



School / Facility Radon Testing Report Form

Instructions: Submit one testing report form per-facility per-round of testing. 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.

School Year: **23-24**

Facility:	Rosa M. Parks Middle School
Address:	19200 Olney Mill Road
	Olney, MD 20832

Reason for Testing:	<input checked="" type="checkbox"/> Scheduled Re-Testing (2 or 5-year schedule) <input type="checkbox"/> Clearance Testing (Post-Mitigation) <input type="checkbox"/> System(s) Performance Testing (Post-Mitigation) <input type="checkbox"/> New Construction/Facility
Facility Current Radon Status:	<input checked="" type="checkbox"/> Active Mitigation (2-year regular schedule) <input type="checkbox"/> No Active Mitigation (5-year regular schedule) <input type="checkbox"/> Not Previously Tested
Round of Testing:	<input checked="" type="checkbox"/> Initial Testing -or- <input 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 checked="" type="checkbox"/> Not Required or Considered <input type="checkbox"/> Required (>8.0 -pCi/L) <input type="checkbox"/> Required (≥ 4.0 -pCi/L) <input type="checkbox"/> Consider (≥ 2.0 & <4.0 -pCi/L)	<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)

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)	
<i>Other—Specify here:</i>				
Detector/Device Name:	Air Chek – Radon Test Kits			
Manufacturer:	Radon Lab			
Person(s) Deploying or Retrieving Test Devices and certification number			Organization/Company	
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):	01/23/24
<input type="checkbox"/> Long-Term				01/26/24
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)

	Detectors Deployed		
	Ground-Contact	Upper-Level(s)	Total
Test Locations ¹	64	4	68
Duplicates ²	6	0	6
Field Blanks ³	3	0	4
Grand Total			78

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.

Spike Samples ¹	6	Trip Blank(s) ²	2	Office Blank(s) ^{3,4}	2
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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.

Spike Sample Lab Results. Measured values are satisfactory, i.e., within ± 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 QA plan previously submitted?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Quality Assurance / Quality Control (QA/QC) (continued)

If “No” to either, please describe any QC measurements that were missing or outside of control tolerances established in the QAP here:

Summary of Test Results¹ and Determination of Valid Measurements²

	Ground-Contact	Upper-Level(s)	Total
Number of test locations:	68	4	68
Number of locations ≥8.0-pCi/L:	0	0	0
Number of locations ≥4.0 and ≤8-pCi/L:	0	0	0
Number of locations ≥2.7 and ≤4-pCi/L:	0	0	0
Number of locations ≥2.0 and ≤4-pCi/L:	0	0	0
Number of missing required test locations ³ :	6	0	6
Percentage of missing test locations for the facility ^{4,5} :	8.8%	0	8.8%

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

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

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

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

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

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

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 type="checkbox"/> Yes <input checked="" 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
<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 there sufficient valid measurements obtained? ^{1,2} <i>If Yes – then Testing Status - ‘No Further Testing Needed’ complete Conclusion section</i> <i>If No, then Testing Status - ‘Follow-up Testing Required’ continue below</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input 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.

- **If ‘No Further Testing Needed’** complete conclusions section on first page.
- **If ‘Follow-up Testing Required’** – complete Follow-up Testing described below and the conclusion section on the first page for only the valid measurements/results obtained

Follow-Up Testing (if required)

Required if –

- 1- Not enough valid results were obtained from a facility (table above);
- 2- Any results ≥ 4.0 – pCi/L; and
- 3- At the discretion of MCPS IAQ Staff

Follow-up Testing:

- 1- If an insufficient number of valid measurements obtained during initial round:
 - return to facility to test locations that require valid measurements
- 2- Follow-up Testing for valid measurements ≥ 4.0-pCi/L

Initial Result(s)	Procedure	Follow-up Result	Conclusion
≥ 4.0-pCi/L	1- Short-term follow-up test 2- Average the results of the two tests	≥4.0	Mitigation Required
		<4.0 but >2.0	Consider Mitigation
		<2.0	Not Required or Considered

- **Complete second School/Facility Radon Testing Report Form for only Follow-up Testing locations.**

Attachment 1:
Summary Data Tables

Table 1- Radon Testing Results		
Rosa M. Parks Middle School		
Test Period: 01/23/2024 - 01/26/2024		
Kit Number	Room / Area	Result
11463458	A106	< 0.3
11463410	A107	< 0.3
11463475	A108	< 0.3
11463473	A135 TV STUDIO	< 0.3
11463420	ADMIN SECRETARY	< 0.3
11463401	ASSISTANT PRINCIPAL	< 0.3
11463428	ASSISTANT PRINCIPAL MIKE	< 0.3
11463447	AUX GYM 105A	1.4
11463449	AUX GYM A105B	0.8
11463421	B101	< 0.3
11463427	B102	< 0.3
11463402	B103	< 0.3
11463414	B104	< 0.3
11463403	B106	< 0.3
11463407	B108	< 0.3
11463415	B108	< 0.3
11463408	B109	< 0.3
11463406	B110	< 0.3
11463405	B111	< 0.3
11463411	B112	< 0.3
11463404	B113	< 0.3
11463413	B114	< 0.3
11463419	B116	< 0.3
11463412	B118	< 0.3
11463417	B120	< 0.3
11463424	B120	< 0.3
11463437	B202	< 0.3
11463466	B205	< 0.3
11463459	BS OFFICE	< 0.3
11463453	C101	< 0.3
11463451	C102	< 0.3
11463464	C103	< 0.3
11463474	C104	N/A
11463489	C105	< 0.3
11463448	C106	< 0.3
11463490	C106 DARKROOM	< 0.3
11463482	C106 OFFICE	< 0.3
11463485	C107	< 0.3

Table 1- Radon Testing Results		
Rosa M. Parks Middle School		
Test Period: 01/23/2024 - 01/26/2024		
11463477	C107/C105 OFFICE	N/A
11463439	C108	< 0.3
11463454	C108 CALM ROOM	< 0.3
11463456	C109	< 0.3
11463476	C109	< 0.3
11463481	C109 OFFICE	< 0.3
11463438	C111	< 0.3
11463463	C111 OFFICE	0.5
11463440	C202	< 0.3
11463444	CAFE A104	< 0.3
11463457	CAFE A104	0.6
11463423	GUIDANCE	< 0.3
11463418	GUIDANCE CONFERENCE	< 0.3
11463416	GUIDANCE COUNSELOR AREA	< 0.3
11463452	GYM A105	0.6
11463469	GYM A105	< 0.3
11463450	HEALTH	< 0.3
11463484	HEALTH OFFICE	< 0.3
11463491	HEALTH OFFICE	0.5
11463409	IMC A110	< 0.3
11463430	IMC A110	< 0.3
11463468	IMC OFFICE	< 0.3
11463467	KITCHEN OFFICE	0.7
11463483	KITCHEN OFFICE	< 0.3
11463426	LOUNGE	< 0.3
11463435	LOUNGE	< 0.3
11463422	MAIN OFFICE	< 0.3
11463461	PE OFFICE BOYS	0.6
11463446	PE OFFICE GIRLS	< 0.3
11463462	PE OFFICE GIRLS	< 0.3
11463436	PRINCIPAL	< 0.3
11463431	PRINCIPAL CONFERENCE	< 0.3
11463455	STAFF LOUNGE	< 0.3
11463492	STAGE	N/A
11463429	STUDENT COOL OFF ROOM	< 0.3
11463445	STUDIO OFFICE	< 0.3
11463425	WORKROOM	< 0.3
11478486	A106	<0.3
11478098	B110	<0.3

Table 3 - QC Radon Testing Results			
Rosa M. Parks Middle School			
Test Period: 01/23/2024 - 01/26/2024			
Kit Number	QC Type	Room / Area	Result
11463415	FB	B108	< 0.3
11463424	D	B120	< 0.3
11463476	D	C109	< 0.3
11463484	FB	Health Office	< 0.3
11463467	D	Kitchen Office	0.7
11463435	D	Lounge	< 0.3
11463462	FB	PE Office Girls	< 0.3
11463691	OB	OFFICE BLANK	< 0.3
11463647	TB	TRAVEL BLANK	< 0.3
11478486	D	A106	<0.3
11478098	D	B110	<0.3

Attachment 2:
Laboratory Reports

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11463458	A106	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463410	A107	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463475	A108	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463473	A135 TV STUDIO	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463420	ADMIN SECRETARY	2024-01-23 @ 6:00 am	2024-01-26 @ 6:00 am	< 0.3	2024-01-30
11463401	ASSISTANT PRINCIPAL	2024-01-23 @ 6:00 am	2024-01-26 @ 6:00 am	< 0.3	2024-01-30
11463428	ASSISTANT PRINCIPAL MIKE	2024-01-23 @ 6:00 am	2024-01-26 @ 6:00 am	< 0.3	2024-01-30
11463447	AUX GYM 105A	2024-01-23 @ 9:00 am	2024-01-26 @ 9:00 am	1.4 ± 0.3	2024-01-30
11463449	AUX GYM A105B	2024-01-23 @ 9:00 am	2024-01-26 @ 9:00 am	0.8 ± 0.3	2024-01-30
11463421	B101	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463427	B102	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463402	B103	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463414	B104	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463403	B106	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463415	B108	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463407	B108	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463408	B109	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463406	B110	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463405	B111	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463411	B112	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463404	B113	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463413	B114	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463419	B116	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463412	B118	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463424	B120	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463417	B120	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463437	B202	2024-01-23 @ 9:00 am	2024-01-26 @ 9:00 am	< 0.3	2024-01-30
11463466	B205	2024-01-23 @ 9:00 am	2024-01-26 @ 9:00 am	< 0.3	2024-01-30
11463459	BS OFFICE	2024-01-23 @ 9:00 am	2024-01-26 @ 9:00 am	< 0.3	2024-01-30
11463453	C101	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463451	C102	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463464	C103	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463489	C105	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463448	C106	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463490	C106 DARKROOM	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463482	C106 OFFICE	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463485	C107	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11463439	C108	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463454	C108 CALM ROOM	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463476	C109	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463456	C109	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463481	C109 OFFICE	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463438	C111	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463463	C111 OFFICE	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	0.5 ± 0.3	2024-01-30
11463440	C202	2024-01-23 @ 9:00 am	2024-01-26 @ 9:00 am	< 0.3	2024-01-30
11463444	CAFE A104	2024-01-23 @ 9:00 am	2024-01-26 @ 9:00 am	< 0.3	2024-01-30
11463457	CAFE A104	2024-01-23 @ 9:00 am	2024-01-26 @ 9:00 am	0.6 ± 0.3	2024-01-30
11463423	GUIDANCE	2024-01-23 @ 6:00 am	2024-01-26 @ 6:00 am	< 0.3	2024-01-30
11463418	GUIDANCE CONFERENCE	2024-01-23 @ 6:00 am	2024-01-26 @ 6:00 am	< 0.3	2024-01-30
11463416	GUIDANCE COUNSELOR AREA	2024-01-23 @ 6:00 am	2024-01-26 @ 6:00 am	< 0.3	2024-01-30
11463452	GYM A105	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	0.6 ± 0.3	2024-01-30
11463469	GYM A105	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463450	HEALTH	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463484	HEALTH OFFICE	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463491	HEALTH OFFICE	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	0.5 ± 0.3	2024-01-30
11463409	IMC A110	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463430	IMC A110	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463468	IMC OFFICE	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463483	KITCHEN OFFICE	2024-01-23 @ 9:00 am	2024-01-26 @ 9:00 am	< 0.3	2024-01-30
11463467	KITCHEN OFFICE	2024-01-23 @ 9:00 am	2024-01-26 @ 9:00 am	0.7 ± 0.3	2024-01-30
11463426	LOUNGE	2024-01-23 @ 6:00 am	2024-01-26 @ 6:00 am	< 0.3	2024-01-30
11463435	LOUNGE	2024-01-23 @ 6:00 am	2024-01-26 @ 6:00 am	< 0.3	2024-01-30
11463422	MAIN OFFICE	2024-01-23 @ 6:00 am	2024-01-26 @ 6:00 am	< 0.3	2024-01-30
11463461	PE OFFICE BOYS	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	0.6 ± 0.3	2024-01-30
11463446	PE OFFICE GIRLS	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463462	PE OFFICE GIRLS	2024-01-23 @ 8:00 am	2024-01-26 @ 8:00 am	< 0.3	2024-01-30
11463436	PRINCIPAL	2024-01-23 @ 6:00 am	2024-01-26 @ 6:00 am	< 0.3	2024-01-30
11463431	PRINCIPAL CONFERENCE	2024-01-23 @ 6:00 am	2024-01-26 @ 6:00 am	< 0.3	2024-01-30
11463455	STAFF LOUNGE	2024-01-23 @ 9:00 am	2024-01-26 @ 9:00 am	< 0.3	2024-01-30
11463429	STUDENT COOL OFF ROOM	2024-01-23 @ 6:00 am	2024-01-26 @ 6:00 am	< 0.3	2024-01-30
11463445	STUDIO OFFICE	2024-01-23 @ 7:00 am	2024-01-26 @ 7:00 am	< 0.3	2024-01-30
11463425	WORKROOM	2024-01-23 @ 6:00 am	2024-01-26 @ 6:00 am	< 0.3	2024-01-30

March 4, 2024

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11478486	A106	2024-02-26 @ 8:00 am	2024-02-29 @ 8:00 am	< 0.3	2024-03-04
11478098	B110	2024-02-26 @ 8:00 am	2024-02-29 @ 8:00 am	< 0.3	2024-03-04

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

January 30, 2024

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**KCI
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11463691	OB	2024-01-23 @ 8:00 am	2024-01-26 @ 2:00 pm	< 0.3	2024-01-30
11463647	TB	2024-01-23 @ 8:00 am	2024-01-26 @ 2:00 pm	< 0.3	2024-01-30

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

March 5, 2024

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**KCI
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11284001	OB	2024-02-26 @ 8:00 am	2024-02-29 @ 1:00 pm	< 0.3	2024-03-04
11482791	TB	2024-02-26 @ 8:00 am	2024-02-29 @ 1:00 pm	< 0.3	2024-03-04

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI TECHNOLOGIES, INC Job Number 213327

NOMINAL Conditions: Radon Conc 49.5 pCi/L Rel. Hum 24.7 % Temp. 69.8 F

Date Start: 1/19/24 Date Stop: 1/22/24 Date Start: _____ Date Stop: _____

Time Start: 0831 Time Stop: 0831 Time Start: _____ Time Stop: _____

Device No.'s: (6) CHAR BAGS - Device No.'s: _____

11284003, 11284005, 11284006 _____

11284007, 11284008, 11284013 _____

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**

January 29, 2024

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
**BOWSER MORNER
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11284003	SK	2024-01-19 @ 9:00 am	2024-01-22 @ 9:00 am	47.0 ± 3.8	2024-01-29
11284005	SK	2024-01-19 @ 9:00 am	2024-01-22 @ 9:00 am	43.4 ± 3.5	2024-01-29
11284006	SK	2024-01-19 @ 9:00 am	2024-01-22 @ 9:00 am	42.1 ± 3.4	2024-01-29
11284007	SK	2024-01-19 @ 9:00 am	2024-01-22 @ 9:00 am	46.4 ± 3.7	2024-01-29
11284008	SK	2024-01-19 @ 9:00 am	2024-01-22 @ 9:00 am	46.2 ± 3.7	2024-01-29
11284013	SK	2024-01-19 @ 9:00 am	2024-01-22 @ 9:00 am	45.6 ± 3.6	2024-01-29

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 213819

NOMINAL Conditions: Radon Conc 50.0 pCi/L Rel. Hum 28.9 % Temp. 69.1 F

Date Start: 2/23/24 Date Stop: 2/26/24 Date Start: _____ Date Stop: _____

Time Start: 0812 Time Stop: 0812 Time Start: _____ Time Stop: _____

Device No.'s: (6) CHAR BAGS Device No.'s: _____

11478400, 11477842, 11477845, _____

11477852, 11477996, 11477999 _____

E3 left

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

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

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

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

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

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

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

March 1, 2024

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

FEB SK

MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11477842	NA	2024-02-23 @ 8:00 am	2024-02-26 @ 8:00 am	50.3 ± 4.0	2024-03-01
11477845	NA	2024-02-23 @ 8:00 am	2024-02-26 @ 8:00 am	55.3 ± 4.4	2024-03-01
11477852	NA	2024-02-23 @ 8:00 am	2024-02-26 @ 8:00 am	49.4 ± 4.0	2024-03-01
11477996	NA	2024-02-23 @ 8:00 am	2024-02-26 @ 8:00 am	49.8 ± 4.0	2024-03-01
11477999	NA	2024-02-23 @ 8:00 am	2024-02-26 @ 8:00 am	55.4 ± 4.4	2024-03-01
11478400	NA	2024-02-23 @ 8:00 am	2024-02-26 @ 8:00 am	47.0 ± 3.8	2024-03-01

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 – Testing January 23rd to January 26th

Name of Schools:

1. Thomas S. Wootton HS
2. Sligo MS
3. White Oak MS
4. Rosa M. Parks MD
5. Clopper Mill ES
6. Thomas W. Pyle MS
7. Burnt Mills ES

	Date	Initials
Radon Test Kits Deployed	01/23/2024	BMM
Radon Test Kits Collected	01/26/2024	BMM
Radon Test Kits Shipped to Lab*	01/26/2024	BMM
Radon Test Kits Received by Lab*	01/30/2024	BMM

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon – Testing February 26th & February 29th 2024

Name of Schools:

- 1. Blair G. Ewing Center
- 2. Radnor Center
- 3. Rosa M. Parks MS
- 4. Cabin Branch ES
- 5. Westbrook ES
- 6. Clopper Mill ES

	Date	Initials
Radon Test Kits Deployed	02/26/2024	GM
Radon Test Kits Collected	02/29/2024	GM
Radon Test Kits Shipped to Lab*	02/29/2024	GM
Radon Test Kits Received by Lab*	01/30/2024	GM

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

Attachment 3:
Sampling Location Map



MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Rosa Parks Middle School
Date of Test Report	05/12/2022
Round of Testing	Initial <u>Follow-up</u> Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	5
# Rooms \geq 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	0.8 pCi/L

Project Status

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



May 12, 2022

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

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

Location: Rose Parks Middle School
19200 Olney Mill Rd.
Olney, MD 20832

Dear Mr. Croyle:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools (MCPS) pursuant to completing a “short-term” 3 day radon test for the Rosa Parks Middle School, located at 19200 Olney Mill Rd. Olney, MD 20832 (subject site).

Scope of Services:

KCI conducted radon testing at the subject site to evaluate indoor radon levels relative to the USEPA's recommended action level of 4.0 picocuries per Liter (pCi/L) - the level at which EPA recommends that schools take action to reduce the level. KCI conducted the radon testing in accordance with American Association of Radon Scientists and Technologists (AARST) *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*. A National Radon Proficiency Program (NRPP) Radon Measurement Specialist (certification #111004 RT) supervised the testing. Additional information on radon management and the health effects of radon exposure is available from <https://www.montgomeryschoolsmd.org> or www.epa.gov/radon.

KCI visited the site on March 21, 2022 and deployed seven (7) activated charcoal (AC) radon test kits. KCI deployed radon test kits in all frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

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

1. Rooms with missing test kits from the Radon 2022 testing period (i.e. test kit was deployed but not recovered),
2. Rooms with invalidated test kits from the Radon 2022 testing period (e.g. an open window in the room or disturbed test kit),
3. Rooms which were locked/inaccessible during the Radon 2022 testing period,
4. Rooms with elevated radon results (i.e. ≥ 3.5 pCi/L),
5. Rooms previously tested for radon but not tested in Radon 2022, and
6. Additional rooms that require testing (if applicable.)

A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on March 24, 2022 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

These tests represent:

- Follow-up to initial testing.

These tests were conducted to:

- Evaluate radon concentrations at the facility.

According to AARST, *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*, ideal testing conditions would be when the building is fully occupied and the heating system is active. For this test, the facility's HVAC system was operating in heating mode; therefore, KCI concludes that this test was conducted during ideal testing conditions.

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the low 40°Fs and high temperatures ranged from the low 50°Fs to the low 70°Fs. Maximum sustained winds ranged from 0-29 miles per hour. Average humidity was around 56% with 0.51 inches of precipitation (rain) was recorded during testing period.

Results:

The sampling locations and analytical results are listed on Table 1 (Attachment B). The quality control sample locations and analytical results are listed on Table 2 (Attachment B). Sampling locations and associated test kit identification numbers and relevant field observations are listed on Table 3 (Attachment B). The laboratory analytical results are included in Attachment C. Laboratory results and exposure data for the spike samples are also included in Attachment C.

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥4.0 pCi/L	None	N/A
<4.0 pCi/L	See Attachment B	

Quality Control Samples	
Results of Blank Canisters:	The office blanks, and lab transit blanks had test results of less than the laboratory detection limit of 0.3 pCi/L.
Adequate Laboratory Precision?	Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved.
Spike Sample Analysis:	The Spike Sample analysis results indicate the laboratory is operating within statistical control limits.

Our professional services have been performed in accordance with customary principles and practices in the field of industrial hygiene and engineering. If you have any questions or comments regarding this report, please feel free to contact me at (410) 891-1769.

Sincerely,



Tyler P. McCleaf
Radon Measurement Provider
#111004 RT
KCI Technologies, Inc.

Attachments: A- Floor Plan with Test Locations
 B- Table 1-3, Radon Test Summary Spreadsheets
 C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Check, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

OC- Quality Control

Table 1- Radon Testing Results		
Rosa Parks MS RT		
Test Period: 03/21/2022 - 03/24/2022		
Kit Number	Room / Area	Result
11139177	A105	0.8
11139178	C105 OFFICE	< 0.3
11139187	C108 OFFICE	< 0.3
11139192	MAIN OFFICE	< 0.3
11139176	STO B114	< 0.3
11139184	STO B114	< 0.3
11139188	STO B114	< 0.3

Table 2- Radon Testing Results			
Rosa Parks MS RT			
Test Period: 03/21/2022 - 03/24/2022			
Kit Number	QC Type	Room / Area	Result
11139188	D	Sto b114	< 0.3
11139176	FB	Sto b 114	< 0.3
11139902	OB	OFFICE BLANK	< 0.3
11139928	TB	TRAVEL BLANK	< 0.3

Summary of Missed Locations		
Rosa Parks MS RT		
Test Period: 03/21/22 - 03/24/22		
Kit Number	Room/Area	Result
	NA	

Summary of Missing, Compromised and >= 4 pIC/L Tests		
Rosa Parks MS RT		
Test Period: 03/21/22 - 03/24/22		
Kit Number	Room/Area	Result
	NA	

Table Note:
* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

March 28, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
**ROSA PARKS MS RT
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11139177	A105	2022-03-21 @ 11:00 am	2022-03-24 @ 8:00 am	0.8 ± 0.3	2022-03-28
11139178	C105 OFFICE	2022-03-21 @ 11:00 am	2022-03-24 @ 8:00 am	< 0.3	2022-03-28
11139187	C108 OFFICE	2022-03-21 @ 11:00 am	2022-03-24 @ 8:00 am	< 0.3	2022-03-28
11139192	MAIN OFFICE	2022-03-21 @ 11:00 am	2022-03-24 @ 8:00 am	< 0.3	2022-03-28
11139176	STO B114	2022-03-21 @ 11:00 am	2022-03-24 @ 8:00 am	< 0.3	2022-03-28
11139184	STO B114	2022-03-21 @ 11:00 am	2022-03-24 @ 8:00 am	< 0.3	2022-03-28
11139188	STO B114	2022-03-21 @ 11:00 am	2022-03-24 @ 8:00 am	< 0.3	2022-03-28

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies, Inc. Job Number 204620

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

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

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

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

11139367, 11139368, 11139371, _____

11139710, 11139717 _____

E3 light

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

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

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

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

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

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

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

March 30, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

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

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

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon – March 2022 Schools – Retesting

Name of Schools:

1. Rosa Parks MS
2. Poolesville ES
3. Wyngate ES
4. Seven Locks ES
5. Walt Whitman HS
6. Somerset ES
7. Rock Creek Forest ES
8. Walter Johnson HS
9. Westbrook ES
10. Westland MS
11. Farmland ES
12. College Gardens ES
13. Julius West MS
14. Robert Frost MS
15. Carl Sandburg Learning Center

	Date	Initials
Radon Test Kits Deployed	03/21/2022	BMM
Radon Test Kits Collected	03/24/2022	BMM
Radon Test Kits Shipped to Lab*	03/25/2022	BMM
Radon Test Kits Received by Lab*	03/28/2022	BMM

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



MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Rosa Parks Middle School
Date of Test Report	2/21/2022
Round of Testing	Initial Follow-up Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	68
# Rooms \geq 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	0.8 pCi/L

Project Status:

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



February 21, 2022

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

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

Location: Rosa Parks Middle School
19200 Olney Mill Rd.
Olney, MD 20832

Dear Mr. Croyle:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools (MCPS) pursuant to completing a “short-term” 3 day radon test for the Rosa Parks Middle School, located at 19200 Olney Mill Rd. Olney, MD 20832 (subject site).

Scope of Services:

KCI conducted radon testing at the subject site to evaluate indoor radon levels relative to the USEPA's recommended action level of 4.0 picocuries per Liter (pCi/L) - the level at which EPA recommends that schools take action to reduce the level. KCI conducted the radon testing in accordance with American Association of Radon Scientists and Technologists (AARST) *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*. A National Radon Proficiency Program (NRPP) Radon Measurement Specialist (certification #111004 RT) supervised the testing. Additional information on radon management and the health effects of radon exposure is available from <https://www.montgomeryschoolsmd.org> or www.epa.gov/radon.

KCI visited the site on January 18, 2022 and deployed eighty one (81) activated charcoal (AC) radon test kits. KCI deployed radon test kits in all frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on January 21, 2022 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc.

is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

These tests represent:

- Follow-up to post-mitigation biennial testing.

These tests were conducted to:

- Confirm the success of the mitigation system(s).

According to AARST, *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*, ideal testing conditions would be when the building is fully occupied and the heating system is active. For this test, the facility’s HVAC system was operating in heating mode; therefore, KCI concludes that this test was conducted during ideal testing conditions.

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the 30s and high temperatures ranged from the mid 30s to the mid 40s Fahrenheit. Maximum sustained winds ranged from 7-20 miles per hour. Average humidity was around 50% with .05 inches of precipitation (rain) was recorded during testing period.

Results:

The sampling locations and analytical results are listed on Table 1 (Attachment B). The quality control sample locations and analytical results are listed on Table 2 (Attachment B). Sampling locations and associated test kit identification numbers and relevant field observations are listed on Table 3 (Attachment B). The laboratory analytical results are included in Attachment C. Laboratory results and exposure data for the spike samples are also included in Attachment C.

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥4.0 pCi/L	None	N/A
<4.0 pCi/L	See Attachment B	

Quality Control Samples	
Results of Blank Canisters:	The office blanks, and lab transit blanks had test results of less than the laboratory detection limit of 0.3 pCi/L.
Adequate Laboratory Precision?	Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved.
Spike Sample Analysis:	The Spike Sample analysis results indicate the laboratory is operating within statistical control limits.

Our professional services have been performed in accordance with customary principles and practices in the field of industrial hygiene and engineering. If you have any questions or comments regarding this report, please feel free to contact me at (410) 891-1769.

Sincerely,



Tyler P. McCleaf
Radon Measurement Provider
#111004 RT
KCI Technologies, Inc.

Attachments: A- Floor Plan with Test Locations
 B- Table 1-3, Radon Test Summary Spreadsheets
 C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Check, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

OC- Quality Control

Table 1- Radon Testing Results		
Rosa Parks MS		
Test Period: 01/18/2022-01/21/2022		
Kit Number	Room / Area	Result
11106007	A 104	< 0.3
11106005	A102	< 0.3
11106094	A102 OFFICE	< 0.3
11106013	A103	< 0.3
11106018	A104	< 0.3
11106001	A105	< 0.3
11106003	A105	< 0.3
11106012	A105	< 0.3
11106054	A105A	< 0.3
11106071	A105B	< 0.3
11106037	A107	< 0.3
11106067	A107	< 0.3
11106045	A108	< 0.3
11106058	A109	< 0.3
11106065	A110	0.6
11106068	A110	< 0.3
11106072	A110	< 0.3
11106075	A116	< 0.3
11106077	A116	< 0.3
11106078	A116	< 0.3
11106076	A135	< 0.3
11106073	ASSISTANT PRINCIPAL	< 0.3
11106080	ASSISTANT PRINCIPAL 1	< 0.3
11106044	B101	< 0.3
11106036	B102	< 0.3
11106040	B103	< 0.3
11106043	B103	< 0.3
11106035	B104	< 0.3
11106034	B106	< 0.3
11106028	B108	< 0.3
11106042	B109	< 0.3
11106041	B110	0.6
11106047	B111	< 0.3
11106048	B112	< 0.3
11106056	B113	< 0.3
11106051	B114	< 0.3
11106049	B116	< 0.3
11106050	B116	< 0.3
11106052	B118	< 0.3
11106063	B120	< 0.3
11106059	B204	< 0.3
11106027	B211	< 0.3

Table 1- Radon Testing Results		
Rosa Parks MS		
Test Period: 01/18/2022-01/21/2022		
Kit Number	Room / Area	Result
11106060	B221	< 0.3
11106009	BLR	< 0.3
11106053	C101	< 0.3
11106046	C102	0.6
11106055	C103	< 0.3
11106062	C103	< 0.3
11106039	C104	< 0.3
11106021	C105	< 0.3
11106019	C106	< 0.3
11106022	C106	< 0.3
11106025	C106	< 0.3
11106015	C106 OFFICE 1	< 0.3
11106016	C106 OFFICE 2	< 0.3
11106017	C107	< 0.3
11106038	C108	0.8
11106023	C109	< 0.3
11106024	C109 OFFICE	< 0.3
11106031	C111	< 0.3
11106069	C206	< 0.3
11106070	C216	< 0.3
11106026	COPY ROOM	< 0.3
11106083	FRONT OFFICE	< 0.3
11106006	GLR	< 0.3
11106064	GUIDANCE	< 0.3
11106074	IMC	< 0.3
11106029	IMC 1	< 0.3
11106020	KITCHEN OFFICE	< 0.3
11106004	MU	< 0.3
11106084	NURSES OFFICE	< 0.3
11106092	NURSES OFFICE	< 0.3
11106082	NURSES OFFICE 1	< 0.3
11106093	NURSES OFFICE 1	< 0.3
11106002	OFFICE	NA
11106014	PE	< 0.3
11106010	PE 1	< 0.3
11106079	PRINCIPAL OFFICE	< 0.3
11106066	PRINCIPLE CONFERENCE	< 0.3
11106030	SECRETARY OFFICE	< 0.3
11106032	WIRE CR	< 0.3

Table 2- Radon Testing Results			
Rosa Parks MS			
Test Period: 01/18/22-01/21/22			
Kit Number	QC Type	Room / Area	Result
11106003	D	A105	< 0.3
11106025	D	C106	< 0.3
11106019	FB	C106	< 0.3
11106055	D	C103	< 0.3
11106040	D	B103	< 0.3
11106033	FB	B103	< 0.3
11106077	D	A116	< 0.3
11106075	FB	A116	< 0.3
11106072	D	A110	< 0.3
11106092	D	Nurses office 1	< 0.3
11106397	OB	OFFICE BLANK	< 0.3
11106400	FB	TRAVEL BLANK	< 0.3

Summary of Missed Locations		
Rosa Parks MS		
Test Period: 01/18/22-01/21/22		
Kit Number	Room/Area	Result
NA	C105 - Office	NA
NA	C108 - Office	NA
NA	STO - Office	NA

Summary of Missing, Compromised and >= 4 piC/L Tests		
Rosa Parks MS		
Test Period: 01/18/22-01/21/22		
Kit Number	Room/Area	Result
11106011	A105	Missing
11106002	Office	Compromised

Table Note:
 * Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:**ROSA PARKS MS****1**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11106007	A 104	2022-01-18 @ 8:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106005	A102	2022-01-18 @ 8:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106094	A102 OFFICE	2022-01-18 @ 11:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106013	A103	2022-01-18 @ 8:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106018	A104	2022-01-18 @ 8:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106012	A105	2022-01-18 @ 8:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106001	A105	2022-01-18 @ 8:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106003	A105	2022-01-18 @ 8:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106054	A105A	2022-01-18 @ 9:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106071	A105B	2022-01-18 @ 10:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106037	A107	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106067	A107	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106045	A108	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106058	A109	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106072	A110	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106065	A110	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	0.6 ± 0.4	2022-01-26
11106068	A110	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106075	A116	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106078	A116	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106077	A116	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106076	A135	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106073	ASSISTANT PRINCIPAL	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106080	ASSISTANT PRINCIPAL 1	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106044	B101	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106036	B102	2022-01-18 @ 9:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106043	B103	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106040	B103	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106035	B104	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106034	B106	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106028	B108	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106042	B109	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106041	B110	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	0.6 ± 0.4	2022-01-26
11106047	B111	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106048	B112	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106056	B113	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106051	B114	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106050	B116	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26

Radon test result report for:**ROSA PARKS MS****1**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11106049	B116	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106052	B118	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106063	B120	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106059	B204	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106027	B211	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106060	B221	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106009	BLR	2022-01-18 @ 8:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106053	C101	2022-01-18 @ 9:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106046	C102	2022-01-18 @ 9:00 am	2022-01-21 @ 9:00 am	0.6 ± 0.4	2022-01-26
11106055	C103	2022-01-18 @ 9:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106062	C103	2022-01-18 @ 9:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106039	C104	2022-01-18 @ 9:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106021	C105	2022-01-18 @ 8:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106022	C106	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106019	C106	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106025	C106	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106015	C106 OFFICE 1	2022-01-18 @ 9:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106016	C106 OFFICE 2	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106017	C107	2022-01-18 @ 8:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106038	C108	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	0.8 ± 0.4	2022-01-26
11106023	C109	2022-01-18 @ 8:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106024	C109 OFFICE	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106031	C111	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106069	C206	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106070	C216	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106026	COPY ROOM	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106083	FRONT OFFICE	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106006	GLR	2022-01-18 @ 8:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106064	GUIDANCE	2022-01-18 @ 10:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106074	IMC	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106029	IMC 1	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106020	KITCHEN OFFICE	2022-01-18 @ 8:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106004	MU	2022-01-18 @ 7:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106084	NURSES OFFICE	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106092	NURSES OFFICE	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106093	NURSES OFFICE 1	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106082	NURSES OFFICE 1	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26

January 27, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

ROSA PARKS MS

1

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11106002	OFFICE	2022-01-18 @ 8:00 am	2022-01-21 @ 7:00 am	???? IF1	2022-01-26
11106014	PE	2022-01-18 @ 8:00 am	2022-01-21 @ 7:00 am	< 0.3	2022-01-26
11106010	PE 1	2022-01-18 @ 8:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26
11106079	PRINCIPAL OFFICE	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106066	PRINCIPLE CONFERENCE	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106030	SECRETARY OFFICE	2022-01-18 @ 11:00 am	2022-01-21 @ 9:00 am	< 0.3	2022-01-26
11106032	WIRE CR	2022-01-18 @ 9:00 am	2022-01-21 @ 8:00 am	< 0.3	2022-01-26

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

P4792 / WILLIAM LYMAN

Kit Number	Start Date	Start Time	End Date	End Time	Temp.	Facility	Building	Room	Project ID	Floor	Result
11106033	2022-01-18	9:00 am	2022-01-21	8:00 am	71	ROSA PARKS MS	MAIN	C106		1	< 0.3

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies, Inc. Job Number 203404

NOMINAL Conditions: Radon Conc 16.2 pCi/L Rel. Hum 28.8 % Temp. 59.9 F

Date Start: 12/24/21 Date Stop: 12/27/21 Date Start: _____ Date Stop: _____

Time Start: 0809 Time Stop: 0809 Time Start: _____ Time Stop: _____

Device No.'s: (2) Char Bags - Device No.'s: _____

9341721, 9341722

G4 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

December 31, 2021

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

SK
MA MCPS - Spike Sample Lab Results. Measured values are satisfactory, i.e., within $\pm 25\%$ of the chamber's reference value (16.2 pCi/L).

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9341721	1	2021-12-24 @ 8:00 am	2021-12-27 @ 8:00 am	11.6 \pm 0.9	2021-12-31
9341722	1	2021-12-24 @ 8:00 am	2021-12-27 @ 8:00 am	15.4 \pm 1.2	2021-12-31

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 – January 2022 Schools

Name of Schools:

1. Poolesville ES
2. Rosa Parks MS
3. Seven Locks ES
4. Somerset ES
5. Thomas Pyle MS
6. Walt Whitman HS
7. Walter Johnson HS
8. Westland MS
9. Wyngate ES

	Date	Initials
Radon Test Kits Deployed	01/18/2022	JM
Radon Test Kits Collected	01/21/2022	JM
Radon Test Kits Shipped to Lab*	01/21/2022	JM
Radon Test Kits Received by Lab*	01/23/2022	JM

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



MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Rosa Parks Middle School
Date of Report	1/28/2020
Round of Testing	Initial Follow-up Post Remediation 2 year testing 5 year testing HVAC Upgrade Window Replacement New Addition New Facility
# of Rooms Tested	76
# Rooms \geq 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	0.6 pCi/L

Project Status

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



1/28/2020

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

Re: Radon Testing Services

KCI Job #12146341126

Location: Rosa Parks Middle School

19200 Olney Mill Road
Olney, Maryland 20832

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 Rosa Parks Middle School, located at 19200 Olney Mill Road in Olney, Maryland 20832 (subject site).

SCOPE OF SERVICES

KCI conducted radon testing at the subject site to evaluate indoor radon levels relative to the USEPA's recommended action level of 4.0 picocuries per Liter (pCi/L) - the level at which EPA recommends that schools take action to reduce the level. KCI conducted the radon testing in accordance with American Association of Radon Scientists and Technologists (AARST) *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*. A National Radon Proficiency Program (NRPP) Radon Measurement Specialist (certification #111004 RT) supervised the testing. Additional information on radon management and the health effects of radon exposure is available from <https://www.montgomeryschoolsmd.org/departments/facilities/maintenance/default.aspx?id=458858> or www.epa.gov/radon.

KCI visited the site on 12/10/2019 and deployed ninety-eight (98) 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 12/13/2019 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Aircheck, Inc. for analysis by gamma-ray spectroscopy. Aircheck, Inc. is a NRSB certified analytical laboratory for radon analysis (certification #ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

EVALUATION OF TESTING CONDITIONS

These tests represent:

- Follow-up to initial testing.

These tests were conducted to:

- Evaluate radon concentrations at the facility.

According to AARST, *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*, ideal testing conditions would be when the building is fully occupied and the heating system is active. For this test, the facility's HVAC system was operating in heating mode; therefore, KCI concludes that this test was conducted during ideal testing conditions.

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the upper-30s and high temperatures ranged from the upper-30s to the mid-50s. Maximum sustained winds ranged from 7-21 miles per hour. Average humidity was around 75%. 0.52 inches of precipitation (rain) was recorded during the testing period.

RESULTS

The sampling locations and analytical results are listed on Table 1 (Attachment B). The quality control sample locations and analytical results are listed on Table 2 (Attachment B). Sampling locations and associated test kit identification numbers and relevant field observations are listed on Table 3 (Attachment B). The laboratory analytical results are included in Attachment C. Laboratory results and exposure data for the spike samples are also included in Attachment C.

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥4.0 pCi/L	None	N/A
≤4.0 pCi/L	See Attachment B	See Attachment B

Quality Control Samples	
Results of Blank Canisters:	The office blanks, and lab transit blanks had test results of less than the laboratory detection limit of 0.3 pCi/L.
Adequate Laboratory Precision?	Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved.
Spike Sample Analysis:	The Spike sample analysis results indicate the laboratory is operating within statistical control limits.

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

Sincerely,

Mr. Tyler P. McCleaf
Radon Measurement Provider
111004 RT

KCI Technologies, Inc.

Attachments:

A- Floor Plan with Test Locations

B - Tables 1-3, Radon Test Summary Spreadsheets

C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

Table 1- Radon Testing Results		
Rosa Parks Middle School		
Test Period: 12/10/2019-12/13/2019		
Kit Number	Room / Area	Result
9333972	ASSISTANT PRINCIPAL1	< 0.3
9333975	MAIN OFFICE	< 0.3
9333976	ASSISTANT PRINCIPAL2	< 0.3
9333977	STAFF LOUNGE	< 0.3
9333978	MAIN OFFICE - SUB OFFICE	< 0.3
9333979	PRINCIPAL	< 0.3
9333980	PRINCIPAL CONFERENCE	< 0.3
9333981	MAIL	< 0.3
9333982	ADMIN SECRETARY	< 0.3
9333983	HEALTH	< 0.3
9333984	HEALTH OFFICE	< 0.3
9333985	HEALTH OFFICE	< 0.3
9333986	GUIDANCE OFFICE1	< 0.3
9333987	GUIDANCE MAIN OFFICE	< 0.3
9333988	GUIDANCE MAIN OFFICE	0.5
9333989	GUIDANCE OFFICE 2	< 0.3
9333990	GUIDANCE CONFERENCE	< 0.3
9333991	GUIDANCE CONFERENCE	< 0.3
9333992	IMC	< 0.3
9333993	IMC	< 0.3
9333994	IMC OFFICE	< 0.3
9333995	A108	< 0.3
9333996	A107	< 0.3
9333997	A135 TV STUDIO	< 0.3
9333998	TV STUDIO CONTROL	< 0.3
9333999	A108	< 0.3
9334000	CAFETERIA	0.6
9334128	B221	< 0.3
9334129	A106	< 0.3
9334133	B215	< 0.3
9334134	C202	< 0.3
9334135	C202	< 0.3
9334136	C208	< 0.3
9334137	B118	< 0.3
9334139	B120	< 0.3
9334140	B103 OFFICE	< 0.3
9334141	B207	< 0.3
9334142	C214	< 0.3
9334143	B109	< 0.3
9334144	B110	< 0.3
9334145	B116	< 0.3
9334146	B114	< 0.3
9334147	B113	< 0.3
9334148	B112	0.5
9334149	B110	< 0.3
9334150	B108	< 0.3
9334151	B106	< 0.3
9334152	B103	< 0.3
9334153	B102	< 0.3
9334154	B104	< 0.3

9334155	C103	< 0.3
9334156	C102	< 0.3
9334157	C103	< 0.3
9334158	C106 OFFICE 1	< 0.3
9334159	B101	< 0.3
9334160	C102	< 0.3
9334161	C106 OFFICE 2	< 0.3
9334162	C106 OFFICE1	< 0.3
9334163	C106 QUIET ROOM	< 0.3
9334164	C111	< 0.3
9334165	C106	< 0.3
9334166	C108	< 0.3
9334167	C107	< 0.3
9334168	C105 OFFICE	< 0.3
9334169	C105	< 0.3
9334170	C107	< 0.3
9334171	C109	< 0.3
9334172	C109 OFFICE	< 0.3
9334173	C104	< 0.3
9334174	C101	< 0.3
9334175	C101	< 0.3
9334176	AUX GYM 2	< 0.3
9334177	AUX GYM 1	0.5
9334178	PE OFFICE G	< 0.3
9334179	PE OFFICE B	< 0.3
9334180	GYM	< 0.3
9334181	GYM	< 0.3
9334182	GYM	< 0.3
9334183	A101	< 0.3
9334184	A101	< 0.3
9334185	GYM	< 0.3
9334186	MUSIC STORAGE	< 0.3
9334187	A102	< 0.3
9334188	A102 PRACTICE RM 1	0.5
9334189	MUSIC OFFICE	< 0.3
9334190	A-102-A	0.5
9334191	A102 PRACTICE RM 2	< 0.3
9334192	MUSIC OFFICE	< 0.3
9334193	BUILDING SERVICES OFFICE	< 0.3
9334194	A103 STAGE	< 0.3
9334195	BUILDING SERVICES OFFICE	< 0.3
9334196	KITCHEN OFFICE	< 0.3
9334197	STAFF DINING	0.6
9334198	STAFF DINING	< 0.3
9334199	CAFETERIA	< 0.3
9334200	CAFETERIA	< 0.3
9334996	OFFICE BLANK	< 0.3
9334138	B120	<0.3

Table 2- Radon Testing Results			
Rosa Parks Middle School			
Test Period: 12/10/2019-12/13/2019			
Kit Number	QC Type	Room / Area	Result
9333985	D	HEALTH OFFICE	<0.3
9333988	D	GUIDANCE MAIN OFFICE	0.5
9333990	FB	GUIDANCE CONFERENCE	<0.3
9333995	D	A108	<0.3
9334197	D	STAFF DINING	0.6
9334193	FB	BUILDING SERVICES OFFICE	<0.3
9334189	D	MUSIC OFFICE	<0.3
9334183	FB	A101	<0.3
9334174	D	C101	<0.3
9334167	D	C107	<0.3
9334158	D	C106 OFFICE 1	<0.3
9334155	D	C103	<0.3
9334156	D	C102	<0.3
9334144	D	B110	<0.3
9334138	FB	B120	<0.3
9334135	D	C202	<0.3
9334850	TRANSIT BLANK	NA	< 0.3
9334914	TRANSIT BLANK	NA	< 0.3
9334916	TRANSIT BLANK	NA	< 0.3
9334963	TRANSIT BLANK	NA	< 0.3

Summary of Missed Locations		
Rosa Parks Middle School		
Test Period: 12/10/2019 - 12/13/2019		
Kit Number	Room/Area	Result
	NA	

Summary of Missing, Compromised and \geq 4 piC/L Tests		
Rosa Parks Middle School		
Test Period: 12/10/2019-12/13/2019		
Kit Number	Room/Area	Result
	NA	

Table Note:
 * Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:**ROSA PARKS MS
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9334190	A-102-A	2019-12-10 @ 10:00 am	2019-12-13 @ 1:00 pm	0.5 ± 0.3	2019-12-17
9334183	A101	2019-12-10 @ 10:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-16
9334184	A101	2019-12-10 @ 10:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-17
9334187	A102	2019-12-10 @ 10:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-16
9334188	A102 PRACTICE RM 1	2019-12-10 @ 10:00 am	2019-12-13 @ 1:00 pm	0.5 ± 0.3	2019-12-17
9334191	A102 PRACTICE RM 2	2019-12-10 @ 10:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-17
9334194	A103 STAGE	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-17
9334129	A106	2019-12-10 @ 12:00 pm	2019-12-13 @ 1:00 pm	< 0.3	2019-12-17
9333996	A107	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-17
9333995	A108	2019-12-10 @ 9:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-16
9333999	A108	2019-12-10 @ 9:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-17
9333997	A135 TV STUDIO	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-16
9333982	ADMIN SECRETARY	2019-12-10 @ 8:00 am	2019-12-13 @ 11:00 am	< 0.3	2019-12-16
9333972	ASSISTANT PRINCIPAL1	2019-12-10 @ 8:00 am	2019-12-13 @ 11:00 am	< 0.3	2019-12-17
9333976	ASSISTANT PRINCIPAL2	2019-12-10 @ 8:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-17
9334177	AUX GYM 1	2019-12-10 @ 10:00 am	2019-12-13 @ 3:00 pm	0.5 ± 0.3	2019-12-16
9334176	AUX GYM 2	2019-12-10 @ 10:00 am	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16
9334159	B101	2019-12-10 @ 11:00 am	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16
9334153	B102	2019-12-10 @ 11:00 am	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16
9334152	B103	2019-12-10 @ 11:00 am	2019-12-13 @ 3:00 pm	< 0.3	2019-12-17
9334140	B103 OFFICE	2019-12-10 @ 12:00 pm	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16
9334154	B104	2019-12-10 @ 11:00 am	2019-12-13 @ 3:00 pm	< 0.3	2019-12-17
9334151	B106	2019-12-10 @ 12:00 pm	2019-12-13 @ 3:00 pm	< 0.3	2019-12-17
9334150	B108	2019-12-10 @ 12:00 pm	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16
9334143	B109	2019-12-10 @ 12:00 pm	2019-12-13 @ 3:00 pm	< 0.3	2019-12-17
9334149	B110	2019-12-10 @ 12:00 pm	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16
9334144	B110	2019-12-10 @ 12:00 pm	2019-12-13 @ 3:00 pm	< 0.3	2019-12-17
9334148	B112	2019-12-10 @ 12:00 pm	2019-12-13 @ 3:00 pm	0.5 ± 0.3	2019-12-16
9334147	B113	2019-12-10 @ 12:00 pm	2019-12-13 @ 3:00 pm	< 0.3	2019-12-17
9334146	B114	2019-12-10 @ 12:00 pm	2019-12-13 @ 3:00 pm	< 0.3	2019-12-17
9334145	B116	2019-12-10 @ 12:00 pm	2019-12-13 @ 3:00 pm	< 0.3	2019-12-17
9334137	B118	2019-12-10 @ 12:00 pm	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16
9334138	B120	2019-12-10 @ 12:00 pm	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16
9334139	B120	2019-12-10 @ 12:00 pm	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16
9334141	B207	2019-12-10 @ 12:00 pm	2019-12-13 @ 12:00 pm	< 0.3	2019-12-16
9334133	B215	2019-12-10 @ 12:00 pm	2019-12-13 @ 1:00 pm	< 0.3	2019-12-16
9334128	B221	2019-12-10 @ 12:00 pm	2019-12-13 @ 1:00 pm	< 0.3	2019-12-16

Radon test result report for:**ROSA PARKS MS****MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9334195	BUILDING SERVICES OFFICE	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-16
9334193	BUILDING SERVICES OFFICE	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-16
9334175	C101	2019-12-10 @ 10:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-16
9334174	C101	2019-12-10 @ 10:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-16
9334160	C102	2019-12-10 @ 11:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-16
9334156	C102	2019-12-10 @ 11:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-16
9334155	C103	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-16
9334157	C103	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-16
9334173	C104	2019-12-10 @ 10:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-16
9334169	C105	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-17
9334168	C105 OFFICE	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-17
9334165	C106	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-16
9334158	C106 OFFICE 1	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-16
9334161	C106 OFFICE 2	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-16
9334162	C106 OFFICE1	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-16
9334163	C106 QUIET ROOM	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-16
9334170	C107	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-16
9334167	C107	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-16
9334166	C108	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-16
9334171	C109	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-17
9334172	C109 OFFICE	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-17
9334164	C111	2019-12-10 @ 11:00 am	2019-12-13 @ 2:00 pm	< 0.3	2019-12-17
9334134	C202	2019-12-10 @ 12:00 pm	2019-12-13 @ 12:00 pm	< 0.3	2019-12-17
9334135	C202	2019-12-10 @ 12:00 pm	2019-12-13 @ 12:00 pm	< 0.3	2019-12-17
9334136	C208	2019-12-10 @ 12:00 pm	2019-12-13 @ 12:00 pm	< 0.3	2019-12-17
9334142	C214	2019-12-10 @ 12:00 pm	2019-12-13 @ 12:00 pm	< 0.3	2019-12-16
9334200	CAFETERIA	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-16
9334000	CAFETERIA	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	0.6 ± 0.3	2019-12-17
9334199	CAFETERIA	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-17
9333991	GUIDANCE CONFERENCE	2019-12-10 @ 8:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-16
9333990	GUIDANCE CONFERENCE	2019-12-10 @ 8:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-17
9333988	GUIDANCE MAIN OFFICE	2019-12-10 @ 8:00 am	2019-12-13 @ 1:00 pm	0.5 ± 0.3	2019-12-17
9333987	GUIDANCE MAIN OFFICE	2019-12-10 @ 8:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-17
9333989	GUIDANCE OFFICE 2	2019-12-10 @ 8:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-17
9333986	GUIDANCE OFFICE1	2019-12-10 @ 8:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-17
9334182	GYM	2019-12-10 @ 10:00 am	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16
9334180	GYM	2019-12-10 @ 10:00 am	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16

Radon test result report for:
ROSA PARKS MS
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9334185	GYM	2019-12-10 @ 10:00 am	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16
9334181	GYM	2019-12-10 @ 10:00 am	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16
9333983	HEALTH	2019-12-10 @ 8:00 am	2019-12-13 @ 11:00 am	< 0.3	2019-12-17
9333985	HEALTH OFFICE	2019-12-10 @ 8:00 am	2019-12-13 @ 11:00 am	< 0.3	2019-12-17
9333984	HEALTH OFFICE	2019-12-10 @ 8:00 am	2019-12-13 @ 11:00 am	< 0.3	2019-12-17
9333993	IMC	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-16
9333992	IMC	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-16
9333994	IMC OFFICE	2019-12-10 @ 9:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-16
9334196	KITCHEN OFFICE	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-16
9333981	MAIL	2019-12-10 @ 8:00 am	2019-12-13 @ 11:00 am	< 0.3	2019-12-16
9333975	MAIN OFFICE	2019-12-10 @ 8:00 am	2019-12-13 @ 11:00 am	< 0.3	2019-12-17
9333978	MAIN OFFICE - SUB OFFICE	2019-12-10 @ 8:00 am	2019-12-13 @ 11:00 am	< 0.3	2019-12-16
9334189	MUSIC OFFICE	2019-12-10 @ 10:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-16
9334192	MUSIC OFFICE	2019-12-10 @ 10:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-17
9334186	MUSIC STORAGE	2019-12-10 @ 10:00 am	2019-12-13 @ 1:00 pm	< 0.3	2019-12-17
9334179	PE OFFICE B	2019-12-10 @ 10:00 am	2019-12-13 @ 3:00 pm	< 0.3	2019-12-16
9334178	PE OFFICE G	2019-12-10 @ 10:00 am	2019-12-13 @ 4:00 pm	< 0.3	2019-12-17
9333979	PRINCIPAL	2019-12-10 @ 8:00 am	2019-12-13 @ 11:00 am	< 0.3	2019-12-17
9333980	PRINCIPAL CONFERENCE	2019-12-10 @ 8:00 am	2019-12-13 @ 11:00 am	< 0.3	2019-12-17
9334197	STAFF DINING	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	0.6 ± 0.3	2019-12-17
9334198	STAFF DINING	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-17
9333977	STAFF LOUNGE	2019-12-10 @ 8:00 am	2019-12-13 @ 11:00 am	< 0.3	2019-12-17
9333998	TV STUDIO CONTROL	2019-12-10 @ 9:00 am	2019-12-13 @ 12:00 pm	< 0.3	2019-12-16

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KEI Technologies Inc. Job Number 193475

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

Date Start: 12/13/19 Date Stop: 12/16/19 Date Start: _____ Date Stop: _____
Time Start: 0806 Time Stop: 0806 Time Start: _____ Time Stop: _____
(Group 1)
Device No.'s: (20) Char. Bags - Device No.'s: _____
9334502 thru 9334510,
9334514, 9334516, 9334517,
9334519, 9334519
9334522 thru 9334528
B4

Date Start: 12/13/19 Date Stop: 12/16/19 Date Start: _____ Date Stop: _____
Time Start: 0811 Time Stop: 0811 Time Start: _____ Time Stop: _____
(Group 2)
Device No.'s: (20) Char. Bags - Device No.'s: _____
9334529 thru 9334538,
9334540,
9334542 thru 9334550
B3

Date Start: 12/13/19 Date Stop: 12/16/19 Date Start: _____ Date Stop: _____
Time Start: 0816 Time Stop: 0816 Time Start: _____ Time Stop: _____
(Group 3)
Device No.'s: (20) Char. Bags - Device No.'s: _____
9334551, 9334552, 9334562,
9334555 thru 9334559,
9334569, 9334576, 9334579,
9334580, 9334583, 9334584,
9334591, 9334593, 9334594,
9334597, 9334598, 9334599
B2

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

Radon test result report for:

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

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

December 18, 2019

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

N/A

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

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

Radon test result report for:**S****N/A**

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon 2019 Week 1

Name of Schools:

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

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

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



MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Rosa Parks Middle School
Date of Report	March 13, 2018
Round of Testing	Initial Follow-up Post Remediation 2 year testing 5 year testing HVAC Upgrade Window Replacement New Addition New Facility
# of Rooms Tested	9
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	1.0 pCi/L

Project Status

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



March 13, 2018

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

Re: Radon Testing Services

KCI Job #1214634188

Location: Rosa Parks Middle School

19200 Olney Mill Rd.
Olney, Maryland 20832

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 Rosa Parks Middle School, located at 19200 Olney Mill Rd. in Olney, Maryland 20832 (subject site).

SCOPE OF SERVICES

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

KCI visited the site on February 13, 2018 and deployed eleven (11) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

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

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

A floor plan map of the building with the test locations is included as Appendix A of this report.

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

KCI returned to the site on February 16, 2018 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Aircheck, Inc. for analysis by gamma-ray spectroscopy. Aircheck, Inc. is a NRSB certified analytical laboratory for radon analysis (certification #ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

EVALUATION OF TESTING CONDITIONS

These tests represent:

- Follow-up to post-mitigation biennial testing.

These tests were conducted to:

- Confirm the success of the mitigation system(s).

According to AARST, *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*, ideal testing conditions would be when the building is fully occupied and the heating system is active. For this test, the facility's HVAC system was operating in heating mode; therefore, KCI concludes that this test was conducted during ideal testing conditions.

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures ranged from the mid-20s to upper 40s and high temperatures ranged from the high-30s to the high-60s. Maximum sustained winds ranged from 10-18 miles per hour. Average humidity was around 73%. 0.30 Inches of precipitation was recorded during the testing period.

RESULTS

The sampling locations and analytical results are listed on Table 1 (Attachment B). The quality control sample locations and analytical results are listed on Table 2 (Attachment B). The laboratory analytical results are included in Attachment C. Laboratory results and exposure data for the spike samples are also included in Attachment C.

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥ 4.0 pCi/L	None	N/A
≤ 4.0 pCi/L	See Attachment B	See Attachment B

Quality Control Samples	
Results of Blank Canisters:	The field blank, office blanks, and lab transit blanks had test results of less than the laboratory detection limit of 0.3 pCi/L.
Adequate Laboratory Precision?	Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved.
Spike Sample Analysis:	The Spike sample analysis results indicate the laboratory is operating within statistical control limits.

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

Sincerely,



Radon Measurement Specialist
KCI Technologies, Inc.

Attachments:

B - Radon Test Summary Spreadsheets

C - Laboratory Analytical Results

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

Table 1 - Radon Testing Results		
Rosa Parks Middle School		
Test Period: 02/13/18-02/16/18		
Kit Number	Room / Area	Result
7986595	BLDG SVC. OFF.	1.0
7986576	BLR OFFICE	< 0.3
7986551	CAFE A103	0.6
7986577	GLR OFFICE	< 0.3
7986570	* KITCHEN (open door)	< 0.3
7986549	KITCHEN OFFICE	0.9
7986547	LIBRARIAN OFFICE	< 0.3
7986550	LIBRARY COMP	< 0.3
7986590	WEIGHT ROOM	0.8

Table Note:

* Missing or Compromised Sample

Table 2 - Radon Testing Results		
Rosa Parks Middle School		
Test Period: 02/13/18-02/16/18		
Kit Number	QC Type	Result
7986548	* D (KITCHEN:Open Door)	< 0.3
7986560	* FB (KITCHEN:Open Door)	< 0.3

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:

**ROSA PARKS MIDDLE SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7986595	BLDG SCV. OFF.	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	1.0 ± 0.3	2018-02-20
7986576	BLR OFFICE	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	< 0.3	2018-02-20
7986551	CAFE A103	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	0.6 ± 0.3	2018-02-20
7986577	GLR OFFICE	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	< 0.3	2018-02-20
7986560	KITCHEN	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	< 0.3	2018-02-20
7986570	KITCHEN	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	< 0.3	2018-02-20
7986548	KITCHEN	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	< 0.3	2018-02-20
7986549	KITCHEN OFFICE	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	0.9 ± 0.3	2018-02-20
7986547	LIBRARIAN OFFICE	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	< 0.3	2018-02-20
7986550	LIBRARY COMP	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	< 0.3	2018-02-20
7986590	WEIGHT ROOM	2018-02-13 @ 11:00 am	2018-02-16 @ 10:00 am	0.8 ± 0.3	2018-02-20



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase

Names of Schools:

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

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

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

Radon test result report for:
OFFICE BLANKS

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

Radon test result report for:
TRANSIT BLANKS

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

February 28, 2018

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

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

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies Inc. Job Number 183530

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

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

Date Start: _____ Date Stop: _____ Date Start: _____ Date Stop: _____
 Time Start: _____ Time Stop: _____ Time Start: _____ Time Stop: _____
 Device No.'s: _____ Device No.'s: _____

Date Start: _____ Date Stop: _____ Date Start: _____ Date Stop: _____
 Time Start: _____ Time Stop: _____ Time Start: _____ Time Stop: _____
 Device No.'s: _____ Device No.'s: _____

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



MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Rosa Parks Middle School
Date of Report	February 1, 2018
Round of Testing	Initial Follow-up Post Remediation 2 year testing 5 year testing HVAC Upgrade Window Replacement New Addition New Facility
# of Rooms Tested	60
# Rooms \geq 4.0 pCi/L	0
Lowest Value	< 0.3 pCi/L
Highest Value	1.5 pCi/L

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



February 1, 2018

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

Re: Radon Testing Services

KCI Job #1214694182

Location: Rosa Parks Middle School

19200 Olney Mill Rd.
Olney, Maryland 20832

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 Rosa Parks Middle School, located at 19200 Olney Mill Rd. in Olney, Maryland 20832 (subject site).

SCOPE OF SERVICES

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

KCI visited the site on December 4, 2017 and deployed seventy (70) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Appendix A of this report.

As a quality control measure, KCI included duplicate samples, field blanks, lab transit blanks, and office blanks in accordance with AARST recommendations. In addition, KCI submitted six (6) test kits to

Bowser-Morner, Inc. as spike samples. The spiked tests were exposed to a known radon concentration by Bowser-Morner, Inc. prior to being returned to the laboratory for analysis.

KCI returned to the site on December 7, 2017 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Aircheck, Inc. for analysis by gamma-ray spectroscopy. Aircheck, Inc. is a NRSB certified analytical laboratory for radon analysis (certification #ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

EVALUATION OF TESTING CONDITIONS

These tests represent:

- Post-mitigation biennial testing.

These tests were conducted to:

- Confirm the success of the mitigation system(s).

According to AARST, *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*, ideal testing conditions would be when the building is fully occupied and the heating system is active. For this test, the facility's HVAC system was operating in heating mode; therefore, KCI concludes that this test was conducted during ideal testing conditions.

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the high-20s to mid-40s and high temperatures ranged from the low-40s to mid-50s. Maximum sustained winds ranged from 12-17 miles per hour. Average humidity was around 65%. 0.16 Inches of precipitation was recorded during the testing period.

RESULTS

The sampling locations, field observations, and analytical results are listed on Table 1 (Attachment B). The quality control sample locations and analytical results are listed on Table 2 (Attachment B). Missing/compromised tests, missed rooms, and locked rooms are listed on Table 3 (Attachment B). The laboratory

analytical results are included in Attachment C. Laboratory results and exposure data for the spike samples are also included in Attachment C.

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥ 4.0 pCi/L	None	N/A
≤ 4.0 pCi/L	See Attachment B	See Attachment B

Quality Control Samples	
Results of Blank Canisters:	The field blanks, office blank, and lab transit blanks had test results of less than the laboratory detection limit of 0.3 pCi/L.
Adequate Laboratory Precision?	Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved.
Spike Sample Analysis:	The Spike sample analysis results indicate the laboratory is operating within statistical control limits.

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

Sincerely,



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

Attachments:

B- Tables 1-3, Radon Test Summary Spreadsheets

C- Laboratory Analytical Results

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

Radon Testing Results		
Rosa Parks Middle School		
Test Period: 12/04/17-12/07/17		
Kit Number	Room / Area	Result
7986152	A102	1.1
7986153	A102 OFFICE	0.9
7986147	A105B	1.5
7986129	A106	< 0.3
7986128	A107	0.9
7986127	A108	< 0.3
7986164	A109	1.0
7986131	A110	< 0.3
7986130	A110	0.8
7986163	A116	< 0.3
7986166	A135	0.7
7986167	A135 OFFICE	0.8
7986104	ASST PRINCIPAL2	1.3
7986103	ASST. PRINCIPAL1	< 0.3
7986123	B101	0.9
7986122	B102	0.9
7986125	B103	< 0.3
7986121	B104	0.7
7986120	B106	1.0
7986119	B108	0.6
7986117	B109	< 0.3
7986118	B110	0.5
7986115	B111	0.6
7986114	B112	0.9
7986126	B113	0.8
7986113	B114	0.9
7986112	B116	0.6
7986111	B118	0.7
7986110	B120	0.6
7986160	B207	0.6
7986132	C101	< 0.3
7986134	C102	0.7
7986149	C103	0.6
7986133	C104	1.0
7986143	C105	< 0.3
7986137	C106	< 0.3
7986135	C106A	0.7
7986136	C106B	< 0.3
7986138	C106C	< 0.3
7986142	C107	< 0.3
7986139	C108	0.6
7986141	C109	0.7
7986140	C111	< 0.3
7986155	C202	0.9
7986156	C208	< 0.3
7986158	C212	0.6

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Rosa Parks Middle School		
Test Period: 12/04/17-12/07/17		
Kit Number	Room / Area	Result
7986159	C216	1.1
7986150	CAFF	1.0
7986151	CAFF	0.7
7986101	GENERAL OFFICE	0.5
7986165	GUIDENCE SECT.	1.0
7986145	GYM	0.9
7986146	GYM	0.6
7986144	GYM OFFICE	0.7
7986169	HEALTH OFFICE	0.7
7986168	HEALTH ROOM	0.7
7986154	MUSIC	0.7
7986105	PRINCIPAL	0.8
7986106	PRINCIPAL CONF.	0.6
7986161	PRINT ROOM	< 0.3
7986162	SCHOOL SECT.	0.9
7986108	STAFF LOUNGE	1.0
7986148	WEIGHT ROOM	0.9

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Rosa Parks Middle School		
Test Period: 12/04/17-12/07/17		
Kit Number	QC Type	Result
7986116	D (B111)	0.8
7986157	D (C208)	< 0.3
7986102	D (GENERAL OFFICE)	1.1
7986109	D (STAFF LOUNGE)	0.8
7986124	FB (B101)	0.6
7986107	FB (PRINCIPAL CONF.)	< 0.3
7975827	OB (OFFICE BLANK)	< 0.3

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:

**ROSA PARKS MIDDLE SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7986152	A102	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	1.1 ± 0.4	2017-12-12
7986153	A102 OFFICE	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	0.9 ± 0.4	2017-12-12
7986147	A105B	2017-12-04 @ 12:00 pm	2017-12-07 @ 9:00 am	1.5 ± 0.4	2017-12-12
7986129	A106	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	< 0.3	2017-12-12
7986128	A107	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	0.9 ± 0.4	2017-12-12
7986127	A108	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	< 0.3	2017-12-12
7986164	A109	2017-12-04 @ 1:00 pm	2017-12-07 @ 9:00 am	1.0 ± 0.4	2017-12-12
7986131	A110	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	< 0.3	2017-12-11
7986130	A110	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	0.8 ± 0.4	2017-12-12
7986163	A116	2017-12-04 @ 12:00 pm	2017-12-07 @ 9:00 am	< 0.3	2017-12-12
7986166	A135	2017-12-04 @ 1:00 pm	2017-12-07 @ 9:00 am	0.7 ± 0.4	2017-12-12
7986167	A135 OFFICE	2017-12-04 @ 1:00 pm	2017-12-07 @ 9:00 am	0.8 ± 0.4	2017-12-12
7986104	ASST PRINCIPAL2	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.3 ± 0.4	2017-12-12
7986103	ASST. PRINCIPAL1	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	< 0.3	2017-12-12
7986123	B101	2017-12-04 @ 11:00 am	2017-12-07 @ 10:00 am	0.9 ± 0.4	2017-12-12
7986124	B101	2017-12-04 @ 11:00 am	2017-12-07 @ 10:00 am	0.6 ± 0.4	2017-12-12
7986122	B102	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	0.9 ± 0.4	2017-12-12
7986125	B103	2017-12-04 @ 11:00 am	2017-12-07 @ 10:00 am	< 0.3	2017-12-12
7986121	B104	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	0.7 ± 0.4	2017-12-12
7986120	B106	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	1.0 ± 0.4	2017-12-12
7986119	B108	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	0.6 ± 0.4	2017-12-12
7986117	B109	2017-12-04 @ 11:00 am	2017-12-07 @ 10:00 am	< 0.3	2017-12-12
7986118	B110	2017-12-04 @ 11:00 am	2017-12-07 @ 10:00 am	0.5 ± 0.4	2017-12-12
7986116	B111	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	0.8 ± 0.4	2017-12-12
7986115	B111	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	0.6 ± 0.4	2017-12-12
7986114	B112	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	0.9 ± 0.4	2017-12-12
7986126	B113	2017-12-04 @ 11:00 am	2017-12-07 @ 10:00 am	0.8 ± 0.4	2017-12-12
7986113	B114	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	0.9 ± 0.4	2017-12-12
7986112	B116	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	0.6 ± 0.4	2017-12-12
7986111	B118	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	0.7 ± 0.4	2017-12-12
7986110	B120	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	0.6 ± 0.4	2017-12-12
7986160	B207	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	0.6 ± 0.4	2017-12-12
7986132	C101	2017-12-04 @ 11:00 am	2017-12-07 @ 10:00 am	< 0.3	2017-12-12
7986134	C102	2017-12-04 @ 11:00 am	2017-12-07 @ 10:00 am	0.7 ± 0.4	2017-12-12
7986149	C103	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	0.6 ± 0.4	2017-12-12
7986133	C104	2017-12-04 @ 11:00 am	2017-12-07 @ 10:00 am	1.0 ± 0.4	2017-12-12
7986143	C105	2017-12-04 @ 12:00 pm	2017-12-07 @ 9:00 am	< 0.3	2017-12-11

Radon test result report for:

**ROSA PARKS MIDDLE SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7986137	C106	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	< 0.3	2017-12-12
7986135	C106A	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	0.7 ± 0.4	2017-12-12
7986136	C106B	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	< 0.3	2017-12-12
7986138	C106C	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	< 0.3	2017-12-12
7986142	C107	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	< 0.3	2017-12-11
7986139	C108	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	0.6 ± 0.4	2017-12-12
7986141	C109	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	0.7 ± 0.4	2017-12-12
7986140	C111	2017-12-04 @ 11:00 am	2017-12-07 @ 9:00 am	< 0.3	2017-12-12
7986155	C202	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	0.9 ± 0.4	2017-12-12
7986156	C208	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	< 0.3	2017-12-12
7986157	C208	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	< 0.3	2017-12-12
7986158	C212	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	0.6 ± 0.4	2017-12-12
7986159	C216	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	1.1 ± 0.4	2017-12-12
7986150	CAFF	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	1.0 ± 0.4	2017-12-12
7986151	CAFF	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	0.7 ± 0.4	2017-12-12
7986101	GENERAL OFFICE	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	0.5 ± 0.4	2017-12-12
7986102	GENERAL OFFICE	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.1 ± 0.4	2017-12-12
7986165	GUIDENCE SECT.	2017-12-04 @ 1:00 pm	2017-12-07 @ 9:00 am	1.0 ± 0.4	2017-12-12
7986145	GYM	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	0.9 ± 0.4	2017-12-12
7986146	GYM	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	0.6 ± 0.4	2017-12-12
7986144	GYM OFFICE	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	0.7 ± 0.4	2017-12-12
7986169	HEALTH OFFICE	2017-12-04 @ 1:00 pm	2017-12-07 @ 10:00 am	0.7 ± 0.4	2017-12-12
7986168	HEALTH ROOM	2017-12-04 @ 1:00 pm	2017-12-07 @ 10:00 am	0.7 ± 0.4	2017-12-12
7986154	MUSIC	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	0.7 ± 0.4	2017-12-12
7975827	OFFICE BLANK	2017-12-04 @ 11:00 am	2017-12-07 @ 11:00 am	< 0.3	2017-12-12
7986105	PRINCIPAL	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	0.8 ± 0.4	2017-12-12
7986106	PRINCIPAL CONF.	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	0.6 ± 0.4	2017-12-12
7986107	PRINCIPAL CONF.	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	< 0.3	2017-12-12
7986161	PRINT ROOM	2017-12-04 @ 12:00 pm	2017-12-07 @ 9:00 am	< 0.3	2017-12-12
7986162	SCHOOL SECT.	2017-12-04 @ 12:00 pm	2017-12-07 @ 9:00 am	0.9 ± 0.4	2017-12-12
7986108	STAFF LOUNGE	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	1.0 ± 0.4	2017-12-12
7986109	STAFF LOUNGE	2017-12-04 @ 10:00 am	2017-12-07 @ 9:00 am	0.8 ± 0.4	2017-12-12
7986148	WEIGHT ROOM	2017-12-04 @ 12:00 pm	2017-12-07 @ 10:00 am	0.9 ± 0.4	2017-12-12



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase

Names of Schools:

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

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

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

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

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

December 19, 2017

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

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

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies Inc. Job Number 182393

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

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

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

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

7975075, 7975064, 7975063, _____

7975065, 7975069, 7975070 _____

F4 Right

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

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

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

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

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

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

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



MCPS RADON TESTING

Executive Summary: Rosa Parks Middle School

Date of Test Report:	10/20/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	3
# Rooms \geq 4.0 pCi/L:	0
Low Value:	< 0.3
High Value:	0.6

Project Status:

Post remediation testing completed; no further action at this time.



October 20, 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 # 12146341.54

Location: Rosa Parks Middle School
19200 Olney Mill Road
Olney, MD 20832

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 Rosa Parks Middle School, located at 19200 Olney Mill Road in Olney, Maryland 20832 (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 September 27, 2016 and deployed five (5) 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 September 30, 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:

These tests represent:

- Post-mitigation testing for radon mitigation systems installed recently.

To expedite the testing, tests were conducted in September as soon as students and staff returned to:

- Confirm the success of the mitigation system(s).

Future periodic testing should be conducted during the heating season in ideal conditions as described below. 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 cooling mode; therefore, KCI concludes that this test was not 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 50s and high temperatures in the mid-60s to mid-70s. Maximum sustained winds ranged from 3-15 miles per hour. Average humidity ranged from 71 to 89 percent. Rain (1.83 inches in Gaithersburg, MD) was recorded on 9/29/16. The weather conditions during the testing period may have resulted in atypical radon test results for this facility.

Results:

The results of the radon test analysis indicated the following:

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

Notes:

D- Duplicate sample

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

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

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

Sincerely,



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

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

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Radon Testing Results		
Rosa M Parks Middle School		
Test Period: 09/27/16-09/30/16		
Kit Number	Room / Area	Result
7802580	B111	< 0.3
7802581	B112	0.6
7802582	B114	< 0.3

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Rosa M Parks Middle School		
Test Period: 09/27/16-09/30/16		
Kit Number	QC Type	Result
7802584	D (B111)	< 0.3
7802583	FB (B114)	< 0.3

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

October 7, 2016

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**ROSA M PARKS MIDDLE SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7802584	B111	2016-09-27 @ 10:00 am	2016-09-30 @ 9:00 am	< 0.3	2016-10-03
7802580	B111	2016-09-27 @ 10:00 am	2016-09-30 @ 9:00 am	< 0.3	2016-10-03
7802581	B112	2016-09-27 @ 10:00 am	2016-09-30 @ 9:00 am	0.6 ± 0.2	2016-10-03
7802583	B114	2016-09-27 @ 10:00 am	2016-09-30 @ 9:00 am	< 0.3	2016-10-03
7802582	B114	2016-09-27 @ 10:00 am	2016-09-30 @ 9:00 am	< 0.3	2016-10-03

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

October 7, 2016

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

MCPS Radon

Phase 18 Office Blanks

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7802697	1	2016-09-26 @ 11:00 am	2016-09-29 @ 11:00 am	< 0.3	2016-10-03
7801899	10	2016-09-26 @ 11:00 am	2016-09-29 @ 11:00 am	< 0.3	2016-10-03
7802932	11	2016-09-26 @ 11:00 am	2016-09-29 @ 11:00 am	< 0.3	2016-10-03
7802935	12	2016-09-26 @ 11:00 am	2016-09-29 @ 11:00 am	< 0.3	2016-10-03
7802915	13	2016-09-26 @ 11:00 am	2016-09-29 @ 11:00 am	< 0.3	2016-10-03
7802941	2	2016-09-26 @ 11:00 am	2016-09-29 @ 11:00 am	< 0.3	2016-10-03
7802942	3	2016-09-26 @ 11:00 am	2016-09-29 @ 11:00 am	< 0.3	2016-10-03
7802919	4	2016-09-26 @ 11:00 am	2016-09-29 @ 11:00 am	< 0.3	2016-10-03
7802918	5	2016-09-26 @ 11:00 am	2016-09-29 @ 11:00 am	< 0.3	2016-10-03
7802917	6	2016-09-26 @ 11:00 am	2016-09-29 @ 11:00 am	< 0.3	2016-10-03
7802916	7	2016-09-26 @ 11:00 am	2016-09-29 @ 11:00 am	< 0.3	2016-10-03
7802952	8	2016-09-26 @ 11:00 am	2016-09-29 @ 11:00 am	< 0.3	2016-10-03
7802928	9	2016-09-26 @ 11:00 am	2016-09-29 @ 11:00 am	< 0.3	2016-10-03

Radon test result report for:

MCPS Radon**Phase 18 Transit Blanks**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7714274	1	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03
7802962	10	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03
7714295	11	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03
7714299	12	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03
7714273	13	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03
7714270	14	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03
7802965	2	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03
7802696	3	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03
7802690	4	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03
7714275	5	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03
7714298	6	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03
7802990	7	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03
7802974	8	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03
7802694	9	2016-09-26 @ 10:00 am	2016-09-29 @ 10:00 am	< 0.3	2016-10-03

October 12, 2016

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
**MCPS Radon
Spike Sample Results**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7769880	101	2016-09-24 @ 8:00 am	2016-09-26 @ 8:00 am	22.9 ± 1.0	2016-09-28
7769884	102	2016-09-24 @ 8:00 am	2016-09-26 @ 8:00 am	22.4 ± 1.0	2016-09-28
7769885	103	2016-09-24 @ 8:00 am	2016-09-26 @ 8:00 am	23.0 ± 1.0	2016-09-28
7769890	104	2016-09-24 @ 8:00 am	2016-09-26 @ 8:00 am	22.3 ± 1.0	2016-09-28
7769891	105	2016-09-24 @ 8:00 am	2016-09-26 @ 8:00 am	26.8 ± 1.2	2016-09-28
7769899	106	2016-09-24 @ 8:00 am	2016-09-26 @ 8:00 am	24.1 ± 1.1	2016-09-28

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 176788

NOMINAL Conditions: Radon Conc 26.1 pCi/L Rel. Hum 49.6 % Temp. 70.0 F

Date Start: 9/24/16 Date Stop: 9/26/16 Date Start: _____ Date Stop: _____

Time Start: 0758 Time Stop: 0758 Time Start: _____ Time Stop: _____

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

7769899, 7769884, 7769885, _____

7769889, 7769890, 7769891 _____

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**



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 18

Name of Schools:

1. Wood Acres Elementary School
2. Walt Whitman High School
3. Burning Tree Elementary School
4. Ashburton Elementary School
5. Bethesda Maintenance
6. Bethesda Transportation
7. Herbert Hoover Middle School
8. Cold Spring Elementary School
9. Garret Park Elementary School
10. Rock View Elementary School
11. Francis Scott Key Middle School
12. Montgomery Blair High School
13. Stephen Knolls School
14. Lourie Center
15. Shriver Elementary School
16. Viers Mill Elementary School
17. Highland Elementary School
18. Newport Middle School
19. Albert Einstein High School
20. Sligo Middle School
21. East Silver Spring Elementary School
22. Oak View Elementary School
23. Roscoe Nix Elementary School
24. Northwood High School
25. Springbrook High School
26. John F. Kennedy High School

	Date	Initials
Radon Test Kits Deployed	9/26/16	JM
Radon Test Kits Collected	9/29/16	JM
Radon Test Kits Shipped to Lab*	9/30/16	JM
Radon Test Kits Received by Lab*	10/03/16	JM

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 18

Name of Schools:

- | | |
|--|-----------------------------------|
| 1. Damascus High School | 17. Watkins Mills High School |
| 2. Cedar Grove Elementary School | 18. Forest Oak Middle School |
| 3. Hallie Wells Middle School | 19. Gaithersburg Middle School |
| 4. Clarksburg Elementary School | 20. Emory Grove |
| 5. Clarksburg High School | 21. Fields Road Elementary School |
| 6. Woodlin Elementary School | 22. Beall Elementary School |
| 7. Flora Singer Elementary School | 23. Julius West Middle School |
| 8. Spring Mill Center | 24. Thomas Wootton High School |
| 9. Dr. Charles Drew Elementary School | 25. Robert Frost High School |
| 10. William Farquah Middle School | 26. Travilah Elementary School |
| 11. Rosa Parks Middle School | 27. Jones Lane Elementary School |
| 12. Blair Ewing Center | 28. Longview School |
| 13. Lathrop Smith Environmental Center | 29. Rock Terrace High School |
| 14. Sequoyah Elementary School | 30. Germantown Elementary School |
| 15. Shady Grove Middle School | 31. Lake Seneca Elementary School |
| 16. Captain James Daly Elementary School | |

	Date	Initials
Radon Test Kits Deployed	9/27/16	JM
Radon Test Kits Collected	9/30/16	JM
Radon Test Kits Shipped to Lab*	9/30/16	JM
Radon Test Kits Received by Lab*	10/03/16	JM

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

RADON SCREENING SURVEY – FOLLOW-UP ROSA PARKS MIDDLE SCHOOL

19200 Olney Mill Road, Olney, Maryland 20832

EXECUTIVE SUMMARY

Date of Test Report:	4/18/16 (Rev 1 Follow-Up)
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested	2
# Rooms \geq 4.0 pCi/L:	0
Low Value:	<0.3
High Value:	1.9
Confirmed Rooms \geq 4.0 pCi/L US EPA Action Level	1

Summary of Sampling Events \geq 4.0 pCi/L

Room	Result (pCi/L) 4/18/16 (Rev 1 Initial)	Result (pCi/L) 4/18/16 (Rev 1 Follow-Up)	Average Result (pCi/L)
B112	9.7	1.5	5.6
135	<0.3 Tampered	<0.3	<0.3



MCPS RADON TESTING

Executive Summary: Rosa Parks Middle School

Date of Test Report:	4/18/2016 (Rev 1)
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	2
# Rooms \geq 4.0 pCi/L:	0
Low Value:	< 0.3
High Value:	1.9

Project Status:

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



April 18, 2016 (Rev 1)

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

Re: **Radon Testing Services**
KCI Job # 12146341.29

Location: Rosa Parks Middle School
19200 Olney Mill Road
Olney, MD 20832

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 Rosa Parks Middle School, located at 19200 Olney Mill Road in Olney, Maryland 20832 (subject site).

Scope of Services:

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

KCI visited the site on February 22, 2016 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. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on February 25, 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 $\leq 65^{\circ}$ F.

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

KCI also conducted observations of field conditions which could affect the results of the test and compiled weather data for the testing period. Note that strong storms and heavy rainfall were recorded during the test period. The unusual weather conditions may have resulted in atypical radon test results for this facility.

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

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

Results:

The results of the radon test analysis indicated the following:

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

Notes:

D- Duplicate sample

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

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

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

Sincerely,



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

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

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank*

PM- Project Manager

QC- Quality Control

*Office blanks were submitted at a rate of 1% for all samples deployed in Phase 9 testing. Office blanks were not submitted under each school individually.

Radon Testing Results		
Rosa Parks Middle School		
Test Period: 02/22/16-02/25/16		
Kit Number	Room / Area	Result
7729784	B112	1.5
7729786	135	< 0.3

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Rosa Parks Middle School		
Test Period: 02/22/16-02/25/16		
Kit Number	QC Type	Result
7729785	D (B112)	1.9
7729791	FB (135)	< 0.3

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

March 8, 2016 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
**ROSA PARKS MIDDLE SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7729784	B112	2016-02-22 @ 9:00 am	2016-02-25 @ 10:00 am	1.5 ± 0.3	2016-02-29
7729785	B112	2016-02-22 @ 9:00 am	2016-02-25 @ 10:00 am	1.9 ± 0.3	2016-02-29
7729786	135	2016-02-22 @ 9:00 am	2016-02-25 @ 10:00 am	< 0.3	2016-02-29
7729791	135	2016-02-22 @ 9:00 am	2016-02-25 @ 10:00 am	< 0.3	2016-02-29

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

March 9, 2016 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
MCPS
Phase 9 Office Blanks

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

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

March 9, 2016 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
MCPS
Phase 9 Office Blanks

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

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

February 23, 2016
LABORATORY ANALYSIS REPORT

Radon test result report for:
TRANSIT- PHASE 7, 8, 9
NONE

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

February
15,
2016

**** LABORATORY ANALYSIS
REPORT ****

Spike Sample Laboratory Results

Radon test result report for:
MCPS

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

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCF Technologies Inc. Job Number 173704

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

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

Time Start: 0926 Time Stop: 0926 Time Start: _____ Time Stop: _____

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

7718281, 7718282, 7718291, _____

7718288, 7718289, 7718273 _____

ε3 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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 9

Name of Schools:

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

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

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 9

Name of Schools:

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

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

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



MCPS RADON TESTING

Executive Summary: Rosa Parks Middle School

Date of Test Report:	4/18/2016 (Rev 1)
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	60
# Rooms \geq 4.0 pCi/L:	1
Low Value:	< 0.3
High Value:	9.7

Rooms with results \geq 4.0 pCi/L:
Room B112 (9.7 pCi/L)

Project Status:

Initial testing completed; re-test needed for results \geq 4.0 pCi/L.
Initial testing completed; missing or compromised samples need re-test.



April 18, 2016 (Rev 1)

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

Re: **Radon Testing Services**
KCI Job # 12146341.21

Location: Rosa Parks Middle School
19200 Olney Mill Road
Olney, MD 20832

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 Rosa Parks Middle School, located at 19200 Olney Mill Road in Olney, Maryland 20832 (subject site).

Scope of Services:

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

KCI visited the site on December 28, 2015 and deployed sixty-eight (68) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on December 31, 2015 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936

Butler Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

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

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

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

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

Results:

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥ 4.0 pCi/L	B112	9.7
< 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,



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

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

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

Radon Testing Results		
Rosa Park Middle School		
Test Period: 12/28/15-12/31/15		
Kit Number	Room / Area	Result
7712679	101	< 0.3
7713075	101	< 0.3
7713908	101	0.9
7712680	102	< 0.3
7713976	102	< 0.3
7713997	102	1.1
7712681	103	< 0.3
7712685	103	1.2
7713996	103	1.1
7712682	104	< 0.3
7713975	104	0.8
7713059	105	1
7713069	105	< 0.3
7712668	106	< 0.3
7713036	106	0.6
7713061	107	< 0.3
7713074	107	< 0.3
7712671	108	< 0.3
7713066	108	1.1
7713993	108	< 0.3
7713058	109	1.3
7713994	109	< 0.3
7712676	110	< 0.3
7713063	110	1.4
7713064	110	< 0.3
7713983	110	< 0.3
7712675	111	< 0.3
7713984	111	1.3
7713988	B112	9.7
7713068	114	0.6
7713065	116	0.6
7708202	118	0.6
7713072	120	0.6
7713081	207	0.6
7713086	209	< 0.3
7713085	211	< 0.3
7713079	213	< 0.3
7713088	215	< 0.3
7713989	105A	0.9
7712673	105B	1.1
7712669	106A	< 0.3
7708204	* 135 (tampered)	< 0.3
7713067	ASST PRINCIPLE	0.6
7713980	ASST PRINCIPLE	0.6
7712670	CAFE	< 0.3
7712672	CAFE	0.9

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Rosa Park Middle School		
Test Period: 12/28/15-12/31/15		
Kit Number	Room / Area	Result
7712674	CAFE	< 0.3
7713987	CAFE103	< 0.3
7712688	GUIDANCE	0.8
7713999	GUIDANCE	< 0.3
7714000	GUIDANCE	< 0.3
7713986	GYM	< 0.3
7713990	GYM	< 0.3
7708201	LIB COMP	< 0.3
7713073	LIBRARIAN	< 0.3
7712691	LOUNGE	< 0.3
7712687	OFFICE	< 0.3
7713071	OFFICE	< 0.3
7713038	PRIN CONF	< 0.3
7713010	PRINCIPLE	< 0.3

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Rosa Park Middle School		
Test Period: 12/28/15-12/31/15		
Kit Number	QC Type	Result
7713977	D (102)	0.8
7713070	D (116)	1
7713078	D (215)	0.6
7712677	D (CAFE)	0.8
7713985	D (GYM)	0.6
7713992	FB (110)	< 0.3
7713082	FB (CAFE)	< 0.3
7711307	OB (0)	< 0.3

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

January 16, 2016
LABORATORY ANALYSIS REPORT

Radon test result report for:
ROSA PARK MIDDLE SCHOOL MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7711307	0	2015-12-28 @ 3:00 pm	2015-12-31 @ 12:00 pm	< 0.3	2016-01-04
7713908	101	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	0.9 ± 0.3	2016-01-04
7712679	101	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713075	101	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-05
7713977	102	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	0.8 ± 0.3	2016-01-04
7712680	102	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713997	102	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	1.1 ± 0.3	2016-01-04
7713976	102	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-05
7712681	103	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7712685	103	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	1.2 ± 0.3	2016-01-04
7713996	103	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	1.1 ± 0.4	2016-01-05
7713975	104	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	0.8 ± 0.3	2016-01-04
7712682	104	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713059	105	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	1.0 ± 0.3	2016-01-04
7713069	105	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713989	105A	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	0.9 ± 0.3	2016-01-04
7712673	105B	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.1 ± 0.3	2016-01-04
7712668	106	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713036	106	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	0.6 ± 0.3	2016-01-05
7712669	106A	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713061	107	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713074	107	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7712671	108	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713993	108	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713066	108	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	1.1 ± 0.4	2016-01-05
7713058	109	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	1.3 ± 0.4	2016-01-04
7713994	109	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7712676	110	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713992	110	2015-12-28 @ 10:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713063	110	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	1.4 ± 0.4	2016-01-05
7713064	110	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-05
7713983	110	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-05
7712675	111	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713984	111	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	1.3 ± 0.4	2016-01-05
7713988	B112	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	9.7 ± 1.0	2016-01-05
7713068	114	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	0.6 ± 0.4	2016-01-05
7713065	116	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	0.6 ± 0.3	2016-01-04

January 16, 2016 **LABORATORY ANALYSIS REPORT ****

Radon test result report for:
**ROSA PARK MIDDLE SCHOOL
 MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7713070	116	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	1.0 ± 0.3	2016-01-04
7708202	118	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	0.6 ± 0.4	2016-01-05
7713072	120	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	0.6 ± 0.4	2016-01-05
7708204	135	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713081	207	2015-12-28 @ 1:00 pm	2015-12-31 @ 9:00 am	0.6 ± 0.3	2016-01-04
7713086	209	2015-12-28 @ 1:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713085	211	2015-12-28 @ 1:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713079	213	2015-12-28 @ 1:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713078	215	2015-12-28 @ 1:00 pm	2015-12-31 @ 9:00 am	0.6 ± 0.3	2016-01-04
7713088	215	2015-12-28 @ 1:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713067	ASST PRINCIPLE	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	0.6 ± 0.3	2016-01-04
7713980	ASST PRINCIPLE	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	0.6 ± 0.3	2016-01-04
7713082	CAFE	2015-12-28 @ 1:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7712670	CAFE	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7712672	CAFE	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	0.9 ± 0.4	2016-01-04
7712677	CAFE	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	0.8 ± 0.3	2016-01-04
7712674	CAFE	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-05
7713987	CAFE103	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713999	GUIDANCE	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	< 0.3	2016-01-04
7712688	GUIDANCE	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	0.8 ± 0.3	2016-01-04
7714000	GUIDANCE	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	< 0.3	2016-01-05
7713985	GYM	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	0.6 ± 0.3	2016-01-04
7713986	GYM	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713990	GYM	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-05
7708201	LIB COMP	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7713073	LIBRARIAN	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-05
7712691	LOUNGE	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	< 0.3	2016-01-04
7713071	OFFICE	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	< 0.3	2016-01-04
7712687	OFFICE	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	< 0.3	2016-01-05
7713038	PRIN CONF	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	< 0.3	2016-01-04
7713010	PRINCIPLE	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	< 0.3	2016-01-04

January 15, 2016
** LABORATORY ANALYSIS REPORT **

Radon test result report for:
**MCPS PHASE 3 & 4
TRANSIT BLANKS**

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

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**



Chain of Custody

Project Name: MCPS Radon Phase III

Name of Schools:

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

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

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