ADDENDUM G

October 7, 2019

BIDDING AND CONTRACT DOCUMENTS

FOR

Various Elevator Modernizations
PROJECT NO. 112008
CONTRACT NO. 112008-LF-2019-129

The following changes, additions, or deletions shall be made to the following documents as indicated for this Project; and all other terms and conditions shall remain the same. Each bidder is responsible for transmitting this information to all affected subcontractors and suppliers before the Bid Deadline.

1. INFORMATION AVAILABLE TO BIDDERS

Add the Entomology Asbestos and Lead Survey to Information Available to Bidders.

Add the PE/ Athletics Asbestos and Lead Survey to Information Available to Bidders.

Add the Spieth Hall North Asbestos and Lead Survey to Information Available to Bidders

Add the Spieth Hall South Asbestos and Lead Survey to Information Available to Bidders.

Add the Watkins Asbestos and Lead Survey to Information Available to Bidders.

Add the Webber Asbestos and Lead Survey to Information Available to Bidders.

2. SPECIFICATION TABLE OF CONTENTS

Delete existing Specification Table of Contents and replace with the one issued in this Addendum.

3. SPECIFICATIONS

Add Specification 02 8216, Hazardous Soil, Asbestos, Lead Abatement of Non-Friable Floor Tile, to the Specification Table of Contents.

END OF ADDENDUM

INFORMATION AVAILABLE TO BIDDERS

The following information is made available for the convenience of bidders and is not a part of the Contract. The information is provided subject to the provisions of Article 3 of the General Conditions.

1. The University of California has contracts for materials, equipment and/or services with the suppliers listed on the Office of the President Procurement Services website at: http://www.ucop.edu/procurement-services/for-suppliers/ucop-designated-construction-agreements.html

   General Contractors or others submitting bids for University construction projects may enter into agreements with these suppliers that utilize the pricing and terms contained in the University-supplier agreements. The university does not represent or warrant that materials/equipment/services of these suppliers meet the requirements of the University's construction contracts.

   Use of such suppliers shall not relieve Contractor from its obligation to meet all contractual requirements in any contracts with the University. The university will not be a party to any agreements with such suppliers and accepts no performance obligations or liability with respect to such agreements.

2. Reports:

   Entomology Asbestos and Lead Survey

   PE/ Athletics Asbestos and Lead Survey

   Spieth Hall North Asbestos and Lead Survey

   Spieth Hall South Asbestos and Lead Survey

   Watkins Asbestos and Lead Survey

   Webber Asbestos and Lead Survey

3. Record Documents and As-Builts:

   None

END OF INFORMATION AVAILABLE TO BIDDERS

AMBIENT ENVIRONMENTAL, INC.
Consulting/Engineering/Remediation
400 North Princeland Court Suite-3
Corona, California 92879
951 272-4730 *Phone*
951 272-4731 *Facsimile*
jp@ambientenv.com
www.ambientenvinc.com

July 31, 2019

University of California, Riverside
Planning Design & Construction
1223 University Avenue Suite 240
Riverside, California 92507
Attn: Mr. Fernando Nunez-Project Manager

Re: Asbestos and Lead Survey for the project located at: Entomology Research Museum (Elevator Upgrade Project) University of Riverside, California.
PO #SC108046-CH2 Project #112008

Dear Mr. Nunez,

Ambient Environmental Inc. performed an asbestos building material for the above referenced location. Ambient Environmental Inc. on site field personnel obtained asbestos building material bulk samples and X-Ray Fluorescence (XRF) reading from painted building component that would be impacted during the elevator upgrade project located at the above referenced location. The survey was conducted on July 21, 2019 by Mr. John L. Payne a California Certified Asbestos Consultant #93-1226 a United States Environmental Protection Agency (USEPA) certified asbestos building inspector and a CDPHS #25387 Certified Lead Sampling Technician.

Asbestos Survey Procedures

The purpose of the asbestos survey was to locate and identify suspect building materials that will be impacted during the elevator upgrade project for detectable levels of asbestos Once a visual inspection was performed, representative bulk samples were obtained from each homogeneous building material that would be impacted during the upgrade activity. Homogeneous building materials are defined as building materials that are uniform in texture, construction or application date and general appearance. Also, each homogeneous building material was divided into three main categories: Surfacing Materials, Thermal System Insulation and Miscellaneous Materials. The sample location, building material type, friability and condition of building materials were also documented. If building materials were installed at different times or if there is any reason to suspect that the building material might be different through appearance, Ambient separated each building material into a new homogeneous sampling area.

Asbestos bulk samples were obtained in accordance with USEPA established guidelines document, "Guidance for Controlling Asbestos Containing Materials in Buildings" (USEPA 560/5-85-024, 1985) and USEPA 40 CFR Part 763.86 "Asbestos-Containing Materials in Schools, Final Rule" (AHERA). Each bulk sample was analyzed of asbestos content by Polarized Light Microscopy (PLM) EPA Method 600/R-93-116 Visual Area Estimation. Building materials not identified in this report may be present within hidden or concealed areas of the property or outside the scope of services.

Friable and non-friable building materials assessments were performed for each homogeneous building material by the use of hand pressure as defined in USEPA 40 CFR Part 763 "Asbestos-Containing Materials in Schools, Final Rule" (AHERA). Friable material is defined as any building material that by the means of hand pressure can be crumbled into a powder.

When each homogeneous sampling area was identified, a random sampling grid was utilized for sample collection of each building material as described in the EPA guidance document, Asbestos in Building: Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/5-85-030a, October 1985 Random Number Diagrams). The minimum number of samples was obtained for each identified friable homogeneous area based upon the overall square footage of material in table-1. The physical condition, friability, accessibility, activity and damage of building materials were also assessed and documented. The following procedures were performed during the survey

- Perform a visual assessment to identify the location and type of friable/non-friable building materials.

- Obtain representative bulk samples from suspect building materials per the below table-1.

- Samples were analyzed by an independent accredited laboratory for the presence of asbestos by PLM analysis USEPA 40 CFR Part 763.87.

- Present all survey results in a written report including recommendations, locations and laboratory results. All findings, recommendations and analytical data presented in this report are based on the information (assessment and sampling data) obtained by our inspector during the survey.

Sample Table-1

Size of Sampling Area	**Number of Samples Collected**
Less Than 1,000 sq. ft.	3 – Samples
Between 1,000 & 5,000 sq. ft.	5 – Samples
Greater than 5,000 sq. Ft.	*7 – Samples

***The recommended number of samples per AHERA is nine for areas greater than 5,000 square feet, or at least one additional sample per additional 1,000 square feet for any friable building material.**

All bulk samples were submitted to Forensic Analytical located at: 2959 Pacific Commerce Drive Rancho Dominguez, California (310) 763-2374. Forensic Analytical is accredited by the American Industrial Hygiene Association (AIHA), National Voluntary Laboratory Accreditation Program (NVLAP #101459-0), National Institute of Standards and Testing (NIST), and is a successful participant in the Proficiency Analytical Testing Program (PAT). Each sample analyzed by Polarized Light Microscopy (PLM) method in accordance with the "Interim Method for the Determination of Asbestos in Bulk Insulation Samples EPA - 600/M4-82-020" dated December 1982 and adopted by the National Voluntary Laboratory Accreditation Program (NVLAP) Title 15, part 7 of the Code of Federal Register as affiliated with the National Institute for Standards and Testing (NIST).

Current Federal USEPA Regulations define a material to be asbestos containing at 1% by weight. Current State of California regulations define a material to be asbestos containing at 0.1% by weight. For this reason, any sample reported as containing a trace amount of asbestos is assumed to contain asbestos. The following is the laboratory result:

Material	Sample Number	Asbestos Content	Square Footage	Location of Material	Friable	Damage
Drywall and Joint Compound	01 02 03	Non Detected	N/A	Elevator Room	No	No
Exterior Stucco	04 05 06	Non Detected	N/A	Throughout Exterior Walls	No	No

Lead Survey Procedures

The lead survey was performed to identify painted building components for disposal during the construction activity. Once the suspect painted building components were identified, each painted building component was categorized into homogeneous sample areas. Homogeneous sample areas are defined as areas in which suspect painted building components are uniform in color, texture, application date and general appearance. Representative X-Ray Fluorescence (XRF) lead readings were obtained from each homogeneous sample area.

Detection Limit Guidelines for The Department of Health Services is 5000 parts per million (PPM) or 1.0 mg/cm^2 by the use of a hand held X-Ray Fluorescence (XRF) lead paint analyzer, however CALOSHA requires that all workers be properly protected when working with any painted building component containing levels of lead above 600 ppm or

0.06 mg/cm^2 in accordance with Title 8 CCR Section 1532.1. The following highlighted building components indicate lead containing painted surfaces above 1.0 mg/cm^2

Location	Sample Number	Component	Substrate	Pbl mg/cm^2	Condition
Calibration	---	---	---	1.0	---
Calibration	---	---	---	1.0	---
Calibration	---	---	---	1.0	---
Elevator Room	1	Wall	Drywall	0.0	N/A
Elevator Room	2	Wall	Drywall	0.0	N/A
Exterior	3	Wall	Stucco	0.0	N/A
Exterior	4	Wall	Stucco	0.0	N/A

Any lead containing building components highlighted above is designed to aid the building owner, architect, construction manager, general contractors of potential lead containing building components within the scope of work. Other lead containing building components may exist at the property within concealed areas of the property or outside the scope of work. All conditions of paints identified in the above table were identified during the time of the survey. All removal work should proceed under all requirements pertaining to lead containing paint removal activities.

Since the building materials sampled during this survey could potentially contain asbestos and/or lead with limited access to the scope of work no intrusive sampling was performed in areas like (roofing underlay, walls/ceiling cavities, under flooring, underground, pools/spa) or any other areas that would cause damage to building materials potentially containing asbestos or lead.

Due to limited access of the property, other asbestos and/or lead containing building materials may exist at the property and/or outside the scope of work. If other building materials that are not identified in this report are discovered, all work should (stop) and these building materials should be sampled prior to any related activities. Also, if any changes to any regulation governing asbestos and or lead occurred after the date of this report, Ambient cannot be responsible for this changes.

Once the asbestos and/or lead containing building materials identified in this report have been remove and with full access to the building interior and exterior, Ambient recommends an intrusive survey be performed to identify any remaining asbestos and/or lead containing building materials within the property.

Any recommendations in this report are professional opinions based solely on visual observations and analytical analyses, as described in this report. Opinions and/or recommendations presented herein apply to site conditions existing at the time of our investigation, they cannot necessarily apply to site changes of which this office is not aware of and/or has not had the opportunity to evaluate.

Please contact the undersigned with your questions and/or comments regarding the sample result and/or location of material.

Sincerely,
Signed for Ambient Environmental, Inc. by

John L. Payne
CAC #93-1226

Attachments

Appendix - A	Chain of Custody and Bulk Sample Log
Appendix - B	Laboratory Certification of Analysis
Appendix - C	Certification

APPENDIX A

CHAIN OF CUSTODY
AND BULK SAMPLE LOG

AMBIENT ENVIRONMENTAL, INC.
Consulting/Engineering/Remediation

400 North Princeland Court Suite-3
Corona, California 92879
951 272-4730 *Phone*
951 272-4731 *Facsimile*
www.ambientenvinc.com

ASBESTOS BULK SAMPLE LOG

Page 1 of 1

Client Name: UCR P&D

Project Location: Entomology Research Museum

Date: 7-21-15 **Field Technician:** John Ryan

Project Number: 19-1489 **Priority:** ASAP ___ 24 HR ✓ 3-5 Days ___

SAMPLE NUMBER	SAMPLE LOCATION	MATERIAL DESCRIPTION	SQUARE FOOTAGE
01	Right Room	Drywall at Tower Complex	
02	"	"	
03	"	"	
04	Right Room Walls	Right Room Stucco	
05	"	"	
06	"	"	

Chain of Custody **Analytical Method:** PLM: ✓ TEM: ____ Other: ____

Sampled By		**Date**	**Time**
Relinquished By		**Date**	**Time**
Received By		**Date** 07-26-19	**Time** 9:35
Relinquished By		**Date**	**Time**
Received By		**Date**	**Time**

APPENDIX B

LABORATORY CERTIFICATES OF ANALYSIS

Forensic Analytical LABORATORIES

Final Report

Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-1

Ambient Environmental Inc
John Payne
400 N. Princeland Crt.
Ste. 3
Corona, CA 92879

Client ID: 5697
Report Number: B290665
Date Received: 07/26/19
Date Analyzed: 07/28/19
Date Printed: 07/29/19
First Reported: 07/29/19

Job ID/Site: 19-1489; Entomology Research Museum

FALI Job ID: 5697
Total Samples Submitted: 6
Total Samples Analyzed: 6

Date(s) Collected: 07/21/2019

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
01	51251702						
Layer: White Drywall			**ND**				
Layer: Drywall Tape			**ND**				
Layer: White Skimcoat/Joint Compounds			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (2 %)							
02	51251703						
Layer: White Drywall			**ND**				
Layer: Drywall Tape			**ND**				
Layer: White Skimcoat/Joint Compounds			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (2 %)							
03	51251704						
Layer: White Drywall			**ND**				
Layer: Drywall Tape			**ND**				
Layer: White Skimcoat/Joint Compounds			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (2 %)							
04	51251705						
Layer: Grey Cementitious Material			**ND**				
Layer: White Cementitious Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
05	51251706						
Layer: Grey Cementitious Material			**ND**				
Layer: White Cementitious Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							

2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 / Telephone: (310) 763-2374 (888) 813-9417 / Fax: (310) 763-8684

Report Number: B290665

Client Name: Ambient Environmental Inc **Date Printed:** 07/29/19

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
06	51251707						
Layer: Grey Cementitious Material			**ND**				
Layer: White Cementitious Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							

Tiffani Ludd, Laboratory Supervisor, Rancho Dominguez Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 / Telephone: (310) 763-2374 (888) 813-9417 / Fax: (310) 763-8684

APPENDIX C

CERTIFICATION

STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Asbestos Certification & Training Unit
2424 Arden Way, Suite 495
Sacramento, CA 95825-2417
(916) 574-2993 Office (916) 483-0572 Fax
http://www.dir.ca.gov/dosh/asbestos.html acru@dir.ca.gov

310191226C 80 87

Ambient Environmental, Inc.
John Lee Payne
400 Princeland Court, Suite 3
Corona CA 92879

May 16, 2019

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email with any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Jeff Ferrell
Senior Safety Engineer

Attachment: Certification Card

cc: File

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

John Lee Payne
Name

Certification No. **93-1226**

Expires on **06/24/20**

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.

Renewal – Card Attached (Revised 01/10/2019)

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type

Sampling Technician

Expiration Date

10/23/2019

John L. Payne

ID #: 25387

AMBIENT ENVIRONMENTAL, INC.
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400 North Princeland Court Suite-3
Corona, California 92879
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951 272-4731 *Facsimile*
jp@ambientenv.com
www.ambientenvinc.com

July 31, 2019

University of California, Riverside
Planning Design & Construction
1223 University Avenue Suite 240
Riverside, California 92507
Attn: Mr. Fernando Nunez-Project Manager

Re: Asbestos and Lead Survey for the project located at: PE Building (Elevator Upgrade Project) University of Riverside, California.

Dear Mr. Nunez,

Ambient Environmental Inc. performed an asbestos building material for the above referenced locations. Ambient Environmental Inc. on site field personnel obtained asbestos building material bulk samples and X-Ray Fluorescence (XRF) reading from painted building component that would be impacted during the elevator upgrade project located at the above referenced location. The survey was conducted on July 21, 2019 by Mr. John L. Payne a California Certified Asbestos Consultant #93-1226 a United States Environmental Protection Agency (USEPA) certified asbestos building inspector and a CDPHS #25387 Certified Lead Sampling Technician.

Asbestos Survey Procedures

The purpose of the asbestos survey was to locate and identify suspect building materials that will be impacted during the elevator upgrade project for detectable levels of asbestos Once a visual inspection was performed, representative bulk samples were obtained from each homogeneous building material that would be impacted during the upgrade activity. Homogeneous building materials are defined as building materials that are uniform in texture, construction or application date and general appearance. Also, each homogeneous building material was divided into three main categories: Surfacing Materials, Thermal System Insulation and Miscellaneous Materials. The sample location, building material type, friability and condition of building materials were also documented. If building materials were installed at different times or if there is any reason to suspect that the building material might be different through appearance, Ambient separated each building material into a new homogeneous sampling area.

Asbestos bulk samples were obtained in accordance with USEPA established guidelines document, "Guidance for Controlling Asbestos Containing Materials in Buildings" (USEPA 560/5-85-024, 1985) and USEPA 40 CFR Part 763.86 "Asbestos-Containing Materials in Schools, Final Rule" (AHERA). Each bulk sample was analyzed of asbestos content by Polarized Light Microscopy (PLM) EPA Method 600/R-93-116 Visual Area Estimation. Building materials not identified in this report may be present within hidden or concealed areas of the property or outside the scope of services.

Friable and non-friable building materials assessments were performed for each homogeneous building material by the use of hand pressure as defined in USEPA 40 CFR Part 763 "Asbestos-Containing Materials in Schools, Final Rule" (AHERA). Friable material is defined as any building material that by the means of hand pressure can be crumbled into a powder.

When each homogeneous sampling area was identified, a random sampling grid was utilized for sample collection of each building material as described in the EPA guidance document, Asbestos in Building: Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/5-85-030a, October 1985 Random Number Diagrams). The minimum number of samples was obtained for each identified friable homogeneous area based upon the overall square footage of material in table-1. The physical condition, friability, accessibility, activity and damage of building materials were also assessed and documented. The following procedures were performed during the survey

- Perform a visual assessment to identify the location and type of friable/non-friable building materials.

- Obtain representative bulk samples from suspect building materials per the below table-1.

- Samples were analyzed by an independent accredited laboratory for the presence of asbestos by PLM analysis USEPA 40 CFR Part 763.87.

- Present all survey results in a written report including recommendations, locations and laboratory results. All findings, recommendations and analytical data presented in this report are based on the information (assessment and sampling data) obtained by our inspector during the survey.

Sample Table-1

Size of Sampling Area	**Number of Samples Collected**
Less Than 1,000 sq. ft.	3 – Samples
Between 1,000 & 5,000 sq. ft.	5 – Samples
Greater than 5,000 sq. Ft.	*7 – Samples

***The recommended number of samples per AHERA is nine for areas greater than 5,000 square feet, or at least one additional sample per additional 1,000 square feet for any friable building material.**

All bulk samples were submitted to Forensic Analytical located at: 2959 Pacific Commerce Drive Rancho Dominguez, California (310) 763-2374. Forensic Analytical is accredited by the American Industrial Hygiene Association (AIHA), National Voluntary Laboratory Accreditation Program (NVLAP #101459-0), National Institute of Standards and Testing (NIST), and is a successful participant in the Proficiency Analytical Testing Program (PAT). Each sample analyzed by Polarized Light Microscopy (PLM) method in accordance with the "Interim Method for the Determination of Asbestos in Bulk Insulation Samples EPA - 600/M4-82-020" dated December 1982 and adopted by the National Voluntary Laboratory Accreditation Program (NVLAP) Title 15, part 7 of the Code of Federal Register as affiliated with the National Institute for Standards and Testing (NIST).

Current Federal USEPA Regulations define a material to be asbestos containing at 1% by weight. Current State of California regulations define a material to be asbestos containing at 0.1% by weight. For this reason, any sample reported as containing a trace amount of asbestos is assumed to contain asbestos. The following is the laboratory result:

Material	Sample Number	Asbestos Content	Square Footage	Location of Material	Friable	Damage
Interior Plaster	01 02 03	Non Detected	N/A	Throughout Interior Walls and Ceiling	No	No
Drywall and Joint Compound	04 05 06	Non Detected	N/A	Equipment Room Walls and Ceiling	No	No

Lead Survey Procedures

The lead survey was performed to identify painted building components for disposal during the construction activity. Once the suspect painted building components were identified, each painted building component was categorized into homogeneous sample areas. Homogeneous sample areas are defined as areas in which suspect painted building components are uniform in color, texture, application date and general appearance. Representative X-Ray Fluorescence (XRF) lead readings were obtained from each homogeneous sample area.

Detection Limit Guidelines for The Department of Health Services is 5000 parts per million (PPM) or 1.0 mg/cm^2 by the use of a hand held X-Ray Fluorescence (XRF) lead paint analyzer, however CALOSHA requires that all workers be properly protected when working with any painted building component containing levels of lead above 600 ppm or

0.06 mg/cm^2 in accordance with Title 8 CCR Section 1532.1. The following highlighted building components indicate lead containing painted surfaces above 1.0 mg/cm^2

Location	Sample Number	Component	Substrate	Pbl mg/cm^2	Condition
Calibration	---	---	---	1.0	---
Calibration	---	---	---	1.0	---
Calibration	---	---	---	1.0	---
Hallway	1	Wall	Plaster	0.0	N/A
Hallway	2	Wall	Plaster	0.0	N/A
Equipment Room	3	Wall	Drywall	0.0	N/A
Equipment Room	4	Wall	Drywall	0.0	N/A

Any lead containing building components highlighted above is designed to aid the building owner, architect, construction manager, general contractors of potential lead containing building components within the scope of work. Other lead containing building components may exist at the property within concealed areas of the property or outside the scope of work. All conditions of paints identified in the above table were identified during the time of the survey. All removal work should proceed under all requirements pertaining to lead containing paint removal activities.

Since the building materials sampled during this survey could potentially contain asbestos and/or lead with limited access to the scope of work no intrusive sampling was performed in areas like (roofing underlay, walls/ceiling cavities, under flooring, underground, pools/spa) or any other areas that would cause damage to building materials potentially containing asbestos or lead.

Due to limited access of the property, other asbestos and/or lead containing building materials may exist at the property and/or outside the scope of work. If other building materials that are not identified in this report are discovered, all work should (stop) and these building materials should be sampled prior to any related activities. Also, if any changes to any regulation governing asbestos and or lead occurred after the date of this report, Ambient cannot be responsible for this changes.

Once the asbestos and/or lead containing building materials identified in this report have been remove and with full access to the building interior and exterior, Ambient recommends an intrusive survey be performed to identify any remaining asbestos and/or lead containing building materials within the property.

Any recommendations in this report are professional opinions based solely on visual observations and analytical analyses, as described in this report. Opinions and/or recommendations presented herein apply to site conditions existing at the time of our investigation, they cannot necessarily apply to site changes of which this office is not aware of and/or has not had the opportunity to evaluate.

Please contact the undersigned with your questions and/or comments regarding the sample result and/or location of material.

Sincerely,
Signed for Ambient Environmental, Inc. by

John L. Payne
CAC #93-1226

Attachments

Appendix - A	Chain of Custody and Bulk Sample Log
Appendix - B	Laboratory Certification of Analysis
Appendix - C	Certification

APPENDIX A

CHAIN OF CUSTODY
AND BULK SAMPLE LOG

AMBIENT ENVIRONMENTAL, INC.
Consulting/Engineering/Remediation

400 North Princeland Court Suite-3
Corona, California 92879
951 272-4730 *Phone*
951 272-4731 *Facsimile*
www.ambientenvinc.com

ASBESTOS BULK SAMPLE LOG

Client Name: UCR P.D

Project Location: PE Building UC Riverside

Date: 7-21-15 **Field Technician:** [illegible]

Project Number: 19-1486 **Priority:** ASAP ___ 24 HR ✓ 3-5 Days ___

SAMPLE NUMBER	SAMPLE LOCATION	MATERIAL DESCRIPTION	SQUARE FOOTAGE
01	Fireplace walls	Entry Plate	
02	"	"	
03	"	"	
04	Fireplace Room	Drywall w/ Joint compound	
05	"	"	
06	"	"	

Chain of Custody **Analytical Method: PLM:** ___ **TEM:** ___ **Other:** ___

Sampled By		**Date**	**Time**
Relinquished By		**Date**	**Time**
Received By	FE	**Date** 07-26-15	**Time** 9:35 am
Relinquished By		**Date**	**Time**
Received By		**Date**	**Time**

APPENDIX B

LABORATORY CERTIFICATES OF ANALYSIS

Forensic Analytical LABORATORIES

Final Report

Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-1

Ambient Environmental Inc
John Payne
400 N. Princeland Crt.
Ste. 3
Corona, CA 92879

Client ID: 5697
Report Number: B290657
Date Received: 07/26/19
Date Analyzed: 07/28/19
Date Printed: 07/29/19
First Reported: 07/29/19

Job ID/Site: 19-1486; PE Building, UC Riverside

Date(s) Collected: 07/21/2019

FALI Job ID: 5697
Total Samples Submitted: 6
Total Samples Analyzed: 6

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
01	51251681						
Layer: Beige Plaster			**ND**				
Layer: Off-White Plaster			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
02	51251682						
Layer: Beige Plaster			**ND**				
Layer: Off-White Plaster			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
03	51251683						
Layer: Beige Plaster			**ND**				
Layer: Off-White Plaster			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
04	51251684						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (3 %)							
05	51251685						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (3 %)							

2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 / Telephone: (310) 763-2374 (888) 813-9417 / Fax: (310) 763-8684

Report Number: B290657
Client Name: Ambient Environmental Inc **Date Printed:** 07/29/19

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
06	51251686						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (3 %)							

Tiffani Ludd, Laboratory Supervisor, Rancho Dominguez Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 / Telephone: (310) 763-2374 (888) 813-9417 / Fax: (310) 763-8684

APPENDIX C

CERTIFICATION

STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Asbestos Certification & Training Unit
2424 Arden Way, Suite 495
Sacramento, CA 95825-2417
(916) 574-2993 Office (916) 483-0572 Fax
http://www.dir.ca.gov/dosh/asbestos.html acru@dir.ca.gov

310191226C 80 87

Ambient Environmental, Inc.
John Lee Payne
400 Princeland Court, Suite 3
Corona CA 92879

May 16, 2019

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email with any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Jeff Ferrell
Senior Safety Engineer

Attachment: Certification Card

cc: File

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

John Lee Payne
Name

Certification No. **93-1226**

Expires on **06/24/20**

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.

Renewal – Card Attached (Revised 01/10/2019)

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type: Sampling Technician

Expiration Date: 10/23/2019

John L. Payne

ID #: 25387

AMBIENT ENVIRONMENTAL, INC.
Consulting/Engineering/Remediation
400 North Princeland Court Suite-3
Corona, California 92879
951 272-4730 *Phone*
951 272-4731 *Facsimile*
jp@ambientenv.com
www.ambientenvinc.com

July 31, 2019

University of California, Riverside
Planning Design & Construction
1223 University Avenue Suite 240
Riverside, California 92507
Attn: Mr. Fernando Nunez-Project Manager

Re: Asbestos and Lead Survey for the project located at: Spieth Hall North (Elevator Upgrade Project) University of Riverside, California.

Dear Mr. Nunez,

Ambient Environmental Inc. performed an asbestos building material for the above referenced locations. Ambient Environmental Inc. on site field personnel obtained asbestos building material bulk samples and X-Ray Fluorescence (XRF) reading from painted building component that would be impacted during the elevator upgrade project located at the above referenced location. The survey was conducted on July 21, 2019 by Mr. John L. Payne a California Certified Asbestos Consultant #93-1226 a United States Environmental Protection Agency (USEPA) certified asbestos building inspector and a CDPHS #25387 Certified Lead Sampling Technician.

Asbestos Survey Procedures

The purpose of the asbestos survey was to locate and identify suspect building materials that will be impacted during the elevator upgrade project for detectable levels of asbestos Once a visual inspection was performed, representative bulk samples were obtained from each homogeneous building material that would be impacted during the upgrade activity. Homogeneous building materials are defined as building materials that are uniform in texture, construction or application date and general appearance. Also, each homogeneous building material was divided into three main categories: Surfacing Materials, Thermal System Insulation and Miscellaneous Materials. The sample location, building material type, friability and condition of building materials were also documented. If building materials were installed at different times or if there is any reason to suspect that the building material might be different through appearance, Ambient separated each building material into a new homogeneous sampling area.

Asbestos bulk samples were obtained in accordance with USEPA established guidelines document, "Guidance for Controlling Asbestos Containing Materials in Buildings" (USEPA 560/5-85-024, 1985) and USEPA 40 CFR Part 763.86 "Asbestos-Containing Materials in Schools, Final Rule" (AHERA). Each bulk sample was analyzed of asbestos content by Polarized Light Microscopy (PLM) EPA Method 600/R-93-116 Visual Area Estimation. Building materials not identified in this report may be present within hidden or concealed areas of the property or outside the scope of services.

Friable and non-friable building materials assessments were performed for each homogeneous building material by the use of hand pressure as defined in USEPA 40 CFR Part 763 "Asbestos-Containing Materials in Schools, Final Rule" (AHERA). Friable material is defined as any building material that by the means of hand pressure can be crumbled into a powder.

When each homogeneous sampling area was identified, a random sampling grid was utilized for sample collection of each building material as described in the EPA guidance document, Asbestos in Building: Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/5-85-030a, October 1985 Random Number Diagrams). The minimum number of samples was obtained for each identified friable homogeneous area based upon the overall square footage of material in table-1. The physical condition, friability, accessibility, activity and damage of building materials were also assessed and documented. The following procedures were performed during the survey

- Perform a visual assessment to identify the location and type of friable/non-friable building materials.

- Obtain representative bulk samples from suspect building materials per the below table-1.

- Samples were analyzed by an independent accredited laboratory for the presence of asbestos by PLM analysis USEPA 40 CFR Part 763.87.

- Present all survey results in a written report including recommendations, locations and laboratory results. All findings, recommendations and analytical data presented in this report are based on the information (assessment and sampling data) obtained by our inspector during the survey.

Sample Table-1

Size of Sampling Area	**Number of Samples Collected**
Less Than 1,000 sq. ft.	3 – Samples
Between 1,000 & 5,000 sq. ft.	5 – Samples
Greater than 5,000 sq. Ft.	*7 – Samples

***The recommended number of samples per AHERA is nine for areas greater than 5,000 square feet, or at least one additional sample per additional 1,000 square feet for any friable building material.**

All bulk samples were submitted to Forensic Analytical located at: 2959 Pacific Commerce Drive Rancho Dominguez, California (310) 763-2374. Forensic Analytical is accredited by the American Industrial Hygiene Association (AIHA), National Voluntary Laboratory Accreditation Program (NVLAP #101459-0), National Institute of Standards and Testing (NIST), and is a successful participant in the Proficiency Analytical Testing Program (PAT). Each sample analyzed by Polarized Light Microscopy (PLM) method in accordance with the "Interim Method for the Determination of Asbestos in Bulk Insulation Samples EPA - 600/M4-82-020" dated December 1982 and adopted by the National Voluntary Laboratory Accreditation Program (NVLAP) Title 15, part 7 of the Code of Federal Register as affiliated with the National Institute for Standards and Testing (NIST).

Current Federal USEPA Regulations define a material to be asbestos containing at 1% by weight. Current State of California regulations define a material to be asbestos containing at 0.1% by weight. For this reason, any sample reported as containing a trace amount of asbestos is assumed to contain asbestos. The following is the laboratory result:

Material	Sample Number	Asbestos Content	Square Footage	Location of Material	Friable	Damage
Interior Plaster	01 02 03	Non Detected	N/A	Throughout Interior Walls and Ceiling	No	No
12x12 Ceiling Tile and Mastic	04 05 06	Non Detected	N/A	Throughout Interior Walls and Ceiling	No	No

Lead Survey Procedures

The lead survey was performed to identify painted building components for disposal during the construction activity. Once the suspect painted building components were identified, each painted building component was categorized into homogeneous sample areas. Homogeneous sample areas are defined as areas in which suspect painted building components are uniform in color, texture, application date and general appearance. Representative X-Ray Fluorescence (XRF) lead readings were obtained from each homogeneous sample area.

Detection Limit Guidelines for The Department of Health Services is 5000 parts per million (PPM) or 1.0 mg/cm^2 by the use of a hand held X-Ray Fluorescence (XRF) lead paint analyzer, however CALOSHA requires that all workers be properly protected when working with any painted building component containing levels of lead above 600 ppm or

0.06 mg/cm^2 in accordance with Title 8 CCR Section 1532.1. The following highlighted building components indicate lead containing painted surfaces above 1.0 mg/cm^2

Location	Sample Number	Component	Substrate	Pbl mg/cm^2	Condition
Calibration	---	---	---	1.0	---
Calibration	---	---	---	1.0	---
Calibration	---	---	---	1.0	---
Hallway	1	Wall	Plaster	0.0	N/A
Hallway	2	Wall	Plaster	0.0	N/A
Hallway	3	Wall	Concrete	0.0	N/A
Hallway	4	Wall	Concrete	0.0	N/A
Room 360/362	5	Wall	Drywall	0.0	N/A
Room 360/362	6	Wall	Drywall	0.0	N/A

Any lead containing building components highlighted above is designed to aid the building owner, architect, construction manager, general contractors of potential lead containing building components within the scope of work. Other lead containing building components may exist at the property within concealed areas of the property or outside the scope of work. All conditions of paints identified in the above table were identified during the time of the survey. All removal work should proceed under all requirements pertaining to lead containing paint removal activities.

Since the building materials sampled during this survey could potentially contain asbestos and/or lead with limited access to the scope of work no intrusive sampling was performed in areas like (roofing underlay, walls/ceiling cavities, under flooring, underground, pools/spa) or any other areas that would cause damage to building materials potentially containing asbestos or lead.

Due to limited access of the property, other asbestos and/or lead containing building materials may exist at the property and/or outside the scope of work. If other building materials that are not identified in this report are discovered, all work should (stop) and these building materials should be sampled prior to any related activities. Also, if any changes to any regulation governing asbestos and or lead occurred after the date of this report, Ambient cannot be responsible for this changes.

Once the asbestos and/or lead containing building materials identified in this report have been remove and with full access to the building interior and exterior, Ambient recommends an intrusive survey be performed to identify any remaining asbestos and/or lead containing building materials within the property.

Any recommendations in this report are professional opinions based solely on visual observations and analytical analyses, as described in this report. Opinions and/or recommendations presented herein apply to site conditions existing at the time of our

investigation, they cannot necessarily apply to site changes of which this office is not aware of and/or has not had the opportunity to evaluate.

Please contact the undersigned with your questions and/or comments regarding the sample result and/or location of material.

Sincerely,
Signed for Ambient Environmental, Inc. by

John L. Payne
CAC #93-1226

Attachments

Appendix - A	Chain of Custody and Bulk Sample Log
Appendix - B	Laboratory Certification of Analysis
Appendix - C	Certification

APPENDIX A

CHAIN OF CUSTODY
AND BULK SAMPLE LOG

AMBIENT ENVIRONMENTAL, INC.
Consulting/Engineering/Remediation

400 North Princeland Court Suite-3
Corona, California 92879
951 272-4730 *Phone*
951 272-4731 *Facsimile*
www.ambientenvinc.com

ASBESTOS BULK SAMPLE LOG

Client Name: UCR P.D

Project Location: SOUTH HALL ROOF UC RIVERSIDE

Date: 7-21-19 **Field Technician:** John Payne

Project Number: 19-1487 **Priority:** ASAP ___ 24 HR ___ 3-5 Days ___

SAMPLE NUMBER	SAMPLE LOCATION	MATERIAL DESCRIPTION	SQUARE FOOTAGE
01	Hallways	Interior Plaster	
02		"	
03		"	
04		CAR TILE MASTIC	
05		"	
06		"	

Chain of Custody **Analytical Method:** PLM: X TEM: ____ Other: ____

Sampled By		**Date**	**Time**
Relinquished By		**Date**	**Time**
Received By	FE	**Date** 07-26-19	**Time** 9:35 am
Relinquished By		**Date**	**Time**
Received By		**Date**	**Time**

APPENDIX B

LABORATORY CERTIFICATES OF ANALYSIS

Forensic Analytical LABORATORIES

Final Report

Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-1

Ambient Environmental Inc
John Payne
400 N. Princeland Crt.
Ste. 3
Corona, CA 92879

Client ID: 5697
Report Number: B290658
Date Received: 07/26/19
Date Analyzed: 07/28/19
Date Printed: 07/29/19
First Reported: 07/29/19

Job ID/Site: 19-1487; Spieth Hall North, UC Riverside

Date(s) Collected: 07/21/2019

FALI Job ID: 5697
Total Samples Submitted: 6
Total Samples Analyzed: 6

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
01	51251687						
Layer: Beige Plaster			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
02	51251688						
Layer: Beige Plaster			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
03	51251689						
Layer: Beige Plaster			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
04	51251690						
Layer: Brown Mastic			**ND**				
Layer: Tan Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (90 %)		**Asbestos (ND)**					
05	51251691						
Layer: Brown Mastic			**ND**				
Layer: Tan Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (90 %)		**Asbestos (ND)**					
06	51251692						
Layer: Brown Mastic			**ND**				
Layer: Tan Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (90 %)		**Asbestos (ND)**					

2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 / Telephone: (310) 763-2374 (888) 813-9417 / Fax: (310) 763-8684

Report Number: B290658

Client Name: Ambient Environmental Inc **Date Printed:** 07/29/19

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer

Tiffani Ludd, Laboratory Supervisor, Rancho Dominguez Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 / Telephone: (310) 763-2374 (888) 813-9417 / Fax: (310) 763-8684

APPENDIX C

CERTIFICATION

STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Asbestos Certification & Training Unit
2424 Arden Way, Suite 495
Sacramento, CA 95825-2417
(916) 574-2993 Office (916) 483-0572 Fax
http://www.dir.ca.gov/dosh/asbestos.html acru@dir.ca.gov

310191226C 80 87

Ambient Environmental, Inc.
John Lee Payne
400 Princeland Court, Suite 3
Corona CA 92879

May 16, 2019

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email with any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Jeff Ferrell
Senior Safety Engineer

Attachment: Certification Card

cc: File

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

John Lee Payne
Name

Certification No. 93-1226

Expires on 06/24/20

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.

Renewal – Card Attached (Revised 01/10/2019)

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type

Sampling Technician

Expiration Date

10/23/2019

John L. Payne

ID #: 25387

AMBIENT ENVIRONMENTAL, INC.
Consulting/Engineering/Remediation
400 North Princeland Court Suite-3
Corona, California 92879
951 272-4730 *Phone*
951 272-4731 *Facsimile*
jp@ambientenv.com
www.ambientenvinc.com

July 31, 2019

University of California, Riverside
Planning Design & Construction
1223 University Avenue Suite 240
Riverside, California 92507
Attn: Mr. Fernando Nunez-Project Manager

Re: Asbestos and Lead Survey for the project located at: Spieth Hall South Rooms 360/362 and Hallways (Elevator Upgrade Project) University of Riverside, California.

Dear Mr. Nunez,

Ambient Environmental Inc. performed an asbestos building material for the above referenced locations. Ambient Environmental Inc. on site field personnel obtained asbestos building material bulk samples and X-Ray Fluorescence (XRF) reading from painted building component that would be impacted during the elevator upgrade project located at the above referenced location. The survey was conducted on July 21, 2019 by Mr. John L. Payne a California Certified Asbestos Consultant #93-1226 a United States Environmental Protection Agency (USEPA) certified asbestos building inspector and a CDPHS #25387 Certified Lead Sampling Technician.

Asbestos Survey Procedures

The purpose of the asbestos survey was to locate and identify suspect building materials that will be impacted during the elevator upgrade project for detectable levels of asbestos Once a visual inspection was performed, representative bulk samples were obtained from each homogeneous building material that would be impacted during the upgrade activity. Homogeneous building materials are defined as building materials that are uniform in texture, construction or application date and general appearance. Also, each homogeneous building material was divided into three main categories: Surfacing Materials, Thermal System Insulation and Miscellaneous Materials. The sample location, building material type, friability and condition of building materials were also documented. If building materials were installed at different times or if there is any reason to suspect that the

building material might be different through appearance, Ambient separated each building material into a new homogeneous sampling area.

Asbestos bulk samples were obtained in accordance with USEPA established guidelines document, "Guidance for Controlling Asbestos Containing Materials in Buildings" (USEPA 560/5-85-024, 1985) and USEPA 40 CFR Part 763.86 "Asbestos-Containing Materials in Schools, Final Rule" (AHERA). Each bulk sample was analyzed of asbestos content by Polarized Light Microscopy (PLM) EPA Method 600/R-93-116 Visual Area Estimation. Building materials not identified in this report may be present within hidden or concealed areas of the property or outside the scope of services.

Friable and non-friable building materials assessments were performed for each homogeneous building material by the use of hand pressure as defined in USEPA 40 CFR Part 763 "Asbestos-Containing Materials in Schools, Final Rule" (AHERA). Friable material is defined as any building material that by the means of hand pressure can be crumbled into a powder.

When each homogeneous sampling area was identified, a random sampling grid was utilized for sample collection of each building material as described in the EPA guidance document, Asbestos in Building: Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/5-85-030a, October 1985 Random Number Diagrams). The minimum number of samples was obtained for each identified friable homogeneous area based upon the overall square footage of material in table-1. The physical condition, friability, accessibility, activity and damage of building materials were also assessed and documented. The following procedures were performed during the survey

- Perform a visual assessment to identify the location and type of friable/non-friable building materials.

- Obtain representative bulk samples from suspect building materials per the below table-1.

- Samples were analyzed by an independent accredited laboratory for the presence of asbestos by PLM analysis USEPA 40 CFR Part 763.87.

- Present all survey results in a written report including recommendations, locations and laboratory results. All findings, recommendations and analytical data presented in this report are based on the information (assessment and sampling data) obtained by our inspector during the survey.

Sample Table-1

Size of Sampling Area	**Number of Samples Collected**
Less Than 1,000 sq. ft.	3 – Samples
Between 1,000 & 5,000 sq. ft.	5 – Samples

Greater than 5,000 sq. Ft.	*7 – Samples

***The recommended number of samples per AHERA is nine for areas greater than 5,000 square feet, or at least one additional sample per additional 1,000 square feet for any friable building material.**

All bulk samples were submitted to Forensic Analytical located at: 2959 Pacific Commerce Drive Rancho Dominguez, California (310) 763-2374. Forensic Analytical is accredited by the American Industrial Hygiene Association (AIHA), National Voluntary Laboratory Accreditation Program (NVLAP #101459-0), National Institute of Standards and Testing (NIST), and is a successful participant in the Proficiency Analytical Testing Program (PAT). Each sample analyzed by Polarized Light Microscopy (PLM) method in accordance with the "Interim Method for the Determination of Asbestos in Bulk Insulation Samples EPA - 600/M4-82-020" dated December 1982 and adopted by the National Voluntary Laboratory Accreditation Program (NVLAP) Title 15, part 7 of the Code of Federal Register as affiliated with the National Institute for Standards and Testing (NIST).

Current Federal USEPA Regulations define a material to be asbestos containing at 1% by weight. Current State of California regulations define a material to be asbestos containing at 0.1% by weight. For this reason, any sample reported as containing a trace amount of asbestos is assumed to contain asbestos. The following is the laboratory result:

Material	Sample Number	Asbestos Content	Square Footage	Location of Material	Friable	Damage
Drywall and Joint Compound	01 02 03	Non Detected	N/A	Throughout Interior Walls and Ceiling	No	No
12x12 Ceiling Tile and Mastic	04 05 06	Non Detected	N/A	Throughout Interior Walls and Ceiling	No	No
Interior Plaster	07 08 09	Non Detected	N/A	Throughout Interior Walls and Ceilings	No	No

Lead Survey Procedures

The lead survey was performed to identify painted building components for disposal during the construction activity. Once the suspect painted building components were identified, each painted building component was categorized into homogeneous sample areas. Homogeneous sample areas are defined as areas in which suspect painted building components are uniform in color, texture, application date and general appearance. Representative X-Ray Fluorescence (XRF) lead readings were obtained from each homogeneous sample area.

Detection Limit Guidelines for The Department of Health Services is 5000 parts per million (PPM) or 1.0 mg/cm^2 by the use of a hand held X-Ray Fluorescence (XRF) lead paint analyzer, however CALOSHA requires that all workers be properly protected when working with any painted building component containing levels of lead above 600 ppm or 0.06 mg/cm^2 in accordance with Title 8 CCR Section 1532.1. The following highlighted building components indicate lead containing painted surfaces above 1.0 mg/cm^2

Location	Sample Number	Component	Substrate	Pbl mg/cm^2	Condition
Calibration	---	---	---	1.0	---
Calibration	---	---	---	1.0	---
Calibration	---	---	---	1.0	---
Hallway	1	Wall	Plaster	0.0	N/A
Hallway	2	Wall	Plaster	0.0	N/A
Hallway	3	Wall	Concrete	0.0	N/A
Hallway	4	Wall	Concrete	0.0	N/A
Room 360/362	5	Wall	Drywall	0.0	N/A
Room 360/362	6	Wall	Drywall	0.0	N/A

Any lead containing building components highlighted above is designed to aid the building owner, architect, construction manager, general contractors of potential lead containing building components within the scope of work. Other lead containing building components may exist at the property within concealed areas of the property or outside the scope of work. All conditions of paints identified in the above table were identified during the time of the survey. All removal work should proceed under all requirements pertaining to lead containing paint removal activities.

Since the building materials sampled during this survey could potentially contain asbestos and/or lead with limited access to the scope of work no intrusive sampling was performed in areas like (roofing underlay, walls/ceiling cavities, under flooring, underground, pools/spa) or any other areas that would cause damage to building materials potentially containing asbestos or lead.

Due to limited access of the property, other asbestos and/or lead containing building materials may exist at the property and/or outside the scope of work. If other building materials that are not identified in this report are discovered, all work should (stop) and these building materials should be sampled prior to any related activities. Also, if any changes to any regulation governing asbestos and or lead occurred after the date of this report, Ambient cannot be responsible for this changes.

Once the asbestos and/or lead containing building materials identified in this report have been remove and with full access to the building interior and exterior, Ambient recommends an intrusive survey be performed to identify any remaining asbestos and/or lead containing building materials within the property.

Any recommendations in this report are professional opinions based solely on visual observations and analytical analyses, as described in this report. Opinions and/or recommendations presented herein apply to site conditions existing at the time of our investigation, they cannot necessarily apply to site changes of which this office is not aware of and/or has not had the opportunity to evaluate.

Please contact the undersigned with your questions and/or comments regarding the sample result and/or location of material.

Sincerely,
Signed for Ambient Environmental, Inc. by

John L. Payne
CAC#93-1226

Attachments

Appendix - A	Chain of Custody and Bulk Sample Log
Appendix - B	Laboratory Certification of Analysis
Appendix - C	Certification

APPENDIX A

CHAIN OF CUSTODY
AND BULK SAMPLE LOG

AMBIENT ENVIRONMENTAL, INC.
Consulting/Engineering/Remediation

400 North Princeland Court Suite-3
Corona, California 92879
951 272-4730 *Phone*
951 272-4731 *Facsimile*
www.ambientenvinc.com

ASBESTOS BULK SAMPLE LOG

Client Name: UCR PiD

Project Location: SPIETH HALL SOUTH UC RIVERSIDE

Date: 7-21-15 **Field Technician:** John Ryan

Project Number: 19-1488 **Priority:** ASAP ___ 24 HR X 3-5 Days ___

SAMPLE NUMBER	SAMPLE LOCATION	MATERIAL DESCRIPTION	SQUARE FOOTAGE
01	Room 360/362	Drywall Joint compound	
02	"	"	
03	"	"	
04	Hallway	Ceiling Plaster with mastic	
05	"	"	
06	"	"	
07	Hallway	Interior Plaster	
08	"	"	
09	"	"	

Chain of Custody **Analytical Method: PLM:** X **TEM:** ____ **Other:** ____

Sampled By		**Date**	**Time**
Relinquished By		**Date**	**Time**
Received By	Carlo FIE	**Date** 07-26-15	**Time** 9:35 AM
Relinquished By		**Date**	**Time**
Received By		**Date**	**Time**

APPENDIX B

LABORATORY CERTIFICATES OF ANALYSIS

Forensic Analytical LABORATORIES

Final Report

Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-1

Ambient Environmental Inc
John Payne
400 N. Princeland Crt.
Ste. 3
Corona, CA 92879

Client ID: 5697
Report Number: B290659
Date Received: 07/26/19
Date Analyzed: 07/29/19
Date Printed: 07/29/19
First Reported: 07/29/19

Job ID/Site: 19-1488; Spieth Hall South, UC Riverside

Date(s) Collected: 07/21/2019

FALI Job ID: 5697
Total Samples Submitted: 9
Total Samples Analyzed: 9

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
01	51251693						
Layer: White Drywall			**ND**				
Total Composite Values of Fibrous Components: Cellulose (20 %) Fibrous Glass (5 %)		**Asbestos (ND)**					
02	51251694						
Layer: White Drywall			**ND**				
Total Composite Values of Fibrous Components: Cellulose (20 %) Fibrous Glass (5 %)		**Asbestos (ND)**					
03	51251695						
Layer: White Drywall			**ND**				
Total Composite Values of Fibrous Components: Cellulose (20 %) Fibrous Glass (5 %)		**Asbestos (ND)**					
04	51251696						
Layer: Brown Mastic			**ND**				
Layer: Tan Fibrous Material			**ND**				
Layer: Beige Plaster			**ND**				
Total Composite Values of Fibrous Components: Cellulose (70 %)		**Asbestos (ND)**					
05	51251697						
Layer: Brown Mastic			**ND**				
Layer: Tan Fibrous Material			**ND**				
Layer: Beige Plaster			**ND**				
Total Composite Values of Fibrous Components: Cellulose (70 %)		**Asbestos (ND)**					
06	51251698						
Layer: Brown Mastic			**ND**				
Layer: Tan Fibrous Material			**ND**				
Layer: Beige Plaster			**ND**				
Total Composite Values of Fibrous Components: Cellulose (70 %)		**Asbestos (ND)**					

2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 / Telephone: (310) 763-2374 (888) 813-9417 / Fax: (310) 763-8684

Report Number: B290659
Client Name: Ambient Environmental Inc **Date Printed:** 07/29/19

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
07	51251699						
Layer: Beige Plaster			**ND**				
Layer: White Plaster			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
08	51251700						
Layer: Beige Plaster			**ND**				
Layer: White Plaster			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
09	51251701						
Layer: Beige Plaster			**ND**				
Layer: White Plaster			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					

Tiffani Ludd, Laboratory Supervisor, Rancho Dominguez Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 / Telephone: (310) 763-2374 (888) 813-9417 / Fax: (310) 763-8684

APPENDIX C

CERTIFICATION

STATE OF CALIFORNIA — GAVIN NEWSOM, *Governor*

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Asbestos Certification & Training Unit
2424 Arden Way, Suite 495
Sacramento, CA 95825-2417
(916) 574-2993 Office (916) 483-0572 Fax
http://www.dir.ca.gov/dosh/asbestos.html acru@dir.ca.gov

310191226C 80 87

Ambient Environmental, Inc.
John Lee Payne
400 Princeland Court, Suite 3
Corona CA 92879

May 16, 2019

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email with any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Jeff Ferrell
Senior Safety Engineer

Attachment: Certification Card

cc: File

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

John Lee Payne
Name

Certification No. 93-1226

Expires on 06/24/20

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.

Renewal – Card Attached (Revised 01/10/2019)

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type

Sampling Technician

Expiration Date

10/23/2019

John L. Payne

ID #: 25387

AMBIENT ENVIRONMENTAL, INC.
Consulting/Engineering/Remediation
400 North Princeland Court Suite-3
Corona, California 92879
951 272-4730 *Phone*
951 272-4731 *Facsimile*
jp@ambientenv.com
www.ambientenvinc.com

July 31, 2019

University of California, Riverside
Planning Design & Construction
1223 University Avenue Suite 240
Riverside, California 92507
Attn: Mr. Fernando Nunez-Project Manager

Re: Asbestos and Lead Survey for the project located at: Watkins Hall Rooms 1329, 1237 and 1233 (Elevator Upgrade Project) University of Riverside, California. PO #SC10804611-CH2 Project #112008

Dear Mr. Nunez,

Ambient Environmental Inc. performed an asbestos building material for the above referenced locations. Ambient Environmental Inc. on site field personnel obtained asbestos building material bulk samples and X-Ray Fluorescence (XRF) reading from painted building component that would be impacted during the elevator upgrade project located at the above referenced location. The survey was conducted on July 21, 2019 by Mr. John L. Payne a California Certified Asbestos Consultant #93-1226 a United States Environmental Protection Agency (USEPA) certified asbestos building inspector and a CDPHS #25387 Certified Lead Sampling Technician.

Asbestos Survey Procedures

The purpose of the asbestos survey was to locate and identify suspect building materials that will be impacted during the elevator upgrade project for detectable levels of asbestos Once a visual inspection was performed, representative bulk samples were obtained from each homogeneous building material that would be impacted during the upgrade activity. Homogeneous building materials are defined as building materials that are uniform in texture, construction or application date and general appearance. Also, each homogeneous building material was divided into three main categories: Surfacing Materials, Thermal System Insulation and Miscellaneous Materials. The sample location, building material type, friability and condition of building materials were also documented. If building materials were installed at different times or if there is any reason to suspect that the building material might be different through appearance, Ambient separated each building material into a new homogeneous sampling area.

Asbestos bulk samples were obtained in accordance with USEPA established guidelines document, "Guidance for Controlling Asbestos Containing Materials in Buildings" (USEPA 560/5-85-024, 1985) and USEPA 40 CFR Part 763.86 "Asbestos-Containing Materials in Schools, Final Rule" (AHERA). Each bulk sample was analyzed of asbestos content by Polarized Light Microscopy (PLM) EPA Method 600/R-93-116 Visual Area Estimation. Building materials not identified in this report may be present within hidden or concealed areas of the property or outside the scope of services.

Friable and non-friable building materials assessments were performed for each homogeneous building material by the use of hand pressure as defined in USEPA 40 CFR Part 763 "Asbestos-Containing Materials in Schools, Final Rule" (AHERA). Friable material is defined as any building material that by the means of hand pressure can be crumbled into a powder.

When each homogeneous sampling area was identified, a random sampling grid was utilized for sample collection of each building material as described in the EPA guidance document, Asbestos in Building: Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/5-85-030a, October 1985 Random Number Diagrams). The minimum number of samples was obtained for each identified friable homogeneous area based upon the overall square footage of material in table-1. The physical condition, friability, accessibility, activity and damage of building materials were also assessed and documented. The following procedures were performed during the survey

- Perform a visual assessment to identify the location and type of friable/non-friable building materials.

- Obtain representative bulk samples from suspect building materials per the below table-1.

- Samples were analyzed by an independent accredited laboratory for the presence of asbestos by PLM analysis USEPA 40 CFR Part 763.87.

- Present all survey results in a written report including recommendations, locations and laboratory results. All findings, recommendations and analytical data presented in this report are based on the information (assessment and sampling data) obtained by our inspector during the survey.

Sample Table-1

Size of Sampling Area	**Number of Samples Collected**
Less Than 1,000 sq. ft.	3 – Samples
Between 1,000 & 5,000 sq. ft.	5 – Samples
Greater than 5,000 sq. Ft.	*7 – Samples

***The recommended number of samples per AHERA is nine for areas greater than 5,000 square feet, or at least one additional sample per additional 1,000 square feet for any friable building material.**

All bulk samples were submitted to Forensic Analytical located at: 2959 Pacific Commerce Drive Rancho Dominguez, California (310) 763-2374. Forensic Analytical is accredited by the American Industrial Hygiene Association (AIHA), National Voluntary Laboratory Accreditation Program (NVLAP #101459-0), National Institute of Standards and Testing (NIST), and is a successful participant in the Proficiency Analytical Testing Program (PAT). Each sample analyzed by Polarized Light Microscopy (PLM) method in accordance with the "Interim Method for the Determination of Asbestos in Bulk Insulation Samples EPA - 600/M4-82-020" dated December 1982 and adopted by the National Voluntary Laboratory Accreditation Program (NVLAP) Title 15, part 7 of the Code of Federal Register as affiliated with the National Institute for Standards and Testing (NIST).

Current Federal USEPA Regulations define a material to be asbestos containing at 1% by weight. Current State of California regulations define a material to be asbestos containing at 0.1% by weight. For this reason, any sample reported as containing a trace amount of asbestos is assumed to contain asbestos. The following is the laboratory result:

Material	Sample Number	Asbestos Content	Square Footage	Location of Material	Friable	Damage
Interior Plaster	01 02 03	Non Detected	N/A	Throughout Interior Walls and Ceiling	No	No
12x12 Ceiling Tile and Mastic	04 05 06	Non Detected	N/A	Throughout Interior Walls and Ceiling	No	No
Ceiling Tile	07 08 09	Non Detected	N/A	Throughout Interior Walls and Ceilings	No	No
Vinyl Floor Tile and Mastic	10 11 12	Tile 5% Chrysotile Mastic Non Detected	90 SF	Room 1329	No	No

The asbestos containing building materials table above is designed to aid the building owner, architect, construction manager, general contractors and potential asbestos abatement contractors in locating asbestos containing building materials within the scope of work. Other asbestos containing building materials may exist at the property within concealed areas of the property or outside the scope of work. All square footages of asbestos containing building materials should be field verified prior to submitting any removal quotes.

Current federal and state regulations (SCAQMD Rule 1403) require if during any renovation or demolition activities asbestos containing building materials will be disturbed, then only contractors who have been properly trained in the correct handling of asbestos containing buildings conduct any repair, removal and/or demolition activities. A SCAQMD notification will have to be submitted and approved for any removal of 100 square feet or 160 linear feet of asbestos containing building materials. If any asbestos containing building materials becomes damaged or disturbed during any construction activities, then a SCAQMD Proceders-5 work plan should be written and approved prior to any asbestos removal activity. All environmental work should proceed under the guidance or direction of an independent State Certified Consultant.

Lead Survey Procedures

The lead survey was performed to identify painted building components for disposal during the construction activity. Once the suspect painted building components were identified, each painted building component was categorized into homogeneous sample areas. Homogeneous sample areas are defined as areas in which suspect painted building components are uniform in color, texture, application date and general appearance. Representative X-Ray Fluorescence (XRF) lead readings were obtained from each homogeneous sample area.

Detection Limit Guidelines for The Department of Health Services is 5000 parts per million (PPM) or 1.0 mg/cm^2 by the use of a hand held X-Ray Fluorescence (XRF) lead paint analyzer, however CALOSHA requires that all workers be properly protected when working with any painted building component containing levels of lead above 600 ppm or 0.06 mg/cm^2 in accordance with Title 8 CCR Section 1532.1. The following highlighted building components indicate lead containing painted surfaces above 1.0 mg/cm^2

Location	Sample Number	Component	Substrate	Pbl mg/cm^2	Condition
Calibration	---	---	---	1.0	---
Calibration	---	---	---	1.0	---
Calibration	---	---	---	1.0	---
Room 1329	1	Wall	Plaster	0.0	N/A
Room 1237	2	Wall	Plaster	0.0	N/A
Room 1233	3	Wall	Plaster	0.0	N/A
Room 1329	4	Wall	Ceramic Tile	1.9	N/A

Any lead containing building components highlighted above is designed to aid the building owner, architect, construction manager, general contractors of potential lead containing building components within the scope of work. Other lead containing building components may exist at the property within concealed areas of the property or outside the scope of work. All conditions of paints identified in the above table were identified

during the time of the survey. All removal work should proceed under all requirements pertaining to lead containing paint removal activities.

Since the building materials sampled during this survey could potentially contain asbestos and/or lead with limited access to the scope of work no intrusive sampling was performed in areas like (roofing underlay, walls/ceiling cavities, under flooring, underground, pools/spa) or any other areas that would cause damage to building materials potentially containing asbestos or lead.

Due to limited access of the property, other asbestos and/or lead containing building materials may exist at the property and/or outside the scope of work. If other building materials that are not identified in this report are discovered, all work should (stop) and these building materials should be sampled prior to any related activities. Also, if any changes to any regulation governing asbestos and or lead occurred after the date of this report, Ambient cannot be responsible for these changes.

Once the asbestos and/or lead containing building materials identified in this report have been remove and with full access to the building interior and exterior, Ambient recommends an intrusive survey be performed to identify any remaining asbestos and/or lead containing building materials within the property.

Any recommendations in this report are professional opinions based solely on visual observations and analytical analyses, as described in this report. Opinions and/or recommendations presented herein apply to site conditions existing at the time of our investigation, they cannot necessarily apply to site changes of which this office is not aware of and/or has not had the opportunity to evaluate.

Please contact the undersigned with your questions and/or comments regarding the sample result and/or location of material.

Sincerely,
Signed for Ambient Environmental, Inc. by

John L. Payne
CAC #93-1226

Attachments

Appendix - A	Chain of Custody and Bulk Sample Log
Appendix - B	Laboratory Certification of Analysis
Appendix - C	Certification

APPENDIX A

CHAIN OF CUSTODY
AND BULK SAMPLE LOG

AMBIENT ENVIRONMENTAL, INC.
Consulting/Engineering/Remediation

400 North Princeland Court Suite-3
Corona, California 92879
951 272-4730 *Phone*
951 272-4731 *Facsimile*
www.ambientenvinc.com

ASBESTOS BULK SAMPLE LOG

Client Name: UCR P:D

Project Location: WATKINS HALL UC RIVERSIDE

Date: 7-21-19 Field Technician: John Pace

Project Number: 19-1490 Priority: ASAP ___ 24 HR ✓ 3-5 Days ___

SAMPLE NUMBER	SAMPLE LOCATION	MATERIAL DESCRIPTION	SQUARE FOOTAGE
01	Room 1329	Interior Plaster	
02	Room 1237	↓	
03	Room 1233	↓	
04	Hallway	12"x12" Ceiling Tile and Mastic	
05	1237 Wall/Ceil	↓	
06	1233 Above 2x4 Ceil	↓	
07	Room 1233	Ceiling Tile	
08	↓	↓	
09			
10	Room 1329	Vinyl Floor Tile and Mastic	

Chain of Custody Analytical Method: PLM: ✓ TEM: ____ Other: ____

Sampled By		Date	Time
Relinquished By		Date	Time
Received By	FE	Date 07-26-19	Time 9:35 am
Relinquished By		Date	Time
Received By		Date	Time

AMBIENT ENVIRONMENTAL, INC.
Consulting/Engineering/Remediation

400 North Princeland Court Suite-3
Corona, California 92879
951 272-4730 *Phone*
951 272-4731 *Facsimile*
www.ambientenvinc.com

ASBESTOS BULK SAMPLE LOG

Client Name: UCR P & D

Project Location: UNIT KING HALL UC RIVERSIDE

Date: 7-21-19 **Field Technician:** John Pagan

Project Number: 19-1490 **Priority:** ASAP ___ 24 HR X 3-5 Days ___

SAMPLE NUMBER	SAMPLE LOCATION	MATERIAL DESCRIPTION	SQUARE FOOTAGE
11	Room 1329	Vinyl Floor Tile w/ MASTIC	
12	"	"	

Chain of Custody **Analytical Method:** PLM: X TEM: ____ Other: ____

Sampled By		**Date**	**Time**
Relinquished By		**Date**	**Time**
Received By		**Date** 07-26-19	**Time** 9:35
Relinquished By		**Date**	**Time**
Received By		**Date**	**Time**

APPENDIX B

LABORATORY CERTIFICATES OF ANALYSIS

Forensic Analytical LABORATORIES

Final Report

Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-1

Ambient Environmental Inc
John Payne
400 N. Princeland Crt.
Ste. 3
Corona, CA 92879

Client ID: 5697
Report Number: B290674
Date Received: 07/26/19
Date Analyzed: 07/29/19
Date Printed: 07/29/19
First Reported: 07/29/19

Job ID/Site: 19-1490; Watkins Hall, UC Riverside

Date(s) Collected: 07/21/2019

FALI Job ID: 5697
Total Samples Submitted: 12
Total Samples Analyzed: 12

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
01	51251738						
Layer: Beige Plaster			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
02	51251739						
Layer: Beige Plaster			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
03	51251740						
Layer: Beige Plaster			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
04	51251741						
Layer: Beige Fibrous Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (35 %) Fibrous Glass (45 %)		**Asbestos (ND)**					
05	51251742						
Layer: Beige Fibrous Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (35 %) Fibrous Glass (45 %)		**Asbestos (ND)**					
06	51251743						
Layer: Beige Fibrous Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (35 %) Fibrous Glass (45 %)		**Asbestos (ND)**					
07	51251744						
Layer: Brown Mastic			**ND**				
Layer: Tan Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (90 %)		**Asbestos (ND)**					

2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 / Telephone: (310) 763-2374 (888) 813-9417 / Fax: (310) 763-8684

Report Number: B290674
Client Name: Ambient Environmental Inc **Date Printed:** 07/29/19

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
08	51251745						
Layer: Brown Mastic			**ND**				
Layer: Tan Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (90 %)							
09	51251746						
Layer: Brown Mastic			**ND**				
Layer: Tan Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (90 %)							
10	51251747						
Layer: Red Tile		Chrysotile	**5 %**				
Layer: Black Mastic			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (5%)**					
Cellulose (Trace)							
11	51251748						
Layer: Red Tile		Chrysotile	**5 %**				
Layer: Black Mastic			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (5%)**					
Cellulose (Trace)							
12	51251749						
Layer: Red Tile		Chrysotile	**5 %**				
Layer: Black Mastic			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (5%)**					
Cellulose (Trace)							

Tiffani Ludd, Laboratory Supervisor, Rancho Dominguez Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 / Telephone: (310) 763-2374 (888) 813-9417 / Fax: (310) 763-8684

APPENDIX C

CERTIFICATION

STATE OF CALIFORNIA — GAVIN NEWSOM, *Governor*

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Asbestos Certification & Training Unit
2424 Arden Way, Suite 495
Sacramento, CA 95825-2417
(916) 574-2993 Office (916) 483-0572 Fax
http://www.dir.ca.gov/dosh/asbestos.html acru@dir.ca.gov

310191226C 80 87

Ambient Environmental, Inc.
John Lee Payne
400 Princeland Court, Suite 3
Corona CA 92879

May 16, 2019

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email with any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Jeff Ferrell
Senior Safety Engineer

Attachment: Certification Card

cc: File

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

John Lee Payne
Name

Certification No. 93-1226

Expires on 06/24/20

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.

Renewal – Card Attached (Revised 01/10/2019)

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type

Sampling Technician

Expiration Date

10/23/2019

John L. Payne

ID #: 25387

AMBIENT ENVIRONMENTAL, INC.
Consulting/Engineering/Remediation
400 North Princeland Court Suite-3
Corona, California 92879
951 272-4730 *Phone*
951 272-4731 *Facsimile*
jp@ambientenv.com
www.ambientenvinc.com

July 31, 2019

University of California, Riverside
Planning Design & Construction
1223 University Avenue Suite 240
Riverside, California 92507
Attn: Mr. Fernando Nunez-Project Manager

Re: Asbestos and Lead Survey for the project located at: Webber Hall (Elevator Upgrade Project) University of Riverside, California.
PO #SC10804611-CH2 Project #112008

Dear Mr. Nunez,

Ambient Environmental Inc. performed an asbestos building material for the above referenced locations. Ambient Environmental Inc. on site field personnel obtained asbestos building material bulk samples and X-Ray Fluorescence (XRF) reading from painted building component that would be impacted during the elevator upgrade project located at the above referenced location. The survey was conducted on July 21, 2019 by Mr. John L. Payne a California Certified Asbestos Consultant #93-1226 a United States Environmental Protection Agency (USEPA) certified asbestos building inspector and a CDPHS #25387 Certified Lead Sampling Technician.

Asbestos Survey Procedures

The purpose of the asbestos survey was to locate and identify suspect building materials that will be impacted during the elevator upgrade project for detectable levels of asbestos Once a visual inspection was performed, representative bulk samples were obtained from each homogeneous building material that would be impacted during the upgrade activity. Homogeneous building materials are defined as building materials that are uniform in texture, construction or application date and general appearance. Also, each homogeneous building material was divided into three main categories: Surfacing Materials, Thermal System Insulation and Miscellaneous Materials. The sample location, building material type, friability and condition of building materials were also documented. If building materials were installed at different times or if there is any reason to suspect that the building material might be different through appearance, Ambient separated each building material into a new homogeneous sampling area.

Asbestos bulk samples were obtained in accordance with USEPA established guidelines document, "Guidance for Controlling Asbestos Containing Materials in Buildings" (USEPA 560/5-85-024, 1985) and USEPA 40 CFR Part 763.86 "Asbestos-Containing Materials in Schools, Final Rule" (AHERA). Each bulk sample was analyzed of asbestos content by Polarized Light Microscopy (PLM) EPA Method 600/R-93-116 Visual Area Estimation. Building materials not identified in this report may be present within hidden or concealed areas of the property or outside the scope of services.

Friable and non-friable building materials assessments were performed for each homogeneous building material by the use of hand pressure as defined in USEPA 40 CFR Part 763 "Asbestos-Containing Materials in Schools, Final Rule" (AHERA). Friable material is defined as any building material that by the means of hand pressure can be crumbled into a powder.

When each homogeneous sampling area was identified, a random sampling grid was utilized for sample collection of each building material as described in the EPA guidance document, Asbestos in Building: Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/5-85-030a, October 1985 Random Number Diagrams). The minimum number of samples was obtained for each identified friable homogeneous area based upon the overall square footage of material in table-1. The physical condition, friability, accessibility, activity and damage of building materials were also assessed and documented. The following procedures were performed during the survey

- Perform a visual assessment to identify the location and type of friable/non-friable building materials.

- Obtain representative bulk samples from suspect building materials per the below table-1.

- Samples were analyzed by an independent accredited laboratory for the presence of asbestos by PLM analysis USEPA 40 CFR Part 763.87.

- Present all survey results in a written report including recommendations, locations and laboratory results. All findings, recommendations and analytical data presented in this report are based on the information (assessment and sampling data) obtained by our inspector during the survey.

Sample Table-1

Size of Sampling Area	**Number of Samples Collected**
Less Than 1,000 sq. ft.	3 – Samples
Between 1,000 & 5,000 sq. ft.	5 – Samples
Greater than 5,000 sq. Ft.	*7 – Samples

***The recommended number of samples per AHERA is nine for areas greater than 5,000 square feet, or at least one additional sample per additional 1,000 square feet for any friable building material.**

All bulk samples were submitted to Forensic Analytical located at: 2959 Pacific Commerce Drive Rancho Dominguez, California (310) 763-2374. Forensic Analytical is accredited by the American Industrial Hygiene Association (AIHA), National Voluntary Laboratory Accreditation Program (NVLAP #101459-0), National Institute of Standards and Testing (NIST), and is a successful participant in the Proficiency Analytical Testing Program (PAT). Each sample analyzed by Polarized Light Microscopy (PLM) method in accordance with the "Interim Method for the Determination of Asbestos in Bulk Insulation Samples EPA - 600/M4-82-020" dated December 1982 and adopted by the National Voluntary Laboratory Accreditation Program (NVLAP) Title 15, part 7 of the Code of Federal Register as affiliated with the National Institute for Standards and Testing (NIST).

Current Federal USEPA Regulations define a material to be asbestos containing at 1% by weight. Current State of California regulations define a material to be asbestos containing at 0.1% by weight. For this reason, any sample reported as containing a trace amount of asbestos is assumed to contain asbestos. The following is the laboratory result:

Material	Sample Number	Asbestos Content	Square Footage	Location of Material	Friable	Damage
Drywall and Joint Compound	01 02 03	Non Detected	N/A	Third Floor Walls	No	No
Interior Plaster	04 05 06	Non Detected	N/A	Throughout Interior Walls and Ceiling	No	No
12x12 Ceiling Tiles and Mastic	07 08 09	Non Detected	N/A	Throughout Ceilings	No	No

Lead Survey Procedures

The lead survey was performed to identify painted building components for disposal during the construction activity. Once the suspect painted building components were identified, each painted building component was categorized into homogeneous sample areas. Homogeneous sample areas are defined as areas in which suspect painted building components are uniform in color, texture, application date and general appearance. Representative X-Ray Fluorescence (XRF) lead readings were obtained from each homogeneous sample area.

Detection Limit Guidelines for The Department of Health Services is 5000 parts per million (PPM) or 1.0 mg/cm^2 by the use of a hand held X-Ray Fluorescence (XRF) lead

paint analyzer, however CALOSHA requires that all workers be properly protected when working with any painted building component containing levels of lead above 600 ppm or 0.06 mg/cm^2 in accordance with Title 8 CCR Section 1532.1. The following highlighted building components indicate lead containing painted surfaces above 1.0 mg/cm^2

Location	Sample Number	Component	Substrate	Pbl mg/cm^2	Condition
Calibration	---	---	---	1.0	---
Calibration	---	---	---	1.0	---
Calibration	---	---	---	1.0	---
Hallway	1	Wall	Plaster	0.0	N/A
Hallway	2	Wall	Plaster	0.0	N/A
Third Floor	3	Wall	Drywall	0.0	N/A
Third	4	Wall	Drywall	0.0	N/A

Any lead containing building components highlighted above is designed to aid the building owner, architect, construction manager, general contractors of potential lead containing building components within the scope of work. Other lead containing building components may exist at the property within concealed areas of the property or outside the scope of work. All conditions of paints identified in the above table were identified during the time of the survey. All removal work should proceed under all requirements pertaining to lead containing paint removal activities.

Since the building materials sampled during this survey could potentially contain asbestos and/or lead with limited access to the scope of work no intrusive sampling was performed in areas like (roofing underlay, walls/ceiling cavities, under flooring, underground, pools/spa) or any other areas that would cause damage to building materials potentially containing asbestos or lead.

Due to limited access of the property, other asbestos and/or lead containing building materials may exist at the property and/or outside the scope of work. If other building materials that are not identified in this report are discovered, all work should (stop) and these building materials should be sampled prior to any related activities. Also, if any changes to any regulation governing asbestos and or lead occurred after the date of this report, Ambient cannot be responsible for these changes.

Once the asbestos and/or lead containing building materials identified in this report have been remove and with full access to the building interior and exterior, Ambient recommends an intrusive survey be performed to identify any remaining asbestos and/or lead containing building materials within the property.

Any recommendations in this report are professional opinions based solely on visual observations and analytical analyses, as described in this report. Opinions and/or recommendations presented herein apply to site conditions existing at the time of our

investigation, they cannot necessarily apply to site changes of which this office is not aware of and/or has not had the opportunity to evaluate.

Please contact the undersigned with your questions and/or comments regarding the sample result and/or location of material.

Sincerely,
Signed for Ambient Environmental, Inc. by

John L. Payne
CAC #93-1226

Attachments

Appendix - A	Chain of Custody and Bulk Sample Log
Appendix - B	Laboratory Certification of Analysis
Appendix - C	Certification

APPENDIX A

CHAIN OF CUSTODY
AND BULK SAMPLE LOG

AMBIENT ENVIRONMENTAL, INC.
Consulting/Engineering/Remediation

400 North Princeland Court Suite-3
Corona, California 92879
951 272-4730 *Phone*
951 272-4731 *Facsimile*
www.ambientenvinc.com

ASBESTOS BULK SAMPLE LOG

Client Name: UCR P-D

Project Location: WRBB Hall

Date: 7-21-19 **Field Technician:** [illegible]

Project Number: 19-1485 **Priority:** ASAP ___ 24 HR 7 3-5 Days ___

SAMPLE NUMBER	SAMPLE LOCATION	MATERIAL DESCRIPTION	SQUARE FOOTAGE
01	3rd Floor	Brown Popcorn ceiling	
02	"	"	
03	"	"	
04	2nd Floor Hallway	Brown Plaster	
05	"	"	
06	1st Floor Hallway	"	
07	Hallways 2nd	Gray Texture on mastic	
08	"	"	
09	Hallway 4th	"	

Chain of Custody **Analytical Method:** PLM: 7 TEM: ____ Other: ____

Sampled By		**Date**	**Time**
Relinquished By		**Date**	**Time**
Received By	FE	**Date** 07-26-19	**Time** 9:35 AM
Relinquished By		**Date**	**Time**
Received By		**Date**	**Time**

APPENDIX B

LABORATORY CERTIFICATES OF ANALYSIS

Forensic Analytical LABORATORIES

Final Report

Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-1

Ambient Environmental Inc
John Payne
400 N. Princeland Crt.
Ste. 3
Corona, CA 92879

Client ID: 5697
Report Number: B290649
Date Received: 07/26/19
Date Analyzed: 07/29/19
Date Printed: 07/29/19
First Reported: 07/29/19

Job ID/Site: 19-1485; WRBBN Hall

Date(s) Collected: 07/21/2019

FALI Job ID: 5697
Total Samples Submitted: 9
Total Samples Analyzed: 9

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
01	51251672						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (5 %)							
02	51251673						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (5 %)							
03	51251674						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (5 %)							
04	51251675						
Layer: Beige Plaster			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
05	51251676						
Layer: Beige Plaster			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
06	51251677						
Layer: Beige Plaster			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							

2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 / Telephone: (310) 763-2374 (888) 813-9417 / Fax: (310) 763-8684

Report Number: B290649

Client Name: Ambient Environmental Inc **Date Printed:** 07/29/19

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
07	51251678						
Layer: Brown Mastic			**ND**				
Layer: Tan Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (90 %)							
08	51251679						
Layer: Brown Mastic			**ND**				
Layer: Tan Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (90 %)							
09	51251680						
Layer: Brown Mastic			**ND**				
Layer: Tan Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (90 %)							

Tiffani Ludd, Laboratory Supervisor, Rancho Dominguez Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 / Telephone: (310) 763-2374 (888) 813-9417 / Fax: (310) 763-8684

APPENDIX C

CERTIFICATION

STATE OF CALIFORNIA — GAVIN NEWSOM, *Governor*

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Asbestos Certification & Training Unit
2424 Arden Way, Suite 495
Sacramento, CA 95825-2417
(916) 574-2993 Office (916) 483-0572 Fax
http://www.dir.ca.gov/dosh/asbestos.html acru@dir.ca.gov

310191226C 80 87

Ambient Environmental, Inc.
John Lee Payne
400 Princeland Court, Suite 3
Corona CA 92879

May 16, 2019

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email with any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Jeff Ferrell
Senior Safety Engineer

Attachment: Certification Card

cc: File

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

John Lee Payne
Name

Certification No. 93-1226

Expires on 06/24/20

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.

Renewal – Card Attached (Revised 01/10/2019)

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type

Sampling Technician

Expiration Date

10/23/2019

John L. Payne

ID #: 25387

SPECIFICATIONS

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Division 01 – General Requirements

END OF SPECIFICATIONS
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