND	Not ACM or RACM	NA	Not Asbestos Waste
BSS-32	H-6A - NW Corner I-Beam	SFRM (Off White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
Notes: <ul style="list-style-type: none"> <li>• ACM = Asbestos Containing Material (greater than 1% asbestos)</li> <li>• ACT = Acoustical Ceiling Tile</li> <li>• AWT = Acoustical Wall Tile</li> <li>• FG = Fiberglass</li> <li>• NA = Not applicable</li> <li>• ND = Nondetect (i.e., no asbestos fibers reported above the laboratory detection limit)</li> <li>• RACM = Regulated Asbestos Containing Material (friable and greater than 1% asbestos)</li> <li>• SFRM = Spray-applied fire resistant material</li> <li>• Individual materials comprising multi-layered samples are separated by a "+" symbol</li> <li>• * = Sample was initially reported to contain &lt;1% asbestos. Additional sampling of this material confirmed this material to be ND. Material is homogeneous to other samples reported to be ND.</li> </ul>						

**Conclusions**

As listed in Table 1, none (0) of the samples were reported to contain asbestos (i.e., all samples ND). Based on these data, no ACM identified at the project site. The locations of samples collected at project site are shown on the attached figures (Attachment A). Photographs of the typical materials sampled at the project site are attached Attachment B). The analytical reports are attached (Attachment C).

Any suspect ACM not identified in this memorandum that is discovered during site work should be presumed to contain asbestos until sampled and proven otherwise. If suspect ACM is identified at the project site for which there is no existing data, then work in that area shall stop, the material wetted, and access to the area restricted until the suspect ACM can be appropriately sampled and characterized.

Asbestos materials, if any, that may be disturbed by construction work at project site shall be removed by a licensed abatement contractor prior to other site work. Material containing greater than 1% asbestos is classified by Cal/OSHA as ACM, while material containing detectable quantities of asbestos less than 1% is classified as ACCM. Construction work impacting ACM and ACCM requires compliance with Cal/OSHA asbestos regulations (8CCR1529).

Nonfriable ACM is classified as nonhazardous asbestos waste, so long as the material is not rendered friable. Nonfriable ACM shall be reclassified as Regulated ACM (RACM), if removed using mechanical means. Friable material containing greater than one percent asbestos (e.g., RACM) is classified as a California hazardous waste.

If other constituents of concern are encountered or suspected to be present onsite beyond those identified in the memorandum, then additional sampling must be performed to evaluate the project site for the presence of such hazards. Waste streams generated as a result of construction and/or demolition work at project site must be representatively sampled to determine the concentration of potentially

Technical Memorandum  
Asbestos Data Summary – BSS Building Boiler Replacement

hazardous constituents in the waste prior to transport offsite. Transportation and disposal requirements shall be determined based on the waste characterization data.

Please contact FM PDC with any questions regarding the information contained in this memorandum.

Thank you,

**Facilities Management - Planning, Design & Construction**

A handwritten signature in blue ink, appearing to read 'Scott Harris', is positioned above the contact information.

**Scott Harris, CAC**  
(707) 826-5904  
[scott.harris@humboldt.edu](mailto:scott.harris@humboldt.edu)

**Attachments:**

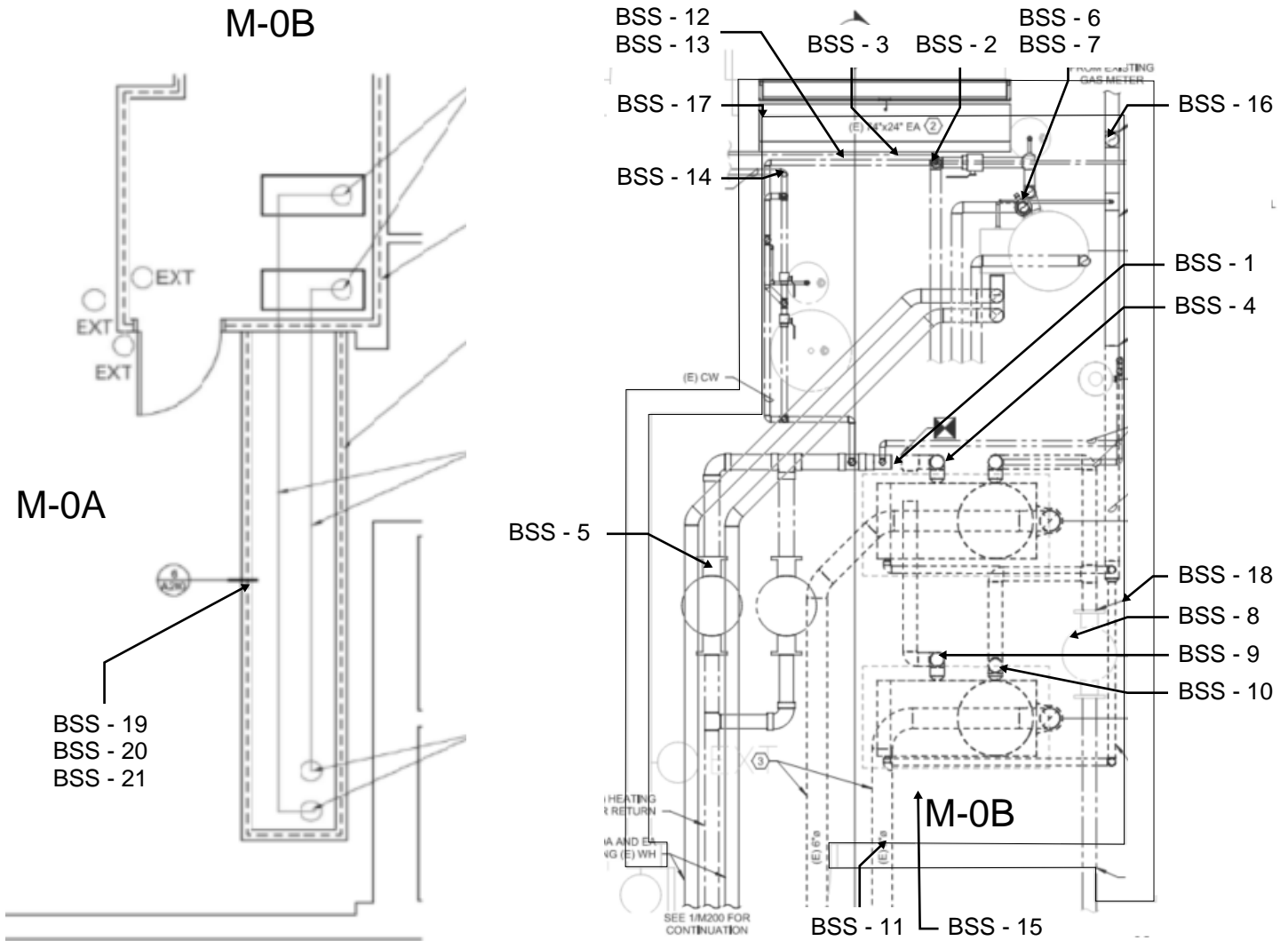
1. Attachment A – Figures
2. Attachment B – Photographs
3. Attachment C – Laboratory Data

# Attachment A – Figures

# Figure 1 - Sample Location Map

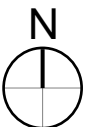
BSS - M-0A & M-0B

1605 Union St Arcata, CA 95521



## Notes:

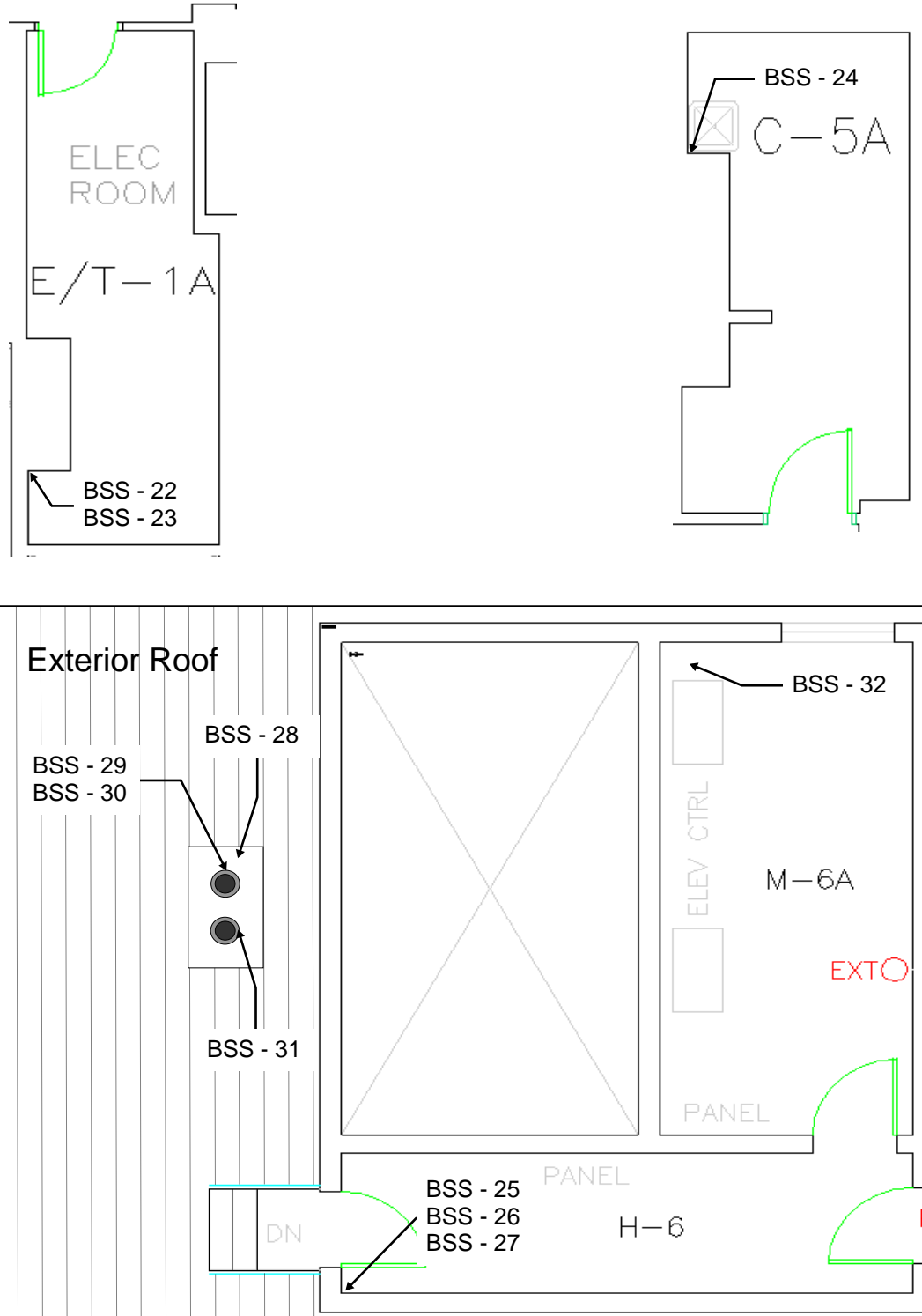
- All locations and measurements approximate
- Not to scale
- Call out = Sample Location - Building - Sample #
- **Out lined box** + **Bold lettering** = Material reported to contain asbestos



# Figure 1.2 - Sample Location Map

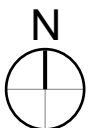
BSS - E/T-1A, C-5A, H-6, M-6A & Exterior Roof

1605 Union St Arcata, CA 95521



## Notes:

- All locations and measurements approximate
- Not to scale
- Call out = Sample Location - Building - Sample #
- **Out lined box** + **Bold lettering** = Material reported to contain asbestos





# Attachment B – Photographs

Asbestos Data Summary – BSS Building  
XPL293 Boiler Replacement



Photograph 1 – BSS Building – Room M-0A Horizontal Chase



Photograph 2 – BSS Building – Room M-0B Horizontal and Vertical TSI Typical

Asbestos Data Summary – BSS Building  
XPL293 Boiler Replacement



Photograph 3 – BSS Building – Room M-0B Vertical TSI and 45° Fitting (Typical)



Photograph 4 – BSS Building – Room M-0B – Fiberglass TSI Run (Typical)

Asbestos Data Summary – BSS Building  
XPL293 Boiler Replacement

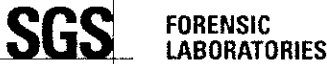


Photograph 5 – BSS Building – Roof Exhaust



Photograph 6 – BSS Building – Roof Exhaust Detail

# Attachment C – Laboratory Data



Analysis Request Form (COC)

Client Name & Address: <b>Cal Poly Humboldt Facilities Management - Planning, Design &amp; Construction 1 Harpst Street, Arcata, CA 95521-8299</b>		Client No.: 2087	PO / Job#: <b>FM PDC / XPL293</b>	Date: <b>01/25/2024</b>
Contact: <b>Scott Harris</b>		Phone: <b>(707) 826-5904</b>	Turn Around Time: <input type="checkbox"/> Same Day / <input type="checkbox"/> 1Day / <input checked="" type="checkbox"/> 2Day / <input type="checkbox"/> 3Day / <input type="checkbox"/> 4Day / <input type="checkbox"/> 5Day	
E-mail: <b>ssh11@humboldt.edu, jrb20@humboldt.edu</b>		<input type="checkbox"/> PCM: <input type="checkbox"/> NIOSH 7400A / <input type="checkbox"/> NIOSH 7400B <input type="checkbox"/> Rotometer <input checked="" type="checkbox"/> PLM: <input checked="" type="checkbox"/> Standard / <input type="checkbox"/> Point Count <b>400 - 1000</b> / <input type="checkbox"/> CARB 435		
Site Name: <b>Behavioral &amp; Social Sciences (BSS)(089) Boiler</b>		<input type="checkbox"/> TEM Air: <input type="checkbox"/> AHERA / <input type="checkbox"/> Yamate2 / <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> TEM Bulk: <input type="checkbox"/> Quantitative / <input type="checkbox"/> Qualitative / <input type="checkbox"/> Chatfield <input type="checkbox"/> TEM Water: <input type="checkbox"/> Potable / <input type="checkbox"/> Non-Potable / <input type="checkbox"/> Weight % <input type="checkbox"/> TEM Dust: <input type="checkbox"/> D5755 (microvac) / <input type="checkbox"/> D6480 (wipe)		
Site Location: <b>1605 Union St, Arcata, 95521</b>		<input type="checkbox"/> IAQ Particle Identification (PLM LAB) <input type="checkbox"/> PLM Opaques/Soot <input type="checkbox"/> Particle Identification (TEM LAB) <input type="checkbox"/> Special Project <input type="checkbox"/> Metals Analysis Matrix: Method: Analytes:		

Comments: **Reference: CF- 660061 HM605 D30037 - - XPL293; Please Send Invoice to Above Emails**  Silica in Air  w/Gravimetry  Quartz Only

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY				Sample Area / Air Volume
			Type	Time On/Off	Avg LPM	Total Time	
See Attachment A	01/24/24	See Attachment A	<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C	NA	NA	NA	NA
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
		N/A	<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				

**RECEIVED**  
 JAN 26 2024  
 BY: J.C. 9:50 am

Sampled By: <b>SH</b>	Date/Time: <b>As above</b>	Shipped Via: <input type="checkbox"/> Fed Ex <input checked="" type="checkbox"/> UPS <input type="checkbox"/> US Mail <input type="checkbox"/> Courier <input type="checkbox"/> Drop Off <input type="checkbox"/> Other:
Relinquished By: <b>Scott Harris</b>	Relinquished By:	Relinquished By:
Date / Time: <b>01/25/2024 1400</b> <i>SH</i>	Date / Time:	Date / Time:
Received By:	Received By:	Received By:
Date / Time:	Date / Time:	Date / Time:
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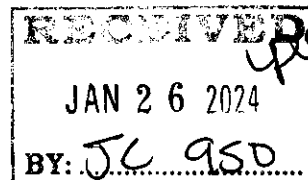
SGS Forensic Laboratories may subcontract client samples to other SGSFL locations to meet client requests.  
 San Francisco Office: 3777 Depot Road, Suite 409, Hayward, CA 94545-2761 • Phone: 510/887-8828 • 800/827-3274  
 Los Angeles Office: 20535 South Belshaw Ave., Carson, CA 90746 • Phone: 310/763-2374 • 888/813-9417  
 Las Vegas Office: 6765 S. Eastern Avenue, Suite 3, Las Vegas, NV 89119 • Phone: 702/784-0040  
 Chicago Office: 3020 Woodcreek Drive, Suite C, Downers Grove, IL 60515 • Phone: 341/465-2464

Site: BSS	Project: XPL293 Boiler Replacement Project	Sample Date: 1/24/24
Bulk Sample Matrix		
Sample Number	Location	Material Description
BSS-1	M-0B - 8" Vertical HWR @ N. Boiler	TSI Run (Yellow)
BSS-2	M-0B - 4" Vertical Domestic Cold Water NW Center	TSI Run (Yellow)
BSS-3	M-0B - 4" Industrial Cold Water NW Corner	TSI Run (Yellow)
BSS-4	M-0B - 8" 90° Vertical HWR @ N. Boiler N Side	TSI Elbow (Yellow)
BSS-5	M-0B - 12" Horizontal HWR @ Valve	TSI Fitting Sleeve (Yellow)
BSS-6	M-0B - 4" Vertical HWS NE Hot Water Heater	TSI Run (Yellow)
BSS-7	M-0B - 4" Vertical HWR NE Hot Water Heater	TSI Run (Yellow)
BSS-8	M-0B - 24" Pressure Tank N Wall SE Corner	TSI (Yellow)
BSS-9	M-0B - S Boiler N Side HWS Plastic Cover	Caulking (White)
BSS-10	M-0B - S Boiler 8" 90° HWR	TSI Elbow (Yellow)
BSS-11	M-0B - S Wall Center 6" Hole	Fire Caulking
BSS-12	M-0B - NW Corner 2.5" Horizontal CW	Pipe Thread Compound
BSS-13	M-0B - N Wall W Side @ 8" Pressure Reducer	8" Flange Gasket
BSS-14	M-0B - NW Pressure Tank 2" Vertical	TSI Run (Yellow)
BSS-15	M-0B - S Center Ceiling	FG Batt (Orange)
BSS-16	M-0B - NE 10" Gas Supply Line	10" Flange Gasket (Red)
BSS-17	M-0B - W Wall NW Corner	Drywall (White) + Joint Compound (White)
BSS-18	M-0B - E Wall Center	Drywall (White) + Joint Compound (White)
BSS-19	M-0A - Ceiling Chase Center W Side	2 Layers Drywall (White) + Joint Compound (White)
BSS-20	M-0A - Ceiling Chase Center W Side	FG Batt (Yellow)
BSS-21	M-0A - Ceiling Chase Center W Side	FG Coated (Yellow) Drywall (White)
BSS-22	E/T-1A - S Wall Of Vertical Chase SW Corner	4" Base (Grey) + Mastic
BSS-23	E/T-1A - S Wall Of Vertical Chase SW Corner	Drywall (White) + Joint Compound (White)
BSS-24	C-5A - N Wall Of Vertical Chase NW Corner	Drywall (White) + Joint Compound (White)
BSS-25	H-6 - SW Corner I-Beam	SFRM (Off White)
BSS-26	H-6 - SW Corner I-Beam	SFRM (Tan Patch)
BSS-27	H-6 - SW Corner Column	SFRM (Off White)
BSS-28	Roof @ Exhaust Vent Metal Roof	Roof Coating (Green)
BSS-29	Roof @ N Exhaust Vent Bolt Sealant	Caulking (Grey)
BSS-30	Roof @ N Exhaust Vent Bolt Sealant Patch	Caulking (White)
BSS-31	Roof @ S Exhaust Vent Bolt Sealant	Caulking (Grey)
BSS-32	H-6A - NW Corner I-Beam	SFRM (Off White)

**Notes:**

Please provide a result for each unique material comprising multilayered samples.

- ACT Acoustical Ceiling Tile
- CTR Center
- JC Joint Compound
- N, S, E, W, NW, etc. Azimuth directions
- TSI Thermal System Insulation
- VFT Vinyl floor tile
- VSF Vinyl sheet flooring
- SFRM Spray-applied Fire Resistant Material



# Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)  
NVLAP Lab Code: 101459-0

Humboldt State University  
Scott Harris  
1 Harpst Street  
Plan Operations  
Arcata, CA 95521

**Client ID:** 2087  
**Report Number:** B356214  
**Date Received:** 01/26/24  
**Date Analyzed:** 01/30/24  
**Date Printed:** 01/30/24  
**First Reported:** 01/30/24

**Job ID/Site:** FM PDC/ XPL293 - Behavioral & Social Sciences (BSS)(089) Boiler - 1605 Union St.,  
Arcata, 95521  
**Date(s) Collected:** 01/25/2024

**SGSFL Job ID:** 2087  
**Total Samples Submitted:** 32  
**Total Samples Analyzed:** 32

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>BSS-1</b>	12725838						
Layer: Yellow Fibrous Material							<b>ND</b>
Layer: White Fibrous Material							<b>ND</b>
Layer: White Woven Material							<b>ND</b>
Layer: Silver Foil							<b>ND</b>
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (95 %)						
<b>BSS-2</b>	12725839						
Layer: Yellow Fibrous Material							<b>ND</b>
Layer: White Fibrous Material							<b>ND</b>
Layer: White Woven Material							<b>ND</b>
Layer: Silver Foil							<b>ND</b>
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (95 %)						
<b>BSS-3</b>	12725840						
Layer: Yellow Fibrous Material							<b>ND</b>
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)	Fibrous Glass (99 %)						
<b>BSS-4</b>	12725841						
Layer: Yellow Fibrous Material							<b>ND</b>
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)	Fibrous Glass (99 %)						
<b>BSS-5</b>	12725842						
Layer: Yellow Fibrous Material							<b>ND</b>
Layer: Silver Foil							<b>ND</b>
Layer: White Woven Material							<b>ND</b>
Layer: White Fibrous Material							<b>ND</b>
Layer: White Coating							<b>ND</b>
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (90 %)						



**Client Name:** Humboldt State University

**Report Number:** B356214

**Date Printed:** 01/30/24

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>BSS-6</b>	12725843						
Layer: Yellow Fibrous Material			<b>ND</b>				
Layer: Silver Foil			<b>ND</b>				
Layer: White Woven Material			<b>ND</b>				
Layer: White Fibrous Material			<b>ND</b>				
Layer: White Coating			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (90 %)						
<b>BSS-7</b>	12725844						
Layer: Yellow Fibrous Material			<b>ND</b>				
Layer: Silver Foil			<b>ND</b>				
Layer: White Woven Material			<b>ND</b>				
Layer: White Fibrous Material			<b>ND</b>				
Layer: White Coating			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (90 %)						
<b>BSS-8</b>	12725845						
Layer: Yellow Fibrous Material			<b>ND</b>				
Layer: Silver Foil			<b>ND</b>				
Layer: White Woven Material			<b>ND</b>				
Layer: White Fibrous Material			<b>ND</b>				
Layer: White Coating			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (90 %)						
<b>BSS-9</b>	12725846						
Layer: White Non-Fibrous Material			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>BSS-10</b>	12725847						
Layer: Yellow Fibrous Material			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)	Fibrous Glass (99 %)						
<b>BSS-11</b>	12725848						
Layer: Red Semi-Fibrous Material			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)	Fibrous Glass (5 %)						
<b>BSS-12</b>	12725849						
Layer: Beige Non-Fibrous Material			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							

Client Name: Humboldt State University

Report Number: B356214

Date Printed: 01/30/24

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>BSS-13</b>	12725850						
Layer: Black Non-Fibrous Material			ND				
Layer: White Woven Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)	Synthetic (10 %)						
<b>BSS-14</b>	12725851						
Layer: Yellow Fibrous Material			ND				
Layer: White Fibrous Material			ND				
Layer: White Woven Material			ND				
Layer: Silver Foil			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (95 %)						
<b>BSS-15</b>	12725852						
Layer: Pink Fibrous Material			ND				
Layer: White Fibrous Material			ND				
Layer: White Woven Material			ND				
Layer: Silver Foil			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (95 %)						
<b>BSS-16</b>	12725853						
Layer: Red Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>BSS-17</b>	12725854						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (20 %)	Fibrous Glass (10 %)						
<b>BSS-18</b>	12725855						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (20 %)	Fibrous Glass (10 %)						
<b>BSS-19</b>	12725856						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Layer: Drywall Tape			ND				
Layer: White Joint Compound			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (20 %)	Fibrous Glass (10 %)						

Client Name: Humboldt State University

Report Number: B356214

Date Printed: 01/30/24

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>BSS-20</b>	12725857						
Layer: Yellow Fibrous Material			ND				
Layer: Tan Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (5 %)	Fibrous Glass (95 %)						
<b>BSS-21</b>	12725858						
Layer: White Drywall			ND				
Layer: Yellow Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)	Fibrous Glass (5 %)						
<b>BSS-22</b>	12725859						
Layer: Grey Non-Fibrous Material			ND				
Layer: Beige Mastic			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>BSS-23</b>	12725860						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Layer: Drywall Tape			ND				
Layer: White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (20 %)	Fibrous Glass (10 %)						
<b>BSS-24</b>	12725861						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Layer: Drywall Tape			ND				
Layer: White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (20 %)	Fibrous Glass (10 %)						
<b>BSS-25</b>	12725862						
Layer: Off-White Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (45 %)	Synthetic (35 %)						
<b>BSS-26</b>	12725863						
Layer: Tan Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (45 %)	Synthetic (35 %)						
<b>BSS-27</b>	12725864						
Layer: Off-White Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (45 %)	Synthetic (35 %)						

**Client Name:** Humboldt State University

**Report Number:** B356214

**Date Printed:** 01/30/24

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>BSS-28</b>	12725865						
Layer: Green Non-Fibrous Material							<b>ND</b>
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>BSS-29</b>	12725866						
Layer: Grey Non-Fibrous Material							<b>ND</b>
Layer: Paint							<b>ND</b>
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>BSS-30</b>	12725867						
Layer: White Non-Fibrous Material							<b>ND</b>
Layer: Paint							<b>ND</b>
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>BSS-31</b>	12725868						
Layer: Grey Non-Fibrous Material							<b>ND</b>
Layer: Paint							<b>ND</b>
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>BSS-32</b>	12725869						
Layer: Off-White Fibrous Material							<b>ND</b>
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (45 %) Synthetic (35 %)							



Maria Casper, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. This report must not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.



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## Technical Memorandum

February 1, 2024

### Asbestos Data Summary – Kinesiology & Athletics Building (024F) Third-Floor Mechanical Room (M-3B)

The California State Polytechnic University, Humboldt (Humboldt) Facilities Management (FM) Planning, Construction & Design (PDC) division collected bulk samples of suspect Asbestos Containing Material (ACM) at select areas of the Kinesiology & Athletics Building (KA) on January 24, 2024.

This memorandum summarizes the sampling analytical findings and provides conclusions based on these data. The location of samples collected at the KA as well as the distribution of any ACM identified at the site are depicted on the attached figures (Attachment A).

#### Site Description

The KA Building, Humboldt Building Number 024F, is located at the following street address:

- 55 Gymnasium Lane, Arcata, CA 95521

The 90,000 square-foot KA Building provides recreational, academic, and fitness spaces. The interior walls, ceilings, ducting, insulation, and mechanical systems of the third-floor mechanical room (M-3B) are herein defined as the project site.

The project site interior floor is exposed concrete. The walls consist of drywall and joint compound wall systems over metal framing. The ceiling is open to the exposed metal pan deck. I-Beams are coated with spray-applied fire-resistant material (i.e., fireproofing). Planview figures depicting the project site are attached (Attachment A). Site photographs are also attached (Attachment B).

#### Survey Description

A total 26 samples were collected of suspect ACM throughout the project site. Some samples consisted of multiple unique layers of material. The samples collected at the project site are listed in Table 1. The sample locations are depicted on the attached figures (Attachment B). The ACM sampling was conducted in general accordance with the United States Environmental Protection Agency (USEPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations.

#### Laboratory Data

Bulk samples collected from project site were sent to SGS Forensic Laboratories, an accredited laboratory located in Hayward, California. Suspect ACM samples were analyzed for asbestos content via Polarized Light Microscopy (PLM) using USEPA Method 600/R-93-R. The PLM data are summarized in Table 1. The PLM analytical reports are attached (Attachment C).

Technical Memorandum  
 Asbestos Data Summary – Kinesiology & Athletics Building (024F)

**Asbestos Findings**

The PLM laboratory analytical data for project site is summarized in Table 1 (below). Table 1 includes the location, material type, analytical result, and applicable regulatory designations for each suspect ACM sample collected at project site. Samples that do not contain asbestos above the PLM detection limit are reported by the laboratory as non-detect (ND) and are listed in Table 1 as ND. Samples reported to contain asbestos are identified in Table 1 by the asbestos content (percent asbestos) and emphasized using bold text.

<b>Table 1 – Asbestos Data Summary</b>						
<b>Sample Number</b>	<b>Location</b>	<b>Material</b>	<b>Laboratory Result</b>	<b>Material Category</b>	<b>Cal/OSHA Work Class</b>	<b>Waste Designation</b>
KA-1	M-3B - W Wall NW Corner 3" Vertical Direct Cold Water	TSI Run (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-2	M-3B - NW Corner 2" Horizontal Make Up Water	TSI Run (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-3	M-3B - 16" T-Valve N of Boiler	TSI Fitting (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-4	M-3B - 10" 45° E Boiler N Side	TSI Elbow (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-5	M-3B - 8" Vertical HWR W Boiler N Side	TSI Run (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-6	M-3B - 8" 45° E Boiler N Side	TSI Fitting (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-7	M-3B - 8" Horizontal HWS Center	TSI Run (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-8	M-3B - 24" Pressure Tank	TSI Batt (Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-9	M-3B - W Wall Canter	4" Base (Dark Grey) + Mastic (Off White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-10	M-3B - SE Corner	4" Base (Dark Grey) + Mastic (Off White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-11	M-3B - SE Corner	Drywall (White) + Joint Compound (White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-12	M-3B - SW Corner	Drywall (White) + Joint Compound (White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-13	M-3B - NE Corner	Drywall (White) + Joint Compound (White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-14	M-3B - SW Corner I-Beam	SFRM (Off White)	ND	Not ACM or RACM	NA	Not Asbestos Waste

Technical Memorandum  
 Asbestos Data Summary – Kinesiology & Athletics Building (024F)

<b>Table 1 – Asbestos Data Summary</b>						
<b>Sample Number</b>	<b>Location</b>	<b>Material</b>	<b>Laboratory Result</b>	<b>Material Category</b>	<b>Cal/OSHA Work Class</b>	<b>Waste Designation</b>
KA-15	M-3B - NE Corner I-Beam	SFRM (Off White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-16	M-3B - NW Corner I-Beam	SFRM (Off White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-17	M-3B - NW Corner	Fire Caulking (Red)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-18	M-3B - N of Boiler 10" Pressure Reducer	10" Flange Gasket (Brown)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-19	M-3B - N of Boiler 10" Pressure Reducer	10" Flange Gasket (Red)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-20	M-3B - E Boiler 6" Flex Ducting	Flex Ducting (Dark Brown)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-21	M-3B - E Boiler	Insulation (FG Batt, Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-22	M-3B - W Boiler	Insulation (FG Batt, Yellow)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-23	M-3B - W Boiler	Pipe Thread Compound (Off White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-24	M-3B - W Wall 1" Pressure Reducing Valve	4" Flange Gasket (Black)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-25	M-3B - N of W Boiler Gas Intake	Pipe Thread Compound (Off White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
KA-26	M-3B - N of E Boiler Gas Intake	Pipe Thread Compound (Off White)	ND	Not ACM or RACM	NA	Not Asbestos Waste
Notes: <ul style="list-style-type: none"> <li>• ACM = Asbestos Containing Material (greater than 1% asbestos)</li> <li>• ACT = Acoustical Ceiling Tile</li> <li>• AWT = Acoustical Wall Tile</li> <li>• NA = Not applicable</li> <li>• ND = Nondetect (i.e., no asbestos fibers reported above the laboratory detection limit)</li> <li>• VFT = Vinyl Floor Tile</li> <li>• VSF = Vinyl Sheet Flooring</li> <li>• RACM = Regulated Asbestos Containing Material (friable and greater than 1% asbestos)</li> <li>• SFRM = Spray-applied fire-resistant material</li> <li>• Individual materials comprising multi-layered samples are separated by a "+" symbol</li> <li>• * = Sample was initially reported to contain &lt;1% asbestos. Additional sampling of this material confirmed this material to be ND. Material is homogeneous to other samples reported to be ND.</li> </ul>						

Technical Memorandum  
Asbestos Data Summary – Kinesiology & Athletics Building (024F)

## Conclusions

As listed in Table 1, none (0) of the samples were reported to contain asbestos (i.e., all samples ND). Based on these data, ACM was not identified at the project site. The locations of samples collected are shown on the attached figures (Attachment A). Photographs of the typical materials sampled at the project site are attached Attachment B). The analytical reports are attached (Attachment C).

Any suspect ACM not identified in this memorandum that is discovered during site work should be presumed to contain asbestos until sampled and proven otherwise. If suspect ACM is identified at the project site for which there is no existing data, then work in that area shall stop, the material wetted, and access to the area restricted until the suspect ACM can be appropriately sampled and characterized.

Asbestos materials, if any, that may be disturbed by construction work at project site shall be removed by a licensed abatement contractor prior to other site work. Material containing greater than 1% asbestos is classified by Cal/OSHA as ACM, while material containing detectable quantities of asbestos less than 1% is classified as ACCM. Construction work impacting ACM and ACCM requires compliance with Cal/OSHA asbestos regulations (8CCR1529).

Nonfriable ACM is classified as nonhazardous asbestos waste, so long as the material is not rendered friable. Nonfriable ACM shall be reclassified as Regulated ACM (RACM), if removed using mechanical means. Friable material containing greater than one percent asbestos (e.g., RACM) is classified as a California hazardous waste.

If other constituents of concern are encountered or suspected to be present onsite beyond those identified in the memorandum, then additional sampling must be performed to evaluate the project site for the presence of such hazards. Waste streams generated as a result of construction and/or demolition work at project site must be representatively sampled to determine the concentration of potentially hazardous constituents in the waste prior to transport offsite. Transportation and disposal requirements shall be determined based on the waste characterization data.

Please contact FM PDC with any questions regarding the information contained in this memorandum.

Thank you,

**Facilities Management - Planning, Design & Construction**



**Scott Harris, CAC**  
(707) 826-5904  
[scott.harris@humboldt.edu](mailto:scott.harris@humboldt.edu)

### Attachments:

1. Attachment A – Figures
2. Attachment B – Photographs
3. Attachment C – Laboratory Data

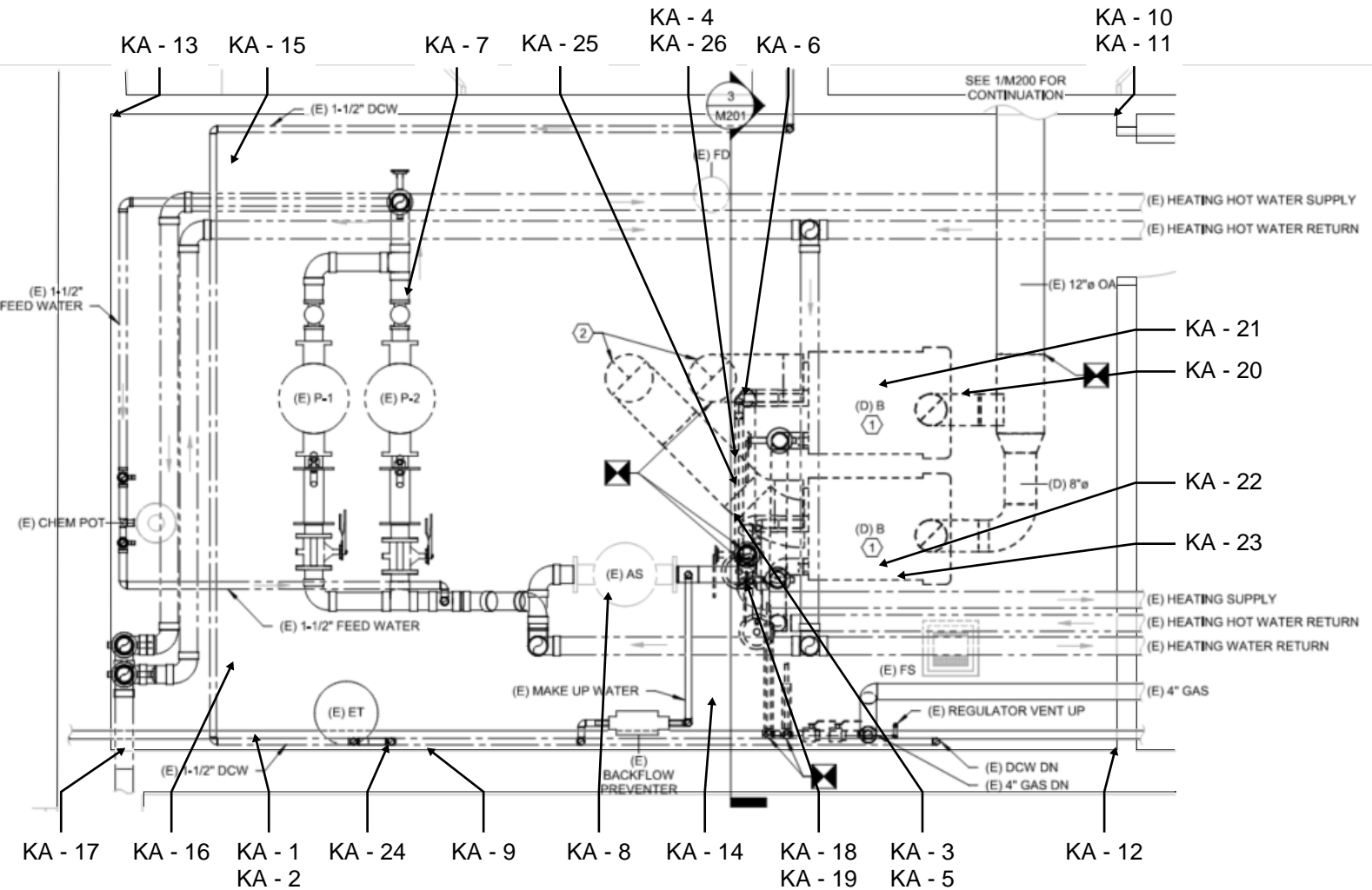


# Attachment A – Figures

# Figure 1 - Sample Location Map

KA - M-3B

55 Gymnasium Ln Arcata, CA 95521



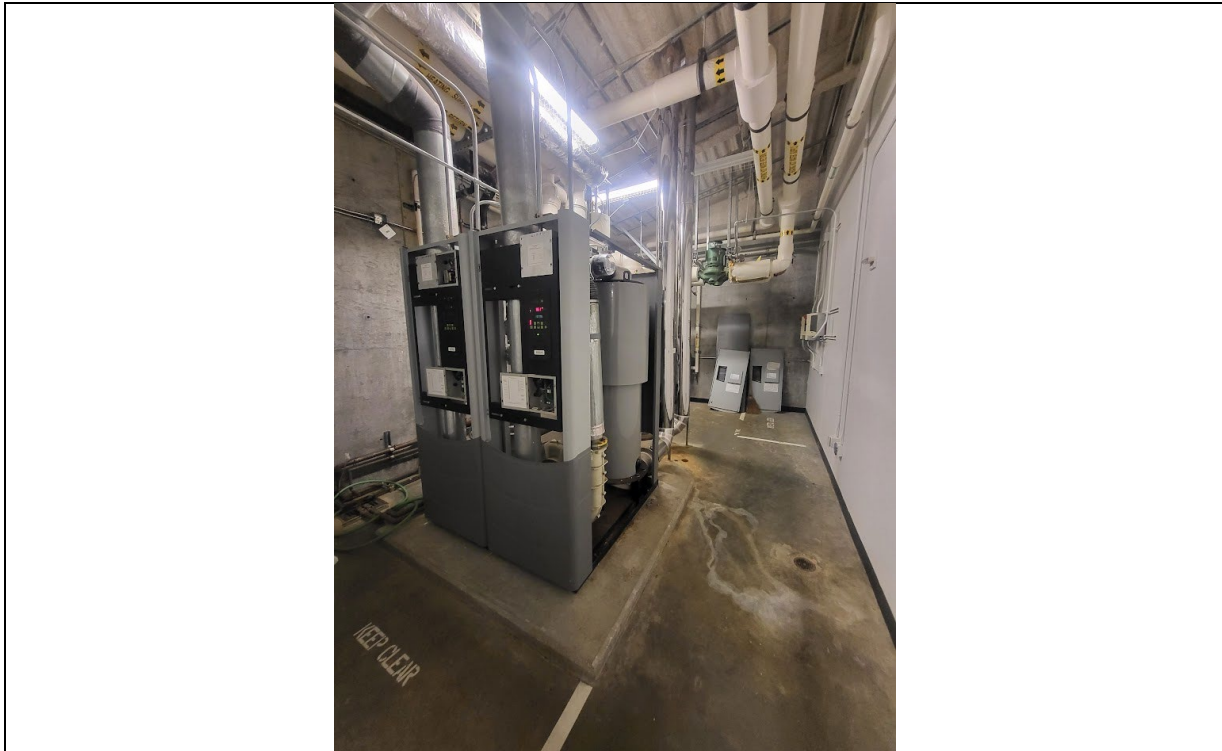
### Notes:

- All locations and measurements approximate
- Not to scale
- Call out = Sample Location (Building - Sample #)
- **Out lined box + Bold lettering** = Material reported to contain asbestos



# Attachment B – Photographs

Asbestos Data Summary – Kinesiology & Athletics Building (024F)

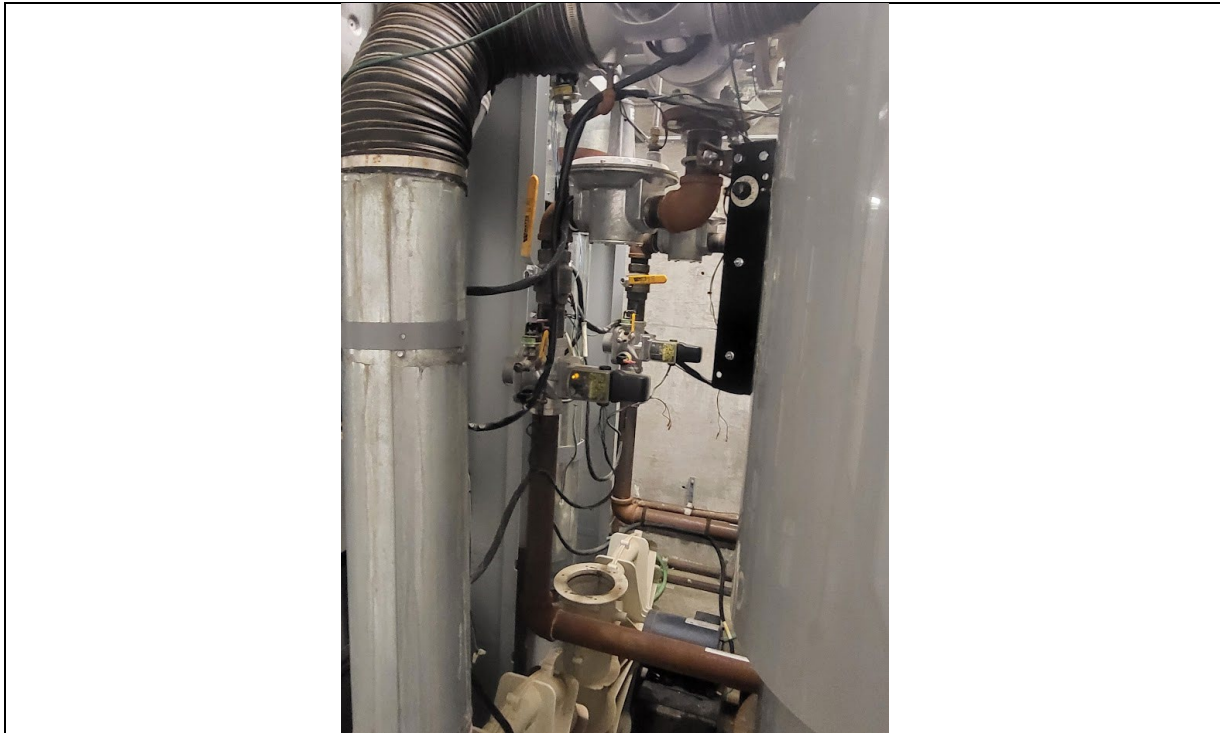


Photograph 1 – KA – Room M-3B

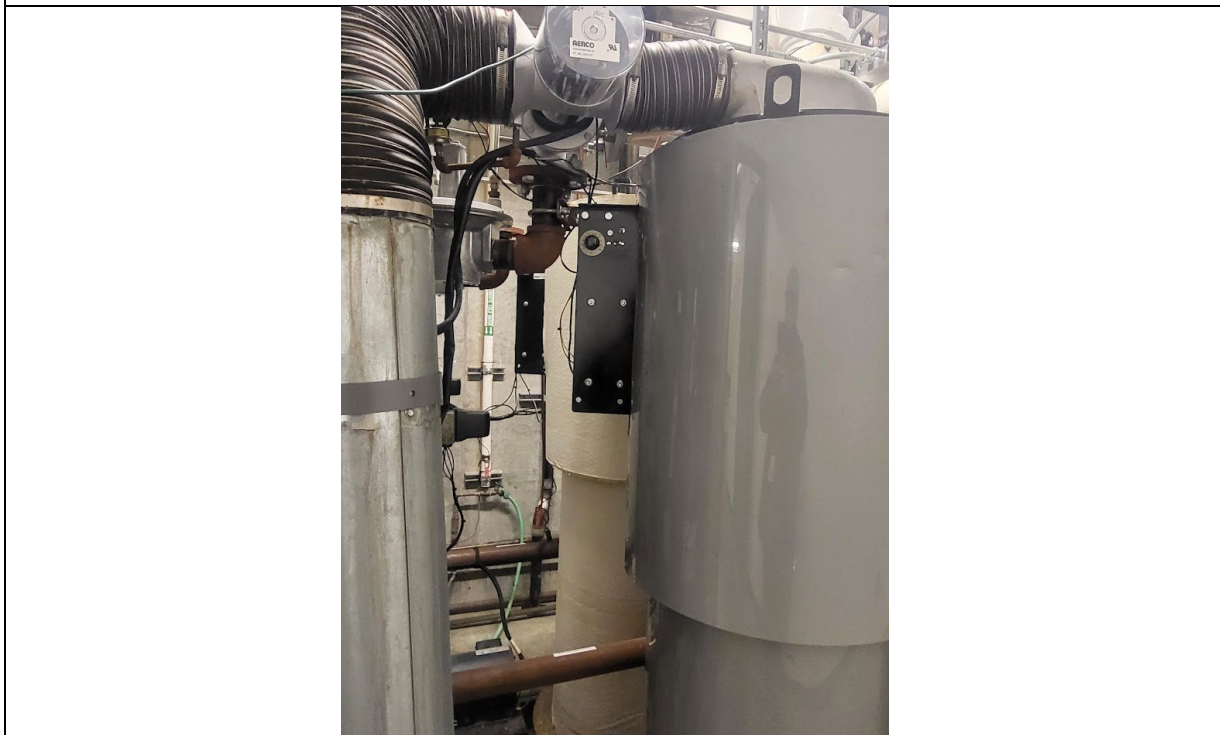


Photograph 2 – KA – Room M-3B

Asbestos Data Summary – Kinesiology & Athletics Building (024F)  
**Error! Reference source not found.**



Photograph 3 – KA – Room M-3B



Photograph 4 – KA – Room M-3B

Asbestos Data Summary – Kinesiology & Athletics Building (024F)  
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Photograph 5 – KA – Room M-3B – Fiberglass TSI (typical)



Photograph 6 – KA – Room M-3B – TSI (typical) and flange location (typical)

# Attachment C – Laboratory Data



# Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)  
NVLAP Lab Code: 101459-0

Humboldt State University  
Scott Harris  
1 Harpst Street  
Plan Operations  
Arcata, CA 95521

**Client ID:** 2087  
**Report Number:** B356209  
**Date Received:** 01/26/24  
**Date Analyzed:** 01/30/24  
**Date Printed:** 01/30/24  
**First Reported:** 01/30/24

**Job ID/Site:** FM PDC/ XPL293 - Kinesiology & Athletics (KA)(024F) Boiler RM - 55 Gymnasium Ln,  
Arcata 95521

**SGSFL Job ID:** 2087  
**Total Samples Submitted:** 26  
**Total Samples Analyzed:** 26

**Date(s) Collected:** 01/25/2024

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>ka-1</b>	12725775						
Layer: White Fibrous Material							ND
Layer: Silver Foil							ND
Layer: White Woven Material							ND
Layer: White Fibrous Material							ND
Layer: White Coating							ND
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (90 %)						
<b>ka-2</b>	12725776						
Layer: White Fibrous Material							ND
Layer: Silver Foil							ND
Layer: White Woven Material							ND
Layer: White Fibrous Material							ND
Layer: White Coating							ND
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (90 %)						
<b>ka-3</b>	12725777						
Layer: White Fibrous Material							ND
Layer: Silver Foil							ND
Layer: White Woven Material							ND
Layer: White Fibrous Material							ND
Layer: White Coating							ND
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (90 %)						
<b>ka-4</b>	12725778						
Layer: Yellow Fibrous Material							ND
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)	Fibrous Glass (99 %)						



**Client Name:** Humboldt State University

**Report Number:** B356209

**Date Printed:** 01/30/24

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>ka-5</b>	12725779						
Layer: White Fibrous Material			ND				
Layer: Silver Foil			ND				
Layer: White Woven Material			ND				
Layer: White Fibrous Material			ND				
Layer: White Coating			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (90 %)						
<b>ka-6</b>	12725780						
Layer: White Fibrous Material			ND				
Layer: Silver Foil			ND				
Layer: White Woven Material			ND				
Layer: Tan Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (95 %)						
<b>ka-7</b>	12725781						
Layer: White Fibrous Material			ND				
Layer: Red Non-Fibrous Material			ND				
Layer: Silver Foil			ND				
Layer: White Woven Material			ND				
Layer: White Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (90 %)						
<b>ka-8</b>	12725782						
Layer: White Fibrous Material			ND				
Layer: Silver Foil			ND				
Layer: White Woven Material			ND				
Layer: White Fibrous Material			ND				
Layer: White Coating			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (90 %)						
<b>ka-9</b>	12725783						
Layer: Dark Grey Non-Fibrous Material			ND				
Layer: Off-White Mastic			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>ka-10</b>	12725784						
Layer: Dark Grey Non-Fibrous Material			ND				
Layer: Off-White Mastic			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							

Client Name: Humboldt State University

Report Number: B356209

Date Printed: 01/30/24

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>ka-11</b>	12725785						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Layer: Drywall Tape			ND				
Layer: White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (20 %)	Fibrous Glass (10 %)						
<b>ka-12</b>	12725786						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (20 %)	Fibrous Glass (10 %)						
<b>ka-13</b>	12725787						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (20 %)	Fibrous Glass (10 %)						
<b>ka-14</b>	12725788						
Layer: Off-White Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (45 %)	Synthetic (35 %)						
<b>ka-15</b>	12725789						
Layer: Off-White Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (45 %)	Synthetic (35 %)						
<b>ka-16</b>	12725790						
Layer: Off-White Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (45 %)	Synthetic (35 %)						
<b>ka-17</b>	12725791						
Layer: Red Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)	Fibrous Glass (5 %)						
<b>ka-18</b>	12725792						
Layer: Brown Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>ka-19</b>	12725793						
Layer: Red Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							

**Client Name:** Humboldt State University

**Report Number:** B356209

**Date Printed:** 01/30/24

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>ka-20</b>	12725794						
Layer: White Woven Material			<b>ND</b>				
Layer: Black Coating			<b>ND</b>				
Layer: Brown Woven Material			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)	Fibrous Glass (90 %)						
<b>ka-21</b>	12725795						
Layer: Yellow Fibrous Material			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)	Fibrous Glass (99 %)						
<b>ka-22</b>	12725796						
Layer: White Fibrous Material			<b>ND</b>				
Layer: Silver Foil			<b>ND</b>				
Layer: White Woven Material			<b>ND</b>				
Layer: White Fibrous Material			<b>ND</b>				
Layer: White Coating			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (2 %)	Fibrous Glass (90 %)						
<b>ka-23</b>	12725797						
Layer: Off-White Non-Fibrous Material			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>ka-24</b>	12725798						
Layer: Black Non-Fibrous Material			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>ka-25</b>	12725799						
Layer: Off-White Non-Fibrous Material			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>ka-26</b>	12725800						
Layer: Off-White Non-Fibrous Material			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							



Maria Casper, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. This report must not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.



Analysis Request Form (COC)

Client Name & Address: Cal Poly Humboldt Facilities Management - Planning, Design & Construction 1 Harpst Street, Arcata, CA 95521-8299		Client No.: 2087	PO / Job#: FM PDC / XPL293	Date: 01/25/2024
Contact: Scott Harris		Phone: (707) 826-5904	Turn Around Time: <input type="checkbox"/> Same Day / <input type="checkbox"/> 1Day / <input checked="" type="checkbox"/> 2Day / <input type="checkbox"/> 3Day / <input type="checkbox"/> 4Day / <input type="checkbox"/> 5Day	
E-mail: ssh11@humboldt.edu, jrb20@humboldt.edu		<input type="checkbox"/> PCM: <input type="checkbox"/> NIOSH 7400A / <input type="checkbox"/> NIOSH 7400B <input type="checkbox"/> Rotometer <input checked="" type="checkbox"/> PLM: <input checked="" type="checkbox"/> Standard / <input type="checkbox"/> Point Count 400-1000 / <input type="checkbox"/> CARB 435		
Site Name: Kinesiology & Athletics (KA) (024F) Boiler Rm		<input type="checkbox"/> TEM Air: <input type="checkbox"/> AHERA / <input type="checkbox"/> Yamate2 / <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> TEM Bulk: <input type="checkbox"/> Quantitative / <input type="checkbox"/> Qualitative / <input type="checkbox"/> Chatfield <input type="checkbox"/> TEM Water: <input type="checkbox"/> Potable / <input type="checkbox"/> Non-Potable / <input type="checkbox"/> Weight % <input type="checkbox"/> TEM Dust: <input type="checkbox"/> D5755 (microvac) / <input type="checkbox"/> D6480 (wipe)		
Site Location: 55 Gymnasium Ln, Arcata, 95521		<input type="checkbox"/> IAQ Particle Identification (PLM LAB) <input type="checkbox"/> PLM Opaques/Soot <input type="checkbox"/> Particle Identification (TEM LAB) <input type="checkbox"/> Special Project <input type="checkbox"/> Metals Analysis Matrix: Method: Analytes:		

Comments: Reference: CF- 660061 HM605 D30037 - - XPL293; Please Send Invoice to Above Emails  Silica in Air  w/Gravimetry  Quartz Only

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY				Sample Area / Air Volume
			Type	Time On/Off	Avg LPM	Total Time	
See Attachment A	01/24/24	See Attachment A	A P C	NA	NA	NA	NA
			A P C				
			A P C				
			A P C				
		n/a	A P C				
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				

**RECEIVED**  
 JAN 26 2024  
 BY: JLC 950

Sampled By: SH	Date/Time: As above	Shipped Via: <input type="checkbox"/> Fed Ex <input checked="" type="checkbox"/> UPS <input type="checkbox"/> US Mail <input type="checkbox"/> Courier <input type="checkbox"/> Drop Off <input type="checkbox"/> Other:		
Relinquished By: Scott Harris	Relinquished By:	Relinquished By:		
Date / Time: 01/25/2024 1400	Date / Time:	Date / Time:		
Received By:	Received By:	Received By:		
Date / Time:	Date / Time:	Date / Time:		
Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No	Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No	Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No		

SGS Forensic Laboratories may subcontract client samples to other SGSFL locations to meet client requests.  
 San Francisco Office: 3777 Depot Road, Suite 409, Hayward, CA 94545-2761 • Phone: 510/887-8828 • 800/827-3274  
 Los Angeles Office: 20535 South Belshaw Ave., Carson, CA 90746 • Phone: 310/763-2374 • 888/813-9417  
 Las Vegas Office: 6765 S. Eastern Avenue, Suite 3, Las Vegas, NV 89119 • Phone: 702/784-0040  
 Chicago Office: 3020 Woodcreek Drive, Suite C, Downers Grove, IL 60515 • Phone: 341/465-2464

Site: KA	Project: XPL293 Boiler Replacement Project	Sample Date: 1/24/24
Bulk Sample Matrix		
Sample Number	Location	Material Description
KA-1	M-3B - W Wall NW Corner 3" Verticle Direct Cold Water	TSI Run (Yellow)
KA-2	M-3B - NW Corner 2" Horizontal Make Up Water	TSI Run (Yellow)
KA-3	M-3B - 16" T-Valve N Of Boiler	TSI Fitting (Yellow)
KA-4	M-3B - 10" 45° E Boiler N Side	TSI Elbow (Yellow)
KA-5	M-3B - 8" Verticle HWR W Boiler N Side	TSI Run (Yellow)
KA-6	M-3B - 8" 45° E Boiler N Side	TSI Fitting(Yellow)
KA-7	M-3B - 8" Horizontal HWS Center	TSI Run (Yellow)
KA-8	M-3B - 24" Pressure Tank	TSI (Yellow)
KA-9	M-3B - W Wall Canter	4" Base (Dark Grey) + Mastic (Off White)
KA-10	M-3B - SE Corner	4" Base (Dark Grey) + Mastic (Off White)
KA-11	M-3B - SE Corner	Drywall (White) + Joint Compound (White)
KA-12	M-3B - SW Corner	Drywall (White) + Joint Compound (White)
KA-13	M-3B - NE Corner	Drywall (White) + Joint Compound (White)
KA-14	M-3B - SW Corner I-Beam	SFRM (Off White)
KA-15	M-3B - NE Corner I-Beam	SFRM (Off White)
KA-16	M-3B - NW Corner I-Beam	SFRM (Off White)
KA-17	M-3B - NW Corner	Fire Caulking (Red)
KA-18	M-3B - N Of Boiler 10" Presure Reducer	10" Flange Gasket (Brown)
KA-19	M-3B - N Of Boiler 10" Presure Reducer	10" Flange Gasket (Red)
KA-20	M-3B - E Boiler 6" Flex Ducting	Flex Ducting (Dark Brown)
KA-21	M-3B - E Boiler	Insulation (FG Batt, Yellow)
KA-22	M-3B - W Boiler	Insulation (FG Batt, Yellow)
KA-23	M-3B - W Boiler	Pipe Thread Compund (Off White)
KA-24	M-3B - W Wall 1" Pressure Reducing Valve	4" Flange Gasket (Black)
KA-25	M-3B - N Of W Boiler Gas Intake	Pipe Thread Compound(Off White)
KA-26	M-3B - N Of E Boiler Gas Intake	Pipe Thread Compound (Off White)

**Notes:**

Please provide a result for each unique material comprising multilayered samples.

- ACT Acoustical Ceiling Tile
- CTR Center
- JC Joint Compound
- N, S, E, W, NW, etc. Azimuth directions
- TSI Thermal System Insulation
- VFT Vinyl floor tile
- VSF Vinyl sheet flooring

**RECEIVED**  
 UPS  
 JAN 26 2024  
 BY: J.L. G.S.D.