



MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	White Oak 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 \geq 4.0 pCi/L	1
Lowest Value	0.6 pCi/L
Highest Value	6.7 pCi/L

Project Status

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

Mitigation needed - Room 138A



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: White Oak Middle School
12201 New Hampshire Ave.
Silver Spring, MD 20904

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 White Oak Middle School, located at 12201 New Hampshire Ave. Silver Spring, MD (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	138A	6.7
≥4.0 pCi/L	138A	5.5
<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		
White Oak MS RT		
Test Period: 03/29/2022 - 04/01/2022		
Kit Number	Room / Area	Result
11139926	138A	1.4
11139966	138A	6.7
11139970	138A	5.5
11139965	GYM 244	0.6
11139968	GYM 244	0.7

Table 2- Radon Testing Results			
White Oak MS RT			
Test Period: 03/29/2022 - 04/01/2022			
Kit Number	QC Type	Room / Area	Result
11139966	D	138A	6.7
11139926	FB	138A	1.4
11139883	OB	OFFICE BLANK	< 0.3
11139841	TB	TRAVEL BLANK	< 0.3

ATTACHMENT C

Laboratory Analytical Results

April 4, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11139926	138A	2022-03-29 @ 11:00 am	2022-04-01 @ 11:00 am	1.4 ± 0.3	2022-04-04
11139966	138A	2022-03-29 @ 11:00 am	2022-04-01 @ 11:00 am	6.7 ± 0.5	2022-04-04
11139970	138A	2022-03-29 @ 11:00 am	2022-04-01 @ 11:00 am	5.5 ± 0.4	2022-04-04
11139965	GYM 244	2022-03-29 @ 11:00 am	2022-04-01 @ 11:00 am	0.6 ± 0.3	2022-04-04
11139968	GYM 244	2022-03-29 @ 11:00 am	2022-04-01 @ 11:00 am	0.7 ± 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 light

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 – 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	White Oak Middle School
Date of Test Report	4/29/2022
Round of Testing	Initial Follow-up Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	64
# Rooms \geq 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	6.6 pCi/L

Project Status:

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



April 29, 2022

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

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

Location: White Oak Middle School
12201 New Hampshire Ave.
Silver Spring, MD 20904

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 White Oak Middle School located at 12201 New Hampshire Ave. Silver Spring, MD 20904 (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 7, 2022 and deployed seventy-three (73) 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 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:

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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 20s and high temperatures ranged from the high 70s to the low 50s Fahrenheit. Maximum sustained winds ranged from 0-32 miles per hour. Average humidity was around 65% with 1.09 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:

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Sincerely,



Tyler P. McCleaf
Radon Measurement Provider
#111004 RT
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Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

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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		
White Oak MS		
Test Period: 03/07/2022 - 03/10/2022		
Kit Number	Room / Area	Result
11123489	101	1.6
11123499	102	1.2
11123490	103	1.7
11123483	104	1.2
11123498	105	1.6
11134316	105	1.6
11123486	106	0.9
11123477	107	1.4
11123479	108	1.2
11123493	109	0.8
11123487	110	1.2
11123480	111	1.2
11123488	112	1.4
11123495	113	1.0
11123491	114	1.7
11123482	115	0.8
11123485	115	< 0.3
11123492	115	1.0
11123494	117	0.9
11134356	119	0.8
11134348	120	< 0.3
11134355	122	1.2
11134354	123	1.3
11134359	124	1.4
11134351	125	1.7
11134353	127	0.9
11123496	129	1.0
11134347	129	1.1
11134357	130	2.1
11134362	131	1.4
11134350	132	0.5
11134361	134	1.7
11134360	138	2.4
11134358	140	2.1
11134381	200	< 0.3
11134384	200	< 0.3
11134386	200	< 0.3
11134371	201	< 0.3
11134377	205	< 0.3
11134382	212	< 0.3
11134388	222	< 0.3
11134389	225	< 0.3

Table 1- Radon Testing Results		
White Oak MS		
Test Period: 03/07/2022 - 03/10/2022		
Kit Number	Room / Area	Result
11134393	225	< 0.3
11134394	233	< 0.3
11134395	241	< 0.3
11134368	250	1.3
11134349	252	0.7
11134396	320	< 0.3
11123500	101A	2.6
11123478	106A	1.5
11123484	107A	1.3
11134352	125A	1.1
11123497	138A	6.6
11134372	201A	< 0.3
11134375	201B	< 0.3
11134376	201B	< 0.3
11134379	201D	0.7
11134373	201E	< 0.3
11134366	201F	0.6
11134369	201G	< 0.3
11134374	201J	0.8
11134380	202 MEDIA CENTER	0.6
11134383	202 MEDIA CENTER	< 0.3
11134392	202A	0.7
11134385	202B	< 0.3
11134378	205A	< 0.3
11134390	214 CAFETERIA	< 0.3
11134391	214 CAFETERIA	< 0.3
11134387	216A	1.0
11134365	244 GYM	0.8
11134363	252A	1.2
11134364	252A	< 0.3
11134367	252A	1.5

Table 2- Radon Testing Results			
White Oak MS			
Test Period: 03/07/2022 - 03/10/2022			
Kit Number	QC Type	Room / Area	Result
11134316	D	105	1.6
11123492	D	115	1.0
11123485	FB	115	< 0.3
11123496	D	129	1.0
11134367	D	252A	1.5
11134364	FB	252A	< 0.3
11134386	D	200	< 0.3
11134381	FB	200	< 0.3
11134393	D	225	< 0.3
11131662	OB	OFFICE BLANK	< 0.3
11131691	TB	TRAVEL BLANK	< 0.3

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11123489	101	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.6 ± 0.4	2022-03-14
11123500	101A	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	2.6 ± 0.4	2022-03-14
11123499	102	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.2 ± 0.3	2022-03-14
11123490	103	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.7 ± 0.4	2022-03-14
11123483	104	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.2 ± 0.3	2022-03-14
11123498	105	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.6 ± 0.4	2022-03-14
11134316	105	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.6 ± 0.4	2022-03-14
11123486	106	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	0.9 ± 0.3	2022-03-14
11123478	106A	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.5 ± 0.3	2022-03-14
11123477	107	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.4 ± 0.4	2022-03-14
11123484	107A	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.3 ± 0.3	2022-03-14
11123479	108	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.2 ± 0.3	2022-03-14
11123493	109	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	0.8 ± 0.3	2022-03-14
11123487	110	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.2 ± 0.3	2022-03-14
11123480	111	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.2 ± 0.3	2022-03-14
11123488	112	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.4 ± 0.4	2022-03-14
11123495	113	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.0 ± 0.3	2022-03-14
11123491	114	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	1.7 ± 0.4	2022-03-14
11123482	115	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	0.8 ± 0.3	2022-03-14
11123492	115	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	1.0 ± 0.3	2022-03-14
11123485	115	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	< 0.3	2022-03-14
11123494	117	2022-03-07 @ 9:00 am	2022-03-10 @ 9:00 am	0.9 ± 0.3	2022-03-14
11134356	119	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	0.8 ± 0.3	2022-03-14
11134348	120	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	< 0.3	2022-03-14
11134355	122	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	1.2 ± 0.4	2022-03-14
11134354	123	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	1.3 ± 0.4	2022-03-14
11134359	124	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	1.4 ± 0.4	2022-03-14
11134351	125	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	1.7 ± 0.3	2022-03-14
11134352	125A	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	1.1 ± 0.3	2022-03-14
11134353	127	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	0.9 ± 0.3	2022-03-14
11123496	129	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	1.0 ± 0.4	2022-03-14
11134347	129	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	1.1 ± 0.3	2022-03-14
11134357	130	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	2.1 ± 0.4	2022-03-14
11134362	131	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	1.4 ± 0.3	2022-03-14
11134350	132	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	0.5 ± 0.3	2022-03-14
11134361	134	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	1.7 ± 0.4	2022-03-14
11134360	138	2022-03-07 @ 10:00 am	2022-03-10 @ 9:00 am	2.4 ± 0.4	2022-03-14

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11123497	138A	2022-03-07 @ 10:00 am	2022-03-10 @ 10:00 am	6.6 ± 0.5	2022-03-14
11134358	140	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	2.1 ± 0.4	2022-03-14
11134384	200	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134386	200	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134381	200	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134371	201	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134372	201A	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134375	201B	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134376	201B	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134379	201D	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	0.7 ± 0.3	2022-03-14
11134373	201E	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134366	201F	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	0.6 ± 0.3	2022-03-14
11134369	201G	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134374	201J	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	0.8 ± 0.3	2022-03-14
11134380	202 MEDIA CENTER	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	0.6 ± 0.3	2022-03-14
11134383	202 MEDIA CENTER	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134392	202A	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	0.7 ± 0.3	2022-03-14
11134385	202B	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134377	205	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134378	205A	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134382	212	2022-03-07 @ 12:00 pm	2022-03-10 @ 9:00 am	< 0.3	2022-03-14
11134391	214 CAFETERIA	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134390	214 CAFETERIA	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134387	216A	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	1.0 ± 0.3	2022-03-14
11134388	222	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134389	225	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134393	225	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134394	233	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134395	241	2022-03-07 @ 12:00 pm	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134365	244 GYM	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	0.8 ± 0.3	2022-03-14
11134368	250	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	1.3 ± 0.3	2022-03-14
11134349	252	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	0.7 ± 0.3	2022-03-14
11134364	252A	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	< 0.3	2022-03-14
11134363	252A	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	1.2 ± 0.3	2022-03-14
11134367	252A	2022-03-07 @ 11:00 am	2022-03-10 @ 10:00 am	1.5 ± 0.3	2022-03-14
11134396	320	2022-03-07 @ 12:00 pm	2022-03-10 @ 11:00 am	< 0.3	2022-03-14

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 light

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. Cresthaven ES
2. Key, Francis Scott MS
3. Nix, Roscoe ES
4. Greencastle ES
5. Jackson Road
6. Page, William Tyler ES
7. West Farm Transportation Depot
8. Westover ES
9. White Oak MS

	Date	Initials
Radon Test Kits Deployed	03/07/2022	BMM
Radon Test Kits Collected	03/10/2022	BMM
Radon Test Kits Shipped to Lab*	03/10/2022	BMM
Radon Test Kits Received by Lab*	03/13/2022	BMM

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