

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

### MCPS RADON TESTING

Executive Summary: College Gardens Elementary School

Date of Test Report:	2/04/2016 (Rev 1)
Round of Testing:	Initial
	Follow-up
	Post Remediation
# Rooms Tested:	53
# Rooms $\geq$ 4.0 pCi/L:	0
Low Value:	< 0.3
High Value:	2.7

Project Status:

Initial testing completed; no further action at this time.

KCI TECHNOLOGIES, INC. WWW.kci.com

### ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

February 4, 2016 (Rev 1)

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

Re: Radon Testing Services

KCI Job # 12146341.24

Location: College Gardens Elementary School

1700 Yale Place Rockville, MD 20850

Dear Mr. Cox:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to the Montgomery County Public Schools (MCPS) pursuant to completing a "short-term" 3 day radon test for the College Gardens Elementary School, located at 1700 Yale Place in Rockville, Maryland 20850 (subject site).

#### **Scope of Services:**

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

KCI visited the site on January 11, 2016 and deployed sixty-five (65) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on January 14, 2016 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936

www.kci.com

Butler Bridge Road, Mills River, North Carolina.

#### **Evaluation of Testing Conditions:**

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

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

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

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

#### **Results:**

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥4.0 piC/L	none	n/a
<4.0 piC/L	See Attachment B	

Notes:

D- Duplicate sample

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

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

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

Mr. Richard Cox February 4, 2016 Page 4

Sincerely,

M. Mon Burnett H. Allen Bennett

Certified Industrial Hygienist

KCI Technologies, Inc.

Attachments: A- Floor Plan with Test Locations

B- Table 1-Radon Test Summary Spreadsheet

C- Laboratory Analytical Results

# ATTACHMENT B

# Radon Test Summary Spreadsheet

Radon Testing Results				
College Gardens Elementary School				
Te	st Period: 01/11/16-01/14/16			
Kit Number	Room / Area	Result		
7722001	A100	< 0.3		
7715113	A100A	0.7		
7715114	A100A A100D	0.7		
7715114	A100E	< 0.3		
7715116	A100E	0.8		
7715117	A101	< 0.3		
7713117	A101	< 0.3		
7722004	A104A	0.6		
7722002	A104C	< 0.3		
7715121	A105	< 0.3		
7715121	A106	0.8		
7715120	A100 A107	< 0.3		
7715122	A107 A109	< 0.3		
7715123	A109 A111	< 0.3		
	A112			
7714354		0.8		
7714355	A112	0.8		
7714356	A112A	< 0.3		
7714357	A112B	0.7		
7715127	A117A	< 0.3		
7714388	A159	< 0.3		
7714387	A159	< 0.3		
7714390	A159A	< 0.3		
7714359	B118	< 0.3		
7714358	B120	0.7		
7714363	B122	0.8		
7714361	B127	0.8		
7714360	B127	0.9		
7714362	B127A	1.1		
7714366	B128	1.2		
7714364	B129	0.8		
7714365	B131	2.7		
7714385	B202	0.7		
7714367	C130	0.8		
7714369	C134	< 0.3		
7714372	C136	< 0.3		
7714371	C140	0.6		
7714368	C141	0.8		
7714375	C142	0.7		
7714376	C146	< 0.3		
7714392	C226	0.7		
7714380	D147	0.6		
7714377	D148	0.9		
7714370	D151	< 0.3		
7714379	D153	0.8		
7714378	D156	0.9		
7714386	D157	0.7		

Table Note:
\* Missing or Compromised Sample

Radon Testing Results					
College	College Gardens Elementary School				
Tes	t Period: 01/11/16-01/14/16				
12'4 N					
Kit Number	Room / Area	Result			
7714381	D162	0.7			
7714382	D164	0.6			
7714383	D172	< 0.3			
7714389	D233	0.8			
7714398	P1	< 0.3			
7714394	P2	< 0.3			
7714396	P3	< 0.3			
7714395	P4	< 0.3			
7714391	P5	< 0.3			
7714397	P6	< 0.3			

Table Note:
\* Missing or Compromised Sample

Radon Testing Results				
College Gardens Elementary School				
Т	est Period: 01/11/16-01/14/16			
Kit Number	QC Type	Result		
7715118	D (A100)	0.6		
7714400	D (A104)	0.6		
7715126	D (A111)	0.6		
7714374	D (C136)	< 0.3		
7714384	D (D164)	8.0		
7714393	D (D233)	0.7		
7715119	FB (A100)	< 0.3		
7714373	FB (C140)	< 0.3		
7714399	OB (0)	< 0.3		

### **Table Notes:**

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

**OB- Office Blank** 

PM- Project Manager

QC- Quality Control

# ATTACHMENT C

# Laboratory Analytical Results

Radon test result report for:

# COLLEGE GARDENS ELEMENTARY SCHOOL MAIN

Kit#	Room Id	Started	Ended	pCi/L	Analyzed
7714399	0	2016-01-11 @ 4:00 pm	2016-01-14 @ 1:00 pm	< 0.3	2016-01-18
7715118	A100	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	$0.6 \pm 0.3$	2016-01-18
7715119	A100	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7722001	A100	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-20
7715113	A100A	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	$0.7 \pm 0.4$	2016-01-20
7715114	A100D	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	$0.7 \pm 0.4$	2016-01-20
7715115	A100E	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-20
7715116	A100F	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	$0.8 \pm 0.3$	2016-01-18
7715117	A101	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-20
7714400	A104	2016-01-11 @ 3:00 pm	2016-01-14 @ 11:00 am	$0.6 \pm 0.4$	2016-01-20
7722003	A104	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-20
7722004	A104A	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	$0.6 \pm 0.3$	2016-01-18
7722002	A104C	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-20
7715121	A105	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-20
7715120	A106	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	$0.8 \pm 0.4$	2016-01-20
7715122	A107	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-20
7715123	A109	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-20
7715124	A111	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-20
7715126	A111	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	$0.6 \pm 0.4$	2016-01-20
7714354	A112	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	$0.8 \pm 0.3$	2016-01-18
7714355	A112	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	$0.8 \pm 0.4$	2016-01-20
7714356	A112A	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-20
7714357	A112B	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	$0.7 \pm 0.4$	2016-01-20
7715127	A117A	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7714387	A159	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7714388	A159	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7714390	A159A	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-20
7714359	B118	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7714358	B120	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	$0.7 \pm 0.4$	2016-01-20
7714363	B122	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	$0.8 \pm 0.3$	2016-01-18
7714360	B127	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	$0.9 \pm 0.4$	2016-01-20
7714361	B127	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	$0.8 \pm 0.4$	2016-01-20
7714362	B127A	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	$1.1 \pm 0.4$	2016-01-20
7714366	B128	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	$1.2 \pm 0.5$	2016-01-20
7714364	B129	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	$0.8 \pm 0.4$	2016-01-20
7714365	B131	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	$2.7 \pm 0.5$	2016-01-20
7714385	B202	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	$0.7 \pm 0.4$	2016-01-20

# February LABORATORY ANALYSIS 1, REPORT \*\*

Radon test result report for:
COLLEGE GARDENS ELEMENTARY SCHOOL
MAIN

Kit#	Room Id	Started	Ended	pCi/L	Analyzed
7714367	C130	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	$0.8 \pm 0.4$	2016-01-20
7714369	C134	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7714372	C136	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-20
7714374	C136	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-20
7714371	C140	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	$0.6 \pm 0.4$	2016-01-20
7714373	C140	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-20
7714368	C141	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	$0.8 \pm 0.3$	2016-01-18
7714375	C142	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	$0.7 \pm 0.3$	2016-01-18
7714376	C146	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7714392	C226	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	$0.7 \pm 0.3$	2016-01-18
7714380	D147	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	$0.6 \pm 0.3$	2016-01-18
7714377	D148	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	$0.9 \pm 0.3$	2016-01-18
7714370	D151	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7714379	D153	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	$0.8 \pm 0.3$	2016-01-18
7714378	D156	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	$0.9 \pm 0.4$	2016-01-20
7714386	D157	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	$0.7 \pm 0.3$	2016-01-18
7714381	D162	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	$0.7 \pm 0.3$	2016-01-18
7714382	D164	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	$0.6 \pm 0.3$	2016-01-18
7714384	D164	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	$0.8 \pm 0.3$	2016-01-18
7714383	D172	2016-01-11 @ 2:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-20
7714389	D233	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	$0.8 \pm 0.3$	2016-01-18
7714393	D233	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	$0.7 \pm 0.4$	2016-01-20
7714398	P1	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7714394	P2	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7714396	P3	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-20
7714395	P4	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7714391	P5	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-20
7714397	P6	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-20

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

# February LABORATORY ANALYSIS 2, REPORT \*\*

Radon test result report for: MCPS PHASE 5 & 6 TRANSIT BLANKS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7722194	1	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718494	10	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718475	11	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718495	12	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718496	13	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718497	14	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718498	15	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718499	16	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718500	17	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718296	18	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718295	19	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7722195	2	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7716789	20	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7716785	21	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-26
7716791	22	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7716786	23	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7716793	24	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718274	25	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7716792	26	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718294	27	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718293	28	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718292	29	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7722197	3	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718290	30	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7722198	4	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7722199	5	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7722211	6	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718491	7	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27
7718476	8	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-26
7718479	9	2016-01-19 @ 12:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-27

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

# December LABORATORY ANALYSIS 23, REPORT \*\*

## Spike Sample Laboratory Results

Radon test result report for: MCPS

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

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

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

## **EXPOSURE IN BOWSER-MORNER RADON CHAMBER**

CLIENT KCI Technologies.	Inc. Job Number 173224
	pCi/L Rel. Hum <u>49.6</u> % Temp. <u>69.9</u>
Date Start: 12/18/15 Date Stop: 12/21/5	Date Start: Date Stop:
Time Start: <u>0929</u> Time Stop: <u>0929</u>	Time Start: Time Stop:
Device No.'s: 7705132,7766208	Device No.'s:
7706211,7706366,	
7706380, 7706381	
F3 Loft	
Date Start: Date Stop:	Date Start: Date Stop:
Time Start: Time Stop:	Time Start: Time Stop:
Device No.'s:	Device No.'s:
	-
1	
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



### Engineers • Planners • Scientists • Construction Managers

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

## **Chain of Custody**

Project Name: MCPS Radon Phase V

### Name of Schools:

1.	Arcola ES	11. Clopper Mill ES	21. Parkland Magnet MS
2.	Argyle ES	12. College Gardens ES	22. Rachel Carson ES
3.	Bells Mill ES	13. Eastern MS	23. Roberto Clemente MS
4.	Bethesda ES	14. Fallsmead ES	24. Rock Creek ES
5.	Brookhaven ES	15. Fields Road ES	25. Rockview ES
6.	Burning Tree ES	16. Flower Hill ES	26. Rockville HS
7.	Capt. James Daly ES	17. Flower Valley ES	27. Rocky Hill MS
8.	Carderock Springs ES	18. Fox Chapel ES	28. Seneca Valley HS
9.	Cashell ES	19. Glen Haven ES	29. Westover ES
10.	Clearspring ES	20. James Hubert Blake HS	30. William Farquar MS

	Date	Initials
Radon Test Kits Deployed	1/11/16	VM
Radon Test Kits Sampled	1/14/16	JM
Radon Test Kits Shipped to Lab*	1/15/16	JM
Radon Test Kits Received by Lab*	1/18/16	JM

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

## M. A. CECIL & ASSOCIATES, INC.

4475 Shannon Way, Port Republic, Maryland 20676 (301) 855-7710 INDUSTRIAL HYGIENE AND ENVIRONMENTAL HEALTH

August 20, 2013

Mr. Sean Yarup Montgomery County Public Schools 16651 Crabbs Branch Way Rockville, Maryland 20855

Re: Radon Evaluation- College Gardens Elementary School

Dear Mr. Yarup:

Environmental radon testing has been completed at College Gardens Elementary School.

Twenty-seven charcoal canisters were placed in various rooms throughout the school. The canisters were placed on August 6, 2013 and retrieved on August 8, 2013. The detected radon concentration was below the EPA recommended level of 4.0 pico curies per liter (pCi/l) of air. Testing locations and results are summarized in the table below. One sample (MPR) was missing at the time of retrieval.

Should you have any questions concerning this report please do not hesitate to contact us.

Sincerely,

Michael A. Cecil, CIH

mihada Cent

## College Gardens Elementary School Environmental Radon Results August 6 to 8, 2013

Location	Detected Radon Concentration (pCi/l)
Main Office	<0.5
Gym	<0.5
Room D157	<0.5
Room D172	0.6
Room D153(A)	0.5
Room D153(B)	<0.5
Room D164	<0.5
Room D162	<0.5
Room D151	<0.5
Room D156	<0.5
Room D147	<0.5
Room D148	<0.5
Room C146)A)	<0.5
Room C146(B)	0.5
Room C142	<0.5
Room C140	<0.5
Room C136	<0.5
Room C134	0.6
Room C141	<0.5
Room C130	<0.5
Room B128	<0.5
Room B122	<0.5
IMC	<0.5
Room B120	<0.5
Room B118	<0.5
MPR	Missing at pick-up
A101	0.5