



November 7, 2017

Casey Waletich
Executive Director of Facilities, Safety, and Operations
Hillsboro School District
4901 SE Witch Hazel Road
Hillsboro, Oregon 97123

Via email: waleticc@hsd.k12.or.us

Regarding: District Wide Radon Testing
Glencoe High School
2700 NW Glencoe Road
Hillsboro, Oregon
PBS Project 23440.024, Phase 0002

Dear Mr. Waletich:

From October 23 to October 26, 2017, PBS Engineering and Environmental Inc. (PBS) performed short term radon testing at Glencoe High School located at 2700 NW Glencoe Road in Hillsboro, Oregon.

The Environmental Protection Agency (EPA) and Oregon Health Authority (OHA) recommend that buildings be tested for radon and that any radon concentrations be maintained below 4.0 picocuries per liter (pCi/L) of air. PBS used Air Chek, Inc. brand single-use, short-term radon test kits to measure radon levels in frequently-occupied rooms that are in contact with the ground or above unoccupied basements or crawlspaces.

Laboratory results indicate all short-term radon tests at Glencoe High School tested below 4.0 pCi/L.

See the attached Laboratory Analysis Report for more details.

In addition to the EPA recommendation that radon concentrations not exceed 4.0 pCi/L, OHA recommends the following steps be conducted based on the results of a room's initial short-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 result is from 4.0 pCi/L to 8.0 pCi/L**, perform a follow-up measurement of that room using a long-term test. This test should be conducted over as much of a nine-month school year as possible, when the room is likely to be occupied. If that result is equal to or greater than 4.0 pCi/L, the radon in the room should be fixed (i.e., lowered).
- **If the initial short-term test result is equal to or greater than 8.0 pCi/L**, conduct a second short-term test and average its result with the initial short-term test result. If the average of the two is equal to or greater than 4.0 pCi/L, radon in the room should be fixed (i.e., lowered).

Note: A great difference in the results of the short-term tests may indicate a flaw in the testing process. Investigate and consider retesting. For situations in which one of the test results is equal to or greater than 4.0 pCi/L, if the higher result is two or more times the lower result, repeat the test.

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 503.417.7694 or chris.boyce@pbsusa.com with any questions or comments.

Sincerely,



Chris Boyce
Project Manager

Attachment: AirChek, Inc Laboratory Analysis Report

CB::bmp

November 1, 2017

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7956829	ART	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	1.7 ± 0.2	2017-10-27

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

Radon test result report for:
GLENCOE HIGH
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7956840	ADMIN	2017-10-23 @ 11:00 am	2017-10-26 @ 11:00 am	0.6 ± 0.2	2017-10-27
7956835	ART 173	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	1.2 ± 0.2	2017-10-27
7956836	ART 173 DUP	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	0.9 ± 0.2	2017-10-27
7956841	ASST PRIN 1	2017-10-23 @ 11:00 am	2017-10-26 @ 11:00 am	0.6 ± 0.2	2017-10-27
7956822	ATHLETIC OFFIC 1	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	0.7 ± 0.2	2017-10-27
7956821	ATHLETIC OFFIC2	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	0.9 ± 0.2	2017-10-27
7956890	AUDITORIUM 1	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	0.9 ± 0.2	2017-10-27
7956889	AUDITORIUM 2	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	0.8 ± 0.2	2017-10-27
7956878	BAND	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	0.8 ± 0.2	2017-10-27
7956885	BAND OFFICE	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	0.9 ± 0.2	2017-10-27
7956826	BOOKKEEPER 2	2017-10-23 @ 11:00 am	2017-10-26 @ 11:00 am	< 0.3	2017-10-27
7956831	BOOKKEEPER1	2017-10-23 @ 11:00 am	2017-10-26 @ 11:00 am	< 0.3	2017-10-27
7956802	BOYS LOCKER OFF	2017-10-23 @ 9:00 am	2017-10-26 @ 10:00 am	< 0.3	2017-10-27
7956882	CHOIR	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	0.8 ± 0.2	2017-10-27
7956881	CHOIR DUP	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	0.6 ± 0.2	2017-10-27
7956884	CHOIR OFF BLANK	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956883	CHOIR OFFICE	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	0.6 ± 0.2	2017-10-27
7956869	CLR 104	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956868	CLR 105	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	0.5 ± 0.2	2017-10-27
7956858	CLR 106	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	0.6 ± 0.2	2017-10-27
7956865	CLR 107	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	0.7 ± 0.2	2017-10-27
7956870	CLR 107 BLANK	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956871	CLR 108	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956872	CLR 109	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	0.9 ± 0.2	2017-10-27
7956864	CLR 110	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956863	CLR 111	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	0.7 ± 0.2	2017-10-27
7956857	CLR 112	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956867	CLR 113	2017-10-23 @ 11:00 am	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956862	CLR 114	2017-10-23 @ 11:00 am	2017-10-26 @ 12:00 pm	0.6 ± 0.2	2017-10-27
7956861	CLR 115	2017-10-23 @ 11:00 am	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956860	CLR 115 DUP	2017-10-23 @ 11:00 am	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956855	CLR 116	2017-10-23 @ 11:00 am	2017-10-26 @ 12:00 pm	0.6 ± 0.2	2017-10-27
7956849	CLR 118	2017-10-23 @ 11:00 am	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956859	CLR 119	2017-10-23 @ 11:00 am	2017-10-26 @ 12:00 pm	0.7 ± 0.2	2017-10-27
7956853	CLR 121	2017-10-23 @ 11:00 am	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956852	CLR 123	2017-10-23 @ 11:00 am	2017-10-26 @ 12:00 pm	0.5 ± 0.2	2017-10-27
7956854	CLR 124	2017-10-23 @ 11:00 am	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27

Radon test result report for:
GLENCOE HIGH
MAIN

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7956851	CLR 125	2017-10-23 @ 11:00 am	2017-10-26 @ 11:00 am	< 0.3	2017-10-27
7956848	CLR 126	2017-10-23 @ 11:00 am	2017-10-26 @ 11:00 am	< 0.3	2017-10-27
7956842	CLR 128	2017-10-23 @ 11:00 am	2017-10-26 @ 11:00 am	0.7 ± 0.2	2017-10-27
7956876	CLR 131	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956877	CLR 132	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	0.5 ± 0.2	2017-10-27
7956856	CLR 133	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956873	CLR 134	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956874	CLR 134 DUP	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956818	CLR 135	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	0.6 ± 0.2	2017-10-27
7956845	CLR 137	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	0.6 ± 0.2	2017-10-27
7956816	CLR 160	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	0.8 ± 0.2	2017-10-27
7956817	CLR 162	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	1.0 ± 0.2	2017-10-27
7956823	CLR 163	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	0.5 ± 0.2	2017-10-27
7956827	CLR 165	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	0.6 ± 0.2	2017-10-27
7956828	CLR 165 DUP	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	0.8 ± 0.2	2017-10-27
7956824	CLR 171	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	0.6 ± 0.2	2017-10-27
7956814	CLR 180	2017-10-23 @ 10:00 am	2017-10-26 @ 10:00 am	0.6 ± 0.2	2017-10-27
7956803	CLR 191	2017-10-23 @ 9:00 am	2017-10-26 @ 10:00 am	< 0.3	2017-10-27
7956809	CLR 192	2017-10-23 @ 9:00 am	2017-10-26 @ 10:00 am	< 0.3	2017-10-27
7956808	CLR 193	2017-10-23 @ 9:00 am	2017-10-26 @ 10:00 am	< 0.3	2017-10-27
7956806	CLR 194	2017-10-23 @ 9:00 am	2017-10-26 @ 10:00 am	< 0.3	2017-10-27
7956807	CLR 196	2017-10-23 @ 9:00 am	2017-10-26 @ 10:00 am	< 0.3	2017-10-27
7956838	CUST OFF BLANK	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	< 0.3	2017-10-27
7956830	CUST OFF DUP	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	< 0.3	2017-10-27
7956837	CUST OFFICE	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	< 0.3	2017-10-27
7956839	DEAN OFFICE	2017-10-23 @ 11:00 am	2017-10-26 @ 11:00 am	0.8 ± 0.2	2017-10-27
7956847	FOOD 127	2017-10-23 @ 11:00 am	2017-10-26 @ 11:00 am	< 0.3	2017-10-27
7956801	GIRLS LOCKER OFF	2017-10-23 @ 9:00 am	2017-10-26 @ 10:00 am	< 0.3	2017-10-27
7956846	GRAD OFFICE	2017-10-23 @ 11:00 am	2017-10-26 @ 11:00 am	< 0.3	2017-10-27
7956888	GREENHOUSE CLR	2017-10-23 @ 1:00 pm	2017-10-26 @ 1:00 pm	1.0 ± 0.2	2017-10-27
7956893	GREENHOUSE LAB	2017-10-23 @ 1:00 pm	2017-10-26 @ 1:00 pm	0.8 ± 0.2	2017-10-27
7956879	GYM 1	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956880	GYM 1	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956819	GYM 2	2017-10-23 @ 10:00 am	2017-10-26 @ 10:00 am	< 0.3	2017-10-27
7956820	GYM 2	2017-10-23 @ 10:00 am	2017-10-26 @ 10:00 am	< 0.3	2017-10-27
7956815	HEALTH	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	0.6 ± 0.2	2017-10-27
7956899	KITCHEN OFFICE	2017-10-23 @ 1:00 pm	2017-10-26 @ 1:00 pm	0.5 ± 0.2	2017-10-27

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7956898	LIFE SKILLS	2017-10-23 @ 1:00 pm	2017-10-26 @ 1:00 pm	0.7 ± 0.2	2017-10-27
7956825	MAIN OFFICE	2017-10-23 @ 11:00 am	2017-10-26 @ 11:00 am	0.7 ± 0.2	2017-10-27
7956811	METAL CLASSROOM	2017-10-23 @ 9:00 am	2017-10-26 @ 10:00 am	< 0.3	2017-10-27
7956810	METAL OFFICE	2017-10-23 @ 9:00 am	2017-10-26 @ 10:00 am	0.6 ± 0.2	2017-10-27
7956805	METALSHOP 101	2017-10-23 @ 9:00 am	2017-10-26 @ 10:00 am	0.5 ± 0.2	2017-10-27
7956843	OFFICE 136	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	< 0.3	2017-10-27
7956833	OFFICE WRKRM	2017-10-23 @ 11:00 am	2017-10-26 @ 11:00 am	0.7 ± 0.2	2017-10-27
7956832	OFFICE WRKRM DUP	2017-10-23 @ 11:00 am	2017-10-26 @ 11:00 am	< 0.3	2017-10-27
7956866	PRINCIPAL	2017-10-23 @ 12:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956850	ROOM 117	2017-10-23 @ 11:00 am	2017-10-26 @ 12:00 pm	0.9 ± 0.2	2017-10-27
7956844	SECURITY OFF	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	0.6 ± 0.2	2017-10-27
7956834	STAFF LOUNGE	2017-10-23 @ 11:00 am	2017-10-26 @ 12:00 pm	0.9 ± 0.2	2017-10-27
7956900	STAFFKIT LOUNGE	2017-10-23 @ 1:00 pm	2017-10-26 @ 1:00 pm	0.5 ± 0.2	2017-10-27
7956896	STU COUN BLANK	2017-10-23 @ 1:00 pm	2017-10-26 @ 1:00 pm	< 0.3	2017-10-27
7956897	STUDENT COUNCIL	2017-10-23 @ 1:00 pm	2017-10-26 @ 1:00 pm	0.5 ± 0.2	2017-10-27
7956875	VICE PRIN 2	2017-10-23 @ 12:00 pm	2017-10-26 @ 11:00 am	0.9 ± 0.2	2017-10-27
7956887	WEIGHT ROOM	2017-10-23 @ 1:00 pm	2017-10-26 @ 1:00 pm	0.7 ± 0.2	2017-10-27
7956804	WEIGHTROOM 182	2017-10-23 @ 9:00 am	2017-10-26 @ 10:00 am	< 0.3	2017-10-27
7956813	WOOD OFFICE	2017-10-23 @ 10:00 am	2017-10-26 @ 11:00 am	0.9 ± 0.2	2017-10-27
7956812	WOOD SHOP	2017-10-23 @ 10:00 am	2017-10-26 @ 10:00 am	1.0 ± 0.2	2017-10-27
7956895	WORKSHOP	2017-10-23 @ 1:00 pm	2017-10-26 @ 1:00 pm	< 0.3	2017-10-27
7956894	WORKSHOP DUP	2017-10-23 @ 1:00 pm	2017-10-26 @ 1:00 pm	0.8 ± 0.2	2017-10-27
7956886	WRESTLING	2017-10-23 @ 1:00 pm	2017-10-26 @ 12:00 pm	< 0.3	2017-10-27
7956892	WRESTLING	2017-10-23 @ 1:00 pm	2017-10-26 @ 12:00 pm	0.5 ± 0.2	2017-10-27
7956891	WRESTLING DUP	2017-10-23 @ 1:00 pm	2017-10-26 @ 12:00 pm	0.6 ± 0.2	2017-10-27