MCPS DEM SUSTAINABILITY & COMPLIANCE

School / Facility Radon Testing Report Form

School Year: **24-25**

Facility:	Parkland Middle School
Address:	4610 West Frankfort Dr.
	Rockville, MD 20853
Reason for Testing:	Scheduled Re-Testing - ☐ 2-year or ☒ 5-year schedule ☐ Clearance Testing (Post-Mitigation) ☒ Building Envelope or HVAC Upgrades ☐ New Construction – Addition or Facility
Current Radon Status:	☐ Active Mitigation (2-year regular schedule) ☒ No Active Mitigation (5-year regular schedule) ☐ Not Previously Tested (New Facility)
Round of Testing:	☐ Initial Testing **-or-** ☒ Follow-up Testing
Testing Status:	☒ No Further Testing Needed **-or-** ☐ Follow-Up Testing Required

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

Mitigation -	**Facility Radon Status:**		
☒ Not Required ☐ Required (≥4.0-pCi/L) Rooms:	☒ No Change in Status ☐ Active Mitigation (2-year regular schedule) ☐ No Active Mitigation (5-year regular schedule)		
Number of Rooms Tested	97	Lowest Value (pCi/L)	< 0.3
Number of Rooms (≥4.0-pCi/L)	0	Highest Value (pCi/L)	0.8

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

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

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

Attachment 2 – Laboratory Report(s)

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

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School / Facility Radon Testing Report Form

Detector and Deployment

Detector/Device Type:	☒ Passive ☐ Continuous	☒ Charcoal Absorption (CAD) ☐ Alpha Track (ATD) ☐ Other ☐ Electret ion Chamber (EIC) ☐ Electronic Integration (EID)
	Other–Specify here:	
Detector/Device Name:	Air Chek – Radon Test Kits	
Manufacturer:	Radon Lab	

Person(s) Deploying or Retrieving Test Devices and certification number	Organization/Company
Tyler McCleaf, CSP – Cert. #111004 – RMP	KCI Technologies, Inc.
Shannon King	KCI Technologies, Inc.
If noncertified individuals, the qualified measurement professional providing oversight -	
Tyler McCleaf, CSP – Cert. #111004 – RMP	KCI Technologies, KCI

Testing

☒ Short-Term ☐ Long-Term	Length of Test (days):	3	Date of Deployment and Retrieval (mm/dd/yy):	02/03/25 02/06/25	03/24/25 03/27/25
Does the test period include weekends, school breaks or holidays?				☐ Yes ☒ No	
*If "**Yes**" please explain/detail in the space below:*					
Was HVAC operating under occupied conditions?				☒ Yes ☐ No	
*If "**No**" please explain/detail in the space below:*					

Testing (continued)

	Detectors Deployed				
	Ground-Contact		Upper-Level(s)		Total
Round of Testing	Initial	Follow-Up	Initial	Follow-Up	
Test Locations[1]	95	2	1	0	98
Duplicates[2]	10	1	0	0	11
Field Blanks[3]	4	1	0	0	5
				Grand Total	114

1 – include all detectors deployed (duplicates, field blanks); 1 detector per occupied (or intended to be occupied) ground-contact space ≤ 2,000-square feet; large spaces ≥ 2,000-square feet - 1 detector per 2,000-square feet or part thereof); and upper floors - 10% of all occupied or intended to be occupied rooms per floor (these are in addition to ground contact locations)
2 - 10% of all locations tested, per floor
3 – 5% of all locations tested, per floor

Quality Assurance / Quality Control (QA/QC)

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

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

1 - 3% of EIC detectors; and 3% from each LOT of CAD and ATD detectors; a maximum of 6-spiked measurements per month for both EIC detectors and each LOT of CAD and ATD detectors.
2 – One per shipping container from start of detector deployment
3 – One per facility tested as devices are removed/allocated from the storage location for deployment;
4 - One additional blank, analyzed prior to deployment, for storage locations that have not been evaluated or monitored, for detectors that have been stored for more than 30-day durations.

Quality Assurance / Quality Control (continued)

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

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

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

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

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

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

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

	Ground-Contact		Upper-Level(s)		Total
Round of Testing	**Initial**	**Follow-Up**	**Initial**	**Follow-Up**	
Number of test locations:	95	1	1	0	97
Number of locations ≥8.0-pCi/L:	0	0	0	0	0
Number of locations ≥4.0 and ≤8-pCi/L:	0	0	0	0	0
Number of locations ≥2.7 and <4-pCi/L:	0	0	0	0	0
Number of locations ≥2.0 and <2.7-pCi/L:	0	0	0	0	0
Number of missing required test locations[3]:	2	0	0	0	2
Number of failed duplicate control locations:	1	0	0	0	1
Percentage of missing test locations for the facility[4,5]:	2.11%	0	0	0	2.06%

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

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

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

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

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

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

Round of Testing	Initial	Follow-Up
Were test devices deployed in all occupied and intended to be occupied rooms in contact with the ground, and, if applicable, 10% of upper floor rooms?	☒ Yes ☐ No	☒ Yes ☐ No
Were valid measurements obtained in all occupied and intended to be occupied rooms in contact with the ground, and, if applicable, 10% of upper floor rooms?	☐ Yes ☒ No	☐ Yes ☒ No
If Yes to both above *– then Testing Status –* ***'No Further Testing Needed'*** *mark 'NA' below and complete Conclusions section*		
If No to either above, were all results obtained under 4.0-pCi/L **and** were sufficient valid measurements obtained?[1,2] ***If Yes,*** *then -* ***'No Further Testing Needed'*** *complete Conclusion section on first page.* ***If No****, then -* ***'Follow-up Testing Required'*** *continue below.*	☐ Yes ☒ No ☐ NA	☒ Yes ☐ No ☐ NA

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

Follow-Up Testing

Required –

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

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

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

Attachment 1:

Summary Data Tables

Table 1- Radon Testing Results		
Parkland Middle School		
Test Period: 2/3/2025 - 2/6/2025		
Kit Number	Room / Area	Result
11919788	1002	< 0.3
11919783	1004	< 0.3
11919792	1004	< 0.3
11951622	1005	0.6
11951635	1009	0.8
11951639	1011	< 0.3
11951624	1012	< 0.3
11951645	1012	< 0.3
11951632	1015	< 0.3
11951630	1020	< 0.3
11951631	1022	< 0.3
11951613	1111	< 0.3
11951619	1111	< 0.3
11951617	1113	< 0.3
11951618	1113	< 0.3
11951637	1117	< 0.3
11951649	1125	0.6
11951643	1127	0.5
11951629	1129	< 0.3
11951644	1129	< 0.3
11951638	1131	< 0.3
11951648	1132	< 0.3
11951646	1134	< 0.3
11951641	1136	< 0.3
11951650	1136	< 0.3
11951605	1140	< 0.3
11951612	1142	< 0.3
11951606	1148	0.7
11951607	1150	< 0.3
11951691	1200	< 0.3
11951692	1200	< 0.3
11951693	1210	< 0.3
11951621	1214	< 0.3
11951653	1215	< 0.3
11951652	1216	< 0.3
11951628	1220	0.5
11951665	1221	0.5

Table 1- Radon Testing Results		
Parkland Middle School		
Test Period: 2/3/2025 - 2/6/2025		
Kit Number	Room / Area	Result
11951664	1222	0.5
11951659	1225	< 0.3
11951663	1226	0.7
11951660	1228	< 0.3
11951658	1232	< 0.3
11951675	1232	< 0.3
11951679	1300	< 0.3
11951684	1304	< 0.3
11951683	1306	< 0.3
11951682	1310	< 0.3
11951688	1311	< 0.3
11951694	1313	< 0.3
11951687	1314	< 0.3
11951689	1318	< 0.3
11951696	1318	< 0.3
11951677	1322	< 0.3
11951690	1324	< 0.3
11951604	1330	< 0.3
11951603	1332	< 0.3
11951609	1332	< 0.3
11951669	1334	< 0.3
11951610	1338	< 0.3
11951674	1340	< 0.3
11951681	1340	0.6
11951671	1344	< 0.3
11951673	1345	< 0.3
11951662	1400	< 0.3
11951667	1400	< 0.3
11951676	1403	< 0.3
11951668	1404	< 0.3
11951654	1405	0.7
11951666	1405	< 0.3
11951655	1407	0.7
11951656	1408	< 0.3
11951661	1410	< 0.3
11951670	2020	< 0.3
11919790	1000A	< 0.3

Table 1- Radon Testing Results		
Parkland Middle School		
Test Period: 2/3/2025 - 2/6/2025		
Kit Number	Room / Area	Result
11919789	1000B	< 0.3
11919786	1000C	< 0.3
11919787	1000D	< 0.3
11919785	1000F	< 0.3
11919784	1000G	< 0.3
11919778	1000H	0.5
11919777	1004A	< 0.3
11931000	1004B	< 0.3
11951616	1004C	0.7
11951615	1004D	0.8
11951626	1004E	< 0.3
11951647	1005A	0.8
11951633	1011A	< 0.3
11951634	1011A	< 0.3
11951623	1020A	< 0.3
11951642	1117A	< 0.3
11951640	1123A	< 0.3
11951686	1200A	< 0.3
11951602	1200B	< 0.3
11951601	1200C	< 0.3
11951699	1209A	0.7
11951700	1209E	< 0.3
11951657	1228B	< 0.3
11951695	1313A	< 0.3
11951680	1314A	< 0.3
11951608	AUX GYM	< 0.3
11951614	AUX GYM	< 0.3
11951620	CAFE	< 0.3
11951627	CAFE	< 0.3
11951625	KITCHEN OFFICE	< 0.3
11919791	MAIN OFFICE	< 0.3
11951697	MEDIA	< 0.3
11951698	MEDIA	< 0.3
11951672	NURSE	< 0.3
11951685	NURSE	< 0.3
11951678	NURSE OFFICE	< 0.3

Table 2 - Summary Testing Results ≥2.0 pCi/L							
Parkland Middle School							
Test Period: 2/3/2025 - 2/6/2025							
≥2.0 and <2.7 pCi/L		≥2.7 and <4.0 pCi/L		≥4.0 and <8.0 pCi/l		≥8.0 pCi/L	
Room / Area	Result	Room / Area	Result	Room / Area	Result	Room / Area	Result
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3 - QC Radon Testing Results			
Parkland Middle School			
Test Period: 2/3/2025 - 2/6/2025			
Kit Number	**QC Type**	**Room / Area**	**Result**
11919783	D	1004	< 0.3
11951613	FB	1111	< 0.3
11951618	D	1113	< 0.3
11951644	D	1129	< 0.3
11951650	D	1136	< 0.3
11951691	D	1200	< 0.3
11951675	D	1232	< 0.3
11951689	D	1318	< 0.3
11951603	FB	1332	< 0.3
11951674	D	1340	< 0.3
11951662	FB	1400	< 0.3
11951666	D	1405	< 0.3
11951633	D	1011A	< 0.3
11951685	FB	Nurse	< 0.3
11931691	OB	OFFICE BLANK	< 0.3
11931692	TB	TRAVEL BLANK	< 0.3

Table 3a - Duplicate Worksheet / Data Validation										
Parkland Middle School										
Test Period: 2/3/2025 - 2/6/2025										
Sample ID			Duplicate Concentrations (pCi/L) and QC Checks							
Kit Numbers		Room / Area	Higher	Lower	Check #1 (Pass/Fail)	2x the Lower	Check #2 (Pass/Fail)	Average	Relative Percent Difference (RPD)	Check #3
11919792	11919783	1004	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11951617	11951618	1113	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11951634	11951633	1011A	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11951629	11951644	1129	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11951641	11951650	1136	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11951654	11951666	1405	0.7	0.3	✓	0.6	FAIL	0.5	<1-pCi/L	✗
11951681	11951674	1340	0.6	0.3	✓	0.6	PASS	0.5	<1-pCi/L	✓
11951658	11951675	1232	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11951696	11951689	1318	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11951692	11951691	1200	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓

NOTES:

QC Check #1 - Data Entry

QC Check #2 - Higher duplicate concentration is < or = to 2x the Lower

QC Check #3 - Meets RPD Limits, by average duplicate concentration

- enter 2 if RPD is BELOW warning and control levels, AND passes QC Check 1 and 2
- enter 1 if RPD is ABOVE warning and BELOW control levels, AND passes QC Check 1 and 2
- enter 0 if RPD is ABOVE control level, or 'FAILS' QC Check 1 or 2

Average (pCi/L)	Warning Level	Control Level
< 2.0	1-pCi/L	NA
Between 2.0 and 3.9	50% RPD	67% RPD
≥ 4.0	28% RPD	36% RPD

Table 4 - Summary of Invalid Measurement Locations		
Parkland Middle School		
Test Period: 2/3/25 - 2/6/25		
Kit Number	**Room/Area**	**Reason**
11951611	1140	Missing Kit
11951636	Gym	Missing Kit
11951651	Gym	Missing Kit

Table 1- Radon Testing Results		
Parkland Middle School RT		
Test Period: 3/24/2025 - 3/27/2025		
Kit Number	Room / Area	Result
11892484	1405	< 0.3
11892485	1405	0.8
11892486	1405	< 0.3
11892487	1405	< 0.3

Table 2 - Summary Testing Results ≥2.0 pCi/L							
Parkland Middle School RT							
Test Period: 3/24/2025 - 3/27/2025							
≥2.0 and <2.7 pCi/L		≥2.7 and <4.0 pCi/L		≥4.0 and <8.0 pCi/l		≥8.0 pCi/L	
Room / Area	Result	Room / Area	Result	Room / Area	Result	Room / Area	Result
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3 - QC Radon Testing Results			
Parkland Middle School RT			
Test Period: 3/24/2025 - 3/27/2025			
Kit Number	**QC Type**	**Room / Area**	**Result**
11892486	D	1405	< 0.3
11892487	FB	1405	< 0.3
11951800	OB	OFFICE BLANK	< 0.3
11892493	TB	TRAVEL BLANK	< 0.3

Table 3a - Duplicate Worksheet / Data Validation										
Parkland Middle School RT										
Test Period: 3/24/2025 - 3/27/2025										
Sample ID			Duplicate Concentrations (pCi/L) and QC Checks							
Kit Numbers		Room / Area	Higher	Lower	Check #1 (Pass/Fail)	2x the Lower	Check #2 (Pass/Fail)	Average	Relative Percent Difference (RPD)	Check #3
11892486	11892484 11892485	1405	0.6	0.3	✓	0.6	PASS	0.5	<1-pCi/L	✓

NOTES:

QC Check #1 - Data Entry

QC Check #2 - Higher duplicate concentration is < or = to 2x the Lower

QC Check #3 - Meets RPD Limits, by average duplicate concentration

- enter 2 if RPD is BELOW warning and control levels, AND passes QC Check 1 and 2
- enter 1 if RPD is ABOVE warning and BELOW control levels, AND passes QC Check 1 and 2
- enter 0 if RPD is ABOVE control level, or 'FAILS' QC Check 1 or 2

Average (pCi/L)	Warning Level	Control Level
< 2.0	1-pCi/L	NA
Between 2.0 and 3.9	50% RPD	67% RPD
≥ 4.0	28% RPD	36% RPD

Table 4 - Summary of Invalid Measurement Locations		
Parkland Middle School RT		
Test Period: 3/24/25 - 3/27/25		
Kit Number	**Room/Area**	**Reason**
N/A	N/A	N/A

Attachment 2:

Laboratory Reports

February 10, 2025 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
PARKLAND MS
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11919790	1000A	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11919789	1000B	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11919786	1000C	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11919787	1000D	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11919785	1000F	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11919784	1000G	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11919778	1000H	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	0.5 ± 0.3	2025-02-10
11919788	1002	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11919783	1004	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11919792	1004	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11919777	1004A	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11931000	1004B	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951616	1004C	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	0.7 ± 0.3	2025-02-10
11951615	1004D	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	0.8 ± 0.3	2025-02-10
11951626	1004E	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951622	1005	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	0.6 ± 0.3	2025-02-10
11951647	1005A	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	0.8 ± 0.3	2025-02-10
11951635	1009	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	0.8 ± 0.3	2025-02-10
11951639	1011	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951634	1011A	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951633	1011A	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951624	1012	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951645	1012	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951632	1015	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951630	1020	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951623	1020A	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951631	1022	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951619	1111	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951613	1111	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951618	1113	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951617	1113	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951637	1117	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951642	1117A	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951640	1123A	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951649	1125	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	0.6 ± 0.3	2025-02-10
11951643	1127	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	0.5 ± 0.3	2025-02-10
11951629	1129	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10

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

February 10, 2025 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
PARKLAND MS
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11951644	1129	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951638	1131	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951648	1132	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951646	1134	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951641	1136	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951650	1136	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951605	1140	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951612	1142	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951606	1148	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	0.7 ± 0.3	2025-02-10
11951607	1150	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951691	1200	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951692	1200	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951686	1200A	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951602	1200B	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951601	1200C	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951699	1209A	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	0.7 ± 0.3	2025-02-10
11951700	1209E	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951693	1210	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951621	1214	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951653	1215	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951652	1216	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951628	1220	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	0.5 ± 0.3	2025-02-10
11951665	1221	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	0.5 ± 0.3	2025-02-10
11951664	1222	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	0.5 ± 0.3	2025-02-10
11951659	1225	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951663	1226	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	0.7 ± 0.3	2025-02-10
11951660	1228	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951657	1228B	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951658	1232	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951675	1232	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951679	1300	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951684	1304	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951683	1306	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951682	1310	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951688	1311	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951694	1313	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951695	1313A	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10

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

February 10, 2025 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
PARKLAND MS
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11951687	1314	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951680	1314A	2025-02-03 @ 11:00 am	2025-02-06 @ 12:00 pm	< 0.3	2025-02-10
11951689	1318	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951696	1318	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951677	1322	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951690	1324	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951604	1330	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951603	1332	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951609	1332	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951669	1334	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951610	1338	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951674	1340	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951681	1340	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	0.6 ± 0.3	2025-02-10
11951671	1344	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951673	1345	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951667	1400	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951662	1400	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951676	1403	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951668	1404	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951654	1405	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	0.7 ± 0.3	2025-02-10
11951666	1405	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951655	1407	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	0.7 ± 0.3	2025-02-10
11951656	1408	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951661	1410	2025-02-03 @ 10:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951670	2020	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951614	AUX GYM	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951608	AUX GYM	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951627	CAFE	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951620	CAFE	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951625	KITCHEN OFFICE	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11919791	MAIN OFFICE	2025-02-03 @ 9:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951697	MEDIA	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951698	MEDIA	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951672	NURSE	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951685	NURSE	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951678	NURSE OFFICE	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10

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

February 11, 2025 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
PARKLAND MS
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11951636	GYM	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10
11951651	GYM	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10

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February 11, 2025 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
OFFICE
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11931691	O	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10

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February 11, 2025 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
TRAVEL
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11931692	T	2025-02-03 @ 11:00 am	2025-02-06 @ 11:00 am	< 0.3	2025-02-10

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI TECHNOLOGIES, INC Job Number 20001560

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

Date Start: 12/14/24 Date Stop: 12/17/24	Date Start: _____ Date Stop: _____
Time Start: 0815 Time Stop: 0815	Time Start: _____ Time Stop: _____
Device No.'s: (3) CHAR BAGS	Device No.'s: _____
11477880, 11477883, 11477896	_____
_____	_____
B4 Right	
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
_____	_____
_____	_____
_____	_____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
_____	_____
_____	_____
_____	_____

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

December 23, 2024 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
SK
MAIN

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

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KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

Radon Test Kit Chain of Custody

Project Name: MCPS Radon – Testing February 3rd – February 6th, 2025

Name of Schools:

1. A. Mario Loiederman MS
2. Parkland MS
3. Rockville HS
4. Stone Mill ES
5. Wyngate ES

	Date	Initials
Radon Test Kits Deployed	2/3/2025	
Radon Test Kits Collected	2/6/2025	
Radon Test Kits Shipped to Lab*	2/6/2025	
Radon Test Kits Received by Lab*	2/8/2025	

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

April 2, 2025

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11892484	1405	2025-03-24 @ 2:00 pm	2025-03-27 @ 2:00 pm	< 0.3	2025-04-02
11892485	1405	2025-03-24 @ 2:00 pm	2025-03-27 @ 2:00 pm	0.8 ± 0.5	2025-04-02
11892486	1405	2025-03-24 @ 2:00 pm	2025-03-27 @ 2:00 pm	< 0.3	2025-04-02
11892487	1405	2025-03-24 @ 2:00 pm	2025-03-27 @ 2:00 pm	< 0.3	2025-04-02

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

April 3, 2025 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
OFFICE
MAIN

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

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

April 3, 2025

** LABORATORY ANALYSIS REPORT **

Radon test result report for:
TRAVEL
MAIN

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

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EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI TECHNOLOGIES, INC Job Number 20002919

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

Date Start: 3/7/25 Date Stop: 3/10/25	Date Start: _____ Date Stop: _____
Time Start: 0832 Time Stop: 0832	Time Start: _____ Time Stop: _____
Device No.'s: (7) CHAR BAGS	Device No.'s: _____
11886401 thru 11886406,	
11886410	
G3 Right	
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____

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

March 19, 2025 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
QC
MAIN

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

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KCI TECHNOLOGIES

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

Radon Test Kit Chain of Custody

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

Name of Schools:

1. Beverly Farms ES
2. Bradley Hills ES
3. Cabin John MS
4. Springbrook HS
5. Thomas Edison HS
6. Walter Johnson HS
7. Julius West MS
8. Parkland MS
9. Rockville HS
10. Westland MS
11. Charles W. Woodward HS
12. Walt Whitman HS

	Date	Initials
Radon Test Kits Deployed	3/24/2025	
Radon Test Kits Collected	3/27/2025	
Radon Test Kits Shipped to Lab*	3/28/2025	
Radon Test Kits Received by Lab*	4/01/2025	

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

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MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Parkland Middle School
Date of Test Report	05/12/2022
Round of Testing	Initial Follow-up Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	5
# Rooms ≥ 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 completed; no further action needed

KCI TECHNOLOGIES

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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: Parkland Middle School
4610 West Frankfort Dr.
Rockville, MD 20853

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 Parkland Middle School 4610 West Frankfort Dr. Rockville, MD 20853 (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 22, 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 piC/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 25, 2022 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

These tests represent:

- Follow-up to 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 piC/L	None	N/A
<4.0 piC/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 McCleaf

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
QC- Quality Control

Table 1- Radon Testing Results		
Parkland MS RT		
Test Period: 03/22/2022 - 03/25/2022		
Kit Number	Room / Area	Result
11138973	1311	0.6
11138972	1000C	< 0.3
11138974	1000C	< 0.3
11139097	1000C	< 0.3
11138967	1022A	< 0.3
11139077	1200A	0.5
11139091	STAFFLOUNGE	< 0.3

Table 2- Radon Testing Results			
Parkland MS RT			
Test Period: 03/22/2022 - 03/25/2022			
Kit Number	QC Type	Room / Area	Result
11138972	FB	1000c	< 0.3
11139097	D	1000c	< 0.3
11139902	OB	OFFICE BLANK	< 0.3
11139928	TB	TRAVEL BLANK	< 0.3

Summary of Missed Locations		
Parkland MS RT		
Test Period: 03/22/22 - 03/25/22		
Kit Number	Room/Area	Result
	NA	

Summary of Missing, Compromised and >/= 4 piC/L Tests		
Parkland MS RT		
Test Period: 03/22/22 - 03/25/22		
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:

PARKLAND MS RT
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11138972	1000C	2022-03-22 @ 11:00 am	2022-03-25 @ 10:00 am	< 0.3	2022-03-28
11138974	1000C	2022-03-22 @ 11:00 am	2022-03-25 @ 10:00 am	< 0.3	2022-03-28
11139097	1000C	2022-03-22 @ 11:00 am	2022-03-25 @ 10:00 am	< 0.3	2022-03-28
11138967	1022A	2022-03-22 @ 11:00 am	2022-03-25 @ 10:00 am	< 0.3	2022-03-28
11139077	1200A	2022-03-22 @ 11:00 am	2022-03-25 @ 10:00 am	0.5 ± 0.3	2022-03-28
11138973	1311	2022-03-22 @ 11:00 am	2022-03-25 @ 10:00 am	0.6 ± 0.3	2022-03-28
11139091	STAFFLOUNGE	2022-03-22 @ 11:00 am	2022-03-25 @ 10:00 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 Eight	_____
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 30, 2022

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

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

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

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

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

Radon Test Kit Chain of Custody

Project Name: MCPS Radon – March 2022 Schools – Retesting

Name of Schools:

1. Herbert Hoover MS
2. Parkland MS
3. Redland MS
4. Rock Creek Valley ES
5. Tilden MS
6. Rockville HS
7. Wootton HS
8. Capt. James E. Daly ES
9. Clarksburg HS
10. Clearspring ES
11. Hallie Wells MS
12. Northwest HS
13. Paint Branch HS
14. Rocky Hills MS
15. Seneca Valley HS
16. Sherwood HS
17. Wilson Wims ES

	Date	Initials
Radon Test Kits Deployed	03/22/2022	BMM
Radon Test Kits Collected	03/25/2022	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

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Parkland Middle School
Date of Test Report	4/6/2022
Round of Testing	Initial Follow-up Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	82
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	1.5 pCi/L

Project Status:
Initial testing completed; Missing or compromised kits need re-sampling.

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

April 6, 2022

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

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

Location: Parkland MS
4610 W. Frankfort Dr.
Rockville, MD 20853

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 Parkland MS, located at 4610 W. Frankfort Dr. Rockville, MD 20853 (subject site).

Scope of Services:

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

KCI visited the site on February 8, 2022 and deployed ninety two (92) activated charcoal (AC) radon test kits. KCI deployed radon test kits in all frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

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

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

KCI returned to the site on February 11, 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 centration levels 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 30s and high temperatures ranged from the mid 30s to the mid 50s Fahrenheit. Maximum sustained winds ranged from 3-12 miles per hour. Average humidity was around 23% with 0.1 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 piC/L	None	N/A
<4.0 piC/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 McCleaf

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
QC- Quality Control

Table 1- Radon Testing Results		
Parkland MS		
Test Period: 02/8/2022 - 02/11/2022		
Kit Number	Room / Area	Result
11113876	1002	< 0.3
11113872	1004	0.7
11113824	1005	1.4
11113825	1009	0.8
11113826	1011	< 0.3
11113835	1012	0.6
11113831	1015	< 0.3
11113834	1020	0.7
11113829	1022	< 0.3
11113815	1129	0.6
11113852	1200	< 0.3
11113838	1210	< 0.3
11113830	1214	< 0.3
11113857	1215	< 0.3
11113891	1216	0.7
11113886	1220	0.9
11113889	1221	< 0.3
11113804	1222	0.9
11113807	1225	< 0.3
11113808	1225	0.5
11113820	1226	0.7
11113816	1228	0.6
11113814	1232	< 0.3
11113849	1300	< 0.3
11113848	1304	0.5
11113846	1306	< 0.3
11113845	1310	< 0.3
11113803	1313	< 0.3
11113864	1313	0.7
11113847	1314	0.5
11113843	1318	< 0.3
11113836	1322	< 0.3
11113881	1324	< 0.3
11113895	1400	0.5
11113858	1403	< 0.3
11113860	1404	< 0.3
11113863	1404	0.5
11113859	1405	< 0.3
11113888	1407	< 0.3
11113896	1408	0.5
11113892	1410	< 0.3
11113890	2000	< 0.3

Table 1- Radon Testing Results		
Parkland MS		
Test Period: 02/8/2022 - 02/11/2022		
Kit Number	Room / Area	Result
11113884	2012	< 0.3
11113869	2014	< 0.3
11113883	2024	< 0.3
11113878	1000A	0.9
11113861	1000B	< 0.3
11113867	1000B1	0.5
11113887	1000D	< 0.3
11113854	1000F	0.8
11113862	1000G	0.5
11113870	1000H	0.5
11113871	1004A	< 0.3
11113879	1004B	0.9
11113882	1004C	1.0
11113853	1004D	0.5
11113875	1004F	< 0.3
11113822	1005A	< 0.3
11113832	1011A	0.5
11113833	1020A	0.7
11113818	1113 RECEIVING	0.5
11113856	1200B	< 0.3
11113850	1200C	< 0.3
11113851	1200C	< 0.3
11113873	1201 HEALTH	< 0.3
11113880	1201 HEALTH	< 0.3
11113874	1201B	< 0.3
11113868	1201C	< 0.3
11113821	1209A	0.6
11113823	1209B	0.7
11113842	1209C	0.8
11113841	1209D	0.7
11113840	1209E	0.5
11113837	1212 SECURITY	< 0.3
11113811	1228B	0.7
11113844	1314A	0.8
11113812	AUX GYM 1	0.5
11113817	AUX GYM 2	< 0.3
11113801	BOYS PE OFFICE 1123A	1.0
11113813	BS 1111	0.5
11113809	CAFETERIA	0.5
11113810	CAFETERIA	0.6
11113805	GIRLS PE OFFICE 1117A	0.5
11113893	GYM	< 0.3

Table 1- Radon Testing Results		
Parkland MS		
Test Period: 02/8/2022 - 02/11/2022		
Kit Number	Room / Area	Result
11113894	GYM	0.9
11113898	GYM	1.5
11113897	GYM STAGE	1.4
11113806	KITCHEN OFFICE	0.5
11113877	MAIN OFFICE	0.7
11113827	MEDIA CENTER 1209	< 0.3
11113828	MEDIA CENTER 1209	< 0.3
11113802	PE OFFICE 1119	0.7

Table 2- Radon Testing Results			
Parkland MS			
Test Period: 02/8/2022 - 02/11/2022			
Kit Number	QC Type	Room / Area	Result
11113817	D	Aux Gym 2	< 0.3
11113824	D	1005	1.4
11113822	FB	1005A	< 0.3
11113840	D	1209E	0.5
11113807	D	1225	< 0.3
11113860	FB	1404	< 0.3
11113850	D	1200C	< 0.3
11113864	D	1313	0.7
11113880	FB	1201 Health	< 0.3
11113867	D	1000B1	0.5
11113894	D	Gym	0.9
11113893	FB	Gym	< 0.3
11113889	D	1221	< 0.3
11113478	OB	OFFICE BLANK	< 0.3
11113477	TB	TRAVEL BLANK	< 0.3

Summary of Missed Locations		
Parkland MS		
Test Period: 02/8/22 - 02/11/22		
Kit Number	Room/Area	Result
NA	1311	NA
NA	1000C	NA

Summary of Missing, Compromised and >/= 4 piC/L Tests		
Parkland MS		
Test Period: 02/8/22 - 02/11/22		
Kit Number	Room/Area	Result
11113819	1209B1 - Staff Lounge	Missing
11113839	1022A	Missing
11113855	1200A	Missing

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

February 15, 2022

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

PARKLAND MS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11113878	1000A	2022-02-08 @ 10:00 am	2022-02-11 @ 8:00 am	0.9 ± 0.3	2022-02-15
11113861	1000B	2022-02-08 @ 10:00 am	2022-02-11 @ 8:00 am	< 0.3	2022-02-15
11113867	1000B1	2022-02-08 @ 10:00 am	2022-02-11 @ 8:00 am	0.5 ± 0.3	2022-02-15
11113887	1000D	2022-02-08 @ 11:00 am	2022-02-11 @ 8:00 am	< 0.3	2022-02-15
11113854	1000F	2022-02-08 @ 11:00 am	2022-02-11 @ 8:00 am	0.8 ± 0.3	2022-02-15
11113862	1000G	2022-02-08 @ 10:00 am	2022-02-11 @ 8:00 am	0.5 ± 0.3	2022-02-15
11113870	1000H	2022-02-08 @ 12:00 pm	2022-02-11 @ 8:00 am	0.5 ± 0.3	2022-02-15
11113876	1002	2022-02-08 @ 10:00 am	2022-02-11 @ 8:00 am	< 0.3	2022-02-15
11113872	1004	2022-02-08 @ 11:00 am	2022-02-11 @ 8:00 am	0.7 ± 0.3	2022-02-15
11113871	1004A	2022-02-08 @ 11:00 am	2022-02-11 @ 8:00 am	< 0.3	2022-02-15
11113879	1004B	2022-02-08 @ 11:00 am	2022-02-11 @ 8:00 am	0.9 ± 0.3	2022-02-15
11113882	1004C	2022-02-08 @ 11:00 am	2022-02-11 @ 8:00 am	1.0 ± 0.3	2022-02-15
11113853	1004D	2022-02-08 @ 11:00 am	2022-02-11 @ 8:00 am	0.5 ± 0.3	2022-02-15
11113875	1004F	2022-02-08 @ 11:00 am	2022-02-11 @ 8:00 am	< 0.3	2022-02-15
11113824	1005	2022-02-08 @ 8:00 am	2022-02-11 @ 10:00 am	1.4 ± 0.3	2022-02-14
11113822	1005A	2022-02-08 @ 8:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-15
11113825	1009	2022-02-08 @ 8:00 am	2022-02-11 @ 10:00 am	0.8 ± 0.3	2022-02-14
11113826	1011	2022-02-08 @ 8:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-14
11113832	1011A	2022-02-08 @ 8:00 am	2022-02-11 @ 10:00 am	0.5 ± 0.3	2022-02-15
11113835	1012	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	0.6 ± 0.3	2022-02-14
11113831	1015	2022-02-08 @ 8:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-15
11113834	1020	2022-02-08 @ 8:00 am	2022-02-11 @ 10:00 am	0.7 ± 0.3	2022-02-15
11113833	1020A	2022-02-08 @ 8:00 am	2022-02-11 @ 10:00 am	0.7 ± 0.3	2022-02-14
11113829	1022	2022-02-08 @ 8:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-15
11113818	1113 RECEIVING	2022-02-08 @ 8:00 am	2022-02-11 @ 9:00 am	0.5 ± 0.3	2022-02-15
11113815	1129	2022-02-08 @ 8:00 am	2022-02-11 @ 9:00 am	0.6 ± 0.3	2022-02-15
11113852	1200	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-15
11113856	1200B	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-14
11113851	1200C	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-14
11113850	1200C	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-14
11113880	1201 HEALTH	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-15
11113873	1201 HEALTH	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-15
11113874	1201B	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-15
11113868	1201C	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-15
11113821	1209A	2022-02-08 @ 9:00 am	2022-02-11 @ 9:00 am	0.6 ± 0.3	2022-02-15
11113823	1209B	2022-02-08 @ 9:00 am	2022-02-11 @ 9:00 am	0.7 ± 0.3	2022-02-15
11113842	1209C	2022-02-08 @ 9:00 am	2022-02-11 @ 9:00 am	0.8 ± 0.3	2022-02-14

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

February 15, 2022

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

PARKLAND MS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11113841	1209D	2022-02-08 @ 9:00 am	2022-02-11 @ 9:00 am	0.7 ± 0.3	2022-02-15
11113840	1209E	2022-02-08 @ 9:00 am	2022-02-11 @ 9:00 am	0.5 ± 0.3	2022-02-15
11113838	1210	2022-02-08 @ 9:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-14
11113837	1212 SECURITY	2022-02-08 @ 9:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-15
11113830	1214	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-15
11113857	1215	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-15
11113891	1216	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	0.7 ± 0.3	2022-02-14
11113886	1220	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	0.9 ± 0.3	2022-02-15
11113889	1221	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-15
11113804	1222	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	0.9 ± 0.3	2022-02-14
11113808	1225	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	0.5 ± 0.3	2022-02-14
11113807	1225	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-15
11113820	1226	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	0.7 ± 0.3	2022-02-14
11113816	1228	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	0.6 ± 0.3	2022-02-14
11113811	1228B	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	0.7 ± 0.3	2022-02-14
11113814	1232	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-14
11113849	1300	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-15
11113848	1304	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	0.5 ± 0.3	2022-02-15
11113846	1306	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-14
11113845	1310	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-14
11113803	1313	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-14
11113864	1313	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	0.7 ± 0.3	2022-02-14
11113847	1314	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	0.5 ± 0.3	2022-02-15
11113844	1314A	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	0.8 ± 0.3	2022-02-14
11113843	1318	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-14
11113836	1322	2022-02-08 @ 10:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-14
11113881	1324	2022-02-08 @ 10:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-14
11113895	1400	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	0.5 ± 0.3	2022-02-14
11113858	1403	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-14
11113860	1404	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-15
11113863	1404	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	0.5 ± 0.3	2022-02-15
11113859	1405	2022-02-08 @ 9:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-15
11113888	1407	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-15
11113896	1408	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	0.5 ± 0.3	2022-02-14
11113892	1410	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-15
11113890	2000	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-14
11113884	2012	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-14

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

February 15, 2022

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

PARKLAND MS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11113869	2014	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-15
11113883	2024	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-15
11113812	AUX GYM 1	2022-02-08 @ 8:00 am	2022-02-11 @ 9:00 am	0.5 ± 0.3	2022-02-14
11113817	AUX GYM 2	2022-02-08 @ 8:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-14
11113801	BOYS PE OFFICE 1123A	2022-02-08 @ 8:00 am	2022-02-11 @ 9:00 am	1.0 ± 0.3	2022-02-15
11113813	BS 1111	2022-02-08 @ 8:00 am	2022-02-11 @ 9:00 am	0.5 ± 0.3	2022-02-14
11113810	CAFETERIA	2022-02-08 @ 8:00 am	2022-02-11 @ 9:00 am	0.6 ± 0.3	2022-02-14
11113809	CAFETERIA	2022-02-08 @ 8:00 am	2022-02-11 @ 9:00 am	0.5 ± 0.3	2022-02-15
11113805	GIRLS PE OFFICE 1117A	2022-02-08 @ 8:00 am	2022-02-11 @ 9:00 am	0.5 ± 0.3	2022-02-15
11113893	GYM	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	< 0.3	2022-02-14
11113898	GYM	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	1.5 ± 0.3	2022-02-14
11113894	GYM	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	0.9 ± 0.3	2022-02-15
11113897	GYM STAGE	2022-02-08 @ 11:00 am	2022-02-11 @ 10:00 am	1.4 ± 0.3	2022-02-14
11113806	KITCHEN OFFICE	2022-02-08 @ 8:00 am	2022-02-11 @ 9:00 am	0.5 ± 0.3	2022-02-14
11113877	MAIN OFFICE	2022-02-08 @ 10:00 am	2022-02-11 @ 8:00 am	0.7 ± 0.3	2022-02-15
11113828	MEDIA CENTER 1209	2022-02-08 @ 9:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-15
11113827	MEDIA CENTER 1209	2022-02-08 @ 9:00 am	2022-02-11 @ 9:00 am	< 0.3	2022-02-15
11113802	PE OFFICE 1119	2022-02-08 @ 8:00 am	2022-02-11 @ 9:00 am	0.7 ± 0.3	2022-02-15

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

February 15, 2022 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
PARKLAND MS
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11113900	1004E	2022-02-08 @ 9:00 am	2022-02-11 @ 11:00 am	0.6 ± 0.3	2022-02-14

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies, Inc. Job Number 204186

NOMINAL Conditions: Radon Conc 25.8 pCi/L Rel. Hum 59.1 % Temp. 70.9 F

Date Start: 2/18/22 Date Stop: 2/21/22	Date Start: _____ Date Stop: _____
Time Start: 0911 Time Stop: 0911	Time Start: _____ Time Stop: _____
Device No.'s: (3) Char Bags - 11113484, 11192998, 20107126	Device No.'s: _____
23 Right	
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____

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

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

Kit Number	Start Date	Start Time	End Date	End Time	Temp.	Facility	Building	Room	Project ID	Floor	Result
11113484	2022-02-18	9:00 am	2022-02-21	9:00 am	71	OFFICE	MAIN	SK1		1	27.9
11122998	2022-02-18	9:00 am	2022-02-21	9:00 am	71	OFFICE	MAIN	SK2		1	26.0
20107126	2022-02-18	9:00 am	2022-02-21	9:00 am	71	OFFICE	MAIN	SK3		1	27.6

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

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

Radon Test Kit Chain of Custody

Project Name: MCPS Radon – February 2022 Schools

Name of Schools:

1. Earle. B Wood MS
2. Flower Valley ES
3. Parkland MS
4. Herbert Hoover MS
5. Ritchie Park ES
6. Wayside ES
7. Potomac ES
8. Redland MS
9. Sequoyah ES
10. Sherwood ES
11. Rock Terrace School

	Date	Initials
Radon Test Kits Deployed	02/08/2022	
Radon Test Kits Collected	02/11/2022	
Radon Test Kits Shipped to Lab*	02/11/2022	
Radon Test Kits Received by Lab*	02/15/2022	

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

RADON SCREENING SURVEY – FOLLOW-UP PARKLAND MIDDLE SCHOOL

4610 West Frankfort Drive, Rockville Maryland 20853

EXECUTIVE SUMMARY

Date of Test Report:	4/6/16 Follow-Up
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested	8
# Rooms ≥ 4.0 pCi/L:	0
Low Value:	<0.4
High Value:	<0.4
Confirmed Rooms ≥ 4.0 pCi/L US EPA Action Level	0

Summary of Sampling Events ≥ 4.0 pCi/L

Room	Result (pCi/L) 2/5/16 (Rev 1 Initial)	Result (pCi/L) 4/6/16 Follow-Up	Average Result (pCi/L)
1001	<0.3 Tampered	<0.4	<0.4
1101	<0.3 Tampered	<0.4	<0.4
1201D	<0.3 Tampered	Not sampled	<0.3
1209	<0.3 Tampered	<0.4	<0.4
1209C	0.9 Tampered	<0.4	0.7
1220	<0.3 Tampered	<0.4	<0.4
1228	0.6 Tampered	<0.4	0.5
1410	--- Missing	<0.4	<0.4

KCI TECHNOLOGIES

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

MCPS RADON TESTING

Executive Summary: Parkland Magnet Middle School

Date of Test Report:	4/6/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	8
# Rooms ≥ 4.0 pCi/L:	0
Low Value:	< 0.4
High Value:	< 0.4

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

KCI TECHNOLOGIES

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

April 6, 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 # 12146341.31

Location: Parkland Magnet Middle School
4610 West Frankfort Drive
Rockville, MD 20853

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 Parkland Magnet Middle School, located at 4610 West Frankfort Drive in Rockville, Maryland 20853 (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 March 21, 2016 and deployed thirteen (13) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on March 24, 2016 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to AccuStar Labs for analysis by gamma-ray spectroscopy. Accustar Labs is a NRSB certified analytical laboratory for radon analysis (certification # ARL0007) located at 929 Mount

Zion Road, Lebanon, Pennsylvania.

Evaluation of Testing Conditions:

The operating condition that represents the greatest amount of significantly occupied time for this building is; heating active, with outdoor temperature averages ≤ 65° F.

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

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

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

Results:

The results of the radon test analysis indicated the following:

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

Notes:
D- Duplicate sample

The field blank, office blank, and lab transit blanks had test results of less than the laboratory detection limit of 0.4 pCi/L. Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved. The Spike sample analysis results indicate the laboratory is operating within statistical control limits.

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

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

Sincerely,

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

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

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank*

PM- Project Manager

QC- Quality Control

*Office blanks were submitted at a rate of 1% for all samples deployed in Phase 11 testing. Office blanks were not submitted under each school individually.

Radon Testing Results		
Parkland Middle School		
Test Period: 03/21/16-03/24/16		
Kit Number	**Room / Area**	**Result**
3029199	1001	<0.4
3029242	1001	<0.4
3029252	1101	<0.4
3029193	1209	<0.4
3029194	1220	<0.4
3029195	1228	<0.4
3029246	1410	<0.4
3028916	1201C	<0.4
3029200	1209C	<0.4

Table Note:
* Missing or Compromised Sample

Radon Testing Results		
Parkland Middle School		
Test Period: 03/21/16-03/24/16		
Kit Number	**QC Type**	**Result**
3029197	D (1209)	<0.4
3029198	D (1209)	<0.4
3029249	D (1410)	<0.4
3029250	FB (1209)	<0.4

Table Note:
* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NRPP 10511AL
NRSB ARL0007

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

Laboratory Report for:

KCI Technologies
936 Ridgebrook Rd
Sparks MD 21152

Property Tested: Project # 12146341

Parkland M S
4610 West Frank Fort Dr
Rockville MD 20853

Log Number	Device Number	Test Exposure Duration:		Area Tested	Result (pCi/L)
3018377	3029242	03/21/2016 11:01 am	03/24/2016 10:50 am	Unit 1001 First Floor	<0.4
3018378	3029252	03/21/2016 11:40 am	03/24/2016 10:51 am	Unit 1101 First Floor	<0.4
3018379	3029246	03/21/2016 11:35 am	03/24/2016 10:55 am	Unit 1410 First Floor	<0.4
3018380	3029249	03/21/2016 11:36 am	03/24/2016 10:56 am	Unit 1410 First Floor	<0.4
3018381	3029195	03/21/2016 11:30 am	03/24/2016 10:57 am	Unit 1228 First Floor	<0.4
3018382	3029194	03/21/2016 11:25 am	03/24/2016 11:05 am	Unit 1220 First Floor	<0.4
3018383	3029200	03/21/2016 11:20 am	03/24/2016 11:06 am	Unit 1209C First Floor	<0.4
3018384	3029193	03/21/2016 11:14 am	03/24/2016 11:07 am	Unit 1209 First Floor	<0.4
3018385	3029250	03/21/2016 11:13 am	03/24/2016 11:10 am	Unit 1209 First Floor	<0.4
3018386	3029198	03/21/2016 11:15 am	03/24/2016 11:11 am	Unit 1209 First Floor	0.4

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

Distributed by: KCI Technologies, Inc.

Date Received: 03/28/2016 Date Logged: 03/28/2016 Date Analyzed: 03/28/2016 Date Reported: 03/29/2016

Report Reviewed By: Grace E Hebner

Report Approved By: Carolyn D. Koke

Carolyn D. Koke, President, AccuStar Labs

Disclaimer:

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

This report may only be transferred to a third party in its entirety. Analytical results relate to the samples AS RECEIVED BY THE LABORATORY. Results shown on this report represent levels of radon gas measured between the dates shown in the room or area of the site identified above as "Property Tested". Incorrect information will affect results. The results may not be construed as either predictive or supportive of measurements conducted in any area of this structure at any other time. AccuStar Labs, its employees and agents are not responsible for the consequences of any action taken or not taken based upon the results reported or any verbal or written interpretation of the results.

AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NRPP 10511AL
NRSB ARL0007

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

Laboratory Report for:

KCI Technologies
936 Ridgebrook Rd
Sparks MD 21152

Property Tested: Project # 12146341

Parkland M S
4610 West Frank Fort Dr
Rockville MD 20853

Log Number	Device Number	Test Exposure Duration:		Area Tested	Result (pCi/L)
3018387	3029199	03/21/2016 11:02 am	03/24/2016 11:00 am	Unit 1001 First Floor	<0.4
3018388	3029197	03/21/2016 11:16 am	03/24/2016 11:01 am	Unit 1209 First Floor	<0.4
3018389	3028916	03/21/2016 11:03 am	03/24/2016 11:02 am	Unit 1201C First Floor	<0.4

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

Distributed by: KCI Technologies, Inc.

Date Received: 03/28/2016 Date Logged: 03/28/2016 Date Analyzed: 03/28/2016 Date Reported: 03/29/2016

Report Reviewed By: Grace E Heverly Report Approved By: Carolyn D. Koke

Carolyn D. Koke, President, AccuStar Labs

Disclaimer:

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

This report may only be transferred to a third party in its entirety. Analytical results relate to the samples AS RECEIVED BY THE LABORATORY. Results shown on this report represent levels of radon gas measured between the dates shown in the room or area of the site identified above as "Property Tested". Incorrect information will affect results. The results may not be construed as either predictive or supportive of measurements conducted in any area of this structure at any other time. AccuStar Labs, its employees and agents are not responsible for the consequences of any action taken or not taken based upon the results reported or any verbal or written interpretation of the results.

AccuStar
Professional Radon Laboratory Services Since 1984

AccuStar Labs
11 Awl Street
Medway MA 02053

888-480-8812
www.accustarlabs.com

Radon Device Type Open Face Canister

Send Written Report To:

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

Site Tested:

Site Name	Parkland M. S.
Address	4610 West Frank Fort Dr
Address	
City / Town	Rockville
State/Province Postal Code	MD 20853
Test Country	Montgomery County
Project Number	12146341

Contact Information:

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

Lab Use Only	Device Number	Building Number	Unit Number	Floor	Name of Room	Start Date mm/dd/yyyy	Start Time hh:mm am / pm	Stop Date mm/dd/yyyy	Stop Time hh:mm am / pm	Lab Use Only
	3029242		1001	1	Temp 73	3/21/2016	11:01 AM	3/24/16	10:50 AM	
	3029252		1101	1		3/21/2016	11:40 AM		10:51 AM	
	3029246		1410	1		3/21/2016	11:35 AM		10:55 AM	
	3029249		1410	1		3/21/2016	11:36 AM		10:56 AM	
	3029195		1228	1		3/21/2016	11:30 AM		10:57 AM	
	3029194		1220	1		3/21/2016	11:25 AM		11:05 AM	
	3029200		1209c	1		3/21/2016	11:20 AM		11:06 AM	
	3029193		1209	1		3/21/2016	11:14 AM		11:07 AM	
	3029250		1209	1		3/21/2016	11:13 AM		11:10 AM	
	3029198		1209	1		3/21/2016	11:15 AM		11:11 AM	

Test must start before the expiration date shown on your device or test results will be invalid

AccuStar
Professional Radon Laboratory Services Since 1984

AccuStar Labs
11 Awl Street
Medway MA 02053

888-480-8812
www.accustarlabs.com

Radon Device Type Open Face Canister

Send Written Report To:

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

Site Tested:

Site Name	PARKLAND M.S.
Address	
Address	
City / Town	
State/Province Postal Code	MD
Test Country	Montgomery County
Project Number	12146341

Contact Information:

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

Lab Use Only	Device Number	Building Number	Unit Number	Floor	Name of Room	Start Date mm/dd/yyyy	Start Time hh:mm am / pm	Stop Date mm/dd/yyyy	Stop Time hh:mm am / pm	Lab Use Only
					Temp					
	3029199		1001	1	M3	3/21/2016	11^03 AM	3/24/16	11^00 AM	
	3029197		1209	1	↓	3/21/2016	11^16 AM	↓	11^01 AM	
	3029916		1201C	1		3/21/2016	11^03 AM		11^02 AM	

Rev E1512

Test must start before the expiration date shown on your device or test results will be invalid

AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NRPP 10511AL
NRSB ARL0007

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

Laboratory Report for:

KCI Technologies
936 Ridgebrook Rd
Sparks MD 21152

Property Tested: Project # 12146341

MCPS Radon Phase 11 (re-testing) Office Blank

Log Number	Device Number	Test Exposure Duration:		Area Tested	Result (pCi/L)
3018362	3029232	03/21/2016 8:00 am	03/24/2016 8:00 am	Unit O First Floor Main Room	<0.4

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

Distributed by: KCI Technologies, Inc.

Date Received: 03/28/2016 Date Logged: 03/28/2016 Date Analyzed: 03/28/2016 Date Reported: 03/29/2016

Report Reviewed By: Grace E Hebner

Report Approved By: Carolyn D. Koke

Carolyn D. Koke, President, AccuStar Labs

Disclaimer:

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

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AccuStar
Professional Radon Laboratory Services Since 1984

AccuStar Labs
11 Awl Street
Medway MA 02053
888-480-8812
www.accustarlabs.com

Radon Device Type Open Face Canister

Send Written Report To:

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

Site Tested:

Site Name	KCI OFFICE
Address	936 RIDGEBROOK RD
Address	
City / Town	SPARKS
State/Province Postal Code	MD 21152
Test Country	Montgomery County
Project Number	12146341

Contact Information:

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

Lab Use Only	Device Number	Building Number	Unit Number	Floor	Name of Room Temp	Start Date mm/dd/yyyy	Start Time hh:mm am / pm	Stop Date mm/dd/yyyy	Stop Time hh:mm am / pm	Lab Use Only
	3029232		0	1	MAIN 72	3/21/2016	8:00AM	3/24/2016	8:00 AM	

Rev E1512

Test must start before the expiration date shown on your device or test results will be invalid

AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NRPP 10511AL
NRSB ARL0007

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

Laboratory Report for:

KCI Technologies
936 Ridgebrook Rd
Sparks MD 21152

Property Tested:

MCPS
Transit Blanks

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

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

Distributed by: KCI Technologies, Inc.

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

Report Reviewed By: Crystal Bates Report Approved By: Carolyn D. Koke

Carolyn D. Koke, President, AccuStar Labs

Disclaimer:

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

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

RECEIVED JAN 27 2016

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

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

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

Test Site Info

Name of Building/Project or Owner Transit

Site Address: Transit

City: _____ State _____ Zip _____ County _____

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

Multi-Page Report Y-N

Detector Serial#	ROOM NAME & NUMBER - LOCATION OF DETECTOR IN ROOM (indicate duplicates and blanks)		Floor	Start Date	Start Time Include AM/PM	Stop Date	Stop Time Include AM/PM	LAB USE ONLY Wgt. Gain	LAB USE ONLY pCi/L
12 3028953	Transit	3010588	1	1/19/16	1:00pm	1/22/16	9:30am		<0.4
1 8955	Transit	3010589	1	1/19/16	↓	↓	↓		<0.4
2 8954	Transit	3010590	1	1/19/16					<0.4
3 8997	Transit	3010591	1	1/19/16					<0.4

KCI Technologies, Inc. 1/27/2016
3010588 **3028953** ACPC275B EXP12/31/2018

Structure Type: (circle one or more) Basement - Crawlspace - Slab on Grade - Other

Test Purpose: (Circle all that apply) Initial Screening - Follow Up Test - Post Mitigation - Real Estate - Other

Building Type: (Circle One) Residential - Non Residential; Private Day Care - Private School; Day Care in Public School - Public School

Both Placed by and Retrieved by signatures are required Certified Tester's Name #

Canisters placed by _____ #_____

Canisters retrieved by _____ #_____

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

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

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

Normal Temp. Yes - No
Normal Humidity Yes - No
Windy Y-N Rainy Y-N

Send Results To:

Company Name: KCI Tech Attention: James Moulsdale

Address: 936 Ridgebrook

City: Sparks State: MD Zip 21152

Phone: 410-584-3826 Fax:

EMAIL Results to: James.Moulsdale@kci.com

Make sure information is complete and correct.

If a recalculation is requested there is a $10.00 recalc fee PER Canister.

Mailing: PO Box 990 Jonestown, PA 17038
Shipping: 929 Mt Zion Road, Lebanon, PA 17046
800-523-4964 fax 717-274-5662
NEHA 10511AL NRSB ARL 0007

TCS INDUSTRIES, INC.

(717) 657-7032 RADON GAS DETECTION

www.radondetek.com 4326 Crestview Road, Harrisburg, PA 17112

James Moulsdale
KCI
936 Ridgebrook Rd.
Sparks, MD 21152

April 04, 2016

Dear Mr. Moulsdale:

The spike exposure data were:

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

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

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

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

Sincerely,

Carl H. Distenfeld, CHP

****
TCS Radon Chamber NRSB CHM 0002
****

AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NRPP 10511AL
NRSB ARL0007

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

Laboratory Report for:

KCI Technologies
936 Ridgebrook Rd
Sparks MD 21152

Property Tested:

MCPS
Radon Spike Sample Laboratory Results

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

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

Distributed by: KCI Technologies, Inc.

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

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

Report Reviewed By: _____ Report Approved By: _____

Carolyn D. Koke, President, AccuStar Labs

Disclaimer:

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

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Professional Radon Laboratory Services Since 1984

AccuStar Labs
11 Awl Street
Medway MA 02053

888-480-8812
www.accustarlabs.com

Radon Device Type Open Face Canister

Send Written Report To:

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

Site Tested:

Site Name	MCPS
Address	850 Hungerford Dr
Address	
City / Town	Rockville
State/Province Postal Code	MD 20850
Test Country	Montgomery County
Project Number	12146341

Contact Information:

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

Lab Use Only	Device Number	Building Number	Unit Number	Floor	Name of Room Temp	Start Date mm/dd/yyyy	Start Time hh:mm am / pm	Stop Date mm/dd/yyyy	Stop Time hh:mm am / pm	Lab Use Only
	3029166	1		1	1	4/4/16	11:10am	4/6/16	11:13am	
	3029214	1		1	2					
	3029217	1		1	3					
	3029218	1		1	4					
	3029219	1		1	5					
	3029220	1		1	6					

Rev E1512

Test must start before the expiration date shown on your device or test results will be invalid

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

MCPS RADON TESTING

Executive Summary: Parkland Magnet Middle School

Date of Test Report:	2/05/2016 (Rev 1)
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	84
# Rooms ≥ 4.0 pCi/L:	0
Low Value:	< 0.3
High Value:	1.4

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

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

February 5, 2016 (Rev 1)

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

Re: **Radon Testing Services**
KCI Job # 12146341.24

Location: Parkland Magnet Middle School
4610 West Frankfort Drive
Rockville, MD 20853

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 Parkland Magnet Middle School, located at 4610 West Frankfort Drive in Rockville, Maryland 20853 (subject site).

Scope of Services:

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

KCI visited the site on January 11, 2016 and deployed one hundred one (101) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

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

Butler Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

The operating condition that represents the greatest amount of significantly occupied time for this building is; heating active, with outdoor temperature averages ≤ 65° F.

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

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

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

Results:

The results of the radon test analysis indicated the following:

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

Notes:
D- Duplicate sample

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

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

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

Sincerely,

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

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

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

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		
Parkland Magnet Middle School		
Test Period: 01/11/16-01/14/16		
Kit Number	**Room / Area**	**Result**
7717001	1000	0.6
7717022	1001	< 0.3
7717004	1002	< 0.3
7717014	1004	0.6
7717036	1005	1.2
7717037	1009	1.1
7717038	1011	< 0.3
7717068	1012	1.1
7717040	1015	< 0.3
7717041	1020	< 0.3
7717045	1022	0.6
7717023	1100	< 0.3
7717024	1100	1.1
7717026	1111	0.6
7717027	1113	0.8
7717030	1119	0.6
7717033	1125	< 0.3
7717034	1127	< 0.3
7717035	1129	0.8
7717083	1200	0.8
7717080	1201	< 0.3
7717089	1209	< 0.3
7717099	1210	< 0.3
7717100	1212	0.9
7717066	1214	1
7717067	1215	0.7
7717065	1216	0.7
7717054	1221	< 0.3
7717056	1222	0.8
7717050	1225	< 0.3
7717055	1226	1
7717051	1232	0.6
7717079	1300	0.7
7717078	1304	0.7
7717077	1306	< 0.3
7717076	1310	0.7
7717073	1311	1.1
7717070	1313	0.8
7717074	1314	0.9
7717072	1318	0.9
7717071	1322	0.6
7717069	1324	0.8
7717061	1400	0.6
7717063	1403	0.9
7717057	1404	< 0.3
7717062	1405	< 0.3

Table Note:
* Missing or Compromised Sample

Radon Testing Results		
Parkland Magnet Middle School		
Test Period: 01/11/16-01/14/16		
Kit Number	**Room / Area**	**Result**
7717060	1407	0.6
7717048	1408	< 0.3
7717095	2000	< 0.3
7717098	2002	< 0.3
7717096	2003	< 0.3
7717007	1000A	0.6
7717015	1004A	< 0.3
7717008	1000B	< 0.3
7717009	1000C	0.7
7717010	1000D	0.6
7717011	1000F	< 0.3
7717012	1000G	0.8
7717013	1000H	0.8
7717021	* 1001 (Tampered)	< 0.3
7717016	1004B	0.9
7717017	1004C	< 0.3
7717018	1004D	1
7717020	1004E	< 0.3
7717039	1011A	< 0.3
7717044	1020A	0.8
7717046	1022A	< 0.3
7717025	* 1101 (Tampered)	< 0.3
7717029	1109C	< 0.3
7717031	1117A	< 0.3
7717032	1123A	< 0.3
7717085	1200A	1
7717086	1200B	0.7
7717084	1200C	0.7
7717081	1201C	0.7
7717082	* 1201D (Tampered)	< 0.3
7717088	* 1209 (Tampered)	< 0.3
7717090	1209A	0.7
7717091	1209B	0.8
7717094	* 1209C (Tampered)	0.9
7717093	1209D	0.7
7717092	1209E	< 0.3
7717064	* 1220 (Tampered)	< 0.3
7717052	* 1228 (Tampered)	0.6
7717053	1228B	0.7
7717075	1314A	1.1
7717047	* 1410 (Missing)	0

Table Note:
* Missing or Compromised Sample

Radon Testing Results		
Parkland Magnet Middle School		
Test Period: 01/11/16-01/14/16		
Kit Number	**QC Type**	**Result**
7717002	D (1000)	< 0.3
7717005	D (1002)	< 0.3
7717019	D (1004D)	1.2
7717042	D (1020)	< 0.3
7717028	D (1113)	0.7
7717087	D (1200B)	1.4
7717058	D (1404)	< 0.3
7717049	D (1408)	< 0.3
7717097	D (2003)	< 0.3
7717003	FB (1000)	< 0.3
7717006	FB (1002)	< 0.3
7717043	FB (1020)	< 0.3
7717059	FB (1404)	< 0.3
7716768	OB (0)	< 0.3

Table Note:
* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

February 4, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

PARKLAND MAGNET MIDDLE SCHOOL
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7716768	0	2016-01-11 @ 5:00 pm	2016-01-14 @ 1:00 pm	< 0.3	2016-01-19
7717001	1000	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	0.6 ± 0.4	2016-01-19
7717002	1000	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717003	1000	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717007	1000A	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	0.6 ± 0.3	2016-01-19
7717015	1004A	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717008	1000B	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717009	1000C	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	0.7 ± 0.4	2016-01-19
7717010	1000D	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	0.6 ± 0.4	2016-01-19
7717011	1000F	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717012	1000G	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	0.8 ± 0.4	2016-01-19
7717013	1000H	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	0.8 ± 0.4	2016-01-19
7717021	1001	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717022	1001	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717004	1002	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717005	1002	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717006	1002	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717014	1004	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	0.6 ± 0.3	2016-01-19
7717016	1004B	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	0.9 ± 0.4	2016-01-19
7717017	1004C	2016-01-11 @ 8:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717018	1004D	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	1.0 ± 0.4	2016-01-19
7717019	1004D	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	1.2 ± 0.4	2016-01-19
7717020	1004E	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717036	1005	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	1.2 ± 0.4	2016-01-19
7717037	1009	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	1.1 ± 0.4	2016-01-19
7717038	1011	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717039	1011A	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717068	1012	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	1.1 ± 0.4	2016-01-19
7717040	1015	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717041	1020	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717042	1020	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717043	1020	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717044	1020A	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	0.8 ± 0.4	2016-01-19
7717045	1022	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	0.6 ± 0.3	2016-01-19
7717046	1022A	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717023	1100	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717024	1100	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	1.1 ± 0.4	2016-01-19

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

February 4, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

PARKLAND MAGNET MIDDLE SCHOOL
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7717025	1101	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717029	1109C	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717026	1111	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	0.6 ± 0.3	2016-01-19
7717028	1113	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	0.7 ± 0.4	2016-01-19
7717027	1113	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	0.8 ± 0.4	2016-01-19
7717031	1117A	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717030	1119	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	0.6 ± 0.3	2016-01-19
7717032	1123A	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717033	1125	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717034	1127	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	< 0.3	2016-01-19
7717035	1129	2016-01-11 @ 9:00 am	2016-01-14 @ 8:00 am	0.8 ± 0.3	2016-01-19
7717083	1200	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.8 ± 0.4	2016-01-19
7717085	1200A	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	1.0 ± 0.4	2016-01-19
7717086	1200B	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.7 ± 0.4	2016-01-19
7717087	1200B	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	1.4 ± 0.4	2016-01-19
7717084	1200C	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.7 ± 0.4	2016-01-19
7717080	1201	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717081	1201C	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.7 ± 0.4	2016-01-19
7717082	1201D	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717088	1209	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717089	1209	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717090	1209A	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.7 ± 0.4	2016-01-19
7717091	1209B	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.8 ± 0.4	2016-01-19
7717094	1209C	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.9 ± 0.4	2016-01-19
7717093	1209D	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.7 ± 0.3	2016-01-19
7717092	1209E	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717099	1210	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717100	1212	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.9 ± 0.4	2016-01-19
7717066	1214	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	1.0 ± 0.4	2016-01-19
7717067	1215	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.7 ± 0.3	2016-01-19
7717065	1216	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.7 ± 0.3	2016-01-19
7717064	1220	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717054	1221	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717056	1222	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	0.8 ± 0.4	2016-01-19
7717050	1225	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717055	1226	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	1.0 ± 0.4	2016-01-19
7717052	1228	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	0.6 ± 0.3	2016-01-19

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

February 4, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

PARKLAND MAGNET MIDDLE SCHOOL
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7717053	1228B	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	0.7 ± 0.4	2016-01-19
7717051	1232	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	0.6 ± 0.3	2016-01-19
7717079	1300	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.7 ± 0.4	2016-01-19
7717078	1304	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.7 ± 0.4	2016-01-19
7717077	1306	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717076	1310	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.7 ± 0.4	2016-01-19
7717073	1311	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	1.1 ± 0.4	2016-01-19
7717070	1313	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.8 ± 0.4	2016-01-19
7717074	1314	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.9 ± 0.4	2016-01-19
7717075	1314A	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	1.1 ± 0.4	2016-01-19
7717072	1318	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.9 ± 0.4	2016-01-19
7717071	1322	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.6 ± 0.3	2016-01-19
7717069	1324	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	0.8 ± 0.3	2016-01-19
7717061	1400	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	0.6 ± 0.3	2016-01-19
7717063	1403	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	0.9 ± 0.4	2016-01-19
7717057	1404	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717058	1404	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717059	1404	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717062	1405	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717060	1407	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	0.6 ± 0.3	2016-01-19
7717048	1408	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717049	1408	2016-01-11 @ 9:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717047	1410	@	@		
7717095	2000	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717098	2002	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717096	2003	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19
7717097	2003	2016-01-11 @ 10:00 am	2016-01-14 @ 9:00 am	< 0.3	2016-01-19

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

February 2, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

MCPS PHASE 5 & 6
TRANSIT BLANKS

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

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

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, 7706211, 7706366, 7706380, 7706381 F3 Left	Device No.'s: _____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____

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

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

Chain of Custody

Project Name: MCPS Radon Phase V

Name of Schools:

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

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

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