



MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Takoma Park Middle School
Date of Test Report	05/27/2022
Round of Testing	Initial <u>Follow-up</u> Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	2
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	<0.3 pCi/L

Project Status

Current Project Status at this time: Testing completed; no further action needed



May 27, 2022

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

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

Location: Takoma Park Middle School
7611 Piney Branch Rd.
Silver Spring, MD 20910

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 Takoma Park Middle School, located at 7611 Piney Branch Rd. Silver Spring, MD 20910 (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.

KCI visited the site on March 29, 2022 and deployed five (5) 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.

KCI sampled the following locations during this follow-up test:

1. Rooms with missing test kits from the Radon 2022 testing period (i.e. test kit was deployed but not recovered),
2. Rooms with invalidated test kits from the Radon 2022 testing period (e.g. an open window in the room or disturbed test kit),
3. Rooms which were locked/inaccessible during the Radon 2022 testing period,
4. Rooms with elevated radon results (i.e. ≥ 3.5 pCi/L),
5. Rooms previously tested for radon but not tested in Radon 2022, and
6. Additional rooms that require testing (if applicable.)

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 April 01, 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 concentrations 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 mid 20°Fs and high temperatures ranged from the low 50°Fs to the mid 70°Fs. Maximum sustained winds ranged from 0-33 miles per hour. Average humidity was around 47% with 0.23 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		
Takoma Park MS RT		
Test Period: 03/29/2022 - 04/01/2022		
Kit Number	Room / Area	Result
11140036	149B	< 0.3
11140038	149B	< 0.3
11140040	149B	< 0.3
11140045	AUX GYM 170	< 0.3
11140046	AUX GYM 170	< 0.3

Table 2- Radon Testing Results			
Takoma Park MS RT			
Test Period: 03/29/2022 - 04/01/2022			
Kit Number	QC Type	Room / Area	Result
11140040	D	149b	< 0.3
11140038	FB	149b	< 0.3
11139883	OB	OFFICE BLANK	< 0.3
11139841	TB	TRAVEL BLANK	< 0.3

ATTACHMENT C

Laboratory Analytical Results

April 21, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
TAKOMA PARK MS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11140036	149B	2022-03-29 @ 11:00 am	2022-04-01 @ 10:00 am	< 0.3	2022-04-04
11140038	149B	2022-03-29 @ 11:00 am	2022-04-01 @ 10:00 am	< 0.3	2022-04-04
11140040	149B	2022-03-29 @ 11:00 am	2022-04-01 @ 10:00 am	< 0.3	2022-04-04
11140045	AUX GYM 170	2022-03-29 @ 11:00 am	2022-04-01 @ 10:00 am	< 0.3	2022-04-04
11140046	AUX GYM 170	2022-03-29 @ 11:00 am	2022-04-01 @ 10:00 am	< 0.3	2022-04-04

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 204620

NOMINAL Conditions: Radon Conc 27.0 pCi/L Rel. Hum 50.1 % Temp. 70.0 F

Date Start: 3/18/22 Date Stop: 3/21/22 Date Start: _____ Date Stop: _____

Time Start: 0705 Time Stop: 0705 Time Start: _____ Time Stop: _____

Device No.'s: (5) Char Bags - Device No.'s: _____

11139367, 11139368, 11139371, _____

11139710, 11139717 _____

E3 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 μ R/h Elevation = 820 ft

March 30, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

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 #	Room Id	Started	Ended	pCi/L	Analyzed
11139367	SK1	2022-03-18 @ 7:00 am	2022-03-21 @ 7:00 am	25.9 \pm 2.1	2022-03-30
11139368	SK2	2022-03-18 @ 7:00 am	2022-03-21 @ 7:00 am	23.9 \pm 2.0	2022-03-30
11139371	SK3	2022-03-18 @ 7:00 am	2022-03-21 @ 7:00 am	25.7 \pm 2.1	2022-03-30
11139710	SK4	2022-03-18 @ 7:00 am	2022-03-21 @ 7:00 am	26.4 \pm 2.1	2022-03-30
11139717	SK5	2022-03-18 @ 7:00 am	2022-03-21 @ 7:00 am	24.6 \pm 2.0	2022-03-30

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Radon Test Kit Chain of Custody

Project Name: MCPS Radon – March 2022 Schools – Retesting

Name of Schools:

1. Watkins Mill HS
2. Cresthaven ES
3. East Silver Spring ES
4. Fairland Center
5. Francis Scott Key MS
6. Greencastle ES
7. Roscoe Nix ES
8. West Farm Transportation Depot
9. Wheaton HS
10. White Oak MS
11. William Tyler Page ES
12. Bel Pre ES
13. Fairland ES
14. Highland ES
15. Rolling Terrace ES
16. Takoma Park MS
17. Viers Mill ES
18. Poolesville ES

	Date	Initials
Radon Test Kits Deployed	03/29/2022	BMM
Radon Test Kits Collected	04/01/2022	BMM
Radon Test Kits Shipped to Lab*	04/01/2022	BMM
Radon Test Kits Received by Lab*	04/04/2022	BMM

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



MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Takoma Park Middle School
Date of Test Report	5/11/2022
Round of Testing	Initial Follow-up Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	82
# Rooms \geq 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	1.4 pCi/L

Project Status:

Initial testing completed; Missing or compromised samples need re-sampling



May 11, 2022

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

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

Location: Takoma Park Middle School
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Silver Spring, MD 20910

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KCI visited the site on March 14, 2022 and deployed ninety-six (96) 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 March 17, 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.

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- 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 low 20s and high temperatures ranged from the mid 70s to the high 50s Fahrenheit. Maximum sustained winds ranged from 0-32 miles per hour. Average humidity was around 61% 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.

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

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Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

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ACI- Air Check, Inc.

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FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

OC- Quality Control

Table 1- Radon Testing Results		
Takoma Park MS		
Test Period: 03/14/2022 - 03/17/2022		
Kit Number	Room / Area	Result
11131141	101	< 0.3
11131118	102	< 0.3
11131125	104	< 0.3
11131119	105	< 0.3
11131126	106	< 0.3
11131117	107	< 0.3
11131127	108	< 0.3
11131107	110	0.7
11131108	112	< 0.3
11131111	112	< 0.3
11131103	114	< 0.3
11131113	118	< 0.3
11131135	120	< 0.3
11131123	122	< 0.3
11131131	124	< 0.3
11131132	126	< 0.3
11131129	127	< 0.3
11131130	128	< 0.3
11131133	129	< 0.3
11131104	130	< 0.3
11131139	131	< 0.3
11131140	131	< 0.3
11131150	132	< 0.3
11131149	134	< 0.3
11131136	135	< 0.3
11131143	136	< 0.3
11131142	137	< 0.3
11131134	139	< 0.3
11131146	140	< 0.3
11131147	145	< 0.3
11131138	148	< 0.3
11131144	148	< 0.3
11131145	148	0.7
11131151	149	< 0.3
11131101	160	< 0.3
11131167	160	0.8
11131152	170	< 0.3
11131121	175	0.7
11131102	176	< 0.3
11131128	176	0.5
11131157	178	< 0.3
11131168	180	< 0.3

Table 1- Radon Testing Results		
Takoma Park MS		
Test Period: 03/14/2022 - 03/17/2022		
Kit Number	Room / Area	Result
11131165	182	< 0.3
11131173	182	0.6
11131174	182	< 0.3
11131153	184	0.7
11131181	186	< 0.3
11131170	189	0.6
11131161	201	< 0.3
11131171	201	< 0.3
11131169	234	< 0.3
11131162	243	< 0.3
11131179	301	< 0.3
11131188	400	< 0.3
11131194	400	< 0.3
11131195	400	< 0.3
11131177	401	< 0.3
11131193	402	< 0.3
11131197	403	0.6
11131160	404	< 0.3
11131164	404	< 0.3
11131183	404	0.7
11131191	406	< 0.3
11131163	407	< 0.3
11131190	408	1.4
11131189	409	< 0.3
11131180	410	0.6
11131172	411	< 0.3
11131199	412	0.5
11131185	413	< 0.3
11131184	414	< 0.3
11131186	415	< 0.3
11131192	417	< 0.3
11131200	420	< 0.3
11131198	421	0.7
11131196	422	< 0.3
11131166	500	< 0.3
11131122	508	< 0.3
11131148	512	< 0.3
11131137	514	< 0.3
11131109	105A	< 0.3
11131110	105B	0.5
11131105	117A	< 0.3
11131106	117B	< 0.3

Table 1- Radon Testing Results		
Takoma Park MS		
Test Period: 03/14/2022 - 03/17/2022		
Kit Number	Room / Area	Result
11131115	119A	< 0.3
11131116	119A	< 0.3
11131124	119A	< 0.3
11131112	119B	< 0.3
11131120	119C	< 0.3
11131114	119D	< 0.3
11131159	145C	< 0.3
11131176	180A	< 0.3
11131156	500A	< 0.3
11131155	500B	< 0.3
11131154	500E	< 0.3
11131182	KITCHEN OFFICE	< 0.3

Table 2- Radon Testing Results			
Takoma Park MS			
Test Period: 03/14/2022 - 03/17/2022			
Kit Number	QC Type	Room / Area	Result
11131111	D	112	< 0.3
11131124	D	119a	< 0.3
11131116	FB	119a	< 0.3
11131140	D	131	< 0.3
11131145	D	148	< 0.3
11131144	FB	148	< 0.3
11131102	D	176	< 0.3
11131174	D	182	< 0.3
11131165	FB	182	< 0.3
11131161	D	201	< 0.3
11131183	D	404	0.7
11131160	FB	404	< 0.3
11131195	D	400	< 0.3
11131194	FB	400	< 0.3
11138932	OB	OFFICE BLANK	< 0.3
11138946	TB	TRAVEL BLANK	< 0.3

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:
TAKOMA PARK MS
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11131141	101	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131118	102	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131125	104	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131119	105	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131109	105A	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131110	105B	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	0.5 ± 0.3	2022-03-21
11131126	106	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131117	107	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131127	108	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131107	110	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	0.7 ± 0.4	2022-03-21
11131108	112	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131111	112	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131103	114	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131105	117A	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131106	117B	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131113	118	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131124	119A	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131116	119A	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131115	119A	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131112	119B	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131120	119C	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131114	119D	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131135	120	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131123	122	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131131	124	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131132	126	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131129	127	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131130	128	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131133	129	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131104	130	2022-03-14 @ 9:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131139	131	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131140	131	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131150	132	2022-03-14 @ 10:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131149	134	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131136	135	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131143	136	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131142	137	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21

Radon test result report for:
**TAKOMA PARK MS
 MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11131134	139	2022-03-14 @ 9:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131146	140	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131147	145	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131159	145C	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131144	148	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131138	148	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131145	148	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	0.7 ± 0.3	2022-03-21
11131151	149	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131101	160	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131167	160	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	0.8 ± 0.4	2022-03-21
11131152	170	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131121	175	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	0.7 ± 0.3	2022-03-21
11131128	176	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	0.5 ± 0.3	2022-03-21
11131102	176	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131157	178	2022-03-14 @ 10:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131168	180	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131176	180A	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131173	182	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	0.6 ± 0.3	2022-03-21
11131174	182	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131165	182	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131153	184	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	0.7 ± 0.4	2022-03-21
11131181	186	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131170	189	2022-03-14 @ 11:00 am	2022-03-17 @ 8:00 am	0.6 ± 0.3	2022-03-21
11131161	201	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131171	201	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131169	234	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131162	243	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131179	301	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131188	400	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131194	400	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131195	400	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131177	401	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131193	402	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131197	403	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	0.6 ± 0.3	2022-03-21
11131160	404	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131164	404	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131183	404	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	0.7 ± 0.3	2022-03-21

Radon test result report for:
**TAKOMA PARK MS
 MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11131191	406	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131163	407	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131190	408	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	1.4 ± 0.3	2022-03-21
11131189	409	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131180	410	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	0.6 ± 0.3	2022-03-21
11131172	411	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131199	412	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	0.5 ± 0.3	2022-03-21
11131185	413	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131184	414	2022-03-14 @ 11:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131186	415	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131192	417	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131200	420	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131198	421	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	0.7 ± 0.3	2022-03-21
11131196	422	2022-03-14 @ 11:00 am	2022-03-17 @ 9:00 am	< 0.3	2022-03-21
11131166	500	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131156	500A	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131155	500B	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131154	500E	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131122	508	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131148	512	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131137	514	2022-03-14 @ 10:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21
11131182	KITCHEN OFFICE	2022-03-14 @ 11:00 am	2022-03-17 @ 8:00 am	< 0.3	2022-03-21

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies, Inc. Job Number 204620

NOMINAL Conditions: Radon Conc 27.0 pCi/L Rel. Hum 50.1 % Temp. 70.0 F

Date Start: 3/18/22 Date Stop: 3/21/22 Date Start: _____ Date Stop: _____

Time Start: 0705 Time Stop: 0705 Time Start: _____ Time Stop: _____

Device No.'s: (5) Char Bags - Device No.'s: _____

11139367, 11139368, 11139371, _____

11139710, 11139717 _____

E3 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 μ R/h Elevation = 820 ft

March 30, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

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 #	Room Id	Started	Ended	pCi/L	Analyzed
11139367	SK1	2022-03-18 @ 7:00 am	2022-03-21 @ 7:00 am	25.9 \pm 2.1	2022-03-30
11139368	SK2	2022-03-18 @ 7:00 am	2022-03-21 @ 7:00 am	23.9 \pm 2.0	2022-03-30
11139371	SK3	2022-03-18 @ 7:00 am	2022-03-21 @ 7:00 am	25.7 \pm 2.1	2022-03-30
11139710	SK4	2022-03-18 @ 7:00 am	2022-03-21 @ 7:00 am	26.4 \pm 2.1	2022-03-30
11139717	SK5	2022-03-18 @ 7:00 am	2022-03-21 @ 7:00 am	24.6 \pm 2.0	2022-03-30

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon – March 2022 Schools

Name of Schools:

1. Silver Spring International MS
2. Sligo Creek ES
3. Takoma Park MS
4. Takoma Park ES
5. Highland ES
6. Rolling Terrace ES

	Date	Initials
Radon Test Kits Deployed	03/14/2022	BMM
Radon Test Kits Collected	03/17/2022	BMM
Radon Test Kits Shipped to Lab*	03/17/2022	BMM
Radon Test Kits Received by Lab*	03/20/2022	BMM

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