

CASCADE RADON, INC. Testing, Mitigation, Systems Design CCB 180537 / CASCARI927C1

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## Radon Survey Analysis

for

# Corbett Middle School

c/o Mark Wilson

property located at

### 35800 E Historic Columbia River Hwy

Corbett OR 97019

October 20, 2016



Cascade Radon Inc. is a Woman-Owned Small Business (WOSB)

#### Introduction

The following report documents a study of radon levels for the property located at <u>35800 E Historic</u> Columbia River Hwy Corbett OR <u>97019</u>. The goal of this study is to determine indoor radon levels in all areas in contact with the ground and to sample radon in areas on the floors above.

Analysis assumes that the building tested was maintained under "closed-building" conditions (windows closed and exterior doors shut immediately after entering and exiting) 12 hours prior to the start of testing, as well as normal indoor temperatures, for the duration of the testing period.

#### **Conclusions and Recommendations**

Test was a "Short-Term" test, with duration of <u>69 hours</u>. See the chart below of areas in building that were tested, and the corresponding levels found. Note that all twenty-five (25) locations tested had results below the EPA Action Level of 4.0 pCi/L.

No mitigation action is recommended at this time. While the EPA recommends buildings be fixed if the radon level is 4.0 pCi/L or more, because there is no known safe level of exposure to radon, EPA also suggests Americans consider fixing buildings for radon levels between 2.0 pCi/L and 4.0 pCi/L.

The concentration of radon gas in indoor air can vary widely. It may fluctuate from day to day, week to week, and season to season. Indoor radon levels may be affected by barometric pressure, strong winds, rain-soaked ground, snow cover, heating and A/C systems, house construction, open windows, and the like. For further confirmation of average, long-term radon levels, it is suggested a long-term, Alpha-Track type radon test be performed.

#### Radon Level Measurements

The building tested was assumed <u>occupied</u> during testing. The measurement technique used (30) Air Check activated charcoal kits. Measurements of radon levels were made in the following areas:

Test End: 6:30 AM, 10/17/2016

Test Kit Number	Test Kit Location	Average Radon Level (pCi/L)
7795015,	Hallway Copy Room	$0.7 \pm 0.2$
7795043		
7795035	Room 8	$1.4 \pm 0.2$
7795012	Room 7	$0.8 \pm 0.2$
7795017	Room 6	< 0.3
7795013	Room 5	< 0.3
7129301	Room 4	< 0.3
7795018	MS/HS Office	$0.5 \pm 0.2$
7795020	West Commons Office	< 0.3
7795019	Middle Commons Office	< 0.3
7795027,	East Commons Office	$0.4 \pm 0.2$
7795028		
7795025	Commons Classroom	< 0.3
7795026	Upper Level Commons	$0.6 \pm 0.2$

Test Kit Number	Test Kit Location	Average Radon Level (pCi/L)
7795044	Lower Level Commons	< 0.3
7795046	East Student Services Office	< 0.3
7795041	South Middle Student Services Office	< 0.3
7795037	West Student Services Office	< 0.3
7795045	Student Services Lobby area	< 0.3
7795039	Room 1	$0.8 \pm 0.2$
7795042,	Room 2	< 0.3
7795040		
7795036	Room 3	< 0.3
7795033	Athletic Director's Office	$0.8 \pm 0.2$
7129299	District Office Copy Room	< 0.3
7795031	Superintendent's Office	$0.7 \pm 0.2$
7795032	Business Manager's Office	< 0.3
7795034	Deputy Clerk/Business Office Asst. Area	< 0.3

Blanks (unexposed kits) and Duplicate tests (two kits laid side by side) were deployed for QA/QC as per EPA protocol

#### Key:

pCi/L: Picocuries per liter – units of radon concentration.

Average: Cumulative average of the entire period since the test started.

Please contact me if you have any questions.

Thank you,

Tamara Linde NRPP 108246 RT