School / Facility Radon Testing Report Form

School Year: **24-25**

Facility:	Burtonsville Elementary School
Address:	15516 Old Columbia Pike
	Burtonsville, MD 20866
Reason for Testing:	Scheduled Re-Testing - ☐ 2-year or ☒ 5-year schedule ☐ Clearance Testing (Post-Mitigation) ☐ Building Envelope or HVAC Upgrades ☐ New Construction – Addition or Facility
Current Radon Status:	☐ Active Mitigation (2-year regular schedule) ☒ No Active Mitigation (5-year regular schedule) ☐ Not Previously Tested (New Facility)
Round of Testing:	☒ Initial Testing **-or-** ☐ Follow-up Testing
Testing Status:	☒ No Further Testing Needed **-or-** ☐ Follow-Up Testing Required

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

Mitigation -	**Facility Radon Status:**		
☒ Not Required ☐ Required (≥4.0-pCi/L) Rooms:	☒ No Change in Status ☐ Active Mitigation (2-year regular schedule) ☐ No Active Mitigation (5-year regular schedule)		
Number of Rooms Tested	58	Lowest Value (pCi/L)	< 0.3
Number of Rooms (≥4.0-pCi/L)	0	Highest Value (pCi/L)	1.0

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.

MCPS DEM SUSTAINABILITY & COMPLIANCE

School / Facility Radon Testing Report Form

Detector and Deployment

Detector/Device Type:	☒ Passive ☐ Continuous	☒ Charcoal Absorption (CAD) ☐ Alpha Track (ATD) ☐ Other ☐ Electret ion Chamber (EIC) ☐ 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
Tyler McCleaf, CSP – Cert. #111004-RMP	KCI Technologies, Inc.
If noncertified individuals, the qualified measurement professional providing oversight -	

Testing

☒ Short-Term ☐ Long-Term	Length of Test (days):	3	Date of Deployment and Retrieval (mm/dd/yy):	12/02/2024 12/05/2024
Does the test period include weekends, school breaks or holidays?				☐ Yes ☒ No
*If "**Yes**" please explain/detail in the space below:*				
Was HVAC operating under occupied conditions?				☒ Yes ☐ No
*If "**No**" please explain/detail in the space below:*				

Testing (continued)

	Detectors Deployed				
	Ground-Contact		Upper-Level(s)		Total
Round of Testing	Initial	Follow-Up	Initial	Follow-Up	
Test Locations[1]	58	0	0	0	58
Duplicates[2]	6	0	0	0	6
Field Blanks[3]	3	0	0	0	3
				Grand Total	67

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.

	QA/QC Samples		Total
Round of Testing	Initial	Follow-Up	
Spikes[1]	Not applicable		3
Trip Blanks[2]	1	0	1
Office Blanks[3, 4]	1	0	1
			5

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 ± 25% of the chamber's reference value?	☒ Yes ☐ No	
Quality Control measurements comply with QA/QC requirements in the submitted testing organization's/company's QA plan?	☒ Yes ☐ No	
Round of Testing	**Initial**	**Follow-Up**
All Field, Trip and Office Blanks are **≤** (less than or equal to) to the Method Detection Limit?	☒ Yes ☐ No	☐ Yes ☒ No
For all Duplicate Samples[1], the higher value is **≤ 2x** the lower value?	☒ Yes ☐ No	☐ Yes ☒ No
For all Duplicate Samples[1], Relative Percent Difference(s) (RPD)[2] are less than the Warning Level[3]?	☒ Yes ☐ No	☐ Yes ☒ No
For all Duplicate Samples[1], Relative Percent Difference(s) (RPD)[2] are less than the Control Level[3]?	☒ Yes ☐ No	☐ Yes ☒ 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

MCPS DEM SUSTAINABILITY & COMPLIANCE

School / Facility Radon Testing Report Form

Summary of Test Results[1] and Determination of Valid Measurements[2]

	Ground-Contact		Upper-Level(s)		Total
Round of Testing	**Initial**	**Follow-Up**	**Initial**	**Follow-Up**	
Number of test locations:	58	0	0	0	58
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:	0	0	0	0	0
Number of locations ≥2.0 and <2.7-pCi/L:	0	0	0	0	0
Number of missing required test locations[3]:	0	0	0	0	0
Number of failed duplicate control locations:	0	0	0	0	0
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 ≤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 ≤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 Results[1] and Determination of Valid Measurements[2] (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?	☒ Yes ☐ No	☐ Yes ☒ 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?	☒ Yes ☐ No	☐ Yes ☒ No
***If Yes to both above** – then Testing Status – **'No Further Testing Needed'** mark 'NA' below and complete Conclusions section*		
If No to either above, were all results obtained under 4.0-pCi/L **and** were sufficient valid measurements obtained?[1,2] ***If Yes,** then - '**No Further Testing Needed**' complete Conclusion section on first page.* ***If No**, then - '**Follow-up Testing Required**' continue below.*	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☒ 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		
Burtonsville Elementary School		
Test Period: 12/02/2024 - 12/05/2024		
Kit Number	Room / Area	Result
11903331	1	< 0.3
11903342	2	< 0.3
11903341	3	< 0.3
11903340	4	< 0.3
11903334	5	< 0.3
11903329	6	< 0.3
11903330	6	< 0.3
11903327	8	< 0.3
11903328	8	< 0.3
11903312	9	< 0.3
11903311	10	< 0.3
11903322	11	< 0.3
11903321	12	< 0.3
11903314	13	< 0.3
11903313	14	< 0.3
11903306	15	< 0.3
11903320	15	< 0.3
11903357	17	< 0.3
11903355	18	< 0.3
11903356	19	< 0.3
11903359	20	< 0.3
11903360	21	< 0.3
11903371	21	< 0.3
11903361	22	< 0.3
11903362	22	< 0.3
11903358	23	< 0.3
11903363	24	< 0.3
11903364	25	< 0.3
11903365	26	< 0.3
11903366	27	< 0.3
11903303	28	< 0.3
11903350	30	< 0.3
11903301	31	< 0.3
11903349	33	< 0.3
11903348	34	< 0.3
11903347	37	< 0.3
11903344	42	< 0.3
11903304	43	< 0.3
11903343	43	< 0.3
11903337	44	< 0.3
11903338	44	< 0.3

Table 1- Radon Testing Results		
Burtonsville Elementary School		
Test Period: 12/02/2024 - 12/05/2024		
Kit Number	Room / Area	Result
11903336	45	< 0.3
11903345	46	< 0.3
11903346	52	< 0.3
11903351	53	< 0.3
11903352	55	< 0.3
11903332	56	< 0.3
11903325	57	< 0.3
11903305	58	< 0.3
11903323	.MEDIA OFFICE	1.0
11903326	APR	< 0.3
11903333	APR	< 0.3
11903310	ASSISTANT PRINCIPAL	< 0.3
11903315	CONFERENCE	< 0.3
11903319	GYM	< 0.3
11903335	GYM	0.7
11903353	GYM OFFICE	< 0.3
11903354	GYM OFFICE	< 0.3
11903318	HEALTH	< 0.3
11903339	LOUNGE	< 0.3
11903302	MAIN OFFICE	< 0.3
11903308	MEDIA	< 0.3
11903309	MEDIA	0.6
11903307	MEDIA WORKROOM	0.5
11903324	MEDIA WORKROOM	< 0.3
11903316	PRINCIPAL	< 0.3
11903317	WORKROOM	0.5

Table 2 - Summary Testing Results ≥2.0 pCi/L							
Burtonsville Elementary School							
Test Period: 12/02/2024 - 12/05/2024							
≥2.0 and <2.7 pCi/L		≥2.7 and <4.0 pCi/L		≥4.0 and <8.0 pCi/l		≥8.0 pCi/L	
Room / Area	Result	Room / Area	Result	Room / Area	Result	Room / Area	Result
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3 - QC Radon Testing Results			
Burtonsville Elementary School			
Test Period: 12/02/2024 - 12/05/2024			
Kit Number	**QC Type**	**Room / Area**	**Result**
11903330	D	6	< 0.3
11903328	FB	8	< 0.3
11903320	D	15	< 0.3
11903371	D	21	< 0.3
11903362	FB	22	< 0.3
11903343	D	43	< 0.3
11903338	FB	44	< 0.3
11903354	D	GYM OFFICE	< 0.3
11903324	D	MEDIA WORKROOM	< 0.3
11892899	OB	OFFICE BLANK	< 0.3
11892900	TB	TRAVEL BLANK	< 0.3

Table 3a - Duplicate Worksheet / Data Validation

Burtonsville Elementary School

Test Period: 12/02/2024 - 12/05/2024

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
11903307	11903324	Media Workroom	0.5	0.3	✓	0.6	PASS	0.4	<1-pCi/L	✓
11903329	11903330	6	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11903306	11903320	15	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11903343	11903304	43	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11903354	11903353	Gym Office	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11903361	11903362	22	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

Table 4 - Summary of Invalid Measurement Locations		
Burtonsville Elementary School		
Test Period: 12/02/24 - 12/05/24		
Kit Number	**Room/Area**	**Reason**
N/A	N/A	N/A

Attachment 2:

Laboratory Reports

December 9, 2024 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
BURTONSVILLE ES
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11903323	.MEDIA OFFICE	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	1.0 ± 0.4	2024-12-09
11903331	1	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903311	10	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903322	11	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903321	12	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903314	13	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903313	14	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903320	15	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903306	15	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903357	17	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903355	18	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903356	19	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903342	2	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903359	20	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903371	21	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903360	21	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903362	22	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903361	22	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903358	23	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903363	24	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903364	25	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903365	26	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903366	27	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903303	28	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903341	3	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903350	30	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903301	31	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903349	33	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903348	34	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903347	37	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903340	4	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903344	42	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903304	43	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903343	43	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903337	44	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903338	44	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903336	45	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09

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

December 9, 2024 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
BURTONSVILLE ES
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11903345	46	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903334	5	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903346	52	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903351	53	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903352	55	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903332	56	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903325	57	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903305	58	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903330	6	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903329	6	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903327	8	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903328	8	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903312	9	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903333	APR	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903326	APR	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903310	ASSISTANT PRINCIPAL	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903315	CONFERENCE	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903319	GYM	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903335	GYM	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	0.7 ± 0.4	2024-12-09
11903354	GYM OFFICE	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903353	GYM OFFICE	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903318	HEALTH	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903339	LOUNGE	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903302	MAIN OFFICE	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903309	MEDIA	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	0.6 ± 0.4	2024-12-09
11903308	MEDIA	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903307	MEDIA WORKROOM	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	0.5 ± 0.4	2024-12-09
11903324	MEDIA WORKROOM	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903316	PRINCIPAL	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903317	WORKROOM	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	0.5 ± 0.4	2024-12-09

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

P4792 / TYLER MCCLEAF

Kit Number	Start Date	Start Time	End Date	End Time	Temp.	Facility	Building	Room	Project ID	Floor	Result
11892899	2024-12-02	11:00 am	2024-12-05	11:00 am	70	OFFICE	MAIN	O		1	< 0.3
11892900	2024-12-02	11:00 am	2024-12-05	11:00 am	70	TRAVEL	MAIN	T		1	< 0.3
11904003	2024-12-02	10:00 am	2024-12-05	11:00 am	70	JAMES HUBERT BLAKE HS	MAIN	SMALL GYM		1	1.4
11904272	2024-12-03	11:00 am	2024-12-06	11:00 am	70	TRAVEL	MAIN	T		1	< 0.3
11904291	2024-12-03	11:00 am	2024-12-06	11:00 am	70	OFFICE	MAIN	O		1	< 0.3

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 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 µR/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

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

KCI TECHNOLOGIES

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 December 2nd – December 5th, 2024

Name of Schools:

1. Argyle MS
2. Benjamin Banneker MS
3. Belmont ES
4. James Hubert Blake HS
5. Briggs Chaney MS
6. Burtonsville ES

	Date	Initials
Radon Test Kits Deployed	12/02/2024	BMU
Radon Test Kits Collected	12/05/2024	BMU
Radon Test Kits Shipped to Lab*	12/05/2024	BMU
Radon Test Kits Received by Lab*	12/09/2024	BMU

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

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

MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Burtonsville Elementary School
Date of Report	2/3/2020
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	58
# Rooms ≥4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	2.6 pCi/L

Project Status

Current Project Status at this time: Testing Complete; no further action.

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2/3/2020

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: Burtonsville Elementary School
15516 Old Columbia Pike
Burtonsville, Maryland 20866

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 Burtonsville Elementary School, located at 15516 Old Columbia Pike in Burtonsville, Maryland 20866 (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 Provider (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 12/16/2019 and deployed seventy-three (73) 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 12/19/2019 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 National Radon Safety Board (NRSB) radon measurement provider and is a 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 lower-20s and high temperatures were in the lower-40s. Maximum sustained winds ranged from 12-26 miles per hour. Average humidity was around 67%. 0.54 inches of precipitation (rain and snow) 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 piC/L	None	N/A
≤4.0 piC/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		
Burtonsville Elementary School		
Test Period: 12/16/2019-12/19/2019		
Kit Number	Room / Area	Result
9341601	37	< 0.3
9341602	GYM OFFICE	0.6
9341603	GYM OFFICE	0.7
9341604	GYM	< 0.3
9341605	GYM	0.5
9341606	34	< 0.3
9341607	30	0.7
9341608	28	0.7
9341609	31	0.8
9341610	33	< 0.3
9341611	27	0.7
9341612	26	< 0.3
9341613	26	0.9
9341614	25	0.6
9341615	25	< 0.3
9341616	24	0.8
9341617	23	1.3
9341618	22	0.6
9341619	21	0.8
9341620	20	1.6
9341621	19	0.7
9341622	18	1.2
9341623	18	1
9341624	17	0.7
9341625	58	0.6
9341626	57A	0.6
9341627	57B	1
9341628	55	0.5
9341629	53	1.1
9341630	52	< 0.3
9341631	46	< 0.3
9341632	15	0.9
9341633	15	0.8
9341634	14	0.7
9341635	14	< 0.3
9341636	13	1
9341637	12	1.3
9341638	11	< 0.3
9341639	10	0.5
9341640	9	< 0.3
9341641	8	< 0.3
9341642	6	< 0.3
9341643	6	0.6
9341644	STAFF LOUNGE	< 0.3
9341645	5	1.1
9341646	4	< 0.3
9341647	3	< 0.3
9341648	2	< 0.3
9341649	1	< 0.3
9341650	MEDIA CENTER	1.5

9341651	MEDIA CENTER	1.2
9341652	303	1
9341653	303	0.7
9341654	304	1.1
9341655	304	< 0.3
9341656	MEDIA BACK	1.4
9341657	MEDIA BACK OFFICE	2.6
9341658	WORKROOM	1
9341659	ASST PRINCIPAL	0.8
9341660	CONFERENCE	1.1
9341661	MAIN OFFICE	0.7
9341662	HEALTH	1
9341663	HEALTH	0.6
9341664	45	0.5
9341665	44	1.1
9341666	43	0.8
9341667	42	1
9341668	PRINCIPAL	0.9
9341669	NURSE	1
9341670	ALL PURPOSE	0.9
9341671	ALL PURPOSE	0.9
9341672	ALL PURPOSE	< 0.3
9341673	ALL PURPOSE	0.8
9341381	OFFICE BLANK	0.7

Table 2- Radon Testing Results			
Burtonsville Elementary School			
Test Period: 12/16/2019-12/19/2019			
Kit Number	QC Type	Room / Area	Result
9341603	D	GYM OFFICE	0.7
9341613	D	26	0.9
9341615	FB	25	<0.3
9341623	D	18	1
9341633	D	15	0.8
9341635	FB	14	<0.3
9341643	D	6	0.6
9341653	D	303	0.7
9341655	FB	304	<0.3
9341663	D	HEALTH	0.6
9341672	FB	ALL PURPOSE	<0.3
9341673	D	ALL PURPOSE	0.8
9341377	TRANSIT BLANK	NA	0.5
9341379	TRANSIT BLANK	NA	< 0.3
9341380	TRANSIT BLANK	NA	< 0.3
9341398	TRANSIT BLANK	NA	< 0.3

Summary of Missed Locations		
Burtonsville Elementary School		
Test Period: 12/16/2019 - 12/19/2019		
Kit Number	Room/Area	Result
	NA	

Summary of Missing, Compromised and >/= 4 piC/L Tests		
Burtonsville Elementary School		
Test Period: 12/16/2019-12/19/2019		
Kit Number	Room/Area	Result
	NA	

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

December 23, 2019 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
BURTONSVILLE ES
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9341649	1	2019-12-16 @ 10:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341639	10	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.5 ± 0.4	2019-12-23
9341638	11	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341637	12	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	1.3 ± 0.4	2019-12-23
9341636	13	2019-12-16 @ 9:00 am	2019-12-19 @ 9:00 am	1.0 ± 0.4	2019-12-23
9341635	14	2019-12-16 @ 9:00 am	2019-12-19 @ 9:00 am	< 0.3	2019-12-23
9341634	14	2019-12-16 @ 9:00 am	2019-12-19 @ 9:00 am	0.7 ± 0.4	2019-12-23
9341632	15	2019-12-16 @ 9:00 am	2019-12-19 @ 9:00 am	0.9 ± 0.4	2019-12-23
9341633	15	2019-12-16 @ 9:00 am	2019-12-19 @ 9:00 am	0.8 ± 0.4	2019-12-23
9341624	17	2019-12-16 @ 9:00 am	2019-12-19 @ 9:00 am	0.7 ± 0.4	2019-12-23
9341622	18	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	1.2 ± 0.4	2019-12-23
9341623	18	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	1.0 ± 0.4	2019-12-23
9341621	19	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.7 ± 0.4	2019-12-23
9341648	2	2019-12-16 @ 10:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341620	20	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	1.6 ± 0.4	2019-12-23
9341619	21	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.8 ± 0.4	2019-12-23
9341618	22	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.3	2019-12-23
9341617	23	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	1.3 ± 0.4	2019-12-23
9341616	24	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.8 ± 0.4	2019-12-23
9341615	25	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341614	25	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.3	2019-12-23
9341613	26	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.9 ± 0.4	2019-12-23
9341612	26	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341611	27	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.7 ± 0.4	2019-12-23
9341608	28	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.7 ± 0.4	2019-12-23
9341647	3	2019-12-16 @ 10:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341607	30	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.7 ± 0.3	2019-12-23
9341652	303	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	1.0 ± 0.4	2019-12-23
9341653	303	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	0.7 ± 0.3	2019-12-23
9341654	304	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	1.1 ± 0.4	2019-12-23
9341655	304	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	< 0.3	2019-12-23
9341609	31	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.8 ± 0.3	2019-12-23
9341610	33	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341606	34	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341601	37	2019-12-16 @ 7:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341646	4	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341667	42	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.0 ± 0.4	2019-12-23

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

December 23, 2019 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
BURTONSVILLE ES
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9341666	43	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	0.8 ± 0.4	2019-12-23
9341665	44	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.1 ± 0.4	2019-12-23
9341664	45	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	0.5 ± 0.4	2019-12-23
9341631	46	2019-12-16 @ 9:00 am	2019-12-19 @ 9:00 am	< 0.3	2019-12-23
9341645	5	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	1.1 ± 0.3	2019-12-23
9341630	52	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341629	53	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	1.1 ± 0.4	2019-12-23
9341628	55	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.5 ± 0.4	2019-12-23
9341626	57A	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.4	2019-12-23
9341627	57B	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	1.0 ± 0.4	2019-12-23
9341625	58	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.4	2019-12-23
9341642	6	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341643	6	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.3	2019-12-23
9341641	8	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341640	9	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341672	ALL PURPOSE	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	< 0.3	2019-12-23
9341670	ALL PURPOSE	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	0.9 ± 0.4	2019-12-23
9341673	ALL PURPOSE	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	0.8 ± 0.4	2019-12-23
9341671	ALL PURPOSE	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	0.9 ± 0.4	2019-12-23
9341659	ASST PRINCIPAL	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	0.8 ± 0.4	2019-12-23
9341660	CONFERENCE	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	1.1 ± 0.4	2019-12-23
9341605	GYM	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.5 ± 0.4	2019-12-23
9341604	GYM	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341603	GYM OFFICE	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.7 ± 0.3	2019-12-23
9341602	GYM OFFICE	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.4	2019-12-23
9341662	HEALTH	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	1.0 ± 0.4	2019-12-23
9341663	HEALTH	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	0.6 ± 0.4	2019-12-23
9341661	MAIN OFFICE	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	0.7 ± 0.4	2019-12-23
9341656	MEDIA BACK	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	1.4 ± 0.4	2019-12-23
9341657	MEDIA BACK OFFICE	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	2.6 ± 0.4	2019-12-23
9341650	MEDIA CENTER	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	1.5 ± 0.4	2019-12-23
9341651	MEDIA CENTER	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	1.2 ± 0.4	2019-12-23
9341669	NURSE	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.0 ± 0.4	2019-12-23
9341668	PRINCIPAL	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	0.9 ± 0.4	2019-12-23
9341644	STAFF LOUNGE	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9341658	WORKROOM	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	1.0 ± 0.4	2019-12-23

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 193598

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

Temp °F 70.1 RH % 50.1 Avg pCi/L 25.4

Date Start: 12/21/19 Date Stop: 12/23/19

Time Start: 0815 Time Stop: 0815

(Group 1)

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

9340001 thru 9340020

55

Temp °F 70.1 RH % 50.1 Avg pCi/L 25.4

Date Start: 12/21/19 Date Stop: 12/23/19

Time Start: 0829 Time Stop: 0820

(Group 2)

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

9340021 thru 9340040

54

Temp °F 70.1 RH % 50.1 Avg pCi/L 25.4

Date Start: 12/21/19 Date Stop: 12/23/19

Time Start: 0825 Time Stop: 0823

(Group 3)

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

9340041 thru 9340060

53

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

January 3, 2020

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

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

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9340067	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 ± 2.4 D	2020-01-03
9340035	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	22.5 ± 2.3 D	2020-01-03
9340003	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.2 ± 2.4 D	2020-01-03
9340089	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	23.3 ± 2.3 D	2020-01-03
9340072	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	18.3 ± 2.0 D	2020-01-03
9340040	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.3 ± 2.6 D	2020-01-03
9340008	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	24.8 ± 2.5 D	2020-01-03
9340094	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.7 ± 2.5 D	2020-01-03
9340099	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	27.5 ± 2.6 D	2020-01-03
9340077	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.2 ± 2.5 D	2020-01-03
9340045	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	24.7 ± 2.4 D	2020-01-03
9340013	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.9 ± 2.6 D	2020-01-03
9340018	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	29.1 ± 2.8 D	2020-01-03
9341704	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 ± 2.4 D	2020-01-03
9340050	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.2 ± 2.6 D	2020-01-03
9340023	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.2 ± 2.7 D	2020-01-03
9341709	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.5 ± 2.4 D	2020-01-03
9340055	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.8 ± 2.6 D	2020-01-03
9340060	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.3 ± 2.5 D	2020-01-03
9340028	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	23.9 ± 2.3 D	2020-01-03
9341714	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	28.3 ± 2.7 D	2020-01-03
9340082	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.4 ± 2.6 D	2020-01-03
9340065	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.2 ± 2.4 D	2020-01-03
9340033	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.2 ± 2.5 D	2020-01-03
9341719	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.7 ± 2.5 D	2020-01-03
9340001	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.3 ± 2.5 D	2020-01-03
9340087	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.8 ± 2.4 D	2020-01-03
9340070	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	19.5 ± 2.4 D	2020-01-03
9340038	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	24.7 ± 2.3 D	2020-01-03
9340006	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.2 ± 2.4 D	2020-01-03
9340092	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	31.4 ± 2.8 D	2020-01-03
9340097	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.7 ± 2.5 D	2020-01-03
9340075	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	29.6 ± 2.6 D	2020-01-03
9340043	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.1 ± 2.6 D	2020-01-03
9340011	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.8 ± 2.5 D	2020-01-03
9340016	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	23.2 ± 2.4 D	2020-01-03
9341702	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.8 ± 2.5 D	2020-01-03

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January 3, 2020

** LABORATORY ANALYSIS REPORT **

Radon test result report for:
S
N/A

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9340048	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.5 ± 2.4 D	2020-01-03
9340021	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.7 ± 2.6 D	2020-01-03
9341707	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.8 ± 2.4 D	2020-01-03
9340053	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.8 ± 2.5 D	2020-01-03
9340058	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.5 ± 2.7 D	2020-01-03
9340026	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.9 ± 2.4 D	2020-01-03
9341712	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.3 ± 2.4 D	2020-01-03
9340080	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 ± 2.4 D	2020-01-03
9340063	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.8 ± 2.5 D	2020-01-03
9340031	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	24.9 ± 2.4 D	2020-01-03
9341717	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.7 ± 2.4 D	2020-01-03
9340085	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.9 ± 2.5 D	2020-01-03
9340068	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.2 ± 2.5 D	2020-01-03
9340036	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	23.6 ± 2.3 D	2020-01-03
9340004	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.9 ± 2.6 D	2020-01-03
9340090	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.3 ± 2.5 D	2020-01-03
9340073	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.8 ± 2.5 D	2020-01-03
9340041	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.6 ± 2.4 D	2020-01-03
9340009	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	24.1 ± 2.4 D	2020-01-03
9340095	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.2 ± 2.5 D	2020-01-03
9340100	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.5 ± 2.4 D	2020-01-03
9340078	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.0 ± 2.4 D	2020-01-03
9340046	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.0 ± 2.6 D	2020-01-03
9340014	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	21.8 ± 2.8 D	2020-01-03
9340019	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.0 ± 2.5 D	2020-01-03
9341705	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	27.8 ± 2.6 D	2020-01-03
9340051	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.5 ± 2.4 D	2020-01-03
9340056	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.7 ± 2.6 D	2020-01-03
9340024	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.3 ± 2.5 D	2020-01-03
9341710	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.2 ± 2.3 D	2020-01-03
9340061	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	28.9 ± 2.6 D	2020-01-03
9340029	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	23.0 ± 2.3 D	2020-01-03
9341715	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	27.0 ± 2.5 D	2020-01-03
9340083	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.9 ± 2.4 D	2020-01-03
9340066	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 ± 2.4 D	2020-01-03
9340034	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.4 ± 2.5 D	2020-01-03
9341720	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.3 ± 2.5 D	2020-01-03

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January 3, 2020

** LABORATORY ANALYSIS REPORT **

Radon test result report for:
S
N/A

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9340002	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.7 ± 2.5 D	2020-01-03
9340088	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.4 ± 2.5 D	2020-01-03
9340071	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.9 ± 2.4 D	2020-01-03
9340039	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.9 ± 2.5 D	2020-01-03
9340007	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.9 ± 2.4 D	2020-01-03
9340093	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 ± 2.5 D	2020-01-03
9340098	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.8 ± 2.5 D	2020-01-03
9340076	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 ± 2.5 D	2020-01-03
9340044	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.2 ± 2.5 D	2020-01-03
9340012	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	22.5 ± 2.2 D	2020-01-03
9340017	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.3 ± 2.5 D	2020-01-03
9341703	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.0 ± 2.5 D	2020-01-03
9340049	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.0 ± 2.5 D	2020-01-03
9340022	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.6 ± 2.6 D	2020-01-03
9341708	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	28.8 ± 2.8 D	2020-01-03
9340054	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.8 ± 2.5 D	2020-01-03
9340059	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.5 ± 2.6 D	2020-01-03
9340027	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.6 ± 2.5 D	2020-01-03
9341713	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.5 ± 2.5 D	2020-01-03
9340081	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	18.4 ± 2.1 D	2020-01-03
9340064	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.5 ± 2.5 D	2020-01-03
9340032	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.1 ± 2.4 D	2020-01-03
9341718	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	23.7 ± 2.4 D	2020-01-03
9340086	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.9 ± 2.6 D	2020-01-03
9340069	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.6 ± 2.5 D	2020-01-03
9340037	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.4 ± 2.6 D	2020-01-03
9340005	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	???? DIF1	2020-01-03
9340091	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.5 ± 2.5 D	2020-01-03
9340096	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.2 ± 2.5 D	2020-01-03
9340074	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	27.7 ± 2.5 D	2020-01-03
9340042	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.6 ± 2.5 D	2020-01-03
9340010	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.5 ± 2.5 D	2020-01-03
9341701	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	22.9 ± 2.3 D	2020-01-03
9340047	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.7 ± 2.5 D	2020-01-03
9340015	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.4 ± 2.5 D	2020-01-03
9340020	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	24.1 ± 2.4 D	2020-01-03
9341706	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	31.0 ± 2.7 D	2020-01-03

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January 3, 2020 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
S
N/A

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9340052	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.4 ± 2.6 D	2020-01-03
9340057	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.3 ± 2.5 D	2020-01-03
9340025	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.1 ± 2.4 D	2020-01-03
9341711	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	22.5 ± 2.2 D	2020-01-03
9340079	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.9 ± 2.5 D	2020-01-03
9340062	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.6 ± 2.5 D	2020-01-03
9340030	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.0 ± 2.4 D	2020-01-03
9341716	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 ± 2.4 D	2020-01-03
9340084	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.5 ± 2.3 D	2020-01-03

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KCI TECHNOLOGIES

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 2

Name of Schools:

1. Argyle M.S.
2. Banneker M.S.
3. Bel Pre E.S.
4. Bells Mill E.S.
5. Bethesda Maintenance Depot
6. Beverly Farms E.S.
7. Blake H.S.
8. Dufief E.S.
9. Briggs Chaney M.S.
10. Brookhaven E.S.
11. Burtonsville E.S.
12. Cabin John M.S.
13. Candelwood E.S.
14. Drew E.S.
15. Fallsmead E.S.
16. Farquhar M.S.
17. Kennedy H.S.
18. Luxmanor E.S.
19. Magruder H.S.
20. Redland M.S.
21. Shriver E.S.
22. Smith Center
23. Viers Mill E.S.
24. Wheaton H.S.

	Date	Initials
Radon Test Kits Deployed	12/16/19 to 12/17/19	
Radon Test Kits Collected	12/19/19 to 12/20/19	
Radon Test Kits Shipped to Lab*	12/20/19	
Radon Test Kits Received by Lab*	12/23/19	

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

RADON SCREENING SURVEY – FOLLOW-UP BURTONSVILLE ELEMENTARY SCHOOL

15516 Old Columbia Pike, Burtonsville, Maryland 20866

EXECUTIVE SUMMARY

Date of Test Report:	3/11/16 Follow-Up
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested	1
# Rooms ≥ 4.0 pCi/L:	0
Low Value:	0.8
High Value:	0.9
Confirmed Rooms ≥ 4.0 pCi/L US EPA Action Level	0

Summary of Sampling Events ≥ 4.0 pCi/L

Room	Result (pCi/L) 3/10/16 (Rev 1 Initial)	Result (pCi/L) 3/11/16 Follow-Up	Average Result (pCi/L)
MPR	--- Missing	0.9	0.9

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

MCPS RADON TESTING

Executive Summary: Burtonsville Elementary School

Date of Test Report:	3/11/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	1
# Rooms ≥ 4.0 pCi/L:	0
Low Value:	0.8
High Value:	0.9

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

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

March 11, 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 # 12146341.29

Location: Burtonsville Elementary School
15516 Old Columbia Pike
Burtonsville, MD 20866

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 Burtonsville Elementary School, located at 15516 Old Columbia Pike in Burtonsville, Maryland 20866 (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 23, 2016 and deployed three (3) 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 February 26, 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 ≤ 65° 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. Note that strong storms and heavy rainfall were recorded during the test period. The unusual weather conditions may have resulted in atypical radon test results for this facility.

KCI recorded observations of the following conditions in each room at the time of deployment and collection of the radon test kits:

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

Results:

The results of the radon test analysis indicated the following:

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

Notes:
D- Duplicate sample

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

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

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

Sincerely,

James M. Moulsdale
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 9 testing. Office blanks were not submitted under each school individually.

Radon Testing Results		
Burtonsville Elementary School		
Test Period: 02/23/16-02/26/16		
Kit Number	**Room / Area**	**Result**
7719192	MPR	0.9

Table Note:
* Missing or Compromised Sample

Radon Testing Results		
Burtonsville Elementary School		
Test Period: 02/23/16-02/26/16		
Kit Number	**QC Type**	**Result**
7719197	D (MPR)	0.8
7719182	FB (MPR)	< 0.3

Table Note:
* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

March 8, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

BURTONSVILLE ELEMENTARY SCHOOL
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7719182	MPR	2016-02-23 @ 1:00 pm	2016-02-26 @ 12:00 pm	< 0.3	2016-03-01
7719192	MPR	2016-02-23 @ 1:00 pm	2016-02-26 @ 12:00 pm	0.9 ± 0.3	2016-03-01
7719197	MPR	2016-02-23 @ 1:00 pm	2016-02-26 @ 12:00 pm	0.8 ± 0.3	2016-03-01

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

March 9, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

MCPS
Phase 9 Office Blanks

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7712568	0	2016-02-22 @ 6:00 pm	2016-02-25 @ 3:00 pm	< 0.3	2016-02-29
7712584	0	2016-02-22 @ 6:00 pm	2016-02-25 @ 3:00 pm	< 0.3	2016-02-29
7719460	0	2016-02-22 @ 6:00 pm	2016-02-25 @ 3:00 pm	< 0.3	2016-02-29
7719481	0	2016-02-22 @ 6:00 pm	2016-02-25 @ 3:00 pm	< 0.3	2016-02-29
7719497	0	2016-02-22 @ 6:00 pm	2016-02-25 @ 3:00 pm	< 0.3	2016-02-29
7719498	0	2016-02-22 @ 6:00 pm	2016-02-25 @ 3:00 pm	< 0.3	2016-02-29

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

March 9, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

MCPS
Phase 9 Office Blanks

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7731626	0	2016-02-23 @ 2:00 pm	2016-02-26 @ 3:00 pm	< 0.3	2016-03-01
7731633	0	2016-02-23 @ 2:00 pm	2016-02-26 @ 3:00 pm	< 0.3	2016-03-01
7735204	0	2016-02-23 @ 2:00 pm	2016-02-26 @ 3:00 pm	< 0.3	2016-03-01

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

February 23, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

TRANSIT- PHASE 7, 8, 9
NONE

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7734937	1	2016-02-19 @ 3:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734946	10	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734955	11	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734956	12	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734959	13	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734930	14	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734953	15	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734954	16	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734940	17	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734949	18	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734948	19	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734939	2	2016-02-19 @ 3:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734942	20	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734929	21	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734933	22	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734934	23	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734936	24	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734943	25	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734944	26	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734935	27	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734928	28	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734952	29	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734947	3	2016-02-19 @ 3:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734931	30	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734932	31	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7718520	32	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7718523	33	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7718522	34	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7718521	35	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734945	4	2016-02-19 @ 3:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734960	5	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734958	6	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734951	7	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734957	8	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23
7734938	9	2016-02-19 @ 4:00 pm	2016-02-22 @ 11:00 am	< 0.3	2016-02-23

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

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: 1/30/16 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	_____
E3 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 μR/h Elevation = 820 ft

KCI TECHNOLOGIES

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 Phase 9

Name of Schools:

1. Rocking Horse Road ES
2. Rockwell ES
3. Oakland Terrace ES
4. Rosemont ES
5. Beall ES
6. Cresthaven ES
7. Quince Orchard HS
8. Smith Center
9. Ashburton ES
10. Bannockburn ES
11. Bradley Hills ES
12. Cannon Road ES
13. Flora M. Singer ES
14. Clarksburg HS
15. Briggs Chaney MS
16. Broad Acres ES
17. Belmont ES
18. Emory Grove Center
19. Forest Knolls ES
20. Baker MS
21. MLK MS
22. Richard Montgomery HS
23. Sherwood HS
24. Walter Johnson HS
25. Diamond ES
26. Newport Mill MS
27. Drew ES
28. Monocacy ES
29. Potomac ES
30. Rock Terrace School
31. Rosa Parks MS
32. Rosemary Hills ES
33. Sequoyah ES
34. Damascus HS
35. Einstein ES
36. Forest Oak MS
37. Hoover MS
38. Julius West MS
39. John F. Kennedy HS
40. Travilah ES
41. Watkins Mill HS
42. Northwood HS
43. Lincoln Center

	Date	Initials
Radon Test Kits Deployed	2/22/16	JM
Radon Test Kits Collected	2/25/16	JM
Radon Test Kits Shipped to Lab*	2/25/16	JM
Radon Test Kits Received by Lab*	2/29/16	JM

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

KCI TECHNOLOGIES

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 Phase 9

Name of Schools:

1. Banneker MS
2. Bethesda-Chevy Chase HS
3. Burtonsville ES
4. Chevy Chase ES
5. Clopper Mill ES
6. Edison HS
7. Flower Hill ES
8. Flower Valley ES
9. Greencastle ES
10. Maryvale ES
11. Montgomery Blair HS
12. Poolesville HS
13. Rachel Carson ES
14. Stedwick ES
15. Watkins Mill ES
16. Laytonsville ES
17. Lincoln Center

	Date	Initials
Radon Test Kits Deployed	2/23/16	JM
Radon Test Kits Collected	2/26/16	JM
Radon Test Kits Shipped to Lab*	2/26/16	JM
Radon Test Kits Received by Lab*	3/01/16	JM

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

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

MCPS RADON TESTING

Executive Summary: Burtonsville Elementary School

Date of Test Report:	3/10/2016 (Rev 1)
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	59
# Rooms ≥ 4.0 pCi/L:	0
Low Value:	< 0.3
High Value:	1.7

Project Status:
Initial testing completed; missing or compromised samples need re-test.

KCI TECHNOLOGIES

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

March 10, 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 # 12146341.22

Location: Burtonsville Elementary School
15516 Old Columbia Pike
Burtonsville, MD 20866

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 Burtonsville Elementary School, located at 15516 Old Columbia Pike in Burtonsville, Maryland 20866 (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 28, 2015 and deployed seventy-four (74) 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 December 31, 2015 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 ≤ 65° F.

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

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

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

Results:

The results of the radon test analysis indicated the following:

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

Notes:
D- Duplicate sample

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

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

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

Sincerely,

James M. Moulsdale
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		
Burtonsville ES		
Test Period: 12/28/15-12/31/15		
Kit Number	**Room / Area**	**Result**
7707463	33	< 0.3
7707519	50A	1.4
7707496	ART 30	0.7
7707526	ASSIST PRINCIPAL	1.2
7707484	BLDG SVC MANAGER	0.6
7707521	COM 50A	1.3
7707529	CONFERENCE RM	1.3
7707461	CR1	< 0.3
7707489	CR10	0.6
7707498	CR11	< 0.3
7707495	CR12	< 0.3
7707500	CR13	< 0.3
7707487	CR14	< 0.3
7707491	CR15	1.7
7707493	CR17	< 0.3
7707471	CR18	0.6
7707472	CR19	1.0
7707404	CR2	< 0.3
7707485	CR20	1.6
7707477	CR21	0.6
7707465	CR22	< 0.3
7707479	CR23	< 0.3
7707473	CR23 OFFICE	< 0.3
7707480	CR24	< 0.3
7707474	CR25	0.7
7707478	CR26	0.8
7707475	CR27	< 0.3
7707467	CR3	< 0.3
7707409	CR4	0.8
7707469	CR5 COMP LAB	1.1
7707518	CR55	< 0.3
7707515	CR56	0.7
7707524	CR58	< 0.3
7707458	CR6	< 0.3
7707468	CR8	< 0.3
7707483	CR9	< 0.3
7707488	GYM	< 0.3
7707492	GYM	< 0.3
7707482	GYM OFFICE	< 0.3
7707405	HEALTH SUITE	1.5
7707510	IDA 53	1.2
7707523	IMC	0.8
7707516	IMC	0.7
7707486	INST 37	0.7
7707481	K28	1.0
7707460	MAIN OFFICE	1.4

Table Note:
* Missing or Compromised Sample

Radon Testing Results		
Burtonsville ES		
Test Period: 12/28/15-12/31/15		
Kit Number	**Room / Area**	**Result**
7707513	ML1023	< 0.3
7707525	ML1039	< 0.3
7707501	ML851	< 0.3
7707507	ML898	< 0.3
7707504	ML923	< 0.3
7707502	ML955	< 0.3
7707527	MO	1.5
7707528	MP	1.0
7707514	MPR	1.3
7707520	* MPR (missing)	0.0
7707476	MUSIC 34	< 0.3
7707494	PRINCIPAL OFFICE	1.1
7707517	RSC 57	< 0.3
7707522	SDT 52	< 0.3
7707464	STAFF LOUNGE	0.7
7707401	WR	1.3

Table Note:
* Missing or Compromised Sample

Radon Testing Results		
Burtonsville ES		
Test Period: 12/28/15-12/31/15		
Kit Number	**QC Type**	**Result**
7707499	D (ART 30)	0.6
7707459	D (CR1)	< 0.3
7707466	D (CR10)	0.7
7707462	D (CR14)	0.5
7707470	D (CR22)	< 0.3
7707511	D (CR55)	< 0.3
7707512	D (ML1023)	< 0.3
7707509	D (ML923)	< 0.3
7707497	FB (ART 30)	< 0.3
7707490	FB (CR17)	< 0.3
7707508	FB (ML1023)	< 0.3
7707503	OB (0)	< 0.3

Table Note:
* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

January 16, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

BURTONSVILLE ES
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7707503	0	2015-12-28 @ 5:00 pm	2015-12-31 @ 1:00 pm	< 0.3	2016-01-05
7707463	33	2015-12-28 @ 1:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707519	50A	2015-12-28 @ 3:00 pm	2015-12-31 @ 12:00 pm	1.4 ± 0.4	2016-01-05
7707496	ART 30	2015-12-28 @ 1:00 pm	2015-12-31 @ 11:00 am	0.7 ± 0.3	2016-01-05
7707497	ART 30	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707499	ART 30	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	0.6 ± 0.3	2016-01-05
7707526	ASSIS PRINCIPAL	2015-12-28 @ 3:00 pm	2015-12-31 @ 10:00 am	1.2 ± 0.4	2016-01-05
7707484	BLDG SVC MANAGER	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	0.6 ± 0.3	2016-01-04
7707521	COM 50A	2015-12-28 @ 3:00 pm	2015-12-31 @ 12:00 pm	1.3 ± 0.4	2016-01-05
7707529	CONFERENCE RM	2015-12-28 @ 3:00 pm	2015-12-31 @ 10:00 am	1.3 ± 0.4	2016-01-05
7707459	CR1	2015-12-28 @ 3:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707461	CR1	2015-12-28 @ 3:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707466	CR10	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	0.7 ± 0.3	2016-01-05
7707489	CR10	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	0.6 ± 0.3	2016-01-05
7707498	CR11	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707495	CR12	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707500	CR13	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707462	CR14	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	0.5 ± 0.3	2016-01-05
7707487	CR14	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707491	CR15	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	1.7 ± 0.4	2016-01-05
7707490	CR17	2015-12-28 @ 2:00 pm	2015-12-31 @ 12:00 pm	< 0.3	2016-01-05
7707493	CR17	2015-12-28 @ 2:00 pm	2015-12-31 @ 12:00 pm	< 0.3	2016-01-05
7707471	CR18	2015-12-28 @ 2:00 pm	2015-12-31 @ 12:00 pm	0.6 ± 0.3	2016-01-05
7707472	CR19	2015-12-28 @ 2:00 pm	2015-12-31 @ 10:00 am	1.0 ± 0.3	2016-01-05
7707404	CR2	2015-12-28 @ 3:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707485	CR20	2015-12-28 @ 2:00 pm	2015-12-31 @ 10:00 am	1.6 ± 0.4	2016-01-05
7707477	CR21	2015-12-28 @ 2:00 pm	2015-12-31 @ 10:00 am	0.6 ± 0.3	2016-01-05
7707470	CR22	2015-12-28 @ 2:00 pm	2015-12-31 @ 10:00 am	< 0.3	2016-01-04
7707465	CR22	2015-12-28 @ 2:00 pm	2015-12-31 @ 10:00 am	< 0.3	2016-01-05
7707479	CR23	2015-12-28 @ 2:00 pm	2015-12-31 @ 10:00 am	< 0.3	2016-01-05
7707473	CR23 OFFICE	2015-12-28 @ 2:00 pm	2015-12-31 @ 10:00 am	< 0.3	2016-01-05
7707480	CR24	2015-12-28 @ 2:00 pm	2015-12-31 @ 10:00 am	< 0.3	2016-01-05
7707474	CR25	2015-12-28 @ 2:00 pm	2015-12-31 @ 10:00 am	0.7 ± 0.3	2016-01-05
7707478	CR26	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	0.8 ± 0.3	2016-01-05
7707475	CR27	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707467	CR3	2015-12-28 @ 3:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707409	CR4	2015-12-28 @ 3:00 pm	2015-12-31 @ 11:00 am	0.8 ± 0.4	2016-01-05

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

January 16, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

BURTONSVILLE ES
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7707469	CR5 COMP LAB	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	1.1 ± 0.4	2016-01-05
7707511	CR55	2015-12-28 @ 4:00 pm	2015-12-31 @ 12:00 pm	< 0.3	2016-01-05
7707518	CR55	2015-12-28 @ 4:00 pm	2015-12-31 @ 12:00 pm	< 0.3	2016-01-05
7707515	CR56	2015-12-28 @ 4:00 pm	2015-12-31 @ 12:00 pm	0.7 ± 0.3	2016-01-04
7707524	CR58	2015-12-28 @ 4:00 pm	2015-12-31 @ 12:00 pm	< 0.3	2016-01-05
7707458	CR6	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-04
7707468	CR8	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707483	CR9	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707492	GYM	2015-12-28 @ 1:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707488	GYM	2015-12-28 @ 1:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707482	GYM OFFICE	2015-12-28 @ 1:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707405	HEALTH SUITE	2015-12-28 @ 3:00 pm	2015-12-31 @ 10:00 am	1.5 ± 0.4	2016-01-05
7707510	IDA 53	2015-12-28 @ 4:00 pm	2015-12-31 @ 12:00 pm	1.2 ± 0.4	2016-01-05
7707516	IMC	2015-12-28 @ 3:00 pm	2015-12-31 @ 12:00 pm	0.7 ± 0.3	2016-01-05
7707523	IMC	2015-12-28 @ 3:00 pm	2015-12-31 @ 12:00 pm	0.8 ± 0.4	2016-01-05
7707486	INST 37	2015-12-28 @ 1:00 pm	2015-12-31 @ 11:00 am	0.7 ± 0.3	2016-01-05
7707481	K28	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	1.0 ± 0.3	2016-01-05
7707460	MAIN OFFICE	2015-12-28 @ 3:00 pm	2015-12-31 @ 10:00 am	1.4 ± 0.4	2016-01-05
7707527	MO	2015-12-28 @ 4:00 pm	2015-12-31 @ 12:00 pm	1.5 ± 0.4	2016-01-04
7707528	MP	2015-12-28 @ 4:00 pm	2015-12-31 @ 12:00 pm	1.0 ± 0.4	2016-01-05
7707520	MPR	@	@		
7707514	MPR	2015-12-28 @ 4:00 pm	2015-12-31 @ 11:00 am	1.3 ± 0.4	2016-01-05
7707476	MUSIC 34	2015-12-28 @ 1:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707494	PRINCIP OFFICE	2015-12-28 @ 3:00 pm	2015-12-31 @ 10:00 am	1.1 ± 0.3	2016-01-04
7707517	RSC 57	2015-12-28 @ 4:00 pm	2015-12-31 @ 12:00 pm	< 0.3	2016-01-05
7707522	SDT 52	2015-12-28 @ 4:00 pm	2015-12-31 @ 12:00 pm	< 0.3	2016-01-05
7707464	STAFF LOUNGE	2015-12-28 @ 2:00 pm	2015-12-31 @ 11:00 am	0.7 ± 0.3	2016-01-05
7707401	WR	2015-12-28 @ 3:00 pm	2015-12-31 @ 10:00 am	1.3 ± 0.4	2016-01-05

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January 16, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

BURTONSVILLE ES
PORTABLE

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7707508	ML1023	2015-12-28 @ 4:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707512	ML1023	2015-12-28 @ 4:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707513	ML1023	2015-12-28 @ 4:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707525	ML1039	2015-12-28 @ 4:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707501	ML851	2015-12-28 @ 4:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-04
7707507	ML898	2015-12-28 @ 4:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707504	ML923	2015-12-28 @ 4:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707509	ML923	2015-12-28 @ 4:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-05
7707502	ML955	2015-12-28 @ 4:00 pm	2015-12-31 @ 11:00 am	< 0.3	2016-01-04

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January 15, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

MCPS PHASE 3 & 4
TRANSIT BLANKS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7708218	TRAMSIT 4	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708200	TRANSIT 1	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708190	TRANSIT 10	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708189	TRANSIT 11	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708191	TRANSIT 12	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708188	TRANSIT 13	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708197	TRANSIT 14	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708186	TRANSIT 15	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708185	TRANSIT 16	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708184	TRANSIT 17	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708182	TRANSIT 18	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708187	TRANSIT 18	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708199	TRANSIT 2	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708181	TRANSIT 20	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708180	TRANSIT 21	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708183	TRANSIT 22	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708178	TRANSIT 23	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708179	TRANSIT 24	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708177	TRANSIT 25	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708176	TRANSIT 26	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708174	TRANSIT 27	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708173	TRANSIT 28	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708175	TRANSIT 29	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708198	TRANSIT 3	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708172	TRANSIT 30	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708194	TRANSIT 5	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708196	TRANSIT 6	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708193	TRANSIT 7	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708192	TRANSIT 8	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708195	TRANSIT 9	2015-12-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23

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December 23, 2015

** LABORATORY ANALYSIS REPORT **

Spike Sample Laboratory Results

Radon test result report for:

MCPS

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies Inc. Job Number 173224

NOMINAL Conditions: Radon Conc 26.9 pCi/L Rel. Hum 49.6 % Temp. 69.9 F

Date Start: 12/18/15 Date Stop: 12/21/15	Date Start: _____ Date Stop: _____
Time Start: 0929 Time Stop: 0929	Time Start: _____ Time Stop: _____
Device No.'s: 7705132, 7706208, 7706211, 7706366, 7706380, 7706381 F3 Left	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: _____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____

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

KCI TECHNOLOGIES

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 III

Name of Schools:

1. Burnt Mills ES
2. Burtonsville ES
3. Cedar Grove ES
4. Cloverly ES
5. Cold Spring ES
6. Damascus HS
7. Darnestown ES
8. Diamond ES
9. Charles R. Drew ES
10. DuFief ES
11. Thomas Edison HS
12. Robert Frost MS
13. Georgian Frost ES
14. Germantown ES
15. Goshen ES
16. Greencastle ES
17. Greenwood ES
18. Lake Seneca ES
19. Laytonsville ES
20. Col. E. Brooke MS
21. Luxmanor ES
22. Magruder HS
23. Thur. Marshall ES
24. Monocacy ES
25. Northlake Center
26. Olney ES
27. Rosa Parks MS
28. Poolesville ES
29. Poolesville HS
30. Potomac ES
31. Rock Terrace HS
32. Rosemary Hills ES
33. Carl Sandburg
34. Sequoyah ES
35. Stedwick ES
36. Whetstone ES

	Date	Initials
Radon Test Kits Deployed	12/28/15	JM
Radon Test Kits Sampled	12/31/15	JM
Radon Test Kits Shipped to Lab*	12/31/15	JM
Radon Test Kits Received by Lab*	1/4/16	JM

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