

# INDUSTRIAL HYGIENE REPORT

## RADON TESTING REPORT

### Hoover Elementary School

Report to: Vonnie B. Good, EHS Salem-Keizer Public Schools

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On-site: March 15 - 18, 2022

Report: March 29, 2022

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#### PURPOSE

Radon retesting was done at Hoover Elementary School to determine if there have been any changes in the background radon levels in the classrooms, offices and other rooms that are in contact with the ground since the 2014 tests. Hoover Elementary School has also undergone a major construction project that included additional classrooms, offices and workspaces. These new areas also needed to be tested for radon levels.

This testing is a requirement in OAR 332.331 Healthy and Safe Schools Plan rules.

#### CONCLUSION and RECOMMENDATIONS

**All tested rooms had low to non-detectable levels of radon.**

#### TESTING

Radon testing was conducted using protocols recommended by the Oregon Health Authority per OAR 332.345. Radon Air-Chek short-term test devices were used in the rooms by suspending the device in each room. The testing occurred from March 15-18, 2022, during normal and routine school ventilation system operation. Weather conditions during the weeks prior to testing had been wet with moderate temperatures.

This testing was conducted under COVID-19 recommended precautions of having increased outside air supplied to the building.

Quality assurance testing was also conducted by blank (QCB) test devices, and duplicate samples per the recommendations found in OAR 332.345.

## **EPA RADON GUIDELINES**

The EPA has set an Action Level of 4.0 pCi/L (picoCuries per liter) for schools. If classrooms, offices or buildings have radon levels at or above 4.0 pCi/L, EPA recommends that schools take action to reduce the level. These actions include:

Step 1. If your result is 4.0 pCi/L or higher take a follow-up test (Step 2) to be sure.

Step 2. Follow up with either a long-term test or a second short-term test.

The World Health Organization has set their action level at 2.7 pCi/L. Salem-Keizer Public Schools has determined that 2.7 pCi/L is a target level where retesting should be done.

## **CONTROL OF RADON LEVELS IN SCHOOLS**

The major control mechanism for lowering radon levels within school buildings is the use of dilution ventilation. If the amount of outside air delivered into a building increases, the radon levels should decrease.

March 22, 2022

**\*\* LABORATORY ANALYSIS REPORT \*\***

Radon test result report for:

**HOOVER  
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11118774	1 E	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	1.3 ± 0.3	2022-03-21
11118773	1 W	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	0.7 ± 0.3	2022-03-21
11118753	10	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	1.3 ± 0.3	2022-03-21
11118754	10S	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	1.2 ± 0.3	2022-03-21
11118755	11	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	0.6 ± 0.3	2022-03-21
11118756	12	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	1.5 ± 0.3	2022-03-21
11118745	120	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	0.7 ± 0.3	2022-03-21
11118749	121	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	0.6 ± 0.3	2022-03-21
11118748	121	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	0.6 ± 0.3	2022-03-21
11118750	122	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	0.7 ± 0.3	2022-03-21
11118751	123	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	< 0.3	2022-03-21
11118757	13	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	0.6 ± 0.3	2022-03-21
11118765	14	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	< 0.3	2022-03-21
11118762	15	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	0.7 ± 0.3	2022-03-21
11118764	15	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	< 0.3	2022-03-21
11118763	16	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	< 0.3	2022-03-21
11118766	17	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	0.9 ± 0.3	2022-03-21
11118775	18	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	0.9 ± 0.3	2022-03-21
11118767	19	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	0.9 ± 0.3	2022-03-21
11118735	3	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	0.7 ± 0.3	2022-03-21
11118737	4	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	0.7 ± 0.3	2022-03-21
11118736	4	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	0.7 ± 0.3	2022-03-21
11118738	5	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	1.2 ± 0.3	2022-03-21
11118739	6	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	< 0.3	2022-03-21
11118740	7	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	0.8 ± 0.3	2022-03-21
11118741	8	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	0.8 ± 0.3	2022-03-21
11118752	9	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	< 0.3	2022-03-21
11118744	AUX GYM	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	< 0.3	2022-03-21
11118732	BEHAVIOR SPECIALIST	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	< 0.3	2022-03-21
11118768	CAFETERIA N	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	< 0.3	2022-03-21
11118769	CAFETERIA S	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	0.6 ± 0.3	2022-03-21
11118758	COMP LAB	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	0.6 ± 0.3	2022-03-21
11118777	CONF RM	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	< 0.3	2022-03-21
11118776	COUNSELOR	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	< 0.3	2022-03-21
11118747	GYM N	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	< 0.3	2022-03-21
11118746	GYM W	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	0.5 ± 0.3	2022-03-21
11118730	HEALTH RM	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	< 0.3	2022-03-21

Radon test result report for:

**HOOVER  
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11118770	KITCHEN OFFICE	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	< 0.3	2022-03-21
11118759	LIBRARY	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	0.7 ± 0.3	2022-03-21
11118761	LIBRARY CONF RM	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	< 0.3	2022-03-21
11118760	LIBRARY W	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	< 0.3	2022-03-21
11118727	MAIN OFFICE	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	< 0.3	2022-03-21
11118743	MUSIC	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	< 0.3	2022-03-21
11118728	OFFICE MANAGER	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	< 0.3	2022-03-21
11118729	OUTREACH COORD	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	0.6 ± 0.3	2022-03-21
11118742	PE OFFICE	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	< 0.3	2022-03-21
11118731	PRINCIPAL	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	< 0.3	2022-03-21
11118778	QCB1	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	< 0.3	2022-03-21
11118779	QCB2	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	< 0.3	2022-03-21
11118780	QCB3	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	< 0.3	2022-03-21
11118733	RM 2	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	0.5 ± 0.3	2022-03-21
11118734	STAFF ROOM	2022-03-15 @ 11:00 am	2022-03-18 @ 10:00 am	0.8 ± 0.3	2022-03-21
11118771	STAGE	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	0.8 ± 0.3	2022-03-21
11118772	STAGE OFFICE	2022-03-15 @ 11:00 am	2022-03-18 @ 11:00 am	0.6 ± 0.3	2022-03-21

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**Note: QCB1-3 are blank samples and part of the quality control process for radon testing.**