



July 16, 2021

Reta Doland
Oakridge School District 76
47997 W 1st Street
Oakridge, Oregon 97463

Via email: rdoland@ohswarriors.net

Regarding: Oakridge Elementary School – Long-Term Radon Testing
48119 E 1st Street
Oakridge, Oregon 97463
PBS Project 52517.004

Dear Ms. Doland:

From January 27 to June 16, 2021, PBS Engineering and Environmental Inc. (PBS) performed long-term radon testing in select locations at Oakridge Elementary School in Oakridge, Oregon. The Environmental Protection Agency (EPA) and Oregon Health Authority (OHA) recommend conducting long-term follow-up testing in areas where initial short-term tests indicated concentrations at or above 4.0 pCi/L. PBS used RSSI long-term Alpha-track Radon Detectors to measure radon levels in areas selected by the district for follow-up testing. **No samples taken by PBS were found to be at or above the EPA action level of 4.0 pCi/L.**

In addition to the two long-term Alpha-track Radon Detectors deployed in areas with previously measured elevated radon levels using short term testing methods, two spike samples and one duplicate sample were analyzed by RSSI in Morton Grove, Illinois for quality control (QC) purposes.

The following table presents the results of all tests conducted during this study. Results are listed in pCi/L.

Kit Number	Start Date	End Date	Room	Floor	Result (pCi/L)	Comments
413578	1/27/2021	6/16/2021	Classroom 12	1	2.1	
413577	1/27/2021	6/16/2021	Classroom 12	1	2.1	Duplicate Sample RPD: 0%
413584	5/15/2021	6/14/2021	Spike Sample	NA	26.0 (measured) 31.0 (reference)	Spike Device RPE: -16.1%
413591	5/15/2021	6/14/2021	Spike Sample	NA	27.0 (measured) 31.0 (reference)	Spike Device RPE: -12.9%
413581	1/27/2021	6/16/2021	Classroom 14	1	2.9	

Relative Percentage Error (RPE) is calculated by taking the difference between a measured value and reference value, dividing by the reference, and multiplying by 100. A trend in RPE values that are more than 30% should be investigated.

No testing abnormalities were noted during sampling.

Refer to the attached laboratory analysis report for additional details.

In addition to the EPA recommendation that radon concentrations do not exceed 4.0 pCi/L, OHA/EPA recommend that the following steps be conducted based on the results of a room’s follow-up long-term test:

- **If the result is less than 2.0 pCi/L**, school districts are required to test again every 10 years, per Oregon Revised Statute 332.166-167.
- **If the result is between 2.0 pCi/L and 4.0 pCi/L**, consider fixing (i.e., lowering) the radon in that room.
- **If the follow-up test is long-term, and the result is 4.0 pCi/L or above**, the EPA recommends that the radon concentration in that room be reduced to below 4.0 pCi/L.
- National guidelines recommend conducting short-term radon measurements no sooner than 24 hours after a mitigation system is operational and within 30 days after installation of system(s).
- OHA recommends that schools with radon mitigation systems be retested every 5 years.

LIMITATIONS OF SCOPE

This study was limited to the tests and locations as previously indicated. The site as a whole may have other environmental concerns that will not be characterized by this study. The findings and conclusions of this work are not scientific certainties, but probabilities based on professional judgment concerning the significance of the data gathered during the course of this investigation. PBS is not able to represent conditions on the site or adjoining sites beyond those detected or observed by PBS.

Please feel free to contact me at 541.868.0955 or jeff.heeren@pbsusa.com with any questions or comments.

Sincerely,

Jeff Heeren
Senior Project Manager/Eugene Office Manager

Attachment: RSSI Laboratory Analysis Report(s)



6312 West Oakton Street
Morton Grove, IL 60053-2723
847-965-1999
Fax 847-965-1991

July 02, 2021

PBS Engineering and Environmental
Aaron LeFore
3500 Chad Drive, Suite 100
Eugene, OR 97408
United States

Alpha Track Radon Test Results

Detector Number	pCi/L	Test Location	Test Address	Start Date	End Date	Note*
413576	2.0 ± 5%	Oakridge HS - LCC Lab	47997 W 1st street Oakridge, OR 97463	1/27/2021	6/16/2021	
413577	2.1 ± 5%	Oakridge ES - Room 12	48119 E 1st street Oakridge, OR 97463	1/27/2021	6/16/2021	
413578	2.1 ± 4%	Oakridge ES - Room 12	48119 E 1st street Oakridge, OR 97463	1/27/2021	6/16/2021	
413580	2.1 ± 4%	Oakridge HS - LCC Lab	47997 W 1st street Oakridge, OR 97463	1/27/2021	6/16/2021	
413581	2.9 ± 4%	Oakridge ES - Room 14	48119 E 1st street Oakridge, OR 97463	1/27/2021	6/16/2021	
413584	26.0 ± 3%	Spike Sample		5/15/2021	6/14/2021	
413591	27.0 ± 3%	Spike Sample		5/15/2021	6/14/2021	

Analytical results showing the radon concentration relate only to the device(s) tested in the condition as received by RSSI. Results were calculated based on information provided by the client.

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Detector Number	pCi/L	Test Location	Test Address	Start Date	End Date	Note*
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Analyzed By:  07/01/ 2021
 Zoe Darlington
 Radon Analyst
 Analysis Date

END REPORT

* 1-Broken Seal, 2-Damaged Filter, 3-Loose Test Material, 4-Missing Test Material, 5-Missing End Date, 6-Missing Start Date, 7-Less Than 8 Days, 8-Past Expiration Date, 9-Missing Both Dates, NA-No applicable notes

Analytical results showing the radon concentration relate only to the device(s) tested in the condition as received by RSSI. Results were calculated based on information provided by the client.

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