

936 RIDGEBROOK ROAD • SPARKS, MD 21152 • 410-316-7800 • (FAX) 410-316-7935

#### MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Rachel Carson Elementary	
Site Name		
	School	
Date of Test Report	05/27/2022	
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 $\geq 4.0 \text{ pCi/L}$	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

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#### ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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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: Rachel Carson Elementary School

100 Tschiffely Square Rd. Gaithersburg, MD 20878

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 Rachel Carson Elementary School, located at 100 Tschiffely Square Rd. Gaithersburg, MD 20878 (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 28, 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 piC/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 March 31, 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.

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The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥4.0 piC/L	None	N/A
<4.0 piC/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.

Tyler McCleaf

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			
	Rachel Carson ES RT		
Te	est Period: 03/28/2022 - 03/31/2022		
Kit Number	Room / Area	Result	
11139943 GYM NA		NA	
11139944 GYM < 0.3			
11139930	GYM OFFICE	< 0.3	
11139937 GYM OFFICE < 0.3			
11139938	GYM OFFICE	< 0.3	

Table 2- Radon Testing Results				
	Rachel Ca	rson ES RT		
	Test Period: 03/28/2022 - 03/31/2022			
Kit Number QC Type Room / Area Result				
11139937	D	Gym Office	< 0.3	
11139930 FB Gym Office < 0.3				
11139883	ОВ	OFFICE BLANK	< 0.3	
11139841	ТВ	TRAVEL BLANK	< 0.3	

Summary of Missed Locations			
Rachel Carson ES RT			
Т	Test Period: 03/28/22 - 03/31/22		
Kit Number	Room/Area Result		
	NA		

Summary of Missing, Compromised and >/= 4 piC/L Tests		
Rachel Carson ES RT		
Test Period: 03/28/22 - 03/31/22		
Kit Number	Room/Area	Result
	NA	
	1	I

#### Table Note:

<sup>\*</sup> Missing or Compromised Sample

## ATTACHMENT C

# Laboratory Analytical Results

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

#### Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11139943	GYM	2022-03-28 @ 11:	00 am 2022-03-31 @ 11:00 am	???? IF1	2022-04-04
11139944	GYM	2022-03-28 @ 11:	00 am 2022-03-31 @ 11:00 am	< 0.3	2022-04-04
11139930	GYM OFFICE	2022-03-28 @ 11:	00 am 2022-03-31 @ 11:00 am	< 0.3	2022-04-04
11139937	GYM OFFICE	2022-03-28 @ 11:	00 am 2022-03-31 @ 11:00 am	< 0.3	2022-04-04
11139938	GYM OFFICE	2022-03-28 @ 11:	00 am 2022-03-31 @ 11:00 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, I	10b Number 204620
NOMINAL Conditions: Radon Conc 27. 0 p	Ci/L Rel. Hum <u>50.1</u> % Temp. <u>70.0</u>
Date Start: 3/18/22 Date Stop: 3/21/22	Date Start: Date Stop:
Time Start: <u>0795</u> Time Stop: <u>0795</u>	(
Device No.'s: (5) Char Bags-	Device No.'s:
11139367 11139368, 11139371,	
11139710, 11139717	C
E3 Right	
Date Start: Date Stop:	Date Start: Date Stop:
Time Start: Time Stop:	Time Start: Time Stop:
Device No.'s:	Device No.'s:
	ř
* a	
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

#### \*\* 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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#### Engineers • Planners • Scientists • Construction Managers

Corporate Office: 936 Ridgebrook road • Sparks , Maryland 21152 • 410-316-7800 • (Fax) 410-316-7935

#### **Radon Test Kit Chain of Custody**

Project Name: MCPS Radon - March 2022 Schools - Retesting

#### Name of Schools:

- 1. Rock Terrace School
- 2. S. Christa McAuliffe ES
- 3. Cedar Grove ES
- 4. DuFief ES
- 5. Emory Grove Center
- 6. Gaithersburg ES
- 7. Gaithersburg MS
- 8. Jones Lane ES
- 9. Rachel Carson ES
- 10.Rosemont ES
- 11.Shady Grove MS
- 12.Summit Hall ES
- 13. Albert Einstein HS
- 14.Eastern MS
- 15. Montgomery Blair HS
- 16. Newport Mill MS
- 17.Strawberry Knoll ES

	Date	Initials
Radon Test Kits Deployed	03/28/2022	BMM
Radon Test Kits Collected	03/31/2022	BMU
Radon Test Kits Shipped to Lab*	04/01/2022	BMM
Radon Test Kits Received by Lab*	04/04/2022	BMM

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



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#### MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Rachel Carson
	Elementary 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	47
# Rooms $\geq$ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	1.0 pCi/L

Project Status:

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

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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: Rachel Carson ES

100 Tschiffely Square Rd. Gaithersburg, MD 20878

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 Rachel Carson ES, located at 100 Tschiffely Square Rd. Gaithersburg, MD 20878 (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 <a href="https://www.montgomeryschoolsmd.org">https://www.montgomeryschoolsmd.org</a> or <a href="https://www.montgomeryschoolsmd.org">www.epa.gov/radon</a>.

KCI visited the site on February 22, 2022 and deployed fifty one (51) 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.

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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 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:

Radon Concentration	Room	Result
≥4.0 piC/L	NA	NA
<4.0 piC/L	See Attachn	nent B

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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.

Tyler McCleaf

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
Rachel Carson ES

Test Period: 02/22/2022 - 02/25/2022

Kit Number	Room / Area	Result
11131476	102	0.7
11131492	108	< 0.3
11131499	110	< 0.3
11131475	111	< 0.3
11131477	112	< 0.3
11131497	112	< 0.3
11131459	119	0.7
11131480	120	< 0.3
11131484	120	< 0.3
11131473	121	< 0.3
11131474	121	< 0.3
11131482	123	< 0.3
11123566	124	< 0.3
11123564	126	< 0.3
11123559	127	< 0.3
11131486	128	< 0.3
11123578	129	< 0.3
11123579	130	< 0.3
11123577	131	< 0.3
11131487	131	< 0.3
11123581	132	< 0.3
11123582	138	< 0.3
11123570	139	< 0.3
11123561	140	< 0.3
11123562	140	< 0.3
11123576	141	0.8
11123569	142	< 0.3
11123580	143	< 0.3
11123567	144	< 0.3
11123568	144	< 0.3
11123571	145	< 0.3
11123537	146	< 0.3
11123560	147	< 0.3
11123573	148	< 0.3
11123574	149	1.0
11123575	150	< 0.3
11131483	151	< 0.3
11123588	224	< 0.3
11123586	225	< 0.3
11123587	226	< 0.3
11131493	101C	< 0.3
11131500	ASSISTANT PRINCIPAL	< 0.3
11131481	CAFETERIA	< 0.3
11131498	CAFETERIA	< 0.3
11131494	KITCHEN	< 0.3

Table 1- Radon Testing Results							
	Rachel Carson ES						
Te	est Period: 02/22/2022 - 02/25/2022						
Kit Number	Room / Area	Result					
11131490	MAIN OFFICE	< 0.3					
11123583	< 0.3						
11123584	MEDIA CENTER	< 0.3					
11123589	MEDIA CENTER	< 0.3					
11123590 MEDIA CENTER OFFICE							
11131491	PRINCIPAL	0.8					

Table 2- Radon Testing Results								
	Rachel Carson ES							
	Test Period: 02/22,	/2022 - 02/25/2022						
Kit Number	QC Type	Room / Area	Result					
11131477	D	112	< 0.3					
11131473	D	121	< 0.3					
11131480	FB	120	< 0.3					
11123567	D	144	< 0.3					
11123562	D	140	< 0.3					
11131487	FB	131	< 0.3					
11123584	D	Media center	< 0.3					
11139384	OB	OFFICE BLANK	< 0.3					
11131222	ТВ	TRAVEL BLANK	< 0.3					

Summary of Missed Locations							
Rachel Carson ES							
Test Period: 02/22/22 - 02/25/22							
Kit Number	Result						
	NA						

Summary of Missing, Compromised and >/= 4 piC/L Tests						
	Rachel Carson ES					
	Test Period: 02/22/22 - 02/25/22					
Kit Number	Room/Area	Result				
11131495	Gym	Missing				
11131496	Gym	Missing				
11131485	Gym Office	Missing				

#### Table Note:

<sup>\*</sup> Missing or Compromised Sample

## ATTACHMENT C

# Laboratory Analytical Results

# Radon test result report for: RACHEL CARSON ES MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11131493	101C	2022-02-22 @ 10:00	am 2022-02-25 @ 10:00 am	n < 0.3	2022-03-03
11131476	102	2022-02-22 @ 10:00	am 2022-02-25 @ 10:00 am	$0.7 \pm 0.5$	2022-03-03
11131492	108	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131499	110	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131475	111	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131497	112	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131477	112	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131459	119	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	$0.7 \pm 0.5$	2022-03-03
11131484	120	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131480	120	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131474	121	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131473	121	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131482	123	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131486	128	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131487	131	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131483	151	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131500 AS	SSISTANT PRINCIPAL	2022-02-22 @ 10:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131498	CAFETERIA	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131481	CAFETERIA	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131494	KITCHEN	2022-02-22 @ 11:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131490	MAIN OFFICE	2022-02-22 @ 10:00	am 2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11131491	PRINCIPAL	2022-02-22 @ 10:00	am 2022-02-25 @ 10:00 am	$0.8 \pm 0.4$	2022-03-03

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# Radon test result report for: RACHEL CARSON ES MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyze
1123566	124	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03-
1123564	126	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03-
1123559	127	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03-
1123578	129	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03-
1123579	130	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03-
1123577	131	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123581	132	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123582	138	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123570	139	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123562	140	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123561	140	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123576	141	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	$0.8 \pm 0.4$	2022-03
1123569	142	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123580	143	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123568	144	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123567	144	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123571	145	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123537	146	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123560	147	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123573	148	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123574	149	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	$1.0 \pm 0.5$	2022-03
1123575	150	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123588	224	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123586	225	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123587	226	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123583	MEDIA CENTER	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123584	MEDIA CENTER	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123589	MEDIA CENTER	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03
1123590 M	IEDIA CENTER OFFICE	2022-02-22 @ 12:00 pm	2022-02-25 @ 10:00 am	< 0.3	2022-03-

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
	pCi/L Rel. Hum 50.1 % Temp. 70.9
Date Start: <u>a / 18 b-2</u> Date Stop: <u>2/a 1/a</u>	2 Date Start: Date Stop:
Time Start: Q911 Time Stop: Q911	Time Start: Time Stop:
Device No.'s: (3) Char Bog 5-	Device No.'s:
11113484, 11112998, 20107126	
23 Right	
Date Start: Date Stop:	Date Start: Date Stop:
Time Start: Time Stop:	Time Start: Time Stop:
Device No.'s:	Device No.'s:
	×
(C)	
9	
Date Start: Date Stop:	Date Start: Date Stop:
Time Start: Time Stop:	Time Start: Time Stop:
Device No.'s:	Device No.'s:
	3:

Note: All times are in 24-hour (military) notation, Eastern Standard Time (EST) Background =  $7 \mu R/h$  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	<b>Start Date</b>	<b>Start Time</b>	<b>End Date</b>	<b>End Time</b>	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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#### Engineers • Planners • Scientists • Construction Managers

Corporate Office: 936 Ridgebrook road • Sparks , Maryland 21152 • 410-316-7800 • (Fax) 410-316-7935

#### **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

	Date	Initials
Radon Test Kits Deployed	02/22/2022	Ou
Radon Test Kits Collected	02/25/2022	an
Radon Test Kits Shipped to Lab*	02/25/2022	M
Radon Test Kits Received by Lab*	02/28/2022	M

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