

School / Facility Radon Testing Report Form

School Year: **24-25**

Facility:	James Hubert Blake High School		
Address:	300 Norwood Road		
	Cloverly, MD 20905		
Reason for Testing:	Scheduled Re-Testing - <input type="checkbox"/> 2-year or <input checked="" 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 type="checkbox"/> Active Mitigation (2-year regular schedule) <input checked="" 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	100	Lowest Value (pCi/L)	< 0.3
Number of Rooms (≥ 4.0 -pCi/L)	0	Highest Value (pCi/L)	2.7

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
Shannon King		KCI Technologies, Inc.
Shakia Dawkins		KCI Technologies, Inc.
<i>If noncertified individuals, the qualified measurement professional providing oversight -</i>		
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):	12/02/24	03/11/25
<input type="checkbox"/> Long-Term				12/05/24	03/14/25
Does the test period include weekends, school breaks or holidays?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<i>If “Yes” please explain/detail in the space below:</i>					
Was HVAC operating under occupied conditions?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<i>If “No” please explain/detail in the space below:</i>					

Testing (continued)

Round of Testing	Detectors Deployed				Total
	Ground-Contact		Upper-Level(s)		
	Initial	Follow-Up	Initial	Follow-Up	
Test Locations ¹	88	4	10	0	102
Duplicates ²	10	2	1	0	13
Field Blanks ³	4	1	1	0	6
Grand Total					121

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 checked="" type="checkbox"/> Yes <input 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:	88	2	10	0	100
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:	1	0	0	0	1
Number of locations ≥ 2.0 and < 2.7 -pCi/L:	2	0	0	0	2
Number of missing required test locations ³ :	3	0	0	0	3
Number of failed duplicate control locations:	2	0	0	0	2
Percentage of missing test locations for the facility ^{4,5} :	3.41%	0	0	0	3.41%

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		
James Hubert Blake High School		
Test Period: 12/02/2024 - 12/05/2024		
Kit Number	Room / Area	Result
11903823	102	0.6
11903806	A1000	< 0.3
11903811	A1000	0.5
11903804	A100B	0.7
11903805	A100C	< 0.3
11903812	A100D	1.1
11903814	A100E	0.7
11903802	A100F	0.8
11903807	A100F	1.3
11903820	A100G	1.1
11903809	A100I	< 0.3
11903808	A100K	1.0
11903813	A100L	< 0.3
11903892	A101	< 0.3
11903816	A102	< 0.3
11903815	A102A	1.0
11903844	A102B	< 0.3
11903845	A102C	0.6
11903830	A102D	1.0
11903829	A102E	< 0.3
11903828	A102F	0.6
11903822	A102G	0.8
11903821	A102H	0.7
11903819	A102M	< 0.3
11903836	A102M	0.7
11903837	A102M	0.6
11903824	A102O	0.6
11903889	A103	0.8
11903890	A103	< 0.3
11903894	A105C	< 0.3
11903831	A107	0.8
11903899	A201	0.7
11903897	A202	0.5
11904001	A217	< 0.3
11904002	A217	< 0.3
11903896	a217	< 0.3
11903803	ADMIN SECRETARY	< 0.3
11904010	AUDITORIUM	1.9
11904030	AUDITORIUM	1.9
11903847	B109	0.5
11903839	B109 BUSINESS ADMIN	0.6

Table 1- Radon Testing Results		
James Hubert Blake High School		
Test Period: 12/02/2024 - 12/05/2024		
Kit Number	Room / Area	Result
11903855	B111	0.5
11903852	B113	< 0.3
11903853	B115	< 0.3
11903854	B120	0.7
11903825	B121	< 0.3
11903826	B121	< 0.3
11903835	B121	< 0.3
11904022	B125	0.7
11904005	B226	< 0.3
11904006	B230	< 0.3
11904008	BLACKBOX THEATER	< 0.3
11903867	BOYS LR	1.1
11903860	C131	Compromised Kit
11903861	C133	< 0.3
11903848	C133A	< 0.3
11903832	C134	0.7
11903856	C135	< 0.3
11903863	C135B	0.5
11903810	C136	1.4
11903871	C137	0.5
11903862	C142	0.8
11903868	C142C	< 0.3
11903869	C142D	< 0.3
11903876	C142D	< 0.3
11903870	C142E	0.8
11903827	CAFETERIA	< 0.3
11903838	CAFETERIA	< 0.3
11903846	CAFETERIA	< 0.3
11903872	D148	1.0
11903887	D148	1.1
11903886	d148	< 0.3
11903884	D149	< 0.3
11903883	D150	1.3
11903895	D150A	2.7
11903893	D151	< 0.3
11903881	D152	1.1
11903888	D153	< 0.3
11903859	DANCE	1.2
11903840	E160	< 0.3
11903877	E160D	< 0.3

Table 1- Radon Testing Results		
James Hubert Blake High School		
Test Period: 12/02/2024 - 12/05/2024		
Kit Number	Room / Area	Result
11903873	E161	1.0
11903874	E161	1.1
11903833	E162	1.0
11903858	E163	0.8
11903885	E165	0.8
11903879	E165	1.3
11903878	E170	< 0.3
11903875	E260	0.6
11903891	E265	< 0.3
11903864	F171	< 0.3
11903849	F173	< 0.3
11903857	F173	< 0.3
11903818	F173	< 0.3
11903850	F174	0.9
11903841	F175	0.6
11903842	F176	0.8
11903898	F300	< 0.3
11903851	G184	0.9
11904016	G184	< 0.3
11904021	G190	< 0.3
11903900	G284	0.5
11903834	GLR	1.0
11903880	H1007C	1.1
11903866	H1011E	0.8
11903865	H1017	1.0
11904013	H1020	1.1
11903817	KITCHEN OFFICE	1.7
11904014	MAIN GYM	2.1
11903801	MAIN OFFICE	< 0.3
11904007	MEDIA CENTER	< 0.3
11903882	NURSES OFFICE	0.6
11904003	SMALL GYM	1.4
11904009	STAGE	2.0

[illegible]

Table 3 - QC Radon Testing Results			
James Hubert Blake High School			
Test Period: 12/02/2024 - 12/05/2024			
Kit Number	QC Type	Room / Area	Result
11903807	D	A100F	1.3
11903819	FB	A102M	< 0.3
11903836	D	A102M	0.7
11903890	D	A103	< 0.3
11904002	D	A217	< 0.3
11903896	FB	A217	< 0.3
11903826	D	B121	< 0.3
11903835	FB	B121	< 0.3
11903876	D	C142D	< 0.3
11903846	D	CAFETERIA	< 0.3
11903887	D	D148	1.1
11903886	FB	D148	< 0.3
11903874	D	E161	1.1
11903857	D	F173	< 0.3
11903818	FB	F173	< 0.3
11904016	D	G184 DUPLICATE	< 0.3
11892899	OB	OFFICE BLANK	< 0.3
11892900	TB	TRAVEL BLANK	< 0.3

Table 3a - Duplicate Worksheet / Data Validation										
James Hubert Blake High School										
Test Period: 12/02/2024 - 12/05/2024										
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
11903807	11903802	A100F	1.3	0.8	✓	1.6	PASS	1.1	<1-pCi/L	✓
11903836	11903837	A102M	0.7	0.6	✓	1.2	PASS	0.7	<1-pCi/L	✓
11903838	11903827	Cafeteria	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11903825	11903826	B121	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11903876	11903869	C142D	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11903857	11903849	F173	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11903874	11903873	E161	1.1	1.0	✓	2.0	PASS	1.1	<1-pCi/L	✓
11903872	11903887	D148	1.1	1.0	✓	2.0	PASS	1.1	<1-pCi/L	✓
11903890	11903889	A103	0.8	0.3	✓	0.6	FAIL	0.6	<1-pCi/L	✗
11904001	11904002	A217	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11904015	11904016	G185 (missing)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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

James Hubert Blake High School

Test Period: 12/02/24 - 12/05/24

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Table 1- Radon Testing Results		
James Hubert Blake High School RT		
Test Period: 3/11/2025 - 3/14/2025		
Kit Number	Room / Area	Result
11892354	A103	< 0.3
11892360	A103	< 0.3
11892373	A103	< 0.3
11892361	G185	< 0.3
11892366	G185	< 0.3
11892367	G185	< 0.3
11892368	G185	< 0.3

[illegible]

Table 3 - QC Radon Testing Results			
James Hubert Blake High School RT			
Test Period: 3/11/2025 - 3/14/2025			
Kit Number	QC Type	Room / Area	Result
11892354	D	A103	< 0.3
11892368	D	G185	< 0.3
11892367	FB	G185	< 0.3
11886599	OB	OFFICE BLANK	< 0.3
11886600	TB	TRAVEL BLANK	< 0.3

Table 3a - Duplicate Worksheet / Data Validation										
James Hubert Blake High School RT										
Test Period: 3/11/2025 - 3/14/2025										
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
11892354	11892360	A103	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11892368	11892361 11892366	G185	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

[illegible]

Attachment 2:

Laboratory Reports

Radon test result report for:
JAMES HUBERT

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11903892	A101	2024-12-02 @ 12:00 pm	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903889	A103	2024-12-02 @ 12:00 pm	2024-12-05 @ 9:00 am	0.8 ± 0.3	2024-12-09
11903890	A103	2024-12-02 @ 12:00 pm	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903894	A105C	2024-12-02 @ 12:00 pm	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903899	A201	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	0.7 ± 0.3	2024-12-09
11903897	A202	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	0.5 ± 0.3	2024-12-09
11904002	A217	2024-12-02 @ 1:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11904001	A217	2024-12-02 @ 1:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11904030	AUDITORIUM	2024-12-02 @ 1:00 pm	2024-12-05 @ 9:00 am	1.9 ± 0.4	2024-12-09
11904010	AUDITORIUM	2024-12-02 @ 1:00 pm	2024-12-05 @ 9:00 am	1.9 ± 0.4	2024-12-09
11904022	B125	2024-12-02 @ 1:00 pm	2024-12-05 @ 8:00 am	0.7 ± 0.4	2024-12-09
11904005	B226	2024-12-02 @ 1:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11904006	B230	2024-12-02 @ 1:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11904008	BLACKBOX THEATER	2024-12-02 @ 1:00 pm	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903867	BOYS LR	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	1.1 ± 0.4	2024-12-09
11903872	D148	2024-12-02 @ 12:00 pm	2024-12-05 @ 9:00 am	1.0 ± 0.4	2024-12-09
11903887	D148	2024-12-02 @ 12:00 pm	2024-12-05 @ 9:00 am	1.1 ± 0.4	2024-12-09
11903884	D149	2024-12-02 @ 12:00 pm	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903883	D150	2024-12-02 @ 12:00 pm	2024-12-05 @ 9:00 am	1.3 ± 0.4	2024-12-09
11903895	D150A	2024-12-02 @ 12:00 pm	2024-12-05 @ 9:00 am	2.7 ± 0.4	2024-12-09
11903893	D151	2024-12-02 @ 12:00 pm	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903881	D152	2024-12-02 @ 12:00 pm	2024-12-05 @ 9:00 am	1.1 ± 0.4	2024-12-09
11903888	D153	2024-12-02 @ 12:00 pm	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903859	DANCE	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	1.2 ± 0.4	2024-12-09
11903840	E160	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903875	E260	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	0.6 ± 0.3	2024-12-09
11903891	E265	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903898	F300	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903886	FIELD BLANK	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903896	FIELD BLANK	2024-12-02 @ 1:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11904016	G184 DUPLICATE	2024-12-02 @ 1:00 pm	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11904021	G190	2024-12-02 @ 1:00 pm	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903900	G284	2024-12-02 @ 12:00 pm	2024-12-05 @ 10:00 am	0.5 ± 0.3	2024-12-09
11903834	GLR	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	1.0 ± 0.4	2024-12-09
11903880	H1007C	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	1.1 ± 0.4	2024-12-09
11903866	H1011E	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	0.8 ± 0.4	2024-12-09
11903865	H1017	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	1.0 ± 0.4	2024-12-09

December 9, 2024

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
JAMES HUBERT

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11904013	H1020	2024-12-02 @ 1:00 pm	2024-12-05 @ 9:00 am	1.1 ± 0.4	2024-12-09
11904014	MAIN GYM	2024-12-02 @ 1:00 pm	2024-12-05 @ 9:00 am	2.1 ± 0.4	2024-12-09
11904007	MEDIA CENTER	2024-12-02 @ 1:00 pm	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903882	NURSES OFFICE	2024-12-02 @ 12:00 pm	2024-12-05 @ 9:00 am	0.6 ± 0.4	2024-12-09
11904009	STAGE	2024-12-02 @ 1:00 pm	2024-12-05 @ 9:00 am	2.0 ± 0.4	2024-12-09

Radon test result report for:
JAMES HUBERT BLAKE

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11903823	102 OFFICE REGISTRATION	2024-12-02 @ 9:00 am	2024-12-05 @ 8:00 am	0.6 ± 0.3	2024-12-09
11903806	A1000	2024-12-02 @ 8:00 am	2024-12-05 @ 7:00 am	< 0.3	2024-12-09
11903811	A1000 PRINTER ROOM	2024-12-02 @ 8:00 am	2024-12-05 @ 7:00 am	0.5 ± 0.3	2024-12-09
11903804	A100B	2024-12-02 @ 8:00 am	2024-12-05 @ 7:00 am	0.7 ± 0.4	2024-12-09
11903805	A100C	2024-12-02 @ 8:00 am	2024-12-05 @ 7:00 am	< 0.3	2024-12-09
11903812	A100D	2024-12-02 @ 8:00 am	2024-12-05 @ 7:00 am	1.1 ± 0.4	2024-12-09
11903814	A100E	2024-12-02 @ 8:00 am	2024-12-05 @ 7:00 am	0.7 ± 0.4	2024-12-09
11903802	A100F	2024-12-02 @ 8:00 am	2024-12-05 @ 8:00 am	0.8 ± 0.3	2024-12-09
11903807	A100F	2024-12-02 @ 8:00 am	2024-12-05 @ 8:00 am	1.3 ± 0.4	2024-12-09
11903820	A100G	2024-12-02 @ 8:00 am	2024-12-05 @ 7:00 am	1.1 ± 0.3	2024-12-09
11903809	A100I	2024-12-02 @ 8:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903808	A100K	2024-12-02 @ 8:00 am	2024-12-05 @ 8:00 am	1.0 ± 0.4	2024-12-09
11903813	A100L	2024-12-02 @ 8:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903816	A102 WAIT	2024-12-02 @ 9:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903815	A102A	2024-12-02 @ 9:00 am	2024-12-05 @ 8:00 am	1.0 ± 0.3	2024-12-09
11903844	A102B	2024-12-02 @ 9:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903845	A102C	2024-12-02 @ 9:00 am	2024-12-05 @ 7:00 am	0.6 ± 0.4	2024-12-09
11903830	A102D	2024-12-02 @ 9:00 am	2024-12-05 @ 7:00 am	1.0 ± 0.4	2024-12-09
11903829	A102E	2024-12-02 @ 9:00 am	2024-12-05 @ 7:00 am	< 0.3	2024-12-09
11903828	A102F	2024-12-02 @ 9:00 am	2024-12-05 @ 7:00 am	0.6 ± 0.4	2024-12-09
11903822	A102G	2024-12-02 @ 9:00 am	2024-12-05 @ 7:00 am	0.8 ± 0.4	2024-12-09
11903821	A102H	2024-12-02 @ 8:00 am	2024-12-05 @ 8:00 am	0.7 ± 0.3	2024-12-09
11903837	A102M	2024-12-02 @ 9:00 am	2024-12-05 @ 7:00 am	0.6 ± 0.3	2024-12-09
11903819	A102M	2024-12-02 @ 9:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903836	A102M	2024-12-02 @ 9:00 am	2024-12-05 @ 7:00 am	0.7 ± 0.4	2024-12-09
11903824	A102O	2024-12-02 @ 9:00 am	2024-12-05 @ 8:00 am	0.6 ± 0.4	2024-12-09
11903831	A107	2024-12-02 @ 9:00 am	2024-12-05 @ 8:00 am	0.8 ± 0.4	2024-12-09
11903803	ADMIN SECRETARY	2024-12-02 @ 8:00 am	2024-12-05 @ 7:00 am	< 0.3	2024-12-09
11903847	B109	2024-12-02 @ 9:00 am	2024-12-05 @ 8:00 am	0.5 ± 0.3	2024-12-09
11903839	B109 BUSINESS ADMIN	2024-12-02 @ 9:00 am	2024-12-05 @ 8:00 am	0.6 ± 0.3	2024-12-09
11903855	B111	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	0.5 ± 0.3	2024-12-09
11903852	B113	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903853	B115	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903854	B120	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	0.7 ± 0.4	2024-12-09
11903826	B121	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903835	B121	2024-12-02 @ 10:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903825	B121	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09

Radon test result report for:
JAMES HUBERT BLAKE

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11903860	C131	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	???? PI	2024-12-09
11903861	C133	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903848	C133A	2024-12-02 @ 10:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903832	C134	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	0.7 ± 0.4	2024-12-09
11903856	C135	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903863	C135B	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	0.5 ± 0.3	2024-12-09
11903810	C136	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	1.4 ± 0.4	2024-12-09
11903871	C137	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	0.5 ± 0.4	2024-12-09
11903862	C142	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	0.8 ± 0.4	2024-12-09
11903868	C142C	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903869	C142D	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903876	C142D	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903870	C142E	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	0.8 ± 0.3	2024-12-09
11903846	CAFETERIA	2024-12-02 @ 9:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903827	CAFETERIA	2024-12-02 @ 9:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903838	CAFETERIA	2024-12-02 @ 9:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903877	E160D	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903873	E161	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	1.0 ± 0.4	2024-12-09
11903874	E161	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	1.1 ± 0.4	2024-12-09
11903833	E162	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	1.0 ± 0.3	2024-12-09
11903858	E163	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	0.8 ± 0.4	2024-12-09
11903885	E165	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	0.8 ± 0.4	2024-12-09
11903879	E165 OFFICE	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	1.3 ± 0.4	2024-12-09
11903878	E170	2024-12-02 @ 11:00 am	2024-12-05 @ 9:00 am	< 0.3	2024-12-09
11903864	F171	2024-12-02 @ 11:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903857	F173	2024-12-02 @ 11:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903849	F173	2024-12-02 @ 11:00 am	2024-12-05 @ 8:00 am	< 0.3	2024-12-09
11903850	F174	2024-12-02 @ 11:00 am	2024-12-05 @ 8:00 am	0.9 ± 0.4	2024-12-09
11903841	F175	2024-12-02 @ 11:00 am	2024-12-05 @ 8:00 am	0.6 ± 0.4	2024-12-09
11903842	F176	2024-12-02 @ 11:00 am	2024-12-05 @ 8:00 am	0.8 ± 0.4	2024-12-09
11903818	FIELD BLANK	2024-12-02 @ 11:00 am	2024-12-05 @ 10:00 am	< 0.3	2024-12-09
11903851	G184	2024-12-02 @ 10:00 am	2024-12-05 @ 8:00 am	0.9 ± 0.3	2024-12-09
11903817	KITCHEN OFFICE	2024-12-02 @ 9:00 am	2024-12-05 @ 8:00 am	1.7 ± 0.4	2024-12-09
11903801	MAIN OFFICE	2024-12-02 @ 8:00 am	2024-12-05 @ 7:00 am	< 0.3	2024-12-09

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

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



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

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

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

March 17, 2025

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11892354	A103	2025-03-11 @ 9:00 am	2025-03-14 @ 7:00 am	< 0.3	2025-03-17
11892360	A103	2025-03-11 @ 8:00 am	2025-03-14 @ 7:00 am	< 0.3	2025-03-17
11892373	A103	2025-03-11 @ 8:00 am	2025-03-14 @ 7:00 am	< 0.3	2025-03-17
11892361	G185	2025-03-11 @ 9:00 am	2025-03-14 @ 7:00 am	< 0.3	2025-03-17
11892366	G185	2025-03-11 @ 9:00 am	2025-03-14 @ 7:00 am	< 0.3	2025-03-17
11892367	G185	2025-03-11 @ 9:00 am	2025-03-14 @ 7:00 am	< 0.3	2025-03-17
11892368	G185	2025-03-11 @ 9:00 am	2025-03-14 @ 7:00 am	< 0.3	2025-03-17

March 17, 2025

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**OFFICE
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11892446	OB	2025-03-11 @ 11:00 am	2025-03-14 @ 11:00 am	< 0.3	2025-03-17
11886599	OB	2025-03-10 @ 11:00 am	2025-03-13 @ 11:00 am	< 0.3	2025-03-17

March 17, 2025

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**TRAVEL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11892444	TB	2025-03-11 @ 11:00 am	2025-03-14 @ 11:00 am	< 0.3	2025-03-17
11886600	TB	2025-03-10 @ 11:00 am	2025-03-13 @ 11:00 am	< 0.3	2025-03-17

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon – Re-Testing March 11th – March 14th, 2025

Name of Schools:

1. Albert Einstein HS
2. Argyle MS
3. Belmont ES
4. Benjamin Banneker MS
5. Cannon Road ES
6. Dr. Charles R. Drew ES
7. East Silver Spring ES
8. James Hubert Blake HS
9. William Farquhar MS

	Date	Initials
Radon Test Kits Deployed	3/11/2025	BMM
Radon Test Kits Collected	3/14/2025	BMM
Radon Test Kits Shipped to Lab*	3/14/2025	BMM
Radon Test Kits Received by Lab*	3/16/2025	BMM

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

MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Blake High 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	3
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	<0.3 pCi/L

Project Status

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



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

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 #12146341.126

Location: Blake High School
300 Norwood Road
Silver Spring, Maryland 20905

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 Blake High School, located at 300 Norwood Road in Silver Spring, Maryland 20905 (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 2/11/20 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 2/14/2020 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 were in the mid-20s to the upper-40s; and high temperatures ranged from the lower-40s to the upper-50s. Maximum sustained winds ranged from 14-24 miles per hour. Average humidity was approximately 74%. A total of 1.32 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		
Blake High School		
Test Period: 02/11/20-02/14/20		
Kit Number	Room / Area	Result
9346901	C142	< 0.3
9346902	A212	< 0.3
9346964	C144	< 0.3
9348502	OFFICE BLANK	< 0.3

Table 2- Radon Testing Results			
Blake High School			
Test Period: 02/11/20-02/14/20			
Kit Number	QC Type	Room / Area	Result
9348522	TRANSIT BLANK	NA	0.7
9341735	TRANSIT BLANK	NA	<0.3

ATTACHMENT C

Laboratory Analytical Results

February 19, 2020

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**BLAKE HS
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9346902	A212	2020-02-11 @ 8:00 am	2020-02-14 @ 11:00 am	< 0.3	2020-02-19
9346901	C142D	2020-02-11 @ 8:00 am	2020-02-14 @ 11:00 am	< 0.3	2020-02-19
9346964	C144	2020-02-11 @ 8:00 am	2020-02-14 @ 11:00 am	< 0.3	2020-02-19

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



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. | 6. Fallsmead E.S. |
| 2. Banneker M.S. | 7. Farquhar M.S. |
| 3. Bel Pre E.S. | 8. Kennedy H.S. |
| 4. Blake H.S. | 9. Magruder H.S. |
| 5. Briggs Chaney M.S. | 10. Wheaton H.S. |

	Date	Initials
Radon Test Kits Deployed	2/11/20	DM
Radon Test Kits Collected	2/14/20	DM
Radon Test Kits Shipped to Lab*	2/14/20	DM
Radon Test Kits Received by Lab*	2/17/20	DM

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

MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	James Hubert Blake High 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	105
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	2.1 pCi/L

Project Status

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



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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: James Hubert Blake High School

300 Norwood Road
Silver Spring, Maryland 20905

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 James Hubert Blake High School, located at 300 Norwood Road in Silver Spring, Maryland 20905 (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 one-hundred twenty-five (125) 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 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		
Blake High School		
Test Period: 12/16/2019-12/19/2019		
Kit Number	Room / Area	Result
9340201	B229	0.9
9340202	G286	0.5
9340203	B119	< 0.3
9340204	B113	< 0.3
9340205	B120	< 0.3
9340206	B120	0.6
9340207	B115	< 0.3
9340208	C133	1.2
9340210	F308	0.6
9340211	A107	1.9
9340212	C136	1
9340213	C136A	0.7
9340214	B230	1.1
9340215	C137	1.3
9340216	C135	0.6
9340217	F301	< 0.3
9340218	E264A	0.9
9340219	C242	0.7
9340220	C242	< 0.3
9340221	C131	< 0.3
9340222	C134	1.1
9340223	C131	0.7
9340224	C133A	0.9
9340225	C242	1
9340226	D249	< 0.3
9340227	A205	0.7
9340301	A101B	0.6
9340302	A103	0.6
9340303	A101	< 0.3
9340304	A105	0.9
9340305	A102B	< 0.3
9340306	A101N	0.6
9340307	A102N	0.6
9340308	A102A	0.6
9340309	B110	0.9
9340310	A102O	< 0.3
9340311	A102	< 0.3
9340312	B110	0.6
9340313	A102M	0.6
9340314	A102C	< 0.3
9340315	A100G	1.4
9340316	A102G	1.1
9340317	A102F	0.6
9340318	A102E	0.9
9340319	A102D	0.7
9340320	A100H	0.8
9340321	A102H	0.6
9340322	A100C	0.6
9340323	AP2	1.3
9340324	AP3	1.4

9340325	A100L	0.8
9340326	AP1	1.2
9340327	A100I	0.7
9340328	A100K	0.7
9340330	A102H	1
9340331	A100C	1.2
9340332	A100O	0.8
9340333	D151	0.7
9340334	D153	< 0.3
9340335	D150	2
9340336	D150A	1.4
9340337	D149	0.8
9340338	D148A	1.1
9340339	D148	1.2
9340340	D149	0.5
9340341	H1020	1.1
9340342	D159K	0.9
9340343	A100	< 0.3
9340344	A100A	0.6
9340345	A100B	1.1
9340346	D149	0.9
9340347	D103B	0.7
9340348	A103C	< 0.3
9340349	C146	0.9
9340351	H1007C	1
9340352	A159	1.4
9340353	STG1	1.8
9340354	H1009	1
9340355	A159	1.7
9340356	H1011E	1.2
9340357	TEAM B2	1.2
9340358	TEAM B1	1.4
9340359	H1000	2.1
9340360	H1000	0.5
9340361	H1000	1.3
9340362	H1000	1.2
9340363	H1000	1.3
9340364	H1002	1.1
9340365	H1002	1.2
9340366	H1007E	1.8
9340367	H1017	0.9
9340369	G190	0.6
9340370	G184C	1
9340371	C142	0.9
9340372	G184	0.9
9340373	G184C	0.7
9340375	G185	0.6
9340376	F175	0.8
9340377	F173	< 0.3
9340378	F171	< 0.3
9340379	F171	< 0.3
9340380	B121	< 0.3
9340381	F175A	< 0.3
9340382	F176	1.1
9340383	F174	0.7

9340384	F171	< 0.3
9340385	E165A	0.6
9340386	B125A	< 0.3
9340387	E160	0.5
9340388	E160C	1
9340389	E160D	0.6
9340390	E165	0.8
9340391	E163	0.7
9340392	E170	0.7
9340393	E161C	< 0.3
9340394	B112	1.1
9340395	B120	1
9340396	E161	0.8
9340397	E162	1.1
9340398	E162	0.9
9340399	B123	< 0.3
9340400	B125	< 0.3
9340329	A102H	0.7
9340350	A159	1.3
9341394	OFFICE BLANK	< 0.3
9340368	C144	MISSING
9340374	142D	MISSING
9340209	A212	MISSING

Table 2- Radon Testing Results			
Blake High School			
Test Period: 12/16/2019-12/19/2019			
Kit Number	QC Type	Room / Area	Result
9340306	D	A101N	0.6
9340330	D	A102H	1
9340329	FB	A102H	0.7
9340346	D	D149	0.9
9340337	FB	D149	0.8
9340352	D	A159	1.4
9340361	D	H1000	1.3
9340360	FB	H1000	0.5
9340373	D	G184C	0.7
9340379	D	F171	<0.3
9340384	FB	F171	<0.3
9340397	D	E162	1.1
9340206	D	B120	0.6
9340205	FB	B120	<0.3
9340221	D	C131	<0.3
9340219	D	C242	0.7
9340220	FB	C242	<0.3
9341377	TRANSIT BLANK	NA	0.5
9341379	TRANSIT BLANK	NA	< 0.3
9341380	TRANSIT BLANK	NA	< 0.3
9341398	TRANSIT BLANK	NA	< 0.3

ATTACHMENT C

Laboratory Analytical Results

December 23, 2019

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

BLAKE HIGH SCHOOL

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9340355	A159	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.7 ± 0.4	2019-12-23
9340352	A159	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.4 ± 0.4	2019-12-23
9340349	C146	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	0.9 ± 0.3	2019-12-23
9340351	H1007C	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.0 ± 0.4	2019-12-23
9340354	H1009	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.0 ± 0.3	2019-12-23
9340356	H1011E	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.2 ± 0.4	2019-12-23
9340353	STG1	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.8 ± 0.4	2019-12-23

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

Radon test result report for:**BLAKE HIGH SCHOOL****321**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9340343	A100	2019-12-16 @ 10:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9340344	A100A	2019-12-16 @ 10:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.4	2019-12-23
9340345	A100B	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	1.1 ± 0.4	2019-12-23
9340322	A100C	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.3	2019-12-23
9340331	A100C	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	1.2 ± 0.4	2019-12-23
9340315	A100G	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	1.4 ± 0.4	2019-12-23
9340320	A100H	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.8 ± 0.3	2019-12-23
9340327	A100I	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.7 ± 0.4	2019-12-23
9340328	A100K	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.7 ± 0.4	2019-12-23
9340325	A100L	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.8 ± 0.4	2019-12-23
9340332	A100O	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.8 ± 0.4	2019-12-23
9340303	A101	2019-12-16 @ 8:00 am	2019-12-19 @ 9:00 am	< 0.3	2019-12-23
9340301	A101B	2019-12-16 @ 8:00 am	2019-12-19 @ 9:00 am	0.6 ± 0.4	2019-12-23
9340306	A101N	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.4	2019-12-23
9340311	A102	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9340308	A102A	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.4	2019-12-23
9340305	A102B	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9340314	A102C	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9340319	A102D	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.7 ± 0.3	2019-12-23
9340318	A102E	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.9 ± 0.4	2019-12-23
9340317	A102F	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.4	2019-12-23
9340316	A102G	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	1.1 ± 0.4	2019-12-23
9340321	A102H	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.4	2019-12-23
9340330	A102H	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	1.0 ± 0.4	2019-12-23
9340313	A102M	2019-12-16 @ 8:00 am	2019-12-19 @ 11:00 am	0.6 ± 0.3	2019-12-23
9340307	A102N	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.4	2019-12-23
9340310	A102O	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9340302	A103	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.3	2019-12-23
9340348	A103C	2019-12-16 @ 10:00 am	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9340304	A105	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.9 ± 0.4	2019-12-23
9340211	A107	2019-12-16 @ 2:00 pm	2019-12-19 @ 8:00 am	1.9 ± 0.4	2019-12-23
9340227	A205	2019-12-16 @ 3:00 pm	2019-12-19 @ 11:00 am	0.7 ± 0.3	2019-12-23
9340326	AP1	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	1.2 ± 0.4	2019-12-23
9340323	AP2	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	1.3 ± 0.4	2019-12-23
9340324	AP3	2019-12-16 @ 9:00 am	2019-12-19 @ 8:00 am	1.4 ± 0.4	2019-12-23
9340309	B110	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.9 ± 0.4	2019-12-23
9340312	B110	2019-12-16 @ 8:00 am	2019-12-19 @ 8:00 am	0.6 ± 0.4	2019-12-23

Radon test result report for:**BLAKE HIGH SCHOOL****321**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9340394	B112	2019-12-16 @ 2:00 pm	2019-12-19 @ 8:00 am	1.1 ± 0.4	2019-12-23
9340204	B113	2019-12-16 @ 2:00 pm	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9340207	B115	2019-12-16 @ 2:00 pm	2019-12-19 @ 8:00 am	< 0.3	2019-12-23
9340203	B119	2019-12-16 @ 2:00 pm	2019-12-19 @ 10:00 am	< 0.3	2019-12-23
9340206	B120	2019-12-16 @ 2:00 pm	2019-12-19 @ 7:00 am	0.6 ± 0.4	2019-12-23
9340395	B120	2019-12-16 @ 2:00 pm	2019-12-19 @ 7:00 am	1.0 ± 0.4	2019-12-23
9340205	B120	2019-12-16 @ 2:00 pm	2019-12-19 @ 7:00 am	< 0.3	2019-12-23
9340380	B121	2019-12-16 @ 2:00 pm	2019-12-19 @ 10:00 am	< 0.3	2019-12-23
9340399	B123	2019-12-16 @ 2:00 pm	2019-12-19 @ 10:00 am	< 0.3	2019-12-23
9340400	B125	2019-12-16 @ 2:00 pm	2019-12-19 @ 10:00 am	< 0.3	2019-12-23
9340386	B125A	2019-12-16 @ 2:00 pm	2019-12-19 @ 11:00 am	< 0.3	2019-12-23
9340201	B229	2019-12-16 @ 3:00 pm	2019-12-19 @ 11:00 am	0.9 ± 0.4	2019-12-23
9340214	B230	2019-12-16 @ 3:00 pm	2019-12-19 @ 11:00 am	1.1 ± 0.4	2019-12-23
9340221	C131	2019-12-16 @ 3:00 pm	2019-12-19 @ 10:00 am	< 0.3	2019-12-23
9340223	C131	2019-12-16 @ 3:00 pm	2019-12-19 @ 10:00 am	0.7 ± 0.4	2019-12-23
9340208	C133	2019-12-16 @ 3:00 pm	2019-12-19 @ 10:00 am	1.2 ± 0.4	2019-12-23
9340224	C133A	2019-12-16 @ 3:00 pm	2019-12-19 @ 10:00 am	0.9 ± 0.4	2019-12-23
9340222	C134	2019-12-16 @ 2:00 pm	2019-12-19 @ 10:00 am	1.1 ± 0.4	2019-12-23
9340216	C135	2019-12-16 @ 3:00 pm	2019-12-19 @ 10:00 am	0.6 ± 0.3	2019-12-23
9340212	C136	2019-12-16 @ 3:00 pm	2019-12-19 @ 10:00 am	1.0 ± 0.4	2019-12-23
9340213	C136A	2019-12-16 @ 3:00 pm	2019-12-19 @ 10:00 am	0.7 ± 0.4	2019-12-23
9340215	C137	2019-12-16 @ 3:00 pm	2019-12-19 @ 10:00 am	1.3 ± 0.4	2019-12-23
9340371	C142	2019-12-16 @ 1:00 pm	2019-12-19 @ 11:00 am	0.9 ± 0.4	2019-12-23
9340219	C242	2019-12-16 @ 3:00 pm	2019-12-19 @ 11:00 am	0.7 ± 0.3	2019-12-23
9340220	C242	2019-12-16 @ 3:00 pm	2019-12-19 @ 11:00 am	< 0.3	2019-12-23
9340225	C242	2019-12-16 @ 3:00 pm	2019-12-19 @ 11:00 am	1.0 ± 0.4	2019-12-23
9340347	D103B	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	0.7 ± 0.3	2019-12-23
9340339	D148	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	1.2 ± 0.4	2019-12-23
9340338	D148A	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	1.1 ± 0.4	2019-12-23
9340337	D149	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	0.8 ± 0.4	2019-12-23
9340340	D149	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	0.5 ± 0.3	2019-12-23
9340346	D149	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	0.9 ± 0.4	2019-12-23
9340335	D150	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	2.0 ± 0.4	2019-12-23
9340336	D150A	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	1.4 ± 0.4	2019-12-23
9340333	D151	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	0.7 ± 0.4	2019-12-23
9340334	D153	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	< 0.3	2019-12-23
9340342	D159K	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	0.9 ± 0.4	2019-12-23

Radon test result report for:**BLAKE HIGH SCHOOL****321**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9340226	D249	2019-12-16 @ 3:00 pm	2019-12-19 @ 11:00 am	< 0.3	2019-12-23
9340387	E160	2019-12-16 @ 2:00 pm	2019-12-19 @ 10:00 am	0.5 ± 0.3	2019-12-23
9340388	E160C	2019-12-16 @ 2:00 pm	2019-12-19 @ 10:00 am	1.0 ± 0.4	2019-12-23
9340389	E160D	2019-12-16 @ 2:00 pm	2019-12-19 @ 10:00 am	0.6 ± 0.4	2019-12-23
9340396	E161	2019-12-16 @ 2:00 pm	2019-12-19 @ 10:00 am	0.8 ± 0.4	2019-12-23
9340393	E161C	2019-12-16 @ 2:00 pm	2019-12-19 @ 10:00 am	< 0.3	2019-12-23
9340397	E162	2019-12-16 @ 2:00 pm	2019-12-19 @ 10:00 am	1.1 ± 0.4	2019-12-23
9340398	E162	2019-12-16 @ 2:00 pm	2019-12-19 @ 10:00 am	0.9 ± 0.3	2019-12-23
9340391	E163	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	0.7 ± 0.4	2019-12-23
9340390	E165	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	0.8 ± 0.4	2019-12-23
9340385	E165A	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	0.6 ± 0.3	2019-12-23
9340392	E170	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	0.7 ± 0.4	2019-12-23
9340218	E264A	2019-12-16 @ 4:00 pm	2019-12-19 @ 11:00 am	0.9 ± 0.4	2019-12-23
9340379	F171	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	< 0.3	2019-12-23
9340384	F171	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	< 0.3	2019-12-23
9340378	F171	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	< 0.3	2019-12-23
9340377	F173	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	< 0.3	2019-12-23
9340383	F174	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	0.7 ± 0.3	2019-12-23
9340376	F175	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	0.8 ± 0.4	2019-12-23
9340381	F175A	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	< 0.3	2019-12-23
9340382	F176	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	1.1 ± 0.3	2019-12-23
9340217	F301	2019-12-16 @ 3:00 pm	2019-12-19 @ 11:00 am	< 0.3	2019-12-23
9340210	F308	2019-12-16 @ 3:00 pm	2019-12-19 @ 11:00 am	0.6 ± 0.3	2019-12-23
9340372	G184	2019-12-16 @ 12:00 pm	2019-12-19 @ 11:00 am	0.9 ± 0.3	2019-12-23
9340370	G184C	2019-12-16 @ 12:00 pm	2019-12-19 @ 11:00 am	1.0 ± 0.3	2019-12-23
9340373	G184C	2019-12-16 @ 1:00 pm	2019-12-19 @ 11:00 am	0.7 ± 0.4	2019-12-23
9340375	G185	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	0.6 ± 0.4	2019-12-23
9340369	G190	2019-12-16 @ 1:00 pm	2019-12-19 @ 10:00 am	0.6 ± 0.3	2019-12-23
9340202	G286	2019-12-16 @ 3:00 pm	2019-12-19 @ 11:00 am	0.5 ± 0.4	2019-12-23
9340360	H1000	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	0.5 ± 0.3	2019-12-23
9340363	H1000	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.3 ± 0.4	2019-12-23
9340361	H1000	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.3 ± 0.4	2019-12-23
9340359	H1000	2019-12-16 @ 12:00 pm	2019-12-19 @ 9:00 am	2.1 ± 0.4	2019-12-23
9340362	H1000	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.2 ± 0.3	2019-12-23
9340365	H1002	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.2 ± 0.4	2019-12-23
9340364	H1002	2019-12-16 @ 11:00 am	2019-12-19 @ 9:00 am	1.1 ± 0.3	2019-12-23
9340366	H1007E	2019-12-16 @ 12:00 pm	2019-12-19 @ 9:00 am	1.8 ± 0.4	2019-12-23

December 23, 2019

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

BLAKE HIGH SCHOOL

321

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9340367	H1017	2019-12-16 @ 12:00 pm	2019-12-19 @ 9:00 am	0.9 ± 0.4	2019-12-23
9340341	H1020	2019-12-16 @ 10:00 am	2019-12-19 @ 9:00 am	1.1 ± 0.4	2019-12-23
9340358	TEAM B1	2019-12-16 @ 12:00 pm	2019-12-19 @ 9:00 am	1.4 ± 0.4	2019-12-23
9340357	TEAM B2	2019-12-16 @ 12:00 pm	2019-12-19 @ 9:00 am	1.2 ± 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

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

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

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

Time Start: 0825 Time Stop: 0825

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

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

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

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

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






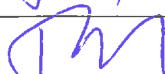
ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS
Corporate Office: 936 Ridgebrook road • Sparks , Maryland 21152 • 410-316-7800 • (Fax) 410-316-7935

Radon Test Kit Chain of Custody

Project Name: MCPS Radon 2019 Week 2

Name of Schools:

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



MCPS RADON TESTING

Executive Summary: James Hubert Blake High School

Date of Test Report:	2/9/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	95
# Rooms \geq 4.0 pCi/L:	0
Low Value:	< 0.3
High Value:	2.4

Project Status:

Initial testing completed; no further action at this time.



ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

February 9, 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 # 12146341.24

Location: James Hubert Blake High School
300 Norwood Road
Silver Spring, MD 20905

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 James Hubert Blake High School, located at 300 Norwood Road in Silver Spring, Maryland 20905 (subject site).

Scope of Services:

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

KCI visited the site on January 11, 2016 and deployed one hundred twenty (120) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

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

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

Notes:

D- Duplicate sample

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

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

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

Sincerely,



H. Allen Bennett
Certified Industrial Hygienist
KCI Technologies, Inc.

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

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Radon Testing Results		
James Hubert Blake High School		
Test Period: 01/11/16-01/14/16		
Kit Number	Room / Area	Result
7718872	A100	< 0.3
7718873	A100	< 0.3
7718880	A1000	< 0.3
7718874	A100A	< 0.3
7718875	A100B	< 0.3
7718876	A100C	< 0.3
7718877	A100D	< 0.3
7718878	A100E	0.6
7718881	A100F	1.2
7718882	A100G	1
7718883	A100H	< 0.3
7718884	A100I	< 0.3
7718885	A100K	< 0.3
7718879	A100L	0.6
7718602	A101	< 0.3
7718601	A102	< 0.3
7718894	A102A	0.5
7718893	A102B	< 0.3
7718892	A102C	< 0.3
7718891	A102D	< 0.3
7718890	A102E	< 0.3
7718889	A102F	< 0.3
7718888	A102G	< 0.3
7718886	A102H	< 0.3
7718896	A102M	< 0.3
7718898	A102N	< 0.3
7718895	A102O	< 0.3
7718603	A103	0.6
7718605	A103A	0.7
7718604	A103C	< 0.3
7718606	A107	1.9
7718868	A159	1.2
7718870	A159	0.9
7718610	B110	< 0.3
7718609	B110	< 0.3
7718813	B112	0.6
7718611	B113	< 0.3
7718612	B115	< 0.3
7718811	B120	0.8
7718844	C144	< 0.3
7718845	C146	0.8
7718842	COACH OFFICE	0.7
7718855	D148	1.3
7718856	D148A	2.4
7718860	D148H	1.3
7718857	D148I	0.9

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
James Hubert Blake High School		
Test Period: 01/11/16-01/14/16		
Kit Number	Room / Area	Result
7718861	D149	0.5
7718852	D150	0.9
7718862	D151	< 0.3
7718865	D152	0.8
7718863	D153	0.7
7718867	D155	0.5
7718869	D155A	< 0.3
7718853	D159J	0.8
7718854	D159K	1
7718864	DIRECTORS OFFICE	0.6
7718816	E160	0.7
7718817	E160C	0.7
7718818	E160D	< 0.3
7718815	E161	< 0.3
7718821	E161C	< 0.3
7718822	E161D	< 0.3
7718823	E161E	< 0.3
7718819	E162	< 0.3
7718820	E163	< 0.3
7718824	E165	0.8
7718825	E165 OFFICE	1
7718826	E165 STORAGE	0.9
7718827	E170	< 0.3
7718613	E262	< 0.3
7718627	E267	< 0.3
7718618	E268	0.7
7718625	E269	< 0.3
7718615	E270	0.7
7718617	E279	< 0.3
7718828	F171	< 0.3
7718829	F171 OFFICE	< 0.3
7718831	F172	0.8
7718830	F173	< 0.3
7718833	F174	< 0.3
7718836	F175	< 0.3
7718834	F175 OFFICE	< 0.3
7718837	F176	0.6
7718619	F301	< 0.3
7718622	F302	< 0.3
7718621	F303	< 0.3
7718620	F304	< 0.3
7718624	F306	< 0.3
7718623	F308	0.6
7718843	G184	< 0.3
7718840	G185	< 0.3
7718841	G185	< 0.3
7718838	G190	< 0.3
7718851	H1000	0.9
7718858	H1000	1
7718849	H1002	1.1

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
James Hubert Blake High School		
Test Period: 01/11/16-01/14/16		
Kit Number	Room / Area	Result
7718848	H1002	1
7718846	H100C	1
7718847	H1011E	1
7718859	H1020	1.3
7718607	HEALTH ROOM	< 0.3

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
James Hubert Blake High School		
Test Period: 01/11/16-01/14/16		
Kit Number	QC Type	Result
7718900	D (A102)	0.5
7718887	D (A102H)	< 0.3
7718897	D (A102M)	< 0.3
7718812	D (B120)	0.8
7718866	D (D155)	0.6
7718614	D (E262)	0.6
7718626	D (E269)	< 0.3
7718616	D (E270)	0.6
7718832	D (F172)	0.7
7718835	D (F173)	< 0.3
7718839	D (G190)	0.6
7718850	D (H1002)	1.3
7718899	FB (A102O)	< 0.3
7718871	FB (A159)	< 0.3
7718814	FB (B112)	< 0.3
7718628	FB (E267)	< 0.3
7718608	FB (HEALTH ROOM)	< 0.3
7717704	OB (0)	< 0.3
7719386	OB (0)	< 0.3

Table Note:

* Missing or Compromised Sample

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:

**JAMES HUBERT BLAKE HIGH SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7717704	0	2016-01-11 @ 4:00 pm	2016-01-14 @ 1:00 pm	< 0.3	2016-01-18
7719386	0	2016-01-11 @ 4:00 pm	2016-01-14 @ 1:00 pm	< 0.3	2016-01-18
7718824	165	2016-01-11 @ 12:00 pm	2016-01-14 @ 11:00 am	0.8 ± 0.3	2016-01-18
7718872	A100	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718873	A100	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718880	A1000	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718874	A100A	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718875	A100B	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718876	A100C	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718877	A100D	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718878	A100E	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	0.6 ± 0.3	2016-01-18
7718881	A100F	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	1.2 ± 0.3	2016-01-18
7718882	A100G	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	1.0 ± 0.3	2016-01-18
7718883	A100H	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718884	A100I	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718885	A100K	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718879	A100L	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	0.6 ± 0.3	2016-01-18
7718602	A101	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718601	A102	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718900	A102	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	0.5 ± 0.3	2016-01-18
7718894	A102A	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	0.5 ± 0.3	2016-01-18
7718893	A102B	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718892	A102C	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718891	A102D	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718890	A102E	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718889	A102F	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718888	A102G	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718886	A102H	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718887	A102H	2016-01-11 @ 2:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718896	A102M	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718897	A102M	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718898	A102N	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718899	A102O	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718895	A102O	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718603	A103	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	0.6 ± 0.3	2016-01-18
7718605	A103A	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	0.7 ± 0.3	2016-01-18
7718604	A103C	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18

Radon test result report for:
**JAMES HUBERT BLAKE HIGH SCHOOL
 MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7718606	A107	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	1.9 ± 0.4	2016-01-18
7718868	A159	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	1.2 ± 0.3	2016-01-18
7718870	A159	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	0.9 ± 0.3	2016-01-18
7718871	A159	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718609	B110	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718610	B110	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718813	B112	2016-01-11 @ 12:00 pm	2016-01-14 @ 10:00 am	0.6 ± 0.3	2016-01-18
7718814	B112	2016-01-11 @ 12:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718611	B113	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718612	B115	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718811	B120	2016-01-11 @ 12:00 pm	2016-01-14 @ 10:00 am	0.8 ± 0.3	2016-01-18
7718812	B120	2016-01-11 @ 12:00 pm	2016-01-14 @ 10:00 am	0.8 ± 0.3	2016-01-18
7718844	C144	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718845	C146	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	0.8 ± 0.3	2016-01-18
7718842	COACH OFFICE	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	0.7 ± 0.3	2016-01-18
7718855	D148	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	1.3 ± 0.3	2016-01-18
7718856	D148A	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	2.4 ± 0.4	2016-01-18
7718860	D148H	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	1.3 ± 0.3	2016-01-18
7718857	D148I	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	0.9 ± 0.3	2016-01-18
7718861	D149	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	0.5 ± 0.3	2016-01-18
7718852	D150	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	0.9 ± 0.3	2016-01-18
7718862	D151	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718865	D152	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	0.8 ± 0.3	2016-01-18
7718863	D153	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	0.7 ± 0.3	2016-01-18
7718866	D155	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	0.6 ± 0.3	2016-01-18
7718867	D155	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	0.5 ± 0.3	2016-01-18
7718869	D155A	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718853	D159J	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	0.8 ± 0.3	2016-01-18
7718854	D159K	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	1.0 ± 0.3	2016-01-18
7718864	DIRECTORS OFFICE	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	0.6 ± 0.3	2016-01-18
7718816	E160	2016-01-11 @ 12:00 pm	2016-01-14 @ 12:00 pm	0.7 ± 0.3	2016-01-18
7718817	E160C	2016-01-11 @ 12:00 pm	2016-01-14 @ 12:00 pm	0.7 ± 0.3	2016-01-18
7718818	E160D	2016-01-11 @ 12:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718815	E161	2016-01-11 @ 12:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718821	E161C	2016-01-11 @ 12:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718822	E161D	2016-01-11 @ 12:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718823	E161E	2016-01-11 @ 12:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18

Radon test result report for:

**JAMES HUBERT BLAKE HIGH SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7718819	E162	2016-01-11 @ 12:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718820	E163	2016-01-11 @ 12:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718825	E165	2016-01-11 @ 12:00 pm	2016-01-14 @ 11:00 am	1.0 ± 0.3	2016-01-18
7718826	E165	2016-01-11 @ 12:00 pm	2016-01-14 @ 11:00 am	0.9 ± 0.3	2016-01-18
7718827	E170	2016-01-11 @ 12:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718613	E262	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718614	E262	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	0.6 ± 0.3	2016-01-18
7718627	E267	2016-01-11 @ 4:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718628	E267	2016-01-11 @ 4:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718618	E268	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	0.7 ± 0.3	2016-01-18
7718625	E269	2016-01-11 @ 4:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718626	E269	2016-01-11 @ 4:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718615	E270	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	0.7 ± 0.3	2016-01-18
7718616	E270	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	0.6 ± 0.3	2016-01-18
7718617	E279	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718828	F171	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718829	F171	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718831	F172	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	0.8 ± 0.3	2016-01-18
7718832	F172	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	0.7 ± 0.3	2016-01-18
7718830	F173	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718835	F173	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718833	F174	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718834	F175	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718836	F175	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718837	F176	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	0.6 ± 0.3	2016-01-18
7718619	F301	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718622	F302	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718621	F303	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718620	F304	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718624	F306	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	< 0.3	2016-01-18
7718623	F308	2016-01-11 @ 3:00 pm	2016-01-14 @ 12:00 pm	0.6 ± 0.3	2016-01-18
7718843	G184	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718840	G185	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718841	G185	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718838	G190	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	< 0.3	2016-01-18
7718839	G190	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	0.6 ± 0.3	2016-01-18
7718858	H1000	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	1.0 ± 0.3	2016-01-18

February 1, 2016

**LABORATORY ANALYSIS
REPORT ****

Radon test result report for:
**JAMES HUBERT BLAKE HIGH SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7718851	H1000	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	0.9 ± 0.3	2016-01-18
7718848	H1002	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	1.0 ± 0.3	2016-01-18
7718849	H1002	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	1.1 ± 0.3	2016-01-18
7718850	H1002	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	1.3 ± 0.3	2016-01-18
7718846	H100C	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	1.0 ± 0.3	2016-01-18
7718847	H1011E	2016-01-11 @ 1:00 pm	2016-01-14 @ 11:00 am	1.0 ± 0.3	2016-01-18
7718859	H1020	2016-01-11 @ 2:00 pm	2016-01-14 @ 11:00 am	1.3 ± 0.3	2016-01-18
7718607	HEALTH ROOM	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18
7718608	HEALTH ROOM	2016-01-11 @ 3:00 pm	2016-01-14 @ 10:00 am	< 0.3	2016-01-18

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

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

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

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies Inc. Job Number 173224

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, Device No.'s: _____

7706211, 7706366, _____

7706380, 7706381 _____

F3 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 V

Name of Schools:

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

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

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

M. A. CECIL & ASSOCIATES, INC.
4475 Shannon Way, Port Republic, Maryland 20676 (301) 855-7710
INDUSTRIAL HYGIENE AND ENVIRONMENTAL HEALTH

March 7, 2011

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

Re: Radon Evaluation- James Hubert Blake High School

Dear Mr. Yarup:

Environmental radon testing has been completed at James Hubert Blake High School.

Charcoal canisters were placed in forty-three locations on the first floor of the school. The canisters were placed on February 25, 2011 and retrieved on February 28, 2011. The results and sampling locations are summarized in the following.

The detected radon concentrations for all 43 sampling locations were below the EPA recommended level of 4.0 pico curies per liter (pCi/l) of air.

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

Sincerely,

Michael A. Cecil, CIH

Environmental Radon Results
James Hubert Blake High School
February 2011

Location	Detected Radon Concentration (pCi/l)
Main Office	< 0.5
D-153	0.8
Auditorium	2.0
D-149	1.0
D-148	2.8
D-150	1.6
H-1020	2.6
Main Gym	2.0
Boys Locker Room	1.5
Girls Locker Room	1.3
Small Gym	2.8
Weight Room	1.9
Dance Studio	1.7
Black Box Theater	1.5
C-137	< 0.5
C-142	1.3
G-184	0.5
G-190	< 0.5
G-185	0.7
F-175	0.8
F-176	1.1
F-173	< 0.5
F-174	< 0.5
F-171	0.6
F-170, Art Room	< 0.5
E-165, Fashion	2.2
E-162	1.4
E-163	0.7
E-161	1.5
E-160	0.7
C-134	0.9
C-136	0.9
C-131	< 0.5
B-121	< 0.5
B-123	< 0.5
Staff Lounge	0.7
B-118	1.1
B-115	< 0.5
B-113	< 0.5
Cafeteria	< 0.5
A-107, Amp Theater	1.8
A-103	1.6
A-101	0.7