

# **Restoration Specific Asbestos and Lead Based Paint Survey Report**

Property Information:

**2518 Ember Dr  
Colorado Springs, CO 80910**

Inspection Conducted By:

**Shannon Anderson Colorado Cert #14225  
Ted Anderson Colorado Cert #14835, #17360**

**Asbestos Consulting Firm #ACF-15258**

Report Prepared By:

**Anderson Property Inspections  
Colorado Springs, CO**

Bulk Sample Analysis Performed by:

**Reservoirs Environmental  
NVLAP lab code 101896**

**RMD, Inc LPA-1 X-Ray Florescence (XRF) Spectrum Instrument**

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## **1.0 METHODOLOGY**

**Anderson Property Inspections has conducted a limited scope asbestos survey for the presence of Asbestos Containing Materials (ACM) as well as a lead based paint survey for the presence of lead in painted building materials slated for demolition which exceed the Colorado and EPA trigger level of (1.0mg.cm2) at the following address:**

**Site: 2518 Ember Dr  
Colorado Springs, CO 80910**

**The Asbestos Consulting Firm and Lead Inspectors Responsible for this project were:**

**Asbestos Consulting Firm #ACF-15258  
Shannon Anderson Asbestos Inspector Colorado Cert #14225 Expires: 6/22/14**

**Theodore Anderson Asbestos Inspector Colorado Cert #14835 Expires: 4/11/15  
Lead Inspector Colorado Cert #17360**

**\*Copies of certifications are available upon request**

**Site Visit(s): 4/24/14  
Report Date: 5/1/14**

### **Field Procedures and Analysis**

**-Guidelines used for the asbestos survey and bulk sampling were established by the Environmental Protection Agency (EPA) in order to comply with the Air Quality Control Commission Regulation No. 8, Part B "Emission Standards for Asbestos."**

**-Field Information in regard to the asbestos survey and bulk sampling was organized as per the AHERA (Asbestos Hazard Emergency Response Act) concept of Homogeneous Area. A Homogeneous Area is defined as a suspect material of similar age, appearance, function and texture. If damage is extensive enough that homogeneous areas cannot be defined, samples will be randomly obtained per functional space. Each material was grouped together as a specific Homogeneous Area or obtained from a specific functional space, sampled and then assessed for condition.**

**-Bulk samples of suspect ACM (Asbestos Containing Material) were analyzed by Polarized Light Microscopy (PLM) with dispersion staining, as described in 40 CFR Part 763 and the National Emissions Standard for Hazardous Air Pollutants (NESHAP). Reservoirs Environmental, Inc. was responsible for the analysis of all bulk samples. Reservoirs Environmental is an analytical laboratory accredited for**

the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), LabCode # 101896.

-Asbestos survey & bulk sampling will generally begin from the top down of the demo area.

-Sampling is conducted by delineating building materials into sampling designations called homogeneous areas

-A homogeneous area is defined as containing material that is uniform in visual appearance and/or confirmed as identical material based on installation date

-Homogenous areas of building materials will require only one bulk sampling procedure.

-Sampling is randomized based on the area of demolition using a simple grid.

-Once materials to be sampled are identified they are then classified as friable or non-friable

-EPA classifies materials as friable or non-friable forms of ACM. Friable materials, are defined by their ability to be crumbled or reduced to powder by hand pressure when dry and in contrast non-friable materials are not able to be reduced to powder by hand pressure. As logic dictates, friable asbestos containing materials have a much higher probability of releasing asbestos containing particulate dust into the air especially when disturbed during renovation and/or demolition activities

The EPA breaks non-friable materials into two categories, Category I non-friable materials which are designated in good condition may remain in place during building renovation or demolition provided these materials are not rendered friable during the proposed activities, Category II non-friable materials are required to be removed prior to non-asbestos related building renovation or demolition if there is not a low probability that these materials will remain non-friable during renovation or demolition activities

-Sampling frequency is compliant with the AHERA rules for frequency and is dependent on friability and classification of the suspect material, friable surfacing materials (less than 1000sqft (3 samples) between 1000-5000sqft (5 samples) and more than 5000sqft (7-9 samples), thermal system insulations at minimum three per homogeneous area although inspector may choose to take more at their discretion and miscellaneous materials have a minimum of 1 sample required, however when over 500sqft of a miscellaneous material is present additional sampling may be employed again at the discretion of the inspector

-The inspector will clean equipment between each material sample collected to reduce the probability of any cross contamination between samples

-Bulk samples which are collected are placed in air tight containers and labeled with the appropriate set designation

-All materials sampled have been slated for demolition. Consequently invasive techniques may have been utilized to obtain or clear areas of suspect ACM.

- Material quantities are approximate as exact amount of demolition may vary depending on a number of factors i.e. success of dry-out, extent of smoke damage. Consequently, for these types of environments we recommend the contractor verify exact material amounts.

-All bulk samples will be marked for 3-5 day lab processing unless rush is requested.

- Any materials not tested but mentioned in this report are non-suspect materials (wood, metal, plastic, rubber or glass)
- Exterior and interior XRF readings were taken on representative painted surfaces on each building component that will be affected by the scope of work or has been slated for removal.
- It is notable this inspection has been conducted in accordance with the EPA Renovation, Repair and Painting regulation (40 CFR Part 745, Subpart E) and may not adhere to all parts of State of Colorado regulation 19 part A as the purpose of the work being conducted is to repair, renovate and restore, not permanently eliminate lead based paint hazards per (I.D.) of Regulation 19 (5 CCR 1001-23).
- The EPA and State of Colorado action level for the definition of lead-based paint is lead equal to or greater than 1.0 mg/cm<sup>2</sup>. All XRF readings below the action level are considered negative and all readings at and above the action level are considered positive.
- OSHA (29 CFR 1926.62 APP B) has established its own set of lead-based paint standards for employees who work with and remove lead-based paint. These regulations have a more stringent classification of lead-containing paint which should be noted whenever disturbing any type of paint. The XRF lead-based paint readings contained in this survey can be used to establish where lead-containing paint is located on the building elements examined. However, it is not the purpose of this survey to provide those direct findings.
- The method employed for testing painted surfaces was with a X-ray fluorescence (XRF) analyzer. The XRF device which was utilized is a LPA-1 RMD Lead Paint Analyzer. The instrument was calibrated to the manufacturer's specifications and was also periodically verified against known lead samples produced by the National Institute of Standards and Testing (NIST) Standard Reference Material (SRM) 2579 lead film (1.0 mg/cm<sup>2</sup>). The instrument was in-control at all times for the wood zero standard and the NIST SRM lead standard. The duration for each test result is determined by a combination of the actual reading, relative to the designated action level; the age of the radioactive source; and, the substrate on which the test was taken. Together these quality control procedures produce a 95% confidence level that the corrected lead concentration (CLC) accurately reflects the actual level of lead in the tested surfaces
- This lead inspector using the RMD, Inc. LPA-1 X-ray Fluorescence (XRF) spectrum analyzer instrument has attended the manufacturer's radiation safety course for operation and handling of the instrument, in addition to completing and holding certification from an EPA sponsored curriculum in Lead Inspection Training. The inspector is currently registered under the RMD general license recognized by the State of Colorado to operate this type of radioactive device.
- Please be advised neither the EPA or Colorado Dept. of Health and Environment have established specific regulations regarding inspections related to inspecting or sampling in a restoration environment. Consequently, A.P.I. makes every effort to comply with the regulations associated with renovation type environments.

## **2.0 SCOPE OF WORK**

**Survey requested as a result of a renovation project affecting the exterior and both levels of this single family dwelling. The scope of work includes painting of the entire exterior, replacement of the windows, replacement of the front door, renovation of the main level bathroom (replacement of tub surround, vanity and lay-over of flooring), replacement of overlay of kitchen flooring, painting of the main level living room as well as renovation of the basement bathroom (replacement of tub surround and potentially the vanity). As a result seven suspect material systems involved in the demolition scope provided by the onsite restoration contractor. These include a white vinyl tile flooring system under the carpet in the main level kitchen, a brush textured drywall substrate wall system present in both main and basement level bathrooms, mastic associated with the upper fiberglass portion of the tub surround in the main level bathroom, ceramic tile elements from the lower portion of the tub surround in the main level bathroom, mastic associated with the plastic tub surround in the basement level bathroom as well as two types of white sealant associated with the tub surrounds in both bathrooms. The lead paint component examination is to include all painted exterior elevations and trim elements (shutters, soffit & fascia boards), exterior window components, exterior front door components, interior walls in the main level living room as well as walls and base trim from the main and basement level bathroom.**

**No additional suspect materials or painted surfaces observed which are slated for removal. This survey was characterized by a close visual inspection of all accessible affected areas. All materials sampled have been slated for demolition by the onsite restoration contractor. Selective demolition may have been conducted to access interstitial spaces suspected of containing ACM. Suspect materials have been sampled and inventoried. These suspect systems as well as non-suspect materials which are slated for removal, their corresponding locations and bulk sampling lab results and XRF results can be found in the following material classification section. If during the course of demolition or due to a change in scope of affected materials additional suspect building materials not addressed in this survey are slated for disturbance it is recommended additional sampling is conducted or that the suspect building material is assumed asbestos containing and is treated accordingly.**

### 3.0 MATERIAL CLASSIFICATION

## ASBESTOS

#### Confirmed asbestos containing materials:

<u>Sample #</u>	<u>Description/Location</u>	<u>Class</u>	<u>Condition</u>	<u>Quantity*</u>	<u>Lab results</u>
A25181	Off-white brown vinyl tile over yellow mastic as flooring system under the carpet in the main level kitchen to be impacted	Misc	Good	Approx 115sqft including adjoining dining room	Trace Chrysotile in the mastic
B2518(1-3)	White texture over white/tan drywall as homogeneous brush textured drywall substrate wall system present in the affected main level bathroom and basement level bathroom to be impacted (includes behind the tile, fiberglass and plastic surrounds)	Surface	Good	TBD as scope of impact may be dependant on asbestos content	4% Chrysotile in the white texture
E25181	White grout, tan mastic and white/tan ceramic tile as main level ceramic tile tub surround (note asbestos containing compound addressed in sample set (B2518(1-3))	Misc	Good	Approx 25sqft	3% Chrysotile in the tan mastic

#### Notes:

1) Trace results from the initial P.L.M. examination require a more detailed lab examination referred to as point counting in order to declare the material non-detect per E.P.A. and State of Colorado guidelines.

2) In addition, P.L.M. test results below 10% asbestos fiber content can also utilize point counting in an attempt to bring the percentage of asbestos below the EPA and Colorado Dept of Health and Environments 1% threshold. Materials which can be declared below 1% asbestos content have significantly reduced demolition and disposal regulations. All bulk samples are retained by the lab for 60 days from the initial date of testing. We recommend consulting with your abatement or demolition contractor to determine if point counting is warranted for this project as it does incur lab additional fees.

**Confirmed non-asbestos containing materials:**

<b>Sample #</b>	<b>Description/ Location</b>
<b>D25181</b>	<b>Tan mastic associated with upper fiberglass tub surround in the main level bathroom (note asbestos containing wall texture addressed in sample set (B2518(1-3)))</b>
<b>F25181</b>	<b>White resinous sealant applied to the main level tub surround</b>
<b>G25181</b>	<b>Tan mastic associated with the basement level plastic tub surround (note asbestos containing texture/compound addressed in sample set (B2518(1-3)))</b>
<b>H25181</b>	<b>White resinous sealant applied to the basement level bathroom tub surround</b>

**Non-suspect Materials Observed and Slated for demolition:**

- 1) Wood (trim and cabinets)

**LEAD-BASED PAINT**

**Sample Key:**

- Exterior:** A) North elevation (front)  
B) West elevation (side)  
C) South elevation (rear)  
D) East elevation (side)

- Interior:** Room #1) Main level living room  
#2) Main level full bathroom  
#3) Basement level bathroom

-No lead-based paint with levels greater than the EPA established 1.0 mg/cm<sup>2</sup> threshold observed in any of the painted building materials slated for removal (see Appendix A)

#### **4.0 CONCLUSIONS AND RECOMMENDATIONS:**

**Asbestos-containing materials, which will be affected by the scope of demolition as a result of this loss, have been positively identified in the white texture and associated overspray (4% Chrysotile) applied to the drywall substrate walls in the main and basement level bathrooms including under the ceramic tile, fiberglass and plastic bathtub surrounds as well as in the yellow mastic (Trace Chrysotile) associated with the kitchen vinyl tile flooring material.**

**As the identified asbestos containing material is to be disturbed by the proposed demolition/renovation work, proper asbestos abatement procedures shall be implemented prior to the commencement of such work. All required asbestos abatement work shall be performed in accordance with all applicable Federal, State and Local rules and regulations. The abatement project shall be filed with all agencies having jurisdiction over this project such as the Colorado Department of Health and Environment.**

**A licensed abatement contractor must perform the removal of all friable and non-friable ACM. API believes that the implementation of these recommendations will serve to best comply with Air Quality Control Commission Regulation No. 8, Part B "Emission Standards for Asbestos."**

**Areas of non-asbestos containing and non-suspect building materials were examined during this survey. As a result no additional precautions relating to asbestos type abatement is required for the demolition and removal of the non-detect and/or non-suspect materials systems examined in this report.**

**The lead-based paint inspection did not identify components with lead above the regulatory definition on building material slated for demolition as a result of this loss. No additional precautions need to be taken in regarding to lead abatement activities in reference to the painted building materials which did not test positive for lead based paint above the regulated trigger level of (1.0mg/cm<sup>2</sup>)**

**A.P.I has made every effort to survey and randomly sample all affected suspect building material associated with this loss. However, in some cases hidden or patched in materials may be present which were not readily observed. If during the course of demolition a new type of suspect material not addressed in this survey is discovered due to visual obscurity or change in project scope it is recommended additional inspection and sampling is employed or that this newly discovered material is assumed to be asbestos containing.**

**5.0 PHOTOS**



**Front of dwelling no lead-based paint found on any components**



**Additional angle of front of dwelling wood shutters, door trim, siding, fascia and soffit boards are tested negative for lead-based paint**



**Western exterior elevations tested negative for lead-based paint**



**Rear of dwelling tested negative for lead-based paint**



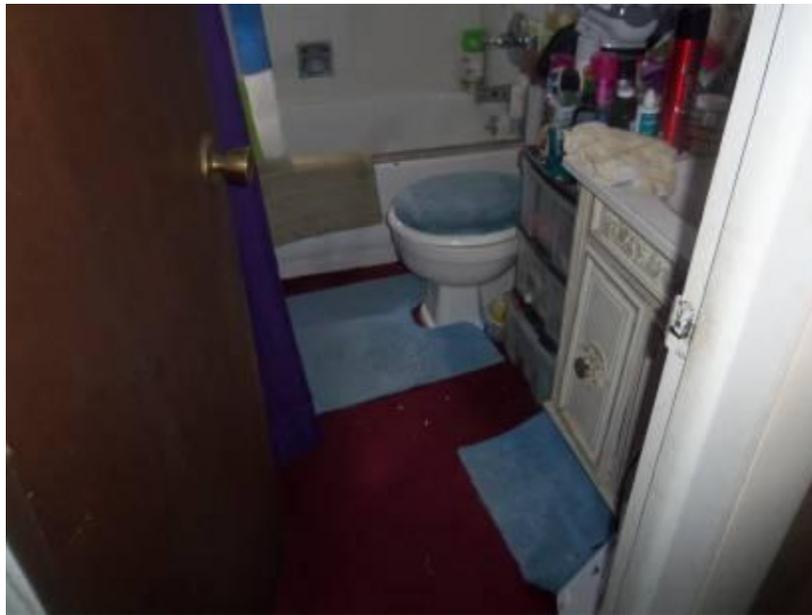
**Eastern exterior elevation tested negative for lead-based paint**



**Windows are newer vinyl windows with minimal painted components which tested negative for lead-based paint**



**Overview of kitchen flooring with white vinyl tile with Trace Chrysotile mastic under (see conclusion)**



**Overview of main level bathroom walls tested positive for asbestos texture includes behind the fiberglass and ceramic tile surrounds**



**Fiberglass and ceramic tile surrounds have asbestos containing texture associated with the wall system in the main level bathroom**



**Overview of basement level bathroom walls tested positive for asbestos in the texture**



**Plastic surround in basement bathroom tested positive in the texture of the drywall behind**

**APPENDIX A**

04241311

## DETAILED REPORT OF LEAD-BASED PAINT INSPECTION:

Inspection Date: 04/24/14  
 Report Date: 4/30/2014  
 Abatement Level: 1.0  
 Report No.: 04/24/14 13:11  
 Total Readings: 41  
 Job Started: 04/24/14 13:11  
 Job Finished: 04/24/14 13:47

Read No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Paint Color	Lead (mg/cm <sup>2</sup> )	Mode
Interior Room 002 Number Only									
030	A	Wall	U Ctr		I	Dry wall	N/A	-0.5	QM
029	B	Baseboard	Rgt		I	Wood	N/A	0.0	QM
031	B	Wall	U Ctr		I	Dry wall	N/A	-0.2	QM
032	C	Wall	L Ctr		I	Dry wall	N/A	-0.1	QM
033	C	Wall	L Ctr		I	Dry wall	N/A	-0.3	QM
Exterior Room 001 Number Only									
001	A	Siding	Ctr		I	Wood	N/A	-0.4	QM
007	A	Fascia	Ctr		I	Wood	N/A	-0.2	QM
006	A	Soffit	Rgt		I	Wood	N/A	-0.4	QM
002	A	Wall	U Rgt		I	Wood	N/A	-0.3	QM
012	A	Window	Rgt	Shutter	I	Wood	N/A	-0.2	QM
008	A	Door	Lft	Lft casing	I	Wood	N/A	-0.1	QM
003	A	Door	Ctr	Header	I	Wood	N/A	-0.2	QM
004	A	Door	Ctr	Rgt casing	I	Wood	N/A	-0.4	QM
005	A	Door	Ctr	Lft jamb	I	Wood	N/A	-0.2	QM
011	B	Fascia	Lft		I	Wood	N/A	-0.1	QM
013	B	GUTTERS	Lft		I	Aluminum	N/A	-0.2	QM
009	B	Siding	Ctr	upper	I	Wood	N/A	-0.3	QM
010	B	Soffit	Rgt		I	Wood	N/A	-0.4	QM
014	B	Siding	Rgt		I	Wood	N/A	-0.1	QM
015	C	Siding	Ctr	upper	I	Wood	N/A	-0.3	QM
016	C	Soffit	Rgt		I	Wood	N/A	-0.3	QM
020	C	Fascia	Rgt		I	Wood	N/A	-0.4	QM
018	C	Door	Lft	slab	I	Wood	N/A	-0.4	QM
017	C	Door	Lft	Rgt casing	I	Wood	N/A	-0.2	QM
019	C	Door	Lft	Lft jamb	I	Wood	N/A	-0.2	QM
021	D	Fascia	Lft		I	Wood	N/A	-0.3	QM
022	D	Siding	Ctr	upper	I	Wood	N/A	-0.1	QM
023	D	GUTTERS	Rgt		I	Aluminum	N/A	-0.1	QM
024	A	Soffit	U Ctr		I	Wood	N/A	-0.3	QM
Interior Room 001 Number Only									
026	A	Wall	L Rgt		I	Dry wall	N/A	-0.3	QM
025	B	Wall	U Ctr		I	Dry wall	N/A	-0.5	QM
028	B	Baseboard	Rgt		I	Wood	N/A	-0.3	QM
027	C	Wall	L Rgt		I	Dry wall	N/A	-0.2	QM
Interior Room 003 Number Only									
034	A	Wall	L Ctr		I	Dry wall	N/A	-0.6	QM
038	A	Baseboard	Ctr		I	Dry wall	N/A	-0.1	QM
035	B	Wall	U Ctr		I	Dry wall	N/A	-0.2	QM
036	C	Wall	U Ctr		I	Dry wall	N/A	-0.5	QM
037	D	Wall	L Ctr		I	Dry wall	N/A	-0.5	QM

Calibration Readings

039  
040  
041

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0.8 QM  
1.2 QM  
1.0 QM

---- End of Readings ----

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