Double Adobe Elementary School Limited Asbestos Report



7081 North Central Highway McNeal, Arizona 85617

Prepared For:

Double Adobe Elementary School

7081 North Central Highway McNeal, Arizona 85617

RedTree consulting, LLC.

7845 East Redfield Road Suite 100 Scottsdale, Arizona 85260 Ph 602.989.2433

December 12, 2016

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SECTION 1 LIMITATIONS

LIMITATIONS

The conclusions and results contained herein are based solely on the information presented in this report and are for the sole use of the Client exclusively and are subject to the terms and conditions of "The Contract". No other person or entity may rely on this report without the prior written consent of RedTree Consulting, LLC (RTC).

The sampling, testing, and observations described in the report represent conditions only at the specified times and locations. Additional materials or information which were hidden, undiscovered, inaccessible, or are not a part of the finding presented herein, would result in the modification of the conclusions and recommendations made herein. Any response action guidelines are based solely on the findings contained herein. The response action guidelines are presented as a courtesy and are not to be considered a complete or detailed set of specifications. RTC performed these services using the degree of care and skill ordinarily exercised under similar conditions by reputable members of the profession practicing in the same or similar circumstances.

Please note, with regard to laboratory analysis of suspect bulk asbestos-containing materials: The Environmental Protection Agency (EPA) Method 600/R-93-116, Polarized Light Microscopy (PLM) is used for the testing of bulk building materials for asbestos by performing a visual estimation. This method is the most widely used method for estimating asbestos in bulk building materials and works well for most sample types. However, it might require a more detailed method such as point counting for accurate estimation of asbestos in samples with low asbestos concentration. This method is also not applicable for samples containing large amounts of fine fibers below the resolution of the PLM (<0.3 microns). Typically, the asbestos fibers present in non-friable organically bound (NOB) materials are often less than 0.1 microns in diameter and therefore may cause the PLM method to yield low estimates or even false negative results.

RTC suggests that Transmission Electron Microscopy (TEM) Chatfield Semi-Quantitative EPA Method 600/R-93-116 be used to confirm all negative results of NOB materials. This method is particularly useful to reduce the possibility of false negatives in NOBs and to provide additional quantitative data for samples which contain low levels of asbestos. The TEM method is available at additional cost and is done only at the client's request.

RTC's scope of service for this report did not include the inspection for, or identification of fungi, lead paint, or any other hazardous or controlled substances not specifically identified herein.

RTC is not responsible for the accuracy of information provided by others, or for conditions or consequences arising from relevant facts that were withheld, concealed, undiscovered, or not fully disclosed. RTC is not a law firm and therefore, makes no representations regarding any potential liability of any person or entity for site conditions. Further, RTC is not qualified to present medical advice. If any present or future health issues are in question, it is recommended that the findings in this report be presented to a qualified medical professional for evaluation.

SECTION 2 EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This limited asbestos survey report contains the results of a limited AHERA-style asbestos inspection conducted for Double Adobe Elementary School (DAES). The limited asbestos inspection was conducted at DAES located at 7081 North Central Highway, McNeal, Arizona 85617. RTC was authorized by DAES, to perform the limited asbestos inspection.

The limited asbestos inspection of the building was conducted on November 8, 2016 by Mr. Michael Crow, an accredited asbestos building inspector. DAES outlined the areas and the materials scheduled to be disturbed during the upcoming renovation activities, instructed RTC to collect bulk samples of all affected materials to be disturbed, and instructed RTC to have those samples analyzed for the presence of asbestos fibers by a qualified laboratory.

A total of eighteen (18) bulk samples were collected from the suspect building materials within the outlined areas of the building. The suspect bulk samples were submitted to EMLab P&K, LLC (EMLab) for analysis using Polarized Light Microscopy (PLM) methods. EMLab used the methods prescribed in Method 40 CFR, Part 763, in the Code of Federal Register in analyzing bulk samples. EMLab is certified by the National Institute of Standards and Technology (NIST) as adhering to and in compliance with the National Voluntary Laboratory Accreditation Program (NVLAP) and holds the certification number 500031-0. The suspect asbestos bulk samples were collected and submitted to the laboratory using established chain of custody procedures. Bulk samples were collected utilizing safety and health practices as required by the Occupational Safety and Health Administration (OSHA).

Below are the suspect building materials that were sampled during the limited asbestos inspection:

- Tape/Texture/Drywall/JC
- Green Cove Base and Mastic
- Split Face Masonry and Mortar
- Ceramic Tile and Thinset
- Plaster
- White Exterior Sealant

The building materials sampled were reported by laboratory PLM analysis to be "none detected" for asbestos.

Based on the previously referenced laboratory analytical data, there are no further recommendations at this time. If any un-sampled suspect building materials are discovered during the restoration activities, those building materials should be properly sampled by a certified inspector and analyzed by a qualified laboratory prior to their disturbance.

All documentation is provided to DAES, and should be retained in a permanent record. Should you have any questions regarding the procedures that were followed on this project, please contact me at any time. Thank you for the opportunity to provide these environmental consulting services.

Michael L. Crow Managing Partner,

AHERA Asbestos Building Inspector

AHERA Certificate Number: 10051-1803302-105007

Expires: March 9, 2017

SECTION 3 SITE MAP

SITE MAP



Site Map of Double Adobe Elementary School.

SECTION 4 PLM BULK SAMPLE LOCATION MAP

PLM BULK SAMPLE LOCATION MAP



SECTION 5 PLM LABORATORY ANALYSIS REPORT



Report for:

Mike Crow Red Tree Consulting, LLC 7845 E. Redfield Rd. Suite 100 Scottsdale, AZ 85260

Regarding: Project: Double Adobe; Double Adobe

EMĹ ID: 1630588

Approved by:

Dates of Analysis: Asbestos PLM: 11-08-2016

Approved Signatory Renee Luna

Service SOPs: Asbestos PLM (EPA Methods 600/R-93/116 & 600/M4-82-020, SOP EM-AS-S-1267)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the items tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Lab ID-Version 1: 7580930-1

Lab ID-Version‡: 7580931-1

Lab ID-Version 1: 7580933-1

1501 West Knudsen Drive, Phoenix, AZ 85027 (800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Red Tree Consulting, LLC Date of Sampling: 11-08-2016 C/O: Mike Crow Date of Receipt: 11-08-2016 Re: Double Adobe; Double Adobe Date of Report: 11-08-2016

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Total Samples Submitted: 18 **Total Samples Analyzed:** 18

Total Samples with Layer Asbestos Content > 1%: 0

Location: 1. Tape/Texture/Drywall/JC

	· · · · · · · · · · · · · · · · · · ·
Sample Layers	Asbestos Content
White Compound with White Paint	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 2, Tape/Texture/Drywall/JC

Sample Layers	Asbestos Content
Cream Mastic	ND
White Compound with White Paint	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 3. Tape/Texture/Drywall/JC

Location: 3, Tape/Texture/Drywall/JC	Lab ID-Version‡: 7580932-1
Sample Layers	Asbestos Content
White Compound with White Paint	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 4. Green Cove Base & Mastic

	· · · · · · · · · · · · · · · · · · ·
Sample Layers	Asbestos Content
Semi-Transparent Mastic	ND
Blue Baseboard	ND
White Mastic	ND
White Compound with White Paint	ND
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Aerotech Laboratories, Inc EMLab ID: 1630588, Page 2 of 6

Lab ID-Version †: 7580934-1

Lab ID-Version 1: 7580935-1

Lab ID-Version : 7580937-1

1501 West Knudsen Drive, Phoenix, AZ 85027 (800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Red Tree Consulting, LLC Date of Sampling: 11-08-2016 C/O: Mike Crow Date of Receipt: 11-08-2016 Re: Double Adobe; Double Adobe Date of Report: 11-08-2016

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 5. Green Cove Base & Mastic

Bocation: 5, Green Cove Base & Mastie	East D Version 4. 1200/31 1
Sample Layers	Asbestos Content
Blue Baseboard	ND
White Mastic	ND
Sample Composite Homogeneity: Moderate	

Location: 6. Green Cove Base & Mastic

Location of Green cove Base & Mastre	
Sample Layers	Asbestos Content
Blue Baseboard	ND
White Mastic	ND
White Compound with White Paint	ND
Sample Composite Homogeneity:	Poor

Location: 7, Split Face & Mortar

Location: 7, Split Face & Mortar	Lab ID-Version‡: 7580936-1
Sample Layers	Asbestos Content
Gray Block	ND
Gray Mortar	ND
Sample Composite Homogeneity: Moderate	

Location: 8, Split Face & Mortar

Sample Layers	Asbestos Content
Gray Block	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Moderate

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Aerotech Laboratories, Inc EMLab ID: 1630588, Page 3 of 6

1501 West Knudsen Drive, Phoenix, AZ 85027 (800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Red Tree Consulting, LLC C/O: Mike Crow

Re: Double Adobe; Double Adobe

Date of Sampling: 11-08-2016 Date of Receipt: 11-08-2016 Date of Report: 11-08-2016

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 9, Split Face & Mortar

Lab ID-Version‡: 7580938-1

Sample Layers	Asbestos Content
Gray Block	ND
Gray Mortar	ND
Sample Composite Homogeneity: Moderate	

Location: 10, Ceramic Tile & Thinset

Lab ID-Version 1: 7580939-1

Sample Layers	Asbestos Content
Gray Ceramic Tile	ND
White Thinset	ND
White Compound with White Paint	ND
Sample Composite Homogeneity:	Poor

Location: 11, Ceramic Tile & Thinset

Lab ID-Version 1: 7580940-1

Sample Layers	Asbestos Content
Gray Ceramic Tile	ND
White Thinset	ND
White Compound with White Paint	ND
Sample Composite Homogeneity:	Poor

Location: 12, Ceramic Tile & Thinset

Lab ID-Version‡: 7580941-1

Sample Layers	Asbestos Content
Gray Ceramic Tile	ND
White Thinset	ND
White Compound with White Paint	ND
Sample Composite Homogeneity: Poor	

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Aerotech Laboratories, Inc EMLab ID: 1630588, Page 4 of 6

1501 West Knudsen Drive, Phoenix, AZ 85027 (800) 651-4802 Fax (623) 780-7695 www.emlab.com

Date of Sampling: 11-08-2016

Client: Red Tree Consulting, LLC C/O: Mike Crow

C/O: Mike Crow Date of Receipt: 11-08-2016 Re: Double Adobe; Double Adobe Date of Report: 11-08-2016

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 13, Plaster

Lab ID-Version: 7580942-1

Sample Layers	Asbestos Content
White Plaster with White Paint	ND
Sample Composite Homogeneity:	Good

Location: 14, Plaster

Lab ID-Version‡: 7580943-1

Sample Layers	Asbestos Content
Gray Plaster with White Paint	ND
Sample Composite Homogeneity:	Good

Location: 15, Plaster

Lab ID-Version‡: 7580944-1

Sample Layers	Asbestos Content
Gray Plaster with White Paint	ND
Sample Composite Homogeneity:	Good

Location: 16, White Exterior Sealant Lab ID-Version‡: 7580945-1

Sample Layers	Asbestos Content
White Sealant	ND
Gray Sealant	ND
Sample Composite Homogeneity: Moderate	

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Aerotech Laboratories, Inc EMLab ID: 1630588, Page 5 of 6

Lab ID-Version †: 7580946-1

Lab ID-Version 1: 7580947-1

1501 West Knudsen Drive, Phoenix, AZ 85027 (800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Red Tree Consulting, LLC
C/O: Mike Crow
Date of Sampling: 11-08-2016
Date of Receipt: 11-08-2016
Date of Report: 11-08-2016

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 17. White Exterior Sealant

Location: 17, White Exterior Scalare	
Sample Layers	Asbestos Content
White Sealant	ND
Gray Sealant	ND
Sample Composite Homogeneity: Moderate	

Location: 18. White Exterior Sealant

Education: 10, 11 mile Exterior Section	
Sample Layers	Asbestos Content
Gray Sealant	ND
Sample Composite Homogeneity:	Good

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Aerotech Laboratories, Inc EMLab ID: 1630588, Page 6 of 6

SECTION 6 GENERAL NOTES/EXCLUSIONS

GENERAL NOTES/EXCLUSIONS

- DAES outlined the areas and the materials scheduled to be disturbed during the upcoming renovation activities, instructed RTC to only collect bulk samples of the outlined materials, and to have those samples analyzed for the presence of asbestos fibers by a qualified laboratory.
- This was a limited inspection and those areas and materials not specifically identified in this report were not inspected; nor any area outside the specific area described herein.
- If any un-sampled suspect building materials are discovered during the renovation activities, those materials should be properly sampled by a certified inspector and analyzed by a qualified laboratory prior to their disturbance.

SECTION 7 INSPECTOR CERTIFICATIONS

THE ASBESTOS INSTITUTE

Certifies that MICHAEL CROW

has attended the EPA approved course

Building Inspector Refresher

and successfully passed and completed the competency exam.

This training meets all requirements for asbestos accreditation under TSCA Title II.

Issue Date: 08-Mar 2016

Expiration Date: 09-Mar 2017

Approved Instructor

ASBESTOS NSTITUTE zona - california - nevada EST. 1988

> 20033 N. 19th Avenue, Building 6, Phoenix, AZ 85027 602 -8 64 - 6564 - www.theasbestosinstitute.com

SECTION 8 LABORATORY CERTIFICATION

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 500031-0

EMLab P&K

Phoenix, AZ

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

Asbestos Fiber Analysis

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

2016-01-01 through 2016-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMLab P&K

1501 W. Knudsen Dr. Phoenix, AZ 85027-1307 Mr. Dan Shelby Phone: 623-298-1015

Email: dshelby@emlabpk.com http://www.emlab.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500031-0

Bulk Asbestos Analysis

<u>Code</u>	Description
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program