



TO: ROBERT SALERNO
FACILITIES PROJECT SUPERVISOR
CALIFORNIA STATE UNIVERSITY
5151 STATE UNIVERSITY DRIVE
LOS ANGELES, CA 90032

LIMITED ASBESTOS SURVEY REPORT
California State University Los Angeles
King Hall – Room 1064
5151 State University Drive
Los Angeles, CA 90032

Date Prepared: August 12, 2019

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I. Executive Summary and Purpose

At the request of Mr. Robert Salerno of California State University Los Angeles facilities Department, Terra Environmental Services conducted a limited asbestos survey at California State University Los Angeles King Hall Room 1064 located at 5151 State University Drive Los Angeles, CA 90032. The Survey was authorized by Mr. Salerno in acceptance of Terra Proposal for Asbestos Consulting Services.

II. Scope of services

The scope of this investigation included a visual inspection of King Hall - Room 1064, digital photography of key observations, sample collection of suspect asbestos containing building materials with laboratory analysis of samples, and production of this written report of findings, conclusions, and recommendations.

III. Visual Survey, Sampling Methodology, and Analytical Procedures

a. Visual Survey

The Visual Survey consisted of a walk-through and visual inspection of the affected building. It included the identification of all suspect asbestos containing materials and the physical touching of suspect ACM in an effort to determine the friability and condition of said materials.

In surveying the building, we used our training in identifying asbestos-containing materials, our familiarity with building construction and our general experience to locate potential sources of ACM and ACCM.

This evaluation was performed in accordance with the Asbestos-Containing Materials in Buildings rule prepared by the U.S. EPA. Destructive sampling collection methods were used by Terra Environmental on site representatives. The asbestos building survey was performed by Mr. Xavier Avila AHERA Certified Asbestos Building Inspector (DOSH CSST Trainee) and Mr. Alfred Delgadillo AHERA Certified Asbestos Building Inspector (DOSH CSST Trainee) under the supervision of Mr. Ulises Monsalvo, a California, Division of Occupational Safety and Health (DOSH)-Certified Site Surveillance Technician, CSST 04-3604 on August 3rd, 2019.

b. Sampling Methodology

The next phase of the survey was the selection of sampling areas and collection of bulk samples. Material sampling areas were grouped based on material homogeneity. A homogeneous material is one, which contains the same texture, color, and uniform, applied during the same general time period. Terra employed destructive sampling methods for the collection of bulk samples. All sampled materials were in good condition at the time of the inspection and sample collection.

c. Analytical Procedures

The PLM Method is the most commonly used method to analyze building materials for the presence of asbestos. This method utilizes the optical properties of minerals to identify the selected constituent. The use of this method enables identification of the type and the percentage of asbestos in a given sample. The detection limit of the PLM method for asbestos identification is about one percent (1%) asbestos. Because the State of California recognizes asbestos-containing construction material (ACCM) as any material, which contains greater than or equal to one tenth of one percent (0.1%) asbestos, materials containing "trace" amounts of asbestos are reported by Terra Environmental as ACCM in the State of California.

Terra Environmental collected a total of nine (9) bulk samples of suspect ACM that were analyzed fifteen (15) times on a layer by layer basis. The samples were transferred following proper chain of custody protocol to AIH Laboratory, located at 2556 W. Woodland Dr. Anaheim California, for analysis. AIH Laboratory is an accredited laboratory for bulk asbestos analysis under the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (Certification Number 500079-0). The samples were analyzed by Polarized Light Microscopy (PLM) with optical dispersion staining in accordance with the United States Environmental Protection Agency (EPA) Method (EPA 600/M4-82-020 per 40 CFR 763, subpart F, Appendix A).

IV. Discussion of Survey Findings and Recommendations

ASBESTOS

Asbestos-containing material (ACM) means any material containing more than 1% asbestos. Asbestos Standard for Construction 29 CFR 1926.1101.

Asbestos-Containing Construction Material (ACCM) is defined by California DOSH Title 8, Section 1529 (341.6 Registration Requirements) to mean any manufactured construction material which contains more than 1/10th of 1 percent asbestos by weight.

The visual inspection and bulk sample analysis results revealed the following Asbestos-Containing Materials:

Homogeneous Material	Location	Lab Sample Numbers	Asbestos detected	Quantity
Ceiling Tile Mastic	Room #C1064-D Room#C1064-C	191217401 191217402 191217403	None Detected	500 Sq. Ft.
Attic Ceiling Plaster	Room#C1064-D Room#C1064-C Room#C1064-B	191217404 191217405 191217406	None Detected	500 Sq. Ft.
Floor VCT Tile Mastic	Room#C1064 – A Room#C1064 – D	191217407 191217408 191217409	Chrysotile 2%	500 Sq. Ft.

Recommendations for handling ACM:

Asbestos containing materials identified the King Hall - Room 1064. The Vinyl floor tile mastic asbestos content is 2% Chrysotile, these materials is in good condition does not constitute a health hazard if left undisturbed and well maintained.

Removal and disposal of Asbestos containing **Floor VCT Tile Mastic** must be performed by a California Licensed Asbestos Abatement Contractor, in accordance with all applicable regulations, including but not limited to, 29 CFR 1926.1101 (OSHA), 40 CFR 763 (AHERA), 40 CFR Part 61 (NESHAPS) and 8 CAC 1529 (Cal/OSHA Asbestos), including mandatory and non-mandatory appendices as applicable, and Local Air Quality Management District regulations (SCAQMD 1403).

Should materials different to those identified in this report or, other forms of suspect hazardous materials be discovered during the renovation process, the contractor should be instructed to cease all work activities which may initiate an exposure episode and notify the appropriate management personnel.

V. General Recommendations and Notes

Terra has endeavored to observe the exiting conditions within the subject property using generally accepted procedures. Regardless of the thoroughness of a survey, there is always a possibility some areas containing asbestos were overlooked or were inaccessible, or are different from those at specific sample locations. Therefore, conditions at every location may not be as anticipated by our field representative. In addition, demolition may uncover altered or differing conditions.

Written by:



Israel Monsalvo,
CA DOSH Certified Asbestos Consultant
CAC #04-3551
Terra Environmental Services

VI. Confidentiality and Limitations

This report has been prepared for the sole use of California State University Los Angeles. Material quantities are, in some cases, listed within this document. Those quantities are not intended to be used for removal bidding purposes. This document also is not intended as a contract manual; work methods and sequence, coordination of participants, applicable codes, engineering controls, required submittals and notifications should in all cases be addressed in a separate and independent bidding and contract document.

SITE PHOTOGRAPHS



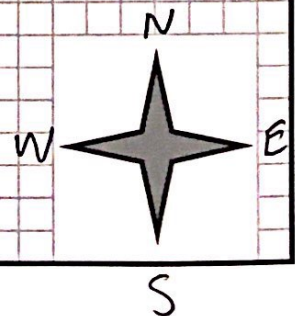
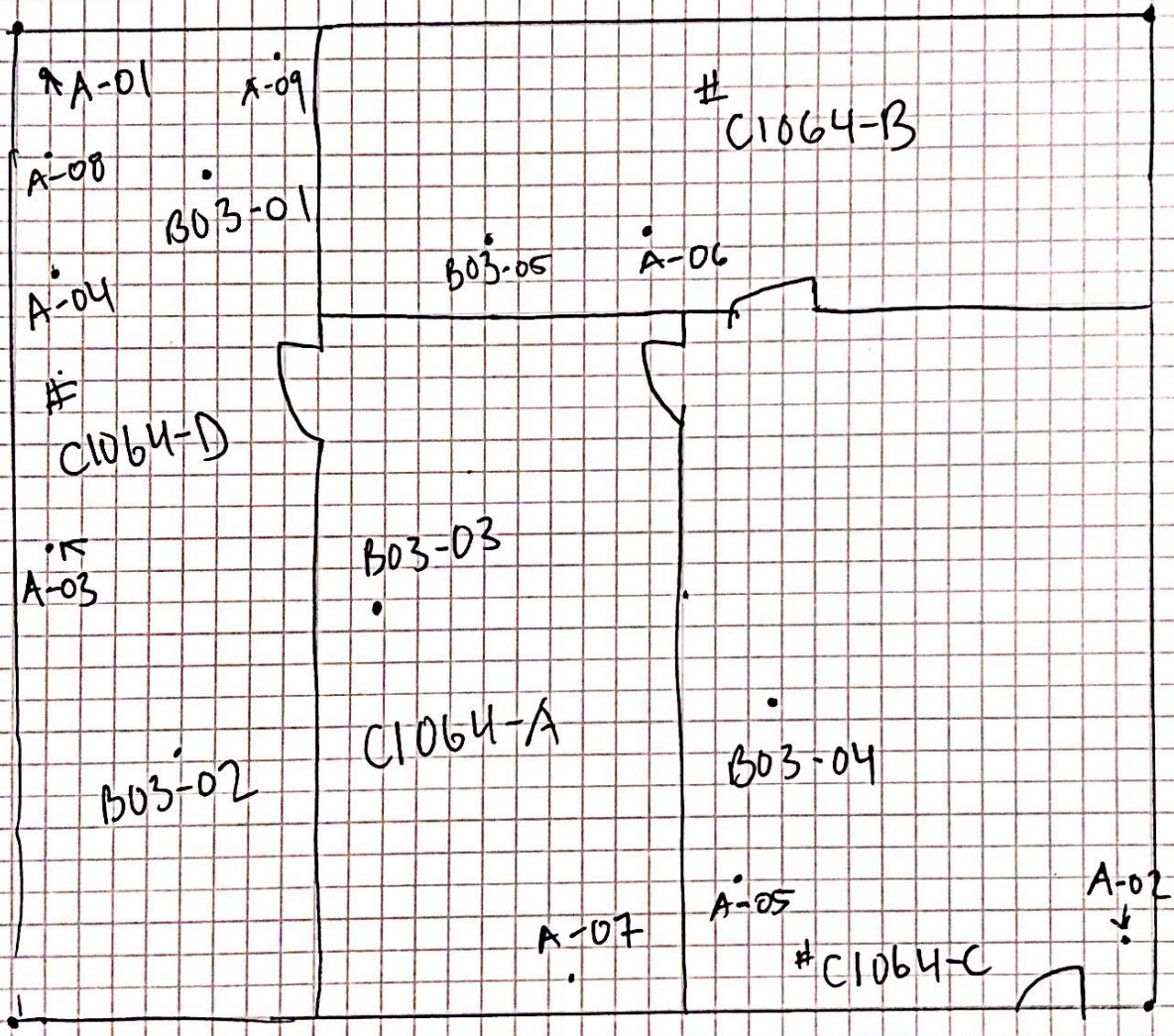
Asbestos containing black mastic on 9"x9" vinyl floor tile



Terra
Environmental

Project # 71900
Date: 8-3-19
Type of Work: AS

Customer CAL STATE LA
Project Name: ROOM 1064 KINGS HALL
Project Address: 5151 STATE UNIVERSITY DR LOS ANGELES CA 90032



12631 Imperial Hwy Suite A225 Santa Fe Springs, CA 90670
Tel 562/868-3777 - Fax 562/868-3778 www.terraeng.com

LABORATORY RESULTS



BULK ASBESTOS FIBER ANALYSIS
BY POLARIZED LIGHT MICROSCOPY



2556 W Woodland Dr Anaheim, CA 92801

Client Name: Terra Environmental
Project Manager: Israel Monsalvo
Client Address: 12631 Imperial Hwy Ste A225 Santa Fe Springs, CA 90670
Project Number: 71900
Project Location: 5151 State University Dr., Los Angeles, CA 90032

Lab Batch Number: 1912174
Samples Submitted: 9
Samples Analyzed: 9
Analysis Method: EPA 600/R-93/116 & EPA 600/M4-82-020

Lab ID: 191217401

Client ID: A-01

Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Brown compressed fibrous material	None Detected	Cellulose 80%	Binder/Filler, Fine Particles
2.	Brown mastic	None Detected	None Detected	Mastic/Binder, Fine Particles

Lab ID: 191217402

Client ID: A-02

Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Brown compressed fibrous material	None Detected	Cellulose 80%	Binder/Filler, Fine Particles
2.	Brown mastic	None Detected	None Detected	Mastic/Binder, Fine Particles

Lab ID: 191217403

Client ID: A-03

Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Brown compressed fibrous material	None Detected	Cellulose 80%	Binder/Filler, Fine Particles
2.	Brown mastic	None Detected	None Detected	Mastic/Binder, Fine Particles

Lab ID: 191217404

Client ID: A-04

Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	White sandy material	None Detected	None Detected	Binder/Filler, Mineral Grains

Lab ID: 191217405

Client ID: A-05

Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	White sandy material	None Detected	None Detected	Binder/Filler, Mineral Grains



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2556 W Woodland Dr Anaheim, CA 92801

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Project Manager: Israel Monsalvo
Client Address: 12631 Imperial Hwy Ste A225 Santa Fe Springs, CA 90670
Project Number: 71900
Project Location: 5151 State University Dr., Los Angeles, CA 90032

Lab Batch Number: 1912174
Samples Submitted: 9
Samples Analyzed: 9
Analysis Method: EPA 600/R-93/116 & EPA 600/M4-82-020

Lab ID: 191217406

Client ID: A-06

Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	White sandy material	None Detected	None Detected	Binder/Filler, Mineral Grains

Lab ID: 191217407

Client ID: A-07

Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Grey vinyl tile	None Detected	None Detected	Vinyl/Binder, Fine Particles
2.	Black mastic	Chrysotile 2%	None Detected	Mastic/Binder, Fine Particles

Lab ID: 191217408

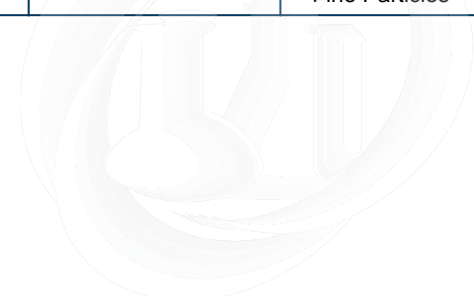
Client ID: A-08

Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Grey vinyl tile	None Detected	None Detected	Vinyl/Binder, Fine Particles
2.	Black mastic	Chrysotile 2%	None Detected	Mastic/Binder, Fine Particles

Lab ID: 191217409

Client ID: A-09

Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Grey vinyl tile	None Detected	None Detected	Vinyl/Binder, Fine Particles
2.	Black mastic	Chrysotile 2%	None Detected	Mastic/Binder, Fine Particles





BULK ASBESTOS FIBER ANALYSIS
BY POLARIZED LIGHT MICROSCOPY



2556 W Woodland Dr Anaheim, CA 92801

Client Name: Terra Environmental
Project Manager: Israel Monsalvo
Client Address: 12631 Imperial Hwy Ste A225 Santa Fe Springs, CA 90670
Project Number: 71900
Project Location: 5151 State University Dr., Los Angeles, CA 90032

Lab Batch Number: 1912174
Samples Submitted: 9
Samples Analyzed: 9
Analysis Method: EPA 600/R-93/116 & EPA 600/M4-82-020

Analyzed by: Hanaa Armanious

Signature:

Date: 08-06-2019

Reviewed by: Zubair Ahmed

Signature:

Date: 08-06-2019

Reporting limit is 1%. If the sample was not collected by AIH Laboratory then the accuracy of the results is limited by the methodology and experience of the sample collector. Clients can verify specific reporting limit requirement from local regulatory agencies. Liability limited to cost of samples analysis. This report shall not be reproduced except in full, without written approval of AIH Laboratory. It shall not be used to claim product endorsement by NVLAP or any other agency of the government. Reported results relate only to the samples tested and may not be the representative of the sample area. AIH Laboratory shall dispose of the Customer's samples 30 days after receiving the samples unless instructed to store them for an alternate period of time in writing.



CERTIFICATIONS

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 500079-0

AIH Laboratory
Anaheim, CA

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

Asbestos Fiber Analysis

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).*

2018-10-01 through 2019-09-30

Effective Dates

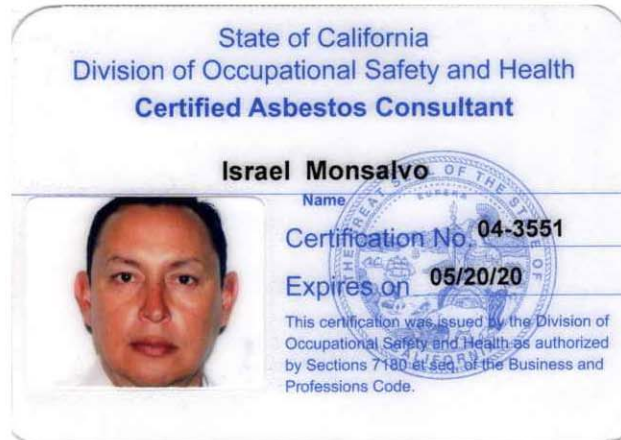


A handwritten signature in blue ink, reading "Peter S. Lamm".

For the National Voluntary Laboratory Accreditation Program



TERRA
Environmental



Israel Monsalvo, CAC, CDPH-I/A & PM
Cal/OSHA-Certified Asbestos Consultant # 04-3551
CDPH-Certified Lead I/A, PM # 9699