Restoration Specific Asbestos and Lead Based Paint Survey Report

Property Information:

1023 E Vermijo Ave
Colorado Springs, CO 80903

Inspection Conducted By:

Ted Anderson Colorado Certs #14835, #17360

Rick Sinchak Colorado Cert #1278 #21289

Report Prepared By:

Anderson Property Inspections
Colorado Springs, CO

Bulk Sample Analysis Performed by:

Reservoirs Environmental
NVLAP lab code 101896

OR

CEI Labs Inc.
NVLAP lab code 101768

Lead-based Paint Analysis Performed by:

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: 1023 E Vermijo Ave
Colorado Springs, CO 80903

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

Asbestos Consulting Firm #ACF-15258

Lead Inspector Firm Cert # 18133

Theodore Anderson	**Asbestos Inspector**	**Colorado Cert #14835 Expires: 4/11/15**
	Lead Inspector	**Colorado Cert #17360**
Rick Sinchak	**Asbestos Inspector**	**Colorado Cert #1278 Expires: 4/11/15**
	Lead Inspector	**Colorado Cert #21289**

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

Site Visit(s): 10/31/14
Report Date: 11/6/14

<u>Field Procedures and Analysis</u>

-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). CEI LABS, Inc. was responsible for the analysis of all bulk samples.

CEI Labs Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), LabCode # 101768.
-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^2. 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^2). 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 planned renovation project affecting the exterior and main level interior of this single family dwelling. Scope of work to be performed includes the replacement of all exterior windows and front entry door on the exterior as well as renovation of the existing main level full bathroom (shower surround replacement and door widening) and kitchen renovation (detach and replacement of cabinets as well as potential change to the interior portion of the kitchen window). As a result seven suspect material systems will be sampled from the interior of the dwelling for the presence of asbestos. These include a homogeneous swirl textured plaster/drywall substrate wall/ceiling material present in the main level full bathroom and kitchen, a bumpy plaster substrate wall material present in the hallway which adjoins the kitchen and bathroom, white compound used around the perimeter of the bath surround, white sealant applied to the bathroom tub surround, base cove mastic present in the bathroom, ceramic tile elements from the kitchen tile backsplash as well as a compound/mastic used to adhere the plaster tub surround in the bathroom.

The XRF lead paint component examination is to include on the exterior all window components from around the dwelling as well as the front entry door elements and on the interior all painted components in the main level bathroom, hallway and kitchen (including windows) which may be impacted during the renovation.

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 non-asbestos containing materials:

Sample #	Description/ Location
A1023(1-3)	White skim coat plaster/compound over gray plaster and white/tan drywall as homogenous swirl textured wall/ceiling material present in the main level bathroom and kitchen *Note the granular plaster in the first sample came back with a Trace of Chrysotile which is not unusual this plaster was point counted to below .25% which is under the 1% threshold for declaring a material asbestos containing per the EPA and State of Colorado regulations, however, OSHA safe work practices should be exercised when disturbing this material**
B1023(1-3)	Off-white plaster skim coat over gray granular plaster substrate as homogeneous wall material present in the hallway where the bathroom door is slated for expansion
C10231	White compound applied around the perimeter of the bath tub surround in the bathroom
D10231	White compound used as sealant around the tub base
E10231	White compound over tan/white drywall which was attempt to find mastic associated with the plastic shower surround appears to be only compound
F10231	Off-white mastic associated with the base cove in the bathroom
G10231	Off-white mastic associated with the white ceramic tile backsplash present in the main level kitchen

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.

LEAD-BASED PAINT

Interior:

The following components indicated the presence of lead-based paint at or above the EPA and State of Colorado Guidelines action level. These components include:

- **Window glass framework in the main level kitchen (south elevation)**

Exterior:

The following types of exterior surfaces of this property tested positive for the presence of lead-based paint. These surfaces include:

- **All painted window trim components around the entire dwelling, should be considered positive for lead-based paint (while some did come back negative these components are all adjoining lead-based paint components)**
- **Front door wood trim elements all tested positive for lead-based paint (Slab tested non-detect which is a newer metal door)**

4.0 CONCLUSIONS AND RECOMMENDATIONS:

Only 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.

**** As noted above the granular plaster in the first sample of homogenous swirl textured wall/ceiling material in the bathroom and kitchen came back with a Trace of Chrysotile which is not unusual this plaster was point counted to below .25% which is under the 1% threshold for declaring a material asbestos containing per the EPA and State of Colorado regulations, however, OSHA safe work practices should be exercised when disturbing this material****

The lead-based paint inspection did identify components with lead above the regulatory definition on building material slated for demolition as a result of this loss. The components which were inventoried above that do contain lead based paint must be removed using proper protocols as defined by the EPA's Regulations on Residential Property Renovation at 40 CFR 745.80, Subpart E

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^2)

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 note nearly all wood painted window components as well as front door wood trim and jamb tested positive for lead-based paint

Sill, casement, framework and sash tested positive for lead-based paint on majority of windows

Overview of eastern elevation window components tested positive for lead-based paint

Some deterioration on sills and casement which tested positive for lead-based paint

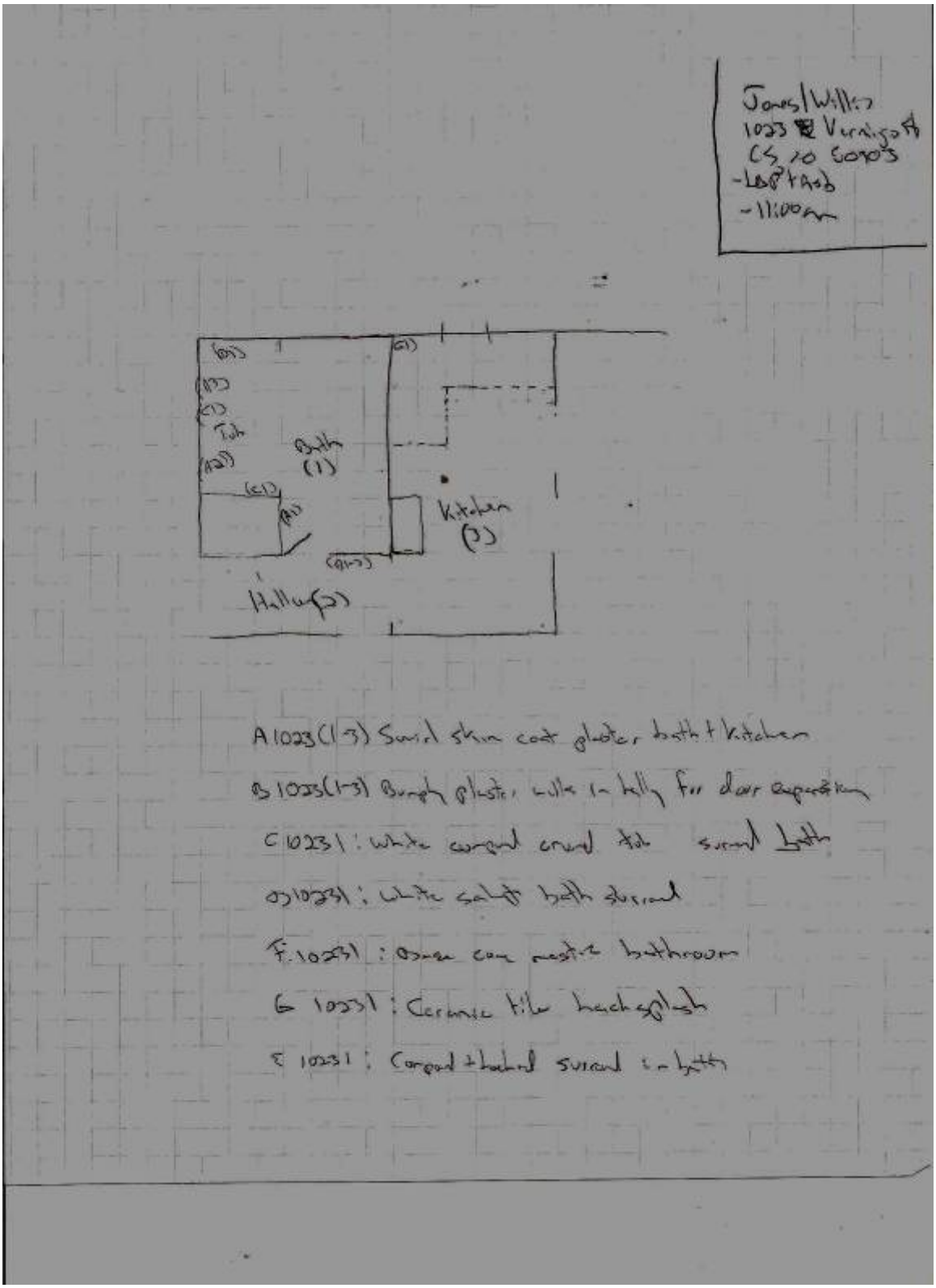
Southern elevation windows tested positive for lead-based paint on the wood components

Again sills and casement along with window framework tested positive for lead-based paint

Western elevation both windows tested positive on painted wood components for lead-based paint

Sill and framework tested positive for lead-based paint

6.0 SKETCH


Jones/Wilk:
1023
CS 10 50303
-Loft Asb
-11:00am
Bath (1)
Kitchen (1)
Hallway (1)
A 1023(1-3) Swirl skim coat plaster, bath + kitchen
B 1023(1-3) Bumph plaster, cutback in hall for door expansion
C 10231: White carpet around the stairs + bath
D 10231: White satin bath surround
F 10231: Brown cork mosaic bathroom
G 10231: Ceramic tile backsplash
E 10231: Carpet + underlay stairs + bath

APPENDIX A

10311243

DETAILED REPORT OF LEAD-BASED PAINT INSPECTION:

Inspection Date: 10/31/14
Report Date: 11/5/2014
Abatement Level: 1.0
Report No. 10/31/14 12:43
Total Readings: 40
Job Started: 10/31/14 12:43
Job Finished: 10/31/14 13:15

Read No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Paint Color	Lead (mg/cm²)	Mode
Interior Room Hallway									
008	C	Wall	L Rgt		I	Plaster	N/A	0.1	QM
007	C	Door	Ctr	Rgt casing	I	Wood	N/A	0.1	QM
Exterior Elevations A-North, B-East, C-South, D-West									
018	A	Window	Lft	Trim	I	Wood	N/A	0.2	QM
017	A	Window	Lft	Sill	I	Wood	N/A	0.1	QM
019	A	Window	Rgt	Trim	I	Wood	N/A	6.3	QM
020	A	Window	Rgt	Sash	I	Wood	N/A	-0.1	QM
035	A	Door	Ctr	slab	I	metals	N/A	0.3	QM
037	A	Door	Ctr	Header	I	Wood	N/A	4.3	QM
036	A	Door	Ctr	Lft jamb	I	Wood	N/A	4.2	QM
023	B	Window	Lft	Rgt casing	I	Wood	N/A	3.3	QM
024	B	Window	Lft	Sill	I	Wood	N/A	2.7	QM
021	B	Window	Rgt	Sash	I	Wood	N/A	0.1	QM
022	B	Window	Rgt	Lft casing	I	Wood	N/A	2.3	QM
027	C	Window	Ctr	Rgt casing	I	Wood	N/A	3.7	QM
029	C	Window	Ctr	Rgt casing	I	Wood	N/A	2.3	QM
028	C	Window	Ctr	Sill	I	Wood	N/A	0.4	QM
025	C	Window	Rgt	Sill	I	Wood	N/A	0.2	QM
026	C	Window	Rgt	Lft casing	I	Wood	N/A	4.1	QM
032	D	Window	Lft	Sash	I	Wood	N/A	3.7	QM
033	D	Window	Lft	Sill	I	Wood	N/A	0.1	QM
034	D	Window	Lft	Lft casing	I	Wood	N/A	2.3	QM
030	D	Window	Rgt	Rgt casing	I	Wood	N/A	0.5	QM
031	D	Window	Rgt	Sill	I	Wood	N/A	0.5	QM
Interior Room Bathroom									
001	A	Wall	U Lft		I	Dry wall	N/A	0.5	QM
006	A	Door	Ctr	Lft casing	I	Wood	N/A	-0.1	QM
002	B	Wall	U Ctr		I	Dry wall	N/A	0.3	QM
003	C	Wall	U Ctr		I	Dry wall	N/A	0.2	QM
005	C	Window	Ctr	Sill	I	Wood	N/A	0.3	QM
004	D	Wall	U Lft		I	Dry wall	N/A	0.1	QM
Interior Kitchen									
016	B	cabinetry	Ctr		I	Wood	N/A	-0.2	QM
010	B	Wall	L Ctr		I	Plaster	N/A	-0.3	QM
009	C	Wall	L Ctr		I	Plaster	N/A	-0.1	QM
011	C	Wall	U Lft		I	Plaster	N/A	0.2	QM
015	C	Window	Ctr	Sash	I	Wood	N/A	3.8	QM
014	C	Window	Ctr	Sill	I	Wood	N/A	-0.1	QM
012	D	Wall	U Lft		I	Plaster	N/A	0.0	QM
013	D	Door	Ctr	Rgt jamb	I	Wood	N/A	0.1	QM
Calibration Readings									
038								0.8	QM

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039		0.8	QM
040		1.0	QM

---- End of Readings ----

APPENDIX B

3736 E Vermijo Ave
Labs.pdf