



**MCPS RADON TESTING – EXECUTIVE SUMMARY**

Site Name	Richard Montgomery High School
Date of Test Report	4/6/2022
Round of Testing	Initial Follow-up Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	106
# Rooms $\geq$ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	2.3 pCi/L

Project Status:  
Initial testing completed; no further action needed.



April 6, 2022

Brian T. Croyle, PG, CHMM  
Environmental Specialist  
Montgomery County Public Schools  
Gaithersburg, MD 20879

Re: **Radon Testing Services**  
KCI Job # 122108316

Location: Richard Montgomery HS  
250 Richard Montgomery Dr.  
Rockville, MD 20852

Dear Mr. Croyle:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools (MCPS) pursuant to completing a “short-term” 3 day radon test for the Richard Montgomery HS, located at 250 Richard Montgomery Dr. Rockville, MD 20852 (subject site).

**Scope of Services:**

KCI conducted radon testing at the subject site to evaluate indoor radon levels relative to the USEPA's recommended action level of 4.0 picocuries per Liter (pCi/L) - the level at which EPA recommends that schools take action to reduce the level. KCI conducted the radon testing in accordance with American Association of Radon Scientists and Technologists (AARST) *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*. A National Radon Proficiency Program (NRPP) Radon Measurement Specialist (certification #111004 RT) supervised the testing. Additional information on radon management and the health effects of radon exposure is available from <https://www.montgomeryschoolsmd.org> or [www.epa.gov/radon](http://www.epa.gov/radon).

KCI visited the site on February 7, 2022 and deployed one hundred and twenty four (124) activated charcoal (AC) radon test kits. KCI deployed radon test kits in all frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

A floor plan map of the building with the test locations is included as Attachment A of this report.

As a quality control measure, KCI also included duplicate samples, field blanks, lab transit blanks, and office blanks in accordance with AARST recommendations. In addition, KCI submitted test kits to Bowser-Morner, Inc. as spike samples. The spiked tests were exposed to a known radon concentration by Bowser-Morner prior to being returned to the laboratory for analysis.

KCI returned to the site on February 10, 2022 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc.

is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

**Evaluation of Testing Conditions:**

These tests represent:

- Follow-up to initial testing.

These tests were conducted to:

- Evaluate radon concentration levels at the facility.

According to AARST, *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*, ideal testing conditions would be when the building is fully occupied and the heating system is active. For this test, the facility’s HVAC system was operating in heating mode; therefore, KCI concludes that this test was conducted during ideal testing conditions.

KCI recorded observations of the following conditions in each room during the time of deployment and collection of the radon test kits:

- Indoor temperature,
- HVAC Operation,
- Dehumidifier operation,
- Humidifier operation,
- Ceiling fan operation, and
- Open windows or doors.

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the 30s and high temperatures ranged from the mid 30s to the mid 50s Fahrenheit. Maximum sustained winds ranged from 3-12 miles per hour. Average humidity was around 23% with 0.1 inches of precipitation (rain) was recorded during testing period.

**Results:**

The sampling locations and analytical results are listed on Table 1 (Attachment B). The quality control sample locations and analytical results are listed on Table 2 (Attachment B). Sampling locations and associated test kit identification numbers and relevant field observations are listed on Table 3 (Attachment B). The laboratory analytical results are included in Attachment C. Laboratory results and exposure data for the spike samples are also included in Attachment C.

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥4.0 pCi/L	None	N/A
<4.0 pCi/L	See Attachment B	

Quality Control Samples	
Results of Blank Canisters:	The office blanks, and lab transit blanks had test results of less than the laboratory detection limit of 0.3 pCi/L.
Adequate Laboratory Precision?	Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved.
Spike Sample Analysis:	The Spike Sample analysis results indicate the laboratory is operating within statistical control limits.

Our professional services have been performed in accordance with customary principles and practices in the field of industrial hygiene and engineering. If you have any questions or comments regarding this report, please feel free to contact me at (410) 891-1769.

Sincerely,



Tyler P. McCleaf  
Radon Measurement Provider  
#111004 RT  
KCI Technologies, Inc.

Attachments:     A- Floor Plan with Test Locations  
                      B- Table 1-3, Radon Test Summary Spreadsheets  
                      C- Laboratory Analytical Results

# ATTACHMENT A

## Floor Plan With Test Locations

# ATTACHMENT B

## Radon Test Summary Spreadsheet

**Table Notes:**

AC- Activated Charcoal

ACI- Air Check, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

OC- Quality Control

Table 1- Radon Testing Results		
Richard Montgomery HS		
Test Period: 02/7/2022 - 02/10/2022		
Kit Number	Room / Area	Result
11115221	11	< 0.3
11115209	14	< 0.3
11115205	15	< 0.3
11115213	15	< 0.3
11115217	16	0.8
11115218	18	< 0.3
11115219	24	< 0.3
11115210	26	< 0.3
11107600	31	< 0.3
11107594	33	< 0.3
11107598	33	< 0.3
11107597	35	< 0.3
11107584	36	< 0.3
11115211	37	< 0.3
11115214	39	< 0.3
11115220	39	< 0.3
11115226	39	< 0.3
11115201	41	< 0.3
11115227	43	< 0.3
11115225	45	< 0.3
11107516	100	< 0.3
11107542	107	< 0.3
11107545	108	< 0.3
11107540	109	< 0.3
11107530	114	< 0.3
11107529	115	< 0.3
11107521	116	0.7
11107524	116	< 0.3
11107533	116	< 0.3
11107534	123	< 0.3
11107539	123	< 0.3
11107557	124	< 0.3
11107556	125	< 0.3
11107555	126	< 0.3
11107561	127	< 0.3
11107562	128	< 0.3
11107558	129	< 0.3
11107563	129	< 0.3
11107537	131	< 0.3
11107572	140	0.7
11107571	141	< 0.3
11107573	142	< 0.3



Table 1- Radon Testing Results		
Richard Montgomery HS		
Test Period: 02/7/2022 - 02/10/2022		
Kit Number	Room / Area	Result
11107574	142	0.5
11107585	143	< 0.3
11107552	154	< 0.3
11107588	156	< 0.3
11107583	158	< 0.3
11107576	159	< 0.3
11107559	160	< 0.3
11107587	161	< 0.3
11107590	162	< 0.3
11107589	163	< 0.3
11107591	163	< 0.3
11107592	163	< 0.3
11107577	164	< 0.3
11107536	165	< 0.3
11107593	166	< 0.3
11107596	167	< 0.3
11107599	168	< 0.3
11107595	170	< 0.3
11115222	200	< 0.3
11115228	210	< 0.3
11115234	222	< 0.3
11115236	232	< 0.3
11115229	242	< 0.3
11115233	253	< 0.3
11115230	262	< 0.3
11115224	265	< 0.3
11115235	265	< 0.3
11115237	265	< 0.3
11115203	353	< 0.3
11107501	100A	< 0.3
11107508	100B	< 0.3
11107502	100C	< 0.3
11107505	100D	< 0.3
11107513	100E	0.6
11107504	100G	0.8
11107538	100H	< 0.3
11107515	100J	< 0.3
11107503	100N	< 0.3
11107510	100N	< 0.3
11107523	100O	< 0.3
11107514	100P	< 0.3
11107522	100R	< 0.3

Table 1- Radon Testing Results		
Richard Montgomery HS		
Test Period: 02/7/2022 - 02/10/2022		
Kit Number	Room / Area	Result
11107532	100S	< 0.3
11107546	107A	< 0.3
11107541	108A	< 0.3
11107526	112 AUDITORIUM	0.7
11107531	112 AUDITORIUM	< 0.3
11107525	116A	< 0.3
11107547	119 GYM	< 0.3
11107548	119 GYM	< 0.3
11107564	129A	< 0.3
11107565	129A	< 0.3
11107569	129A	< 0.3
11107566	129B	< 0.3
11107570	129C	< 0.3
11115202	13A	< 0.3
11107550	141A	< 0.3
11107506	141C	0.5
11107528	141C OFFICE	< 0.3
11107527	141E	0.5
11107554	141F	0.6
11107553	141G	0.6
11107551	141H	< 0.3
11107549	141I	1.2
11107509	141J	1.5
11107579	141K	0.7
11107582	141L	0.9
11107578	141M	0.6
11107580	141M	< 0.3
11107581	141M	0.7
11107520	142A	< 0.3
11107535	142B	0.6
11107543	147 CAFETERIA	0.6
11107544	147 CAFETERIA	2.3
11107586	147A	< 0.3
11107567	147H	0.6
11107568	147H	< 0.3
11107575	147I	< 0.3
11107560	154A	0.5
11115206	17A	< 0.3
11115204	39A	< 0.3
11115212	41A	< 0.3

Table 2- Radon Testing Results			
Richard Montgomery HS			
Test Period: 02/7/2022 - 02/10/2022			
Kit Number	QC Type	Room / Area	Result
11107510	D	100N	< 0.3
11107521	D	116	0.7
11107524	FB	116	< 0.3
11107534	D	123	< 0.3
11107569	D	129A	< 0.3
11107565	FB	129A	< 0.3
11107574	D	142	0.5
11107578	D	141M	0.6
11107580	FB	141M	< 0.3
11107567	D	147H	0.6
11107591	D	163	< 0.3
11107592	FB	163	< 0.3
11107594	D	33	< 0.3
11115226	D	39	< 0.3
11115220	FB	39	< 0.3
11115213	D	15	< 0.3
11115235	D	265	< 0.3
11115237	FB	265	< 0.3
11113481	OB	OFFICE BLANK	< 0.3
11113483	TB	TRAVEL BLANK	< 0.3



# ATTACHMENT C

## Laboratory Analytical Results

Radon test result report for:**RICHARD MONTGOMERY HS**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11107516	100	2022-02-07 @ 8:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107501	100A	2022-02-07 @ 8:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107508	100B	2022-02-07 @ 8:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107502	100C	2022-02-07 @ 8:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107505	100D	2022-02-07 @ 8:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107513	100E	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	0.6 ± 0.4	2022-02-14
11107504	100G	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	0.8 ± 0.3	2022-02-14
11107538	100H	2022-02-07 @ 10:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107515	100J	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107510	100N	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107503	100N	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107523	100O	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107514	100P	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107522	100R	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107532	100S	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107542	107	2022-02-07 @ 10:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107546	107A	2022-02-07 @ 10:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107545	108	2022-02-07 @ 10:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107541	108A	2022-02-07 @ 10:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107540	109	2022-02-07 @ 10:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11115221	11	2022-02-07 @ 2:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11107526	112 AUDITORIUM	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	0.7 ± 0.4	2022-02-14
11107531	112 AUDITORIUM	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107530	114	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107529	115	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107524	116	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107521	116	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	0.7 ± 0.4	2022-02-14
11107533	116	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107525	116A	2022-02-07 @ 9:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107548	119 GYM	2022-02-07 @ 10:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107547	119 GYM	2022-02-07 @ 10:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107534	123	2022-02-07 @ 10:00 am	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11107539	123	2022-02-07 @ 10:00 am	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11107557	124	2022-02-07 @ 10:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107556	125	2022-02-07 @ 10:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107555	126	2022-02-07 @ 10:00 am	2022-02-10 @ 9:00 am	< 0.3	2022-02-14
11107561	127	2022-02-07 @ 10:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14

Radon test result report for:**RICHARD MOTGOMERY HS**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11107562	128	2022-02-07 @ 10:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107563	129	2022-02-07 @ 10:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107558	129	2022-02-07 @ 10:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107564	129A	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107565	129A	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107569	129A	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107566	129B	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107570	129C	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107537	131	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11115202	13A	2022-02-07 @ 2:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115209	14	2022-02-07 @ 2:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11107572	140	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	0.7 ± 0.4	2022-02-14
11107571	141	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107550	141A	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107506	141C	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	0.5 ± 0.4	2022-02-14
11107528	141C OFFICE	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107527	141E	2022-02-07 @ 12:00 pm	2022-02-10 @ 10:00 am	0.5 ± 0.3	2022-02-14
11107554	141F	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	0.6 ± 0.4	2022-02-14
11107553	141G	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	0.6 ± 0.3	2022-02-14
11107551	141H	2022-02-07 @ 12:00 pm	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107549	141I	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	1.2 ± 0.4	2022-02-14
11107509	141J	2022-02-07 @ 12:00 pm	2022-02-10 @ 10:00 am	1.5 ± 0.3	2022-02-14
11107579	141K	2022-02-07 @ 12:00 pm	2022-02-10 @ 10:00 am	0.7 ± 0.3	2022-02-14
11107582	141L	2022-02-07 @ 12:00 pm	2022-02-10 @ 10:00 am	0.9 ± 0.3	2022-02-14
11107581	141M	2022-02-07 @ 12:00 pm	2022-02-10 @ 10:00 am	0.7 ± 0.4	2022-02-14
11107578	141M	2022-02-07 @ 12:00 pm	2022-02-10 @ 10:00 am	0.6 ± 0.3	2022-02-14
11107580	141M	2022-02-07 @ 12:00 pm	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107573	142	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107574	142	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	0.5 ± 0.3	2022-02-14
11107520	142A	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107535	142B	2022-02-07 @ 11:00 am	2022-02-10 @ 10:00 am	0.6 ± 0.4	2022-02-14
11107585	143	2022-02-07 @ 12:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107544	147 CAFETERIA	2022-02-07 @ 12:00 pm	2022-02-10 @ 10:00 am	2.3 ± 0.4	2022-02-14
11107543	147 CAFETERIA	2022-02-07 @ 12:00 pm	2022-02-10 @ 10:00 am	0.6 ± 0.4	2022-02-14
11107586	147A	2022-02-07 @ 12:00 pm	2022-02-10 @ 10:00 am	< 0.3	2022-02-14
11107568	147H	2022-02-07 @ 12:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107567	147H	2022-02-07 @ 12:00 pm	2022-02-10 @ 11:00 am	0.6 ± 0.4	2022-02-14

Radon test result report for:**RICHARD MONTGOMERY HS**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11107575	147I	2022-02-07 @ 12:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11115213	15	2022-02-07 @ 2:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115205	15	2022-02-07 @ 2:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11107552	154	2022-02-07 @ 12:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107560	154A	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	0.5 ± 0.3	2022-02-14
11107588	156	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107583	158	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107576	159	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11115217	16	2022-02-07 @ 2:00 pm	2022-02-10 @ 12:00 pm	0.8 ± 0.3	2022-02-14
11107559	160	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107587	161	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107590	162	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107592	163	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107591	163	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107589	163	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107577	164	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107536	165	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107593	166	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107596	167	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107599	168	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107595	170	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11115206	17A	2022-02-07 @ 2:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115218	18	2022-02-07 @ 2:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115222	200	2022-02-07 @ 3:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115228	210	2022-02-07 @ 3:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115234	222	2022-02-07 @ 3:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115236	232	2022-02-07 @ 3:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115219	24	2022-02-07 @ 2:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115229	242	2022-02-07 @ 3:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115233	253	2022-02-07 @ 3:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115210	26	2022-02-07 @ 1:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115230	262	2022-02-07 @ 3:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115224	265	2022-02-07 @ 3:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115237	265	2022-02-07 @ 3:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11115235	265	2022-02-07 @ 3:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11107600	31	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11107594	33	2022-02-07 @ 1:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14



February 15, 2022

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

Radon test result report for:

**RICHARD MONTGOMERY HS**

<b>Kit #</b>	<b>Room Id</b>	<b>Started</b>	<b>Ended</b>	<b>pCi/L</b>	<b>Analyzed</b>
11107598	33	2022-02-07 @ 1:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11107597	35	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11115203	353	2022-02-07 @ 3:00 pm	2022-02-10 @ 12:00 pm	< 0.3	2022-02-14
11107584	36	2022-02-07 @ 1:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11115211	37	2022-02-07 @ 2:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11115226	39	2022-02-07 @ 2:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11115220	39	2022-02-07 @ 2:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11115214	39	2022-02-07 @ 2:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11115204	39A	2022-02-07 @ 4:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11115201	41	2022-02-07 @ 2:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11115212	41A	2022-02-07 @ 2:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11115227	43	2022-02-07 @ 2:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14
11115225	45	2022-02-07 @ 2:00 pm	2022-02-10 @ 11:00 am	< 0.3	2022-02-14

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

**EXPOSURE IN BOWSER-MORNER RADON CHAMBER**

CLIENT KCI Technologies, Inc. Job Number 204186

NOMINAL Conditions: Radon Conc 25.8 pCi/L Rel. Hum 50.1 % Temp. 70.9 F

Date Start: 2/18/22 Date Stop: 2/21/22 Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: 0911 Time Stop: 0911 Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: (3) Char Bags -  
11113484, 1112998, 20107126 Device No.'s: \_\_\_\_\_

23 Right

Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_ Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_ Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: \_\_\_\_\_ Device No.'s: \_\_\_\_\_

Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_ Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_ Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: \_\_\_\_\_ Device No.'s: \_\_\_\_\_

**Note: All times are in 24-hour (military) notation, Eastern Standard Time (EST)  
Background = 7 µR/h Elevation = 820 ft**

MCPS - Spike Sample Lab Results. Measured values are satisfactory, i.e., within  $\pm 25\%$  of the chamber's reference value (25.7 pCi/L).

---

Kit Number	Start Date	Start Time	End Date	End Time	Temp.	Facility	Building	Room	Project ID	Floor	Result
11113484	2022-02-18	9:00 am	2022-02-21	9:00 am	71	OFFICE	MAIN	SK1		1	27.9
11122998	2022-02-18	9:00 am	2022-02-21	9:00 am	71	OFFICE	MAIN	SK2		1	26.0
20107126	2022-02-18	9:00 am	2022-02-21	9:00 am	71	OFFICE	MAIN	SK3		1	27.6

---



### Radon Test Kit Chain of Custody

**Project Name:** MCPS Radon – February 2022 Schools

**Name of Schools:**

1. Lincoln Center
2. Wootton HS
3. Rockville HS
4. Richard Montgomery HS
5. Rocking Horse Rd. Center
6. Blair G. Ewing Center
7. Twinbrook ES
8. Rock Creek Valley ES
9. Luxmanor ES
10. Tilden MS

---

	Date	Initials
Radon Test Kits Deployed	02/07/2022	
Radon Test Kits Collected	02/10/2022	
Radon Test Kits Shipped to Lab*	02/10/2022	
Radon Test Kits Received by Lab*	02/14/2022	

\*All samples sent to Air Check, Inc., 1936 Butler Bridge Rd, Mills River, NC 28759

**RADON SCREENING SURVEY – FOLLOW-UP RICHARD MONTGOMERY HIGH  
SCHOOL**

250 Richard Montgomery Drive, Rockville, Maryland 20852

**EXECUTIVE SUMMARY**

Date of Test Report:	3/15/16 Follow-Up
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested	4
# Rooms $\geq$ 4.0 pCi/L:	0
Low Value:	<0.3
High Value:	1.4
Confirmed Rooms $\geq$ 4.0 pCi/L US EPA Action Level	0

**Summary of Sampling Events  $\geq$  4.0 pCi/L**

Room	Result (pCi/L) 1/14/16 Initial	Result (pCi/L) 3/15/16 Follow-Up	Average Result (pCi/L)
100E	---Missing	0.6	0.6
108E	---Missing	1.4	1.4
139	---Missing	Room used for storage	Not sampled
141C	---Missing	1.2	1.2
GYM	---Missing	<0.3	<0.3



## MCPS RADON TESTING

### Executive Summary: Richard Montgomery High School

Date of Test Report:	3/15/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	4
# Rooms $\geq$ 4.0 pCi/L:	0
Low Value:	< 0.3
High Value:	1.4

#### Project Status:

Retesting completed; no further action at this time.



March 15, 2016

Mr. Richard Cox  
Indoor Air Quality Team Leader  
Montgomery County Public Schools  
850 Hungerford Drive  
Rockville, MD 20850

Re: **Radon Testing Services**  
KCI Job # 12146341.29

Location: Richard Montgomery High School  
250 Richard Montgomery Drive  
Rockville, MD 20852

Dear Mr. Cox:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to the Montgomery County Public Schools (MCPS) pursuant to completing a “short-term” 3 day radon test for the Richard Montgomery High School, located at 250 Richard Montgomery Drive in Rockville, Maryland 20852 (subject site).

**Scope of Services:**

KCI conducted radon testing at the subject site to evaluate indoor radon levels relative to the USEPA's recommended action level of 4.0 picocuries per Liter (pCi/L) - the level at which EPA recommends that schools take action to reduce the level. KCI conducted the radon testing in accordance with American Association of Radon Scientists and Technologists (AARST) *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*. A National Radon Safety Board (NRSB) Radon Measurement Specialist (certification #14SS056) supervised the testing. Additional information on radon management and the health effects of radon exposure is available from [www.montgomerycountymd.gov/dep/air/radon](http://www.montgomerycountymd.gov/dep/air/radon) or [www.epa.gov/radon](http://www.epa.gov/radon).

KCI visited the site on February 22, 2016 and deployed eight (8) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

As a quality control measure, KCI included duplicate samples, field blanks, lab transit blanks, and office blanks in accordance with AARST recommendations. In addition, KCI submitted six (6) test kits to Bowser-Morner, Inc. as spike samples. The spiked tests were exposed to a known radon concentration by Bowser-Morner prior to being returned to the laboratory for analysis.

KCI returned to the site on February 25, 2016 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936

Butler Bridge Road, Mills River, North Carolina.

**Evaluation of Testing Conditions:**

The operating condition that represents the greatest amount of significantly occupied time for this building is; heating active, with outdoor temperature averages  $\leq 65^{\circ}$  F.

KCI concludes that the test period reasonably represents normal conditions when the building is significantly occupied. Clear characterization of the radon hazard is most likely to be observed under this normal operating condition. Based on the evaluation of test conditions, this test should reasonably characterize radon hazards.

KCI also conducted observations of field conditions which could affect the results of the test and compiled weather data for the testing period. Note that strong storms and heavy rainfall were recorded during the test period. The unusual weather conditions may have resulted in atypical radon test results for this facility.

KCI recorded observations of the following conditions in each room at the time of deployment and collection of the radon test kits:

- Indoor temperature,
- HVAC Operation,
- Dehumidifier operation,
- Humidifier operation,
- Ceiling fan operation, and
- Open windows or doors.

**Results:**

The results of the radon test analysis indicated the following:

<b>Radon Concentration</b>	<b>Room</b>	<b>Result</b>
<b><math>\geq 4.0</math> pCi/L</b>	none	n/a
<b><math>&lt; 4.0</math> pCi/L</b>	See Attachment B	

Notes:

D- Duplicate sample

The field blank, office blanks, and lab transit blanks had test results of less than the laboratory detection limit of 0.3 pCi/L. Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved. The Spike sample analysis results indicate the laboratory is operating within statistical control limits.

The sampling locations, field observations, and analytical results are listed on Table 1 (Attachment B). The laboratory analytical results are also attached (Attachment C). Laboratory results and exposure data for the spike samples are also included in Attachment C.

Our professional services have been performed in accordance with customary principles and practices in the field of industrial hygiene and engineering. If you have any questions or comments regarding this report, please feel free to contact me at (410) 316-7800.



Sincerely,



James M. Mouldale  
Radon Measurement Specialist  
KCI Technologies, Inc.

Attachments:      A- Floor Plan with Test Locations  
                          B- Table 1-Radon Test Summary Spreadsheet  
                          C- Laboratory Analytical Results

# ATTACHMENT A

## Floor Plan With Test Locations

# ATTACHMENT B

## Radon Test Summary Spreadsheet

**Table Notes:**

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank\*

PM- Project Manager

QC- Quality Control

\*Office blanks were submitted at a rate of 1% for all samples deployed in Phase 9 testing. Office blanks were not submitted under each school individually.

<b>Radon Testing Results</b>		
<b>Richard Montgomery HS</b>		
<b>Test Period: 02/22/16-02/25/16</b>		
<b>Kit Number</b>	<b>Room / Area</b>	<b>Result</b>
7712589	100E	0.6
7712582	108E	1.4
7712588	141C	1.2
7712556	GYM	< 0.3
7712557	GYM	< 0.3
7712573	GYM	< 0.3

Table Note:

\* Missing or Compromised Sample

<b>Radon Testing Results</b>		
<b>Richard Montgomery HS</b>		
<b>Test Period: 02/22/16-02/25/16</b>		
<b>Kit Number</b>	<b>QC Type</b>	<b>Result</b>
7712599	D (141C)	1.3
7712585	FB (141C)	< 0.3

Table Note:

\* Missing or Compromised Sample

# ATTACHMENT C

## Laboratory Analytical Results

---

March 8, 2016 **\*\* LABORATORY ANALYSIS REPORT \*\***

---

Radon test result report for:  
**RICHARD MONTGOMERY HS  
MAIN**

---

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7712589	100E	2016-02-22 @ 9:00 am	2016-02-25 @ 11:00 am	0.6 ± 0.3	2016-02-29
7712582	108E	2016-02-22 @ 9:00 am	2016-02-25 @ 11:00 am	1.4 ± 0.3	2016-02-29
7712585	141C	2016-02-22 @ 10:00 am	2016-02-25 @ 11:00 am	< 0.3	2016-02-29
7712588	141C	2016-02-22 @ 10:00 am	2016-02-25 @ 11:00 am	1.2 ± 0.3	2016-02-29
7712599	141C	2016-02-22 @ 10:00 am	2016-02-25 @ 11:00 am	1.3 ± 0.3	2016-02-29
7712556	GYM	2016-02-22 @ 9:00 am	2016-02-25 @ 11:00 am	< 0.3	2016-02-29
7712557	GYM	2016-02-22 @ 9:00 am	2016-02-25 @ 11:00 am	< 0.3	2016-02-29
7712573	GYM	2016-02-22 @ 9:00 am	2016-02-25 @ 11:00 am	< 0.3	2016-02-29

---



---

March 9, 2016 **\*\* LABORATORY ANALYSIS REPORT \*\***

---

Radon test result report for:  
**MCPS**  
**Phase 9 Office Blanks**

---

<b>Kit #</b>	<b>Room Id</b>	<b>Started</b>	<b>Ended</b>	<b>pCi/L</b>	<b>Analyzed</b>
7712568	0	2016-02-22 @ 6:00 pm	2016-02-25 @ 3:00 pm	< 0.3	2016-02-29
7712584	0	2016-02-22 @ 6:00 pm	2016-02-25 @ 3:00 pm	< 0.3	2016-02-29
7719460	0	2016-02-22 @ 6:00 pm	2016-02-25 @ 3:00 pm	< 0.3	2016-02-29
7719481	0	2016-02-22 @ 6:00 pm	2016-02-25 @ 3:00 pm	< 0.3	2016-02-29
7719497	0	2016-02-22 @ 6:00 pm	2016-02-25 @ 3:00 pm	< 0.3	2016-02-29
7719498	0	2016-02-22 @ 6:00 pm	2016-02-25 @ 3:00 pm	< 0.3	2016-02-29

---

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

---

March 9, 2016 **\*\* LABORATORY ANALYSIS REPORT \*\***

---

Radon test result report for:  
**MCPS**  
**Phase 9 Office Blanks**

---

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7731626	0	2016-02-23 @ 2:00 pm	2016-02-26 @ 3:00 pm	< 0.3	2016-03-01
7731633	0	2016-02-23 @ 2:00 pm	2016-02-26 @ 3:00 pm	< 0.3	2016-03-01
7735204	0	2016-02-23 @ 2:00 pm	2016-02-26 @ 3:00 pm	< 0.3	2016-03-01

---

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

February 23, 2016  
**LABORATORY ANALYSIS REPORT**

Radon test result report for:  
**TRANSIT- PHASE 7, 8, 9**  
**NONE**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7734937	1	2016-02-19 @ 3:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734946	10	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734955	11	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734956	12	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734959	13	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734930	14	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734953	15	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734954	16	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734940	17	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734949	18	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734948	19	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734939	2	2016-02-19 @ 3:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734942	20	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734929	21	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734933	22	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734934	23	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734936	24	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734943	25	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734944	26	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734935	27	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734928	28	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734952	29	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734947	3	2016-02-19 @ 3:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734931	30	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734932	31	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7718520	32	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7718523	33	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7718522	34	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7718521	35	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734945	4	2016-02-19 @ 3:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734960	5	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734958	6	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734951	7	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734957	8	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734938	9	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23

February  
15,  
2016

**LABORATORY ANALYSIS  
REPORT \*\***

Spike Sample Laboratory Results

Radon test result report for:  
**MCPS**

<b>Kit #</b>	<b>Room Id</b>	<b>Started</b>	<b>Ended</b>	<b>pCi/L</b>	<b>Analyzed</b>
7718273	101A	2016-01-30 @ 9:00 am	2016-02-01 @ 9:00 am	6.5 ± 0.6	2016-02-04
7718281	102B	2016-01-30 @ 9:00 am	2016-02-01 @ 9:00 am	6.4 ± 0.6	2016-02-04
7718282	103C	2016-01-30 @ 9:00 am	2016-02-01 @ 9:00 am	6.3 ± 0.6	2016-02-04
7718288	104D	2016-01-30 @ 9:00 am	2016-02-01 @ 9:00 am	6.7 ± 0.6	2016-02-04
7718289	105E	2016-01-30 @ 9:00 am	2016-02-01 @ 9:00 am	6.6 ± 0.6	2016-02-04
7718291	106F	2016-01-30 @ 9:00 am	2016-02-01 @ 9:00 am	6.5 ± 0.6	2016-02-04

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

Note: Spike samples are test canisters that are deliberately exposed to a controlled high level of radon in a laboratory. They provide a quality control measure in the testing process and do NOT reflect radon levels in the building being tested.

# EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCF Technologies Inc. Job Number 173704

NOMINAL Conditions: Radon Conc 5.9 pCi/L Rel. Hum 45.9 % Temp. 79.0 F

Date Start: 11/30/16 Date Stop: 2/1/16 Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: 0926 Time Stop: 0926 Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: (6) Char. Bags - Device No.'s: \_\_\_\_\_

7718281, 7718282, 7718291, \_\_\_\_\_

7718288, 7718289, 7718273 \_\_\_\_\_

ε3 Left

Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_ Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_ Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: \_\_\_\_\_ Device No.'s: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_ Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_ Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: \_\_\_\_\_ Device No.'s: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Note: All times are in 24-hour (military) notation, Eastern Standard Time (EST)  
Background = 7  $\mu$ R/h Elevation = 820 ft



## Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 9

Name of Schools:

- |                          |                           |                        |
|--------------------------|---------------------------|------------------------|
| 1. Rocking Horse Road ES | 16. Broad Acres ES        | 31. Rosa Parks MS      |
| 2. Rockwell ES           | 17. Belmont ES            | 32. Rosemary Hills ES  |
| 3. Oakland Terrace ES    | 18. Emory Grove Center    | 33. Sequoyah ES        |
| 4. Rosemont ES           | 19. Forest Knolls ES      | 34. Damascus HS        |
| 5. Beall ES              | 20. Baker MS              | 35. Einstein ES        |
| 6. Cresthaven ES         | 21. MLK MS                | 36. Forest Oak MS      |
| 7. Quince Orchard HS     | 22. Richard Montgomery HS | 37. Hoover MS          |
| 8. Smith Center          | 23. Sherwood HS           | 38. Julius West MS     |
| 9. Ashburton ES          | 24. Walter Johnson HS     | 39. John F. Kennedy HS |
| 10. Bannockburn ES       | 25. Diamond ES            | 40. Travilah ES        |
| 11. Bradley Hills ES     | 26. Newport Mill MS       | 41. Watkins Mill HS    |
| 12. Cannon Road ES       | 27. Drew ES               | 42. Northwood HS       |
| 13. Flora M. Singer ES   | 28. Monocacy ES           | 43. Lincoln Center     |
| 14. Clarksburg HS        | 29. Potomac ES            |                        |
| 15. Briggs Chaney MS     | 30. Rock Terrace School   |                        |

---

	Date	Initials
Radon Test Kits Deployed	2/22/16	JM
Radon Test Kits Collected	2/25/16	JM
Radon Test Kits Shipped to Lab*	2/25/16	JM
Radon Test Kits Received by Lab*	2/29/16	JM

\*All samples sent to Air Check, Inc., 1936 Butler Bridge Rd, Mills River, NC 28759



## Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 9

Name of Schools:

- |                            |                         |
|----------------------------|-------------------------|
| 1. Banneker MS             | 10. Maryvale ES         |
| 2. Bethesda-Chevy Chase HS | 11. Montgomery Blair HS |
| 3. Burtonsville ES         | 12. Poolesville HS      |
| 4. Chevy Chase ES          | 13. Rachel Carson ES    |
| 5. Clopper Mill ES         | 14. Stedwick ES         |
| 6. Edison HS               | 15. Watkins Mill ES     |
| 7. Flower Hill ES          | 16. Laytonsville ES     |
| 8. Flower Valley ES        | 17. Lincoln Center      |
| 9. Greencastle ES          |                         |

---

	Date	Initials
Radon Test Kits Deployed	2/23/16	JM
Radon Test Kits Collected	2/26/16	JM
Radon Test Kits Shipped to Lab*	2/26/16	JM
Radon Test Kits Received by Lab*	3/01/16	JM

\*All samples sent to Air Check, Inc., 1936 Butler Bridge Rd, Mills River, NC 28759



## MCPS RADON TESTING

### Executive Summary: Richard Montgomery High School

Date of Test Report:	1/14/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	107
# Rooms $\geq$ 4.0 pCi/L:	0
Low Value:	< 0.3
High Value:	2.4

#### Project Status:

Initial testing completed; missing or compromised samples need re-test.





January 14, 2016

Mr. Richard Cox  
Indoor Air Quality Team Leader  
Montgomery County Public Schools  
850 Hungerford Drive  
Rockville, MD 20850

Re: **Radon Testing Services**  
KCI Job # 12146341.20

Location: Richard Montgomery High School  
250 Richard Montgomery Drive  
Rockville, MD 20852

Dear Mr. Cox:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to the Montgomery County Public Schools (MCPS) pursuant to completing a “short-term” 3 day radon test for the Richard Montgomery High School, located at 250 Richard Montgomery Drive in Rockville, Maryland 20852 (subject site).

**Scope of Services:**

KCI conducted radon testing at the subject site to evaluate indoor radon levels relative to the USEPA's recommended action level of 4.0 picocuries per Liter (pCi/L) - the level at which EPA recommends that schools take action to reduce the level. KCI conducted the radon testing in accordance with American Association of Radon Scientists and Technologists (AARST) *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*. A National Radon Safety Board (NRSB) Radon Measurement Specialist (certification #14SS056) supervised the testing. Additional information on radon management and the health effects of radon exposure is available from [www.montgomerycountymd.gov/dep/air/radon](http://www.montgomerycountymd.gov/dep/air/radon) or [www.epa.gov/radon](http://www.epa.gov/radon).

KCI visited the site on December 21, 2015 and deployed one hundred twenty-five (125) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

As a quality control measure, KCI included duplicate samples, field blanks, lab transit blanks, and office blanks in accordance with AARST recommendations. In addition, KCI submitted six (6) test kits to Bowser-Morner, Inc. as spike samples. The spiked tests were exposed to a known radon concentration by Bowser-Morner prior to being returned to the laboratory for analysis.

KCI returned to the site on December 24, 2015 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936

Butler Bridge Road, Mills River, North Carolina.

**Evaluation of Testing Conditions:**

The operating condition that represents the greatest amount of significantly occupied time for this building is; heating active, with outdoor temperature averages  $\leq 65^{\circ}$  F.

KCI concludes that the test period reasonably represents normal conditions when the building is significantly occupied. Clear characterization of the radon hazard is most likely to be observed under this normal operating condition. Based on the evaluation of test conditions, this test should reasonably characterize radon hazards.

KCI also conducted observations of field conditions which could affect the results of the test and compiled weather data for the testing period. KCI recorded observations of the following conditions in each room at the time of deployment and collection of the radon test kits:

- Indoor temperature,
- HVAC Operation,
- Dehumidifier operation,
- Humidifier operation,
- Ceiling fan operation, and
- Open windows or doors.

**Results:**

The results of the radon test analysis indicated the following:

<b>Radon Concentration</b>	<b>Room</b>	<b>Result</b>
$\geq 4.0$ pCi/L	None	n/a
$< 4.0$ pCi/L	See Attachment B	

Notes:

D- Duplicate sample

All field blanks, office blanks, and lab transit blanks had test results of less than the laboratory detection limit of 0.3 pCi/L. Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved. The Spike sample analysis results indicate the laboratory is operating within statistical control limits.

The sampling locations, field observations, and analytical results are listed on Table 1 (Attachment B). The laboratory analytical results are also attached (Attachment C). Laboratory results and exposure data for the spike samples are also included in Attachment C.

Our professional services have been performed in accordance with customary principles and practices in the field of industrial hygiene and engineering. If you have any questions or comments regarding this report, please feel free to contact me at (410) 316-7800.

Sincerely,



James M. Mouldale  
Radon Measurement Specialist  
KCI Technologies, Inc.

Attachments:      A- Floor Plan with Test Locations  
                          B- Table 1-Radon Test Summary Spreadsheet  
                          C- Laboratory Analytical Results

# ATTACHMENT B

## Radon Test Summary Spreadsheet

**Table Notes:**

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

Radon Testing Results		
Richard Montgomery High School		
Test Period: 12/21/15-12/24/15		
Kit Number	Room / Area	Result
7710774	1	0.7
7710778	14	0.8
7710777	15	0.6
7710780	16	0.7
7710782	18	1.2
7710783	32	0.8
7710784	33	< 0.3
7710790	36	< 0.3
7710789	37	< 0.3
7710791	39	< 0.3
7710797	41	< 0.3
7710799	42	< 0.3
7710800	43	< 0.3
7711201	45	< 0.3
7710726	100	0.7
7710740	107	< 0.3
7710748	108	0.7
7710751	109	1
7710750	110	0.9
7710753	112	0.8
7710755	112	0.8
7710756	114	< 0.3
7710754	115	< 0.3
7710739	123	< 0.3
7710724	124	< 0.3
7710725	126	< 0.3
7710718	127	< 0.3
7710717	128	< 0.3
7710716	131	< 0.3
7710711	132	0.7
7710705	134	0.7
7710706	135	< 0.3
7710712	136	< 0.3
7710708	137	0.6
7710710	138	0.7
7710704	140	0.7
7710702	141	< 0.3
7710703	142	0.6
7713694	145	0.8
7710757	159	< 0.3
7710761	160	< 0.3
7710764	202	< 0.3
7710766	218	< 0.3
7710767	220	< 0.3
7710768	240	< 0.3
7710769	242	< 0.3

Table Note:

\* Missing or Compromised Sample

<b>Radon Testing Results</b>		
<b>Richard Montgomery High School</b>		
<b>Test Period: 12/21/15-12/24/15</b>		
<b>Kit Number</b>	<b>Room / Area</b>	<b>Result</b>
7710772	254	< 0.3
7710771	300	< 0.3
7710773	300	< 0.3
7710727	100A	0.6
7710728	100B	0.6
7710729	100C	0.8
7710730	100D	1.1
7710731	* 100E (missing)	-
7710732	100G	0.9
7710733	100J	< 0.3
7710734	100N	0.7
7710735	100O	0.7
7710736	100P	0.8
7710737	100R	0.7
7710738	100S	0.9
7710741	107A	1.2
7710742	107B	0.8
7710746	107C	1.2
7710743	107D	1.4
7710747	107E	1.5
7710749	108A	1.2
7710744	108D	1.2
7710745	* 108E (missing)	-
7710752	110E	1.2
7711203	116A	< 0.3
7710719	129A	< 0.3
7710714	129C	0.7
7710715	129D	0.7
7710713	132A	0.9
7710707	134A	< 0.3
7710709	* 139 (missing)	-
7710775	13A	0.7
7713700	141A	0.7
7713699	* 141C (missing)	-
7713698	141E	< 0.3
7713692	141F	0.8
7713691	141G	0.6
7713693	141H	0.6
7713688	141I	1.2
7713687	141J	0.8
7713696	141K	0.8
7713697	141L	1.2
7713695	141M	0.6
7710701	142A	< 0.3
7713683	147D	2
7713685	147D	2
7713680	147E	1.2
7713681	147H	1.8
7713682	147I	1.2
7710776	17A	0.9

Table Note:

\* Missing or Compromised Sample

<b>Radon Testing Results</b>		
<b>Richard Montgomery High School</b>		
<b>Test Period: 12/21/15-12/24/15</b>		
<b>Kit Number</b>	<b>Room / Area</b>	<b>Result</b>
7710787	33B	< 0.3
7710785	33C	< 0.3
7710795	41A	< 0.3
7713686	CAFE	2.2
7713689	CAFE	2.4
7710762	GYM	< 0.3
7710765	GYM	< 0.3
7710763	* GYM (missing)	-
7711202	HEALTH ROOM	< 0.3
7710722	LIBRARY	< 0.3
7710723	LIBRARY	0.6

Table Note:

\* Missing or Compromised Sample



<b>Radon Testing Results</b>		
<b>Richard Montgomery High School</b>		
<b>Test Period: 12/21/15-12/24/15</b>		
<b>Kit Number</b>	<b>QC Type</b>	<b>Result</b>
7710779	D (14)	< 0.3
7710758	D (159)	< 0.3
7710781	D (16)	0.8
7710759	D (162)	< 0.3
7710770	D (242)	< 0.3
7710786	D (33B)	< 0.3
7710793	D (39)	< 0.3
7710796	D (41)	< 0.3
7710794	D (43)	< 0.3
7710792	D (45)	< 0.3
7713690	D (CAFE)	1.4
7710720	D (LIBRARY)	< 0.3
7710760	FB (162)	< 0.3
7710798	FB (41)	< 0.3
7713684	FB (CAFE)	< 0.3
7710721	FB (LIBRARY)	< 0.3
7707327	OB (0)	< 0.3
7707328	OB (0)	< 0.3

Table Note:

\* Missing or Compromised Sample

# ATTACHMENT C

## Laboratory Analytical Results

Radon test result report for:  
**RICHARD MONTGOMERY H.S.**

**1**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7707327	0	2015-12-21 @ 12:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-28
7707328	0	2015-12-21 @ 12:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-28
7710726	100	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.7 ± 0.3	2015-12-28
7710727	100A	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.6 ± 0.3	2015-12-28
7710728	100B	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.6 ± 0.3	2015-12-28
7710729	100C	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.8 ± 0.3	2015-12-28
7710730	100D	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	1.1 ± 0.4	2015-12-29
7710731	100E	@	@		
7710732	100G	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.9 ± 0.3	2015-12-28
7710733	100J	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28
7710734	100N	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.7 ± 0.3	2015-12-29
7710735	100O	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.7 ± 0.3	2015-12-29
7710736	100P	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	0.8 ± 0.4	2015-12-29
7710737	100R	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	0.7 ± 0.3	2015-12-28
7710738	100S	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	0.9 ± 0.3	2015-12-28
7710740	107	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28
7710741	107A	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	1.2 ± 0.3	2015-12-28
7710742	107B	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	0.8 ± 0.3	2015-12-28
7710746	107C	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	1.2 ± 0.3	2015-12-28
7710743	107D	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	1.4 ± 0.3	2015-12-28
7710747	107E	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	1.5 ± 0.3	2015-12-28
7710748	108	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	0.7 ± 0.3	2015-12-28
7710749	108A	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	1.2 ± 0.4	2015-12-29
7710744	108D	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	1.2 ± 0.3	2015-12-28
7710745	108E	@	@		
7710751	109	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	1.0 ± 0.3	2015-12-28
7710750	110	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	0.9 ± 0.3	2015-12-28
7710752	110E	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	1.2 ± 0.3	2015-12-28
7710753	112	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	0.8 ± 0.3	2015-12-28
7710755	112	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	0.8 ± 0.3	2015-12-28
7710756	114	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-29
7710754	115	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-29
7710739	123	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-29
7710724	124	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28
7710725	126	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28
7710718	127	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28
7710717	128	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28

Radon test result report for:  
**RICHARD MONTGOMERY H.S.**

1

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7710719	129A	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28
7710714	129C	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.7 ± 0.3	2015-12-29
7710715	129D	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.7 ± 0.3	2015-12-28
7710716	131	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-29
7710711	132	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.7 ± 0.3	2015-12-29
7710713	132A	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.9 ± 0.4	2015-12-28
7710705	134	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.7 ± 0.3	2015-12-28
7710707	134A	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28
7710706	135	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28
7710712	136	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-29
7710708	137	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.6 ± 0.3	2015-12-29
7710710	138	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.7 ± 0.3	2015-12-28
7710709	139	@	@		
7710704	140	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.7 ± 0.3	2015-12-29
7710702	141	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28
7713700	141A	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.7 ± 0.3	2015-12-28
7713699	141C	@	@		
7713698	141E	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-29
7713692	141F	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.8 ± 0.3	2015-12-28
7713691	141G	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.6 ± 0.3	2015-12-28
7713693	141H	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.6 ± 0.3	2015-12-28
7713688	141I	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	1.2 ± 0.4	2015-12-29
7713687	141J	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.8 ± 0.3	2015-12-28
7713696	141K	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.8 ± 0.3	2015-12-28
7713697	141L	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	1.2 ± 0.4	2015-12-29
7713695	141M	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.6 ± 0.3	2015-12-28
7710703	142	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.6 ± 0.3	2015-12-28
7710701	142A	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28
7713694	145	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.8 ± 0.4	2015-12-29
7713683	147D	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	2.0 ± 0.4	2015-12-28
7713685	147D	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	2.0 ± 0.4	2015-12-29
7713680	147E	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	1.2 ± 0.4	2015-12-29
7713681	147H	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	1.8 ± 0.4	2015-12-28
7713682	147I	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	1.2 ± 0.3	2015-12-28
7710757	159	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-28
7710758	159	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-29
7710761	160	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-29

January 12, 2016  
\*\* LABORATORY ANALYSIS REPORT \*\*

Radon test result report for:  
**RICHARD MONTGOMERY H.S.**

1

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7710759	162	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-29
7710760	162	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-29
7710764	202	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-28
7710766	218	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-29
7710767	220	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-28
7710768	240	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-28
7710770	242	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-28
7710769	242	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-29
7710772	254	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-28
7710771	300	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-28
7710773	300	2015-12-21 @ 4:00 pm	2015-12-24 @ 11:00 am	< 0.3	2015-12-29
7713684	CAFE	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28
7713686	CAFE	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	2.2 ± 0.4	2015-12-29
7713689	CAFE	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	2.4 ± 0.5	2015-12-29
7713690	CAFE	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	1.4 ± 0.4	2015-12-29
7710763	GYM	@	@		
7710762	GYM	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-29
7710765	GYM	2015-12-21 @ 4:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-29
7710720	LIBRARY	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28
7710722	LIBRARY	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-28
7710721	LIBRARY	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	< 0.3	2015-12-29
7710723	LIBRARY	2015-12-21 @ 3:00 pm	2015-12-24 @ 10:00 am	0.6 ± 0.3	2015-12-29

December  
29,  
2015

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

Radon test result report for:  
**TRANSIT DEC 14 2015**  
**NONE**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7704395	TRANSIT 1	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7706508	TRANSIT 10	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7706510	TRANSIT 11	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7706511	TRANSIT 12	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7706505	TRANSIT 13	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7704371	TRANSIT 14	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7706506	TRANSIT 15	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7704381	TRANSIT 16	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7704399	TRANSIT 17	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7704390	TRANSIT 18	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7704396	TRANSIT 2	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7704364	TRANSIT 3	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7704370	TRANSIT 4	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7704368	TRANSIT 5	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7706524	TRANSIT 6	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7706526	TRANSIT 7	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7706518	TRANSIT 8	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16
7706516	TRANSIT 9	2015-12-13 @ 10:00 am	2015-12-15 @ 10:00 am	< 0.3	2015-12-16

December  
23,  
2015

**LABORATORY ANALYSIS  
REPORT \*\***

Spike Sample Laboratory Results

Radon test result report for:  
**MCPS**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7706380	101	2015-12-18 @ 9:00 am	2015-12-21 @ 9:00 am	25.2	2015-12-23
7706381	102	2015-12-18 @ 9:00 am	2015-12-21 @ 9:00 am	26.5	2015-12-23
7706208	103	2015-12-18 @ 9:00 am	2015-12-21 @ 9:00 am	27.7	2015-12-23
7705132	104	2015-12-18 @ 9:00 am	2015-12-21 @ 9:00 am	28.6	2015-12-23
7706366	105	2015-12-18 @ 9:00 am	2015-12-21 @ 9:00 am	26.5	2015-12-23
7706211	106	2015-12-18 @ 9:00 am	2015-12-21 @ 9:00 am	26.1	2015-12-23

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

**Note: Spike samples are test canisters that are deliberately exposed to a controlled high level of radon in a laboratory. They provide a quality control measure in the testing process and do NOT reflect radon levels in the building being tested.**

**EXPOSURE IN BOWSER-MORNER RADON CHAMBER**

CLIENT KCI Technologies Inc. Job Number 173224

NOMINAL Conditions: Radon Conc 26.9 pCi/L Rel. Hum 49.6 % Temp. 69.9 F

Date Start: 12/18/15 Date Stop: 12/21/15 Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: 0929 Time Stop: 0929 Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: 7705132, 7706208, Device No.'s: \_\_\_\_\_

7706211, 7706366, \_\_\_\_\_

7706380, 7706381 \_\_\_\_\_

F3 Left

Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_ Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_ Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: \_\_\_\_\_ Device No.'s: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_ Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_ Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: \_\_\_\_\_ Device No.'s: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Note: All times are in 24-hour (military) notation, Eastern Standard Time (EST)  
Background = 7  $\mu$ R/h Elevation = 820 ft**





## Chain of Custody

Project Name: MCPS Radon Phase II

School Names:

- |                           |                             |                           |
|---------------------------|-----------------------------|---------------------------|
| 1. Bannockburn ES         | 11. Sherwood HS             | 21. Fairland ES           |
| 2. Walt Whitman HS        | 12. Hadley Farms            | 22. Cannon Road ES        |
| 3. Walter Johnson HS      | 13. S. Christa McAuliffe ES | 23. Richard Montgomery HS |
| 4. North Chevy Chase ES   | 14. Ronald A. McNair ES     | 24. Brooke Grove ES       |
| 5. Piney Branch ES        | 15. MLK MS                  | 25. Belmont ES            |
| 6. Forest Knolls ES       | 16. Ashburton ES            | 26. Emory Grove           |
| 7. Newport Mill MS        | 17. Bradley Hills ES        | 27. Clarksburg HS         |
| 8. Broad Acres ES         | 18. Flora M. Singer ES      | 28. Clarksburg ES         |
| 9. Briggs Chaney MS       | 19. Woodlin ES              | 29. John T. Baker MS      |
| 10. Blair G. Ewing Center | 20. Montgomery Knolls ES    |                           |

---

	Date	Initials
Radon Test Kits Deployed	12/21/2015	JM
Radon Test Kits Collected	12/24/2015	JM
Radon Test Kits Shipped to Lab*	12/24/2015	JM
Radon Test Kits Received by Lab*	12/28/2015	JM

\*All samples sent to Air Check, Inc., 1936 Butler Bridge Road, Mills River, NC 28758