Cascade Radon

Testing, Mitigation, System Design
CCB 180537
CASCARI927C1
Fed ID 26-1809992

12839 NE Airport Way, Building 9
Portland, Oregon 97230
Phone: (503) 421-4813
Fax: (503) 281-6170
Office@CascadeRadon.com

Radon Survey Analysis
Job #25-C081F

for

Corbett School District
Woodard Campus

c/o Steve Salisbury

property located at

31520 E Woodard Rd
Troutdale, OR 97060

February 12, 2026

Introduction
The following report documents a study of radon levels for the property located at 31520 E Woodard Rd Troutdale, OR 97060. The goal of this study is to determine indoor radon levels for all areas in contact with the ground. Testing performed per Oregon Health Authority School Testing Protocols.

Analysis assumes that the buildings tested were maintained under "closed-building" conditions (windows closed and exterior doors shut immediately after entering and exiting), as well as normal indoor temperatures, for the duration of the testing period. The H-VAC system for each building was set to normal occupied settings for the entirety of the testing period.

Conclusions and Recommendations
Test was a "Short-Term" test, with minimum duration of 60 hours. See the chart below of areas in buildings that were tested, and the corresponding levels found. Maps of the test levels are provided in Appendix A. Note that Two(2) of the Seventeen(17) locations tested had results above the USEPA Action Level of 4.0 pCi/L.

It is recommended that a certified radon mitigation company be contacted to evaluate the areas which are elevated to determine appropriate mitigation action to bring them below the USEPA Action Level. While the USEPA 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, the US EPA also suggests individuals consider fixing buildings for radon levels between 2.0 pCi/L and 4.0 pCi/L.

This report represents the average radon concentration for the period that testing was and at the specific location(s) within the building. The concentration of radon gas in indoor air can vary widely; it fluctuates daily, seasonally, and with weather conditions. Indoor radon levels may be affected by barometric pressure, strong winds, rain-soaked ground, snow cover, heating and A/C systems, building construction, open windows, and the like. For further confirmation of average, long-term radon levels, it is suggested that long-term, Alpha-Track type radon testing be performed.

NOTE: It is recommended from the Oregon Health Authority that any school indicating low radon values be retested at least every 10 years. In areas where mitigation has been performed, it is recommended to test using long-term testing at least every 5 years.

Radon Level Measurements
The building tested was assumed occupied during testing.
The measurement technique used Twenty-One(21) AirChek activated charcoal kits.
Test Start Date: 1/26/2026 Test End Date: 1/30/2026
Measurements of radon levels were made in the following areas:

Table 1: Results – Main Building

Room	Floor	Kit ID#	Test Start Time	Test End Time	Result (pCi/L)
Gym East	1	12350136	8:00 am	8:00 am	0.3
Gym West	1	12279852	8:00 am	-	Missing
Health	1	12350180	8:00 am	8:00 am	0.7
Reception	1	12350146	8:00 am	8:00 am	0.6
Office 102	1	12350098	8:00 am	8:00 am	0.8
Office 104	1	12350051	8:00 am	8:00 am	0.3
Office 106	1	12350178	8:00 am	8:00 am	0.3
Room 113	1	Duplicate Avg	8:00 am	8:00 am	0.3
Room 115	1	12279826	8:00 am	8:00 am	0.3
Room 121	1	12350028	8:00 am	8:00 am	4.2
Room 123	1	Duplicate Avg	8:00 am	8:00 am	4.9
Room 125	1	12350123	8:00 am	8:00 am	0.7
Room 129	1	12350106	8:00 am	8:00 am	1.3

Room	Floor	Kit ID#	Test Start Time	Test End Time	Result (pCi/L)
Room 6	1	12350033	8:00 am	8:00 am	0.3
Work Room	1	12350138	8:00 am	8:00 am	0.3

Table 2: Results - Module

Room	Floor	Kit ID#	Test Start Time	Test End Time	Result (pCi/L)
Cafeteria East	1	Duplicate Avg	8:00 am	8:00 am	1.6
Cafeteria West	1	12350090	8:00 am	8:00 am	2.1

Duplicate measurements were conducted as a means to assess the precision of the test measurements. The criteria of acceptance is that the average relative percent difference (ARPD) of the results of the two measurement results for results whose averages are greater than 4.0, should be within 25%. The results of the collated duplicates are provided in Table 3. The applicable ARPD for this survey was not applicable and is thus in compliance.

Table 3: *Duplicate Table

Room	Kit ID#	Test Start Time	Test End Time	Result (pCi/L)	Average (pCi/L)	Avg > 3.9 pCi/L?	RPD%
Cafeteria East	12279824	8:00 am	8:00 am	1.5	1.6	No	12.5%
	12279848	8:00 am	8:00 am	1.7			
Room 113	12350094	8:00 am	8:00 am	0.3	0.3	No	0%
	12350108	8:00 am	8:00 am	0.3			
Room 123	12279837	8:00 am	8:00 am	5.0	4.9	Yes	6.2%
	12279900	8:00 am	8:00 am	4.7			
		Average RPD for Duplicate Averages more than 3.9 pCi/L:					6.2%
		In Compliance:					Yes

As a means to determine any biases in the results, detectors were deployed but not opened. At the time of test retrieval of the regular test, the devices were removed from their packaging and sent to the laboratory for blind analysis. The results of these unexposed devices are shown in Table 4. As can be seen, the laboratory reported these at the lower level of detection, indicating that no biases were introduced in handling and shipping of the devices.

Table 4: Blanks

Room	Blank #	Kit ID#	Result (pCi/L)	In Compliance?
Office 102	1	12350195	0.3	Yes

A device was also selected from the lot of detectors that were utilized for exposure to a known radon environment at a spiking chamber (Bowser-Morner, NEHANRPP ID# 101 TC). After exposure, the device was submitted as a blind measurement to the laboratory. A comparison of the reported reading from the lab and the known concentration in the chamber is as follows:

Chamber concentration to which device was exposed:	22.6pCi/L
Concentration reported by lab:	20.5pCi/L
Relative percent difference (RPD):	9.7%

The RPD between the reported and spiking concentration is well within normal limits.

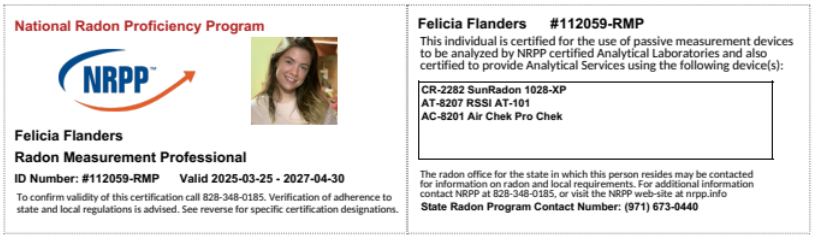
Key:

pCi/L: Picocuries per liter – units of radon concentration.
Average (Avg): Cumulative average of the entire period since the test started.
Invalid: Kit is void due to being found on floor, damaged, missing, or visibly tampered with after placement

Testing Conditions:
Test kit 12279852 Gym West could not be retrieved at pickup.

Weather:
1/26 A.40º L.35º H.45º (Mostly Cloudy)
1/27 A.40º L.38º H.42º (Mostly Sunny)
1/28 A.41º L.38º H.45º (Cloudy)
1/29 A.47º L.44º H.48º (Scattered Showers)
1/30 A.48º L.47º H.51º (Cloudy)

Please contact me if you have any questions.
Thank you,
Felicia Flanders
NRPP 112059 RMP

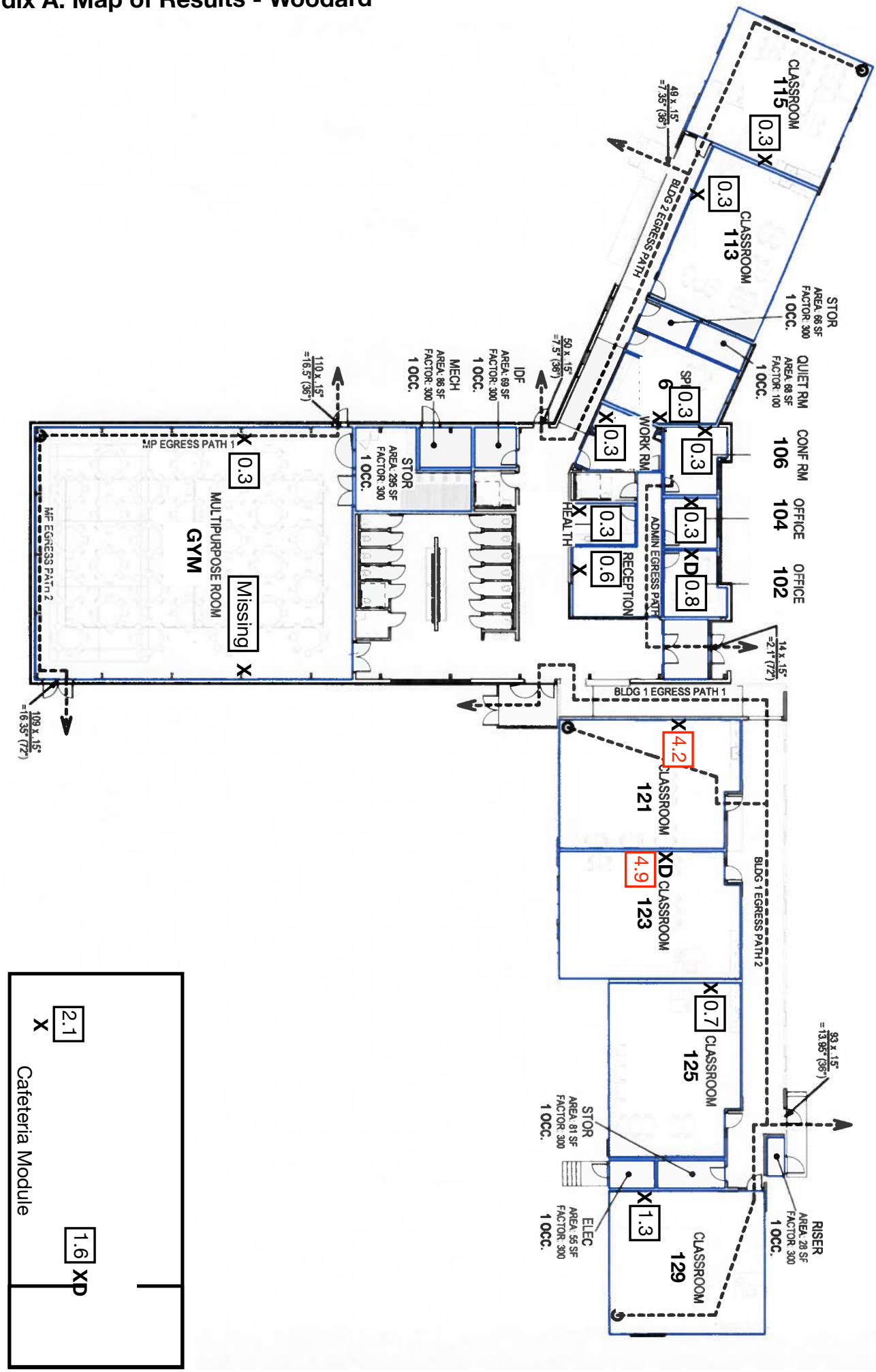

National Radon Proficiency Program

NRPP

Felicia Flanders
Radon Measurement Professional
ID Number: #112059-RMP Valid 2025-03-25 - 2027-04-30
To confirm validity of this certification call 828-348-0185. Verification of adherence to state and local regulations is advised. See reverse for specific certification designations.

Felicia Flanders #112059-RMP
This individual is certified for the use of passive measurement devices to be analyzed by NRPP certified Analytical Laboratories and also certified to provide Analytical Services using the following device(s):
CR-2282 SunRadon 1028-XP
AT-8207 RSSI AT-101
AC-8201 Air Chek Pro Chek
The radon office for the state in which this person resides may be contacted for information on radon and local requirements. For additional information contact NRPP at 828-348-0185, or visit the NRPP web-site at nrpp.info
State Radon Program Contact Number: (971) 673-0440

Appendix A: Map of Results - Woodard



P3606 / WADE GERVAIS

Kit Number	Start Date	Start Time	End Date	End Time	Temp.	Facility	Building	Room	Project ID	Floor	Result
12279824	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MODULE	CAFETERIA EAST	WOODARD CAMPUS 25-C081F	1	1.5
12279826	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	ROOM 115	WOODARD CAMPUS 25-C081F	1	< 0.3
12279837	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	ROOM 123	WOODARD CAMPUS 25-C081F	1	5.0
12279848	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MODULE	CAFETERIA EAST	WOODARD CAMPUS 25-C081F	1	1.7
12279852	2026-01-26	8:00 am			70		MAIN	GYM WEST	WOODARD CAMPUS 25-C081F	1	
12279900	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	ROOM 123	WOODARD CAMPUS 25-C081F	1	4.7
12350028	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	ROOM 121	WOODARD CAMPUS 25-C081F	1	4.2
12350033	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	ROOM 6	WOODARD CAMPUS 25-C081F	1	< 0.3
12350051	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	ROOM 104	WOODARD CAMPUS 25-C081F	1	< 0.3
12350090	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MODULE	CAFETERIA WEST	WOODARD CAMPUS 25-C081F	1	2.1
12350094	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	ROOM 113	WOODARD CAMPUS 25-C081F	1	< 0.3
12350098	2026-01-26	8:00 am	2026-01-30	8:00 am	70			OFFICE 102	WOODARD CAMPUS 25-C081F	1	0.8
12350106	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	ROOM 129	WOODARD CAMPUS 25-C081F	1	1.3
12350108	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	ROOM 113	WOODARD CAMPUS 25-C081F	1	< 0.3
12350123	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	ROOM 125	WOODARD CAMPUS 25-C081F	1	0.7
12350136	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	GYM EAST	WOODARD CAMPUS 25-C081F	1	< 0.3
12350138	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	WORK ROOM	WOODARD CAMPUS 25-C081F	1	< 0.3
12350146	2026-01-26	8:00 am	2026-01-30	8:00 am	70			MAIN OFFICE	WOODARD CAMPUS 25-C081F	1	0.6
12350178	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	ROOM 106	WOODARD CAMPUS 25-C081F	1	< 0.3
12350180	2026-01-26	8:00 am	2026-01-30	8:00 am	70			HEALTH	WOODARD CAMPUS 25-C081F	1	0.7
12350195	2026-01-26	8:00 am	2026-01-30	8:00 am	70		MAIN	OFFICE 102B	WOODARD CAMPUS 25-C081F	1	< 0.3

Air Chek 1936 Butler Bridge Rd, Mills River, NC 28759-3892 Phone: (828) 684-0893 Fax: (828) 684-8498

Felicia Flanders

Has satisfactorily fulfilled the requirements set forth by the
National Radon Proficiency Program and is therefore certified as a:

Radon Measurement Professional

with Standard and Analytical Services

NRPP ID 112059-RMP

Issued On: 2025-03-25 Expires: 2027-04-30

Valid for specific activities or measurement devices, which can be verified with NRPP. State and local agencies may have additional requirements.

In witness Whereof,
I have subscribed my name as a
Representative of NRPP

Ashley Falco
Chair, Certification Council