

School / Facility Radon Testing Report Form

School Year: **24-25**

Facility:	Gaithersburg Elementary School		
Address:	35 North Summit Avenue		
	Gaithersburg, MD 20877		
Reason for Testing:	Scheduled Re-Testing - <input checked="" type="checkbox"/> 2-year or <input type="checkbox"/> 5-year schedule <input type="checkbox"/> Clearance Testing (Post-Mitigation) <input type="checkbox"/> Building Envelope or HVAC Upgrades <input type="checkbox"/> New Construction – Addition or Facility		
Current Radon Status:	<input checked="" type="checkbox"/> Active Mitigation (2-year regular schedule) <input type="checkbox"/> No Active Mitigation (5-year regular schedule) <input type="checkbox"/> Not Previously Tested (New Facility)		
Round of Testing:	<input type="checkbox"/> Initial Testing -or- <input checked="" type="checkbox"/> Follow-up Testing		
Testing Status:	<input checked="" type="checkbox"/> No Further Testing Needed -or- <input type="checkbox"/> Follow-Up Testing Required		

Conclusion (When Testing Status is - No Further Testing Needed)

Mitigation -	Facility Radon Status:		
<input type="checkbox"/> Not Required <input checked="" type="checkbox"/> Consider (≥ 2.0 & < 4.0 -pCi/L) <input type="checkbox"/> Required (≥ 4.0 -pCi/L) Rooms:	<input checked="" type="checkbox"/> No Change in Status <input type="checkbox"/> Active Mitigation (2-year regular schedule) <input type="checkbox"/> No Active Mitigation (5-year regular schedule)		
Number of Rooms Tested	87	Lowest Value (pCi/L)	< 0.3
Number of Rooms (≥ 4.0 -pCi/L)	0	Highest Value (pCi/L)	3.0

Instructions: Submit one testing report form per-facility. Include the following as attachments:

Attachment 1- Summary Data Tables – containing the following: (see attached samples tables)

- Testing Results – lab/detector Identification, by room number/name (alpha-numeric order) as depicted on facility map/floor plan provided by the facility/school at the time of test device deployment;
- Summary Results – list of rooms by test result ≥ 2.0 -pCi/L; ≥ 2.7 -pCi/L; ≥ 4.0 -pCi/L; and ≥ 8.0 -pCi/L;
- QA/QC Results - (field blanks and duplicates) indicating location collected; trip and office blanks; and spike sample results;
- Invalid Measurement Locations – missed locations, missing and or damaged/compromised testing devices.

Attachment 2 – Laboratory Report(s)

Attachment 3 – Sampling Location Map(s) – indicating approximate location of samples, duplicates and blanks.

Detector and Deployment

Detector/Device Type:	<input checked="" type="checkbox"/> Passive	<input checked="" type="checkbox"/> Charcoal Absorption (CAD) <input type="checkbox"/> Alpha Track (ATD) <input type="checkbox"/> Other
	<input type="checkbox"/> Continuous	<input type="checkbox"/> Electret ion Chamber (EIC) <input type="checkbox"/> Electronic Integration (EID)
Other—Specify here:		
Detector/Device Name:	Air Chek – Radon Test Kits	
Manufacturer:	Radon Lab	
Person(s) Deploying or Retrieving Test Devices and certification number		Organization/Company
Brittany Maas		KCI Technologies, Inc.
If noncertified individuals, the qualified measurement professional providing oversight -		
Tyler McCleaf, CSP – Cert. #111004-RMP		KCI Technologies, Inc.

Testing

<input checked="" type="checkbox"/> Short-Term	Length of Test (days):	3	Date of Deployment and Retrieval (mm/dd/yy):	02/24/25	03/25/25
<input type="checkbox"/> Long-Term				02/27/25	03/28/25
Does the test period include weekends, school breaks or holidays?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If “Yes” please explain/detail in the space below:					
Was HVAC operating under occupied conditions?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If “No” please explain/detail in the space below:					

Testing (continued)

Round of Testing	Detectors Deployed				
	Ground-Contact		Upper-Level(s)		Total
	Initial	Follow-Up	Initial	Follow-Up	
Test Locations ¹	83	4	2	0	89
Duplicates ²	9	2	0	0	11
Field Blanks ³	4	1	0	0	5
Grand Total					105

1 – include all detectors deployed (duplicates, field blanks); 1 detector per occupied (or intended to be occupied) ground-contact space ≤ 2,000-square feet; large spaces ≥ 2,000-square feet - 1 detector per 2,000-square feet or part thereof); and upper floors - 10% of all occupied or intended to be occupied rooms per floor (these are in addition to ground contact locations)

2 - 10% of all locations tested, per floor

3 – 5% of all locations tested, per floor

Quality Assurance / Quality Control (QA/QC)

A Quality Assurance plan that is consistent with ANSI/AARST MS-QA (Radon Measurement Systems Quality Assurance) was submitted under separate cover, and is available to review at the MCPS Radon Testing and Mitigation Program website. The following number of QA/QC samples are associated this facility.

Round of Testing	QA/QC Samples		Total
	Initial	Follow-Up	
Spikes ¹	Not applicable		10
Trip Blanks ²	1	1	2
Office Blanks ^{3, 4}	1	1	2
			14

1 - 3% of EIC detectors; and 3% from each LOT of CAD and ATD detectors; a maximum of 6-spiked measurements per month for both EIC detectors and each LOT of CAD and ATD detectors.

2 – One per shipping container from start of detector deployment

3 – One per facility tested as devices are removed/allocated from the storage location for deployment;

4 - One additional blank, analyzed prior to deployment, for storage locations that have not been evaluated or monitored, for detectors that have been stored for more than 30-day durations.

Quality Assurance / Quality Control (continued)

Spike Sample Lab Results. Measured values are satisfactory, i.e., within $\pm 25\%$ of the chamber's reference value?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Quality Control measurements comply with QA/QC requirements in the submitted testing organization's/company's QA plan?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Round of Testing	Initial Follow-Up
All Field, Trip and Office Blanks are \leq (less than or equal to) to the Method Detection Limit?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
For all Duplicate Samples ¹ , the higher value is $\leq 2x$ the lower value?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
For all Duplicate Samples ¹ , Relative Percent Difference(s) (RPD) ² are less than the Warning Level ³ ?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
For all Duplicate Samples ¹ , Relative Percent Difference(s) (RPD) ² are less than the Control Level ³ ?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

1 – Duplicate Control – a “NO” response constitute a control failure and the space/location represented by the duplicate sample becomes an invalid measurement location and should be listed in the “Invalid Measurement Locations” Table attached to this report.

2 - The objective of duplicate tests is to assess the precision error of the measurement method or, how well two side-by-side measurements agree or disagree. Precision involving duplicates is calculated by using Relative Percent Difference (RPD). RPD is equal to the difference between the higher test result minus the lower value test result divided by the average of the two duplicate test results, multiplied by 100. The RPD result is then compared to the warning and control limits.

3 - The Warning Level is set at the deviation from ideal performance that would be expected to occur by chance only 5% of the time, and Control Limits are set at that deviation from ideal performance that would be expected to occur by chance only 1% of the time. The Warning Level indicates a potential problem, which should be investigated. The Control Level indicates that the measurement system should be subject to corrective action.

The control and warning levels for duplicates, based on the averaged duplicate test result, are -

Average concentration of the two duplicate test results	Warning Level	Control Level
< 2.0-pCi/L	1-pCi/L	Not applicable
Between 2.0 and 3.9-pCi/L	50% RPD	67% RPD
≥ 4.0 -pCi/L	28% RPD	36% RPD

Summary of Test Results¹ and Determination of Valid Measurements²

Round of Testing	Ground-Contact		Upper-Level(s)		Total
	Initial	Follow-Up	Initial	Follow-Up	
Number of test locations:	83	2	2	0	87
Number of locations ≥ 8.0 -pCi/L:	0	0	0	0	0
Number of locations ≥ 4.0 and ≤ 8 -pCi/L:	0	0	0	0	0
Number of locations ≥ 2.7 and < 4 -pCi/L:	2	0	0	0	2
Number of locations ≥ 2.0 and < 2.7 -pCi/L:	3	0	0	0	3
Number of missing required test locations ³ :	0	0	0	0	0
Number of failed duplicate control locations:	2	0	0	0	2
Percentage of missing test locations for the facility ^{4,5} :	0	0	0	0	0

1 – for locations with multiple test results, report consistent with Section 7.2(When Two Test Results Disagree) and 8.1.2 (Averaging) of ANSI/AARST MA-MFLB 2023 – Conducting Measurements of Radon in Multifamily, School, Commercial and Mix-Use Buildings;

2 - the allowance is to be calculated individually for Ground-Contact and Upper-Level(s) Test Locations;

3 – includes missed or inaccessible locations upon deployment or retrieval, damaged (not able to analyze) and missing detectors upon retrieval;

4 – if all valid measurements are < 4.0 -pCi/L and the total number of test locations are ≥ 18 , there is an allowance of $\leq 33\%$. If less than 18 test locations please review section 6.2 of the ANSI/AARST MA-MFLB 2023;

5 – if any valid measurements are ≥ 4.0 -pCi/L and the total number of test locations are ≥ 20 , there is an allowance of $\leq 25\%$ of the total locations tested. If less than 20 test locations please review section 6.2 of the ANSI/AARST MA-MFLB 2023.

Summary of Test Results¹ and Determination of Valid Measurements² (continued)

Round of Testing	Initial	Follow-Up
Were test devices deployed in all occupied and intended to be occupied rooms in contact with the ground, and, if applicable, 10% of upper floor rooms?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Were valid measurements obtained in all occupied and intended to be occupied rooms in contact with the ground, and, if applicable, 10% of upper floor rooms?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<i>If Yes to both above – then Testing Status – ‘No Further Testing Needed’ mark ‘NA’ below and complete Conclusions section</i>		
If No to either above, were all results obtained under 4.0-pCi/L and were sufficient valid measurements obtained?^{1,2} <i>If Yes, then - ‘No Further Testing Needed’ complete Conclusion section on first page.</i> <i>If No, then - ‘Follow-up Testing Required’ continue below.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA

1 – if all valid measurements are <4.0-pCi/L and the total number of test locations are ≥18, there is an allowance of ≤33%. If less than 18 test locations please review section 6.2 of the ANSI/AARST MA-MFLB 2023 – Conducting Measurements of Radon in Multifamily, School, Commercial and Mix-Use Buildings to determine the allowance;
 2 – if any valid measurements are ≥4.0-pCi/L and the total number of test locations are ≥20, there is an allowance of ≤25% of the total locations tested. If less than 20 test locations please review section 6.2 of the ANSI/AARST MA-MFLB 2023 – Conducting Measurements of Radon in Multifamily, School, Commercial and Mix-Use Buildings to determine the number the allowance.

Follow-Up Testing

Required –

- If an insufficient number (greater than the allowance provided above) of valid measurements were obtained during the initial round of testing (the “missing required test locations” in the table above);
- Any location test results ≥ 4.0-pCi/L;
- Any location where duplicates fail QC checks; and or
- At the discretion of MCPS IAQ Staff

Reason for Follow-Up Testing	Testing Procedure	Follow-up Result	Conclusion
Insufficient Number of Measurements	Follow same procedures as Initial Testing	Not Applicable	Follow Initial Testing procedures
Results ≥ 4.0-pCi/L	Deploy two Short-term follow-up tests and required blanks and duplicates; Average the results of the two tests	≥4.0	Mitigation Required
Failed QC checks		≥2.0 and <4.0	Consider Mitigation
		<2.0	Mitigation Not Required

- ***If follow-up testing identifies additional spaces requiring additional testing it will be performed as part of the ongoing follow-testing round.***

Attachment 1:

Summary Data Tables

Table 1- Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 2/24/2025 - 2/27/2025		
Kit Number	Room / Area	Result
11927497	1	0.5
11927477	2	0.8
11927478	3	< 0.3
11927479	3	0.8
11927490	4	0.6
11927408	6	0.7
11927410	7	0.5
11927405	8	1.1
11927409	9	0.8
11927411	10	1.0
11927472	11	1.0
11927467	13	0.5
11927482	19	< 0.3
11927421	21	2.7
11927407	22	2.5
11927424	22	2.5
11927427	23	1.3
11927439	24	1.3
11927440	25	1.7
11927441	26	1.2
11927442	27	1.1
11927403	28	1.6
11927420	29	1.8
11927426	30	< 0.3
11927431	30	1.7
11927432	30	3.0
11927452	12A	1.8
11927466	12B	1.2
11927415	6A	1.3
11927416	6A	< 0.3
11927418	6A	0.9
11927406	6A OFFICE 1	1.1
11927404	6A OFFICE 2	1.4
11927413	6B	1.0
11931375	ADMIN SECRETARY	< 0.3
11927456	APR	0.6
11927457	APR	0.9

Table 1- Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 2/24/2025 - 2/27/2025		
Kit Number	Room / Area	Result
11919962	ART	1.0
11927460	B105	1.1
11927449	B109	1.7
11927444	B110	1.1
11927455	B110	1.0
11927471	B110	< 0.3
11927436	B111	1.6
11927469	B112	1.3
11927435	B113	0.7
11927450	B116	1.7
11927481	BUILDING SERVICE OFFICE	0.8
11919955	CONFERENCE	1.1
11927437	E2	0.9
11927445	E2	< 0.3
11927473	E2	0.9
11927458	E4	< 0.3
11927412	ELIAS	1.2
11927468	GYM	0.9
11927470	GYM	1.1
11927451	GYM OFFICE	1.2
11927461	HEALTH LINKAGES	1.3
11919954	IMC	0.9
11919961	IMC	0.9
11919964	IMC	< 0.3
11927417	ISM	0.7
11927462	ISOLATION ROO	0.5
11927446	K1	1.4
11927430	K2	1.7
11927434	K3	2.0
11927425	K4	1.7
11927402	K5	2.0
11927433	K6	1.4
11927419	K7	1.3
11927428	K7	1.2
11927464	KITCHEN OFFICE	0.6
11919957	LOUANGRATH	1.1
11931391	MAIN OFFICE	0.5

Table 1- Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 2/24/2025 - 2/27/2025		
Kit Number	Room / Area	Result
11927453	MATH ASSESSMENT	1.4
11927414	MEDIA CENTER WORK ROOM	0.7
11927447	MU	0.8
11927487	OFFICE A	0.8
11927498	OFFICE B	0.9
11919958	OFFICE C	0.7
11927489	OFFICE D	0.8
11927423	OFFICE F	0.8
11927474	OFFICE H	1.0
11927454	OFFICE K	1.2
11927480	OFFICE L	< 0.3
11927401	OFFICE N	1.3
11927429	OFFICE O	1.5
11927448	OFFICE P	1.9
11927438	OFFICE Q	1.8
11927459	OFFICE X	0.7
11927465	OFFICE X	0.9
11927422	PARK	1.4
11931376	PRINCIPAL	< 0.3
11927463	RESOURCE SOTO	1.1
11927495	STAFF LOUNGE	0.8
11931397	VP	0.6
11927443	WAITING AREA	1.0
11931354	WORKROOM	< 0.3

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Table 3 - QC Radon Testing Results			
Gaithersburg Elementary School			
Test Period: 2/24/2025 - 2/27/2025			
Kit Number	QC Type	Room / Area	Result
11927478	D	3	< 0.3
11927407	D	22	2.5
11927432	D	30	3.0
11927426	FB	30	< 0.3
11927418	D	6A	0.9
11927416	FB	6A	< 0.3
11927455	D	B110	1.0
11927471	FB	B110	< 0.3
11927437	D	E2	0.9
11927445	FB	E2	< 0.3
11919954	D	IMC	0.9
11927428	D	K7	1.2
11927459	D	Office X	0.7
11926882	OB	OFFICE BLANK	< 0.3
11926890	TB	TRAVEL BLANK	< 0.3

Table 3a - Duplicate Worksheet / Data Validation										
Gaithersburg Elementary School										
Test Period: 2/24/2025 - 2/27/2025										
Sample ID			Duplicate Concentrations (pCi/L) and OC Checks							
Kit Numbers		Room / Area	Higher	Lower	Check #1 (Pass/Fail)	2x the Lower	Check #2 (Pass/Fail)	Average	Relative Percent Difference (RPD)	Check #3
11927478	11927479	3	0.8	0.3	✓	0.6	FAIL	0.6	<1-pCi/L	✗
11927407	11927424	22	2.5	2.5	✓	5.0	PASS	2.5	0.0%	✓
11927432	11927431	30	3.0	1.7	✓	3.4	PASS	2.4	55.3%	!
11927415	11927418	6A	1.3	0.9	✓	1.8	PASS	1.1	<1-pCi/L	✓
11927444	11927455	B110	1.1	1.0	✓	2.0	PASS	1.1	<1-pCi/L	✓
11927437	11927473	E2	0.9	0.9	✓	1.8	PASS	0.9	<1-pCi/L	✓
11919954	11919964	IMC	0.9	0.3	✓	0.6	FAIL	0.6	<1-pCi/L	✗
11927419	11927428	K7	1.3	1.2	✓	2.4	PASS	1.3	<1-pCi/L	✓
11927459	11927465	Office X	0.9	0.7	✓	1.4	PASS	0.8	<1-pCi/L	✓
NOTES: QC Check #1 - Data Entry QC Check #2 - Higher duplicate concentration is < or = to 2x the Lower QC Check #3 - Meets RPD Limits, by average duplicate concentration							Average (pCi/L)		Warning Level	Control Level
							< 2.0		1-pCi/L	NA
							Between 2.0 and 3.9		50% RPD	67% RPD
							≥ 4.0		28% RPD	36% RPD

[illegible]

Table 1- Radon Testing Results		
Gaithersburg Elementary School RT		
Test Period: 3/25/2025 - 3/28/2025		
Kit Number	Room / Area	Result
11886672	3	< 0.3
11886681	3	< 0.3
11886682	3	< 0.3
11886676	IMC	< 0.3
11886677	IMC	< 0.3
11886678	IMC	< 0.3
11886680	IMC	< 0.3

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Table 3 - QC Radon Testing Results			
Gaithersburg Elementary School RT			
Test Period: 3/25/2025 - 3/28/2025			
Kit Number	QC Type	Room / Area	Result
11886677	D	IMC	< 0.3
11886676	FB	IMC	< 0.3
11886681	D	3	< 0.3
11886692	OB	OFFICE BLANK	< 0.3
11886693	TB	TRAVEL BLANK	< 0.3

Table 3a - Duplicate Worksheet / Data Validation										
Gaithersburg Elementary School RT										
Test Period: 3/25/2025 - 3/28/2025										
Sample ID			Duplicate Concentrations (pCi/L) and QC Checks							
Kit Numbers		Room / Area	Higher	Lower	Check #1 (Pass/Fail)	2x the Lower	Check #2 (Pass/Fail)	Average	Relative Percent Difference (RPD)	Check #3
11886677	11886678 11886680	IMC	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11886681	11886672 11886682	3	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
NOTES: QC Check #1 - Data Entry QC Check #2 - Higher duplicate concentration is < or = to 2x the Lower QC Check #3 - Meets RPD Limits, by average duplicate concentration - enter 2 if RPD is BELOW warning and control levels, AND passes QC Check 1 and 2 - enter 1 if RPD is ABOVE warning and BELOW control levels, AND passes QC Check 1 and 2 - enter 0 if RPD is ABOVE control level, or 'FAILS' QC Check 1 or 2							Average (pCi/L)		Warning Level	Control Level
							< 2.0		1-pCi/L	NA
							Between 2.0 and 3.9		50% RPD	67% RPD
							≥ 4.0		28% RPD	36% RPD

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Attachment 2:

Laboratory Reports

Radon test result report for:
GAITHERSBURG ES
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11927497	1	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.5 ± 0.3	2025-03-03
11927411	10	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.0 ± 0.4	2025-03-03
11927472	11	2025-02-24 @ 10:00 am	2025-02-27 @ 8:00 am	1.0 ± 0.4	2025-03-03
11927452	12A	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.8 ± 0.4	2025-03-03
11927466	12B	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.2 ± 0.4	2025-03-03
11927467	13	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.5 ± 0.3	2025-03-03
11927482	19	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	< 0.3	2025-03-03
11927477	2	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.8 ± 0.4	2025-03-03
11927421	21	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	2.7 ± 0.4	2025-03-03
11927424	22	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	2.5 ± 0.4	2025-03-03
11927407	22	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	2.5 ± 0.4	2025-03-03
11927427	23	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.3 ± 0.4	2025-03-03
11927439	24	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.3 ± 0.4	2025-03-03
11927440	25	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.7 ± 0.4	2025-03-03
11927441	26	2025-02-24 @ 9:00 am	2025-02-27 @ 8:00 am	1.2 ± 0.4	2025-03-03
11927442	27	2025-02-24 @ 9:00 am	2025-02-27 @ 8:00 am	1.1 ± 0.4	2025-03-03
11927403	28	2025-02-24 @ 9:00 am	2025-02-27 @ 8:00 am	1.6 ± 0.4	2025-03-03
11927420	29	2025-02-24 @ 9:00 am	2025-02-27 @ 8:00 am	1.8 ± 0.4	2025-03-03
11927479	3	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.8 ± 0.3	2025-03-03
11927478	3	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	< 0.3	2025-03-03
11927431	30	2025-02-24 @ 9:00 am	2025-02-27 @ 8:00 am	1.7 ± 0.4	2025-03-03
11927432	30	2025-02-24 @ 9:00 am	2025-02-27 @ 8:00 am	3.0 ± 0.4	2025-03-03
11927426	30	2025-02-24 @ 9:00 am	2025-02-27 @ 8:00 am	< 0.3	2025-03-03
11927490	4	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.6 ± 0.3	2025-03-03
11927408	6	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	0.7 ± 0.4	2025-03-03
11927416	6A	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	< 0.3	2025-03-03
11927415	6A	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.3 ± 0.4	2025-03-03
11927418	6A	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	0.9 ± 0.4	2025-03-03
11927406	6A OFFICE 1	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.1 ± 0.4	2025-03-03
11927404	6A OFFICE 2	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.4 ± 0.4	2025-03-03
11927413	6B	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.0 ± 0.4	2025-03-03
11927410	7	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	0.5 ± 0.3	2025-03-03
11927405	8	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.1 ± 0.4	2025-03-03
11927409	9	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	0.8 ± 0.3	2025-03-03
11931375	ADMIN SECRETARY	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	< 0.3	2025-03-03
11927456	APR	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.6 ± 0.3	2025-03-03
11927457	APR	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.9 ± 0.4	2025-03-03

Radon test result report for:
GAITHERSBURG ES
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11919962	ART	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.0 ± 0.3	2025-03-03
11927460	B105	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.1 ± 0.4	2025-03-03
11927449	B109	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.7 ± 0.4	2025-03-03
11927455	B110	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.0 ± 0.4	2025-03-03
11927444	B110	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.1 ± 0.4	2025-03-03
11927471	B110	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	< 0.3	2025-03-03
11927436	B111	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.6 ± 0.4	2025-03-03
11927469	B112	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.3 ± 0.3	2025-03-03
11927435	B113	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	0.7 ± 0.4	2025-03-03
11927450	B116	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.7 ± 0.4	2025-03-03
11927481	BUILDING SERVICE OFFICE	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.8 ± 0.3	2025-03-03
11919955	CONFERENCE	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.1 ± 0.4	2025-03-03
11927445	E2	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	< 0.3	2025-03-03
11927437	E2	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.9 ± 0.3	2025-03-03
11927473	E2	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.9 ± 0.3	2025-03-03
11927458	E4	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	< 0.3	2025-03-03
11927412	ELIAS	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.2 ± 0.4	2025-03-03
11927468	GYM	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	0.9 ± 0.3	2025-03-03
11927470	GYM	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.1 ± 0.4	2025-03-03
11927451	GYM OFFICE	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.2 ± 0.4	2025-03-03
11927461	HEALTH LINKAGES	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.3 ± 0.4	2025-03-03
11919964	IMC	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	< 0.3	2025-03-03
11919954	IMC	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	0.9 ± 0.4	2025-03-03
11919961	IMC	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	0.9 ± 0.3	2025-03-03
11927417	ISM	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	0.7 ± 0.4	2025-03-03
11927462	ISOLATION ROO	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	0.5 ± 0.3	2025-03-03
11927446	K1	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.4 ± 0.4	2025-03-03
11927430	K2	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.7 ± 0.4	2025-03-03
11927434	K3	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	2.0 ± 0.4	2025-03-03
11927425	K4	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.7 ± 0.4	2025-03-03
11927402	K5	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	2.0 ± 0.4	2025-03-03
11927433	K6	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.4 ± 0.4	2025-03-03
11927428	K7	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.2 ± 0.4	2025-03-03
11927419	K7	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.3 ± 0.3	2025-03-03
11927464	KITCHEN OFFICE	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.6 ± 0.3	2025-03-03
11919957	LOUANGRATH	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.1 ± 0.4	2025-03-03
11931391	MAIN OFFICE	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	0.5 ± 0.3	2025-03-03

Radon test result report for:
**GAITHERSBURG ES
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11927453	MATH ASSESSMENT	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.4 ± 0.4	2025-03-03
11927414	MEDIA CENTER WORK ROOM	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	0.7 ± 0.3	2025-03-03
11927447	MU	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.8 ± 0.3	2025-03-03
11927487	OFFICE A	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.8 ± 0.3	2025-03-03
11927498	OFFICE B	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.9 ± 0.3	2025-03-03
11919958	OFFICE C	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	0.7 ± 0.3	2025-03-03
11927489	OFFICE D	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.8 ± 0.3	2025-03-03
11927423	OFFICE F	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	0.8 ± 0.4	2025-03-03
11927474	OFFICE H	2025-02-24 @ 10:00 am	2025-02-27 @ 8:00 am	1.0 ± 0.4	2025-03-03
11927454	OFFICE K	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.2 ± 0.4	2025-03-03
11927480	OFFICE L	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	< 0.3	2025-03-03
11927401	OFFICE N	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.3 ± 0.4	2025-03-03
11927429	OFFICE O	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.5 ± 0.4	2025-03-03
11927448	OFFICE P	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.9 ± 0.4	2025-03-03
11927438	OFFICE Q	2025-02-24 @ 9:00 am	2025-02-27 @ 8:00 am	1.8 ± 0.4	2025-03-03
11927459	OFFICE X	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	0.7 ± 0.3	2025-03-03
11927465	OFFICE X	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	0.9 ± 0.3	2025-03-03
11927422	PARK	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	1.4 ± 0.4	2025-03-03
11931376	PRINCIPAL	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	< 0.3	2025-03-03
11927463	RESOURCE SOTO	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	1.1 ± 0.4	2025-03-03
11927495	STAFF LOUNGE	2025-02-24 @ 10:00 am	2025-02-27 @ 9:00 am	0.8 ± 0.3	2025-03-03
11931397	VP	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	0.6 ± 0.3	2025-03-03
11927443	WAITING AREA	2025-02-24 @ 9:00 am	2025-02-27 @ 9:00 am	1.0 ± 0.4	2025-03-03
11931354	WORKROOM	2025-02-24 @ 8:00 am	2025-02-27 @ 8:00 am	< 0.3	2025-03-03

March 3, 2025

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**OFFICE
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11926882	OB	2025-02-24 @ 11:00 am	2025-02-27 @ 11:00 am	< 0.3	2025-03-03

March 3, 2025

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**TRAVEL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11926890	TB	2025-02-24 @ 11:00 am	2025-02-27 @ 11:00 am	< 0.3	2025-03-03

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI TECHNOLOGIES, INC Job Number 20001560

NOMINAL Conditions: Radon Conc 50.6 pCi/L Rel. Hum 50.6 % Temp. 70.8 F

Date Start: 12/14/24 Date Stop: 12/17/24 Date Start: _____ Date Stop: _____

Time Start: 0815 Time Stop: 0815 Time Start: _____ Time Stop: _____

Device No.'s: (3) CHAR BAGS Device No.'s: _____

11477880, 11477883, 11477896 _____

B4 Right

Date Start: _____ Date Stop: _____ Date Start: _____ Date Stop: _____

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

Device No.'s: _____ Device No.'s: _____

Date Start: _____ Date Stop: _____ Date Start: _____ Date Stop: _____

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

Device No.'s: _____ Device No.'s: _____

Note: All times are in 24-hour (military) notation, Eastern Standard Time (EST)
Background = 7 μ R/h Elevation = 820 ft

December 23, 2024

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**SK
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11477880	SK1	2024-12-14 @ 8:00 am	2024-12-17 @ 8:00 am	52.0 ± 4.2	2024-12-23
11477883	SK2	2024-12-14 @ 8:00 am	2024-12-17 @ 8:00 am	54.6 ± 4.4	2024-12-23
11477896	SK3	2024-12-14 @ 8:00 am	2024-12-17 @ 8:00 am	45.5 ± 3.6	2024-12-23



Radon Test Kit Chain of Custody

Project Name: MCPS Radon – Testing February 24th – February 27th, 2025

Name of Schools:

1. Diamond ES
2. Smith Center
3. Fields Road ES
4. Forest Oak MS
5. Fox Chapel ES
6. Gaithersburg ES
7. Gaithersburg HS

	Date	Initials
Radon Test Kits Deployed	2/24/2025	DM
Radon Test Kits Collected	2/27/2025	AM
Radon Test Kits Shipped to Lab*	2/27/2025	AM
Radon Test Kits Received by Lab*	3/1/2025	AM

*All samples sent to Air Check, Inc., 2 Saber Way, Ward Hill, MA 01835

April 2, 2025

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
**GAITHERSBURG ES
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11886672	3	2025-03-25 @ 9:00 am	2025-03-28 @ 8:00 am	< 0.3	2025-04-02
11886681	3	2025-03-25 @ 9:00 am	2025-03-28 @ 8:00 am	< 0.3	2025-04-02
11886682	3	2025-03-25 @ 9:00 am	2025-03-28 @ 8:00 am	< 0.3	2025-04-02
11886676	IMC	2025-03-25 @ 9:00 am	2025-03-28 @ 8:00 am	< 0.3	2025-04-02
11886677	IMC	2025-03-25 @ 9:00 am	2025-03-28 @ 8:00 am	< 0.3	2025-04-02
11886678	IMC	2025-03-25 @ 9:00 am	2025-03-28 @ 8:00 am	< 0.3	2025-04-02
11886680	IMC	2025-03-25 @ 9:00 am	2025-03-28 @ 8:00 am	< 0.3	2025-04-02

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

April 3, 2025

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**OFFICE
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11886664	OB	2025-03-24 @ 11:00 am	2025-03-27 @ 11:00 am	< 0.3	2025-04-02
11886692	OB	2025-03-25 @ 11:00 am	2025-03-28 @ 11:00 am	< 0.3	2025-04-02
11951800	OB	2025-03-24 @ 11:00 am	2025-03-28 @ 11:00 am	< 0.3	2025-04-02

April 3, 2025

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**TRAVEL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11886691	TB	2025-03-24 @ 11:00 am	2025-03-27 @ 11:00 am	< 0.3	2025-04-02
11886693	TB	2025-03-25 @ 11:00 am	2025-03-28 @ 11:00 am	< 0.3	2025-04-02
11892493	TB	2025-03-24 @ 11:00 am	2025-03-28 @ 11:00 am	< 0.3	2025-04-02

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI TECHNOLOGIES, INC Job Number 20002919

NOMINAL Conditions: Radon Conc 7.0 pCi/L Rel. Hum 51.4 % Temp. 70.7 F

Date Start: 3/7/25 Date Stop: 3/10/25 Date Start: _____ Date Stop: _____

Time Start: 0832 Time Stop: 0832 Time Start: _____ Time Stop: _____

Device No.'s: (7) CHAR BAGS Device No.'s: _____

11886401 thru 11886406,

11886410

G3 Right

Date Start: _____ Date Stop: _____ Date Start: _____ Date Stop: _____

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

Device No.'s: _____ Device No.'s: _____

Date Start: _____ Date Stop: _____ Date Start: _____ Date Stop: _____

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

Device No.'s: _____ Device No.'s: _____

Note: All times are in 24-hour (military) notation, Eastern Standard Time (EST)
Background = 7 μ R/h Elevation = 820 ft

March 19, 2025

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

QC
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11886401	SK1	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	7.8 ± 1.1	2025-03-19
11886405	SK2	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	7.1 ± 1.1	2025-03-19
11886406	SK3	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	7.7 ± 1.1	2025-03-19
11886403	SK4	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	7.9 ± 1.2	2025-03-19
11886404	SK5	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	7.6 ± 1.2	2025-03-19
11886410	SK6	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	7.0 ± 1.1	2025-03-19
11886402	SK7	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	8.6 ± 1.2	2025-03-19

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



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 – Testing March 25th – March 28th, 2025

Name of Schools:

- | | |
|--------------------|-------------------------------|
| 1. Wheaton HS | 7. Goshen ES |
| 2. Clarksburg HS | 8. Great Seneca Creek ES |
| 3. Darnestown ES | 9. Lake Seneca ES |
| 4. Diamond ES | 10. Lathrop E. Smith Center |
| 5. Gaithersburg ES | 11. Martin Luther King Jr. MS |
| 6. Germantown ES | |

	Date	Initials
Radon Test Kits Deployed	3/25/2025	BMM
Radon Test Kits Collected	3/28/2025	BMM
Radon Test Kits Shipped to Lab*	3/28/2025	BMM
Radon Test Kits Received by Lab*	4/01/2025	BMM

*All samples sent to Air Check, Inc., 2 Saber Way, Ward Hill, MA 01835



MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Gaithersburg Elementary 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	3
# Rooms \geq 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	1.1 pCi/L

Project Status

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



May 27, 2022

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

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

Location: Gaithersburg Elementary School
35 North Summit Ave.
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 Elementary School, located at 35 North Summit Ave. 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.

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. ≥ 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 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.

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 ES RT		
Test Period: 03/28/2022 - 03/31/2022		
Kit Number	Room / Area	Result
11139829	B112	1.1
11139832	B112	1.1
11139833	B112	< 0.3
11139830	I	0.5
11139826	ROOM A	< 0.3

Table 2- Radon Testing Results			
Gaithersburg ES RT			
Test Period: 03/28/2022 - 03/31/2022			
Kit Number	QC Type	Room / Area	Result
11139829	D	B112	1.1
11139833	FB	B112	< 0.3
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:

**GAITHERSBURG
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11139829	B112	2022-03-28 @ 12:00 pm	2022-03-31 @ 11:00 am	1.1 ± 0.3	2022-04-04
11139832	B112	2022-03-28 @ 12:00 pm	2022-03-31 @ 11:00 am	1.1 ± 0.3	2022-04-04
11139833	B112	2022-03-28 @ 12:00 pm	2022-03-31 @ 11:00 am	< 0.3	2022-04-04
11139830	I	2022-03-28 @ 12:00 pm	2022-03-31 @ 11:00 am	0.5 ± 0.3	2022-04-04
11139826	ROOM A	2022-03-28 @ 12:00 pm	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, Inc. Job Number 204620

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

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

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

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

11139367, 11139368, 11139371, _____

11139710, 11139717 _____

E3 Right

Date Start: _____ Date Stop: _____ Date Start: _____ Date Stop: _____

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

Device No.'s: _____ Device No.'s: _____

Date Start: _____ Date Stop: _____ Date Start: _____ Date Stop: _____

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

Device No.'s: _____ Device No.'s: _____

Note: All times are in 24-hour (military) notation, Eastern Standard Time (EST)
Background = 7 μ R/h Elevation = 820 ft

March 30, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

MCPS - Spike Sample Lab Results. Measured values are satisfactory, i.e., within $\pm 25\%$ of the chamber's reference value (25.7 pCi/L).

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

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



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	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	Gaithersburg 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	84
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	1.4 pCi/L

Project Status:

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



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 ES
35 North Summit Ave.
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 ES, located at 35 North Summit Ave. 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.

KCI visited the site on February 22, 2022 and deployed ninety eight (98) 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:

Radon Concentration	Room	Result
≥4.0 pCi/L	NA	NA
<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 ES		
Test Period: 02/22/2022 - 02/25/2022		
Kit Number	Room / Area	Result
11130729	1	< 0.3
11130717	2	< 0.3
11130728	3	< 0.3
11130720	4	< 0.3
11130723	4	< 0.3
11130790	5	1.0
11130791	6	< 0.3
11130760	7	< 0.3
11130799	8	1.2
11130797	9	< 0.3
11130749	10	< 0.3
11130752	10	0.8
11130748	11	< 0.3
11130713	13	< 0.3
11123891	17	< 0.3
11130733	21	< 0.3
11130783	22	< 0.3
11130740	23	< 0.3
11130762	24	< 0.3
11130763	24	< 0.3
11130782	25	< 0.3
11130765	26	< 0.3
11130796	27	< 0.3
11130766	28	0.7
11130742	29	< 0.3
11130774	30	0.8
11130754	12A	1.2
11130753	12B	< 0.3
11130787	6A	< 0.3
11130798	6A	0.7
11130800	6A	1.0
11130789	6B	< 0.3
11130793	ADMIN	< 0.3
11130724	APR	< 0.3
11130732	APR	< 0.3
11130777	ART	< 0.3
11130719	B	< 0.3
11130707	B105	0.9
11130709	B109	< 0.3
11123892	B110	< 0.3
11130714	B111	< 0.3
11130715	B111	< 0.3
11130716	B111	< 0.3
11130705	B113	< 0.3
11123889	B115	< 0.3

Table 1- Radon Testing Results		
Gaithersburg ES		
Test Period: 02/22/2022 - 02/25/2022		
Kit Number	Room / Area	Result
11130712	B116	< 0.3
11130730	BUILDING SERVICES MANAGER	< 0.3
11130768	C	1.0
11130784	COMPUTER	< 0.3
11130778	CONFERENCE	< 0.3
11130775	D	< 0.3
11130761	E	< 0.3
11130725	E2	0.9
11130736	E2	< 0.3
11130737	E2	< 0.3
11130731	E4	< 0.3
11130794	F	< 0.3
11130781	G	< 0.3
11130788	G	< 0.3
11130718	GYM	< 0.3
11130722	GYM	0.9
11130738	GYM OFFICE	< 0.3
11130756	H	< 0.3
11123845	HEALTH	< 0.3
11122616	HEALTH 2	0.7
11130764	I	< 0.3
11130751	K	1.1
11130745	K1	< 0.3
11130747	K2	< 0.3
11130743	K3	< 0.3
11130758	K4	< 0.3
11130750	K5	0.9
11130772	K6	< 0.3
11130779	K6	1.2
11130780	K6	< 0.3
11130746	K7	0.9
11130726	KITCHEN OFFICE	< 0.3
11130708	L	0.6
11130721	M	1.1
11130757	MAIN OFFICE	< 0.3
11130785	MAIN OFFICE	< 0.3
11130786	MAIN OFFICE	< 0.3
11130755	MATH ASSESSMENT	< 0.3
11130795	MATH ROOM	1.0
11130744	MEDIA CENTER	< 0.3
11130792	MEDIA CENTER	< 0.3
11130769	MEDIA CENTER OFFICE	1.4
11130739	MUSIC	< 0.3
11123890	N	< 0.3
11130773	O	< 0.3

Table 1- Radon Testing Results		
Gaithersburg ES		
Test Period: 02/22/2022 - 02/25/2022		
Kit Number	Room / Area	Result
11130767	P	1.2
11130771	PRINCIPAL	< 0.3
11130741	Q	< 0.3
11130727	RESOURCE	0.9
11130735	STAFF LOUNGE	< 0.3
11130776	STAFF WORK ROOM	< 0.3
11130770	VP	0.7
11130759	X	0.6

Table 2- Radon Testing Results			
Gaithersburg ES			
Test Period: 02/22/2022 - 02/25/2022			
Kit Number	QC Type	Room / Area	Result
11130757	D	Main office	< 0.3
11130779	D	K6	1.2
11130780	FB	K6	< 0.3
11130752	D	10	0.8
11130725	D	E2	0.9
11130736	FB	E2	< 0.3
11130720	D	4	< 0.3
11130715	D	B111	< 0.3
11130714	FB	B111	< 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 ES

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11130729	1	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130752	10	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	0.8 ± 0.4	2022-03-03
11130749	10	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130748	11	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130754	12A	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	1.2 ± 0.5	2022-03-03
11130753	12B	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130713	13	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130717	2	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130733	21	2022-02-22 @ 12:00 pm	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130783	22	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130740	23	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130762	24	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130763	24	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130782	25	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130765	26	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130796	27	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130766	28	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	0.7 ± 0.4	2022-03-03
11130742	29	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130728	3	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130774	30	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	0.8 ± 0.5	2022-03-03
11130723	4	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130720	4	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130790	5	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	1.0 ± 0.5	2022-03-03
11130791	6	2022-02-22 @ 10:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130800	6A	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	1.0 ± 0.5	2022-03-03
11130787	6A	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130798	6A	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	0.7 ± 0.5	2022-03-03
11130789	6B	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130760	7	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130799	8	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	1.2 ± 0.5	2022-03-03
11130797	9	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130793	ADMIN	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130732	APR	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130724	APR	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130777	ART	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130719	B	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130707	B105	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	0.9 ± 0.5	2022-03-03

Radon test result report for:
GAITHERSBURG ES

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11130709	B109	2022-02-22 @ 12:00 pm	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130715	B111	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130714	B111	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130716	B111	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130705	B113	2022-02-22 @ 12:00 pm	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130712	B116	2022-02-22 @ 12:00 pm	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130730	BUILDING SERVICES MANAGER	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130768	C	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	1.0 ± 0.5	2022-03-03
11130784	COMPUTER	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130778	CONFERENCE	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130775	D	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130761	E	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130737	E2	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130725	E2	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	0.9 ± 0.5	2022-03-03
11130736	E2	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130731	E4	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130794	F	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130781	G	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130788	G	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130718	GYM	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130722	GYM	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	0.9 ± 0.5	2022-03-03
11130738	GYM OFFICE	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130756	H	2022-02-22 @ 11:00 am	2022-02-25 @ 10:00 am	< 0.3	2022-03-03
11130764	I	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130751	K	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	1.1 ± 0.5	2022-03-03
11130745	K1	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130747	K2	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130743	K3	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130758	K4	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130750	K5	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	0.9 ± 0.4	2022-03-03
11130772	K6	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130780	K6	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130779	K6	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	1.2 ± 0.5	2022-03-03
11130746	K7	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	0.9 ± 0.5	2022-03-03
11130726	KITCHEN OFFICE	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130708	L	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	0.6 ± 0.5	2022-03-03
11130721	M	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	1.1 ± 0.5	2022-03-03

March 3, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
GAITHERSBURG ES

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11130785	MAIN OFFICE	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130757	MAIN OFFICE	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130786	MAIN OFFICE	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130755	MATH ASSESSMENT	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130795	MATH ROOM	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	1.0 ± 0.5	2022-03-03
11130792	MEDIA CENTER	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130744	MEDIA CENTER	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130769	MEDIA CENTER OFFICE	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	1.4 ± 0.6	2022-03-03
11130739	MUSIC	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130773	O	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130767	P	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	1.2 ± 0.5	2022-03-03
11130771	PRINCIPAL	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130741	Q	2022-02-22 @ 10:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130727	RESOURCE	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	0.9 ± 0.5	2022-03-03
11130735	STAFF LOUNGE	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11130776	STAFF WORK ROOM	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	< 0.3	2022-03-03
11130770	VP	2022-02-22 @ 9:00 am	2022-02-25 @ 8:00 am	0.7 ± 0.5	2022-03-03
11130759	X	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	0.6 ± 0.4	2022-03-03

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

March 3, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
GAITHERSBURG ES

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11123891	17	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11123892	B110	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11123889	B115	2022-02-22 @ 12:00 pm	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11123845	HEALTH	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	< 0.3	2022-03-03
11122616	HEALTH 2	2022-02-22 @ 11:00 am	2022-02-25 @ 9:00 am	0.7 ± 0.5	2022-03-03
11123890	N	2022-02-22 @ 12:00 pm	2022-02-25 @ 9:00 am	< 0.3	2022-03-03

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

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 - Device No.'s: _____

11113484, 1112998, 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: _____

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 14, 2022

**** LABORATORY ANALYSIS REPORT ****

Pg 1 of 1

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	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

	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	PM
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

MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Gaithersburg Elementary School
Date of Report	2/28/2020
Round of Testing	Initial Follow-up Post Remediation 2 year testing 5 year testing HVAC Upgrade Window Replacement New Addition New Facility
# of Rooms Tested	2
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	0.9 pCi/L

Project Status

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



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2/28/2020

Mr. Richard Cox, MS
Team Leader
Montgomery County Public Schools
Division of Maintenance
Gaithersburg, Maryland 20879

Re: Radon Testing Services

KCI Job #1214634188

Location: Gaithersburg Elementary School

35 North Summit Avenue
Gaithersburg, Maryland 20877

Dear Mr. Cox:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools pursuant to completing a “short-term” 3-day radon test for the Gaithersburg Elementary School, located at 35 North Summit Avenue in Gaithersburg, Maryland 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 Safety Board (NRSB) Radon Measurement Specialist (certification #111004 RT) 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 2/4/2020 and deployed four (4) 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.

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

1. Rooms with missing test kits from the December 2019 testing period (i.e. test kit was deployed but not recovered),

-
2. Rooms with invalidated test kits from the December 2019 testing period (e.g. an open window in the room or disturbed test kit),
 3. Rooms which were locked/inaccessible during the December 2019 testing period,
 4. Rooms with elevated December 2019 results (i.e. ≥ 3.5 pCi/L),
 5. Rooms previously tested for radon but not tested in December 2019, and
 6. Additional rooms that require testing (if applicable.)

A floor plan map of the building with the test locations is included as Appendix 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, Inc. prior to being returned to the laboratory for analysis.

KCI returned to the site on 2/7/2020 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Aircheck, Inc. for analysis by gamma-ray spectroscopy. Aircheck, 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 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.

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 ranged from the mid-30s to the low-50s; and high temperatures ranged from the upper-40s to the mid-60s. Maximum sustained winds ranged from 13-21 miles per hour. Average humidity was approximately 76%. A total of 1.09 Inches of rain were recorded during the testing period. The weather conditions during the testing period may have resulted in atypical radon test results for this facility.

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). Follow-up 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	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 410-316-7800.

Sincerely,

Mr. Tyler P. McCleaf
Radon Measurement Provider
KCI Technologies, Inc.

Attachments:

A- Floor Plan with Test Locations

B - Tables 1-3, Radon Test Summary Spreadsheets

C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

Floor Plan Legend

X-Sample Location (in red)

X- Previous Sample Location

1- Not Samled; No Ground Contact

2- Not Samled; Unoccupied (e.g. Storage, Mechanical)

3- Not Samled; High Humidity/Moisture

4- Not Samled; Bathroom/Hallway

ATTACHMENT B

Radon Test Summary Spreadsheet

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

Table 1- Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 02/04/20-02/07/20		
Kit Number	Room / Area	Result
9348535	144B	0.9
9348558	179	0.7
9334909	OFFICE BLANK	<0.3
9334910	OFFICE BLANK	<0.3

Table 2- Radon Testing Results			
Gaithersburg Elementary School			
Test Period: 02/04/20-02/07/20			
Kit Number	QC Type	Room / Area	Result
9334902	TRANSIT BLANK	NA	<0.3

ATTACHMENT C

Laboratory Analytical Results

February 11, 2020

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
GAITHERSBURG ES
553

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9348535	144B	2020-02-04 @ 11:00 am	2020-02-07 @ 9:00 am	0.9 ± 0.3	2020-02-11
9348558	179	2020-02-04 @ 11:00 am	2020-02-07 @ 9:00 am	0.7 ± 0.3	2020-02-11

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 194523

NOMINAL Conditions: Radon Conc 25.8 pCi/L Rel. Hum 49.8 % Temp. 70.2 F

Date Start: 2/21/20 Date Stop: 2/24/20 Date Start: _____ Date Stop: _____

Time Start: 0745 Time Stop: 0745 Time Start: _____ Time Stop: _____

Device No.'s: (9) Char Bags - Device No.'s: _____

9341725 thru 9341733

52 Left

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

February 28, 2020

**** 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
9341725	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.9 \pm 1.6	2020-02-26
9341730	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.1 \pm 1.6	2020-02-26
9341728	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.9 \pm 1.6	2020-02-26
9341726	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	25.8 \pm 1.5	2020-02-26
9341731	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	25.1 \pm 1.5	2020-02-26
9341729	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.2 \pm 1.6	2020-02-26
9341727	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	27.2 \pm 1.6	2020-02-26
9341732	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	27.3 \pm 1.6	2020-02-26

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



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Radon Test Kit Chain of Custody

Project Name: MCPS Radon 2019 Week 1 Retesting

Name of Schools:

1. Belmont E.S.
2. Clarksburg H.S.
3. Damascus E.S.
4. Damascus H.S.
5. DuFief E.S.
6. Fields Road E.S.
7. Gaithersburg E.S.
8. McAuliffe E.S.
9. Quince Orchard H.S.
10. Snowden Farms E.S.
11. South Lake E.S.
12. Stone Mill E.S.
13. Travilah ES
14. Watkins Mill ES
15. Whitman H.S.

	Date	Initials
Radon Test Kits Deployed	02/03/20 to 02/04/20	TM
Radon Test Kits Collected	02/06/20 to 02/07/20	TM
Radon Test Kits Shipped to Lab*	02/07/20	TM
Radon Test Kits Received by Lab*	02/10/20	TM

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

MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Gaithersburg Elementary School
Date of Report	1/28/2020
Round of Testing	Initial Follow-up Post Remediation 2 year testing 5 year testing HVAC Upgrade Window Replacement New Addition New Facility
# of Rooms Tested	78
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	1.9 pCi/L

Project Status

Current Project Status at this time: Testing Complete; missing/compromised tests to be sampled.



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1/28/2020

Mr. Richard Cox, MS
Environmental Team Leader
Montgomery County Public Schools
Division of Maintenance
Gaithersburg, Maryland 20879

Re: Radon Testing Services

KCI Job #12146341126

Location: Gaithersburg Elementary School

35 North Summit Avenue
Gaithersburg, Maryland 20877

Dear Mr. Cox:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools pursuant to completing a “short-term” 3-day radon test for the Gaithersburg Elementary School, located at 35 North Summit Avenue in Gaithersburg, Maryland 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/departments/facilities/maintenance/default.aspx?id=458858> or www.epa.gov/radon.

KCI visited the site on 12/9/2019 and deployed ninety-four (94) 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 Appendix 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 sixty (60) test kits to Bowser-Morner, Inc. as spike samples. The spiked tests were exposed to a known radon concentration by Bowser-Morner, Inc. prior to being returned to the laboratory for analysis.

KCI returned to the site on 12/12/2019 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Aircheck, Inc. for analysis by gamma-ray spectroscopy. Aircheck, 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 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.

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 upper-30s and high temperatures ranged from the upper-30s to the mid-50s. Maximum sustained winds ranged from 7-21 miles per hour. Average humidity was around 75%. 0.52 inches of precipitation (rain) was recorded during the 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	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 410-316-7800.

Sincerely,

Mr. Tyler P. McCleaf
Radon Measurement Provider
111004 RT

KCI Technologies, Inc.

Attachments:

A- Floor Plan with Test Locations

B - Tables 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 Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

Table 1- Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 12/9/2019-12/12/2019		
Kit Number	Room/ Area	Result
9334703	205	< 0.3
9334704	183	< 0.3
9334705	183	< 0.3
9334707	168	0.6
9334708	167	0.6
9334709	164	< 0.3
9334710	180	< 0.3
9334711	1006	0.9
9334712	1007	0.6
9334713	164	1.1
9334714	181	0.6
9334715	1008	1.1
9334716	1002	1.2
9334717	1003	0.9
9334718	1004	1.1
9334719	1005	0.9
9334720	1005	0.6
9334721	1009	0.5
9334722	1011	0.7
9334723	1010	0.9
9334724	1019	< 0.3
9334725	163	< 0.3
9334726	184	1
9334727	1019	0.9
9334728	1020	0.8
9334729	162	< 0.3
9334730	185	0.6
9334731	162	0.7
9334732	165	< 0.3
9334733	166	0.5
9334734	186	0.8
9334735	169	0.6
9334736	172	1
9334737	173	< 0.3
9334738	170	0.8
9334739	175	0.5
9334740	174	0.5
9334741	174	< 0.3
9334742	109	0.7
9334743	178	0.6
9334744	109	0.9
9334745	110	< 0.3
9334746	108	0.6
9334747	176	< 0.3
9334748	177	< 0.3
9334749	120	0.7
9334750	120	< 0.3
9334751	106	< 0.3
9334752	158	0.6
9334753	137	1.9

9334754	118	0.9
9334755	105	1.6
9334757	144	< 0.3
9334758	153	< 0.3
9334759	143	0.5
9334760	159	< 0.3
9334761	143	< 0.3
9334762	160	0.5
9334763	143	< 0.3
9334764	107B	1.2
9334765	107A	< 0.3
9334766	111	< 0.3
9334767	107A	0.9
9334768	107	1.2
9334769	112	< 0.3
9334770	112	< 0.3
9334771	OFF 001	< 0.3
9334772	115	0.7
9334773	116	< 0.3
9334774	138	0.9
9334775	138	0.6
9334776	139	0.6
9334777	117	0.7
9334778	STA	< 0.3
9334779	142	0.7
9334780	142	0.8
9334781	140	< 0.3
9334782	140	< 0.3
9334783	113	0.6
9334784	114	< 0.3
9334785	114A	< 0.3
9334786	114	< 0.3
9334787	103	< 0.3
9334788	151	0.8
9334789	156	< 0.3
9334790	156	< 0.3
9334791	104	< 0.3
9334792	150	0.9
9334793	101	< 0.3
9334794	102	< 0.3
9334795	155	< 0.3
9334796	149	< 0.3
9334797	146	< 0.3
9334798	145	< 0.3
9334799	148	< 0.3
9334800	148	0.7
9334515	OFFICE BLANK	<0.3
9334756	144B	MISSING
9334706	179	MISSING

Table 2- Radon Testing Results			
Gaithersburg Elementary School			
Test Period: 12/9/2019-12/12/2019			
Kit Number	QC Type	Room / Area	Result
9334800	D	148	0.7
9334789	D	156	<0.3
9334786	FB	114	<0.3
9334780	D	142	0.8
9334770	D	112	<0.3
9334765	FB	107A	<0.3
9334759	D	143	0.5
9334750	D	120	<0.3
9334742	FB	109	0.7
9334740	D	174	0.5
9334731	D	162	0.7
9334724	FB	1019	<0.3
9334720	D	1005	0.6
9334713	D	164	1.1
9334705	FB	183	<0.3
9334850	TRANSIT BLANK	NA	< 0.3
9334914	TRANSIT BLANK	NA	< 0.3
9334916	TRANSIT BLANK	NA	< 0.3
9334963	TRANSIT BLANK	NA	< 0.3

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:
GAITHERSBURG ES
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9334716	1002	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	1.2 ± 0.5	2019-12-17
9334717	1003	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	0.9 ± 0.4	2019-12-17
9334718	1004	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	1.1 ± 0.4	2019-12-17
9334720	1005	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	0.6 ± 0.4	2019-12-17
9334719	1005	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	0.9 ± 0.4	2019-12-17
9334711	1006	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	0.9 ± 0.4	2019-12-17
9334712	1007	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	0.6 ± 0.4	2019-12-16
9334715	1008	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	1.1 ± 0.4	2019-12-17
9334721	1009	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	0.5 ± 0.4	2019-12-17
9334793	101	2019-12-09 @ 8:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334723	1010	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	0.9 ± 0.4	2019-12-17
9334722	1011	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	0.7 ± 0.4	2019-12-17
9334724	1019	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	< 0.3	2019-12-16
9334727	1019	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	0.9 ± 0.4	2019-12-17
9334794	102	2019-12-09 @ 8:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334728	1020	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	0.8 ± 0.4	2019-12-17
9334787	103	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334791	104	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-17
9334755	105	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	1.6 ± 0.4	2019-12-16
9334751	106	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334768	107	2019-12-09 @ 10:00 am	2019-12-12 @ 9:00 am	1.2 ± 0.4	2019-12-16
9334765	107A	2019-12-09 @ 10:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334767	107A	2019-12-09 @ 10:00 am	2019-12-12 @ 9:00 am	0.9 ± 0.4	2019-12-16
9334764	107B	2019-12-09 @ 10:00 am	2019-12-12 @ 9:00 am	1.2 ± 0.4	2019-12-16
9334746	108	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	0.6 ± 0.4	2019-12-17
9334744	109	2019-12-09 @ 11:00 am	2019-12-12 @ 9:00 am	0.9 ± 0.4	2019-12-16
9334742	109	2019-12-09 @ 11:00 am	2019-12-12 @ 9:00 am	0.7 ± 0.4	2019-12-17
9334745	110	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334766	111	2019-12-09 @ 10:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334770	112	2019-12-09 @ 10:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334769	112	2019-12-09 @ 10:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334783	113	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	0.6 ± 0.4	2019-12-17
9334784	114	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334785	114A	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334772	115	2019-12-09 @ 10:00 am	2019-12-12 @ 9:00 am	0.7 ± 0.4	2019-12-16
9334773	116	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334777	117	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	0.7 ± 0.3	2019-12-16

Radon test result report for:
GAITHERSBURG ES
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9334754	118	2019-12-09 @ 10:00 am	2019-12-12 @ 10:00 am	0.9 ± 0.3	2019-12-16
9334749	120	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	0.7 ± 0.3	2019-12-16
9334750	120	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334753	137	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	1.9 ± 0.4	2019-12-16
9334775	138	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	0.6 ± 0.3	2019-12-16
9334774	138	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	0.9 ± 0.4	2019-12-17
9334776	139	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	0.6 ± 0.3	2019-12-16
9334782	140	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334781	140	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334780	142	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	0.8 ± 0.3	2019-12-16
9334779	142	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	0.7 ± 0.3	2019-12-16
9334763	143	2019-12-09 @ 10:00 am	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334761	143	2019-12-09 @ 10:00 am	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334759	143	2019-12-09 @ 10:00 am	2019-12-12 @ 10:00 am	0.5 ± 0.4	2019-12-16
9334757	144	2019-12-09 @ 10:00 am	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334798	145	2019-12-09 @ 8:00 am	2019-12-12 @ 8:00 am	< 0.3	2019-12-16
9334797	146	2019-12-09 @ 8:00 am	2019-12-12 @ 8:00 am	< 0.3	2019-12-16
9334799	148	2019-12-09 @ 8:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-17
9334800	148	2019-12-09 @ 8:00 am	2019-12-12 @ 9:00 am	0.7 ± 0.4	2019-12-17
9334796	149	2019-12-09 @ 8:00 am	2019-12-12 @ 8:00 am	< 0.3	2019-12-16
9334792	150	2019-12-09 @ 8:00 am	2019-12-12 @ 9:00 am	0.9 ± 0.4	2019-12-17
9334788	151	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	0.8 ± 0.3	2019-12-16
9334758	153	2019-12-09 @ 10:00 am	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334795	155	2019-12-09 @ 8:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334790	156	2019-12-09 @ 8:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16
9334752	158	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	0.6 ± 0.4	2019-12-16
9334760	159	2019-12-09 @ 10:00 am	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334762	160	2019-12-09 @ 10:00 am	2019-12-12 @ 10:00 am	0.5 ± 0.4	2019-12-16
9334731	162	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	0.7 ± 0.3	2019-12-16
9334729	162	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	< 0.3	2019-12-16
9334725	163	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	< 0.3	2019-12-17
9334713	164	2019-12-09 @ 1:00 pm	2019-12-12 @ 11:00 am	1.1 ± 0.4	2019-12-17
9334709	164	2019-12-09 @ 1:00 pm	2019-12-12 @ 11:00 am	< 0.3	2019-12-17
9334732	165	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	< 0.3	2019-12-16
9334733	166	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	0.5 ± 0.4	2019-12-17
9334708	167	2019-12-09 @ 1:00 pm	2019-12-12 @ 11:00 am	0.6 ± 0.3	2019-12-16
9334707	168	2019-12-09 @ 1:00 pm	2019-12-12 @ 11:00 am	0.6 ± 0.4	2019-12-17

December 17, 2019

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
GAITHERSBURG ES
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9334735	169	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	0.6 ± 0.3	2019-12-16
9334738	170	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	0.8 ± 0.4	2019-12-17
9334736	172	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	1.0 ± 0.4	2019-12-17
9334737	173	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334740	174	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	0.5 ± 0.3	2019-12-16
9334741	174	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334739	175	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	0.5 ± 0.3	2019-12-16
9334747	176	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334748	177	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334743	178	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	0.6 ± 0.4	2019-12-17
9334710	180	2019-12-09 @ 1:00 pm	2019-12-12 @ 11:00 am	< 0.3	2019-12-17
9334714	181	2019-12-09 @ 1:00 pm	2019-12-12 @ 11:00 am	0.6 ± 0.4	2019-12-17
9334704	183	2019-12-09 @ 1:00 pm	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334705	183	2019-12-09 @ 1:00 pm	2019-12-12 @ 10:00 am	< 0.3	2019-12-16
9334726	184	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	1.0 ± 0.4	2019-12-17
9334730	185	2019-12-09 @ 12:00 pm	2019-12-12 @ 11:00 am	0.6 ± 0.3	2019-12-16
9334734	186	2019-12-09 @ 11:00 am	2019-12-12 @ 10:00 am	0.8 ± 0.3	2019-12-16
9334703	205	2019-12-09 @ 1:00 pm	2019-12-12 @ 11:00 am	< 0.3	2019-12-17
9334771	OFF 001	2019-12-09 @ 10:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-17
9334778	STA	2019-12-09 @ 9:00 am	2019-12-12 @ 9:00 am	< 0.3	2019-12-16

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies Inc. Job Number 193475

NOMINAL Conditions: Radon Conc 25.7 pCi/L Rel. Hum 74.6 % Temp. 69.9 F

Date Start: 12/13/19 Date Stop: 12/16/19

Date Start: _____ Date Stop: _____

Time Start: 0806 Time Stop: 0806

Time Start: _____ Time Stop: _____

(Group 1)

Device No.'s: (20) Char. Bags-

Device No.'s: _____

9334502 thru 9334510,
9334514, 9334516, 9334517,
9334519, 9334519
9334522 thru 9334528

B4

Date Start: 12/13/19 Date Stop: 12/16/19

Date Start: _____ Date Stop: _____

0811

Time Start: 0806 acm Time Stop: 0811

Time Start: _____ Time Stop: _____

(Group 2)

Device No.'s: (20) Char. Bags-

Device No.'s: _____

9334529 thru 9334538,
9334540,
9334542 thru 9334550

B3

Date Start: 12/13/19 Date Stop: 12/16/19

Date Start: _____ Date Stop: _____

Time Start: 0816 Time Stop: 0816

Time Start: _____ Time Stop: _____

(Group 3)

Device No.'s: (20) Char. Bags-

Device No.'s: _____

9334551, 9334552, 9334562,
9334555 thru 9334559,
9334569, 9334576, 9334579,
9334580, 9334583, 9334584,
9334591, 9334593, 9334594,
9334597, 9334598, 9334599

B2

Note: All times are in 24-hour (military) notation, Eastern Standard Time (EST)
Background = 7 μ R/h Elevation = 820 ft

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
9334583	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.3 \pm 1.4	2019-12-18
9334529	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.3 \pm 1.5	2019-12-18
9334597	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.8 \pm 1.4	2019-12-18
9334534	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.3 \pm 1.4	2019-12-18
9334540	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.9 \pm 1.4	2019-12-18
9334546	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.9 \pm 1.5	2019-12-18
9334551	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.3 \pm 1.4	2019-12-18
9334558	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.6 \pm 1.4	2019-12-18
9334579	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.6 \pm 1.4	2019-12-18
9334593	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.3 \pm 1.4	2019-12-18
9334532	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.6 \pm 1.4	2019-12-18
9334537	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.8 \pm 1.4	2019-12-18
9334544	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.5 \pm 1.4	2019-12-18
9334549	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.4 \pm 1.5	2019-12-18
9334556	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.1 \pm 1.4	2019-12-18
9334569	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.7 \pm 1.4	2019-12-18
9334584	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.4 \pm 1.5	2019-12-18
9334530	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.6 \pm 1.4	2019-12-18
9334598	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.7 \pm 1.4	2019-12-18
9334535	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.0 \pm 1.4	2019-12-18
9334542	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.7 \pm 1.4	2019-12-18
9334547	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	25.2 \pm 1.5	2019-12-18
9334552	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.2 \pm 1.4	2019-12-18
9334559	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.1 \pm 1.4	2019-12-18
9334580	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.1 \pm 1.4	2019-12-18
9334594	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.1 \pm 1.4	2019-12-18
9334533	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.3 \pm 1.5	2019-12-18
9334538	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.6 \pm 1.5	2019-12-18
9334545	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.0 \pm 1.4	2019-12-18
9334550	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.1 \pm 1.4	2019-12-18
9334557	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.6 \pm 1.5	2019-12-18
9334576	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.3 \pm 1.4	2019-12-18
9334591	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.7 \pm 1.4	2019-12-18
9334531	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.3 \pm 1.5	2019-12-18
9334599	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.8 \pm 1.4	2019-12-18
9334536	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.4 \pm 1.5	2019-12-18
9334543	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.4 \pm 1.5	2019-12-18

December 18, 2019

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

N/A

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9334548	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.0 ± 1.4	2019-12-18
9334555	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.4 ± 1.4	2019-12-18
9334562	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.5 ± 1.4	2019-12-18

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

December 18, 2019

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

S

N/A

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9334505	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.5 ± 1.5	2019-12-18
9334510	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.4 ± 1.5	2019-12-18
9334522	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.9 ± 1.4	2019-12-18
9334527	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	22.6 ± 1.4	2019-12-18
9334503	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.6 ± 1.4	2019-12-18
9334508	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.7 ± 1.5	2019-12-18
9334517	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.5 ± 1.4	2019-12-18
9334525	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.8 ± 1.4	2019-12-18
9334506	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.3 ± 1.5	2019-12-18
9334514	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.5 ± 1.5	2019-12-18
9334523	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.6 ± 1.4	2019-12-18
9334528	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.8 ± 1.4	2019-12-18
9334504	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.8 ± 1.4	2019-12-18
9334509	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.5 ± 1.4	2019-12-18
9334519	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.1 ± 1.4	2019-12-18
9334526	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.3 ± 1.4	2019-12-18
9334502	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.7 ± 1.4	2019-12-18
9334507	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.7 ± 1.5	2019-12-18
9334516	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	22.2 ± 1.3	2019-12-18
9334524	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.6 ± 1.5	2019-12-18



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 2019 Week 1

Name of Schools:

- | | |
|-----------------------------|-------------------------|
| 1. Baker M.S. | 13. Jones Lane E.S. |
| 2. Belmont E.S. | 14. Lake Seneca E.S. |
| 3. Clarksburg E.S. | 15. McAuliffe E.S. |
| 4. Clarksburg H.S. | 16. Quince Orchard H.S. |
| 5. Clearspring E.S. | 17. Rosa Parks M.S. |
| 6. Damascus E.S. | 18. Snowden Farm E.S. |
| 7. Damascus H.S. | 19. South Lake E.S. |
| 8. Dufief E.S. | 20. Stone Mill E.S. |
| 9. Fields Road E.S. | 21. Travilah E.S. |
| 10. Gaithersburg E.S. | 22. Watkins Mill E.S. |
| 11. Germantown E.S. | 23. Watkins Mill H.S. |
| 12. Great Seneca Creek E.S. | 24. Whitman H.S. |

	Date	Initials
Radon Test Kits Deployed	12/09/19 to 12/10/19	JM
Radon Test Kits Collected	12/12/19 to 12/13/19	JM
Radon Test Kits Shipped to Lab*	12/13/19	JM
Radon Test Kits Received by Lab*	12/16/19	JM

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

MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Gaithersburg Elementary School
Date of Report	March 12, 2018
Round of Testing	Initial Follow-up Post Remediation 2 year testing 5 year testing HVAC Upgrade Window Replacement New Addition New Facility
# of Rooms Tested	15
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	1.6 pCi/L

Project Status

Current Project Status at this time: Retesting completed; no further action at this time.



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

March 12, 2018

Mr. Richard Cox, MS
Team Leader
Montgomery County Public Schools
Division of Maintenance
Gaithersburg, Maryland 20879

Re: Radon Testing Services

KCI Job #1214634188

Location: Gaithersburg Elementary School

35 North Summit Ave.
Gaithersburg, Maryland 20877

Dear Mr. Cox:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools pursuant to completing a “short-term” 3-day radon test for the Gaithersburg Elementary School, located at 35 North Summit Ave. in Gaithersburg, Maryland 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 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 February 13, 2018 and deployed eighteen (18) 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.

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

1. Rooms not successfully tested,
2. Rooms with elevated November 2017 results (i.e. ≥ 3.5 pCi/L).

A floor plan map of the building with the test locations is included as Appendix 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, Inc. prior to being returned to the laboratory for analysis.

KCI returned to the site on February 16, 2018 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Aircheck, Inc. for analysis by gamma-ray spectroscopy. Aircheck, 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 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.

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 ranged from the mid-20s to upper 40s and high temperatures ranged from the high-30s to the high-60s. Maximum sustained winds ranged from 10-18 miles per hour. Average humidity was around 73%. 0.30 Inches of precipitation was recorded during the 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). 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	See Attachment B

Quality Control Samples	
Results of Blank Canisters:	The field blank, 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 410-316-7800.

Sincerely,



Radon Measurement Specialist
KCI Technologies, Inc.

Attachments:

B - Radon Test Summary Spreadsheets

C- Laboratory Analytical Results

ATTACHMENT B

Radon Test Summary Spreadsheet

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

Table 1- Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 02/13/18-02/16/18		
Kit Number	Room / Area	Result
7986920	5	1.6
7986926	9	0.8
7986922	12B	1.1
7986934	B105	< 0.3
7986939	B112	1.0
7986919	GUIDANCE A	0.5
7986924	GUIDANCE B	0.5
7986933	J	< 0.3
7986932	K	< 0.3
7986944	KITCHEN	0.8
7986945	KITCHEN OFFICE	0.5
7986928	PRE K	0.7
7986951	RESOURCE	< 0.3
7986950	STAFF LOUNGE	1.6
7986940	STAGE	0.8

Table Note:

* Missing or Compromised Sample

Table 2 - Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 02/13/18-02/16/18		
Kit Number	QC Type	Result
7986927	D (9)	1.3
7986925	D (GUIDANCE B)	0.9
7986938	FB (STAGE)	< 0.3

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:**GAITHERSBURG ELEMENTARY SCHOOL****1**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7986922	12B	2018-02-13 @ 10:00 am	2018-02-16 @ 10:00 am	1.1 ± 0.3	2018-02-20
7986920	5	2018-02-13 @ 10:00 am	2018-02-16 @ 10:00 am	1.6 ± 0.4	2018-02-20
7986926	9	2018-02-13 @ 10:00 am	2018-02-16 @ 10:00 am	0.8 ± 0.3	2018-02-20
7986927	9	2018-02-13 @ 10:00 am	2018-02-16 @ 10:00 am	1.3 ± 0.3	2018-02-20
7986934	B105	2018-02-13 @ 10:00 am	2018-02-16 @ 10:00 am	< 0.3	2018-02-20
7986939	B112	2018-02-13 @ 10:00 am	2018-02-16 @ 10:00 am	1.0 ± 0.3	2018-02-20
7986919	GUIDANCE A	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	0.5 ± 0.3	2018-02-20
7986924	GUIDANCE B	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	0.5 ± 0.3	2018-02-20
7986925	GUIDANCE B	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	0.9 ± 0.3	2018-02-20
7986933	J	2018-02-13 @ 10:00 am	2018-02-16 @ 9:00 am	< 0.3	2018-02-20
7986932	K	2018-02-13 @ 10:00 am	2018-02-16 @ 9:00 am	< 0.3	2018-02-20
7986944	KITCHEN	2018-02-13 @ 11:00 am	2018-02-16 @ 9:00 am	0.8 ± 0.3	2018-02-20
7986945	KITCHEN OFFICE	2018-02-13 @ 11:00 am	2018-02-16 @ 9:00 am	0.5 ± 0.3	2018-02-20
7986928	PRE K	2018-02-13 @ 10:00 am	2018-02-16 @ 10:00 am	0.7 ± 0.3	2018-02-20
7986951	RESOURCE	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	< 0.3	2018-02-20
7986950	STAFF LOUNGE	2018-02-13 @ 11:00 am	2018-02-16 @ 9:00 am	1.6 ± 0.3	2018-02-20
7986940	STAGE	2018-02-13 @ 10:00 am	2018-02-16 @ 10:00 am	0.8 ± 0.3	2018-02-20
7986938	STAGE	2018-02-13 @ 10:00 am	2018-02-16 @ 9:00 am	< 0.3	2018-02-20



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase

Names of Schools:

- | | |
|---------------------------------------|--|
| 1. Westbrook Elementary School | 21. E. Silver Spring Elementary School |
| 2. Westland Middle School | 22. Silver Spring Int. Middle School |
| 3. Walt Whitman High School | 23. Clarksburg High School |
| 4. Cloverly Elementary School | 24. Rosa Parks Middle School |
| 5. Sligo Middle School | 25. Greenwood Elementary School |
| 6. Flora Singer Elementary School | 26. Montgomery Knolls Elem. School |
| 7. Albert Einstein High School | 27. Watkins Mill Elementary School |
| 8. Roscoe Nix Elementary School | 28. Gaithersburg Elementary School |
| 9. Mario Loiederman Middle School | 29. Viers Mill Elementary School |
| 10. Sargent Shriver Elementary School | 30. Rock View Elementary School |
| 11. Whetstone Elementary School | |
| 12. Brooke Grove Elementary School | |
| 13. Clearspring Elementary School | |
| 14. Beall Elementary School | |
| 15. Maryvale Elementary School | |
| 16. Lathrop E. Smith Center | |
| 17. Laytonsville Elementary School | |
| 18. Germantown Elementary School | |
| 19. Spring Mill Center | |
| 20. Northwood High School | |

	Date	Initials
Radon Test Kits Deployed	2/13/18	JM
Radon Test Kits Collected	2/16/18	JM
Radon Test Kits Shipped to Lab*	2/16/18	JM
Radon Test Kits Received by Lab*	2/20/18	JM

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

February 27, 2018

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

OFFICE BLANKS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7979482	1	2018-02-13 @ 1:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986991	10	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7985684	11	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986987	12	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986993	13	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986990	14	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7979485	2	2018-02-13 @ 1:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7985686	3	2018-02-13 @ 1:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986995	4	2018-02-13 @ 1:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986989	5	2018-02-13 @ 1:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986998	6	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986986	7	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986985	8	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986997	9	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20

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

February 27, 2018

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
TRANSIT BLANKS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7984188	1	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7984044	10	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986582	11	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986999	12	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7987000	13	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7984196	14	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986996	2	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986994	3	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7986992	4	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7985680	5	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7985698	6	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7985699	7	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7985700	8	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20
7985872	9	2018-02-13 @ 2:00 pm	2018-02-16 @ 2:00 pm	< 0.3	2018-02-20

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

February 28, 2018

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

MCPS - Spike Sample Laboratory Results. Measured values are satisfactory, i.e. within $\pm 25\%$ of the chamber's reference value (20.9 pCi/L).

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7984181	1	2018-02-16 @ 11:00 am	2018-02-19 @ 11:00 am	19.7 ± 0.8	2018-02-21
7986621	2	2018-02-16 @ 11:00 am	2018-02-19 @ 11:00 am	19.4 ± 0.8	2018-02-21
7985683	3	2018-02-16 @ 11:00 am	2018-02-19 @ 11:00 am	19.5 ± 0.8	2018-02-21
7984168	4	2018-02-16 @ 11:00 am	2018-02-19 @ 11:00 am	20.5 ± 0.8	2018-02-21
7986618	5	2018-02-16 @ 11:00 am	2018-02-19 @ 11:00 am	19.9 ± 0.8	2018-02-21
7984169	6	2018-02-16 @ 11:00 am	2018-02-19 @ 11:00 am	20.4 ± 0.8	2018-02-21

Air Chek, Inc. 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 183530

NOMINAL Conditions: Radon Conc 20.9 pCi/L Rel. Hum 49.8 % Temp. 79.1 F

Date Start: <u>2/16/18</u> Date Stop: <u>2/19/18</u>	Date Start: _____ Date Stop: _____
Time Start: <u>1052</u> Time Stop: <u>1052</u>	Time Start: _____ Time Stop: _____
Device No.'s: <u>(6) Char. Bags-</u>	Device No.'s: _____
<u>7984181, 7986621, 7985683</u>	_____
<u>7984168, 7986618, 7984169</u>	_____
<u>G3 Middle</u>	_____
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

MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Gaithersburg Elementary School
Date of Report	February 1, 2018
Round of Testing	Initial Follow-up Post Remediation 2 year testing 5 year testing HVAC Upgrade Window Replacement New Addition New Facility
# of Rooms Tested	69
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	0.6 pCi/L
Highest Value	2.6 pCi/L

Current Project Status at this time: Results satisfactory to date; missed locations to be sampled.



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

February 1, 2018

Mr. Richard Cox, MS
Team Leader
Montgomery County Public Schools
Division of Maintenance
Rockville, Maryland 20855

Re: Radon Testing Services

KCI Job #1214694182

Location: Gaithersburg Elementary School

35 North Summit Ave.
Gaithersburg, Maryland 20877

Dear Mr. Cox:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools pursuant to completing a “short-term” 3-day radon test for the Gaithersburg Elementary School, located at 35 North Summit Ave. in Gaithersburg, Maryland 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 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 December 4, 2017 and deployed eighty-four 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 Appendix 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, Inc. prior to being returned to the laboratory for analysis.

KCI returned to the site on December 7, 2017 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Aircheck, Inc. for analysis by gamma-ray spectroscopy. Aircheck, 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:

- 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 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.

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 high-20s to mid-40s and high temperatures ranged from the low-40s to mid-50s. Maximum sustained winds ranged from 12-17 miles per hour. Average humidity was around 65%. 0.16 Inches of precipitation was recorded during the testing period.

RESULTS

The sampling locations, field observations, 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). Missing/compromised tests, missed rooms, and locked rooms 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	See Attachment B

Quality Control Samples	
Results of Blank Canisters:	The field blanks, office blank, 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 410-316-7800.

Sincerely,



James Mouldale, CHMM
Radon Measurement Specialist
KCI Technologies, Inc.

Attachments:

B- Tables 1-3, Radon Test Summary Spreadsheets

C- Laboratory Analytical Results

ATTACHMENT B

Radon Test Summary Spreadsheet

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

Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 12/04/17-12/07/17		
Kit Number	Room / Area	Result
7986005	1	0.8
7985740	2	0.9
7985708	3	0.8
7985709	4	0.8
7985750	6	1.9
7985757	7	0.8
7985782	8	2.6
7985758	9	1.8
7985760	10	1.4
7985759	11	0.7
7985712	13	0.7
7985711	20	0.8
7985742	21	1.2
7985763	22	1.1
7985794	23	1.4
7985769	24	1.1
7985764	25	0.7
7985770	26	0.7
7985771	27	1.0
7985728	28	1.0
7985768	29	1.1
7985767	30	1.6
7985702	12A	1.5
7986025	6A	1.8
7985756	6B	1.2
7985785	ART	1.4
7986015	B109	1.5
7986007	B110	1.5
7986008	B111	1.4
7986024	B113	0.8
7985714	B115	1.0
7986023	B116	1.4
7985707	BUILDING SERVICE	0.8
7985789	COMPUTER LAB	0.7
7986001	CONFERENCE ROOM	0.8
7985790	COUNSELOR	0.9
7985755	COUNSELOR B	1.0
7985765	COUNSELOR C	0.9
7985788	ESOL 2	0.8
7985705	ESOL3	1.2
7985706	ESOL4	0.9
7985732	GYM	1.4
7986003	GYM	1.3
7986020	GYM	1.4
7986019	GYM OFFICE	1.9
7986004	HEALTH OFFICE	1.0

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 12/04/17-12/07/17		
Kit Number	Room / Area	Result
7985762	ISM	2.0
7985717	ISO ROOM	1.9
7985734	K1	1.1
7985743	K2	0.8
7985751	K3	1.2
7985736	K4	1.0
7985744	K5	0.8
7985752	K6	1.1
7985766	K6	1.0
7985735	K7	1.1
7986002	MAIN OFFICE	1.2
7985791	MEDIA CENTER	0.8
7985792	MEDIA CENTER	1.1
7986006	MEDIA OFFICE	1.1
7985786	MPR	1.2
7985787	MPR	1.3
7985704	MPR	1.3
7985748	MUSIC	0.9
7985780	MUSIC ROOM	1.9
7985716	NURSE OFFICE	1.2
7986010	PRINCIPAL	1.1
7985772	QWB	1.8
7985781	RDG FOCUS	1.0
7986012	RECORDS ROOM	1.1
7986018	STAFF DEVELOPMEN	0.6
7985710	STAFF LOUNGE	1.7
7986009	VP	1.1
7986011	WORKROOM	1.0

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 12/04/17-12/07/17		
Kit Number	QC Type	Result
7985733	D (28)	1.3
7985747	D (4)	1.0
7985793	D (6A)	2.0
7985703	D (MUSIC ROOM)	1.5
7985713	D (NURSE OFFICE)	1.0
7985749	D (STAFF DEVELOPMEN)	1.3
7985779	FB (4)	< 0.3
7985715	FB (NURSE OFFICE)	< 0.3
7986017	FB (STAFF DEVELOPMEN)	< 0.3
7193830	OB (OFFICE BLANK)	< 0.3

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:**GAITHERSBURG ELEMENTARY SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7986005	1	2017-12-04 @ 10:00 am	2017-12-07 @ 10:00 am	0.8 ± 0.4	2017-12-12
7985760	10	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.4 ± 0.4	2017-12-12
7985759	11	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	0.7 ± 0.4	2017-12-12
7985702	12A	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.5 ± 0.4	2017-12-12
7985712	13	2017-12-04 @ 10:00 am	2017-12-07 @ 10:00 am	0.7 ± 0.4	2017-12-12
7985740	2	2017-12-04 @ 10:00 am	2017-12-07 @ 10:00 am	0.9 ± 0.3	2017-12-12
7985711	20	2017-12-04 @ 10:00 am	2017-12-07 @ 10:00 am	0.8 ± 0.4	2017-12-12
7985742	21	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.2 ± 0.4	2017-12-12
7985763	22	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.1 ± 0.4	2017-12-12
7985794	23	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.4 ± 0.4	2017-12-12
7985769	24	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.1 ± 0.4	2017-12-12
7985764	25	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	0.7 ± 0.4	2017-12-12
7985770	26	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	0.7 ± 0.3	2017-12-11
7985771	27	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.0 ± 0.4	2017-12-11
7985733	28	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.3 ± 0.4	2017-12-12
7985728	28	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.0 ± 0.4	2017-12-12
7985768	29	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.1 ± 0.4	2017-12-12
7985708	3	2017-12-04 @ 10:00 am	2017-12-07 @ 10:00 am	0.8 ± 0.4	2017-12-12
7985767	30	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.6 ± 0.4	2017-12-12
7985779	4	2017-12-04 @ 10:00 am	2017-12-07 @ 10:00 am	< 0.3	2017-12-12
7985709	4	2017-12-04 @ 10:00 am	2017-12-07 @ 10:00 am	0.8 ± 0.4	2017-12-12
7985747	4	2017-12-04 @ 10:00 am	2017-12-07 @ 10:00 am	1.0 ± 0.4	2017-12-12
7985750	6	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	1.9 ± 0.4	2017-12-11
7985793	6A	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	2.0 ± 0.4	2017-12-11
7986025	6A	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.8 ± 0.4	2017-12-12
7985756	6B	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	1.2 ± 0.4	2017-12-11
7985757	7	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	0.8 ± 0.3	2017-12-11
7985782	8	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	2.6 ± 0.5	2017-12-12
7985758	9	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	1.8 ± 0.4	2017-12-11
7985785	ART	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	1.4 ± 0.4	2017-12-12
7986015	B109	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.5 ± 0.4	2017-12-12
7986007	B110	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.5 ± 0.4	2017-12-12
7986008	B111	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.4 ± 0.4	2017-12-12
7986024	B113	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	0.8 ± 0.4	2017-12-12
7985714	B115	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.0 ± 0.4	2017-12-12
7986023	B116	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.4 ± 0.4	2017-12-12
7985707	BUILDING SERVICE	2017-12-04 @ 10:00 am	2017-12-07 @ 10:00 am	0.8 ± 0.3	2017-12-11

Radon test result report for:**GAITHERSBURG ELEMENTARY SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7985789	COMPUTER LAB	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	0.7 ± 0.4	2017-12-12
7986001	CONFERENCE ROOM	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	0.8 ± 0.3	2017-12-11
7985790	COUNSELOR	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	0.9 ± 0.3	2017-12-11
7985755	COUNSELOR B	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	1.0 ± 0.4	2017-12-12
7985765	COUNSELOR C	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	0.9 ± 0.4	2017-12-12
7985788	ESOL 2	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	0.8 ± 0.4	2017-12-12
7985705	ESOL3	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.2 ± 0.4	2017-12-12
7985706	ESOL4	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	0.9 ± 0.4	2017-12-12
7985732	GYM	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.4 ± 0.4	2017-12-11
7986003	GYM	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.3 ± 0.3	2017-12-12
7986020	GYM	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.4 ± 0.4	2017-12-12
7986019	GYM OFFICE	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.9 ± 0.4	2017-12-11
7986004	HEALTH OFFICE	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.0 ± 0.4	2017-12-11
7985762	ISM	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	2.0 ± 0.4	2017-12-12
7985717	ISO ROOM	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.9 ± 0.4	2017-12-12
7985734	K1	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.1 ± 0.4	2017-12-12
7985743	K2	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	0.8 ± 0.4	2017-12-12
7985751	K3	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.2 ± 0.4	2017-12-12
7985736	K4	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.0 ± 0.4	2017-12-12
7985744	K5	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	0.8 ± 0.3	2017-12-11
7985752	K6	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.1 ± 0.4	2017-12-12
7985766	K6	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.0 ± 0.4	2017-12-12
7985735	K7	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.1 ± 0.4	2017-12-12
7986002	MAIN OFFICE	2017-12-04 @ 8:00 am	2017-12-07 @ 8:00 am	1.2 ± 0.4	2017-12-11
7985791	MEDIA CENTER	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	0.8 ± 0.3	2017-12-12
7985792	MEDIA CENTER	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	1.1 ± 0.4	2017-12-12
7986006	MEDIA OFFICE	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	1.1 ± 0.4	2017-12-11
7985786	MPR	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.2 ± 0.4	2017-12-12
7985787	MPR	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.3 ± 0.4	2017-12-12
7985704	MPR	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.3 ± 0.4	2017-12-12
7985748	MUSIC	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	0.9 ± 0.4	2017-12-12
7985703	MUSIC ROOM	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.5 ± 0.4	2017-12-12
7985780	MUSIC ROOM	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.9 ± 0.4	2017-12-12
7985713	NURSE OFFICE	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.0 ± 0.4	2017-12-12
7985715	NURSE OFFICE	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	< 0.3	2017-12-12
7985716	NURSE OFFICE	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.2 ± 0.4	2017-12-12
7193830	OFFICE BLANK	2017-12-04 @ 12:00 pm	2017-12-07 @ 12:00 pm	< 0.3	2017-12-12

December 29, 2017

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**GAITHERSBURG ELEMENTARY SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7986010	PRINCIPAL	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	1.1 ± 0.4	2017-12-12
7985772	QWB	2017-12-04 @ 9:00 am	2017-12-07 @ 9:00 am	1.8 ± 0.4	2017-12-12
7985781	RDG FOCUS	2017-12-04 @ 10:00 am	2017-12-07 @ 10:00 am	1.0 ± 0.3	2017-12-12
7986012	RECORDS ROOM	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	1.1 ± 0.4	2017-12-11
7986018	STAFF DEVELOPMEN	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	0.6 ± 0.3	2017-12-11
7985749	STAFF DEVELOPMEN	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	1.3 ± 0.4	2017-12-12
7986017	STAFF DEVELOPMEN	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	< 0.3	2017-12-12
7985710	STAFF LOUNGE	2017-12-04 @ 10:00 am	2017-12-07 @ 10:00 am	1.7 ± 0.4	2017-12-12
7986009	VP	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	1.1 ± 0.4	2017-12-12
7986011	WORKROOM	2017-12-04 @ 8:00 am	2017-12-07 @ 9:00 am	1.0 ± 0.3	2017-12-11

Air Chek, Inc. 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 Phase

Names of Schools:

- | | |
|---------------------------------------|----------------------------------|
| 1. Brooke Grove Elementary School | 14. Newport Mill Middle School |
| 2. Brown Station Elementary School | 15. Oakview Elementary School |
| 3. Diamond Elementary School Addition | 16. Quince Orchard High School |
| 4. Dufief Elementary School | 17. Robert Frost Middle School |
| 5. Emory Grove Center | 18. Rosa Parks Middle School |
| 6. Fields Road Elementary School | 19. South Lake Elementary School |
| 7. Facilities Maintenance Depot | |
| 8. Forest Oak Middle School | |
| 9. Francis Scott Key Middle School | |
| 10. Gaithersburg Elementary School | |
| 11. Gaithersburg Middle School | |
| 12. Germantown Elementary School | |
| 13. Greenwood Elementary School | |
| 14. Jones Lane Elementary School | |

	Date	Initials
Radon Test Kits Deployed	12/04/17	JM
Radon Test Kits Collected	12/07/17	JM
Radon Test Kits Shipped to Lab*	12/07/17	JM
Radon Test Kits Received by Lab*	12/11/17	JM

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

Radon test result report for:**TRANSIT 2
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7193838	TRANSIT 1	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7979384	TRANSIT 10	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7979385	TRANSIT 11	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7984056	TRANSIT 12	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7983834	TRANSIT 13	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7194097	TRANSIT 14	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7194092	TRANSIT 15	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7193840	TRANSIT 16	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7979072	TRANSIT 17	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7979071	TRANSIT 18	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7979065	TRANSIT 19	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	0.6 ± 0.4	2017-12-13
7978194	TRANSIT 2	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7985660	TRANSIT 20	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7985661	TRANSIT 21	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	0.7 ± 0.4	2017-12-13
7193843	TRANSIT 22	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7984055	TRANSIT 23	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7983813	TRANSIT 24	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7983827	TRANSIT 25	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7978193	TRANSIT 3	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7978189	TRANSIT 4	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	0.5 ± 0.4	2017-12-13
7986187	TRANSIT 5	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7986188	TRANSIT 6	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7986177	TRANSIT 7	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7979077	TRANSIT 8	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13
7979386	TRANSIT 9	2017-12-05 @ 2:00 pm	2017-12-08 @ 2:00 pm	< 0.3	2017-12-13

December 19, 2017

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

MCPS - Spike Sample Laboratory Results. Measured values are satisfactory, i.e. within $\pm 25\%$ of the chamber's reference value (27.7 pCi/L).

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7975075	S1	2017-12-01 @ 11:00 am	2017-12-04 @ 11:00 am	25.6 \pm 0.7	2017-12-07
7975064	S2	2017-12-01 @ 11:00 am	2017-12-04 @ 11:00 am	27.4 \pm 0.8	2017-12-07
7975063	S3	2017-12-01 @ 11:00 am	2017-12-04 @ 11:00 am	26.3 \pm 0.7	2017-12-07
7975065	S4	2017-12-01 @ 11:00 am	2017-12-04 @ 11:00 am	23.0 \pm 0.7	2017-12-07
7975069	S5	2017-12-01 @ 11:00 am	2017-12-04 @ 11:00 am	25.6 \pm 0.7	2017-12-07
7975070	S6	2017-12-01 @ 11:00 am	2017-12-04 @ 11:00 am	23.0 \pm 0.7	2017-12-07

Air Chek, Inc. 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 182393

NOMINAL Conditions: Radon Conc 27.7 pCi/L Rel. Hum 49.1 % Temp. 70.1 F

Date Start: 12/1/17 Date Stop: 12/4/17 Date Start: _____ Date Stop: _____

Time Start: 1049 Time Stop: 1049 Time Start: _____ Time Stop: _____

Device No.'s: (6) Chan. Bags. Device No.'s: _____

7975075, 7975064, 7975063, _____

7975065, 7975069, 7975070 _____

F4 Right

Date Start: _____ Date Stop: _____ Date Start: _____ Date Stop: _____

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

Device No.'s: _____ Device No.'s: _____

Date Start: _____ Date Stop: _____ Date Start: _____ Date Stop: _____

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

Device No.'s: _____ Device No.'s: _____

Note: All times are in 24-hour (military) notation, Eastern Standard Time (EST)
Background = 7 μ R/h Elevation = 820 ft



MCPS RADON TESTING

Executive Summary: Gaithersburg Elementary School

Date of Test Report:	5/12/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	7
# Rooms ≥ 4.0 pCi/L:	0
Low Value:	< 0.4
High Value:	1.4

Project Status:

Retesting completed; use the average of the initial and re-test results in a room to determine if remediation is necessary.



ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

May 12, 2016

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

Re: **Radon Testing Services**
KCI Job # 12146341.36

Location: Gaithersburg Elementary School
35 N. Summit Avenue
Gaithersburg, MD 20877

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 Gaithersburg Elementary School, located at 35 N. Summit Avenue in Gaithersburg, Maryland 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 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 April 11, 2016 and deployed eight (8) 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 TCS Industries Inc. as spike samples. The spiked tests were exposed to a known radon concentration by TCS prior to being returned to the laboratory for analysis.

KCI returned to the site on April 14, 2016 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to AccuStar Labs for analysis by gamma-ray spectroscopy. Accustar Labs is a NRSB certified analytical laboratory for radon analysis (certification # ARL0007) located at 929 Mount

Zion Road, Lebanon, Pennsylvania.

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 pCi/L	none	n/a
< 4.0 pCi/L	See Attachment B	

Notes:

D- Duplicate sample

The office blank and lab transit blank had test results of less than the laboratory detection limit of 0.4 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.

Sincerely,



James M. Moulds
Radon Measurement Specialist
KCI Technologies, Inc.

Attachments: A- Floor Plan with Test Locations
 B- Table 1-Radon Test Summary Spreadsheet
 C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

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

*Office blanks were submitted at a rate of 1% for all samples deployed in Phase 14 testing. Office blanks were not submitted under each school individually.

Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 04/11/16-04/14/16		
Kit Number	Room / Area	Result
3029070	Library N	0.5
3029209	Library S	0.9
3029051	Math	0.4
3029161	Media Office	0.4
3029202	Room 5	1.4
3029201	Room 6	1.2
3029207	Room 6B	0.6
3029069	Staff Development	<0.4

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

NRPP 10511AL
NRSB ARL0007

EPA Method #402-R-92-004
Charcoal Canister
NRPP Device Code 6048
NRSB Device Code 10317

Laboratory Report for:

Property Tested: Project # 12146341

KCI Technologies
936 Ridgebrook Rd
Sparks MD 21152

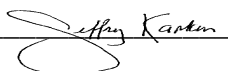
Gaithersburg E.S.
35 N Summit Ave
Gaithersburg MD 20877

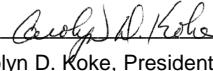
Log Number	Device Number	Test Exposure Duration:		Area Tested	Result (pCi/L)
3021887	3029051	04/11/2016 10:15 am	04/14/2016 1:30 pm	Bldg 1 Math Room First Floor	0.4
3021888	3029202	04/11/2016 10:17 am	04/14/2016 1:32 pm	Bldg 2 Room 5 First Floor	1.4
3021889	3029201	04/11/2016 10:17 am	04/14/2016 1:33 pm	Bldg 3 Room 6 First Floor	1.2
3021890	3029207	04/11/2016 10:22 am	04/14/2016 1:35 pm	Bldg 5 Room 6B First Floor	0.6
3021891	3029070	04/11/2016 10:25 am	04/14/2016 1:40 pm	Bldg 7 Library N First Floor	0.5
3021892	3029069	04/11/2016 10:30 am	04/14/2016 1:45 pm	Bldg 8 Staff Development First Floor	<0.4
3021893	3029161	04/11/2016 10:35 am	04/14/2016 1:50 pm	Bldg 9 Media Office First Floor	0.4
3021894	3029209	04/11/2016 10:40 am	04/14/2016 2:00 pm	Bldg 10 Library S First Floor	0.9

Comment: A copy of this report was emailed to tehsin@kci.com.

Distributed by: KCI Technologies, Inc.

Date Received: 04/18/2016 Date Logged: 04/18/2016 Date Analyzed: 04/18/2016 Date Reported: 04/18/2016

Report Reviewed By: 

Report Approved By: 
Carolyn D. Koke, President, AccuStar Labs

Disclaimer:

The uncertainty of this radon measurement is $\pm 10\%$. Factors contributing to uncertainty include statistical variations, daily and seasonal variations in radon concentrations, sample collection techniques and operation of the dwelling. Interference with test conditions may influence the test results.

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Radon Device Type Open Face Canister

Send Written Report To:

Name	KCI Technologies, Inc
Address	936 Ridgebrook Road
Address	
City / Town	Sparks
State/Province Postal Code	MD 21152
Report Country	Baltimore County
Email Address	tehsein@kci.com

Site Tested:

Site Name	Caithersburg 2.5
Address	35. N Summit Ave
Address	
City / Town	Caithersburg
State/Province Postal Code	MD
Test Country	Montgomery County
Project Number	12146341

Contact Information:

Contact	Tehsin Aurangabadwala
Telephone	410-891-1726
Technician	Brian Cockrell
Cert. Number	
Signature	B. K. Cockrell

Lab Use Only	Device Number	Building Number	Unit Number	Floor	Name of Room	Start Date mm/dd/yyyy	Start Time hh:mm am / pm	Stop Date mm/dd/yyyy	Stop Time hh:mm am / pm	Lab Use Only
	3029051			1	Math	4/11/2016	10:15 AM	4/14/2016	1:30 PM	
	3029002			1	Room 5	4/11/2016	10:17 AM	4/14/2016	1:32 PM	
	3029201			1	Room 6	4/11/2016	10:17 AM	4/14/2016	1:33 PM	
	3029207			1	Room 6B	4/11/2016	10:22 AM	4/14/2016	1:35 PM	
	3029070			1	Library N.	4/11/2016	10:25 AM	4/14/2016	1:40 PM	
	3029069			1	Staff Development	4/11/2016	10:30 AM	4/14/2016	1:45 PM	
	3029161			1	Medium Office	4/11/2016	10:35 AM	4/14/2016	1:50 PM	
	3029287			1	Library S.	4/11/2016	10:40 AM	4/14/2016	2:00 PM	

NRPP 10511AL
NRSB ARL0007

EPA Method #402-R-92-004
Charcoal Canister
NRPP Device Code 6048
NRSB Device Code 10317

Laboratory Report for:

Property Tested: Project # 12146341

KCI Technologies
936 Ridgebrook Rd
Sparks MD 21152

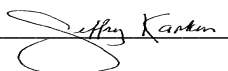
MCPS PHASE 14 Office Blank

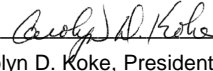
Log Number	Device Number	Test Exposure Duration:	Area Tested	Result (pCi/L)
3021886	3029022	04/11/2016 9:00 am 04/14/2016 9:00 am	Office Unit 0 First Floor	<0.4

Comment: A copy of this report was emailed to tehsin@kci.com.

Distributed by: KCI Technologies, Inc.

Date Received: 04/18/2016 Date Logged: 04/18/2016 Date Analyzed: 04/18/2016 Date Reported: 04/18/2016

Report Reviewed By: 

Report Approved By: 

Disclaimer:

Carolyn D. Koke, President, AccuStar Labs

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Radon Device Type Open Face Canister

Send Written Report To:

Name	KCI Technologies, Inc	
Address	936 Ridgebrook Road	
Address		
City / Town	Sparks	
State/Province	Postal Code	MD 21152
Report Country	Baltimore County	
Email Address	tehsin@kci.com	

Site Tested:

Site Name	iKCL Technologies	
Address	936 Ridgeback Rd.	
Address		
City / Town	Sparks	
State/Province	Postal Code	MD
Test Country	Montgomery County	
Project Number	12146341	

Contact Information:

Contact	Tehsin Aurangabadwala
Telephone	410-891-1726
Technician	
Cert. Number	
Signature	

[illegible]

NRPP 10511AL
NRSB ARL0007

EPA Method #402-R-92-004
Charcoal Canister
NRPP Device Code 6048
NRSB Device Code 10317

Laboratory Report for:

Property Tested:

KCI Technologies
936 Ridgebrook Rd
Sparks MD 21152

MCPS
Transit Blanks

Log Number	Device Number	Test Exposure Duration:		Area Tested	Result (pCi/L)
3010588	3028953	01/19/2016 1:00 pm	01/22/2016 9:30 am	1	< 0.4
3010589	3028955	01/19/2016 1:00 pm	01/22/2016 9:30 am	2	< 0.4
3010590	3028954	01/19/2016 1:00 pm	01/22/2016 9:30 am	3	< 0.4
3010591	3028997	01/19/2016 1:00 pm	01/22/2016 9:30 am	4	< 0.4

Comment: AMENDED REPORT for 3028953-8955, 3028997 on 2/22/16 to add all missing information from the blank datasheet. A copy of this report was emailed to james.moulds@kci.com.

Distributed by: KCI Technologies, Inc.

Date Received: 01/27/2016 Date Logged: 01/27/2016 Date Analyzed: 01/28/2016 Date Reported: 01/28/2016

Report Reviewed By: Christie Bates

Report Approved By: Carolyn D. Koke

Disclaimer:

Carolyn D. Koke, President, AccuStar Labs

The uncertainty of this radon measurement is +/- 10 %. Factors contributing to uncertainty include statistical variations, daily and seasonal variations in radon concentrations, sample collection techniques and operation of the dwelling. Interference with test conditions may influence the test results.

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Return canisters for analysis to:
AccuStar Labs
929 Mt. Zion Rd., Lebanon, PA 17046
800-523-4964

AccuStar Labs - Lebanon, PA
INFORMATION FORM - Large Buildings -
Projects - Apartments

Instructions on back of form
Read instructions carefully
Discrepancies will invalidate tests

Test Site Info

Name of Building/Project or Owner: Transit
Site Address: Transit
City: _____ State: _____ Zip: _____ County: _____

Projects Contact Name: Don Coale Phone: _____ Email: _____

Do not use this form in
New Jersey or Florida
Call for correct forms.

Multi-Page Report Y-N

LAB USE ONLY	
Wgt. Gain	pCi/L
	204
	204
	204
	204

Detector Serial#	ROOM NAME & NUMBER - LOCATION OF DETECTOR IN ROOM (indicate duplicates and blanks)	Floor	Start Date	Start Time Include AM/PM	Stop Date	Stop Time Include AM/PM
3028953	Transit	1	1/19/16	9:30am	1/22/16	9:30am
8955	Transit	1	1/19/16			
8954	Transit	1	1/19/16			
8997	Transit	1	1/19/16			

1/27/2016

KCI Technologies, Inc.

3010588 3028953 ACPC275B EXP12/31/2018

Both Placed by and Retrieved by signatures are required

Canisters placed by _____ # _____

Canisters retrieved by _____ # _____

Owner waives confidentiality by signing here _____ Date 1/22/16

Send Results To:

Company Name: KCI Tech

Address: 936 Ridgebrook

City: Sparks

Phone: 410-599-3826

EMAIL Results to: James.Mouldale@kci.com

Attention: James Mouldale

State: MD Zip: 21152

Fax: _____

Were general operating conditions maintained?
Yes - No explain if NO

Were closed building conditions maintained?
Yes - No explain if NO

Normal Temp. Yes - No

Normal Humidity Yes - No

Windy Y-N Rainy Y-N

Make sure information is complete and correct.
If a recalculation is requested there is a \$10.00 recalc fee PER Canister.

Mailing: PO Box 990 Jonestown, PA 17038
Shipping: 929 Mt Zion Road, Lebanon, PA 17046
800-523-4964 fax 717-274-5662

NEHA 10511AL NRSB ARL 0007

Revision 5
4/2015

TCS INDUSTRIES, INC.

(717) 657-7032

RADON GAS DETECTION

www.radondetek.com

4326 Crestview Road, Harrisburg, PA 17112

James Mouldsdale
KCI
936 Ridgebrook Rd.
Sparks, MD 21152

April 04, 2016

Dear Mr. Mouldsdale:

The spike exposure data were:

Start 04/04/16 @ 1110 hrs EDT
End 04/06/16 @ 1113 hrs EDT

AC 3029218, 3029219, 3029220, 3029217, 3029214, 3029217, and 3029166

Average radon concentration was 10.6 pCi/L +/- 5%

Avg. Temp. was 71F
Avg. RH was 51%
Elevation was 490 feet above sea level

Sincerely,



Carl H. Distenfeld, CHP

TCS Radon Chamber NRSB CHM 0002

NRPP 10511AL
NRSB ARL0007

EPA Method #402-R-92-004
Charcoal Canister
NRPP Device Code 6048
NRSB Device Code 10317

Laboratory Report for:

Property Tested:

KCI Technologies
936 Ridgebrook Rd
Sparks MD 21152

MCPS
Radon Spike Sample Laboratory Results

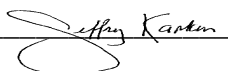
Log Number	Device Number	Test Exposure Duration:		Area Tested	Result (pCi/L)
3020102	3029166	04/04/2016 11:10 am	04/06/2016 11:13 am	Not Indicated	11.9
3020103	3029214	04/04/2016 11:10 am	04/06/2016 11:13 am	Not Indicated	11.5
3020104	3029217	04/04/2016 11:10 am	04/06/2016 11:13 am	Not Indicated	10.7
3020105	3029218	04/04/2016 11:10 am	04/06/2016 11:13 am	Not Indicated	11.3
3020106	3029219	04/04/2016 11:10 am	04/06/2016 11:13 am	Not Indicated	11.0
3020107	3029220	04/04/2016 11:10 am	04/06/2016 11:13 am	Not Indicated	10.5

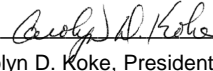
Comment: A copy of this report was emailed to james.mouldsdale@kci.com.

Distributed by: KCI Technologies, Inc.

Date Received: 04/07/2016 Date Logged: 04/07/2016 Date Analyzed: 04/07/2016 Date Reported: 04/08/2016

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.

Report Reviewed By: 

Report Approved By: 
Carolyn D. Koke, President, AccuStar Labs

Disclaimer:

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MCPS RADON TESTING

Executive Summary: Gaithersburg Elementary School

Date of Test Report:	2/17/2016 (Rev 1)
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	81
# Rooms \geq 4.0 pCi/L:	1
Low Value:	< 0.3
High Value:	7.0

Rooms with results \geq 4.0 pCi/L:

Library north side (7.0 pCi/L), Library south side (6.3 pCi/L), Library west side (5.9 pCi/L),
Library south side (5.6 pCi/L), Library north side (5.6 pCi/L)

Project Status:

Initial testing completed; re-test needed for results \geq 4.0 pCi/L.



February 17, 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 # 12146341.25

Location: Gaithersburg Elementary School
35 N. Summit Avenue
Gaithersburg, MD 20877

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 Gaithersburg Elementary School, located at 35 N. Summit Avenue in Gaithersburg, Maryland 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 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 19, 2016 and deployed one hundred-ten (110) 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 22, 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

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 $\leq 65^{\circ}\text{F}$.

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 pCi/L	Library north side	7.0
	Library south side	6.3
	Library west side	5.9 (5.6 D)
	Library south side	5.6
	Library north side	5.6
< 4.0 pCi/L	See Attachment B	

Notes:

D- Duplicate sample

All field blanks, office blanks, and lab transit blanks had test results of less than the laboratory detection limit of 0.3 pCi/L, except one office blank. The analytical result for one office blank indicated a low concentration of radon, suggesting compromised sample packaging for that test kit or analytical error. 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.

Sincerely,



James M. Moulds
Radon Measurement Specialist
KCI Technologies, Inc.

Attachments: A- Floor Plan with Test Locations
 B- Table 1-Radon Test Summary Spreadsheet
 C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

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

Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 01/19/16-01/22/16		
Kit Number	Room / Area	Result
7718328	1	< 0.3
7718320	2	< 0.3
7718322	3	< 0.3
7718335	4	< 0.3
7716695	5	1.9
7716676	6	1.9
7716696	7	0.7
7716686	8	1.2
7716693	9	1.2
7718345	10	1.2
7718341	11	1.3
7718334	13	< 0.3
7718339	14	< 0.3
7718327	15	0.7
7718338	16	< 0.3
7718303	17	< 0.3
7718340	18	< 0.3
7718330	19	0.6
7718325	20	< 0.3
7716692	21	2.2
7716646	22	2.3
7716688	23	2
7716683	24	1.8
7716685	25	2.2
7716659	26	1.3
7716653	27	1.7
7716647	28	1.4
7716638	29	1.6
7716677	30	1.4
7718342	12A	2
7718343	12B	1.4
7716690	6A	1.5
7716689	6B	0.7
7716697	6B	1.7
7716700	ART	2.1
7716630	B105	< 0.3
7716641	B109	0.6
7716656	B110	1.3
7716655	B111	0.8
7716667	B1115	< 0.3
7716645	B112	0.7
7717627	B113	0.6
7716637	B116	0.8
7718321	BUILD SERV	0.8
7718318	CAFATERIA	0.8
7718356	CAFATERIA	1.5

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 01/19/16-01/22/16		
Kit Number	Room / Area	Result
7718354	CAFATERIA	0.5
7718355	CAFE OFF	0.8
7716654	COMP LAB	2
7716684	COUSELOR	2.1
7718351	ESOL2	0.8
7718352	ESOL4	< 0.3
7718319	ESOL5	0.5
7716694	GUIDANCE	1
7718348	GYM	1.2
7718349	GYM	1.7
7718346	GYM	1.7
7718353	GYM	1.7
7718344	GYM OFF	1.4
7716650	ISM	1.1
7716648	ISO RM	0.6
7716662	K1	2.9
7716661	K2	2.8
7716691	K3	2
7716668	K4	2
7718200	K5	2.1
7716651	K6	1.6
7716680	LIBRARY	5.6
7716678	LIBRARY	7
7716681	LIBRARY	6.3
7716679	LIBRARY	5.6
7716675	LIBRARY	5.9
7716632	LOBBY	< 0.3
7718198	LOBBY	< 0.3
7718323	LOUNGE	0.7
7716625	MAIN OFF	1.1
7716699	MATH ROOM	0.6
7718170	ML1042	< 0.3
7716669	ML1045	< 0.3
7716672	ML1056	< 0.3
7716671	ML1088	< 0.3
7718332	ML902	< 0.3
7718326	ML912	< 0.3
7718331	ML972	< 0.3
7716631	MO36	0.6
7718192	MO36	< 0.3
7718347	MUSIC	0.8
7716657	P R E K	2.1
7716633	PARENT CENTER	< 0.3
7717630	PARENT CENTER	< 0.3
7717628	PARENT CENTER	< 0.3
7716698	PRINCIPAL	1.1
7716673	RESOURCE	1.2
7718317	RESOURCE RM	0.7
7716674	VP	0.8

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Gaithersburg Elementary School		
Test Period: 01/19/16-01/22/16		
Kit Number	QC Type	Result
7718336	D (14)	< 0.3
7716634	D (25)	1.9
7716670	D (6A)	1.3
7716687	D (B112)	0.6
7718324	D (BUILD SERV)	< 0.3
7718350	D (GYM)	< 0.3
7716682	D (LIBRARY)	5.6
7716663	D (ML1056)	< 0.3
7716649	D (PARENT CENTER)	0.6
7716639	D (PARENT CENTER)	< 0.3
7716643	D (PARENT CENTER)	< 0.3
7716642	FB (ML1056)	< 0.3
7716652	FB (PARENT CENTER)	< 0.3
7727124	OB (0)	< 0.3
7727128	OB (0)	0.7

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:

**GAITHERSBURG ELEMENTARY SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7727124	0	2016-01-19 @ 4:00 pm	2016-01-22 @ 12:00 pm	< 0.3	2016-01-26
7727128	0	2016-01-19 @ 4:00 pm	2016-01-22 @ 12:00 pm	0.7 ± 0.3	2016-01-26
7718328	1	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-27
7718345	10	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	1.2 ± 0.4	2016-01-26
7718341	11	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	1.3 ± 0.3	2016-01-26
7718342	12A	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	2.0 ± 0.4	2016-01-27
7718343	12B	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	1.4 ± 0.4	2016-01-27
7718334	13	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7718336	14	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7718339	14	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7718327	15	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	0.7 ± 0.3	2016-01-26
7718338	16	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7718303	17	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7718340	18	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7718330	19	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	0.6 ± 0.3	2016-01-26
7718320	2	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7718325	20	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7716692	21	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	2.2 ± 0.4	2016-01-26
7716646	22	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	2.3 ± 0.4	2016-01-26
7716688	23	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	2.0 ± 0.4	2016-01-27
7716683	24	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	1.8 ± 0.4	2016-01-26
7716634	25	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	1.9 ± 0.4	2016-01-26
7716685	25	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	2.2 ± 0.4	2016-01-27
7716659	26	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	1.3 ± 0.4	2016-01-26
7716653	27	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	1.7 ± 0.4	2016-01-26
7716647	28	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	1.4 ± 0.4	2016-01-26
7716638	29	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	1.6 ± 0.4	2016-01-26
7718322	3	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7716677	30	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	1.4 ± 0.4	2016-01-26
7718335	4	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7716695	5	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	1.9 ± 0.4	2016-01-26
7716676	6	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	1.9 ± 0.4	2016-01-26
7716690	6A	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	1.5 ± 0.4	2016-01-26
7716670	6A	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	1.3 ± 0.4	2016-01-26
7716689	6B	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	0.7 ± 0.3	2016-01-26
7716697	6B	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	1.7 ± 0.4	2016-01-27
7716696	7	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	0.7 ± 0.3	2016-01-26

Radon test result report for:

**GAITHERSBURG ELEMENTARY SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7716686	8	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	1.2 ± 0.4	2016-01-26
7716693	9	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	1.2 ± 0.4	2016-01-26
7716700	ART	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	2.1 ± 0.4	2016-01-26
7716630	B105	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7716641	B109	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	0.6 ± 0.3	2016-01-26
7716656	B110	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	1.3 ± 0.4	2016-01-26
7716655	B111	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	0.8 ± 0.3	2016-01-26
7716667	B1115	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7716687	B112	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	0.6 ± 0.3	2016-01-26
7716645	B112	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	0.7 ± 0.3	2016-01-26
7717627	B113	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	0.6 ± 0.3	2016-01-26
7716637	B116	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	0.8 ± 0.3	2016-01-26
7718324	BUILD SERV	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7718321	BUILD SERV	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	0.8 ± 0.3	2016-01-26
7718318	CAFATERIA	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	0.8 ± 0.3	2016-01-26
7718354	CAFATERIA	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	0.5 ± 0.3	2016-01-26
7718356	CAFATERIA	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	1.5 ± 0.4	2016-01-26
7718355	CAFE OFF	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	0.8 ± 0.3	2016-01-26
7716654	COMP LAB	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	2.0 ± 0.4	2016-01-26
7716684	COUSELOR	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	2.1 ± 0.4	2016-01-26
7718351	ESOL2	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	0.8 ± 0.3	2016-01-26
7718352	ESOL4	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7718319	ESOL5	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	0.5 ± 0.3	2016-01-26
7716694	GUIDANCE	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	1.0 ± 0.4	2016-01-26
7718346	GYM	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	1.7 ± 0.4	2016-01-26
7718348	GYM	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	1.2 ± 0.3	2016-01-26
7718349	GYM	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	1.7 ± 0.4	2016-01-26
7718350	GYM	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7718353	GYM	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	1.7 ± 0.4	2016-01-26
7718344	GYM OFF	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	1.4 ± 0.4	2016-01-26
7716650	ISM	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	1.1 ± 0.4	2016-01-26
7716648	ISO RM	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	0.6 ± 0.3	2016-01-26
7716662	K1	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	2.9 ± 0.5	2016-01-26
7716661	K2	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	2.8 ± 0.4	2016-01-26
7716691	K3	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	2.0 ± 0.4	2016-01-26
7716668	K4	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	2.0 ± 0.4	2016-01-27
7718200	K5	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	2.1 ± 0.4	2016-01-26

Radon test result report for:
**GAITHERSBURG ELEMENTARY SCHOOL
 MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7716651	K6	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	1.6 ± 0.4	2016-01-26
7716675	LIBRARY	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	5.9 ± 0.6	2016-01-26
7716678	LIBRARY	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	7.0 ± 0.7	2016-01-26
7716679	LIBRARY	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	5.6 ± 0.6	2016-01-26
7716680	LIBRARY	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	5.6 ± 0.6	2016-01-26
7716681	LIBRARY	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	6.3 ± 0.6	2016-01-26
7716682	LIBRARY	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	5.6 ± 0.5	2016-01-26
7716632	LOBBY	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7718198	LOBBY	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7718323	LOUNGE	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	0.7 ± 0.3	2016-01-26
7716625	MAIN OFF	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	1.1 ± 0.3	2016-01-26
7718170	ML1042	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7716669	ML1045	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7716642	ML1056	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7716663	ML1056	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7716672	ML1056	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7716671	ML1088	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7718332	ML902	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7718326	ML912	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7718331	ML972	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	< 0.3	2016-01-26
7716631	MO36	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	0.6 ± 0.3	2016-01-26
7718192	MO36	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7718347	MUSIC	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	0.8 ± 0.3	2016-01-26
7716657	P R E K	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	2.1 ± 0.4	2016-01-26
7716633	PARENT CENTER	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7716639	PARENT CENTER	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7716643	PARENT CENTER	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7716649	PARENT CENTER	2016-01-19 @ 2:00 pm	2016-01-22 @ 11:00 am	0.6 ± 0.3	2016-01-26
7716652	PARENT CENTER	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7717628	PARENT CENTER	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7717630	PARENT CENTER	2016-01-19 @ 1:00 pm	2016-01-22 @ 10:00 am	< 0.3	2016-01-26
7716698	PRINCIPAL	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	1.1 ± 0.4	2016-01-26
7716673	RESOURCE	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	1.2 ± 0.4	2016-01-26
7718317	RESOURCE RM	2016-01-19 @ 2:00 pm	2016-01-22 @ 10:00 am	0.7 ± 0.3	2016-01-26
7716674	VP	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	0.8 ± 0.3	2016-01-26
7716699	MATH ROOM	2016-01-19 @ 1:00 pm	2016-01-22 @ 9:00 am	0.6 ± 0.3	2016-01-26

February 2, 2016
**** LABORATORY ANALYSIS 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

February
15,
2016

**** LABORATORY ANALYSIS
REPORT ****

Spike Sample Laboratory Results

Radon test result report for:
MCPS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7718273	101A	2016-01-30 @ 9:00 am	2016-02-01 @ 9:00 am	6.5 ± 0.6	2016-02-04
7718281	102B	2016-01-30 @ 9:00 am	2016-02-01 @ 9:00 am	6.4 ± 0.6	2016-02-04
7718282	103C	2016-01-30 @ 9:00 am	2016-02-01 @ 9:00 am	6.3 ± 0.6	2016-02-04
7718288	104D	2016-01-30 @ 9:00 am	2016-02-01 @ 9:00 am	6.7 ± 0.6	2016-02-04
7718289	105E	2016-01-30 @ 9:00 am	2016-02-01 @ 9:00 am	6.6 ± 0.6	2016-02-04
7718291	106F	2016-01-30 @ 9:00 am	2016-02-01 @ 9:00 am	6.5 ± 0.6	2016-02-04

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 KCF Technologies Inc. Job Number 173704

NOMINAL Conditions: Radon Conc 5.9 pCi/L Rel. Hum 45.9 % Temp. 79.0 F

Date Start: 11/30/16 Date Stop: 2/1/16

Date Start: _____ Date Stop: _____

Time Start: 0926 Time Stop: 0926

Time Start: _____ Time Stop: _____

Device No.'s: (6) Char. Bags -

Device No.'s: _____

7718281, 7718282, 7718291,

7718288, 7718289, 7718273

3 Left

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



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 VI

Name of Schools:

- | | | |
|--------------------------|------------------------------|---------------------------|
| 1. Francis Scott Key MS | 12. Little Bennett ES | 23. Rolling Terrace ES |
| 2. Gaithersburg ES | 13. Loiderman MS | 24. Roscoe Nix ES |
| 3. Gaithersburg MS | 14. Longview ES | 25. Sally K. Ride ES |
| 4. Galway ES | 15. Meadow Hall ES | 26. Spark Matsunaga ES |
| 5. Great Seneca Creek ES | 16. Neelsville MS | 27. Tacoma Park ES |
| 6. Harmony Hills ES | 17. New Hampshire Estates ES | 28. Thomas Pyle MS |
| 7. John Poole MS | 18. North Bethesda MS | 29. Wayside ES |
| 8. Judith A. Resnik ES | 19. Northwest HS | 30. Westbrook ES (retest) |
| 9. Kemp Mill ES | 20. Pine Crest ES | 31. Westland MS (retest) |
| 10. Kingsview MS | 21. Radnor Center | 32. William B. Gibbs ES |
| 11. Lakelands Park MS | 22. Ritchie Park ES | 33. William Tyler Page ES |
-

	Date	Initials
Radon Test Kits Deployed	1/19/16	JM
Radon Test Kits Sampled	1/22/16	JM
Radon Test Kits Shipped to Lab*	1/22/16	JM
Radon Test Kits Received by Lab*	1/26/16	JM

*All samples sent to Air Check, Inc., 1936 Butler Bridge Road, Mills River, NC 28758