Cal Poly Humboldt.
Facilities Management

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Technical Memorandum

April 16, 2025

Cal Poly Humboldt Siemens Hall – Asbestos and Lead Data Summary

XPL311 – Siemens Hall Roof Replacement Project

The California State Polytechnic University, Humboldt (Humboldt) Facilities Management (FM) Planning, Construction & Design (PDC) division collected bulk samples of suspect Asbestos Containing Material (ACM) and suspect lead materials at the Siemens Hall (SH) exterior roof on March 11, 2025.

This memorandum summarizes the sampling survey analytical findings and provides conclusions based on these data. The location of samples collected at the SH roof are depicted on the attached Sample Location Map (Figure 1, Attachment A). Photographs of the project site are attached (Attachment B).

Site Description

The Siemens Hall (Building 001) is located at the following street address:

- 239 Plaza Mall, Arcata, CA 95521

The SH is a two-level reinforced concrete building located in the center of the Humboldt campus. The SH was constructed in 1959 and is currently utilized by Humboldt administration and academic programs for administrative and instructional purposes. The roof of SH, including the southwest entry lower roof, consists of a bituminous built-up roofing system installed over layers of cellulose and foam insulation. The SH roof deck is concrete. Roof penetrations are sealed with mastic.

Survey Description

A total 14 suspect ACM samples were collected throughout the SH roof, some samples consisting of multiple unique layers of material. The bulk samples collected at the SH roof are listed in Table 1 (page 2). The sample locations are shown on Figure 1 (Attachment A).

The ACM sampling was conducted in general conformance with the United States Environmental Protection Agency (USEPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations governing facility renovation.

Sampling was conducted by Scott Harris, a FM PDC California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) Certified Asbestos Consultant (11-4713) and California Department of Public Health Lead Inspector/Assessor (LRC-00004068).

Laboratory Data

Bulk samples collected from SH were sent to EMSL Analytical Inc. (EMSL), an accredited laboratory located in San Leandro, California. Suspect ACM samples were analyzed for asbestos content via

Polarized Light Microscopy (PLM) using USEPA Method 600/R-93-R. Suspect LBP samples were analyzed for lead content via Atomic Absorption Spectrometry (AAS) using USEPA Method 3050B/7000B. The PLM and AAS analytical reports are attached (Attachment C).

Asbestos Findings

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

Table 1 – Asbestos Data Summary
Siemens Hall (Building 001) - Roof

Sample Number	Location	Material	Laboratory Result	Material Category	Cal/OSHA Work Class	Waste Designation
SH-01	Roof - Drain patch center-NW at NW HVAC	Rolled roofing (black/dark grey)	ND	Not ACM or RACM	NA	Not Asbestos Waste
SH-02	Roof - Patch at SW-center	Rolled roofing (black/dark grey)	ND	Not ACM or RACM	NA	Not Asbestos Waste
SH-03	Roof - Main plane at center-E	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)	ND	Not ACM or RACM	NA	Not Asbestos Waste
SH-04	Roof - Main plane at center-SW at HVAC	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)	ND	Not ACM or RACM	NA	Not Asbestos Waste
SH-05	Roof - Main plane at NW corner at N edge	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)	ND	Not ACM or RACM	NA	Not Asbestos Waste
SH-06	Roof - Flashing at NW corner at N edge	Flashing sealant (black, bituminous)	ND	Not ACM or RACM	NA	Not Asbestos Waste
SH-07	Roof - Drain at center-E	Drain sealant (black)	ND	Not ACM or RACM	NA	Not Asbestos Waste
SH-08	Roof - HVAC electric box at center-E	Mastic (black)	ND	Not ACM or RACM	NA	Not Asbestos Waste
SH-09	Roof - HVAC curb at center-E	Mastic (black)	ND	Not ACM or RACM	NA	Not Asbestos Waste
SH-10	Roof - Vent at NW	Mastic (black)	ND	Not ACM or RACM	NA	Not Asbestos Waste
SH-11	Roof - Vent at SW-center	Mastic (black)	ND	Not ACM or RACM	NA	Not Asbestos Waste

Table 1 – Asbestos Data Summary
Siemens Hall (Building 001) - Roof

Sample Number	Location	Material	Laboratory Result	Material Category	Cal/OSHA Work Class	Waste Designation
SH-12	Roof - Vent at center-E	Vent sealant (black)	ND	Not ACM or RACM	NA	Not Asbestos Waste
SH-13	Roof - Double vent curb at SW	Mastic (black)	ND	Not ACM or RACM	NA	Not Asbestos Waste
SH-14	Roof - Double vent curb at SW	Epoxy coating (black)	ND	Not ACM or RACM	NA	Not Asbestos Waste

Notes:

- ACM = Asbestos Containing Material (greater than 1% asbestos)
- ACCM = Asbestos Containing Construction Materials (greater than 0.1% asbestos)
- NA = Not applicable
- ND = Nondetect (i.e., no asbestos identified above the laboratory detection limit)
- PC400 = Point Count 400 (laboratory analytical method)
- RACM = Regulated Asbestos Containing Material (friable and greater than 1% asbestos)
- Individual materials comprising multi-layered samples are separated by a "+" sign

Conclusions for Asbestos

As listed in Table 1, none (0) of the sampled materials were reported to contain asbestos. The location of the samples collected at the SH roof are shown on Figure 1 (Attachment A). Typical sampled materials are depicted in the attached photographs (Attachment B). The PLM laboratory analytical reports are attached (Attachment C).

Any suspect ACM not identified in this memorandum that is discovered during site work shall be presumed to contain >1% asbestos until sampled and proven otherwise. If suspect ACM is identified during construction 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 sampled, analyzed, and appropriately classified. If applicable, any asbestos material(s) discovered onsite during construction work shall be removed by a licensed abatement contractor prior to other work that may impact such material.

Material containing greater than 1% asbestos is classified by Cal/OSHA as ACM, while material containing less than 1% asbestos is classified as ACCM. Construction work impacting ACM and ACCM requires compliance with Cal/OSHA asbestos regulations (8CCR1529). Demolition and renovation work impacting ACM requires compliance with the USEPA NESHAP regulations as enforced locally by the North Coast Unified Air Quality Management District (NCUAQMD).

Nonfriable ACM is classified as nonhazardous asbestos waste, so long as the material is not rendered friable. If impacted using mechanical means, nonfriable ACM shall be understood to be rendered friable and reclassified as Regulated ACM (RACM). Friable material containing greater than one percent asbestos (RACM) is classified as a California hazardous waste.

Lead Findings

The AAS data are summarized in Table 2 (below). Table 2 lists the sample location, material type, reported or presumed lead content, and associated regulatory designation for each sampled material.

Table 2 – Lead Data Summary
Siemens Hall (Building 004) - Roof

Sample Number	Location	Material	Laboratory Result	Regulatory Designation
SH-Pb-01	SH roof – vent pipe at center-east	Metal flashing (silver)	240,000 ppm	LBP
SH-Pb-02	SH roof – HVAC vent housing at southwest	Paint (grey)	54,000 ppm	LBP

Notes:
- LBP = Lead Based Paint (greater than 5,000 parts per million or 0.5% lead by weight)
- LCP = Lead Containing Paint (containing >90 ppm lead)
- ppm = Parts per million

Conclusions for Lead

As noted in Table 2, two (2) samples representing two (2) unique materials were reported to contain lead. Paint reported to contain lead in concentrations greater than 5,000 parts per million (ppm) or 0.5% by weight is classified as LBP, while paint containing any detectable amount of lead is classified as Lead Containing Paint (LCP). Typical examples of the lead material identified at SH is shown in the attached photographs (Attachment B). The AAS laboratory analytical reports are attached (Attachment C).

Based on the age of the building and data collected onsite, lead is known to be present at SH. All painted coatings and malleable vent pipe flashing at SH shall be presumed to contain lead unless sampled and proven otherwise. Construction work impacting known or presumed lead materials (e.g., LBP, LCP, etc.) must comply with applicable Cal/OSHA regulations (8CCR1532.1).

Demolition waste streams generated by construction work at SH must be representatively sampled to determine the total and soluble concentration of lead in the waste. Transportation and disposal requirements shall be determined based on the waste characterization data.

Closing

If other hazardous constituents of concern are presumed to be present onsite beyond those identified in the memorandum, then additional sampling must be performed to evaluate the presence of such hazards. Waste streams generated during construction and/or demolition work at SH must be representatively sampled to determine the concentration of hazardous constituents in the waste prior to transport offsite.

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

Thank you,

Facilities Management - Planning, Design & Construction

Scott Harris Digitally signed by Scott Harris
Date: 2025.04.17 11:34:47 -07'00'

Scott Harris, CAC, CDPH I/A
(707) 826-5904
scott.harris@humboldt.edu

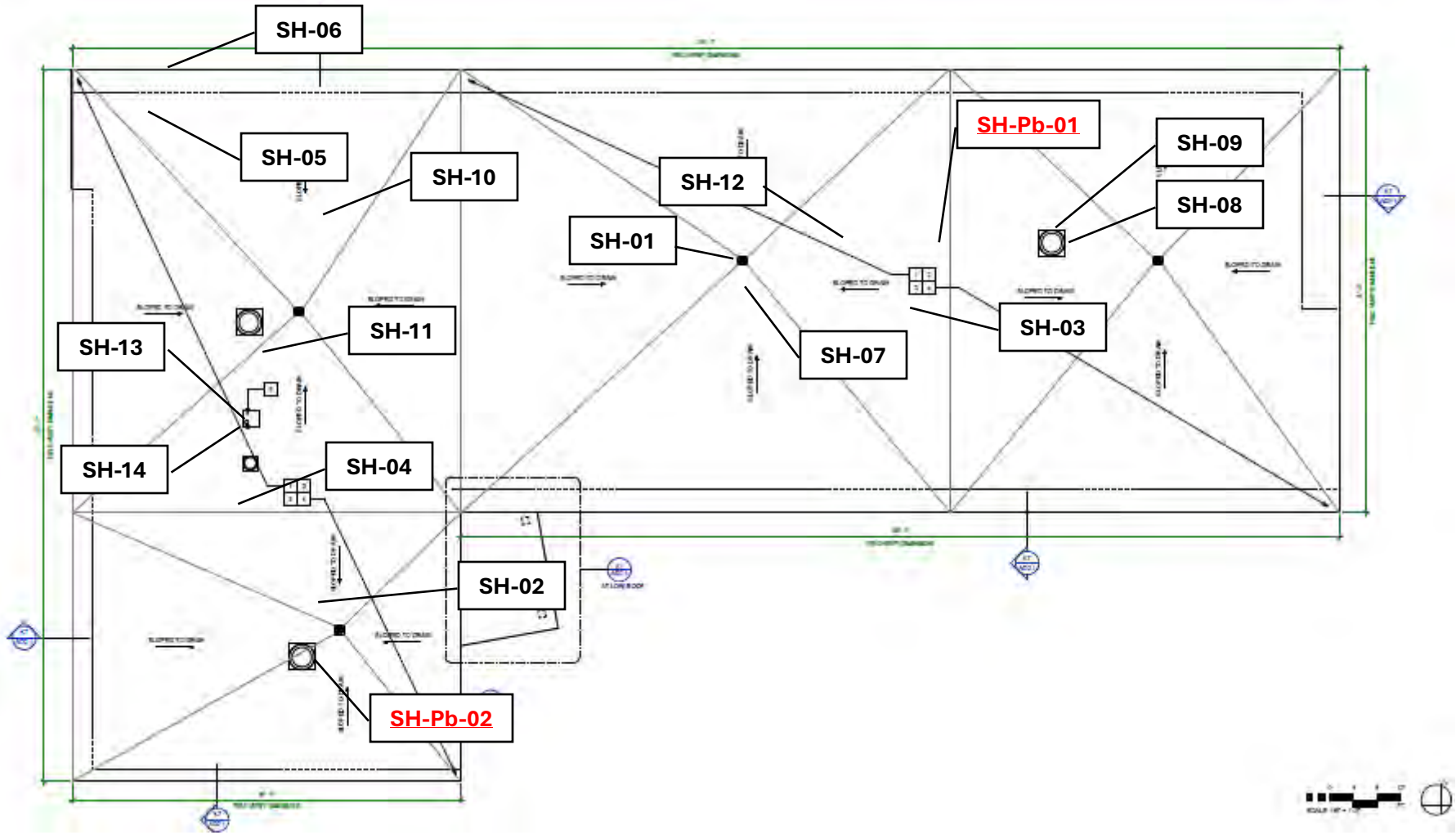
Attachments:
1. Attachment A – Figures
2. Attachment B – Photographs
3. Attachment C – Laboratory Data

Attachment A – Figures

FIGURE 1 – SAMPLE LOCATION MAP

SIEMENS HALL (001)

XPL311 - ROOF REPLACEMENT PROJECT



NOTES:
-NOT TO SCALE
-ALL LOCATIONS APPROXIMATE
-SH-## = SUSPECT ACM SAMPLE NUMBER AND LOCATION
-SH-Pb-## = SUSPECT LEAD SAMPLE NUMBER AND LOCATION
-RED & UNDERLINED TEXT INDICATES A POSTIVE PLM (ASBESTOS) OR AAS (LEAD) ANALYTICAL RESULT

Attachment B – Photographs

Attachment B
Site Photographs

Photograph 1 – Siemens Hall – Exterior – Roof – View looking northeast

Photograph 2 – Siemens Hall – Exterior – View looking north

Photograph 3 – Siemens Hall – Exterior – Roof – View looking west

Photograph 4 – Siemens Hall – Exterior – Roof – View looking southwest – Built-up roofing (typical)

Photograph 5 – Siemens Hall – Exterior – Roof – Penetration mastic (black) (typical)

Photograph 6 – Siemens Hall – Exterior – Roof – Vent pipe flashing containing lead (typical)

Photograph 7 – Siemens Hall – Exterior – Roof – Rolled roofing patch at southwest-center

Photograph 8 – Exterior – Roof – HVAC vent housing paint (grey) containing lead (typical)

Photograph 9 – Siemens Hall – Exterior – Roof – Vent curb, flashing

Photograph 10 – Siemens Hall – Exterior – Roof – Vent curb epoxy coating (black)

Attachment C – Laboratory Data

EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

Tel/Fax: (510) 895-3675 / (510) 895-3680

http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order:	092503504
Customer ID:	HUSU75
Customer PO:	189-828
Project ID:	

Attention:	Scott Harris	**Phone:**	(707) 599-6974
	Cal Poly Humboldt – FM - PD&C	**Fax:**	
	1 Harpst St	**Received Date:**	03/17/2025 9:00 AM
	Arcata, CA 95521-8299	**Analysis Date:**	03/18/2025 - 03/19/2025
		Collected Date:	

Project: SIEMENS HALL (001) ROOF - CF : 607022 HM704 D30037 - - XPL311 - 194-828

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
SH-01 *092503504-0001*	ROOF - DRAIN PATCH CENTER - NW AT NW HVAC - ROLLED ROOF (BLACK / DARK GREY)	Black Fibrous Homogeneous	5% Synthetic 10% Glass	10% Quartz 40% Matrix 35% Non-fibrous (Other)	None Detected
SH-02 *092503504-0002*	ROOF - PATCH AT SW - CENTER - ROLLED ROOF (BLACK / DARK GREY)	Black Fibrous Homogeneous	10% Cellulose 10% Synthetic 10% Glass	50% Matrix 20% Non-fibrous (Other)	None Detected
SH-03-Roofing *092503504-0003*	ROOF - MAIN PLANE AT CENTER - E - BUILT-UP ROOFING (BLACK BITUMINOUS) + INSULATION (TAN CELLULOSE) + INSULATION (WHITE, FOAM)	Black Fibrous Homogeneous	10% Glass	70% Matrix 20% Non-fibrous (Other)	None Detected
SH-03-Insulation 1 *092503504-0003A*	ROOF - MAIN PLANE AT CENTER - E - BUILT-UP ROOFING (BLACK BITUMINOUS) + INSULATION (TAN CELLULOSE) + INSULATION (WHITE, FOAM)	Tan Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
SH-03-Insulation 2 *092503504-0003B*	ROOF - MAIN PLANE AT CENTER - E - BUILT-UP ROOFING (BLACK BITUMINOUS) + INSULATION (TAN CELLULOSE) + INSULATION (WHITE, FOAM)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
SH-04-Roofing *092503504-0004*	ROOF - MAIN PLANE AT CENTER-SW AT HVAC - BUILT-UP ROOFING (BLACK BITUMINOUS) + INSULATION (TAN CELLULOSE) + INSULATION (WHITE, FOAM)	Black Fibrous Homogeneous	10% Glass	70% Matrix 20% Non-fibrous (Other)	None Detected

Initial report from: 03/19/2025 13:02:08

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EMSL Order:	092503504
Customer ID:	HUSU75
Customer PO:	189-828
Project ID:	

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
SH-04-Insulation 1 *092503504-0004A*	ROOF - MAIN PLANE AT CENTER-SW AT HVAC - BUILT-UP ROOFING (BLACK BITUMINOUS) + INSULATION (TAN CELLULOSE) + INSULATION (WHITE, FOAM)	Tan Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
SH-04-Insulation 2 *092503504-0004B*	ROOF - MAIN PLANE AT CENTER-SW AT HVAC - BUILT-UP ROOFING (BLACK BITUMINOUS) + INSULATION (TAN CELLULOSE) + INSULATION (WHITE, FOAM)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
SH-05-Roofing *092503504-0005*	ROOF - MAIN PLANE AT NW CORNER AT N EDGE - BUILT-UP ROOFING (BLACK BITUMINOUS) + INSULATION (TAN CELLULOSE) + INSULATION (WHITE, FOAM)	Black Fibrous Homogeneous	10% Glass	70% Matrix 20% Non-fibrous (Other)	None Detected
SH-05-Insulation 1 *092503504-0005A*	ROOF - MAIN PLANE AT NW CORNER AT N EDGE - BUILT-UP ROOFING (BLACK BITUMINOUS) + INSULATION (TAN CELLULOSE) + INSULATION (WHITE, FOAM)	Brown Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
SH-05-Insulation 2 *092503504-0005B*	ROOF - MAIN PLANE AT NW CORNER AT N EDGE - BUILT-UP ROOFING (BLACK BITUMINOUS) + INSULATION (TAN CELLULOSE) + INSULATION (WHITE, FOAM)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
SH-06-Sealant 1 *092503504-0006*	ROOF - FLASHING AT NW CORNER AT N EDGE - FLASHING SEALAN (BLACK BITUMINOUS)	Black Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
SH-06-Sealant 2 *092503504-0006A*	ROOF - FLASHING AT NW CORNER AT N EDGE - FLASHING SEALAN (BLACK BITUMINOUS)	Black Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
SH-07 *092503504-0007*	ROOF - DRAIN AT CENTER-E - DRAIN SEALANT (BLACK)	Black Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected

Initial report from: 03/19/2025 13:02:08

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EMSL Order: 092503504
Customer ID: HUSU75
Customer PO: 189-828
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
SH-08 *092503504-0008*	ROOF - HVAC ELECTRIC BOX AT CENTER-E - MASTIC (BLACK)	Black Fibrous Homogeneous	5% Cellulose 10% Glass	70% Matrix 15% Non-fibrous (Other)	None Detected
SH-09 *092503504-0009*	ROOF - HVAC CURB AT CENTER-E - MASTIC (BLACK)	Black Fibrous Homogeneous	10% Cellulose	70% Matrix 20% Non-fibrous (Other)	None Detected
SH-10 *092503504-0010*	ROOF - VENT AT NW - MASTIC (BLACK)	Black Fibrous Homogeneous	5% Cellulose	70% Matrix 25% Non-fibrous (Other)	None Detected
SH-11-Mastic 1 *092503504-0011*	ROOF - VENT AT SW CENTER - MASTIC (BLACK)	Black Fibrous Homogeneous	10% Cellulose	70% Matrix 20% Non-fibrous (Other)	None Detected
SH-11-Mastic 2 *092503504-0011A*	ROOF - VENT AT SW CENTER - MASTIC (BLACK)	Black Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
SH-11-Membrane *092503504-0011B*	ROOF - VENT AT SW CENTER - MASTIC (BLACK)	Black Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
SH-12 *092503504-0012*	ROOF - VENT AT CENTER-E - CENT SEALANT (BLACK)	Black Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
SH-13 *092503504-0013*	ROOF - DOUBLE VENT CURB AT SW - MASTIC (BLACK)	Black Fibrous Homogeneous	5% Cellulose 3% Glass	70% Matrix 22% Non-fibrous (Other)	None Detected
SH-14 *092503504-0014*	ROOF - DOUBLE VENT CURB AT SW - EXPOXY COATING (BLACK)	Black Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected

Analyst(s)
Brian Khoo (10)
Damaris Pineda Ayala (13)

Jonathan Nomura, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 “Interim Method”) but augmented with procedures outlined in the 1993 (”final”) version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 03/19/2025 13:02:08

OrderID: 092503504

Asbestos Chain of Custody (Air, Bulk, Soil)

California Customers

EMSL Order Number / Lab Use Only

#092503504

EMSL Analytical, Inc.
464 McCormick Street
San Leandro, CA 94577
PHONE: (510) 895-3675
EMAIL: sanleandrolab@emsl.cc

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information		Billing Information	
Customer ID:	HUSU75	Billing ID:	HUSU75
Company Name:	Cal Poly Humboldt	Company Name:	Cal Poly Humboldt
Contact Name:	Scott Harris	Billing Contact:	Scott Harris
Street Address:	Facilities Management-PDC	Street Address:	Facilities Management-PDC
City, State, Zip:	Arcata CA 95521	City, State, Zip:	Arcata CA 95521
Country:	US	Country:	US
Phone:	707-826-5904	Phone:	707-826-5904
Email(s) for Report:	scott.harris@humboldt.edu	Email(s) for Invoice:	scott.harris@humboldt.edu

Project Information

Project Name/No: Siemens Hall (001) Roof - CF: 607022 HM704 D30037 - - XPL311

Purchase Order: WO: 194-828

EMSL LIMS Project ID: (If applicable, EMSL will provide)

US State where samples collected: CA

State of Connecticut (CT) must select project location: ☐ Commercial (Taxable) ☐ Residential (Non-Taxable)

Sampled By Name: SH

Sampled By Signature:

No. of Samples in Shipment

Turn-Around-Time (TAT)

☐ 3 Hour ☐ 4-4.5 Hour AHERA ONLY ☐ 6 Hour ☐ 24 Hour ☐ 32 Hour ☑ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

TEM Air 3-6 Hour, please call ahead to schedule. 32 Hour TAT available for select tests only; samples must be submitted by 11:30 am.

Test Selection

PCM Air
- ☐ NIOSH 7400
- ☐ NIOSH 7400 w/ 8hr. TWA

PLM - Bulk (reporting limit)
- ☑ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)
- ☐ POINT COUNT
  - ☐ 400 (<0.25%) ☐ 1,000 (<0.1%) ☐ 1,200 (<0.08%)
- POINT COUNT w/ GRAVIMETRIC
  - ☐ 400 (<0.25%) ☐ 1,000 (<0.1%) ☐ 1,200 (<0.08%)

TEM - Air
- ☐ AHERA 40 CFR, Part 763
- ☐ CARB Modified AHERA
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312*

TEM - Bulk
- ☐ TEM EPA NOB
- ☐ TEM EPA 600/R-93/116 w Milling Prep (0.1%)

TEM - Settled Dust
- ☐ Microvac - ASTM D5755
- ☐ Wipe - ASTM D6480
- ☐ Qualitative via Filtration Prep
- ☐ Qualitative via Drop Mount Prep

Soil - Rock - Vermiculite (reporting limit)*
- ☐ PLM CARB 435 - Level A (<0.25%)
- ☐ PLM CARB 435 - Level B (<0.1%)
- ☐ TEM CARB 435 - Level B (<0.1%)
- ☐ TEM CARB 435 - Level C (<0.01%)
- ☐ CARB Guidance Compliance Prep
- ☐ PLM EPA 600/R-93/116 with milling prep (<0.25%)
- ☐ PLM EPA 600/R-93/116 with milling prep (<0.1%)
- ☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)

Other

*Please call with your project-specific requirements.

☐ Positive Stop - Clearly Identified Homogeneous Areas (HA)

Filter Pore Size (Air Samples) ☐ 0.8um ☑ 0.45um

Sample Number	Sample Location / Description	Volume, Area or Homogeneous Area	Date / Time Sampled (Air Monitoring Only)
	See Attachment A		

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment:		Sample Condition Upon Receipt:	
Relinquished by: S. Harris	Date/Time: 3/13/25 1700 TO SRR	Received by: Jacob Rebla UPS	Date/Time 3/17/25 9:00a
Relinquished by:	Date/Time:	Received by:	Date/Time

Controlled Document - COC-51 Asbestos CA Clients R3 03/24/2021

☑ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

Project: XPL311	Site: Siemens Hall (001)	Sample Date: 03/12/2025
Bulk Sample Chain of Custody		
Sample Number	**Location**	**Material Description**
SH-01	Roof - Drain patch center-NW at NW HVAC	Rolled roofing (black/dark grey)
SH-02	Roof - Patch at SW-center	Rolled roofing (black/dark grey)
SH-03	Roof - Main plane at center-E	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)
SH-04	Roof - Main plane at center-SW at HVAC	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)
SH-05	Roof - Main plane at NW corner at N edge	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)
SH-06	Roof - Flashing at NW corner at N edge	Flashing sealant (black, bituminous)
SH-07	Roof - Drain at center-E	Drain sealant (black)
SH-08	Roof - HVAC electric box at center-E	Mastic (black)
SH-09	Roof - HVAC curb at center-E	Mastic (black)
SH-10	Roof - Vent at NW	Mastic (black)
SH-11	Roof - Vent at SW-center	Mastic (black)
SH-12	Roof - Vent at center-E	Vent sealant (black)
SH-13	Roof - Double vent curb at SW	Mastic (black)
SH-14	Roof - Double vent curb at SW	Epoxy coating (black)
Notes:		
Please provide a result for each unique material comprising multilayered samples.		
ACT	Acoustical Ceiling Tile	
AWT	Acoustical Wall 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	

Jacob Pelolo 3/11/25 9:00 UPS

EMSL Analytical, Inc.

200 Route 130, Cinnaminson, NJ, 08077
Telephone: 856-858-4800 Fax:cs@emsl.com
www.emsl.com

EMSL Order ID: 012513447
LIMS Reference ID: AD13447
EMSL Customer ID: HUSU75

Attention: Scott Harris
Cal Poly Humboldt – FM - PD&C [HUSU75]
1 Harpst St
Arcata, CA 95521-8299
(707) 599-6974
ssh11@humboldt.edu

Project Name: Siemens Hall (001) Roof - CF-607022 HM704-D30037- - XPL311

Customer PO: 194-828
EMSL Sales Rep: Callum McMillan
Received: 03/18/2025 10:35
Reported: 03/19/2025 18:08

Analytical Results

Analyte	Results	RL	Weight(g)	Prep Date & Tech	Prep Method	Analysis Date & Analyst	Analytical Method	Q	DF
Client Sample ID: SH-Pb-01/SH roof CTR-E Roof vent flashing (metal) Bulk flashing (silver0									**Date Sampled: 03/12/25**
Matrix: Chips									**LIMS Reference ID: AD13447-01**
Lead	240000 ppm	9700 ppm	0.0414	03/19/25 CZX	SW-846 3050B	03/19/25 SD	SW846-7000B	D	25
Sample Comments:									
Client Sample ID: SH-Pb-02/SH roof SW - HVAC vent housing (metal) Paint (grey)									**Date Sampled: 03/12/25**
Matrix: Chips									**LIMS Reference ID: AD13447-02**
Lead	54000 ppm	3200 ppm	0.2532	03/19/25 CZX	SW-846 3050B	03/19/25 SD	SW846-7000B	D	50
Sample Comments:									

EMSL Analytical, Inc.

200 Route 130, Cinnaminson, NJ, 08077
Telephone: 856-858-4800 Fax:cs@emsl.com
www.emsl.com

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Certified Analyses included in this Report

Analyte	Certifications
SW846-7000B in Chips	
Lead	AIHA LAP

List of Certifications

Code	Description	Number	Expires
NJDEP	New Jersey Department of Environmental Protection	03036	06/30/2025
AIHA LAP	EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC-ELLAP Accredited	100194	05/01/2025
NYSDOH	New York State Department of Health	10872	04/01/2025
California ELAP	California Water Boards	1877	06/30/2025
A2LA	A2LA Environmental Certificate	2845.01	07/31/2026
PADEP	Pennsylvania Department of Environmental Protection	68-00367	11/30/2025
MADEP	Massachusetts Department of Environmental Protection	M-NJ337	06/30/2025
CTDPH	Connecticut Department of Public Health	PH-0270	06/23/2026

Please see the specific Field of Testing (FOT) on www.emsl.com <http://www.emsl.com> for a complete listing of parameters for which EMSL is certified.

Notes and Definitions

Item	Definition
D	Analyte was reported from a dilution run.
(Dig)	For metals analysis, sample was digested.
[2C]	Reported from the second channel in dual column analysis.
DA	Direct Analysis
DF	Dilution Factor
MDL	Method Detection Limit.
ND	Analyte was NOT DETECTED at or above the detection limit.
NR	Spike/Surrogate showed no recovery.
Q	Qualifier
RCS	Respirable Crystalline Silica
RL	Reporting Limit For paint chips, the RL is 0.008% by wt. (equiv. to 80 mg/kg, or ppm) based upon a minimum sample weight of 0.25 grams. For soils, the RL is 40 mg/kg (ppm) based upon a minimum sample weight of 0.5 grams. For dust wipes, the RL is 10 µg/wipe; reporting units of µg/sq. ft. are not validated by the lab based upon data provided by non-lab personnel.
Wet	Sample is not dry weight corrected.

Measurement of uncertainty and any applicable definitions of method modifications are available upon request. Per EPA NLLAP policy, sample results are not blank corrected.

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Owen McKenna Laboratory Manager or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. QC sample results are within quality control criteria and met method specifications unless otherwise noted. All results for soil samples are reported on a dry weight basis, unless otherwise noted.

Analysis following EMSL SOP for the Determination of Environmental Lead by FLAA. The laboratory has a reporting limit of 0.0064% by wt., based upon a minimum sample weight of 0.25g submitted to the lab, and is not responsible for any result or reporting limit provided in mg/cm2 since it is dependent upon an area value provided by non-lab personnel. A "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty and definitions of modifications are available upon request. Results in this report are not blank corrected unless specified.

EMSL ANALYTICAL, INC.
TESTING LABS • PRODUCTS • TRAINING

Lead Chain of Custody

EMSL Order Number / Lab Use Only: 261347

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
PHONE: (800) 220-3675
EMAIL: CinnaminsonLeadLab@emsl.com

Customer Information		Billing Information	
Customer ID:	HUSU75	Billing ID:	HUSU75
Company Name:	Cal Poly Humboldt	Company Name:	Cal Poly Humboldt
Contact Name:	Scott Harris	Billing Contact:	Scott Harris
Street Address:	Facilities Management - PDC - 1 Harpst Street	Street Address:	Facilities Management - PDC - 1 Harpst Street
City, State, Zip:	Arcata, CA 95521	City, State, Zip:	Arcata, CA 95521
Country:	US	Country:	US
Phone:	707-826-3674	Phone:	707-826-3646
Email(s) for Report:	scott.harris@humboldt.edu	Email(s) for Invoice:	scott.harris@humboldt.edu

Project Information

Project Name/No: Siemens Hall (001) Roof - CF: 607022 HM704 D30037 - - XPL311
Purchase Order: WO: 194-828
EMSL LIMS Project ID: (If applicable, EMSL will provide)
US State where samples collected:
State of Connecticut (CT) must select project location: ☐ Commercial (Taxable) ☐ Residential (Non-Taxable)
Sampled By Name: SH
Sampled By Signature:
No. of Samples in Shipment: 2

Turn-Around-Time (TAT)

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

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

MATRIX	METHOD	INSTRUMENT	REPORTING LIMIT	SELECTION
CHIPS ☐ % by wt. ☑ ppm (mg/kg) ☐ mg/cm² *Reporting Limit based on a minimum 0.25g sample weight. **Not appropriate for Ceramic Tiles - XRF is recommended	SW 846-7000B	Flame Atomic Absorption	0.008% (80ppm)	☑
	SW 846-6010D*	ICP-OES	0.0004% (4ppm)	☐
AIR	NIOSH 7082	Flame Atomic Absorption	4µg/filter	☐
	NIOSH 7303M	ICP-OES	1.0µg/filter	☐
	NIOSH 7303M	ICP-MS	0.05µg/filter	☐
WIPE ☐ ASTM ☐ NON-ASTM *If no box is checked, non-ASTM Wipe is assumed	SW 846-7000B	Flame Atomic Absorption	10µg/wipe	☐
	SW 846-6010D*	ICP-OES	1.0µg/wipe	☐
TCLP	SW 846-1311 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	SW 846-1311 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
SPLP	SW 846-1312 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	SW 846-1312 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
TTLC	22 CCR App. II, 7000B	Flame Atomic Absorption	40mg/kg (ppm)	☐
	22 CCR App. II, SW 846-6010D*	ICP-OES	2mg/kg (ppm)	☐
STLC	22 CCR App. II, 7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	22 CCR App. II, SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
Soil	SW 846-7000B	Flame Atomic Absorption	40mg/kg (ppm)	☐
	SW 846-6010D*	ICP-OES	2mg/kg (ppm)	☐
Wastewater Unpreserved ☐ Preserved with HNO3 ☐ PH<2	SM 3111B / SW 846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	EPA 200.7	ICP-OES	0.020 mg/L (ppm)	☐
Drinking Water Unpreserved ☐ Preserved with HNO3 ☐ PH<2	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	☐
	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	☐
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	☐
Other:				☐

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Sample Number	Sample Location	Volume / Area	Date / Time Sampled
SH-Pb-01	SH roof CTR-E - Roof vent flashing (metal)	Bulk flashing (silver)	03/12/2025
SH-Pb-02	SH roof SW - HVAC vent housing (metal)	Paint (grey)	03/12/2025

Method of Shipment:
Sample Condition Upon Receipt:

Relinquished by: Scott Harris SH	Date/Time: 3/13/25 1700 TO SSR	Received by: Jesus DeSoto UPS	Date/Time: 3/17/25 9:00a
Relinquished by: FX	Date/Time: 3/17/25 4:00p	Received by: EFX	Date/Time: 3-18-25 10:35 A

Controlled Document - COC-25 Lead R18 04/04/2024

*6010C Available Upon Request

☐ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.