

Restoration Specific Asbestos and Lead Based Paint Survey Report

Property Information:

**634 N Royer St
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 Inc.
NVLAP lab code 10896**

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: 634 N Royer St
Colorado Springs, CO 80903**

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

Asbestos Consulting Firm #ACF-15258

**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): 2/13/15
Report Date: 2/19/15**

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 Inc. 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^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 renovation project affecting select items in need of repair in this single family dwelling built in 1900. The modification work for the exterior of the home is to include the upgrade/replacement of doors and windows, replacement of the cellar/crawlspace hatch door and replacement of the floor of the front patio. The scheduled interior work will include replacing the the main entry way vinyl flooring, the wall and ceiling materials of the living room (for crack repair and light installation), bathroom walls and ceramic tile surround (for tub surround replacement), kitchen walls (for cabinet/countertop replacement), hallway walls/ceilings (cracks and potential light installation) and the wall material in the two bedrooms located in the rear (window egress code upgrade). The installation of new windows in the two rear bedrooms will require a limited amount of textured drywall to be removed because larger windows will be installed (approx 12” larger length wise). For the above identified areas of renovation, the following suspect building materials were sampled;

- **Gray sheet vinyl found at the main entry**
- **The orange peel textured drywall substrate wall system present on the east and south walls of the living room slated for repair work**
- **Slightly different orange peel texture over drywall found on the west walls of the rear bedrooms where the windows are to be enlarged and on the bathrooms walls associated with the replacement of the tub surround**
- **Ceramic tile, grout and mastic associated with the tub surround**
- **White caulk painted beige found on the tub and tile of the surround**
- **Acoustic texture applied to ceilings which may have light installation and crack repairs in the rear bedrooms, hallway and living room ceilings**

Records show the home was constructed in 1900. The lead based paint survey will be performed on the areas to be affected. The lead paint component examination is to include:

EXTERIOR: Siding, front porch railing and floor, window components around the entire dwelling and rear/front entry door components and the hatch door to the cellar/crawlspace

INTERIOR:

- **Living room (room #1) – walls, entry door jamb, baseboards**
- **Kitchen (room #2) – walls**
- **Bedroom #2 (room #3) – walls, window casing**
- **Bedroom #3 (room #4) – walls, window sill**
- **Bath (room #5) – walls, window sash**
- **Bedroom #1 (room #6) – walls**

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/impact by the project manager. 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 the project process 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>
B634(1-3)	White texture applied in an orange peel style over tan compound found on brown/white drywall substrate located along vertical cracks found on the walls of the living room	Surface/ Friable	Good	TBD – see conclusion notes	Tan Compound (appears to be original surfacing application) – 3% Chrysotile
C634(1-3)	White texture applied in an orange peel style over white compound and white/brown drywall substrate found on walls scheduled for renovation work in the rear bedrooms (west) and the bathroom tub surround walls	Surface/ Friable	Good	TBD – see conclusion notes	Texture – 3% Chrysotile Compound – 6% Chrysotile
F634(1-3)	White micaceous (acoustic) ceiling texture applied to drywall substrate, homogeneous on the living room, hallway and rear bedroom ceilings	Surface/ Friable	Good	TBD – see conclusion notes	Texture – 3% Chrysotile

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:

Sample #	Description/ Location
A6341	Gray sheet vinyl w/tan backing and yellow mastic found on the plywood underlayment at the main entrance
D6341	Beige ceramic tile, yellow mastic and white grout found as the ceramic tile tub surround elements in the bathroom to be impacted
E6341	White caulk painted beige found on the tub and tub surround of the bathroom

Non-suspect Materials Observed and Slated for demolition:

- 1) Wood baseboards

LEAD-BASED PAINT

Exterior:

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:

- Wood siding panels (beige) found on the east and north elevations

Interior:

No lead-based paint with levels greater than the EPA established 1.0 mg/cm² threshold observed in any of the painted building materials slated for removal/impact on the interior of the dwelling (see Appendix A)

4.0 CONCLUSIONS AND RECOMMENDATIONS:

Asbestos-containing materials, which may be affected by the proposed renovation plans, have been positively identified in:

- 1. White texture (3% Chrysotile) orange peel style surfacing material found on the living room walls where vertical cracks were observed**
- 2. White texture (3% Chrysotile) with a white compound (6% Chrysotile) found to be homogeneous on the west walls of the rear bedrooms where window enlarging is planned and the walls in the bathroom associated with the replacement of the tub surround**
- 3. White acoustic ceiling texture (3% Chrysotile) homogeneous on the ceilings of the living room, hallway and both rear bedrooms.**

The exact extent material impact for these renovations had not been determined at the time of the inspection and may fluctuate due to the discovery of asbestos. The quantity of asbestos containing materials requiring abatement will be established by the restoration contractor.

Associated overspray texture material encountered during demolition of the textured drywall substrate walls and ceilings is presumed to be asbestos containing and appropriate response actions should be implemented and included in the scope of work.

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."

The only areas of non-asbestos containing and non-suspect building materials that were examined during this survey are the gray sheet vinyl found at the main entrance (approx. 9 sq. ft.) and the beige ceramic wall tile and caulk found on the bathroom tub surround. However, caution is advised regarding removal of the ceramic wall tile due to its attachment to asbestos containing textured walls. 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 identify components with lead above the regulatory definition on building material that may be impacted during the course of this renovation project. If removal of the components which were inventoried above that do contain lead based paint is necessary in order to complete the renovation project, they 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/cm²)

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 EXTERIOR LEAD-BASED PAINT SURVEY PHOTOS



Front view of dwelling faces east



Front elevation window components are below regulated lead based paint regulated trigger level of ($1.0\text{mg}/\text{cm}^2$). However, adjoining the beige colored siding boards did test above the trigger level, the siding boards should be handled appropriately if their removal is required for installation of new windows



Front railing test for lead based paint was below the regulated trigger level of (1.0mg/cm²)



Front porch decking for lead based paint was below the regulated trigger level of (1.0mg/cm²)



Front door components tested for lead based paint was below the regulated trigger level of (1.0mg/cm²)



South elevation window components tested for lead based paint was below the regulated trigger level of (1.0mg/cm²)



South elevation cellar/crawlspace egress hatch tested for lead based paint was below the regulated trigger level of (1.0mg/cm²)



West elevation tested for lead based paint was below the regulated trigger level of (1.0mg/cm²)



North elevation window components are below regulated lead based paint regulated trigger level of (1.0mg/cm²), however, the beige colored siding boards did test above the trigger level, the siding boards should be handled appropriately if their removal is required for installation of new windows

6.0 INTERIOR PHOTO'S



View of the living room walls/ceilings have asbestos surfacing applications



Sample A6341 of the gray sheet vinyl with mastic found adhered to a plywood substrate located at the main entry way is non-detect for asbestos



Sample C6341 of the orange peel style texture material taken from bedroom #2 (southwest corner) contains 2% Chrysotile asbestos



Sample C6343 of the orange peel style texture material taken from the window in bedroom #3 (northwest corner) is homogeneous with the texture material found in bedroom #2 and the bathroom and considered asbestos containing



View of the bathroom



View of the tiled tub surround scheduled for replacement. Sample C6342 of the orange peel texture material including joint compound contains 6% Chrysotile asbestos



Sample D6341 of the beige ceramic tile with yellow mastic and white grout was non-detect, however, the tile is adhered to asbestos containing texture material found on the walls



Sample E6341 of the white caulk painted beige is non-detect for asbestos



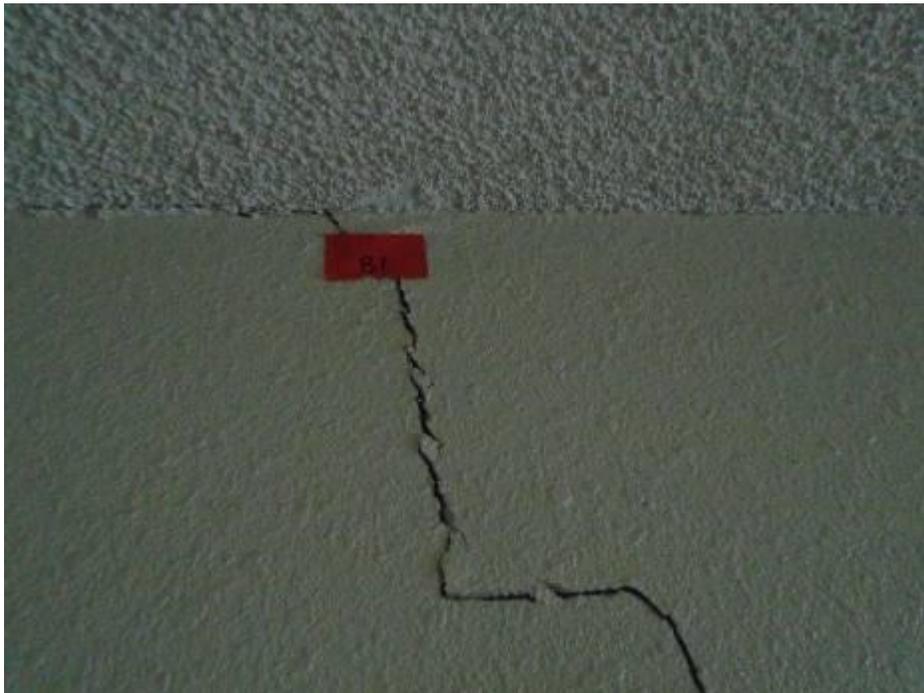
Sample F6341 of the white acoustic ceiling texture taken from the damaged wall/ceiling seam in the hallway contains 3% Chrysotile asbestos



Sample F6342 of the acoustic texture material taken from the damaged wall/ceiling seam in the southwest bedroom(#2) contains 3% Chrysotile asbestos



Sample F6343 of the acoustic texture material taken from the living room ceiling contains 3% Chrysotile asbestos



Sample B6341 of the orange peel texture material taken from the damaged east wall in the living room contains 3% Chrysotile asbestos

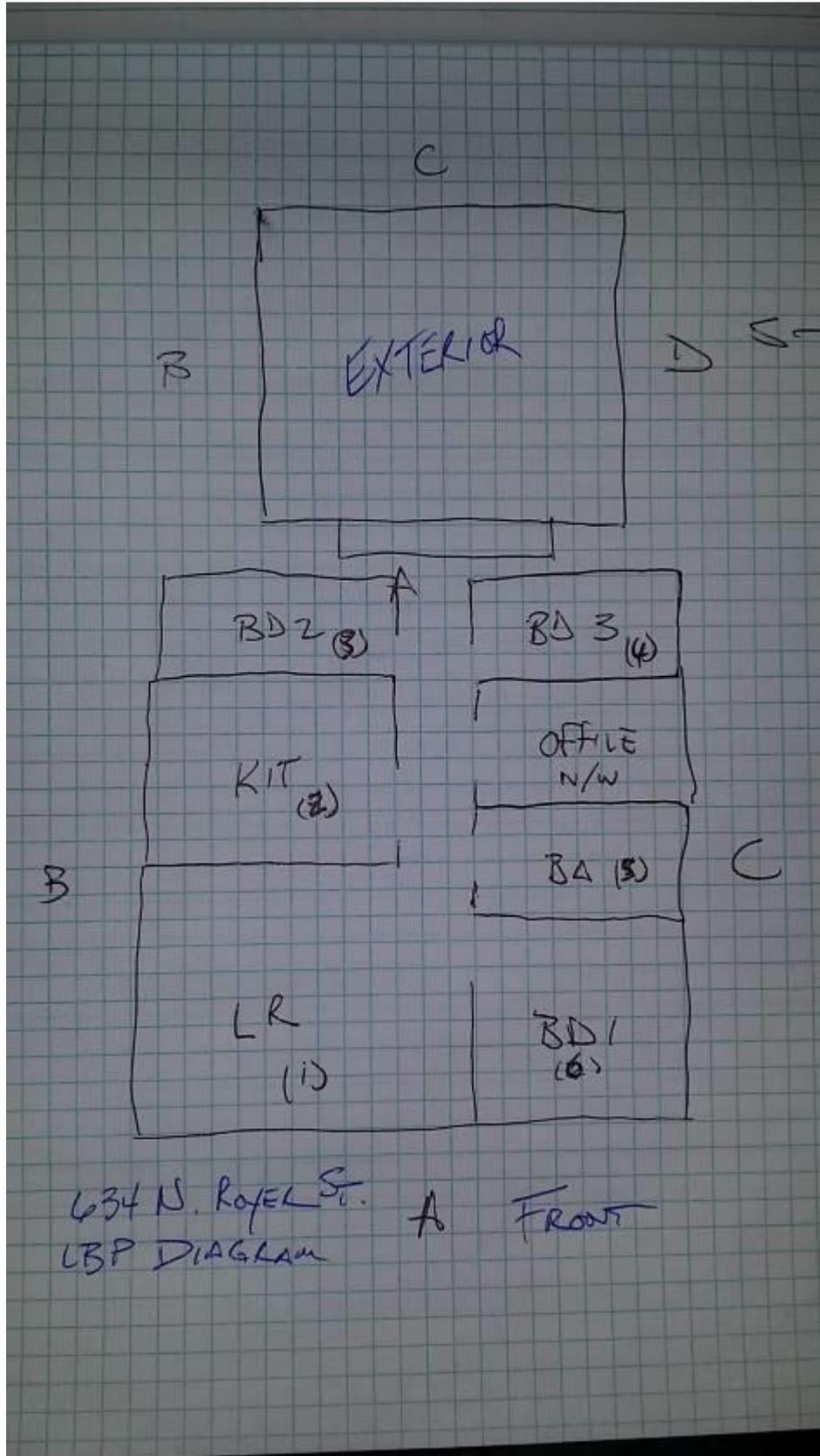


Additional view of vertical cracks found on the living room walls



**View of kitchen base cabinet and counter top scheduled for replacement
walls have asbestos containing texture applied**

6.0 LBP TEST DIAGRAM



APPENDIX A

02131229
 DETAILED REPORT OF LEAD-BASED PAINT INSPECTION:

Inspection Date: 02/13/15
 Report Date: 2/19/2015
 Abatement Level: 1.0
 Report No. 02/13/15 12:29
 Total Readings: 51
 Job Started: 02/13/15 12:29
 Job Finished: 02/13/15 13:23

Read No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Paint Color	Lead (mg/cm ²)	Mode
Interior Room 002 Number Only									
026	A	Wall	L Ctr		I	Dry wall	N/A	-0.1	QM
027	B	Wall	L Ctr		I	Dry wall	N/A	-0.1	QM
028	C	Wall	L Ctr		I	Dry wall	N/A	-0.2	QM
029	D	Wall	L Ctr		I	Dry wall	N/A	-0.1	QM
Exterior Room 001 Number Only									
001	A	Siding	Ctr		I	Wood	N/A	3.8	QM
006	A	Floor	Ctr		I	Wood	N/A	-0.1	QM
002	A	Window	Lft	Rgt casing	I	Wood	N/A	0.0	QM
003	A	Window	Lft	Sash	I	Wood	N/A	0.0	QM
007	A	Door	Ctr	slab	I	Wood	N/A	0.0	QM
004	A	Door	Ctr	Lft casing	I	Wood	N/A	0.2	QM
005	A	Railing	Ctr	Railing	I	Wood	N/A	-0.1	QM
012	B	hatch door	Ctr		I	Wood	N/A	-0.3	QM
009	B	Siding	Rgt		I	Wood	N/A	-0.1	QM
011	B	Window	Ctr	Rgt casing	I	Wood	N/A	-0.2	QM
010	B	Window	Rgt	Lft casing	I	Wood	N/A	-0.2	QM
008	B	Door	Ctr	Rgt jamb	I	Wood	N/A	0.0	QM
013	C	Door	Ctr	slab	I	Wood	N/A	-0.2	QM
016	D	Siding	Ctr		I	Wood	N/A	9.9	QM
017	D	Window	Lft	Lft casing	I	Wood	N/A	0.0	QM
015	D	Window	Ctr	Rgt casing	I	Wood	N/A	-0.1	QM
014	D	Window	Rgt	Sill	I	Wood	N/A	0.1	QM
Interior Room 001 Number Only									
018	A	Wall	L Ctr		I	Dry wall	N/A	-0.1	QM
023	A	Door	Lft	Lft jamb	I	Wood	N/A	0.1	QM
024	B	Wall	L Lft		I	Dry wall	N/A	-0.1	QM
019	B	Wall	L Ctr		I	Dry wall	N/A	-0.0	QM
020	B	Wall	L Rgt		I	Dry wall	N/A	-0.2	QM
025	B	Baseboard	Lft		I	Wood	N/A	0.2	QM
021	C	Wall	L Lft		I	Dry wall	N/A	-0.1	QM
022	D	Wall	L Rgt		I	Dry wall	N/A	-0.3	QM
Interior Room 003 Number Only									
030	A	Wall	L Ctr		I	Dry wall	N/A	-0.1	QM
031	B	Wall	L Ctr		I	Dry wall	N/A	-0.5	QM
032	C	Wall	L Ctr		I	Dry wall	N/A	-0.1	QM
034	C	Window	Rgt	Rgt casing	I	Wood	N/A	0.1	QM
033	D	Wall	L Lft		I	Dry wall	N/A	-0.3	QM
Interior Room 004 Number Only									
035	A	Wall	L Ctr		I	Dry wall	N/A	-0.1	QM
036	B	Wall	L Rgt		I	Dry wall	N/A	-0.1	QM
037	C	Wall	L Rgt		I	Dry wall	N/A	-0.2	QM
038	D	Wall	L Lft		I	Dry wall	N/A	-0.1	QM

039	D	Window	Rgt	Sill	02131229	I	Wood	N/A	0.0	QM
Interior Room 005 Number Only										
040	A	Wall	L	Ctr		I	Dry wall	N/A	-0.1	QM
041	B	Wall	L	Lft		I	Dry wall	N/A	-0.3	QM
042	C	Wall	L	Lft		I	Dry wall	N/A	-0.2	QM
043	D	Wall	L	Rgt		I	Dry wall	N/A	-0.3	QM
044	D	Window	Rgt	Sash		I	Wood	N/A	0.0	QM
Interior Room 006 Number Only										
045	A	Wall	L	Ctr		I	Dry wall	N/A	-0.1	QM
046	B	Wall	L	Lft		I	Dry wall	N/A	-0.1	QM
047	C	Wall	L	Ctr		I	Dry wall	N/A	0.0	QM
048	D	Wall	L	Lft		I	Dry wall	N/A	-0.2	QM
Calibration Readings										
049									1.0	QM
050									0.8	QM
051									0.8	QM
----- End of Readings -----										

APPENDIX B



634 N. Royer St.
Labs.pdf