



**MCPS RADON TESTING – EXECUTIVE SUMMARY**

Site Name	Gaithersburg Middle School
Date of Test Report	05/31/2022
Round of Testing	Initial Follow-up Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	2
# Rooms $\geq$ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	1.0 pCi/L

**Project Status**

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



May 31, 2022

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

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

Location: Gaithersburg Middle School  
2 Teachers Way  
Gaithersburg, MD 20877

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 Gaithersburg Middle School, located at 2 Teachers Way, Gaithersburg, MD 20877 (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 April 05, 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.  $\geq 3.5$  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 08, 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		
Gaithersburg MS RT		
Test Period: 04/05/2022 - 04/08/2022		
Kit Number	Room / Area	Result
11139963	206	< 0.3
11139995	206	1.0
11139998	206	1.0
11139999	GYM	0.8
11140000	GYM	0.7



Table 2- Radon Testing Results			
Gaithersburg MS RT			
Test Period: 04/05/2022 - 04/08/2022			
Kit Number	QC Type	Room / Area	Result
11139998	D	206	1.0
11139963	FB	206	< 0.3
11139882	OB	OFFICE BLANK	< 0.3
11139881	TB	TRAVEL BLANK	< 0.3

Summary of Missed Locations		
Gaithersburg MS RT		
Test Period: 04/05/22 - 04/08/22		
Kit Number	Room/Area	Result
	NA	

Summary of Missing, Compromised and $\geq 4$ piC/L Tests		
Gaithersburg MS RT		
Test Period: 04/05/22 - 04/08/22		
Kit Number	Room/Area	Result
	NA	

Table Note:  
 \* Missing or Compromised Sample

# ATTACHMENT C

## Laboratory Analytical Results

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April 12, 2022

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

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Radon test result report for:

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<b>Kit #</b>	<b>Room Id</b>	<b>Started</b>	<b>Ended</b>	<b>pCi/L</b>	<b>Analyzed</b>
11139963	206	2022-04-05 @ 12:00 pm	2022-04-08 @ 11:00 am	< 0.3	2022-04-12
11139995	206	2022-04-05 @ 12:00 pm	2022-04-08 @ 11:00 am	1.0 ± 0.3	2022-04-12
11139998	206	2022-04-05 @ 12:00 pm	2022-04-08 @ 11:00 am	1.0 ± 0.3	2022-04-12
11139999	GYM	2022-04-05 @ 12:00 pm	2022-04-08 @ 11:00 am	0.8 ± 0.3	2022-04-12
11140000	GYM	2022-04-05 @ 12:00 pm	2022-04-08 @ 11:00 am	0.7 ± 0.3	2022-04-12

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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  $\mu$ R/h Elevation = 820 ft

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March 30, 2022

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

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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).

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<b>Kit #</b>	<b>Room Id</b>	<b>Started</b>	<b>Ended</b>	<b>pCi/L</b>	<b>Analyzed</b>
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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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 – April 2022 Schools – Retesting

Name of Schools:

1. Gaithersburg MS
2. Julius West MS
3. Sherwood HS

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	Date	Initials
Radon Test Kits Deployed	04/05/2022	BMM
Radon Test Kits Collected	04/08/2022	BMM
Radon Test Kits Shipped to Lab*	04/08/2022	BMM
Radon Test Kits Received by Lab*	04/11/2022	BMM

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



**MCPS RADON TESTING – EXECUTIVE SUMMARY**

Site Name	Gaithersburg Middle School
Date of Test Report	4/7/2022
Round of Testing	Initial Follow-up Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	74
# Rooms $\geq$ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	3.2 pCi/L

Project Status:

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





April 7, 2022

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

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

Location: Gaithersburg MS  
2 Teacher's Way  
Gaithersburg, MD 20877

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 Gaithersburg MS, located at 2 Teacher's Way Gaithersburg, MD 20877 (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 22, 2022 and deployed eighty six (86) 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 25, 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 post-mitigation biennial testing.

These tests were conducted to:

- Confirm the success of the mitigation system(s).

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 20s and high temperatures ranged from the high 30s to the high 40s Fahrenheit. Maximum sustained winds ranged from 5-18 miles per hour. Average humidity was around 15% with 1.5 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:

<b>Radon Concentration</b>	<b>Room</b>	<b>Result</b>
≥4.0 pCi/L	NA	NA
<4.0 pCi/L	See Attachment B	

<b>Quality Control Samples</b>	
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		
Gaithersburg MS		
Test Period: 02/22/2022 - 02/25/2022		
Kit Number	Room / Area	Result
11124182	100	1.5
11124185	101	2.2
11124188	102	NA
11124187	103	1.0
11124191	104	< 0.3
11122877	105	1.2
11122894	105	1.1
11122846	107	< 0.3
11122879	108	1.3
11122856	109	< 0.3
11122863	111	1.6
11122854	112	1.0
11122855	114	< 0.3
11124194	200	2.8
11124197	202	2.5
11124198	203	1.3
11124192	206	3.2
11124195	206	< 0.3
11124196	206	3.1
11122862	300	0.8
11122845	301	1.0
11122878	302	0.9
11122883	303	< 0.3
11122880	304	< 0.3
11122892	304	0.9
11122896	304	< 0.3
11122898	305	< 0.3
11122893	307	< 0.3
11122897	309	< 0.3
11122884	311	1.3
11122859	400	< 0.3
11122874	401	< 0.3
11122881	402	0.8
11122838	403	0.8
11122841	403	1.1
11122872	403	< 0.3
11122866	404	< 0.3
11122882	405	0.7
11122814	407	< 0.3
11122868	500	< 0.3
11122869	501	< 0.3
11122873	502	1.0
11122888	505	0.6
11122849	507	< 0.3
11124165	507	1.0

Table 1- Radon Testing Results		
Gaithersburg MS		
Test Period: 02/22/2022 - 02/25/2022		
Kit Number	Room / Area	Result
11122875	601	1.3
11122889	603	2.0
11124200	709	1.4
11124199	808	< 0.3
11124183	100B	0.9
11124189	101 OFFICE	< 0.3
11122851	407 CENTER	< 0.3
11122876	407 LEFT	< 0.3
11122827	407 RIGHT	< 0.3
11122867	ATTENDANCE	1.0
11124181	CAFETERIA	< 0.3
11122848	COUNSELING	< 0.3
11122853	COUNSELING ALLISON	0.5
11122822	COUNSELING IKPEMGBE	< 0.3
11122857	COUNSELING MOSKOWITZ	0.7
11122860	COUNSELING OBEN	< 0.3
11122850	COUNSELING PINTO	< 0.3
11124173	HEALTH CENTER	1.0
11124186	HEALTH CENTER	< 0.3
11124174	HEALTH CENTER OFFICE	< 0.3
11122861	LOUNGE	1.3
11122829	MAIN OFFICE	< 0.3
11122852	MAIN OFFICE	< 0.3
11122870	MAIN OFFICE	< 0.3
11122899	MAIN OFFICE BEAN	< 0.3
11122887	MAIN OFFICE BLANTON	1.1
11122864	MAIN OFFICE CONFERENCE ROOM	0.9
11122885	MAIN OFFICE COPY ROOM	< 0.3
11122900	MAIN OFFICE MAIL ROOM	< 0.3
11122891	MAIN OFFICE PRINCIPAL	< 0.3
11122886	MAIN OFFICE TYLEEN	< 0.3
11122895	MAN OFFICE JOHNSON	0.7
11122865	MEDIA CENTER	1.0
11124164	MEDIA CENTER	0.9
11124172	MEDIA CENTER CLASSROOM	1.3
11124190	MEDIA CENTER FILM ROOM	< 0.3
11124163	MEDIA CENTER MDDLE	1.7
11122858	MEDIA CENTER OFFICE	1.9
11124171	MEDIA CENTER THOMAS	1.1
11124179	STAFF WORKROOM	1.6
11124180	TRIAGE	1.3



Table 2- Radon Testing Results			
Gaithersburg MS			
Test Period: 02/22/2022 - 02/25/2022			
Kit Number	QC Type	Room / Area	Result
11122852	D	Main Office	< 0.3
11122870	FB	Main Office	< 0.3
11122844	D	Gym	NA
11122880	D	304	< 0.3
11122896	FB	304	< 0.3
11122894	D	105	1.1
11122841	D	403	1.1
11122872	FB	403	< 0.3
11124165	D	507	1.0
11122865	D	Media Center	1.0
11124186	FB	Health center	< 0.3
11124196	D	206	3.1
11124195	FB	206	< 0.3
11139384	OB	OFFICE BLANK	< 0.3
11131222	TB	TRAVEL BLANK	< 0.3



# ATTACHMENT C

## Laboratory Analytical Results

Radon test result report for:

**GAITHERSBURG MIDDLE SCHOOL**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11124182	100	2022-02-22 @ 4:00 pm	2022-02-25 @ 11:00 am	1.5 ± 0.5	2022-03-03
11124183	100B	2022-02-22 @ 4:00 pm	2022-02-25 @ 11:00 am	0.9 ± 0.5	2022-03-03
11124185	101	2022-02-22 @ 4:00 pm	2022-02-25 @ 11:00 am	2.2 ± 0.6	2022-03-03
11124189	101 OFFICE	2022-02-22 @ 4:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11124188	102	2022-02-22 @ 4:00 pm	2022-02-25 @ 11:00 am	???? IF1	2022-03-03
11124187	103	2022-02-22 @ 4:00 pm	2022-02-25 @ 11:00 am	1.0 ± 0.5	2022-03-03
11124191	104	2022-02-22 @ 4:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11122894	105	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	1.1 ± 0.5	2022-03-03
11122877	105	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	1.2 ± 0.5	2022-03-03
11122846	107	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11122879	108	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	1.3 ± 0.5	2022-03-03
11122856	109	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11122863	111	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	1.6 ± 0.5	2022-03-03
11122854	112	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	1.0 ± 0.5	2022-03-03
11122855	114	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11124194	200	2022-02-22 @ 4:00 pm	2022-02-25 @ 12:00 pm	2.8 ± 0.6	2022-03-03
11124197	202	2022-02-22 @ 4:00 pm	2022-02-25 @ 12:00 pm	2.5 ± 0.6	2022-03-03
11124198	203	2022-02-22 @ 4:00 pm	2022-02-25 @ 12:00 pm	1.3 ± 0.5	2022-03-03
11124196	206	2022-02-22 @ 4:00 pm	2022-02-25 @ 12:00 pm	3.1 ± 0.6	2022-03-03
11124192	206	2022-02-22 @ 4:00 pm	2022-02-25 @ 12:00 pm	3.2 ± 0.6	2022-03-03
11124195	206	2022-02-22 @ 4:00 pm	2022-02-25 @ 12:00 pm	< 0.3	2022-03-03
11122862	300	2022-02-22 @ 1:00 pm	2022-02-25 @ 12:00 pm	0.8 ± 0.5	2022-03-03
11122845	301	2022-02-22 @ 1:00 pm	2022-02-25 @ 12:00 pm	1.0 ± 0.5	2022-03-03
11122878	302	2022-02-22 @ 1:00 pm	2022-02-25 @ 12:00 pm	0.9 ± 0.5	2022-03-03
11122883	303	2022-02-22 @ 1:00 pm	2022-02-25 @ 12:00 pm	< 0.3	2022-03-03
11122896	304	2022-02-22 @ 1:00 pm	2022-02-25 @ 12:00 pm	< 0.3	2022-03-03
11122880	304	2022-02-22 @ 1:00 pm	2022-02-25 @ 12:00 pm	< 0.3	2022-03-03
11122892	304	2022-02-22 @ 1:00 pm	2022-02-25 @ 12:00 pm	0.9 ± 0.4	2022-03-03
11122898	305	2022-02-22 @ 1:00 pm	2022-02-25 @ 12:00 pm	< 0.3	2022-03-03
11122893	307	2022-02-22 @ 1:00 pm	2022-02-25 @ 12:00 pm	< 0.3	2022-03-03
11122897	309	2022-02-22 @ 1:00 pm	2022-02-25 @ 12:00 pm	< 0.3	2022-03-03
11122884	311	2022-02-22 @ 1:00 pm	2022-02-25 @ 12:00 pm	1.3 ± 0.5	2022-03-03
11122859	400	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11122874	401	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11122881	402	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	0.8 ± 0.5	2022-03-03
11122872	403	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11122841	403	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	1.1 ± 0.5	2022-03-03

Radon test result report for:**GAITHERSBURG MIDDLE SCHOOL**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11122838	403	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	0.8 ± 0.5	2022-03-03
11122866	404	2022-02-22 @ 2:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11122882	405	2022-02-22 @ 1:00 pm	2022-02-25 @ 11:00 am	0.7 ± 0.4	2022-03-03
11122814	407	2022-02-22 @ 2:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11122851	407 CENTER	2022-02-22 @ 2:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11122876	407 LEFT	2022-02-22 @ 2:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11122827	407 RIGHT	2022-02-22 @ 2:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11122868	500	2022-02-22 @ 12:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11122869	501	2022-02-22 @ 2:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11122873	502	2022-02-22 @ 12:00 pm	2022-02-25 @ 11:00 am	1.0 ± 0.5	2022-03-03
11122888	505	2022-02-22 @ 2:00 pm	2022-02-25 @ 11:00 am	0.6 ± 0.5	2022-03-03
11122849	507	2022-02-22 @ 2:00 pm	2022-02-25 @ 11:00 am	< 0.3	2022-03-03
11124165	507	2022-02-22 @ 2:00 pm	2022-02-25 @ 11:00 am	1.0 ± 0.5	2022-03-03
11122875	601	2022-02-22 @ 12:00 pm	2022-02-25 @ 12:00 pm	1.3 ± 0.5	2022-03-03
11122889	603	2022-02-22 @ 12:00 pm	2022-02-25 @ 12:00 pm	2.0 ± 0.5	2022-03-03
11124200	709	2022-02-22 @ 4:00 pm	2022-02-25 @ 1:00 pm	1.4 ± 0.5	2022-03-03
11124199	808	2022-02-22 @ 4:00 pm	2022-02-25 @ 1:00 pm	< 0.3	2022-03-03
11124181	CAFETERIA	2022-02-22 @ 3:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11122848	COUNSELING	2022-02-22 @ 3:00 pm	2022-02-25 @ 12:00 pm	< 0.3	2022-03-03
11122853	COUNSELING ALLISON	2022-02-22 @ 3:00 pm	2022-02-25 @ 12:00 pm	0.5 ± 0.4	2022-03-03
11122822	COUNSELING IKPEMGBE	2022-02-22 @ 3:00 pm	2022-02-25 @ 12:00 pm	< 0.3	2022-03-03
11122857	COUNSELING MOSKOWITZ	2022-02-22 @ 3:00 pm	2022-02-25 @ 12:00 pm	0.7 ± 0.4	2022-03-03
11122860	COUNSELING OBEN	2022-02-22 @ 3:00 pm	2022-02-25 @ 1:00 pm	< 0.3	2022-03-03
11122850	COUNSELING PINTO	2022-02-22 @ 3:00 pm	2022-02-25 @ 12:00 pm	< 0.3	2022-03-03
11124173	HEALTH CENTER	2022-02-22 @ 3:00 pm	2022-02-25 @ 10:00 am	1.0 ± 0.5	2022-03-03
11124186	HEALTH CENTER	2022-02-22 @ 3:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11124174	HEALTH CENTER OFFICE	2022-02-22 @ 3:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11122861	LOUNGE	2022-02-22 @ 1:00 pm	2022-02-25 @ 1:00 pm	1.3 ± 0.5	2022-03-03
11122852	MAIN OFFICE	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11122870	MAIN OFFICE	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11122829	MAIN OFFICE	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11122899	MAIN OFFICE BEAN	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11122864	MAIN OFFICE CONFERENCE ROOM	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	0.9 ± 0.5	2022-03-03
11122885	MAIN OFFICE COPY ROOM	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11122900	MAIN OFFICE MAIL ROOM	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11122886	MAIN OFFICE TYLEEN	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11122895	MAN OFFICE JOHNSON	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	0.7 ± 0.4	2022-03-03

March 3, 2022

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

Radon test result report for:

**GAITHERSBURG MIDDLE SCHOOL**

<b>Kit #</b>	<b>Room Id</b>	<b>Started</b>	<b>Ended</b>	<b>pCi/L</b>	<b>Analyzed</b>
11122865	MEDIA CENTER	2022-02-22 @ 3:00 pm	2022-02-25 @ 12:00 pm	1.0 ± 0.5	2022-03-03
11124164	MEDIA CENTER	2022-02-22 @ 3:00 pm	2022-02-25 @ 12:00 pm	0.9 ± 0.5	2022-03-03
11124172	MEDIA CENTER CLASSROOM	2022-02-22 @ 3:00 pm	2022-02-25 @ 12:00 pm	1.3 ± 0.5	2022-03-03
11124190	MEDIA CENTER FILM ROOM	2022-02-22 @ 3:00 pm	2022-02-25 @ 12:00 pm	< 0.3	2022-03-03
11124163	MEDIA CENTER MDDLE	2022-02-22 @ 3:00 pm	2022-02-25 @ 12:00 pm	1.7 ± 0.5	2022-03-03
11122858	MEDIA CENTER OFFICE	2022-02-22 @ 3:00 pm	2022-02-25 @ 12:00 pm	1.9 ± 0.5	2022-03-03
11124171	MEDIA CENTER THOMAS	2022-02-22 @ 3:00 pm	2022-02-25 @ 12:00 pm	1.1 ± 0.5	2022-03-03
11124179	STAFF WORKROOM	2022-02-22 @ 3:00 pm	2022-02-25 @ 10:00 am	1.6 ± 0.6	2022-03-03
11124180	TRIAGE	2022-02-22 @ 3:00 pm	2022-02-25 @ 11:00 am	1.3 ± 0.5	2022-03-03

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

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March 3, 2022

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

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Radon test result report for:

**GAITHERSBURG MIDDLE SCHOOLQ**

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<b>Kit #</b>	<b>Room Id</b>	<b>Started</b>	<b>Ended</b>	<b>pCi/L</b>	<b>Analyzed</b>
11122867	ATTENDANCE	2022-02-22 @ 12:00 pm	2022-02-25 @ 1:00 pm	1.0 ± 0.4	2022-03-03
11122887	MAIN OFFICE BLANTON	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	1.1 ± 0.5	2022-03-03
11122891	MAIN OFFICE PRINCIPAL	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03-03

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**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).

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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

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## Radon Test Kit Chain of Custody

Project Name: MCPS Radon – February 2022 Schools

Name of Schools:

1. Dufief ES
2. Emory Grove Center
3. Fields Road ES
4. Forest Oak MS
5. Gaithersburg ES
6. Gaithersburg MS
7. Jones Lane ES
8. Rachel Carson ES
9. Rosemont ES
10. Shady Grove MS
11. Summit Hall ES
12. Washington Grove ES

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	Date	Initials
Radon Test Kits Deployed	02/22/2022	PM
Radon Test Kits Collected	02/25/2022	PM
Radon Test Kits Shipped to Lab*	02/25/2022	JM
Radon Test Kits Received by Lab*	02/28/2022	PM

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