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March 20, 2017

Ms. Kate Hall
Dallas School District #2
111 SW Ash Street
Dallas, OR 97338

VIA email to: kate.hall@dsd2.org

**RE: Radon Testing
LaCreole Middle School
701 SE LaCreole Drive
Dallas, OR 97338**

TRC Project: 272838

Ms. Hall:

At your request, TRC Environmental Corporation (TRC) performed radon in air testing at the LaCreole Middle School located at 701 SE LaCreole Middle School, in Dallas, Oregon.

Testing Procedures

Prior to conducting the radon testing, to maintain proper testing conditions, a notification letter from the school administration was provided to staff informing them of the scheduled radon testing dates and protocols. Testing was performed under the guidance of TRC personnel certified as Radon Measurement Providers by the National Environmental Health Association (NEHA) National Radon Proficiency Program (NRPP). The initial radon testing was performed between March 7, 2017 and March 10, 2017.

Radon testing was conducted using the protocols recommended by the United States Environmental Protection Agency (EPA) and the Oregon Health Authority (OHA) as directed by ORS 332.166-167. Testing was conducted by taking initial short-term measurements of frequently occupied rooms in contact with the soil or above a basement or crawlspace. Frequently occupied rooms include classrooms, offices, cafeterias, libraries and gymnasiums. Areas such as restrooms, hallways, stairwells, elevator shafts, utility closets and storage closets need not be tested. Testing was conducted during the weekday while school was in session and Heating Ventilation and Air-Conditioning (HVAC) systems were operating normally.

The radon sampling devices placed in the LaCreole Middle School were short-term (3-day) passive, 4-inch open-faced, activated charcoal absorption canisters, deployed in general accordance with the OHA guidance documents *Testing for Elevated Radon in Oregon Schools*, as well as the EPA guidance documents *Radon Measurements in Schools, July 1993, and Indoor*

Radon and Radon Decay Product Measurement Device Protocols, July 1992. After retrieval from Woodward Elementary School, the canisters were returned to TRC's American Association of Radon Scientists and Technologists (AARST)/National Environmental Health Association (NEHA) and National Radon Proficiency Program (NRPP)-certified Analytical Laboratory for analysis utilizing a gamma scintillation spectroscopy system.

A warning sheet was placed underneath each testing device to alert occupants that radon testing was in progress, and that the device should not be disturbed and the windows must remain closed. TRC followed the EPA and OHA guidance for placing testing devices, as reasonably feasible, based on each room's configuration and usage. Testing devices were generally placed within the rooms away from drafts, vents and appliance, 20 inches above the floor, 3 feet from any exterior walls, doors or windows, 1 foot from any interior walls, 4 inches from other objects, away from heat, areas of high humidity and direct sunlight and where they were least likely to be disturbed. Multiple testing devices were utilized in rooms that were greater than 2000 square feet. Testing for the District included, spikes, 10% duplicated measurements and 5% blank measurements to provide appropriate quality assurance/quality control (QA/QC) measures. Samples were left in place for 3 days to ensure optimum results.

Samples Collected and Results

Testing was performed testing in 74 locations within this school. **All of the 74 rooms tested had results below the EPA recommended action level of 4.0 picocuries per liter (pCi/L) of air, with the highest reading in one (1) location of 3.5 pCi/L.**

Enclosed, please find the testing device warning sheet, a sample location map and laboratory analytical data.

TRC appreciates the opportunity to provide you with environmental consulting services. We look forward to working with you on future endeavors. If you have any questions or comments concerning this report, please call TRC at (503) 387-3251.

Sincerely,

TRC Environmental Corporation



Victoria Shepersky
Senior Industrial Hygienist

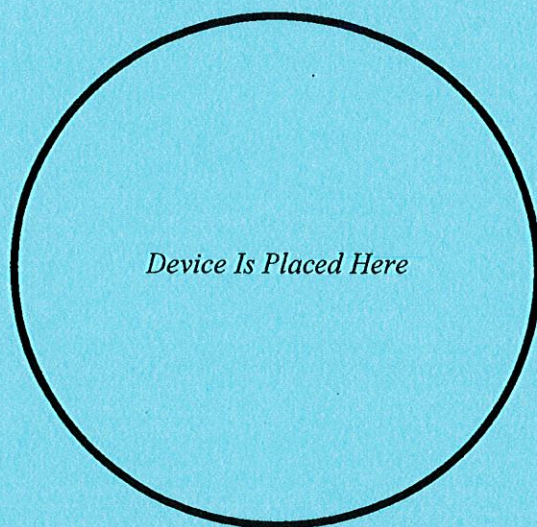


Ron Landolt
NW Region BSI Practice Leader

Attachments: Appendix A – Radon Device Warning Sheet
Appendix B – Sample Location Map
Appendix C – Laboratory Results

Appendix A – Radon Device Warning Sheet

**DO NOT TOUCH, MOVE,
OR DISTURB UNDER
ANY CIRCUMSTANCES!
(KEEP YOUR WINDOWS CLOSED)**



**RADON TESTING
IN PROGRESS**

(Canister and its contents are not harmful)

**Please note if windows were opened at any time during the test and
how long they were open or if the test was disturbed in any
way...Thanks for your full cooperation.**

Appendix B – Sample Location Map

LaCreole Middle School

2012-2013

Weight Room 17 (17)	
DLC 15 (16)	Wicks 13 (15)

Lower Gym (13) (14)	
Boys Locker Room Smith (12)	
Girls Locker Room Buckingham/Ghosteard/Petersen (9)	
Band Rebischke (84)	

Kitchen (7) (6)	Lounge (5)
Choir Thackeray (81)	Cafeteria (3) (4)

(18) 16	
(19)	
Petersen (21)	

Jordan SLP 11 (21)	Health 9 (22)	Boys RR
Courtyard		Girls RR
		Rogers 64 (23)
		63 (24)
		Ordonez 62 (25)
Administration (31) (17) (18) (24)		Haerer/Hays Counseling (23)
Main Office	Attend	10 (26)

174 MADRID PLANS

Coker WESD 56 (46)	Courtyard		Girls RR
Price 57 (45)	Fisher C. 68 (44)	Noack 69 (43)	Boys RR
8th Work Room (42)			(41) (40) (39)
			57 56 55

6th Grade House

Richards

Lawson 60 (33)	Cassim 59 (24)	Guffey 58 (35)
Walter 61 (32)	Courtyard	
		Boys RR
		Girls RR

Library Pauls (37)	
(28)	(36)

Osborn (47) 46	Read 180 Clark/Price (52) 45	Chin (53) 44	Lindemann (51) 43
Workroom (48) 49 48 47		8th Grade House	
Sped Rec Ackerman		Literacy	
		Tesch (55) 42	

Computer Lab (59) 39	Shinn (58) 39	Shafer (57) 40	Fox (56) 41
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Tharp (60) 35			
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Barnes (61) 34			
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Computer Lab (62) 27	Fisher M (63) 27	McDonald (64) 28	Harms (65) 29
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(25) (24) (23) (22)	(21) (20) (19)	7th Grade House		Hess (16) 18
Workroom (20)				
Clark (20) 22	ERC Workroom (19) 20	Wade (18) 20	Hughes (17) 19	

Appendix C – Laboratory Results



Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

RADON ANALYSIS REPORT

CLIENT: Dallas School District

Site: LaCreole Middle School, Dallas, OR
Project #: 272838.0000.0000
Lab Log #: 50111
Date Received: 03/11/17
Date Analyzed: 03/13/17, 03/15/17, 03/16/17 & 03/17/17

Test Location	Canister #	Start Date	Start Time	Stop Date	Stop Time	Radon Concentration (pCi/l)
#1 Choir	2140	03-07-17	0850	03-10-17	0747	ND<0.5
#2 Choir Office	2177	03-07-17	0851	03-10-17	0750	ND<0.5
#3 Café	2129	03-07-17	0853	03-10-17	0801	1.3
#4 Café	42B	03-07-17	0854	03-10-17	0803	1.6
#5 Lounge	2101	03-07-17	0857	03-10-17	0805	0.8
#6 Kitchen Office	68B	03-07-17	0900	03-10-17	0755	0.7
#7 Kitchen Office	2062	03-07-17	0902	03-10-17	0752	1.1
#8 Band	2074	03-07-17	0907	03-10-17	0745	0.8
#9 Girls Locker	192A	03-07-17	0911	03-10-17	0807	1.3
#10 Girls Locker Office	303	03-07-17	0915	03-10-17	0810	ND<0.5
#11 Boys Locker Office	543	03-07-17	0920	03-10-17	0817	0.8
#12 Boys Locker Main	9B	03-07-17	0925	03-10-17	0814	1.2
#13 Lower Gym	3274	03-07-17	0930	03-10-17	0820	1.8
#14 Lower Gym	2067	03-07-17	0935	03-10-17	0822	1.3
#15 Wicks	1950	03-07-17	0940	03-10-17	0828	3.5
#16 DLC	1746	03-07-17	0945	03-10-17	0827	1.1
#17 Weight Room	1889	03-07-17	1000	03-10-17	0825	0.6
#18 Rm. 16	2121	03-07-17	1015	03-10-17	0832	1.7
#19 Mid Room	2119	03-07-17	1020	03-10-17	0836	1.1

TRC LABORATORY RADON ANALYTICAL CERTIFICATIONS


NEHA NRPP ID# 102266AL CT # PH-0426 NY # 10980


Test Location	Canister #	Start Date	Start Time	Stop Date	Stop Time	Radon Concentration (pCi/l)
#20 Rm. 14	2086	03-07-17	1022	03-10-17	0835	1.0
#21 Rm. 11	309	03-07-17	1030	03-10-17	0842	0.8
#22 Rm. 9	502	03-07-17	1035	03-10-17	0844	1.4
#23 Rm. 64	3147	03-07-17	1040	03-10-17	0846	1.7
#24 Rm. 63	433	03-07-17	1045	03-10-17	0850	1.8
#25 Rm. 62	1896	03-07-17	1050	03-10-17	0852	2.8
#26 Rm. 10	2048	03-07-17	1055	03-10-17	0855	1.1
#27 Attend Off	256	03-07-17	1100	03-10-17	0857	1.4
#28 Conf. Rm.	241	03-07-17	1105	03-10-17	0859	1.1
#29 Center Office	1979	03-07-17	1110	03-10-17	0900	1.5
#30 Office Manager	300	03-07-17	1115	03-10-17	0902	1.4
#31 Office Lobby	562	03-07-17	1120	03-10-17	0905	1.4
#31A Office Lobby- Duplicate	414	03-07-17	1125	03-10-17	0904	1.6
#32 Rm. 61	272A	03-07-17	1135	03-10-17	0913	0.9
#33 Rm. 60	2093	03-07-17	1137	03-10-17	0915	1.0
#34 Rm. 59	532	03-07-17	1139	03-10-17	0918	0.7
#35 Rm. 58	371	03-07-17	1142	03-10-17	0920	ND<0.5
#36 Library	286A	03-07-17	1127	03-10-17	0907	1.0
#37 Library Mid	435	03-07-17	1129	03-10-17	0908	0.8
#38 Library	536	03-07-17	1131	03-10-17	0910	0.8
#38A Library- Duplicate	3026	03-07-17	1134	03-10-17	0911	1.1
#39 Rm. 55	912	03-07-17	1147	03-10-17	0925	ND<0.5
#40 Rm. 56	2035	03-07-17	1151	03-10-17	0927	0.7
#41 Rm. 57	357	03-07-17	1155	03-10-17	0929	ND<0.5
#42 Work Rm.	2185	03-07-17	1157	03-10-17	0932	ND<0.5
#43 Rm. 69	2073	03-07-17	1201	03-10-17	0943	0.5
#44 Rm. 68	2071	03-07-17	1204	03-10-17	0945	0.6
#45 Rm. 67	2168	03-07-17	1207	03-10-17	0948	0.6
#46 Rm. 66	2114	03-07-17	1209	03-10-17	0950	0.5
#47 Rm. 46	2021	03-07-17	1215	03-10-17	0955	ND<0.5
#48 Work Rm.	2167	03-07-17	1217	03-10-17	0957	0.5
#49 Records Rm. 49	2128	03-07-17	1219	03-10-17	1003	ND<0.5
#50 Ackerman Rm. 48	1882	03-07-17	1225	03-10-17	1001	ND<0.5
#51 Rm. 47	2172	03-07-17	1230	03-10-17	0959	ND<0.5
#52 Rm. 45	83B	03-07-17	1234	03-10-17	1005	0.5
#53 Rm. 44	231	03-07-17	1237	03-10-17	1007	ND<0.5
#54 Rm. 43	1972	03-07-17	1241	03-10-17	1010	ND<0.5
#55 Rm. 42	3121	03-07-17	1245	03-10-17	1012	ND<0.5
#56 Rm. 41	3174	03-07-17	1248	03-10-17	1014	ND<0.5
#57 Rm. 40	3093	03-07-17	1252	03-10-17	1016	0.5
#58 Rm. 39	1986	03-07-17	1255	03-10-17	1018	0.5

Test Location	Canister #	Start Date	Start Time	Stop Date	Stop Time	Radon Concentration (pCi/l)
# 59 Rm. 38	2117	03-07-17	1300	03-10-17	1020	0.6
#60 Rm. 38	2183	03-07-17	1305	03-10-17	1024	0.5
#61 Rm. 34	388	03-07-17	1310	03-10-17	1027	ND<0.5
#62 Rm. 26	3161	03-07-17	1315	03-10-17	1030	0.7
#62A Rm.26- Duplicate	1801	03-07-17	1316	03-10-17	1031	0.7
#63 Rm. 27	1824	03-07-17	1320	03-10-17	1035	ND<0.5
#63A Rm. 27- Duplicate	126	03-07-17	1322	03-10-17	1036	ND<0.5
#64 Rm. 28	149	03-07-17	1325	03-10-17	1038	ND<0.5
#65 Rm. 29	1829	03-07-17	1330	03-10-17	1040	1.1
#66 Rm. 18	1846	03-07-17	1335	03-10-17	1042	0.8
#66A Rm. 18- Duplicate	26B	03-07-17	1337	03-10-17	1043	0.9
#67 Rm. 19	3270	03-07-17	1341	03-10-17	1045	1.1
#68 Rm. 20	3181	03-07-17	1344	03-10-17	1047	0.6
#69 Rm. 21	1671	03-07-17	1347	03-10-17	1050	0.7
#69A Rm. 21- Duplicate	3214	03-07-17	1349	03-10-17	1051	0.7
#70 Rm. 22	342	03-07-17	1352	03-10-17	1055	0.6
#71 Work Rm.	2112	03-07-17	1355	03-10-17	1057	0.8
#71A Work Rm.- Duplicate	1524	03-07-17	1359	03-10-17	1058	1.2
#72 Front Work	589	03-07-17	1403	03-10-17	1600	ND<0.5
#73 Rm. 24	413	03-07-17	1406	03-10-17	1104	ND<0.5
#74 Rm. 25	1447	03-07-17	1410	03-10-17	1108	0.9
#74A Rm. 25- Duplicate	2154	03-07-17	1411	03-10-17	1111	1.0
Field Blank	202A	03-07-17	--	03-10-17	--	ND<0.5
Field Blank	254	03-07-17	--	03-10-17	--	ND<0.5
Field Blank	2103	03-07-17	--	03-10-17	--	ND<0.5
Field Blank	3155	03-07-17	--	03-10-17	--	ND<0.5

Results relate only to samples tested, as received by the laboratory.

This laboratory utilizes gamma scintillation spectroscopy to analyze activated charcoal (AC) canisters following USEPA Indoor Radon and Radon Decay Product Measurement Device Protocols, July 1992. The United States Environmental Protection Agency has set a CONTINUOUS EXPOSURE Action Level of 4 pCi/l as a guidance level at which further testing and/or remedial actions are indicated. Consult your testing laboratory or State Health Department for further information.

Analyzed by 
Kathleen Williamson, Laboratory Manager &
Cathryn Lemire, Laboratory Analyst

Reviewed by 
Kathleen Williamson, Laboratory Manager
or other approved signatory

Date Issued: 03/20/17