

April 9, 2019

**KENNETH C. JANDA**  
**DEAN, SCHOOL OF PHYSICAL SCIENCES**

RE: March 2019 Air Monitoring Report for Rowland Hall Basement

Dear Dean Janda,

The attached report from Omega Environmental, dated April 8, 2019, provides March 7 – 14, 2019 air monitoring results for the basement of Rowland Hall during asbestos-related construction activities.

We have reviewed the report, including the air sample measurements. Furthermore, we also performed transmission electron microscopy (TEM) on three air samples. The results of this TEM analysis confirm:

1. The one 3.12.19 air sample taken outside the containment during the disturbance of non-asbestos containing materials (PCM result was above 0.01 f/cc) does not contain asbestos fibers.
2. The two 3.13.19 air samples taken outside the containment during the disturbance of non-asbestos containing materials (PCM result was above 0.01 f/cc) do not contain asbestos fibers.

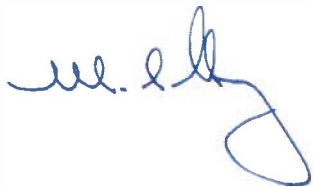
Based on our review, the air sample data has been determined to meet the Environmental Protection Agency (EPA) clearance criteria of 0.01 fibers per cubic centimeters of air (f/cc), which means the air quality in public spaces met or exceeded all applicable standards.

If you have any questions regarding the environmental health and safety of Rowland Hall, please don't hesitate to contact us via phone (949.824.6889) or email ([magomez@uci.edu](mailto:magomez@uci.edu)). After hours calls may be directed to 949.824.6200.

If you have any questions regarding the construction activities on the fifth floor of Rowland Hall, please contact Design and Construction Services Senior Project Manager Chris Schneider via email ([jcshnel@uci.edu](mailto:jcshnel@uci.edu)).

We look forward to a safe and successful completion of the Rowland Hall fire life safety improvement project. Please let us know if you have any questions.

Sincerely,



Marc A. Gomez  
Assistant Vice-Chancellor  
Environmental Health and Safety



Dick T. Sun  
Associate Deputy Director  
Environmental Health and Safety

Attachment



Asbestos Air Monitoring Summary Report  
University of California, Irvine  
Rowland Hall – Basement, Room B61  
Irvine, California 92618

Project Number 2019-3296.1UCI  
April 8, 2019

Prepared For:

Susan Robb  
University of California, Irvine  
4600 Health Science Road  
Irvine, California 92697

Prepared By:

Navid Salari  
Omega Environmental Services  
4570 Campus Drive, Suite 30  
Newport Beach, California 92660

A handwritten signature in black ink, appearing to read "Navid Salari", written over a horizontal line.

Navid Salari

Sr. Project Manager, CAC #94-1597

A handwritten signature in black ink, appearing to read "Steve Rosas", written over a horizontal line.

Steve Rosas

Senior Project Manager

Principal, CAC #92-0284



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**ATTACHMENT A**

Notification, PCM and TEM Air Sample Results, Laboratory Accreditation and Inspectors' Certifications

## 1. EXECUTIVE SUMMARY

The following is an air monitoring summary report for work performed at Rowland Hall, Room B61 located at the University of California, Irvine (UCI) in Irvine California. The scope of work consisted of project oversight and air monitoring during the following activities:

- Removal of fireproofing on beams;
- Removal of floor tile and associated black mastic; and

Chris Canas, a California Certified Site Surveillance Technician (CSST #16-5978), and Jesse Sanchez, an (EPA-AHERA<sup>1</sup> Building inspector), with Omega Environmental Services, Inc. (Omega) provided the oversight and air monitoring from March 7 through March 13, 2019. Attachment A includes copies of the notification, air sample results and inspectors' certifications.

## 2. REGULATED AREA SET-UP AND SPOT REMOVAL/CLEAN-UP

Midwest Environmental Control (MEC) Inc., the asbestos abatement contractor established a regulated area encompassing Room B61 (work area). A contained regulated work area was established and constructed of polyethylene sheeting that isolated the work area from the public environment. Critical barriers of polyethylene sheeting and duct tape were also used to seal windows, air vents, and entrances to the work area. Asbestos warning signs and caution signs were placed at the entrance to the work area. The regulated area complied with the requirements of the California Division of Occupational Safety and Health Administration (Cal-OSHA) Standard Title 8, California Code of Regulations (CCR) Section 1529 Asbestos and South Coast Air Quality Management District (SCAQMD), Rule 1403.

Omega conducted a review of the abatement contractor's submittals and performed a visual inspection of the established regulated area before commencement of any removal work. A three-stage decontamination unit for the abatement workers was located at the perimeter of the work area. The contained work area was then placed under negative pressure, using high efficiency particulate air (HEPA) filtration devices to prevent the migration of asbestos fibers outside the containment. A sprayer was used to mist the work area with amended water as necessary, minimizing airborne fiber concentrations in the work area. Certified workers used disposable coveralls and half-face air purifying respirators with HEPA filters during asbestos related activities. These protective clothing and respirators are removed by the workers as they exit the containment while going through the decontamination unit.

Wet methods and HEPA vacuums were used to clean the contained work area upon completion of the asbestos removal. After passing the final visual inspection, MEC misted a coating/encapsulant throughout the contained work area in order to "lock down" any potential residual fibers.

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<sup>1</sup> Asbestos Hazard Emergency Response Act



### 3. AIR SAMPLE RESULTS

Perimeter and clearance air samples were collected during and at the completion of the asbestos removal activities. The purpose of the perimeter air monitoring was to measure the airborne fiber concentrations outside the containment to determine the effectiveness of the engineering controls during the asbestos removal activities. Clearance air sampling was conducted within the work area following the completion of the asbestos removal activities. Clearance air sample results did not exceed the Environmental Protection Agency (EPA) clearance criteria of 0.01 fibers per cubic centimeters of air (f/cc). The analysis was performed using the Phase Contrast Microscopy (PCM) analytical methodology as described in National Institute for Occupational Safety and Health (NIOSH) 7400 A protocol. Omega’s representatives are NIOSH-582<sup>2</sup> certified and analyzed the collected air samples at the site. Table 1 provides a summary of the air sample results.

Table 1 - Air Sample Results

Date	Sample #	Sample Location / Work Activity	Result (f/cc)
03/07-08/19	NA	Prep work, no air samples collected	NA
03/08-09/19	01	Outside work area, inside clean room / removal of ceiling texture	<0.002
03/08-09/19	02	Outside work area, south hallway, south of room B61 / removal of ceiling texture	<0.002
03/08-09/19	03	Outside work area, negative air exhaust/ removal of ceiling texture	0.003
03/11-12/19	01	Outside work area at decon / tile, mastic removal & cleanup	<0.002
03/11-12/19	02	Outside work area at hallway, south of decon / tile, mastic removal & cleanup	0.002
03/11-12/19	03	Outside work area, negative air exhaust / tile, mastic removal & cleanup	<0.002
03/12/19	01	Outside work area at decon / tile, mastic removal & clean up	0.015*
03/12/19	02	Outside work area at hallway, south of decon / tile, mastic removal & clean up	0.004
03/12/19	03	Outside work area at negative air exhaust / tile, mastic removal & clean up	<0.002
03/12-13/19	01	Outside work area at decon / detail work & clean up	<0.002
03/12-13/19	02	Outside work area, hallway, south of decon / detail work & clean up	<0.002
03/12-13/19	03	Outside work area, negative air exhaust/ detail work & clean up	0.002
03/13/19	01	Outside work area at decon / detail work & clean up	0.022*
03/13/19	02	Outside work area, hallway, south of decon / detail work & clean up	0.015*
03/13/19	03	Outside work area, negative air exhaust/ detail work & clean up	<0.002
03/14/19	01	Inside work area, east side / Clearance air sample	0.003
03/14/19	02	Inside work area, center of the room / Clearance air sample	0.002
03/14/19	03	Inside work area, west side / Clearance air sample	0.002

*f/cc – Fibers per cubic centimeter*

<sup>2</sup> NIOSH-582 or equivalent – Individual trained to analyze samples by Phase Contrast Microscopy



\*The samples with elevated fiber counts (due to non-asbestos construction-related activities) were analyzed by both PCM and Transmission Electron Microscopy (TEM). PCM identifies the total number of fibers in a sample but cannot distinguish between asbestos and non-asbestos fibers. Table 2 is a comparison of air monitoring sample results of the samples with elevated fiber counts collected during the removal of ACMs in Room B61.

\*Table 2 – Air Sample TEM Results

Date	Sample #	Sample Locations / Work Activity	PCM Results (f/cc)	TEM Results Adjusted (f/cc)
03/12/19	01	Outside work area at decon / tile, mastic removal & clean up	0.015	<0.0021 0% Asbestos
03/13/19	01	Outside work area at decon / detail work & clean up	0.022	<0.0021 0% Asbestos
03/13/19	02	Outside work area, hallway, south of decon / detail work & clean up	0.015	<0.0021 0% Asbestos

*f/cc – Fibers per cubic centimeter*


Based on the results of the TEM analysis, all three (3) selected samples were found to contain fiber concentrations less than the EPA Clearance Criteria of 0.01 f/cc; and no asbestos fibers were detected in the samples.

The TEM analysis is performed in accordance with NIOSH 7402 Method. The air samples were submitted under chain of custody procedures to LA Testing Huntington Beach laboratory located at 5431 Industrial Drive in Huntington Beach, California (Tel: 714-828-4999). Attachment A includes copies of the laboratory analytical reports.



Attachment A

## PCM Sample Data Sheet

Project Number	: 2019-3296UCI	
Project Site Address	: Rowland Hall – Room B61	
Sample Date	: 3/08-09/2019	
Analysis type	: PCM (NIOSH 7400A)	
Analysis by	: IH Name: Jesse Sanchez	
Date Analyzed	: 3/09/2019	

Sample ID: 01	Start time: 12:15 AM	End time: 1:40 AM
Sample location: Outside work area, clean room	Flow rate (LPM): 13.4	
	Total time: 85	Total volume: 1,139
Work activity: Removal of ceiling texture	No of fibers: 2	No of fields: 100
	Airborne fiber concentration (fibers/cc): <0.002	
Other comments:		

Sample ID: 02	Start time: 12:15 AM	End time: 1:40 AM
Sample location: Outside work area, hallway, South of room B61	Flow rate (LPM): 13.4	
	Total time: 85	Total volume: 1,139
Work activity: Removal of ceiling texture	No of fibers: 2.5	No of fields: 100
	Airborne fiber concentration (fibers/cc): <0.002	
Other comments:		

Sample ID: 03	Start time: 12:23 AM	End time: 1:48AM
Sample location: Outside work area, at negative air exhaust	Flow rate (LPM): 13.4	
	Total time: 85	Total volume: 1,139
Work activity: Removal of ceiling texture	No of fibers: 8	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0.003	
Other comments:		

Sample ID: 04	Start time: NA	End time: NA
Sample location: NA	Flow rate (LPM): 0.0	
	Total time: NA	Total volume: NA
Work activity: NA	No of fibers: 0.0	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0.0	
Other comments: Field blank		

Sample ID: 05	Start time: NA	End time:
Sample location: NA	Flow rate (LPM): 0.0	
	Total time:	Total volume:
Work activity: NA	No of fibers: 0.0	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0.0	
Other comments: Sealed blank		

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample name (print)	: Jesse Sanchez	Page 1 of 1
Signature	: Jesse Sanchez	





**Omega Environmental Services, Inc.**

4570 Campus Drive, Suite 30  
Newport Beach, California 92660  
Phone: (949) 252-2145, Fax: (949) 252-2148

**Daily Field Log**

Page 1 of 1

Project Number: 2019-3296.1UCI	Date: 03/08/19
Project Name: UCI	Omega Representative: Jesse Sanchez/Navid Salari
Project Address: Rowland Hall, Basement Room B61	
Client Contact: Susan Robb	
Client Phone #:	

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**TIME AND ACTIVITY**

22:00 MEC & Omega on site to begin today work shift. Crew consist of 2 supervisors and 3 workers for todays shift. MEC will be prepping the work area. When set up is complete MEC will require visual inspection from Omega.

22:05 MEC begin to mobilize equipment

22:23 Set up in progress

22:45 Negative pressure system is in place, 3-stage decon has been fully set up, prep work in progress

23:50 Containment complete and fully set up, containment approved

23:50 Work in progress, workers using power washing for the fireproofing abatement.

24:15 Omega started the perimeter air sampling

1:30 AM Work in progress, MEC to clean up the waste inside the work area

2:00 AM At this time MEC stop all activities. The decon area was sealed, the shift ended for today.

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Omega Site Representative Signature: Jesse Sanchez	Date: 03/08/19
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# PCM Sample Data Sheet

"on-site"

Project Number	: 2019-3296UCI
Project Site Address	: Rowland Hall, Room B61
Sample Date	: 3/11-12/2019
Analysis type	: PCM (NIOSH 7400A)
Analysis by	: IH Name: Jesse Sanchez / Laboratory Name LA Testing
Date Analyzed	: 03/11/2019



Sample ID: 01	Start time: 2224	End time: 2424
Sample location: Basement @ Decon	Flow rate (LPM): 10.58	
	Total time: 120	Total volume: 1270
Work activity: Perimeter	No of fibers: 3	No of fields: 100
	Airborne fiber concentration (fibers/cc): 4.001	
Other comments:		

Sample ID: 02	Start time: 2224	End time: 2424
Sample location: Basement @ Hallway South of Decon	Flow rate (LPM): 10.58	
	Total time: 120	Total volume: 1270
Work activity: Perimeter	No of fibers: 5.5	No of fields: 100
	Airborne fiber concentration (fibers/cc) 0.002	
Other comments:		

Sample ID: 03	Start time: 2231	End time: 2431
Sample location: Basement @ N.Y. Air Plex	Flow rate (LPM): 10.58	
	Total time: 120	Total volume: 1270
Work activity: Perimeter	No of fibers: 1.5	No of fields: 100
	Airborne fiber concentration (fibers/cc) 4.002	
Other comments:		

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample name (print)	: Jesse Sanchez
Signature	:



# LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

Tel/Fax: (714) 828-4999 / (714) 828-4944

http://www.LATesting.com / gardengrovelab@lateesting.com

LA Testing Order: 331904945

Customer ID: OMEG34

Customer PO:

Project ID:

Attention: Navid Salari  
Omega Environmental Services, Inc.  
4570 Campus Drive  
Suite 30  
Newport Beach, CA 92660

Phone: (949) 302-6826

Fax:

Received Date: 03/12/2019 08:20 AM

Analysis Date: 03/12/2019

Collected Date: 03/11/2019

Project: 2019-3296UCI / Rowland Hall, Room B61

## Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method - A Rules, Revision 3, Issue 2, 8/15/94

Sample	Location	Sample Date	Volume (L)	Fibers	Fields	LOD (fib/cc)	Fibers/mm <sup>2</sup>	Fibers/cc	Notes
01 331904945-0001	Basement @ decon	03/11/2019	1270	39	100	0.002	49.7	0.015	
02 331904945-0002	Basement @ hallway south of decon	03/11/2019	1270	11	100	0.002	14.0	0.004	
03 331904945-0003	Basement @ neg air flex	03/11/2019	1270	<5.5	100	0.002	<7.01	<0.002	
04 331904945-0004	Blank	03/11/2019		<5.5	100		<7.01		Field Blank

The results reported have been blank corrected as applicable.

Analyst(s):  
Larry Kolk PCM 4

Michael DeCavallas, Laboratory Manager  
or other approved signatory

Limit of detection is 7 fibers/mm<sup>2</sup>. Intra-laboratory Sr values: 5-20 fibers = 0.39, 21-50 fibers = 0.25, 51-100 fibers = 0.22. Inter-laboratory Sr values (Average of EMSL round robin data) = 0.32. The laboratory is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. LA Testing maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by LA Testing. LA Testing bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in acceptable condition unless otherwise noted. Samples analyzed by LA Testing Huntington Beach, CA AIHA-LAP, LLC-IHLAP Accredited #101650

Initial report from: 03/12/2019 01:54 PM



# LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

Tel/Fax: (714) 828-4999 / (714) 828-4944

http://www.LATesting.com / gardengrovelab@latesting.com

LA Testing Order: 331905011

Customer ID: OMEG34

Customer PO:

Project ID:

**Attention:** Navid Salari  
Omega Environmental Services, Inc.  
4570 Campus Drive  
Suite 30  
Newport Beach, CA 92660

**Phone:** (949) 302-6826

**Fax:**

**Received Date:** 03/12/2019 02:20 PM

**Analysis Date:** 03/12/2019

**Collected Date:** 03/11/2019

**Project:** Reference 331904945 2019-329UCI/ Rowland Hall, Room B61

## Test Report:Asbestos Analysis of Air Samples by Transmission Electron Microscopy via NIOSH Method 7402

Sample	Volume (Liters)	Non Asbestos Fibers	Asbestos Type(s)	Asbestos Fibers	PCM F/cc	*Asbestos % of total	7402 Adjusted (TEM)	Notes
01	1270	5.5	None Detected		0.015	0 %	<0.0021	

331905011-0001

NIOSH 7402 method only reports fibers > 5µm in length and > 0.25µm in width.

This method requires a minimum of 2 field blank analyses per set.

\* The above results are not blank corrected.

Average number of asbestos fibers on field blanks: N/A

Average number of non-asbestos fibers on field blanks: N/A

Analyst(s)

Larry Kolk (1)

Michael DeCavallas, Laboratory Manager  
or other approved signatory

EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. Samples received in good condition unless otherwise noted. Samples analyzed by LA Testing Huntington Beach, CA

Initial report from: 03/12/2019 05:44 PM

## PCM Sample Data Sheet

"Daily" 3-hour TAT

Project Number	: 2019-3296UCI
Project Site Address	: Rowland Hall, Room B61
Sample Date	: 3/11-12/2019
Analysis type	: PCM (NIOSH 7400A)
Analysis by	: HI Name: Jesse Sanchez / Laboratory Name: LA Testing
Date Analyzed	:



Sample ID: 01	Start time: 2424	End time: 0224
Sample location: Basement @ Decon.	Flow rate (LPM): 10.58	
	Total time: 120	Total volume: 1270
Work activity: Perimeter	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample ID: 02	Start time: 2424	End time: 0224
Sample location: Basement @ Hallway South of Decon.	Flow rate (LPM): 10.58	
	Total time: 120	Total volume: 1270
Work activity: Perimeter	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample ID: 03	Start time: 2431	End time: 0231
Sample location: Basement @ Neg Air Flex	Flow rate (LPM): 10.58	
	Total time: 120	Total volume: 1270
Work activity: Perimeter	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample ID: 04	Start time: *	End time: *
Sample location: Blank	Flow rate (LPM): *	
	Total time: *	Total volume: *
Work activity:	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample name (print)	: Jesse Sanchez
Signature	:

Reid RG DB

8:20 12

## Daily Field Log

Omega Environmental Services, Inc.  
 4570 Campus Drive, Suite #30  
 Newport Beach, California 92660  
 Phone: (949) 252-2145 Fax: (949) 252-2148  
 Page #

Project Number: 2019-3296UCI	Date: 03/12/2019
Project Name: Room #B61	Omega Representative: Navid S. & Jesse S.
Project Address: Rowland Hall UCI, Irvine CA	Company: American Integrated Resources
Client Contact:	Shift: 2000 - 0700
Client Phone #:	

TIME AND ACTIVITY	
2000	At this time Omega arrives on site to begin today's work shift. Omega will be collecting background samples at the basement for containment B61.
2010	Omega begin to calibrate high flow air pumps running at 10.58 liters per minute.
2024	At this time Omega mobilize and set up background samples at the decon., hallway & the end of the negative air flex.
2110	At this time no issues to report, pumps continue to run & there are no activities occurring at this time.
2200	At this time MEC begin to arrive on site. Crew consist of 2 supervisors + 3 workers. Scope of work: MEC will continue to abate fireproofing using power washer + clean after abatement is completed.
2224	At this time Omega begin to demobilize background samples, then set up first set of daily samples. MEC begin to enter containment wearing proper PPE + PAPR respirators.
2330	Work continues to move forward, no issues to report about the work. Cosco construction begin to arrive on site to start to day's work shift. Cosco are present in the basement, but are not working next to MEC's containment.
2424	At this time Omega begin to demobilize first set of perimeter samples and set up second set of perimeter air samples using calibrated high flow air pumps at the decon., hallway, and at the end of the negative air exhaust.
0140	MEC supervisor request visual inspection of the work area to confirm the complete abatement of fireproofing to then continue cleaning to prepare for tile and mastic abatement.
0143	Omega enters containment wearing proper PPE + Full-face respirator to conduct visual inspection.
0225	Omega exits containment, area had minor issues with the integrity, but was immediately taken care of. There was no more fireproofing visual present during inspection. MEC have the ok to continue cleaning to then start with tile and mastic abatement.
0230	Crew break for lunch.
0330	Crew return from lunch.
0335	Crew enter containment wearing proper PPE + PAPR Respirators. Crew will continue to clean the work area and picking up any fireproofing waste. Also by this time first set of perimeter air samples have been read and are cleared.
0440	Work continues to move forward no issues to report at this time. There are no activities around the work area except COSCO working 30 feet away from the containment.
0530	No issues to report at this time, work continues to move forward. Negative air pressure is good.

Omega Site Representative Signature: Navid S & Jesse S Date: 03/12/2019
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### TIME AND ACTIVITY

0630	UCI Rep. Susan Rob arrives on site to discuss MEC house keeping methods and to be briefed on todays work.
0645	Susan Rob off site.
0700	MEC + Omega off site, MEC have completed fireproofing remove. MEC have mopped the hallway and around the decon. + have demobilized equipment. Shift has ended for today.

Omega Site Representative Signature: Navid S. & Jesse S.  
Date: 03/12/2019

## PCM Sample Data Sheet

Project Number : 2019-3296UCT  
 Project Site Address : Rowland Hall, Room B61  
 Sample Date : ~~3/11/2019~~ 3/12/19  
 Analysis type : PCM (NIOSH 7400A)  
 Analysis by : IH Name: Jesse Sanchez / Laboratory Name: LA Testing  
 Date Analyzed :



Sample ID: 1	Start time: 2324	End time: 0124
Sample location: Basement - Room B61	Flow rate (LPM): 10.58	
Diagon.	Total time: 120	Total volume: 1270
Work activity: Perimeter	No of fibers: 5	No of fields: 100
Other comments:	Airborne fiber concentration (fibers/cc): 0.002	

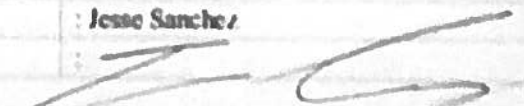
Sample ID: 2	Start time: 2324	End time: 0124
Sample location: Basement - Hallway	Flow rate (LPM): 10.58	
South of Diagon.	Total time: 120	Total volume: 1270
Work activity: Perimeter	No of fibers: 2.5	No of fields: 100
Other comments:	Airborne fiber concentration (fibers/cc): 0.002	

Sample ID: 3	Start time: 2327	End time: 0127
Sample location: Basement - Noy. Air	Flow rate (LPM): 10.58	
Exhaust	Total time: 120	Total volume: 1270
Work activity: Perimeter	No of fibers: 2.5	No of fields: 100
Other comments:	Airborne fiber concentration (fibers/cc): 0.002	

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
Other comments:	Airborne fiber concentration (fibers/cc):	

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
Other comments:	Airborne fiber concentration (fibers/cc):	

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
Other comments:	Airborne fiber concentration (fibers/cc):	

Sample name (print) : Jesse Sanchez  
 Signature : 





# LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

Tel/Fax: (714) 828-4999 / (714) 828-4944

http://www.LATesting.com / gardengrovelab@latesting.com

LA Testing Order: 331905040

Customer ID: OMEG34

Customer PO:

Project ID:

Attention: Navid Salari  
Omega Environmental Services, Inc.  
4570 Campus Drive  
Suite 30  
Newport Beach, CA 92660

Phone: (949) 302-6826

Fax:

Received Date: 03/13/2019 08:00 AM

Analysis Date: 03/13/2019

Collected Date: 03/12/2019

Project: 2019-3296UCI - Rowland Hall, Room B61

## Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method - A Rules, Revision 3, Issue 2, 8/15/94

Sample	Location	Sample Date	Volume (L)	Fibers	Fields	LOD (fib/cc)	Fibers/mm <sup>2</sup>	Fibers/cc	Notes
1	Basement - room B61 decon	03/12/2019	1270	56.5	100	0.002	72.0	0.022	
331905040-0001									
2	Basement - hallway South of decon	03/12/2019	1270	38	100	0.002	48.4	0.015	
331905040-0002									
3	Basement - Neg. air exhaust	03/12/2019	1270	<5.5	100	0.002	<7.01	<0.002	
331905040-0003									

This method requires the submission of field blanks with each sample set. No discernable field blanks were submitted, samples are not blank corrected.

Analyst(s):  
Dennies Ly PCM 3

Michael DeCavallas, Laboratory Manager  
or other approved signatory

Limit of detection is 7 fibers/mm<sup>2</sup>. Intra-laboratory Sr values: 5-20 fibers = 0.39, 21-50 fibers = 0.25, 51-100 fibers = 0.22. Inter-laboratory Sr values (Average of EMSL round robin data) = 0.32. The laboratory is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. LA Testing maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by LA Testing. LA Testing bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in acceptable condition unless otherwise noted. Samples analyzed by LA Testing Huntington Beach, CA AIHA-LAP, LLC-IHLAP Accredited #101650

Initial report from: 03/13/2019 09:58 AM



# LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

Tel/Fax: (714) 828-4999 / (714) 828-4944

http://www.LATesting.com / gardengrovelab@latesting.com

LA Testing Order: 331905040

Customer ID: OMEG34

Customer PO:

Project ID:

**Attention:** Navid Salari  
Omega Environmental Services, Inc.  
4570 Campus Drive  
Suite 30  
Newport Beach, CA 92660

**Phone:** (949) 302-6826

**Fax:**

**Received Date:** 03/13/2019 08:00 AM

**Analysis Date:** 03/13/2019

**Collected Date:** 03/12/2019

**Project:** 2019-3296UCI - Rowland Hall, Room B61

## Test Report:Asbestos Analysis of Air Samples by Transmission Electron Microscopy via NIOSH Method 7402

Sample	Volume (Liters)	Non Asbestos Fibers	Asbestos Type(s)	Asbestos Fibers	PCM F/cc	*Asbestos % of total	7402 Adjusted (TEM)	Notes
1	1270	6.5	None Detected		0.022	0 %	<0.0021	
331905040-0001								
2	1270	1.0	None Detected		0.015	0 %	<0.0021	
331905040-0002								

NIOSH 7402 method only reports fibers > 5µm in length and > 0.25µm in width.

This method requires a minimum of 2 field blank analyses per set.

\* The above results are not blank corrected.

Average number of asbestos fibers on field blanks: N/A

Average number of non-asbestos fibers on field blanks: N/A

Analyst(s)

Jeffrey Deboo (2)

Michael DeCavallas, Laboratory Manager  
or other approved signatory

EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. Samples received in good condition unless otherwise noted. Samples analyzed by LA Testing Huntington Beach, CA

**PCM Sample Data Sheet**

3-Hour TAT

Project Number : 2019-3296UCI  
 Project Site Address : Rowland Hall, Room B61  
 Sample Date : ~~3/11/2019~~ 3/12/19  
 Analysis type : PCM (NIOSH 7400A)  
 Analysis by : IH Name: Jesse Sanchez / Laboratory Name: LA Testing  
 Date Analyzed :



Sample ID: 1	Start time: 0124	End time: 0324
Sample location: Basement - Room B61	Flow rate (LPM): 10.58	
Percon.	Total time: 120	Total volume: 1270
Work activity: Perimeter	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample ID: 2	Start time: 0124	End time: 0324
Sample location: Basement - Hallway	Flow rate (LPM): 10.58	
South of Percon	Total time: 120	Total volume: 1270
Work activity: Perimeter	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample ID: 3	Start time: 0127	End time: 0327
Sample location: Basement - Neg. Air	Flow rate (LPM): 10.58	
Exhaust	Total time: 120	Total volume: 1270
Work activity: Perimeter	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
	Airborne fiber concentration (fibers/cc):	
Other comments:		

Sample name (print) : Jesse Sanchez  
 Signature :

Received: (db) 3-13-19 8AM

## Daily Field Log

Omega Environmental Services, Inc.  
 4570 Campus Drive, Suite #30  
 Newport Beach, California 92660  
 Phone: (949) 252-2145 Fax: (949) 252-2148  
 Page #

Project Number: 2019-3296UCI	Date: 03/12/2019
Project Name: Room #B61	Omega Representative: Navid S. & Jesse S.
Project Address: Rowland Hall UCI, Irvine CA	Company: American Integrated Resources
Client Contact:	Shift: 2000 - 0700
Client Phone #:	

TIME AND ACTIVITY	
2200	MEC, Omega + UCI Rep. Susan Rob arrive on site. UCI Susan Rob informs MEC supervisor to maintain good house keeping after the shift + to set up a critical on a door leading to an open area.
2220	UCI Susan Rob off site. Crew consist of 2 supervisor + 3 workers. Scope of work: MEC will be removing poly floor to begin abatement on tile + mastic. MEC will first mobilize waste bags + barrels outside of the containment.
2225	MEC enter containment wearing proper PPE + Half-face respirators.
2230	At this time Omega enters containment wearing proper PPE + Full-face respirator. Before MEC begin the work.
2250	Omega exit containment, the integrity of the poly wall is still in good condition + Negative pressure is ok. MEC will continue to work, they will be demobilizing waste bags.
2324	At this time Omega calibrate high flow pumps + set up perimeter air samples.
2430	MEC supervisor informs Omega they will be building a 2 stage chamber to take out waste barrels from the containment. MEC will be storing waste bags in a closet on the open area side. Omega informs MEC they need to have the ok from a UCI Rep to use the room as a storage + the room needs to be locked. At this time Omega wait for MEC to have the ok.
0124	Omega demobilize first set of perimeter air samples. First set samples were analyzed and were cleared.
0235	MEC continue to clean the area + demobilizing barrels and waste bags from the work areas. MEC store their waste in a closet north of the containment in the open area.
0330	Crew break for lunch.
0430	Crew return from lunch.
0435	MEC enter containment wearing proper PPE + Half-face respirator to continue cleaning.
0540	Work continues to move forward, no issues to report at this time. MEC continue to use HEPA vacuum the work area + airless water.
0630	At this time MEC continue to clean the work area, MEC containment is nearly complete.
0650	MEC crew begin to exit the containment, area has been completed, Omega inform MEC the containment is to wet for visual inspection.
0730	At this time MEC + Omega are off site, Omega will conduct visual inspection during the next work shift. Area needs to dry. Shift has ended for today.

Omega Site Representative Signature: Navid S & Jesse S Date: 03/12/2019
--



**OMEGA ENVIRONMENTAL SERVICES, INC**  
4570 CAMPUS DRIVE, SUITE 30  
NEWPORT BEACH, CALIFORNIA 92660  
(949) 252-2145

**Asbestos Completion Notification**

PROJECT NUMBER: 2019-3296UCI

CLIENT NAME: UNIVERSITY OF CALIFORNIA, IRVINE

BUILDING/PROPERTY NAME: ROWLAND HALL, ROOM B61

BUILDING/PROPERTY ADDRESS: UNIVERSITY OF CALIFORNIA, IRVINE

SUMMARY OF WORK PERFORMED (BY DATE/S): WORK CONDUCTED IN THE FOLLOWING AREA;  
ROWLAND HALL, ROOM B61

MARCH 7, 2019

- MOBILIZATION AND CONTAINMENT PREP WORK

MARCH 8, 2019

- CONTAINMENT PREP WORK
- FIREPROOFING REMOVAL

MARCH 11, 2019

- FIREPROOFING REMOVAL

MARCH 12, 2019

- FLOORING REMOVAL AND DETAILING

MARCH 13, 2019

- DETAIL, FINAL VISUAL INSPECTION AND FINAL CLEARANCE


VISUAL INSPECTION PERFORMED BY: JESSE SANCHEZ / NAVID SALARI

CLEARANCE SAMPLES COLLECTED BY: JESSE SANCHEZ

The area in which asbestos removal was performed has been visually inspected and accepted by Omega Environmental Services, Inc., certified field personnel. The analysis of the clearance air samples (Room B861)) confirms that the levels of airborne asbestos did not exceed the EPA recommended clearance criteria of 0.01 fibers per cubic centimeter of air (f/cc).

Inspector Signature / Date	Navid Salari March 14, 2019
Inspector Name (Print)	Navid Salari
DOSH Certificate Number	94-1557

## PCM Sample Data Sheet

Project Number	: 2019-3296UCI	
Project Site Address	: Rowland Hall, Room B61	
Sample Date	: 3/14/2019	
Analysis type	: PCM (NIOSH 7400A)	
Analysis by	: IH Name: Jesse Sanchez	
Date Analyzed	:	

Sample ID: 01	Start time: 4:36 AM	End time: 5:56 AM
Sample location: Inside work area, room B61	Flow rate (LPM): 15.68	
East side	Total time: 80	Total volume: 1254.40
Work activity: Clearance air sample	No of fibers: 8.5	No of fields: 100
Airborne fiber concentration (fibers/cc): 0.003		
Other comments:		

Sample ID: 02	Start time: 4:36 AM	End time: 5:56 AM
Sample location: Inside work area, room B61	Flow rate (LPM): 15.68	
Center of the room	Total time: 80	Total volume: 1254.40
Work activity: Clearance air sample	No of fibers: 5.5	No of fields: 100
Airborne fiber concentration (fibers/cc): 0.002		
Other comments:		

Sample ID: 03	Start time: 4:36 AM	End time: 5:56 AM
Sample location: Inside work area, room B61	Flow rate (LPM):	
West side	Total time: 15.68	Total volume: 1254.40
Work activity: Clearance air sample	No of fibers: 6.5	No of fields: 100
Airborne fiber concentration (fibers/cc): 0.002		
Other comments:		

Sample ID: 04	Start time: NA	End time: NA
Sample location: NA	Flow rate (LPM): NA	
	Total time: NA	Total volume: NA
Work activity:	No of fibers: 0.0	No of fields: 100
Airborne fiber concentration (fibers/cc): 0.0		
Other comments: Field blank		

Sample ID: 05	Start time: NA	End time: NA
Sample location: NA	Flow rate (LPM): NA	
	Total time: NA	Total volume: NA
Work activity:	No of fibers: 0.0	No of fields: 100
Airborne fiber concentration (fibers/cc): 0.0		
Other comments: Sealed blank		

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
Airborne fiber concentration (fibers/cc):		
Other comments:		

Sample name (print)	: Jesse Sanchez	
Signature	: J. Sanchez	Page 1 of 1



## AIHA Laboratory Accreditation Programs, LLC

*acknowledges that*

### LA Testing Huntington Beach

5431 Industrial Drive, Huntington Beach, CA 92649

Laboratory ID: 101650

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

#### LABORATORY ACCREDITATION PROGRAMS

- INDUSTRIAL HYGIENE
- ENVIRONMENTAL LEAD
- ENVIRONMENTAL MICROBIOLOGY
- FOOD
- UNIQUE SCOPES

- Accreditation Expires: June 01, 2020
- Accreditation Expires: June 01, 2020
- Accreditation Expires: June 01, 2020
- Accreditation Expires:
- Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website ([www.aihaaccreditedlabs.org](http://www.aihaaccreditedlabs.org)) for the most current Scope.

*Beth Bair*

*Elizabeth Bair*  
Chairperson, Analytical Accreditation Board

*Cheryl O. Morton*

*Cheryl O. Morton*  
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 17 – 09/11/2018

Date Issued: 09/28/2018