David F. Metzger
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Certified Radon Tester Ohio License #: RS340 & RC213; NRPP ID#: 107699RT

Contract #: per D. Boyer/ C. Fredrichs for Radon Testing Services

Report of Radon Measurement Survey

Date: November 16, 2018
Site: Shaker Schools, Shaker Heights, Ohio
Onaway Elementary School and Woodbury Elementary School

We are pleased to provide the final report of short-term radon in-air testing at two buildings in the Shaker Heights Schools, conducted November 7, 2018 through November 12, 2018. (Onaway and Woodbury Elementary Schools.) The radon measurement testing was performed using *Extended Testing Protocol* in accordance with ANSI/AARST MALB 2014, which is in compliance with US EPA protocols and Ohio Department of Health guidelines. Testing was performed with E-PERM® Electret Ion Chambers

Radon is a naturally occurring radioactive gas that has been determined to be the major environmental cause of lung cancer. It is created from the natural breakdown of uranium, which is found in soil and rock all over the United States. Being lighter than the soil and rock around it, radon gas travels up through soil and enters buildings through cracks and other holes in the foundation. Outdoors, radon levels average 0.4 pCi/L (picocuries per liter of air). This level is not believed to be a significant health risk. However, indoor radon is trapped and accumulates to much higher levels. Nationally, indoor levels average approximately 1.4 pCi/L. The EPA recommends taking action to reduce indoor radon levels at or above 4 pCi/L.

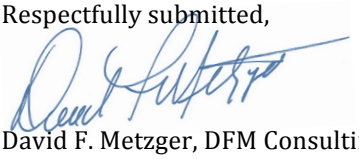
Radon is colorless, odorless and tasteless. Therefore the only way to know whether an elevated level of radon is present in any dwelling or workplace is to test for it. As a result of a nationwide survey of radon levels in schools, apartment buildings and commercial buildings, it is estimated that nearly one in five residential and public buildings have at least one ground contact (or a room above an unused crawl space or garage) with short term radon measurements above 4 pCi/L.

Testing under the *Extended Testing Protocol* requires that one E-PERM® device be placed in each test location with re-testing being required where the initial results are above 4.0 pCi/L. (Quality Control devices are also deployed along with the initial devices.) Retesting should be performed with another short-term test as soon as is reasonably possible to confirm the elevated results within the same timing phase. Results of the retesting can then be averaged with the results of the initial test to help to make decisions about taking steps to reduce radon levels. There were no measurement locations in either school that were above the 4.0 pCi/L Action Level.

The following pages provide a complete breakdown of the testing process and the results of that process and recommendations for action going forward.

Please feel free to contact me if you have any questions regarding this report.

Respectfully submitted,



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Onaway and Woodbury Schools, Radon Testing Procedures and Results

Short term, three to four day, Radon In-Air testing was performed at the aforementioned facilities between November 7 and November 12, 2018. Testing was conducted with Short Term E-PERM® Electret Ion Chambers. The measurement devices were placed in accordance with the EPA Protocols (EPA 402-R-92-004, July 1992 (revised)) and ANSI/AARST MALB 2014 .

As specified in the protocol, measurement devices (E-PERMs) were placed in 100% of the ground contact rooms that are or may be regularly occupied and on at least one room on each floor of each building (ensuring that at least 10% of all rooms above the ground floor were tested). Large rooms such as the gym were tested at a rate of one device for at least every 2,000 square feet of floor space.

The Radon Electret Calculation Log that follows (pages 6-8) provides a room by room breakdown by building of the testing results.

Closed Building Conditions and Weather

Closed Building Conditions (CBC) were in place for more than 12 hours prior to testing and were, for the most part, maintained during the testing period. Heating and air conditioning of the facility operated as normal during the entire testing period. An effort was made to ensure that doors were opened only as needed.

Weather conditions during the test were not remarkable. Seasonal fall weather prevailed. There were no significant weather events that occurred during the testing period that would have had an effect on the results.

Quality Control Measures

Duplicates

Duplicate measurements provide a check on the quality of measurement result and allow the technician to make estimates of the relative precision of the devices measurements. Duplicates devices are placed in at least 10% of the device locations as defined by the aforementioned protocol. All produced duplicate results within the tolerable range. See Quality Control Duplicate entries on the Radon Electret Calculation Log (pages 6-8).

Blanks

Blanks are unexposed devices used as a laboratory analysis tool to ensure that background measurements and corrections are within tolerance. Sealed blank devices were placed in 6% of the locations and all tested below the lower limit of detection of the device, indicating no background radiation effect. Blanks are noted on the Radon Electret Log on pages 6-8 of this report.

Spikes

Spike Testing is done to ensure proper calibration of both devices and laboratory measurements. Licensed and certified Radon Testers are required to perform spike tests at a rate of 3% of the number of radon tests performed (or a maximum of 6/mo.). Spike testing at Rad Elec, Inc. produced Relative Percent Error (RPE) that were well below the maximum threshold specified by the USEPA. Spike testing results can be found on page 8 of this report.

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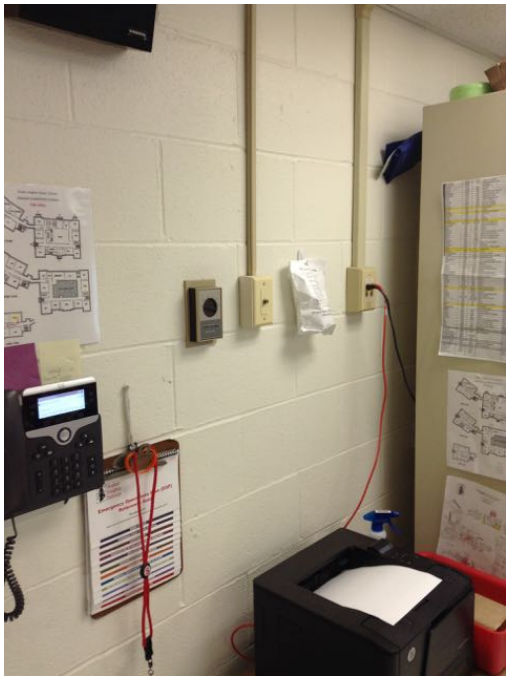
Device Placement

Devices were placed in accordance with aforementioned protocol. Photos of typical placements are shown below. Photos indicating placement in most rooms are part of the testers records and will be made available upon request.



E-PERM® device was deployed inside a breathable Tyvek envelope. Room locations and deployment data are indicated on each envelope.

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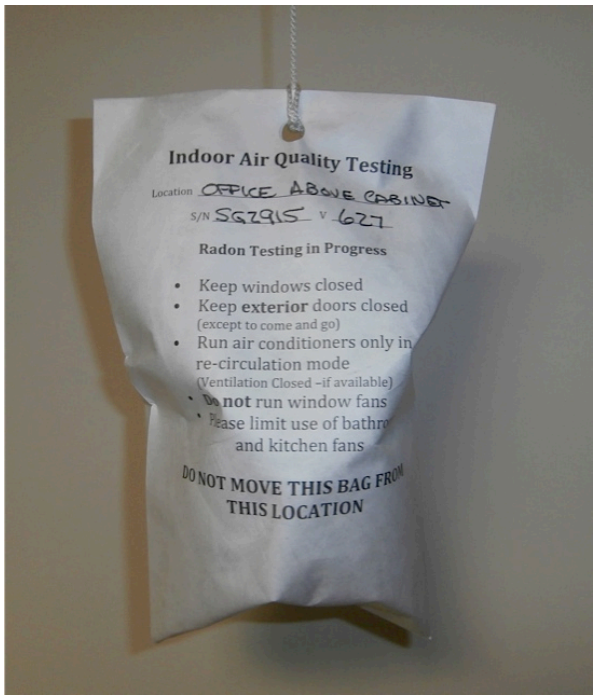

Follow-up

The procedures of Extended Testing Protocol call for follow-up testing at locations where initial results were above 4.0 pCi/L. Recommended testing may be another short term test or a long term (91 to 365 days) test depending on the recorded radon concentration. Although follow-up testing will not be necessary because there were no elevated measurements detected in the initial survey, 1st Option will continue to be available to provide any short or long term follow-up testing required with either E-PERM® radon detection device or Alpha Track devices.

IRE (Individual Relative Error)

Calculation of Individual Relative Error for all duplicates was within acceptable tolerances. All measured less than the Lower Limit of Detection ability of the measurement device.

This report includes the following documentation:

Deployment Data Form and Tamper Resistant Method

Tyvek envelopes were used to hold the E-PERM® radon detection device. These envelopes contained Closed Building Condition Instructions. Data regarding placement of the devices was documented on the envelope and tracked via computer input. (As indicated above) The envelope was then sealed with a wire tie ensuring that the device was not tampered with. The envelopes were then hung with Wire ties or placed with tamper tape to ensure that they were not moved.

Photo logging of deployment

Photographic documentation of typical deployment locations is shown on page 5 of this report. Additional photographs of deployments will be made available as needed.

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Radon Electret Log / Radon Calculation Log

The record of devices, their deployment locations, and details regarding deployment with indications of offices, rooms/bays tested, details of testing, and results is found on pages 7-19 of this report.

* * *

For more information about Radon please see ***A Citizen's Guide to Radon*** which can be obtained on the web at *http://www.epa.gov/radon/pubs/citguide.html* or the Ohio Department of Health, Indoor Radon Program 1-800-523-4439, or on the web at *http:www.odh.ohio.gov/odhPrograms/rp/nm_saf/indrad.aspx* . or *http://radon.utoledo.edu* , or by contacting 1st Option Radon Measurement at *davidmprints@yahoo.com*.

For additional information contact
Ohio Department of Health, Indoor Radon Program
1-800-523-4439 or on the web at *http://www.odh.ohio.gov/odhPrograms/rp/nm_saf/indrad.aspx or http//radon.utoledo.edu*

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Radon Calculation Onaway Elementary School

V4.2 (16 May 2018)

Units = US

Room Deployed	Electret Serial Number	Start Date/Time	End Date/Time	Total Days Exposure	Initial Voltage	Final Voltage	EIC CF	EIC Config	Elevation Feet	Elevation CF	γ µR/h	Radon in Air pCi/L	Average of Duplicates	Notes	± pCi/L	Relative % Error
9	SGC675	11/7/18 9:49	11/12/18 9:51	5.00	457	443	1.9067	SST	1050	1.00	7.3	**0.8**			±0.1	17%
10	SHH055	11/7/18 9:44	11/12/18 9:54	5.01	450	437	1.9029	SST	1050	1.00	7.3	**0.7**			±0.1	19%
11	SKP423	11/7/18 9:40	11/12/18 9:54	5.01	742	732	2.0352	SST	1050	1.00	7.3	**0.3**			±0.1	36%
12	SHH682	11/7/18 9:47	11/12/18 9:50	5.00	579	567	1.9696	SST	1050	1.00	7.3	**0.5**			±0.1	24%
101	SIZ217	11/7/18 10:32	11/12/18 9:36	4.96	680	664	2.0112	SST	1050	1.00	7.3	**0.9**			±0.1	15%
102	SIX691	11/7/18 10:29	11/12/18 9:39	4.97	473	458	1.9155	SST	1050	1.00	7.3	**0.9**			±0.1	15%
103	SIM357	11/7/18 10:25	11/12/18 12:03	5.07	542	516	1.9488	SST	1050	1.00	7.3	**2.0**			±0.2	9%
104	SKP131	11/7/18 10:21	11/12/18 9:33	4.97	714	696	2.0237	SST	1050	1.00	7.3	**1.1**			±0.1	13%
107	SKP033	11/7/18 11:32	11/12/18 9:20	4.91	736	710	2.0302	SST	1050	1.00	7.3	**1.9**			±0.2	9%
108	SJX696	11/7/18 11:34	11/12/18 9:23	4.91	634	617	1.9925	SST	1050	1.00	7.3	**1.1**			±0.1	13%
110	SKP648	11/7/18 10:17	11/12/18 9:47	4.98	759	749	2.0412	SST	1050	1.00	7.3	**0.3**			±0.1	36%
113. Speech Rm	SAF852	11/7/18 10:49	11/12/18 9:16	4.94	506	491	1.9333	SST	1050	1.00	7.3	**0.9**			±0.1	15%
Art Rm	SKO000	11/7/18 11:36	11/12/18 9:13	4.90	688	671	2.0141	SST	1050	1.00	7.3	**1.1**			±0.1	13%
Boiler rm	SIX342	11/7/18 9:57	11/12/18 9:48	4.99	502	477	1.9286	SST	1050	1.00	7.3	**1.9**			±0.2	9%
Gym	SKP473	11/7/18 12:00	11/12/18 9:38	4.90	747	728	2.0354	SST	1050	1.00	7.3	**1.2**			±0.1	12%
Gym Office	SKP953	11/7/18 10:42	11/12/18 9:20	4.94	707	690	2.0212	SST	1050	1.00	7.3	**1.0**	**1.1**	QA/AC	±0.1	14%
Gym Office	SHJ335	11/7/18 10:42	11/12/18 9:20	4.94	464	446	1.9095	SST	1050	1.00	7.3	**1.2**		Duplicate	±0.1	12%
Hall @ Boiler Room	SKN945	11/7/18 10:05	11/12/18 9:46	4.99	758	746	2.0405	SST	1050	1.00	7.3	**0.5**			±0.1	24%
Laminating	SHH010	11/7/18 10:46	11/12/18 9:21	4.94	491	477	1.9256	SST	1050	1.00	7.3	**0.8**			±0.1	17%
Maintenance Office	SHJ399	11/7/18 10:01	11/12/18 9:46	4.99	488	466	1.9218	SST	1050	1.00	7.3	**1.6**	**1.7**	QA/AC	±0.2	10%
Maintenance Office	SJU945	11/7/18 10:01	11/12/18 9:46	4.99	611	587	1.9812	SST	1050	1.00	7.3	**1.8**		Duplicate	±0.2	9%
Nurse's Office	SHI187	11/7/18 11:13	11/12/18 10:00	4.95	391	382	1.8670	SST	1050	1.00	7.3	**0.3**			±0.1	37%
Office	SHG926	11/7/18 10:55	11/12/18 9:30	4.94	330	317	1.8206	SST	1050	1.00	7.3	**0.8**	**0.8**	QA/AC	±0.1	17%
Office	SKP343	11/7/18 10:55	11/12/18 9:30	4.94	726	712	2.0288	SST	1050	1.00	7.3	**0.7**		Duplicate	±0.1	18%
Office	SJJ868	11/7/18 10:56	11/12/18 9:30	4.94	165	165	1.6452	SST	1050	1.00	7.3	**<LLD**		QC Blank		
Principal Office	SJX662	11/7/18 11:09	11/12/18 9:31	4.93	620	603	1.9866	SST	1050	1.00	7.3	**1.1**			±0.1	13%
Psyc 2	SHH351	11/7/18 11:26	11/12/18 9:40	4.93	511	495	1.9357	SST	1050	1.00	7.3	**1.0**			±0.1	14%
Psyc Rm	SKP697	11/7/18 11:25	11/12/18 9:39	4.93	731	712	2.0297	SST	1050	1.00	7.3	**1.2**			±0.1	12%
Stage	SJY643	11/7/18 11:21	11/12/18 9:41	4.93	481	461	1.9185	SST	1050	1.00	7.3	**1.4**			±0.2	11%
Teacher Lounge	SJV557	11/7/18 10:35	11/12/18 9:38	4.96	666	647	2.0051	SST	1050	1.00	7.3	**1.2**			±0.1	12%
QC Office Blank	SKP413	11/6/18 20:15	11/12/18 21:00	6.03	738	737	2.0354	SST	1050	1.00	7.3	**<LLD**		QC Blank		

<LLD = below the lower limit of dtetction of the measurement device..

Radon Concentrations

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Radon Calculation Woodbury Elementary School

V4.2 (16 May 2018)

Unit = US

Room Deployed	Electret Serial Number	Start Date/Time	End Date/Time	Total Days Exposure	Initial Voltage	Final Voltage	EIC CF	EIC Config	Elevation Feet	Elevation CF	γ µR/h	Radon in Air pCi/L	Average of Duplicate	± pCi/L	Error %
112A	SHJ718	11/7/18 14:21	11/12/18 11:08	4.87	450	429	1.9005	SST	1050	1.00	7.3	1.6	1.6	±0.2	10%
114	SKJ762	11/7/18 14:21	11/12/18 11:08	4.87	648	627	1.9974	SST	1050	1.00	7.3	1.5		±0.2	11%
116	SHI851	11/7/18 14:24	11/12/18 11:04	4.86	326	311	1.8166	SST	1050	1.00	7.3	1.0		±0.1	15%
116 art storage	SHH006	11/7/18 14:25	11/12/18 11:05	4.86	454	437	1.9040	SST	1050	1.00	7.3	1.2		±0.2	13%
120	SHI861	11/7/18 14:31	11/12/18 11:07	4.86	462	441	1.9075	SST	1050	1.00	7.3	1.6		±0.2	10%
124	SJQ650	11/7/18 14:34	11/12/18 11:12	4.86	643	616	1.9941	SST	1050	1.00	7.3	2.1		±0.2	9%
125	SHH156	11/7/18 14:39	11/12/18 11:13	4.86	513	496	1.9365	SST	1050	1.00	7.3	1.1		±0.1	13%
126	SIV185	11/7/18 14:37	11/12/18 11:11	4.86	448	427	1.8993	SST	1050	1.00	7.3	1.6		±0.2	10%
128	SKP293	11/7/18 14:41	11/12/18 11:13	4.86	725	707	2.0277	SST	1050	1.00	7.3	1.2		±0.1	12%
130	SJR717	11/7/18 14:45	11/12/18 11:14	4.85	351	318	1.8294	SST	1050	1.00	7.3	3.0		±0.2	7%
130, storage 1	SKG779	11/7/18 14:45	11/12/18 11:14	4.85	597	596	1.9801	SST	1050	1.00	7.3	<LLD	QC Blank		
203	SIZ533	11/7/18 14:48	11/12/18 11:16	4.85	438	415	1.8927	SST	1050	1.00	7.3	1.8		±0.2	10%
218	SHI618	11/7/18 14:54	11/12/18 11:19	4.85	401	383	1.8707	SST	1050	1.00	7.3	1.3		±0.2	12%
228	SKP024	11/7/18 15:04	11/12/18 11:23	4.85	756	741	2.0393	SST	1050	1.00	7.3	0.8		±0.1	16%
244	SKP895	11/7/18 15:07	11/12/18 11:27	4.85	734	718	2.0313	SST	1050	1.00	7.3	1.0		±0.1	14%
304	SKN994	11/7/18 15:11	11/12/18 11:30	4.85	748	734	2.0366	SST	1050	1.00	7.3	0.8		±0.1	17%
312	SHJ430	11/7/18 15:28	11/12/18 11:33	4.84	393	378	1.8663	SST	1050	1.00	7.3	1.0		±0.1	15%
317	SKG990	11/7/18 15:28	11/12/18 11:33	4.84	727	727	2.0317	SST	1050	1.00	7.3	<LLD	QC Blank		
326	SHG702	11/7/18 15:56	11/12/18 11:45	4.83	423	413	1.8874	SST	1050	1.00	7.3	0.4		±0.1	29%
347	SHH404	11/7/18 15:47	11/12/18 11:42	4.83	442	425	1.8969	SST	1050	1.00	7.3	1.2		±0.2	13%
Boiler 2	SHH341	11/7/18 15:44	11/12/18 11:40	4.83	541	525	1.9508	SST	1050	1.00	7.3	1.0		±0.1	14%
Boiler 3	SKO385	11/7/18 15:40	11/12/18 11:39	4.83	756	741	2.0393	SST	1050	1.00	7.3	0.9		±0.1	15%
Boiler Rm 1	SZG670	11/7/18 15:35	11/12/18 11:36	4.83	573	558	1.9662	SST	1050	1.00	7.3	0.9		±0.1	15%
Book Rm	SJN557	11/7/18 13:48	11/12/18 11:02	4.88	436	413	1.8915	SST	1050	1.00	7.3	1.8		±0.2	10%
Cafeteria	SKC950	11/7/18 13:47	11/12/18 10:59	4.88	647	632	1.9983	SST	1050	1.00	7.3	0.9		±0.1	15%
Cafiteria 2	SHI442	11/7/18 13:50	11/12/18 10:58	4.88	356	342	1.8404	SST	1050	1.00	7.3	0.9	0.9	±0.1	16%
CPT Rm	SIV571	11/7/18 13:50	11/12/18 10:58	4.88	501	486	1.9307	SST	1050	1.00	7.3	0.9		±0.1	15%
Gym 1	SJX658	11/7/18 13:28	11/12/18 10:53	4.89	523	501	1.9403	SST	1050	1.00	7.3	1.6		±0.2	10%
Gym 1	SIX431	11/7/18 13:04	11/12/18 10:41	4.90	426	404	1.8856	SST	1050	1.00	7.3	1.7		±0.2	10%
Gym 1 storage	SHI504	11/7/18 13:10	11/12/18 10:43	4.90	413	393	1.8779	SST	1050	1.00	7.3	1.5		±0.2	11%
Library	SHI463	11/7/18 13:38	11/12/18 10:56	4.89	389	367	1.8612	SST	1050	1.00	7.3	1.7	1.6	±0.2	10%
Lunch Room Office	SKP018	11/7/18 13:38	11/12/18 10:56	4.89	750	728	2.0359	SST	1050	1.00	7.3	1.5		±0.2	10%
Main Bookroom	SKO862	11/7/18 12:26	11/12/18 10:25	4.92	751	740	2.0382	SST	1050	1.00	7.3	0.4		±0.1	28%

<LLD = Less than the Lower Limit of Detection of the measurement device.

Radon Concentrations

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Radon Calculation Woodbury Elementary School Cnt'd

V4.2 (16 May 2018)

Unit = US

Room Deployed	Electret Serial Number	Start Date/Time	End Date/Time	Total Days Exposure	Initial Voltage	Final Voltage	EIC CF	EIC Config	Elevation Feet	Elevation CF	γ µR/h	Radon in Air pCi/L	Average of Duplicates	± pCi/L	Error %
Maintenance Office 1	SHH523	11/7/18 13:15	11/12/18 10:46	4.90	558	540	1.9585	SST	1050	1.00	7.3	1.2	1.2	±0.1	12%
Maintenance Office 1	SHH790	11/7/18 13:15	11/12/18 10:46	4.90	492	475	1.9254	SST	1050	1.00	7.3	1.1		±0.1	13%
Maintenance Office	SKP230	11/7/18 13:12	11/12/18 10:46	4.90	738	720	2.0324	SST	1050	1.00	7.3	1.1		±0.1	13%
Music Office	SJY638	11/7/18 12:42	11/12/18 10:28	4.91	538	508	1.9458	SST	1050	1.00	7.3	2.5		±0.2	8%
Music Office	SKG997	11/7/18 12:42	11/12/18 10:28	4.91	657	656	2.0051	SST	1050	1.00	7.3	<LLD		QC Blank	
Music Rm	SKF178	11/7/18 12:40	11/12/18 10:27	4.91	392	379	1.8663	SST	1050	1.00	7.3	0.7		±0.1	19%
Office	SHI476	11/7/18 15:12	11/12/18 11:27	4.84	501	488	1.9312	SST	1050	1.00	7.3	0.7	0.8	±0.1	19%
Office	SJY649	11/7/18 15:12	11/12/18 11:27	4.84	617	603	1.9859	SST	1050	1.00	7.3	0.8		±0.1	17%
Pool basement	SHJ722	11/7/18 12:17	11/12/18 10:20	4.92	481	461	1.9185	SST	1050	1.00	7.3	1.4	1.4	±0.2	11%
Pool basement	SHI889	11/7/18 12:17	11/12/18 10:20	4.92	553	534	1.9559	SST	1050	1.00	7.3	1.3		±0.2	12%
Sm String Music rm	SHH456	11/7/18 12:54	11/12/18 10:31	4.90	411	392	1.8769	SST	1050	1.00	7.3	1.4		±0.2	11%
Small Music Rm	SKP313	11/7/18 12:47	11/12/18 10:27	4.90	730	699	2.0272	SST	1050	1.00	7.3	2.5		±0.2	8%
Social Rm	SHH362	11/7/18 13:26	11/12/18 10:54	4.89	502	480	1.9294	SST	1050	1.00	7.3	1.7		±0.2	10%
String Music	SHJ281	11/7/18 12:49	11/12/18 10:34	4.91	501	486	1.9307	SST	1050	1.00	7.3	0.9		±0.1	15%
String Music Office	SJX667	11/7/18 12:53	11/12/18 10:31	4.90	500	479	1.9286	SST	1050	1.00	7.3	1.6		±0.2	10%
Teachers Lounge	SGJ736	11/7/18 13:23	11/12/18 10:52	4.90	480	457	1.9172	SST	1050	1.00	7.3	1.8		±0.2	10%
Additional Required QA/QC devices															
Lab Blank (QA/QC)	SJU801	11/6/18 21:00	11/12/18 21:00	6.00	212	212	1.7105	SST	1050	1.00	7.3	<LLD		QC Blank	
Lab Blank (QA/QC)	SKB520	11/6/18 21:00	11/12/18 21:00	6.00	214	213	1.7123	SST	1050	1.00	7.3	<LLD		QC Blank	
Lab Blank (QA/QC)	SKG801	11/6/18 21:00	11/12/18 21:00	6.00	588	587	1.9761	SST	1050	1.00	7.3	<LLD		QC Blank	
Office Blank (QA/QC)	SKB609	11/6/18 21:00	11/12/18 21:00	6.00	409	409	1.8818	SST	1050	1.00	7.3	<LLD		QC Blank	
Office Blank (QA/QC)	SKG826	11/6/18 21:00	11/12/18 21:00	6.00	576	576	1.9710	SST	1050	1.00	7.3	<LLD		QC Blank	
Office Blank (QA/QC)	SKJ958	11/6/18 21:00	11/12/18 21:00	6.00	622	620	1.9906	SST	1050	1.00	7.3	<LLD		QC Blank	

QA/QC Spike	Serial Number	Start Date/Time	End Date/Time	Target Value	Measured Value	Relitave Percent Error
Device 1	SKG779	9/10/18 15:00	9/12/18 15:00	20.4	19.6	-3.9
Device 2	SKG792	9/10/18 15:00	9/12/18 15:00	20.4	19.9	-2.5
Device 3	SKG801	9/10/18 15:00	9/12/18 15:00	20.4	19.9	-2.5
Device 4	SKG826	9/10/18 15:00	9/12/18 15:00	20.4	19.3	-5.4

Radon Concentrations

David F. Metzger
121 N. Leavitt Rd. #313, Amherst, OH 44001
Certified Radon Tester Ohio License #: RS340 & RC213; NRPP ID#: 107699RT

SUMMARY:

In summary, there were no test locations where the average radon concentration was measured at or above the EPA Action Level. In fact, there were no measurements above 2.0 pCi/L in the Onaway building and only one test location in Woodbury measured above 2.0 pCi/L (That was 3.0 in room 130.) Keeping in mind that the EPA Action Level is 4.0 pCi/L, there is no indication that steps to reduce radon levels in either of these two buildings would be necessary at this time. The EPA guidelines strongly recommend retesting every 5 years to ensure that any changes to the building structure, the heating and cooling system and the soil beneath the buildings have not become altered to the point where radon intrusion might increase.

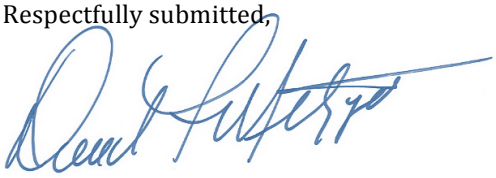
We recommend that a communication be sent to all faculty, staff members, and parents to inform them of the fact that the testing produced no measurements at or above the EPA Action Level.

Unfortunately we cannot assume that because radon levels in these two schools were below the Action Level, the students, faculty, and staff other neighboring school buildings are also not at risk. We suggest establishing a schedule of testing of all of the facilities of the Shaker Heights School System to ensure the health and well being of the students and staff.

We encourage you to contact us if there are any questions regarding the testing, the process or the results of this radon screening measurement in your facilities.

This is the report of radon gas screening measurement. The measurement was performed using short term E-PERM® Electret Ion Chambers (SST), and was performed in conformance with test protocols in 3701-69-07 Appendix A of the Ohio Administrative Code and ANSI/AARST MALB-(Draft 7/2012) *Protocol for Conducting Radon and Radon Decay Product Measurements in Schools and Large Buildings*. While every effort was made to maintain optimum quality control and Ohio Radon Measurement Protocols during the testing period, neither DFM Consulting Services, LLC, dba 1st Option Radon Measurement, nor David Metzger, Licensed Radon Tester, provides any warranty, expressed or implied for any consequences of erroneous results. There can be some uncertainty with any measurement due to statistical variations, extreme weather conditions, building operations, and other factors. DFM Consulting Services, LLC, 1st Option Radon Measurement and David F. Metzger shall not be liable under any charge or claim for loss, claims, charges, fees, demands, expenses, or damages resulting from a radon test.

Respectfully submitted,



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