

June 14, 2017

Gerber Berend Design Build Attn: Bert George 2456 Copper Ridge Drive Steamboat Springs, CO 80487

NWCC Project No: 17-10773

Subject: Inspection for Asbestos Containing Building

Materials, 3305 Highway 131, Routt

County, Colorado

Dear Mr. George:

NWCC, Inc. (NWCC) is pleased to present results of an inspection for asbestos containing building materials (ACBMs) conducted on June 9, 2017 at a residential property located at 3305 Highway 131 in Routt County, Colorado. NWCC conducted the inspection under contract with Gerber Berend Design Build. The inspection was limited to the garage ceiling, deck above the garage and main level windows.

An inspection for ACBMs is required prior to renovation or demolition of residential buildings that may disturb materials identified as "suspect ACBMs" encompassing a greater than 32 square foot (ft²) area, in accordance with Colorado Department of Public Health and Environment (CDPHE), Air Quality Control Commission (AQCC) Regulation No. 8, Part B (Part B).

The purpose of the project was to inspect reasonably accessible areas summarized above for the presence, and condition of suspect ACBMs. Inspection activities included a visual assessment of suspect ACBMs, collection of bulk samples, laboratory testing, and report preparation. The asbestos inspection was performed in accordance with Part B using the industry standard level of care typical for the type of building and use. A discussion of inspection, sampling, and test results is provided in the following three sections and attachments.

- Section 1.0 Asbestos Inspection
- Section 2.0 Findings and Recommendations
- Section 3.0 Limitations
- Attachment A Field Log and Photographs
- Attachment B Laboratory Results
- Attachment C General Information

# 1.0 Asbestos Inspection

A visual inspection of building materials was conducted in accessible areas summarized above in order to identify suspect ACBMs. Building materials potentially containing asbestos were categorized as "homogenous areas", which are areas representing like materials exhibiting similar

characteristics (e.g. uniform color and texture) and age (e.g. construction period). Each era of construction is considered unique and the areas were inspected as separate homogeneous areas, excluding flooring materials and common insulation. Physical room divisions within the building are each considered a functional space and may represent different construction histories that include different materials. However, because of distinct similarities, certain materials found in different functional spaces may have been grouped into the same homogenous area(s).

Material descriptions summarized below are based upon inspection observations and may differ from analytical report sample descriptions. Identified homogeneous areas and collected samples include the following.

• Drywall with White Paint, and Associated Components (e.g. texture, tape, joint compound): Three samples (DRY1, DRY2, and DRY3) were randomly collected from approximately 530 ft<sup>2</sup> of the garage ceiling. The collected samples were classified as surfacing materials observed in good condition.

Suspect ACBM was not observed in areas scheduled for window replacement located on the first level.

Three samples were classified as surfacing materials and none of the samples were classified as miscellaneous materials or thermal system insulation. Each potential ACBM was hand touched in order to determine its friable or non-friable nature. A material is considered friable if when dry, it can be crumbled, pulverized, or reduced to powder by hand pressure.

The collected samples were evaluated for the presence of asbestos using Polarized Light Microscopy (PLM). Aerobiology Associates Laboratory, Inc. (Aerobiology) of Golden, Colorado provided asbestos testing services under contract with NWCC. Based upon AQCC regulations, a material is considered an ACBM if greater than one percent asbestos fibers are present. A field log and select photographic documentation are provided in Attachment A and laboratory reports in Attachment B.

## 2.0 Findings and Recommendations

Three suspect ACBM samples were collected from homogenous areas discussed above. All suspect materials were observed in good condition as defined in Part B. Because of planned renovation activities, the potential for disturbance includes air, physical, and vibration disturbances as defined in Part B.

Based upon site observations, sampling, and laboratory test results it appears that asbestos was not present in the collected samples. The materials are not considered asbestos containing building material (ACBM); therefore, abatement with the State of Colorado is not necessary. General information regarding asbestos is provided in Attachment C.

Note that additional suspect building materials may be buried and hidden within layers or beneath structural features such as additional flooring, walls, or insulation. The presence of these "layers" may not be known until de-construction activities are conducted. If suspect building materials are encountered, please contact the undersigned immediately in order to evaluate the material for the presence of asbestos.

# 3.0 Limitations

This report has been prepared for your exclusive use for building renovation purposes. The asbestos inspection was performed using the industry standard level of care typical for the type of

structure and use. In conducting the inspection, NWCC made a reasonable effort to observe and evaluate all building materials within the areas discussed above. Square footage area estimates presented in the report were only used to determine the appropriate number of samples to collect from specific homogenous areas, in accordance with AQCC regulations. NWCC is not responsible for any other use of square footage estimates.

There is no guarantee that suspect materials are not hidden or buried within the facilities. The act of determining the presence or absence of asbestos fibers in a particular homogeneous area should not be interpreted as a guarantee that asbestos does or does not exist, rather it is an opinion based upon extrapolation and interpretation of limited test results to materials exhibiting similar physical appearances, locales, and histories. There are no guarantees regarding the reliability and accuracy of the information provided except precisely where each material sample was collected. No other warranty, expressed or implied, is given based upon the content of this report.

NWCC appreciates the opportunity to provide you with environmental services. Please contact the undersigned with any questions or comments concerning this project.

Sincerely, NWCC, Inc.

Richard Denney, C.A.B.I

Certified Asbestos Building Inspector No. 866

Certified Mold Inspector No. 81905

Gary W. Webber, P.G.

Vice President

Attachments

# ATTACHMENT A FIELD LOG and PHOTOGRAPHS

# ASBESTOS ASSESSMENT SAMPLING FIELD FORM

				Estimated Surface Area*	\$ 300	3 7		12	1			
				Sample Location	1 Fran Class Laga /	12 From The Late	1.8 Frem Wat The					
Henry 131 Kertat				š	Geraphanias	Galage Celling	Samplering					
	ercial			Sample Description	Drywyll with pant tage	2	1			9-10		
3305	( ) Commercial			Material Color	White		)			6-9		
1x	ıtial			Material Condition	60		-1					
1701-	(4) Residential	enney		Friability	고		1					
ber: ( )		Richard Denney	1-6-9	Material Type			-1	/				
Project Name/Number: [7 -   0773 3305	General Site Description:	Inspector:	Date Inspected:	Sample Designation	DRYI	DRYP	DRYZ					

30s.f.

Notes:

Material types: SM = Surfacing Material, TSI = Thermal System Insulation, MM = Miscellaneous Materials

F = Friable, PF = Potentially Friable, NF = Not Friable

Condition: GC = Good Condition, D = Damaged, SD = Significantly Damaged

Sample Rate: For SM = 3 < 1,000 sf, 5 < 5,000 sf, 7 > 5,000 sf. For Friable TSI = 3 samples minimum. For MM = Minimum of 1 sample per material.

Damage Potential: Air, Physical, Vibration.

Estimated Surface Area\* Estimates provided are for inspector to determine appropriate number of samples to collect. NWCC is not responsible for any other use of square footage estimates.



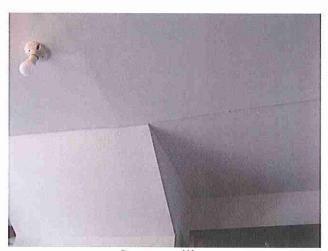
Garage, deck and windows



Garage ceiling



Garage ceiling



Garage ceiling



Garage ceiling



Garage ceiling

# ATTACHMENT B LABORATORY RESULTS



Certificate of Analysis

780 Simms Street Suite 104 Golden, CO, 80401 303.232.3746 nun.aembiology.net

Client Name Street address City, State ZIP NWCC Inc.

2580 Copper Ridge Dr. Steamboat Springs, CO 80487

Richard Denney

Attn Client Project Name:

10773 / 3305 Highway 131, Routt County

MA(V)

NVLAP Lab Code 200860-0

Date Collected 06/09/17 Date Received: 06/12/17 Date Analyzed 06/12/17

Date Reported: Project ID: 06/12/17 17017727

Job ID:

Test Requested 3002, Asbestos in Bulk Samples

Method: Polarized Light Microscopy / Dispersion Staining (PLM), Method for the Determination of Asbestos in Bulk Building Materials EPA-600/R-93/116, July 1993.

\$ 100 CO TO	dentification	Physical Description of Sample/Layer	Homo- geneous (Y/N)	Layer Percentage	Asbestos Detected	Asbestos Percentage	Non-Asbestos Fiber Percentage	Non-Fibrous Material Percentage	Matrix Material Composition
Client	Lab Sample Number								
	17017727-1A	White Compound w/White Paint	N	10%	ND		1 1	100	C,G
DRYI	17017727-1B	White Compound	N	30%	ND			100	С
	17017727-1C	White/Tan Drywall	N	60%	ND		15	85	G
DDVA	17017727-2A	White Compound w/White Paint	N	20%	ND			100	С
DRY2	17017727-2В	White/Tan Drywall	N	80%	ND		15	85	G
DRY3	17017727-3	White/Tan Drywall w/White Paint	N	100%	ND		15	85	G

Shurnor Athlorore Shannon Whitmore

Talena Oliver Asbestos Laboratory Supervisor

A = Amosite
AC = Actinolite
AN = Anthophyllite
CHRY=Chrysotile
CR = Crocidolite
TR = Tremolite
Trace=Less Than 1%
ND=None Detected

Q = Quartz F
C = Carbonates F
G = Gypsum F
M = Mica
T = Tar
NTR = Non-Asbestiform TR
NAC = Non-Asbestiform AC

P = Perlite B = Binder D=Diatoms



# Certificate of Analysis

780 Simms Street Suite 104 Golden, CO, 80401 303 232 3746 www.aembiology.net

NWCC Inc. Date Collected: 06/09/17 2580 Copper Ridge Dr. Date Received: 06/12/17 Steamboat Springs, CO 80487 Date Analyzed: 06/12/17 NVLAP Lab Code 200860-0 Date Reported: Richard Denney 06/12/17 Client Project Name: 10773 / 3305 Highway 131, Routt County Project ID: 17017727 Job ID:

### General Notes

- ND indicates no asbestos was detected; the method detection limit is 1 %
- Trace or "<1" indicates asbestos was identified in the sample, but the concentration is less than 1%.</li>
- ♦ All regulated asbestos minerals (i.e. chrysotile, amosite, crocidolite, anthophyllite, tremolite, and actinolite) were sought in every layer of each sample, but only those asbestos minerals detected are listed. Amosite is the common name for the asbestiform variety of the minerals cummingtonite and grunerite. Crocidolite is the common name used for the asbestiform variety of the mineral riebeckite.
- Tile, vinyl, foam, plastic, and fine powder samples may contain asbestos fibers of such small diameter (< 0.25 microns in diameter) that these fibers cannot be detected by PLM. For such samples, more sensitive analytical methods (e.g. TEM, SEM, and XRD) are recommended if greater certainty about asbestos content is required. Semi-quantitative bulk TEM floor tile analysis is accepted under NESHAP regulations.
- These results are submitted pursuant to Aerobiology Laboratory Associates, Inc.'s current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted.
- Unless notified in writing to return the samples covered by this report, Aerobiology Laboratory Associates, Inc. will store the samples for a minimum period of thirty (30) days before discarding. A shipping and handling charge will be assessed for the return of any samples.
- Aerobiology does not guarantee the results of tape lifts, microvacs, wipe, and/or debris samples. Accurate analysis cannot be performed due to particle size, media used, and/or amount of material given. Analysis of these materials should be preformed by a TEM. A result of ND does not indicate that the sample area does not contain asbestos. It means the analyst could not identify asbestos in the specific sample for the reasons listed above.

### Notes Required by NVLAP

- This 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.
- This test report relates only to the items tested or calibrated.
- This report is not valid unless it bears the name of a NVLAP-approved signatory.
- Any reproduction of this document must include the entire document in order for the report to be valid.

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780 Simms Street, Suite 104, Golden, CO, 80401, 303.232.3746

# ATTACHMENT C GENERAL INFORMATION

Bill Owens, Governor Dennis E. Ellis, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S. Denver, Colorado 80246-1530 Phone (303) 692-2000 TDD Line (303) 691-7700 Located In Glendale, Colorado http://www.cdphe.state.co.us

Laboratory Services Division 8100 Lowry Blvd. Denver, Colorado 80230-6928 (303) 692-3090



and Environment

# BUILDING RENOVATION AND DEMOLITION WHAT YOU NEED TO KNOW!

Are you Remodeling, Renovating or Demolishing?

You are subject to State and Federal Regulations requiring inspection for asbestos. Avoid penalties and delays: have your project inspected for asbestos by a Colorado-certified asbestos building inspector before

It is illegal to improperly disturb asbestos containing materials!

Asbestos can be found in these and other common building materials: Ceiling textures, vinyl floor coverings and mastic, boiler and pipe insulation, heating and cooling duct insulation, ceiling tile, roofing products, clapboard shingles, etcetera. These materials are regulated; a certified asbestos inspector can determine which materials contain asbestos and which are regulated. Buildings of *any* age may contain asbestos; even those newly built may have asbestos-containing materials.

# For ALL Renovation Projects:

- Buildings of any age may contain asbestos; even those newly built may have asbestos containing
- Inspection: the structures/components to be disturbed must be inspected for asbestos by a statecertified asbestos inspector. Contact CDPHE or go to our web site for a current list of Asbestos Inspectors http://www.cdphe.state.co.us/ap/asbeshom.asp or Asbestos Building Inspector Consulting firms can be found in the yellow pages section of most telephone books, under the heading "Asbestos Consulting and
- If the amount of asbestos-containing material to be disturbed exceeds the following trigger levels than an
  - Trigger levels means amounts of material as follows:
    - With regard to single-family residential dwellings, the trigger levels are 50 linear feet on pipes, 32 square feet on other surfaces, or the volume equivalent of a 55-gallon drum.
    - With regard to all areas other than single-family residential dwellings, the trigger levels are 260 linear feet on pipes, 160 square feet on other surfaces, or the volume equivalent of a
- A certified removal contractor (General Abatement Contractor) must remove asbestos-containing materials that are regulated or may become regulated before they are disturbed by renovation or demolition activities. Contact CDPHE or go to our web site for a current list of General Abatement Contractors http://www.cdphe.state.co.us/ap/asbeshom.asp or Contractors can be found in the yellow pages section of most telephone books, under the heading "Asbestos Abatement".
- Notification: A written notification to CDPHE, payment of a notification fee and ten (10) working day waiting period is required before the removal (abatement) of regulated asbestos containing materials.

Regulated asbestos-containing waste material must be disposed of at an approved asbestos waste

Demolitions, Destructive Salvage, House Moving

If you demolish, perform destructive salvage, perform de-construction, burn, destroy, dismantle, dynamite, implode, knock down, level, pull down, pulverize, raze, tear down, wreck all of a structure or structural components or you move a house you are subject to State and Federal Regulations even when there is NO

# Prior to Demolition:

- Inspection: the building must be inspected for asbestos by a state-certified asbestos inspector. Contact CDPHE or go to our web site for a current list of Asbestos Inspectors http://www.cdphe.state.co.us/ap/asbeshom.asp or Asbestos Building Inspector Consulting firms can be found in the yellow page section of most telephone books, under the heading "Asbestos Consulting and
- Asbestos Removal (if necessary) must be performed by a Colorado-certified General Abatement Contractor. Any asbestos containing material that is friable or will be made friable during demolition activities must be removed prior to demolition. Removal, in accordance with Regulation No. 8, is required if the amount of asbestos-containing material that is friable or will become friable during demolition exceeds
- Notification of Demolition Form must be submitted to the CDPHE, even if no asbestos was found during the inspection, payment of a notification fee and ten (10) working day waiting period is required

# During Demolition:

- Recycling of materials, such as concrete or wood, that are bonded or contaminated with asbestoscontaining material (ACM), such as floor tile or mastic, is NOT permitted.
- Demolition of a building that has non-friable asbestos containing VAT or tar-impregnated roofing materials remaining must be completed without causing the asbestos-containing materials to become friable. Concrete floors covered with floor tile shall be removed in as large sections as possible. Operations such as crushing, pneumatic jacking, etc. of materials containing asbestos are not permitted.
- When imploding or burning a structure, ALL asbestos-containing material, regardless of quantity, must be

# For More Information, please contact:

Asbestos Compliance Assistance Group Asbestos and Demolition Permit Coordinator

Phone: (303) 692-3100 Fax: (303) 782-0278 Toll Free: 1-800-886-7689

Web page: http://www.cdphe.state.co.us/ap/asbeshom.asp

Email address: asbestos@state.co.us

All asbestos abatement and demolition permit application forms are available from our web site or by calling

# HAVE YOUR PROJECT INSPECTED BY A COLORADO-CERTIFIED ASBESTOS BUILDING INSPECTOR BEFORE YOU BEGIN

Violation of asbestos regulations can result in monetary penalties and project delays.