

Technical Memorandum

April 16, 2025

Cal Poly Humboldt Harry Griffith Hall – Asbestos and Lead Data Summary

XPL310 – Harry Griffith 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 Harry Griffith Hall (HGH) exterior roof on March 12, 2025.

This memorandum summarizes the sampling survey analytical findings and provides conclusions based on these data. The location of samples collected at the HGH roof and the distribution of ACM and LBP identified onsite are depicted on the attached Sample Location Map (Figure 1, Attachment A).

Site Description

The Harry Griffith Hall (Building 004) is located at the following street address:

- 1703 B Street, Arcata, CA 95521

The HGH is a two-level reinforced concrete building located in the center of the Humboldt campus. The HGH was constructed in 1962 and is currently utilized by academic programs for administrative and instructional purposes. The HGH roof includes a single-level metal structure (penthouse) housing the building's mechanical and electrical equipment. The roof of HGH, including the south stairwell roof and the penthouse roof, consist of a bituminous built-up roofing system installed over layers of cellulose and foam insulation. The south elevator shaft roof consists of a rubberized membrane roofing system. Roof penetrations are sealed with mastic. Photographs of the project site are attached (Attachment B).

Survey Description

A total 13 suspect ACM samples were collected throughout the HGH roof, some samples consisting of multiple unique layers of material. The samples collected at the HGH 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 HGH 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 HGH 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 reported to contain asbestos are identified in Table 1 by the asbestos content (percent asbestos) and emphasized using bold text.

Table 1 – Asbestos Data Summary Harry Griffith Hall (Building 004) - Roof						
Sample Number	Location	Material	Laboratory Result	Material Category	Cal/OSHA Work Class	Waste Designation
HGH-01	Roof - S-center at edge at stars	Flashing sealant (black)	ND	Not ACM or RACM	NA	Not Asbestos Waste
HGH-02	Roof - Penthouse at W-center	Flashing sealant (black, bituminous)	ND	Not ACM or RACM	NA	Not Asbestos Waste
HGH-03	Roof - Penthouse at E-center vent	Vent sealant (black, bituminous)	ND	Not ACM or RACM	NA	Not Asbestos Waste
HGH-04	Roof - Patch seam at S-center at elevator flashing	Mastic (black)	ND	Not ACM or RACM	NA	Not Asbestos Waste
HGH-05	Roof - Pitch pocket at S-center	Mastic (black)	ND	Not ACM or RACM	NA	Not Asbestos Waste
HGH-06	Roof - Elevator roof at NW corner	Rolled roofing (black/red)	ND	Not ACM or RACM	NA	Not Asbestos Waste
HGH-07	Roof - Main plane at center-E at vent patch	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)	ND	Not ACM or RACM	NA	Not Asbestos Waste
HGH-08	Roof - Main plane at NW corner	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)	ND	Not ACM or RACM	NA	Not Asbestos Waste
HGH-09	Roof - Main plane at Center-SW inside corner	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)	ND	Not ACM or RACM	NA	Not Asbestos Waste

Table 1 – Asbestos Data Summary Harry Griffith Hall (Building 004) - Roof						
Sample Number	Location	Material	Laboratory Result	Material Category	Cal/OSHA Work Class	Waste Designation
HGH-10	Roof - Penthouse at center	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)	ND	Not ACM or RACM	NA	Not Asbestos Waste
HGH-11	Roof - Penthouse vent at SE-center	Vent sealant (light grey, hard)	<1% Chrysotile (Analyzed by PC400)	Not ACM or RACM	ACCM	Non-hazardous Asbestos Waste
HGH-12	Roof - Vent housing at S-SE	Fastener caulk (white)	ND	Not ACM or RACM	NA	Not Asbestos Waste
HGH-13	Roof - Vent housing at S-SW	Fastener caulk (black)	ND	Not ACM or RACM	NA	Not Asbestos Waste
Notes: <ul style="list-style-type: none"> • 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, one (1) sample representing a single (1) homogeneous material was reported to contain asbestos. The location and quantity of the ACM identified at the HGH roof are shown on Figure 1 (Attachment A). Typical ACM located at HGH is shown in the attached photographs (Attachment B). The PLM laboratory analytical reports are attached (Attachment C).

Asbestos materials, if any, that may be disturbed by construction work at HGH 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.

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 at HGH 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.

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 Harry Griffith Hall (Building 004) - Roof				
Sample Number	Location	Material	Laboratory Result	Regulatory Designation
HGH-Pb-01	HGH main roof – Vent pipe at south-center	Metal flashing (silver)	48,000 ppm	LBP
HGH-Pb-02	Penthouse – north wall at center	Paint (cream)	150 ppm	LCP
Notes: <ul style="list-style-type: none">• LBP = Lead Based Paint (greater than 5,000 parts per million or 0.5% lead by weight)• LCP = Lead Containing Paint (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 HGH 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 HGH. All painted coatings and malleable vent pipe flashing at HGH 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 HGH 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 HGH 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, CAC, CDPH I/A

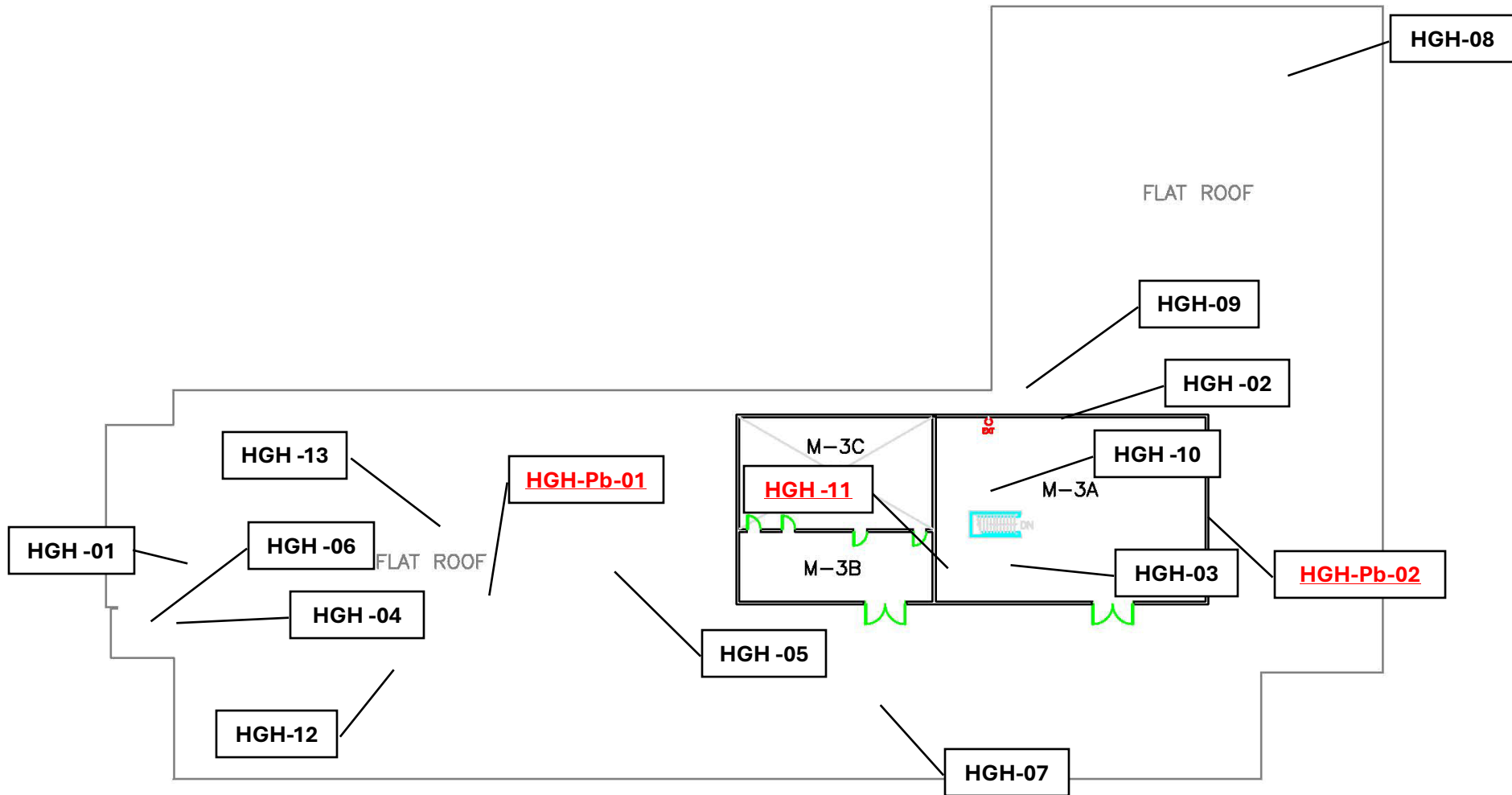
(707) 826-5904
scott.harris@humboldt.edu

Attachments:

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

Attachment A – Figures

FIGURE 1 – SAMPLE LOCATION MAP
HARRY GRIFFITH HALL (004)
XPL310 - 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 – Harry Griffith Hall – Exterior – Roof – View looking north (penthouse south wall)



Photograph 2 – Harry Griffith Hall – Exterior – South Roof – View looking south



Photograph 3 – Harry Griffith Hall – Exterior – North Roof – View looking west



Photograph 4 – Harry Griffith Hall – Exterior – Penthouse Roof – View looking south



Photograph 5 – Harry Griffith Hall – Exterior – Roof – Transition to elevator shaft roof



Photograph 6 – Harry Griffith Hall – Exterior – Roof – Elevator shaft and stairwell roof



Photograph 7 – Harry Griffith Hall – Exterior – Penthouse Roof – View looking north



Photograph 8 – Exterior – Penthouse Roof – Vent sealant reported to contain asbestos



Photograph 9 – Harry Griffith Hall – Exterior – Roof – Vent flashing detail



Photograph 10 – Harry Griffith Hall – Exterior – Roof – Vent pipe flashing containing lead (typical)

Attachment C – Laboratory Data



EMSL Analytical, Inc.

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

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

EMSL Order: 092503499

Customer ID: HUSU75

Customer PO: WO: 194-826

Project ID:

Attention: Scott Harris

Cal Poly Humboldt – FM - PD&C

1 Harpst St

Arcata, CA 95521-8299

Phone: (707) 599-6974

Fax:

Received Date: 03/17/2025 9:00 AM

Analysis Date: 03/19/2025

Collected Date:

Project: HARRY GRIFFITH HALL (004) ROOF - CF: 607022 HM704 D30037 - - XPL310

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HGH-01 092503499-0001	ROOF - S. CENTER AT EDGE AT STARS - FLASHING SEALANT (BLACK)	Black Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
HGH-02 092503499-0002	ROOF - PENTHOUSE AT W CENTER - FLASHING SEALANT (BLACK, BITUMINOUS)	Black Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
HGH-03 092503499-0003	ROOF - PENTHOUSE AT E CENTER VENT - VENT SEALANT (BLACK, BITUMINOUS)	Black Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
HGH-04 092503499-0004	ROOF - PATCH SEAM AT S CENTER AT ELEVATOR FLASHING - MASTIC (BLACK)	Black Non-Fibrous Homogeneous	7% Cellulose	80% Matrix 13% Non-fibrous (Other)	None Detected
HGH-05-Mastic 1 092503499-0005	ROOF - PITCH POCKET AT S CENTER - MASTIC (BLACK)	Black Non-Fibrous Homogeneous	5% Cellulose	80% Matrix 15% Non-fibrous (Other)	None Detected
HGH-05-Mastic 2 092503499-0005A	ROOF - PITCH POCKET AT S CENTER - MASTIC (BLACK)	Brown/Black Non-Fibrous Homogeneous	2% Cellulose	80% Matrix 18% Non-fibrous (Other)	None Detected
HGH-06-Shingle 092503499-0006	ROOF - ELEVATOR ROOF AT NW CORNER - ROLLED ROOFING (BLACK/RED)	Black Fibrous Homogeneous	10% Synthetic	80% Matrix 10% Non-fibrous (Other)	None Detected
HGH-06-Mastic 092503499-0006A	ROOF - ELEVATOR ROOF AT NW CORNER - ROLLED ROOFING (BLACK/RED)	Black Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
HGH-07-B.U.R 092503499-0007	ROOF - MAIN PLANE AT CENTER - E AT VENT PATCH - BUILT-UP ROOFING (BLACK, BITUMINOUS) + INSULATION (TAN, CELLULOSE) + INSULATION (WHITE, FOAM)	Black Fibrous Homogeneous	5% Cellulose 5% Glass	70% Matrix 20% Non-fibrous (Other)	None Detected

Initial report from: 03/19/2025 14:20:52



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EMSL Order: 092503499

Customer ID: HUSU75

Customer PO: WO: 194-826

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HGH-07-Insulation 1 092503499-0007A	ROOF - MAIN PLANE AT CENTER - E AT VENT PATCH - BUILT-UP ROOFING (BLACK, BITUMINOUS) + INSULATION (TAN, CELLULOSE) + INSULATION (WHITE, FOAM)	Brown Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
HGH-07-Insulation 2 092503499-0007B	ROOF - MAIN PLANE AT CENTER - E AT VENT PATCH - BUILT-UP ROOFING (BLACK, BITUMINOUS) + INSULATION (TAN, CELLULOSE) + INSULATION (WHITE, FOAM)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HGH-08-B.U.R 092503499-0008	ROOF - MAIN PLANE AT NW CORNER - BUILT-UP ROOFING (BLACK, BITUMINOUS) + INSULATION (TAN, CELLULOSE) + INSULATION (WHITE, FOAM)	Black Fibrous Homogeneous	5% Cellulose 6% Glass	80% Matrix 9% Non-fibrous (Other)	None Detected
HGH-08-Insulation 1 092503499-0008A	ROOF - MAIN PLANE AT NW CORNER - BUILT-UP ROOFING (BLACK, BITUMINOUS) + INSULATION (TAN, CELLULOSE) + INSULATION (WHITE, FOAM)	Brown Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
HGH-08-Insulation 2 092503499-0008B	ROOF - MAIN PLANE AT NW CORNER - BUILT-UP ROOFING (BLACK, BITUMINOUS) + INSULATION (TAN, CELLULOSE) + INSULATION (WHITE, FOAM)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HGH-09-B.U.R 092503499-0009	ROOF - MAIN PLANE AT CENTER - SW INSIDE CORNER - BUILT-UP ROOFING (BLACK, BITUMINOUS) + INSULATION (TAN, CELLULOSE) + INSULATION (WHITE, FOAM)	Black Fibrous Homogeneous	6% Cellulose 5% Glass	80% Matrix 9% Non-fibrous (Other)	None Detected



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EMSL Order: 092503499

Customer ID: HUSU75

Customer PO: WO: 194-826

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HGH-09-Insulation 1 092503499-0009A	ROOF - MAIN PLANE AT CENTER - SW INSIDE CORNER - BUILT-UP ROOFING (BLACK, BITUMINOUS) + INSULATION (TAN, CELLULOSE) + INSULATION (WHITE, FOAM)	Brown Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
HGH-09-Insulation 2 092503499-0009B	ROOF - MAIN PLANE AT CENTER - SW INSIDE CORNER - BUILT-UP ROOFING (BLACK, BITUMINOUS) + INSULATION (TAN, CELLULOSE) + INSULATION (WHITE, FOAM)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HGH-10-B.U.R 092503499-0010	ROOF - PENTHOUSE AT CENTER - BUILT-UP ROOFING (BLACK, BITUMINOUS) + INSULATION (TAN, CELLULOSE) + INSULATION (WHITE, FOAM)	Black Fibrous Homogeneous	5% Cellulose 5% Glass	80% Matrix 10% Non-fibrous (Other)	None Detected
HGH-10-Insulation 1 092503499-0010A	ROOF - PENTHOUSE AT CENTER - BUILT-UP ROOFING (BLACK, BITUMINOUS) + INSULATION (TAN, CELLULOSE) + INSULATION (WHITE, FOAM)	Tan Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
HGH-10-Insulation 2 092503499-0010B	ROOF - PENTHOUSE AT CENTER - BUILT-UP ROOFING (BLACK, BITUMINOUS) + INSULATION (TAN, CELLULOSE) + INSULATION (WHITE, FOAM)				Layer Not Present
HGH-11 092503499-0011	ROOF - PENTHOUSE VENT AT SE CENTER - VENT SEALANT (LIGHT GREY, HARD)	White/Beige Non-Fibrous Homogeneous	<1% Fibrous (Other)	80% Matrix 20% Non-fibrous (Other)	<1% Chrysotile
Fibers were found with refractive indices outside of the acceptable range for regulated asbestos. These fibers are possibly altered asbestos fibers and were not included in the final asbestos concentration.					
HGH-12 092503499-0012	ROOF - VENT HOUSING A S-SE - FASTENER CAULK (WHITE)	White Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
HGH-13 092503499-0013	ROOF - VENT HOUSING A S-SW - FASTENER CAULK (BLACK)	Black Non-Fibrous Homogeneous	5% Cellulose	80% Matrix 15% Non-fibrous (Other)	None Detected

Initial report from: 03/19/2025 14:20:52



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EMSL Order: 092503499

Customer ID: HUSU75

Customer PO: WO: 194-826

Project ID:

Analyst(s) _____

Brian Khoo (3)

David Nguyen (19)

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 14:20:52



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EMSL Order: 092503499
CustomerID: HUSU75
CustomerPO: WO: 194-826
ProjectID:

Attn: **Scott Harris**
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Phone: (707) 826-3646
Fax:
Received: 3/17/2025 09:00 AM
Analysis Date: 4/17/2025
Collected:

Project: **HARRY GRIFFITH HALL (004) ROOF - CF: 607022 HM704 D30037 - - XPL310**

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 with Gravimetric Reduction. Quantitation using 400 Point Count Procedure.

SAMPLE ID	DESCRIPTION	APPEARANCE	(% Matrix Organic Acid		NON- ASBESTOS % Fibrous	NON- ASBESTOS % NON-FIBROUS	ASBESTOS % TYPES
HGH-11 092503499-0011	ROOF - PENTHOUSE VENT AT SE CENTER - VENT SEALANT (LIGHT GREY, HARD)	White/Beige Non-Fibrous Homogeneous	13.4	77.3		9.3 Non-fibrous (other)	<0.25 Chrysotile

Analyst(s)

Xeena Paul (1)

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. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. EMSL suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. Estimation of uncertainty is available on request.

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

Initial report from 04/17/2025 11:13:57



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LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody (Air, Bulk, Soil)

California Customers

EMSL Order Number / Lab Use Only

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464 McCormick Street

San Leandro, CA 94577
PHONE: (510) 895-3675
EMAIL: sanleandrolab@emsl.cc

#092503499

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

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

Project Information

Project Name/No: Harry Griffith Hall (004) Roof - CF: 607022 HM704 D30037 - - XPL310		Purchase Order: WO: 194-826	
EMSL LIMS Project ID: (If applicable, EMSL will provide)		US State where samples collected: CA	State of Connecticut (CT) must select project location: <input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-Taxable)
Sampled By Name: SH		Sampled By Signature: _____ No. of Samples in Shipment	

Turn-Around-Time (TAT)

☐ 3 Hour
 ☐ 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

<u>PCM Air</u>		<u>TEM - Air</u>		<u>Soil - Rock - Vermiculite (reporting limit)*</u>	
<input type="checkbox"/> NIOSH 7400		<input type="checkbox"/> AHERA 40 CFR, Part 763		<input type="checkbox"/> PLM CARB 435 - Level A (<0.25%)	
<input type="checkbox"/> NIOSH 7400 w/ 8hr. TWA		<input type="checkbox"/> CARB Modified AHERA		<input type="checkbox"/> PLM CARB 435 - Level B (<0.1%)	
<u>PLM - Bulk (reporting limit)</u>		<input type="checkbox"/> NIOSH 7402		<input type="checkbox"/> TEM CARB 435 - Level B (<0.1%)	
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)		<input type="checkbox"/> EPA Level II		<input type="checkbox"/> TEM CARB 435 - Level C (<0.01%)	
<input type="checkbox"/> PLM EPA NOB (<1%)		<input type="checkbox"/> ISO 10312*		<input type="checkbox"/> CARB Guidance Compliance Prep	
<input type="checkbox"/> POINT COUNT		<u>TEM - Bulk</u>		<input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.25%)	
<input type="checkbox"/> 400 (<0.25%)	<input type="checkbox"/> 1,000 (<0.1%)	<input type="checkbox"/> 200 (<0.08%)	<input type="checkbox"/> TEM EPA NOB	<input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.1%)	
POINT COUNT w/ GRAVIMETRIC			<input type="checkbox"/> TEM EPA 600/R-93/116 w Milling Prep (0.1%)	<input type="checkbox"/> TEM EPA 600/R-93/116 with milling prep (<0.1%)	
<input type="checkbox"/> 400 (<0.25%)	<input type="checkbox"/> 1,000 (<0.1%)	<input type="checkbox"/> 200 (<0.08%)	<u>TEM - Settled Dust</u>		<u>Other</u>
			<input type="checkbox"/> Microvac - ASTM D5755		
			<input type="checkbox"/> Wipe - ASTM D6480		
			<input type="checkbox"/> Qualitative via Filtration Prep		
			<input type="checkbox"/> Qualitative via Drop Mount Prep		

<input type="checkbox"/> Positive Stop - Clearly Identified Homogeneous Areas (HA)	Filter Pore Size (Air Samples) <input type="checkbox"/> 0.8um <input checked="" type="checkbox"/> 0.45um
--	--

[illegible]

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 1730 ^{TO SFR}	Received by: J. P. Peltz UP	Date/Time: 3/11/25 9:00
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.

#092503499

Project: XPL310	Site: Harry Griffith Hall (004)	Sample Date: 03/12/2025
Bulk Sample Chain of Custody		
Sample Number	Location	Material Description
HGH-01	Roof - S-center at edge at stars	Flashing sealant (black)
HGH-02	Roof - Penthouse at W-center	Flashing sealant (black, bituminous)
HGH-03	Roof - Penthouse at E-center vent	Vent sealant (black, bituminous)
HGH-04	Roof - Patch seam at S-center at elevator flashing	Mastic (black)
HGH-05	Roof - Pitch pocket at S-center	Mastic (black)
HGH-06	Roof - Elevator roof at NW corner	Rolled roofing (black/red)
HGH-07	Roof - Main plane at center-E at vent patch	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)
HGH-08	Roof - Main plane at NW corner	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)
HGH-09	Roof - Main plane at Center-SW inside corner	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)
HGH-10	Roof - Penthouse at center	Built-up roofing (black, bituminous) + Insulation (tan, cellulose) + insulation (white, foam)
HGH-11	Roof - Penthouse vent at SE-center	Vent sealant (light grey, hard)
HGH-12	Roof - Vent housing at S-SE	Fastener caulk (white)
HGH-13	Roof - Vent housing at S-SW	Fastener caulk (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 Rosh 3/17/25 9:00 4/5

**EMSL Analytical, Inc.**

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

EMSL Order ID: 012513450**LIMS Reference ID:** AD13450**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: Harry Griffith Hall (001) Roof -CF-607022
HM704 D30037 - - XPL310

Customer PO: 194-826
EMSL Sales Rep: Callum McMillan
Received: 03/18/2025 10:35
Reported: 03/19/2025 18:07

Analytical Results

Analyte	Results	RL	Weight(g)	Prep Date & Tech	Prep Method	Analysis Date & Analyst	Analytical Method	Q	DF
Client Sample ID: HGH-Pb-01/HGH Roof S-CR Roof vent flashing (metal) - Bulk flashing (silver)						Date Sampled: 03/12/25			
Matrix: Chips						LIMS Reference ID: AD13450-01			
Lead	48000 ppm	2000 ppm	0.0818	03/19/25 CZX	SW-846 3050B	03/19/25 SD	SW846-7000B	D	10
Sample Comments:									
Client Sample ID: HGH-Pb-02/HGH roof - Penthouse N wall (metal) - Paint (cream)						Date Sampled: 03/12/25			
Matrix: Chips						LIMS Reference ID: AD13450-02			
Lead	150 ppm	60 ppm	0.2617	03/19/25 CZX	SW-846 3050B	03/19/25 SD	SW846-7000B		1
Sample Comments:									

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Harry Griffith Hall (001) Roof -CF-607022
HM704 D30037 - - XPL310

Customer PO:

194-826

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Callum McMillan

Received:

03/18/2025 10:35

Reported:

03/19/2025 18:07

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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Telephone: 856-858-4800 Fax: cs@emsl.com
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EMSL Order ID: 012513450**LIMS Reference ID:** AD13450**EMSL Customer ID:** HUSU75**Attention:** Scott Harris

Cal Poly Humboldt – FM - PD&C [HUSU75]
1 Harpst St
Arcata, CA 95521-8299
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Project Name:

Harry Griffith Hall (001) Roof -CF-607022
HM704 D30037 - - XPL310

Customer PO:

194-826

EMSL Sales Rep:

Callum McMillan

Received:

03/18/2025 10:35

Reported:

03/19/2025 18:07

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

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077

PHONE: (800) 220-3675

EMAIL: CinnaminsonLeadLab@emsl.com

AD 13450

Customer Information	Customer ID:	HUSU75	Billing Information	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		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:	Harry Griffith Hall (001) Roof - CF: 607022 HM704 D30037 - - XPL310
Purchase Order:	WO: 194-826
EMSL LIMS Project ID:	
(If applicable, EMSL will provide)	
US State where samples collected:	State of Connecticut (CT) must select project location:
	<input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-Taxable)
Sampled By Name:	SH
Sampled By Signature:	
No. of Samples in Shipment	2

Turn-Around-Time (TAT)	
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour
<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 32 Hour
<input checked="" type="checkbox"/> 48 Hour	<input type="checkbox"/> 72 Hour
<input type="checkbox"/> 96 Hour	<input type="checkbox"/> 1 Week
<input type="checkbox"/> 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 <input type="checkbox"/> % by wt. <input checked="" type="checkbox"/> ppm (mg/kg) <input type="checkbox"/> mg/cm ²	SW 846-7000B	Flame Atomic Absorption	0.008% (80ppm)	<input checked="" type="checkbox"/>
	SW 846-6010D*	ICP-OES	0.0004% (4ppm)	<input type="checkbox"/>
	NIOSH 7082	Flame Atomic Absorption	4µg/filter	<input type="checkbox"/>
AIR	NIOSH 7303M	ICP-OES	1.0µg/filter	<input type="checkbox"/>
	NIOSH 7303M	ICP-MS	0.05µg/filter	<input type="checkbox"/>
WIPE <input type="checkbox"/> ASTM <input type="checkbox"/> NON-ASTM	SW 846-7000B	Flame Atomic Absorption	10µg/wipe	<input type="checkbox"/>
If no box is checked, non-ASTM Wipe is assumed	SW 846-6010D	ICP-OES	1.0µg/wipe	<input type="checkbox"/>
TCLP	SW 846-1311 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW 846-1311 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
SPLP	SW 846-1312 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW 846-1312 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
TTLC	22 CCR App. II, 7000B	Flame Atomic Absorption	40mg/kg (ppm)	<input type="checkbox"/>
	22 CCR App. II, SW 846-6010D*	ICP-OES	2mg/kg (ppm)	<input type="checkbox"/>
STLC	22 CCR App. II, 7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	22 CCR App. II, SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
Soil	SW 846-7000B	Flame Atomic Absorption	40mg/kg (ppm)	<input type="checkbox"/>
	SW 846-6010D*	ICP-OES	2mg/kg (ppm)	<input type="checkbox"/>
Wastewater	SM 3111B / SW 846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
Unpreserved				<input type="checkbox"/>
Preserved with HNO ₃	EPA 200.7	ICP-OES	0.020 mg/L (ppm)	<input type="checkbox"/>
Drinking Water	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	<input type="checkbox"/>
Unpreserved				<input type="checkbox"/>
Preserved with HNO ₃	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	<input type="checkbox"/>
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	<input type="checkbox"/>
Other:				<input type="checkbox"/>

2025 MAR 18 1A 10:36

CINNAMINSON, NJ

RECEIVED

EMSL

Sample Number	Sample Location	Volume / Area	Date / Time Sampled
HGH-Pb-01	HGH roof S-CTR - Roof vent flashing (metal)	Bulk flashing (silver)	03/12/2025
HGH-Pb-02	HGH roof - Penthouse N wall (metal)	Paint (cream)	03/12/2025

Method of Shipment:		Sample Condition Upon Receipt:	
Relinquished by:	Scott Harris	Received by:	Jacob DeSoto UPS
Date/Time:	3/13/25 1730	Date/Time:	3/17/25 9:00am
Relinquished by:	FX	Received by:	FX
Date/Time:	3/17/25 4:00pm	Date/Time:	3-18-25 10:35

Controlled Document - COC-25 Lead R19-04/04/2024

*6010C Available Upon Request

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

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