



TO: GERALD MIERS
FACILITIES PROJECT SUPERVISOR
CALIFORNIA STATE UNIVERSITY
5151 STATE UNIVERSITY DRIVE
LOS ANGELES, CA 90032

LIMITED ASBESTOS SURVEY REPORT
King Hall – Room 1072-F

Date Prepared: May 25, 2018

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I. Executive Summary and Purpose

At the request of Mr. Gerald Miers of California State University Los Angeles facilities Department, Terra Environmental Services conducted a limited asbestos survey at King Hall. The Survey was authorized by Mr. Miers 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 1072F, 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.

The building materials included in this assessment are those expected to be impacted during the King Hall – Room 1072-F renovation project. In general, the renovation project will involve the disturbance of the Room 1072-F East Wall.

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. Ricardo Ayala, a California, Division of Occupational Safety and Health (DOSH)-Certified Site Surveillance Technician, CSST 16-5785 and Ms. Elnara Tagieva AHERA certified Asbestos Building Inspector on May 25, 2018.

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 three (3) bulk samples of suspect ACM. 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

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

Homogeneous Material	Location	Lab Sample Numbers	Asbestos detected	Quantity
Brown Mastic Puck	Room 1072 – F East Wall	180579501 180579502 180579203	Chrysotile 6%	55 SF

Recommendations for handling ACCM:

Removal and disposal of Asbestos containing materials **Brown Mastic Puck** 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 (ASHERA), 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).

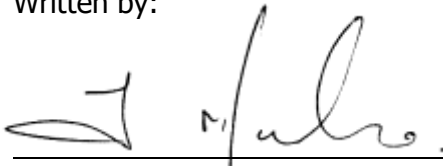
Should materials different to those identified in this report or, other forms of suspect hazardous materials be discovered during the renovation process, the contractor should

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 existing 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. 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.

PHOTOGRAPHS



ATTACHMENTS

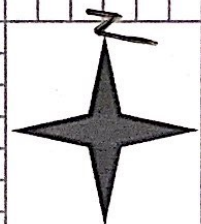
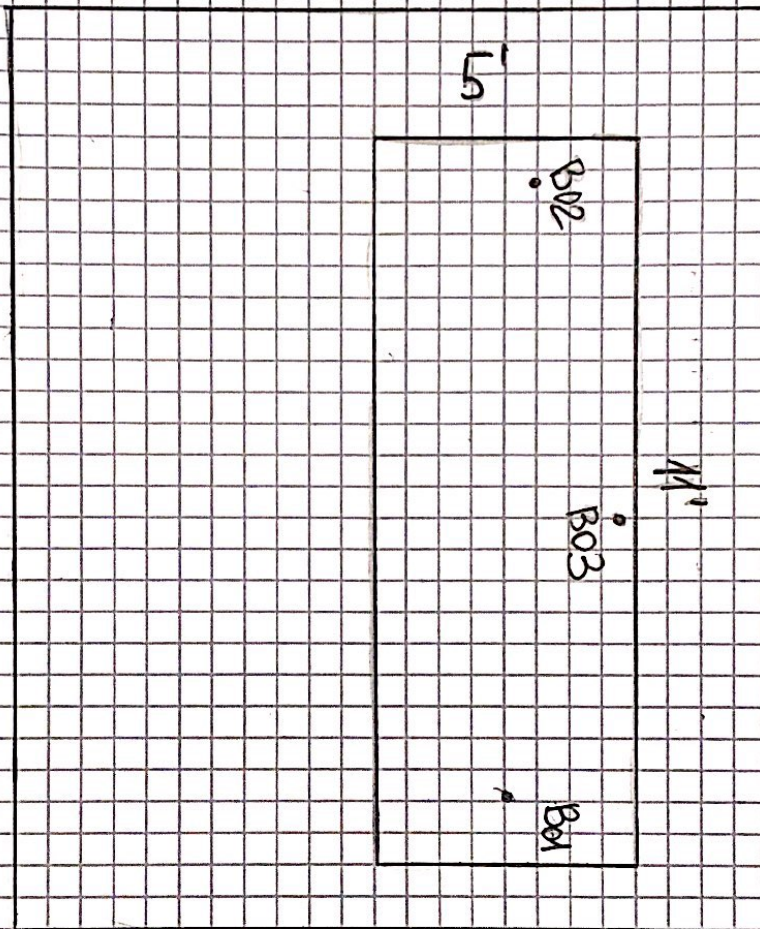


Terra
Environmental

Project # 71293
Date: 5/25/18
Type of Work: AS

Customer -
Project Name: Asbestos Survey-
Project Address: CalState - LA, King Hall, Room 1072 F

East Wall of room 1072 F





BULK ASBESTOS FIBER ANALYSIS



2556 W Woodland Dr Anaheim, CA 92801

Client Name: Terra Environmental
Project Manager: Ulises Monsalvo
Client Address: 12631 Imperial Hwy Ste A225 Santa Fe Springs, CA 90670
Client Job Number: 71293
Client Job Location: Cal State - LA King Hall Room 1072-F

Batch Number: 1805795
Total Samples Submitted: 3
Total Samples Analyzed: 3
Analysis Method: EPA Method 600/R-93-116

Table with 5 columns: Layer, Layer Description, Asbestos Type %, Other Fibrous Material %, Other Non Fibrous Material. Row 1: 1, Brown mastic, Chrysotile 6%, Cellulose <1%, Mastic/Binder. Header: Lab ID: 180579501, Client ID: B01

Table with 5 columns: Layer, Layer Description, Asbestos Type %, Other Fibrous Material %, Other Non Fibrous Material. Row 1: 1, Brown mastic, Chrysotile 6%, Cellulose <1%, Mastic/Binder. Header: Lab ID: 180579502, Client ID: B02

Table with 5 columns: Layer, Layer Description, Asbestos Type %, Other Fibrous Material %, Other Non Fibrous Material. Row 1: 1, Brown mastic, Chrysotile 6%, Cellulose <1%, Mastic/Binder. Header: Lab ID: 180579503, Client ID: B03

Analyzed by: Brian Fullaway

Signature: [Handwritten Signature]

Date: 05-25-2018

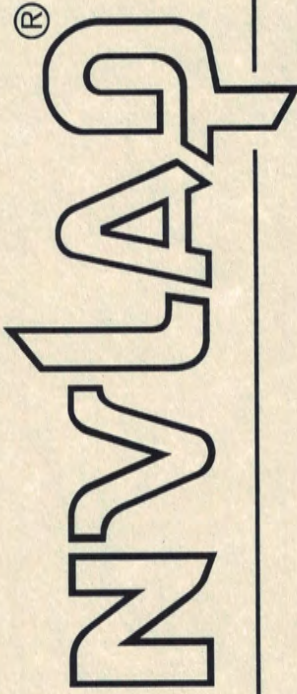
Reviewed by: Francisco Moreno

Signature: [Handwritten Signature]

Date: 05-25-2018

Limit of Quantification ("LOQ")=1%. <1% denotes presence of asbestos below LOQ. 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. 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.

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
Cerritos, 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).

2017-10-01 through 2018-09-30
Effective Dates

A handwritten signature in black ink, appearing to read "Peter S. Lamm".

For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

AIH Laboratory
12611 Hiddencreek Way, Suite B
Cerritos, CA 90703
Mr. Zubair M. Ahmed
Phone: 206-979-1415
Email: bestoflive@live.com
<http://www.aihlab.com>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500079-0

Bulk Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A01	EPA -- Appendix E to Subpart E of Part 763 -- Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program



TERRA
ENVIRONMENTAL

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant

Israel Monsalvo
Name

Certification No. **04-3551**

Expires on **05/20/19**

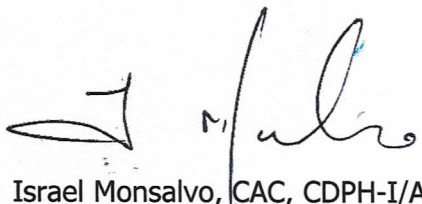
This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.



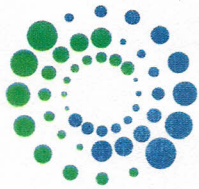
State of California Department of Public Health

Lead-Related Construction Certificate	Certificate Type	Expiration Date
	Inspector/Assessor	09/01/2018
	Project Monitor	09/01/2018

Israel Monsalvo ID #: **9699**



Israel Monsalvo, CAC, CDPH-I/A & PM
Cal/OSHA-Certified Asbestos Consultant #04-3551
California Department of Public Health-Certified I/A, PM # 9699



TERRA
ENVIRONMENTAL



Ricardo Ayala CSST, CDPH ST
Cal/OSHA-Certified Site Surveillance Technician 16-5785
California Department of Public Health-Certified ST # 27455