

INDUSTRIAL HYGIENE REPORT

RADON TESTING REPORT

CTEC

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

By: Kathy Ellis, Senior Industrial Hygiene Consultant

Reviewed By: DeEtta Burrows, MSPH, CIH – Wise Steps, Inc.

On-site: January 27–30, 2020

Report: February 4, 2020

PURPOSE

Radon was done at the CTEC building to determine the background radon levels in the classrooms, offices and of other rooms that are in contact with the ground. This is a requirement in ORS 332 Healthy and Safe Schools Plan rules.

CONCLUSION and RECOMMENDATION

All tested locations had levels of radon below the EPA Action Level of 4.0 picoCuries/Liter (pCi/L.)

TESTING

Radon testing was conducted using protocols recommended by the Oregon Health Authority per ORS 332.166-167. Radon Air-Chek short-term test devices were used in the rooms by suspending the device in each room. The testing occurred January 27 - 30, 2020 during normal and routine building ventilation system operation. Weather conditions during the weeks prior of testing had been rainy and relatively warm.

Quality assurance testing was also conducted by utilizing duplicate, blank (QCB) and lab spiked (QCS) test devices per the recommendations found in ORS 332.166-167.

QCS1, QCS2 and QCS3 are laboratory-spiked test kits. They do NOT represent a radon measurement in the building. They are part of the quality assurance process for testing, as outlined by the Oregon Health Authority.

EPA RADON GUIDELINES

The EPA has set an Action Level of 4.0 pCi/L (picoCuries per liter) for schools. If classrooms 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.

Sample Data

January 31, 2020

** LABORATORY ANALYSIS REPORT **

Radon test result report for:
SK-MTN WEST
CTEC

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9332161	3D DESIGN LAB	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.8 ± 0.3	2020-01-31
9332155	AA	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332134	AESTHOLOGY	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.6 ± 0.3	2020-01-31
9332182	AGRISCIENCE CLASSROOM EAST	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.5 ± 0.3	2020-01-31
9332125	AGRISCIENCE CLASSROOM WEST	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
7280932	AGRISCIENCE OFFICE	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
7280931	AGRISCIENCE WET LAB	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
9332146	AP OFFICE LOBBY	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332147	AP OFFICE MANAGER	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.7 ± 0.3	2020-01-31
9332176	AUTO ENGLISH MATH CLASSROOM	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332178	AUTOBODY CLASSROOM	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.9 ± 0.3	2020-01-31
9332177	AUTOBODY OFFICE	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	1.3 ± 0.3	2020-01-31
9332142	BUSINESS CLASSROOM	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.5 ± 0.3	2020-01-31
9332131	BUSINESS COLLAB CONF ROOM	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
9332145	BUSINESS COMPUTER LAB	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.5 ± 0.3	2020-01-31
9332143	BUSINESS LARGE CONF ROOM	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332144	BUSINESS OFFICE	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332141	BUSINESS SMALL CONF ROOM	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332179	CAD LAB FOR MANUF/CONST EAST	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	2.3 ± 0.3	2020-01-31
7280917	CAD LAB SOUTH	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	2.1 ± 0.3	2020-01-31
7280928	CAFé	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
9332138	CAREER CENTER	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332135	COLOR ROOM	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.7 ± 0.3	2020-01-31
7280922	COMMONS EAST	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.5 ± 0.3	2020-01-31
7280924	COMMONS NORTH	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.5 ± 0.3	2020-01-31
7280923	COMMONS WEST	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.8 ± 0.3	2020-01-31
9332156	CONF ROOM	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332171	CONSTRUCTION CONF ROOM	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.8 ± 0.3	2020-01-31
9332174	CONSTRUCTION MATH	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
7280918	CONSTRUCTION NORTH	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.6 ± 0.3	2020-01-31
7280921	CONSTRUCTION OFFICE	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	2.0 ± 0.3	2020-01-31
7280919	CONSTRUCTION SOUTH	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.8 ± 0.3	2020-01-31
7280920	CONSTRUCTION WEST	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.6 ± 0.3	2020-01-31
9332137	COSMETOLOGY CLASSROOM NORTH	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.9 ± 0.3	2020-01-31
9332181	COSMETOLOGY CLASSROOM SOUTH	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.9 ± 0.3	2020-01-31
9332133	COSMETOLOGY OFFICE	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.6 ± 0.3	2020-01-31
9332132	COSMETOLOGY RECEPTION	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.5 ± 0.3	2020-01-31

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CTEC

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9332130	COURTROOM	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.5 ± 0.3	2020-01-31
7280930	CULINARY ARTS CLASSROOM	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
7280927	CULINARY KITCHEN	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
7280929	CULINARY OFFICE	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
9332163	DESIGN CONCEPT CLASSROOM	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332159	DESIGN ENGLISH SOCIAL STUDIES CLAS	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.7 ± 0.3	2020-01-31
9332139	DIGITAL CINEMA	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332157	DIRECTOR'S OFFICE	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332170	DRONE COLLAB CONF ROOM	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332167	DRONE ROBOTICS OFFICE	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.8 ± 0.3	2020-01-31
9332166	ELECTRONICS LAB	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.9 ± 0.3	2020-01-31
9332140	ENGLISH CLASSROOM	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332173	FABRICATION LAB NW	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.9 ± 0.3	2020-01-31
9332175	FABRICATION LAB SE	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	1.1 ± 0.3	2020-01-31
7274597	FISCAL	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	1.5 ± 0.3	2020-01-31
9332165	FLIGHT LAB EAST	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.8 ± 0.3	2020-01-31
9332164	FLIGHT LAB NW	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.8 ± 0.3	2020-01-31
9332124	HORTICULTURE LAB EAST	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.6 ± 0.3	2020-01-31
7280933	HORTICULTURE LAB NORTH	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.7 ± 0.3	2020-01-31
9332122	HORTICULTURE OFFICE	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.8 ± 0.3	2020-01-31
9332148	IA OFFICE 1	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332149	IA OFFICE 2	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.5 ± 0.3	2020-01-31
9332150	IA OFFICE 3	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332151	IA OFFICE 4 VALERIE	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.7 ± 0.3	2020-01-31
9332153	IA OFFICE 6	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
7280925	KITCHEN	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
7280926	KITCHEN OFFICE	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
9332129	LAW ENFORCEMENT CLASSROOM	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
9332126	LAW ENFORCEMENT NORTH	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
9332128	LAW ENFORCEMENT OFFICE	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
9332127	LAW ENFORCEMENT SOUTH	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	< 0.3	2020-01-31
7280912	MAIN OFFICE	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	1.5 ± 0.3	2020-01-31
7274596	MAIN OFFICE CONF ROOM	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	1.6 ± 0.3	2020-01-31
7280911	MAIN OFFICE LARGE CONF ROOM	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	1.4 ± 0.3	2020-01-31
7280913	MANUF EAST	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.7 ± 0.3	2020-01-31
7280916	MANUF OFFICE	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	1.9 ± 0.3	2020-01-31
7280914	MANUF SOUTH	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.7 ± 0.3	2020-01-31

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7280915	MANUF WEST	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.6 ± 0.3	2020-01-31
9332180	MFG CONSTRUCTION ENGLISH NE	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.8 ± 0.3	2020-01-31
9332172	MFG CONSTRUCTION ENGLISHWEST	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.6 ± 0.3	2020-01-31
7280909	MTN WEST	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	1.1 ± 0.3	2020-01-31
7280910	NURSE ROOM	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	1.7 ± 0.3	2020-01-31
7274598	OFFICE MANAGER	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	1.3 ± 0.3	2020-01-31
9332169	PHYSICS ENGLISH OFFICE	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.8 ± 0.3	2020-01-31
9332123	PLANT TISSUE ROOM	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	0.7 ± 0.3	2020-01-31
7274599	PRINCIPAL	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	1.4 ± 0.3	2020-01-31
9332158	PROGRAM ASSISTANT	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332183	QCB1	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332184	QCB2	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332185	QCB3	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332186	QCB4	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332119	QCS1	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	23.0 ± 1.4	2020-01-31
9332120	QCS2	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	23.3 ± 1.4	2020-01-31
9332121	QCS3	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	21.9 ± 1.3	2020-01-31
7274595	REGISTAR	2020-01-27 @ 9:00 am	2020-01-30 @ 8:00 am	1.4 ± 0.3	2020-01-31
9332136	SALON	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.8 ± 0.3	2020-01-31
9332168	UAS CAB LAB	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	0.7 ± 0.3	2020-01-31
9332162	VIDEO PRODUCTION CLASSROOM	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332160	VIDEO PRODUCTION STUDIO	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31
9332154	WEST LOBBY	2020-01-27 @ 10:00 am	2020-01-30 @ 9:00 am	< 0.3	2020-01-31

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QCS1, QCS2 and QCS3 are laboratory-spiked test kits. They do NOT represent a radon measurement in the building. They are part of the quality assurance process for testing, as outlined by the Oregon Health Authority.