



Cascade Radon, Inc.
Testing, Mitigation,
Systems Design
CCB 180537 / CASCARI927C1

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Radon Survey Analysis Job# 17-C023L

for

Evergreen School District
Crestline Elementary
c/o Susan Steinbrenner

property located at

13003 SE 7th St

Vancouver WA 98683

March 16, 2017



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 13003 SE 7th St Vancouver WA 98683. 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-house” 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 a duration of 49 hours. See the chart below of areas in building that were tested, and the corresponding levels found. Note that one (1) of 46 locations tested had results above the EPA Action Level of 4.0 pCi/L.

It is recommended that a certified radon mitigation company be contacted to mitigate the elevated radon level bringing them below the EPA Action Level. While the EPA recommends homes 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 their home 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 occupied during testing.

The measurement technique used (55) Air Check activated charcoal kits.

Measurements of radon levels were made in the following areas:

Test End: 11:00AM, 2/11/2016

Test Kit Number	Test Kit Location	Test End Time, Date	Average Radon Level (pCi/L)
7877817, 7877821	101A – Front Office	12:00PM, 3/10/17	< 0.3
7877828	101C – Principal		< 0.3
7877827	101H – Assistant Principal		< 0.3
7877766	101M – Staff Lounge		< 0.3
7877775	101G – Nurse		< 0.3
7877798	101E – Health		< 0.3
7877800	103 – Work Room		< 0.3
7877806	105		< 0.3
7877826	105B – Office		< 0.3
7877805, 7877818	107 – Commons		0.5 ± 0.3
7877803	107C - Custodian		4.2 ± 0.4
7877816	113 – Gymnasium		1.1 ± 0.2
7877825	113A – PE Office		0.7 ± 0.3
7877815	121		< 0.3

Test Kit Number	Test Kit Location	Test End Time, Date	Average Radon Level (pCi/L)
7877824	123		< 0.3
7877804	125		< 0.3
7877823	124		0.5 ± 0.3
7877822	129A		< 0.3
7877833, 7877820	129B		< 0.3
7877770	131		< 0.3
7877764	132		< 0.3
7877832	133		< 0.3
7877831	134		< 0.3
7877772	135		< 0.3
7877819	136		< 0.3
7877802	130		< 0.3
7877829	139		< 0.3
7877801, 7877799	137		< 0.3
7877812	146		< 0.3
7877814	148		< 0.3
7877776	140E		< 0.3
7877777	145		< 0.3
7877778	144		< 0.3
7877830	140D		< 0.3
7877811	143		< 0.3
7877783	140C		< 0.3
7877792, 7877807	142		0.4 ± 0.3
7877809	141		< 0.3
7877808	230		0.5 ± 0.3
7977810	243		< 0.3
7877794	128		< 0.3
7877793	124 – Media Center		< 0.3
7877813	124A		< 0.3
7877780	124C		< 0.3
7877787, 7877785	122		< 0.3
7877779	102		< 0.3
7877797	BLANK – 230		< 0.3
7877795	BLANK – transit		< 0.3
7877782	BLANK – transit		< 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.

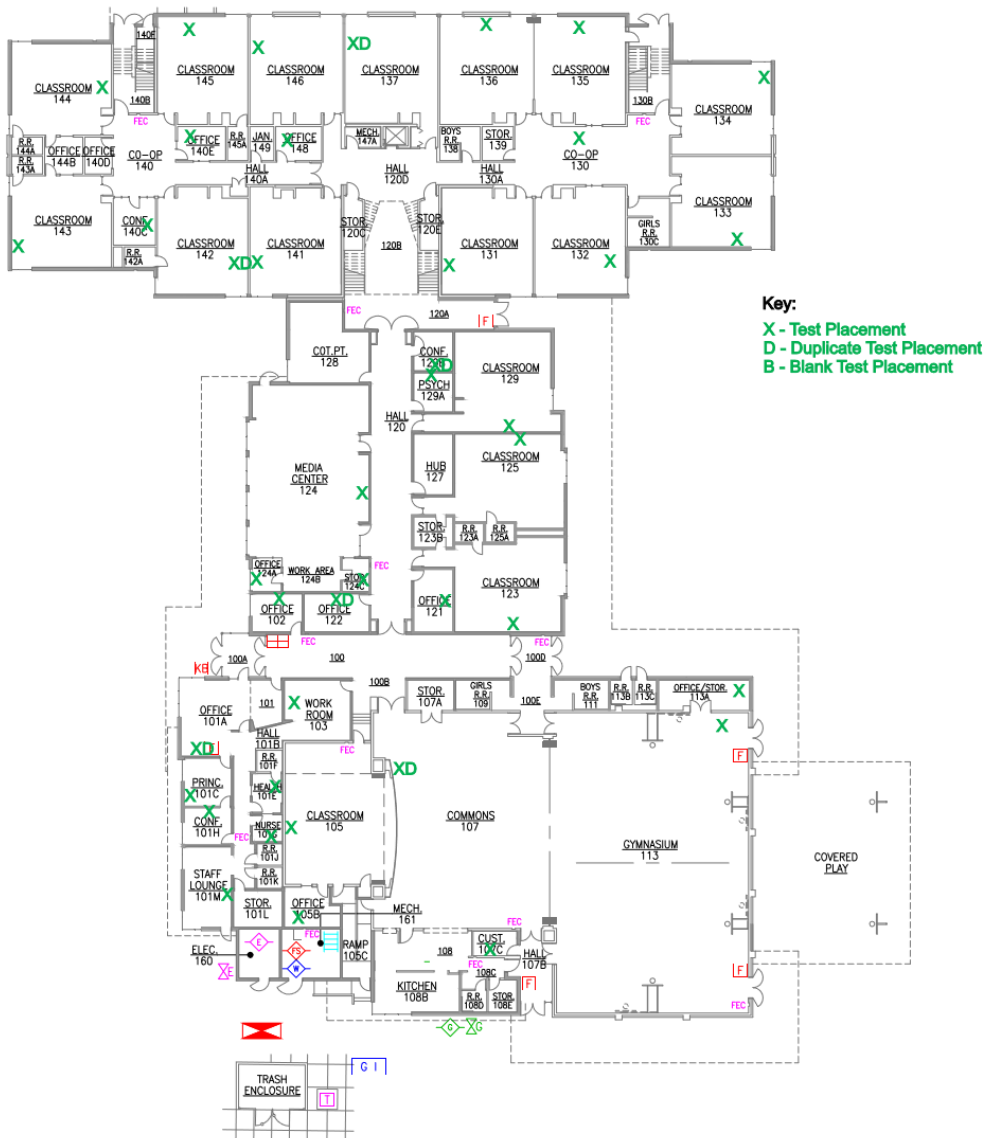
Thank you,

Tamara Linde
NRPP 108246 RT

CRESTLINE ELEMENTARY SCHOOL

13003 SE 7th STREET VANCOUVER, WA 98683

FIRE EMERGENCY KEY					
SYM.	ITEM	SYM.	ITEM	SYM.	ITEM
	PULL STATION		GAS SHUT-OFF		FIRE EXTINGUISHER
	FACP		SECURITY KEYS		ROOF ACCESS
	ANNUNCIATOR		MAIN ELECTRICAL BOARD		GAS SHUTOFF
	FIRE SPRINKLER	101	ROOM NUMBER		
	WATER METER		ELECTRICAL METER		
	WATER SHUTOFF		GAS METER		



 SAFETY PLAN (1ST FLOOR)
 NOT TO SCALE

CRESTLINE ELEMENTARY SCHOOL

13003 SE 7th STREET VANCOUVER, WA 98683

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