

School Year: 24-25

Facility:	Georgia	Georgian Forest Elementary School				
Address:	3100 Re	gina Drive				
Address.	Silver Sp	oring, MD 20906				
		Scheduled Re-Testing - ☐ 2-year or ⊠ 5-year schedule				
Posson for T	ostina:	☐ Clearance Testing (Post-Mitigation)				
Reason for Testing:		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 Requ		☑ No Further Testing Needed -or- ☐ Follow-Up Testing Required				

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

Mitigation -		Facility Radon Status:	
☐ Not Required ☑ Consider (≥2.0 & <4.0-pCi/L) ☐ Required (≥4.0-pCi/L) Rooms:	No Change in Status □ Active Mitigation (2-year regular scheo □ No Active Mitigation (5-year regular sch		
Number of Rooms Tested	ed 63 Lowest Value (pCi/L)		
Number of Rooms (≥4.0-pCi/L)	0	Highest Value (pCi/L)	3.4

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; ≥4.0-pCi/L; and ≥8.0-pCi/L;
- QA/QC Results (field blanks and duplicates) indicating location collected; trip and office blanks; and spike sample results;
- Invalid Measurement Locations missed locations, missing and or damaged/compromised testing devices.

Attachment 2 – Laboratory Report(s)

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



School Year: 24-25

Facility:	Georgian Forest Elementary School				
Address:	3100 Re	gina Drive			
Address.	Silver Sp	oring, MD 20906			
		Scheduled Re-Testing - ⊠ 2-year or □ 5-year schedule			
Posson for T	osting	☐ Clearance Testing (Post-Mitigation)			
Reason for Testing:		☑ Building Envelope or HVAC Upgrades			
		☐ New Construction – Addition or Facility			
		Active Mitigation (2-year regular schedule)			
Current Radon	Status:	tatus: No Active Mitigation (5-year regular schedule)			
		☐ Not Previously Tested (New Facility)			
Round of Testing:		☐ Initial Testing -or- ☑ Follow-up Testing			
Testing Sta	itus:	☑ No Further Testing Needed -or- ☐ Follow-Up Testing Required			

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

Mitigation -		Facility Radon Status:		
☐ Not Required ☑ Consider (≥2.0 & <4.0-pCi/L) ☐ Required (≥4.0-pCi/L) Rooms:		☑ No Change in Status e Mitigation (2-year regular ive Mitigation (5-year regula	egular schedule)	
Number of Rooms Tested	d 63 Lowest Value (pCi/L) < 0			
Number of Rooms (≥4.0-pCi/L)	0	Highest Value (pCi/L)	3.4	

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

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

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

Attachment 2 – Laboratory Report(s)

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



Detector and Deployment

	☐ Passive ☐ Charcoal Absorption (CAD) ☐ Alpha Track (ATD) ☐ Othe					ATD) □ Other		
Detector/Device	☐ Continuous ☐ Electret ion Chamber (EIC) ☐ Electronic Integration (EID					gration (EID)		
Type:	Other–Specify here:							
. /								
Detector/Device	Air Chek – Radon	Test Kits						
Name:								
Manufacturer:	Radon Lab							
Person(s) Deployi	ng or Retrieving	Test Device	s and	Orga	anization/Cor	npany		
certification num	ber							
Tyler McCleaf, CSP	– Cert. #111004-R	MP		KCI Technolog	ies Inc.			
Shannon King				KCI Technolog	ies, Inc.			
If noncertified individ	uals, the qualified m	easurement p	professional pro	viding oversight - 	•			
Tyler McCleaf, CSP	– Cert. #111004-R	MP		KCI Technolog	ies Inc.			
				l				
- • •								
Testing								
	n Length of		Date of Der	oloyment and	12/09/24	03/17/25		
☐ Long-Term		3		mm/dd/yy):	12/12/24	03/20/25		
	· cot (dayo).		Treerieval (, ۵۵, , , , ,	12/12/24	03/20/23		
Does the test	period include we	eekends, sc	hool breaks	or holidays?	□ Yes 🗵	l No		
If "Yes" please explain/detail in the space below:								
Was HVAC ope	Was HVAC operating under occupied conditions? ☐ Yes ☐ No							
·								
if No piease exp	If "No" please explain/detail in the space below:							



Testing (continued)

	Detectors Deployed					
	Ground	-Contact	Uppe	r-Level(s)	Total	
Round of Testing	Initial	Follow-Up	Initial Follow-Up		Total	
Test Locations ¹	60	0	2	2	64	
Duplicates ²	5	0	1	1	7	
Field Blanks ³	3	0	0	1	4	
Grand Total					75	

¹⁻ include all detectors deployed (duplicates, field blanks); 1 detector per occupied (or intended to be occupied) ground-contact space $\le 2,000$ -square feet; large spaces $\ge 2,000$ -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 <u>per floor</u> (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	Total	
Round of Testing	Initial Follow-Up		Total
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 <u>each LOT</u> of CAD and ATD detectors; a <u>maximum of 6-spiked</u> 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, <u>analyzed prior to deployment</u>, 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)	🛛 Yes	⊠ Yes
to the Method Detection Limit?	☐ No	☐ No
For all Duplicate Samples ¹ , the higher value is ≤ 2x the lower value?		✓ Yes
Tot all Duplicate Samples, the higher value is 2 2x the lower value!	⊠ No	☐ No
For all Duplicate Samples ¹ , Relative Percent Difference(s) (RPD) ² are	✓ Yes	
less than the Warning Level ³ ?	□ No	□ No
For all Duplicate Samples ¹ , Relative Percent Difference(s) (RPD) ² are	✓ Yes	☑ Yes
less than the Control Level ³ ?	☐ No	□ No

- 1 Duplicate Control a "NO" response constitute a control failure and the space/location represented by the duplicate sample becomes an invalid measurement location and should be listed in the "Invalid Measurement Locations" Table attached to this report.
- 2 The objective of duplicate tests is to assess the precision error of the measurement method or, how well two side-by-side measurements agree or disagree. Precision involving duplicates is calculated by using Relative Percent Difference (RPD). RPD is equal to the difference between the higher test result minus the lower value test result divided by the average of the two duplicate test results, multiplied by 100. The RPD result is then compared to the warning and control limits.
- 3 The Warning Level is set at the deviation from ideal performance that would be expected to occur by chance only 5% of the time, and Control Limits are set at that deviation from ideal performance that would be expected to occur by chance only 1% of the time. The Warning Level indicates a potential problem, which should be investigated. The Control Level indicates that the measurement system should be subject to corrective action.

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

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



Summary of Test Results¹ and Determination of Valid Measurements²

	Ground-Contact		Upper	Total	
Round of Testing	Initial	Follow-Up	Initial	Follow-Up	TOLAI
Number of test locations:	60	0	2	1	63
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:	3	0	0	0	3
Number of locations ≥2.0 and <2.7-pCi/L:	10	0	0	0	10
Number of missing required test locations ³ :	0	0	1	0	0
Number of failed duplicate control locations:	0	0	0	0	0
Percentage of missing test locations for the facility ^{4,5} :	0	0	50%	0	0

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

- 2 the allowance is to be calculated individually for Ground-Contact and Upper-Level(s) Test Locations;
- 3 includes missed or inaccessible locations upon deployment or retrieval, damaged (not able to analyze) and missing detectors upon retrieval;
- 4 if all valid measurements are <4.0-pCi/L and the total number of test locations are ≥18, there is an allowance of ≤33%. If less than 18 test locations please review section 6.2 of the ANSI/AARST MA-MFLB 2023;
- 5 if any valid measurements are ≥ 4.0 -pCi/L and the total number of test locations are ≥ 20 , there is an allowance of $\le 25\%$ of the total locations tested. If less than 20 test locations please review section 6.2 of the ANSI/AARST MA-MFLB 2023.



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

Round of Testing	Initial	Follow-Up
Were test devices deployed in all occupied and intended to be occupied rooms in		✓ Yes
contact with the ground, and, if applicable, 10% of upper floor rooms?	□No	□ No
Were valid measurements obtained in all occupied and intended to be occupied	☐ Yes	✓ Yes
rooms in contact with the ground, and, if applicable, 10% of upper floor rooms?	⊠ No	□ 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	☑ Yes	☐ Yes
were sufficient valid measurements obtained? ^{1,2} If Yes, then - 'No Further Testing Needed' complete Conclusion section on first page.	☐ No	☐ No
If No, then - 'Follow-up Testing Required' continue below.	□ NA	⊠ 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	Not Applicable	Follow Initial Testing procedures
Results ≥ 4.0-pCi/L	Testing Deploy two Short-term follow-up	Applicable ≥4.0	Mitigation Required
nesans I no pen I	tests and required blanks and	≥2.0 and <4.0	Consider Mitigation
Failed QC checks	duplicates; Average the results of the two tests	<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
Georgian Forest Elementary School
Test Period: 12/09/2024 - 12/12/2024

Kit Number	Room / Area	Result
11893127	100	0.7
11893128	100	1.2
11893129	101	1.1
11893121	102	1.3
11893122	103	0.7
11893130	104	1.0
11893135	105	1.1
11893123	106	< 0.3
11893154	107	0.7
11893159	107	1.2
11893153	108	1.8
11893156	109	2.2
11893144	110	1.5
11893143	111	2.0
11893102	112	2.3
11893101	113	3.4
11893106	113	3.2
11893104	114	1.5
11893105	115	1.9
11893147	116	0.8
11893148	117	1.2
11893168	118	0.6
11893132	119	2.1
11893145	120	2.5
11893146	121	1.4
11893151	122	1.9
11893110	124	1.2
11893126	124	< 0.3
11893109	126	1.1
11893152	126	1.0
11893141	203	2.0
11893139	204	2.3
11893169	205	1.0
11893140	206	1.4
11893149	207	1.1
11893170	209	0.8
11893150	211	< 0.3

Table	1- Radon Testing Res	sults
Georgia	n Forest Elementary	School
Test Pe	riod: 12/09/2024 - 12/1	2/2024

Kit Number	Room / Area	Result
11893164	211	0.9
11893142	213	1.7
11893171	213	1.3
11893157	214	1.6
11893158	216	1.2
11893165	217	1.8
11893178	219	1.0
11893177	220	1.1
11893155	109A	2.3
11893134	BUILDING SERVICES	0.5
11893103	CAFE	0.5
11893115	CAFE	0.6
11893113	CONFERENCE	1.3
11893117	GYM	2.7
11893125	GYM	2.4
11893118	GYM OFFICE	2.2
11893114	HEALTH	1.5
11893112	HEALTH OFFICE	1.2
11893133	KITCHEN OFFICE	1.1
11893163	KITCHEN OFFICE	1.1
11893160	LINKAGES	< 0.3
11893167	LINKAGES	0.8
11893162	LINKAGES CONFERENCE	0.5
11893120	MAIN OFFICE	1.2
11893124	MEDIA	1.8
11893131	MEDIA	1.5
11893136	MEDIA OFFICE	1.7
11893137	MEDIA WORKROOM	1.8
11893138	PCCS	< 0.3
11893111	PRINCIPAL	1.7
11893174	SDT	1.2
11893116	STAFF LOUNGE	< 0.3
11893161	THERAPIST LINKAGES	< 0.3
11893119	WORKROOM	1.1

	Table 2 - Summary Testing Results ≥2.0 pCi/L							
	Georgian Forest Elementary School							
	Test Period: 12/09/2024 - 12/12/2024							
≥2.0 and <2	.7 pCi/L	≥2.7 and <4	l.0 pCi/L	≥4.0 and <8	3.0 pCi/l	≥8.0 pC	i/L	
Room / Area	Result	Room / Area	Result	Room / Area	Result	Room / Area	Result	
203	2.0	GYM	2.7	N/A	N/A	N/A	N/A	
111	2.0	113	3.2					
119	2.1	113	3.4					
GYM OFFICE	2.2							
109	2.2							
112	2.3							
204	2.3							
109A	2.3							
GYM	2.4							
120	2.5							

Table 3 - QC Radon Testing Results
Georgian Forest Elementary School
Test Period: 12/09/2024 - 12/12/2024

Kit Number	QC Type	Room / Area	Result
11893128	D	100	1.2
11893154	D	107	0.7
11893106	D	113	3.2
11893126	FB	124	< 0.3
11893152	D	126	1.0
11893150	FB	211	< 0.3
11893171	D	213	1.3
11893133	D	Kitchen Office	1.1
11893160	FB	Linkages	< 0.3
11477899	OB	OFFICE BLANK	< 0.3
11482789	TB	TRAVEL BLANK	< 0.3

Table 3a - Duplicate Worksheet / Data Validation Georgian Forest Elementary School Test Period: 12/09/2024 - 12/13/2024

	Sample I	ID		Duplicate Concentrations (pCi/L) and OC Checks						
Kit Nu	ımbers	Room / Area	Higher	Lower	Check #1 (Pass/Fail)	2x the Lower	Check #2 (Pass/Fail)	Average	Relative Percent Difference (RPD)	Check #3
11893127	11893128	100	1.2	0.7	✓	1.4	PASS	1.0	<1-pCi/L	✓
11893109	11893152	126	1.1	1.0	✓	2.0	PASS	1.1	<1-pCi/L	✓
11893101	11893106	113	3.4	3.2	✓	6.4	PASS	3.3	6.1%	✓
11893159	11893154	107	1.2	0.7	✓	1.4	PASS	1.0	<1-pCi/L	✓
11893163	11893133	Kitchen office	1.1	1.1	✓	2.2	PASS	1.1	<1-pCi/L	✓
11893142	11893171	213	1.7	1.3	✓	2.6	PASS	1.5	<1-pCi/L	✓
11893175 (Missing)	11893176 (Missing)	Slife	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTES:

QC Check #1 - Data Entry

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

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

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		

- 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

Table 4 - Summary of Invalid Measurement Locations								
Georgian Forest Elementary School								
Test Period: 12/09/24 - 12/12/24								
Kit Number	Room/Area	Reason						
11893175	SLife	Missing Kit						
11893176	SLife	Missing Kit						
	L							

Table 1- Radon Testing Results						
Geor	gian Forest Elementary Scho	ol RT				
Te	Test Period: 3/17/2025 - 3/20/2025					
Kit Number	Kit Number Room / Area Result					
11892445	11892445 SLIFE					
11892447	11892447 SLIFE < 0.3					
11892448	11892448 SLIFE 0.6					
11892449	SLIFE	< 0.3				

	Table 2 - Summary Testing Results ≥2.0 pCi/L								
	Georgian Forest Elementary School								
	Test Period: 3/17/2025 - 3/20/2025								
≥2.0 and <	2.7 pCi/L	≥2.7 and <	4.0 pCi/L	≥4.0 and •	<8.0 pCi/l	≥8.0 ֈ	Ci/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					
Georgian Forest Elementary School					
Test Period: 3/17/2025 - 3/20/2025					
Kit Number	QC Type	Room / Area	Result		
11000115	-	a			
11892445	D	SLIFE	< 0.3		
11892445	FB	SLIFE SLIFE	< 0.3		
		_			

Table 3a - Duplicate Worksheet / Data Validation Georgian Forest Elementary School RT Test Period: 3/17/2025 - 3/20/2025 Sample ID Duplicate Concentrations (pCi/L) and OC Checks **Relative Percent** Check #1 2x the Check #2 Kit Numbers Room / Area Higher Lower Check #3 Average Difference (RPD) (Pass/Fail) Lower (Pass/Fail) 11892447 11892445 SLIFE 0.6 0.3 **V** 0.6 PASS 0.5 <1-pCi/L 11892448 NOTES: Average (pCi/L) Warning Level Control Level QC Check #1 - Data Entry 1-pCi/L QC Check #2 - Higher duplicate concentration is < or = to 2x the Lower Between 2.0 and 3.9 50% RPD 67% RPD QC Check #3 - Meets RPD Limits, by average duplicate concentration ≥ 4.0 28% RPD 36% RPD

- 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

Table 4 - Summary of Invalid Measurement Locations	
Georgian Forest Elementary School	
Test Period: 3/17/25 - 3/20/25	

Kit Number	Room/Area	Reason
N/A	N/A	N/A

Attachment 2: Laboratory Reports

Radon test result report for: GEORGIAN FOREST ES MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11893127	100	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	0.7 ± 0.3	2024-12-16
11893128	100	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	1.2 ± 0.3	2024-12-16
11893129	101	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	1.1 ± 0.4	2024-12-16
11893121	102	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	1.3 ± 0.4	2024-12-16
11893122	103	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	0.7 ± 0.4	2024-12-16
11893130	104	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	1.0 ± 0.3	2024-12-16
11893135	105	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	1.1 ± 0.3	2024-12-16
11893123	106	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	< 0.3	2024-12-16
11893159	107	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	1.2 ± 0.4	2024-12-16
11893154	107	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	0.7 ± 0.4	2024-12-16
11893153	108	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	1.8 ± 0.4	2024-12-16
11893156	109	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	2.2 ± 0.4	2024-12-16
11893155	109A	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	2.3 ± 0.4	2024-12-16
11893144	110	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	1.5 ± 0.4	2024-12-16
11893143	111	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	2.0 ± 0.4	2024-12-16
11893102	112	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	2.3 ± 0.4	2024-12-16
11893106	113	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	3.2 ± 0.4	2024-12-16
11893101	113	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	3.4 ± 0.4	2024-12-16
11893104	114	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	1.5 ± 0.4	2024-12-16
11893105	115	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	1.9 ± 0.4	2024-12-16
11893147	116	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	0.8 ± 0.3	2024-12-16
11893148	117	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	1.2 ± 0.4	2024-12-16
11893168	118	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	0.6 ± 0.4	2024-12-16
11893132	119	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	2.1 ± 0.4	2024-12-16
11893145	120	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	2.5 ± 0.4	2024-12-16
11893146	121	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	1.4 ± 0.4	2024-12-16
11893151	122	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	1.9 ± 0.4	2024-12-16
11893126	124	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	< 0.3	2024-12-16
11893110	124	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	1.2 ± 0.3	2024-12-16
11893109	126	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	1.1 ± 0.3	2024-12-16
11893152	126	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	1.0 ± 0.3	2024-12-16
11893141	203	2024-12-09 @ 10:00 am	2024-12-12 @ 11:00 am	2.0 ± 0.4	2024-12-16
11893139	204	2024-12-09 @ 10:00 am	2024-12-12 @ 11:00 am	2.3 ± 0.4	2024-12-16
11893169	205	2024-12-09 @ 10:00 am	2024-12-12 @ 11:00 am	1.0 ± 0.3	2024-12-16
11893140	206	2024-12-09 @ 10:00 am	2024-12-12 @ 11:00 am	1.4 ± 0.4	2024-12-16
11893149	207	2024-12-09 @ 10:00 am	2024-12-12 @ 11:00 am	1.1 ± 0.3	2024-12-16
11893170	209	2024-12-09 @ 10:00 am	2024-12-12 @ 11:00 am	0.8 ± 0.3	2024-12-16

Radon test result report for: GEORGIAN FOREST ES MAIN

Kit #	Room Id	Started	Ended	pCi/L	A molygod
11893164	211	2024-12-09 @ 10:00 am	2024-12-12 @ 11:00 am	0.9 ± 0.3	Analyzed 2024-12-16
11893150	211		2024-12-12 @ 11:00 am	< 0.3	2024-12-16
11893142	213		2024-12-12 @ 11:00 am	1.7 ± 0.4	2024-12-16
11893171	213		2024-12-12 @ 11:00 am	1.3 ± 0.4	2024-12-16
11893157	214		2024-12-12 @ 11:00 am	1.6 ± 0.3	2024-12-16
11893158	216		2024-12-12 @ 11:00 am	1.2 ± 0.4	2024-12-16
11893165	217	2024-12-09 @ 11:00 am	2024-12-12 @ 11:00 am	1.8 ± 0.4	2024-12-16
11893178	219	2024-12-09 @ 11:00 am	2024-12-12 @ 11:00 am	1.0 ± 0.4	2024-12-16
11893177	220	2024-12-09 @ 11:00 am	2024-12-12 @ 11:00 am	1.1 ± 0.3	2024-12-16
11893134	BUILDING SERVICES	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	0.5 ± 0.3	2024-12-16
11893115	CAFE	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	0.6 ± 0.3	2024-12-16
11893103	CAFE	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	0.5 ± 0.3	2024-12-16
11893113	CONFERENCE	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	1.3 ± 0.4	2024-12-16
11893125	GYM	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	2.4 ± 0.4	2024-12-16
11893117	GYM	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	2.7 ± 0.4	2024-12-16
11893118	GYM OFFICE	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	2.2 ± 0.4	2024-12-16
11893114	HEALTH	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	1.5 ± 0.4	2024-12-16
11893112	HEALTH OFFICE	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	1.2 ± 0.4	2024-12-16
11893133	KITCHEN OFFICE		2024-12-12 @ 10:00 am	1.1 ± 0.4	2024-12-16
11893163	KITCHEN OFFICE		2024-12-12 @ 10:00 am	1.1 ± 0.4	2024-12-16
11893160	LINKAGES		2024-12-12 @ 10:00 am	< 0.3	2024-12-16
11893167	LINKAGES		2024-12-12 @ 10:00 am	0.8 ± 0.3	2024-12-16
	LINKAGES CONFERENCE			0.5 ± 0.3	2024-12-16
11893120	MAIN OFFICE	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	1.2 ± 0.4	2024-12-16
11893124	MEDIA		2024-12-12 @ 10:00 am	1.8 ± 0.4	2024-12-16
11893131	MEDIA		2024-12-12 @ 10:00 am	1.5 ± 0.4	2024-12-16
11893136	MEDIA OFFICE	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	1.7 ± 0.4	2024-12-16
11893137	MEDIA WORKROOM	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	1.8 ± 0.4	2024-12-16
11893138	PCCS	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	< 0.3	2024-12-16
11893111	PRINCIPAL	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	1.7 ± 0.4	2024-12-16
11893174	SDT	2024-12-09 @ 11:00 am		1.2 ± 0.3	2024-12-16
11893116	STAFF LOUNGE		2024-12-12 @ 10:00 am	< 0.3	2024-12-16
11893161	THERAPIST LINKAGES	2024-12-09 @ 10:00 am	2024-12-12 @ 10:00 am	< 0.3	2024-12-16
11893119	WORKROOM	2024-12-09 @ 9:00 am	2024-12-12 @ 10:00 am	1.1 ± 0.4	2024-12-16

December 16, 2024

** LABORATORY ANALYSIS REPORT **

Radon test result report for:
OFFICE
MAIN

11477899 O 2024-12-09 @ 10:00 am 2024-12-12 @ 11:00 am < 0.3 2024-12-16 11907194 O 2024-12-10 @ 10:00 am 2024-12-13 @ 11:00 am < 0.3 2024-12-16	Kit#	Room Id	Started	Ended	pCi/L	Analyzed
11907194 O 2024-12-10 @ 10·00 am 2024-12-13 @ 11·00 am < 0.3 2024-12-16	11477899	O	2024-12-09 @ 10:00 am	2024-12-12 @ 11:00 am	< 0.3	2024-12-16
11707171 0 2021 12 10 C 10.00 um 2024 12 13 G 11.00 um \ \(\text{0.3}\)	11907194	O	2024-12-10 @ 10:00 am	2024-12-13 @ 11:00 am	< 0.3	2024-12-16

December 16, 2024

** LABORATORY ANALYSIS REPORT **

Radon test result report for: TRAVEL MAIN

		Ended	pCi/L	Analyzed
11482789 T	2024-12-09 @ 10:00 am	2024-12-12 @ 11:00 am	< 0.3	2024-12-16
11907193 T	2024-12-10 @ 10:00 am	2024-12-13 @ 11:00 am	< 0.3	2024-12-16

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI TECHNOLOGIES	INC	Job Number 7000 1560)
NOMINAL Conditions: Radon Conc_50.6	pCi/L Rel. Hum	50.6% Temp. 70.8	F
Date Start: 12/14/24 Date Stop: 13/17/29	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			
By 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:_		
	<u> </u>		
S T	·		
! !			

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

December 23, 2024

** LABORATORY ANALYSIS REPORT **

 $\frac{Radon\ test\ result\ report\ for:}{\mathbf{S}\mathbf{K}}$

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

Engineers • Planners • Scientists • Construction Managers

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

Radon Test Kit Chain of Custody

Project Name: MCPS Radon – Testing December 9th – December 12th, 2024

Name of Schools:

1. Georgian Forest ES

2. Glen Haven ES

3. Glenallen ES

4. Greencastle ES

5. Highland ES

	Date	Initials
Radon Test Kits Deployed	12/09/2024	Bmm
Radon Test Kits Collected	12/12/2024	Bhull
Radon Test Kits Shipped to Lab*	12/12/2024	BMM
Radon Test Kits Received by Lab*	12/16/2024	BUM

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

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11892445	SLIFE	2025-03-17 @ 11:00 am	2025-03-20 @ 2:00 pm	< 0.3	2025-03-24
11892447	SLIFE	2025-03-17 @ 11:00 am	2025-03-20 @ 2:00 pm	< 0.3	2025-03-24
11892448	SLIFE	2025-03-17 @ 11:00 am	2025-03-20 @ 2:00 pm	0.6 ± 0.3	2025-03-24
11892449	SLIFE	2025-03-17 @ 11:00 am	2025-03-20 @ 2:00 pm	< 0.3	2025-03-24

April 7, 2025

** LABORATORY ANALYSIS REPORT **

Radon test result report for: OFFICE MAIN

Kit#	Room Id	Started	Ended	pCi/L	Analyzed
11892482	OB	2025-03-17 @ 11:00 am	2025-03-21 @ 11:00 am	< 0.3	2025-03-24

April 7, 2025

** LABORATORY ANALYSIS REPORT **

Radon test result report for: TRAVEL MAIN

Kit#	Room Id	Started	Ended	pCi/L	Analyzed
11892483	TB	2025-03-17 @ 11:00 am	2025-03-21 @ 11:00 am	< 0.3	2025-03-24

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI TECHNOLOGIC	3, INC Job Number 2000 2919
	pCi/L Rel. Hum 51.4 % Temp. 70.7 F
Date Start: 3/143 Date Stop: 3/19/2	Date Start: Date Stop:
Time Start: O832 Time Stop: 0832	Time Start: Time Stop:
Device No.'s: (7) CHAR BAGS	Device No.'s:
11886401 thru 11886406,	
11886410	
G3 Roht	
Date Start: Date Stop:	Date Start: Date Stop:
Time Start: Time Stop:	
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 = $7 \mu R/h$ Elevation = 820 ft

** 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



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 – Re-Testing March 17th – March 20th, 2025

Name of Schools:

- 1. Georgian Forest ES
- 2. Glen Haven ES
- 3. Jackson Road ES
- 4. John F. Kennedy HS

	Date	Initials
Radon Test Kits Deployed	3/17/2025	BNULL
Radon Test Kits Collected	3/20/2025	Buily
Radon Test Kits Shipped to Lab*	3/20/2025	Bally
Radon Test Kits Received by Lab*	3/24/2025	BAUTE

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



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

MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Georgian Forest
	Elementary School
Date of Test Report	2/17/2023
Round of Testing	Initial
	Follow-up
	Post Remediation
	2 Year Testing
	5 Year Testing
	HVAC Upgrade
	Window Replacement
	New Addition
	New Facility
# Rooms Tested	67
# Rooms \geq 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	3.2 pCi/L

Project Status:

1. 5-Year retesting completed.

KCI Technologies, Inc. WWW.kci.com



ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

February 17, 2023

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

Re: Radon Testing Services

KCI Job # 122210551

Location: Georgian Forest Elementary School

3100 Regina Drive

Silver Spring, MD 20906

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 Georgian Forest Elementary School, located at 3100 Regina Dr. Silver Spring, MD 20906 (subject site).

Scope of Services:

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

KCI visited the site on January 24, 2023 and deployed seventy-six (76) activated charcoal (AC) radon test kits. KCI deployed radon test kits in all frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

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

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

KCI returned to the site on January 27, 2023 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Accustar Labs - MA. for analysis by gamma-ray spectroscopy.

KCI Technologies, Inc. WWW.kci.com

Accustar Labs - MA is a NRSB certified analytical laboratory for radon analysis (certification #ARL0017) located at 2 Saber Way, Ward Hill, MA 01835.

Evaluation of Testing Conditions:

These tests represent:

• Follow up to initial testing.

These tests were conducted to:

• Evaluate radon concentration 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 temperatures ranged from the 31°F to 52°F. Maximum sustained winds ranged from 5-25 miles per hour. Average humidity was around 60% with .32 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		

KCI Technologies, Inc. WWW.kci.com

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

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

Sincerely,

Tyler P. McCleaf

Radon Measurement Provider

#111004 RT

KCI Technologies, Inc.

Tyler McCleaf

Attachments: A- Floor Plan with Test Locations

B- Table 1-3, Radon Test Summary Spreadsheets

C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Check, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

OC- Quality Control

Table 1- Radon	Testing Results
Georgian	Forest ES

Test Period: 01/24/2023 - 01/27/2023

Kit Number	Room / Area	Result
11633627	100	< 0.3
11633621	101	< 0.3
11633639	102	0.9
11633640	102	< 0.3
11633634	103	< 0.3
11633622	104	< 0.3
11633628	105	0.5
11633666	106	< 0.3
11633665	107	0.9
11633664	108	2.4
11633617	109	1.4
11633613	110	1.5
11633632	111	< 0.3
11633606	111	0.9
11633605	112	1.5
11633604	113	0.7
11633616	114	2.0
11633615	115	2.4
11633638	116	0.9
11633671	117	1.1
11633637	118	0.7
11633636	119	2.0
11633663	119	1.9
11633612	120	< 0.3
11633614	120	0.7
11633619	121	0.5
11633633	122	1.0
11633620	124	< 0.3
11633646	126	< 0.3
11633645	203	2.3
11633651	204	3.1
11633672	204	3.2
11633673	205	1.4
11633679	205	< 0.3
11633643	206	1.0
11633652	207	1.6
11633644	209	0.9
11633680	211	< 0.3
11633659	213	< 0.3
11633674	214	< 0.3
11633662	216	< 0.3
11633669	217	< 0.3

Table 1- Radon Testing Results				
	Georgian Forest ES			
Tes	st Period: 01/24/2023 - 01/27/2023	3		
Kit Number	Room / Area	Result		
11633670	219	0.5		
11633675	220	0.6		
11633661	229	< 0.3		
11633618	109A	1.1		
11633603	АР	1.4		
11633629	APR	0.6		
11633649	APR	< 0.3		
11633650	BUILDING SERVICES	< 0.3		
11633609	CONFERENCE	1.2		
11633642	GYM	1.4		
11633648	GYM	1.8		
11633641	GYM OFFICE	1.5		
11633602	HEALTH	1.5		
11633607	HEALTH OFFICE	1.3		
11633630	KITCHEN OFFICE	1.1		
11633654	LINKAGES	< 0.3		
11633655	LINKAGES CARE MANAGER	1.1		
11633653	LINKAGES CONFERENCE	0.8		
11633658	LINKAGES SITE COORDINATOR	1.0		
11633657	LINKAGES THERAPIST	< 0.3		
11633601	MAIN OFFICE	1.2		
11633611	MEDIA	1.3		
11633623	MEDIA	1.6		
11633624	MEDIA	1.3		
11633625	MEDIA OFFICE	1.6		
11633626	MEDIA WORKROOM	1.8		
11633631	PARENT RESOURCE	0.8		
11633608	PRINCIPAL	1.1		
11633681	PSCH	< 0.3		
11633667	SDT	< 0.3		
11633668	SDT	< 0.3		
11633635	STAFF LOUNGE	< 0.3		
11633656	STAFF LOUNGE	< 0.3		
11633610	STAFF WORKROOM	1.1		

Table 2- Radon Testing Results						
	Georg	gian Forest ES				
	Test Period: 01/24/23 - 01/27/23					
Kit Number	QC Type	Room / Area	Result			
11633639	D	102	0.9			
11633632	FB	111	< 0.3			
11633636	D	119	2.0			
11633614 D 120		0.7				
11633672	D	204	3.2			
11633679	FB	205	< 0.3			
11633611	D	Media	1.3			
11633667	D	SDT	< 0.3			
11633635	FB	Staff Lounge	< 0.3			
11633975	ОВ	OFFICE BLANK	< 0.3			
11633983	ТВ	TRAVEL BLANK	< 0.3			

Summary of Missed Locations					
1	Georgian Forest ES				
Т	est Period: 01/24/23 - 01/27/23				
	2501 21104. 01/21/25				
Kit Number Room/Area Result					
	N/A				
	,				

Summary of Missing, Compromised and >/= 4 piC/L Tests					
	Georgian Forest ES				
	Test Period: 01/24/23 - 01/27/23				
Kit Number	Room/Area	Result			
	N/A				

Table Note:

^{*} Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for: GEORGIAN FOREST ES MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11633627	100	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633621	101	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633640	102	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633639	102	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	0.9 ± 0.4	2023-01-31
11633634	103	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633622	104	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633628	105	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	0.5 ± 0.4	2023-01-31
11633666	106	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633665	107	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	0.9 ± 0.4	2023-01-31
11633664	108	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	2.4 ± 0.4	2023-01-31
11633617	109	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	1.4 ± 0.4	2023-01-31
11633618	109A	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	1.1 ± 0.4	2023-01-31
11633632	11	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633613	110	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	1.5 ± 0.4	2023-01-31
11633606	111	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	0.9 ± 0.4	2023-01-31
11633605	112	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	1.5 ± 0.4	2023-01-31
11633604	113	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	0.7 ± 0.4	2023-01-31
11633616	114	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	2.0 ± 0.4	2023-01-31
11633615	115	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	2.4 ± 0.4	2023-01-31
11633638	116	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	0.9 ± 0.4	2023-01-31
11633671	117	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	1.1 ± 0.4	2023-01-31
11633637	118	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	0.7 ± 0.4	2023-01-31
11633663	119	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	1.9 ± 0.4	2023-01-31
11633636	119	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	2.0 ± 0.4	2023-01-31
11633614	120	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	0.7 ± 0.4	2023-01-31
11633612	120	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633619	121	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	0.5 ± 0.4	2023-01-31
11633633	122	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	1.0 ± 0.4	2023-01-31
11633620	124	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633646	126	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633645	203	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	2.3 ± 0.4	2023-01-31
11633651	204	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	3.1 ± 0.4	2023-01-31
11633672	204	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	3.2 ± 0.4	2023-01-31
11633679	205	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633673	205	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	1.4 ± 0.4	2023-01-31
11633643	206	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	1.0 ± 0.4	2023-01-31
11633652	207	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	1.6 ± 0.4	2023-01-31

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

Radon test result report for: GEORGIAN FOREST ES MAIN

"				21.5	
Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11633644	209	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	0.9 ± 0.4	2023-01-31
11633680	211	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633659	213	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633674	214	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633662	216	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633669	217	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633670	219	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	0.5 ± 0.4	2023-01-31
11633675	220	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	0.6 ± 0.4	2023-01-31
11633661	229	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633603	AP	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	1.4 ± 0.4	2023-01-31
11633629	APR	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	0.6 ± 0.4	2023-01-31
11633649	APR	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633650	BUILDING SERVICES	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633609	CONFERENCE	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	1.2 ± 0.4	2023-01-31
11633642	GYM	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	1.4 ± 0.4	2023-01-31
11633648	GYM	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	1.8 ± 0.4	2023-01-31
11633641	GYM OFFICE	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	1.5 ± 0.4	2023-01-31
11633602	HEALTH	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	1.5 ± 0.4	2023-01-31
11633607	HEALTH OFFICE	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	1.3 ± 0.4	2023-01-31
11633630	KITCHEN OFFICE	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	1.1 ± 0.4	2023-01-31
11633654	LINKAGES	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633655	LINKAGES CARE MANAGER	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	1.1 ± 0.4	2023-01-31
11633653	LINKAGES CONFERENCE	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	0.8 ± 0.4	2023-01-31
11633658	LINKAGES SITE COORDINATOR	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	1.0 ± 0.4	2023-01-31
11633657	LINKAGES THERAPIST	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633601	MAIN OFFICE	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	1.2 ± 0.4	2023-01-31
11633624	MEDIA	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	1.3 ± 0.4	2023-01-31
11633611	MEDIA	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	1.3 ± 0.4	2023-01-31
11633623	MEDIA	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	1.6 ± 0.4	2023-01-31
11633625	MEDIA OFFICE	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	1.6 ± 0.4	2023-01-31
11633626	MEDIA WORKROOM	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	1.8 ± 0.4	2023-01-31
11633631	PARENT RESOURCE	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	0.8 ± 0.4	2023-01-31
11633608	PRINCIPAL	2023-01-24 @ 10:00 am	2023-01-27 @ 9:00 am	1.1 ± 0.4	2023-01-31
11633681	PSCH	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633667	SDT	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633668	SDT	2023-01-24 @ 11:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11633635	STAFF LOUNGE	2023-01-24 @ 10:00 am	2023-01-27 @ 10:00 am	< 0.3	2023-01-31

February 1, 2023

** LABORATORY ANALYSIS REPORT **

Radon test result report for:
GEORGIAN FOREST ES
MAIN

11633656 STAFF LOUNGE 2023-01-24 @ 10:00 am 2023-01-27 @ 10:00 am < 0.3 2023-01-31 11633610 STAFF WORKROOM 2023-01-24 @ 10:00 am 2023-01-27 @ 9:00 am 1.1 ± 0.4 2023-01-31	Kit#	Room Id	Started	Ended	pCi/L	Analyzed
11633610 STAFF WORKROOM 2023-01-24 @ 10:00 am 2023-01-27 @ 9:00 am 1.1 + 0.4 2023-01-31	11633656	STAFF LOUNGE	2023-01-24 @ 10:00	am 2023-01-27 @ 10:00 am	< 0.3	2023-01-31
11035010 51711 11 OKIMOONI 2025 01 24 € 10.00 am 2025-01-27 € 7.00 am 1.1 ± 0.4 2025-01-51	11633610	STAFF WORKROOM	2023-01-24 @ 10:00	am 2023-01-27 @ 9:00 am	1.1 ± 0.4	2023-01-31

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 KC / TECHNOLOGIES	Job Number 208343
NOMINAL Conditions: Radon Conc 34.7	pCi/L Rel. Hum 49.4 % Temp. 69.6 F
Date Start: 12/24/22 Date Stop: 12/27/2	Date Start: Date Stop:
	Time Start: Time Stop:
Device No.'s (5) CHAR BAGS -	Device No.'s:
THRU 11285103	
By Ceff	
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 = $7 \mu R/h$ Elevation = 820 ft

December 29, 2022

** LABORATORY ANALYSIS REPORT **

Radon test result report for:
OFFICE
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11285110	SK1	2022-12-24 @ 8:00 am	2022-12-27 @ 8:00 am	31.7 ± 2.5	2022-12-29
11285101	SK2	2022-12-24 @ 8:00 am	2022-12-27 @ 8:00 am	30.1 ± 2.4	2022-12-29
11285103	SK3	2022-12-24 @ 8:00 am	2022-12-27 @ 8:00 am	34.0 ± 2.7	2022-12-29
11285102	SK4	2022-12-24 @ 8:00 am	2022-12-27 @ 8:00 am	30.9 ± 2.5	2022-12-29
11285109	SK5	2022-12-24 @ 8:00 am	2022-12-27 @ 8:00 am	32.0 ± 2.6	2022-12-29

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



Engineers • Planners • Scientists • Construction Managers

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

Radon Test Kit Chain of Custody

Project Name: MCPS Radon – Week 2 January Schools

Name of Schools:

- 1. Springbrook HS
- 2. White Oak MS
- 3. Cloverly ES
- 4. Georgian Forest ES
- 5. Harmony Hills ES
- 6. Poolesville ES
- 7. Montrose Center
- 8. Kingsley Wilderness
- 9. Poolesville HS
- 10. Carl Sandburg Learning Center

	Date	Initials
Radon Test Kits Deployed	01/24/2023	BMMY
Radon Test Kits Collected	01/27/2023	BMM
Radon Test Kits Shipped to Lab*	01/27/2023	18mm
Radon Test Kits Received by Lab*	01/31/2023	BMM

^{*}Ali samples sent to Air Check, Inc., 2 Saber Way, Ward Hill, MA 01835



MONTGOMERY COUNTY PUBLIC SCHOOLS RADON TESTING

Executive Summary: Georgian Forest Elementary School

3100 Regina Drive, Glenmont, MD 20906

Date of Test Report:	2/13/2019
Round of Testing:	Initial
	Follow-up
	Post Remediation
	2 Year Testing
	5 Year Testing
	HVAC Upgrade
	Window Replacement
	New Addition
	New Facility
# of Rooms Tested:	82
# of Rooms ≥ 4.0 pCi/L:	0
Low Value:	< 0.4
High Value:	2.1

Project Status

Initial testing complete: No further action at this time



February 13, 2019

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

Re: Radon Testing Services

Location: Georgian Forest Elementary School

3100 Regina Drive, Glenmont, MD 20906

Dear Mr. Cox:

Intertek-PSI (PSI) is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of a "short-term" 3-day radon test for Georgian Forest Elementary School, located at 3100 Regina Drive, Glenmont, MD 20906 (subject site).

Scope of Services:

PSI 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. PSI 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 #14SS007) 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.

PSI visited the site on November 27, 2018 and deployed ninety-eight (98) activated charcoal (AC) radon test kits. PSI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. PSI returned to the site on November 30, 2018 to retrieve the radon sampling test kits. A floor plan map of the building with the test locations is included as Attachment A of this report.

As a quality control measure, PSI included duplicate samples, field blanks, lab transit blanks, and office blanks in accordance with AARST recommendations. In addition, PSI submitted ten (10) test kits to Bowser-Morner Inc. as spike samples. The spiked tests were exposed to a known radon concentration by Bowser-Morner Inc. prior to being returned to the laboratory for analysis.

PSI 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 located at 929 Mount Zion Road, Lebanon, Pennsylvania (certification # ARL0007) and 2 Saber Way, Haverhill, Massachusetts (certification # ARL0017).



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.

PSI 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.

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

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

Results:

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥ 4.0 pCi/L	None	NA
≤ 4.0 pCi/L	See Attack	nment B

Notes:

D - Duplicate Sample

The 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 (703) 698-9300.



Respectfully Submitted,

INTERTEK-PSI

Nand Kaushik, P.E.

Department Manager, Environmental Services

Nand.Kaushik@intertek.com

Non-Apre Coulih

Attachments: A – Floor Plan with Test Locations

B – Table 1 – Radon Test Summary Spreadsheet

C – Laboratory Analytical Results

ATTACHMENT A

Floor Plan with Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

	Radon Testing Results	
	Georgian Forest Elementary School	
	Testing Period: 11/27/18 - 11/30/18	
Kit Number	Room / Area	Result (pCi/L)
3919472	100	0.6
3919473	101	0.4
3919476	102	0.4
3919475	103	0.4
3919474	104	<0.4
3919471	105	<0.4
3919308	106	<0.4
3919302	107	0.7
3919301	108	1.0
3919341	109	1.5
3919306	109A	1.1
3919466	110	1.3
3919467	111	1.6
3919468	112	1.1
3919470	113	2.1
3919343	114	0.6
3919342	115	1.5
3919344	116	<0.4
3919345	117	0.4
3919347	118	<0.4
3919346	119	1.1
3919465	120	1.9
3919464	121	1.2
3919463	122	1.3
3919461	124	0.4
3919462	126	0.6
3919318	200	0.5
3919485	201	<0.4
3919482	202A	0.8
3919486	202B	1.2
3919541	203	1.5
3919490	204	1.5
3919319	205	1.1
3919489	206	1.0
3919488	207	1.0
3919484	208	0.4
3919483	209	0.8
3919481	210	0.4
3919543	211	1.2
3919544	213	1.0
3919550	214	1.0
3919320	216	0.9
3919502	217	0.7

	Radon Testing Results	
	Georgian Forest Elementary School	
171 AL 1	Testing Period: 11/27/18 - 11/30/18	
Kit Number	Room / Area	Result (pCi/L)
3919503	219	1.1
3919504	220	1.3
3919449	222	0.7
3919505	223	0.6
3919507	225	0.8
3919549	229/231	0.7
3919545	232	1.1
3919542	234	1.5
3919508	AP Office	0.5
3888468	APR	0.7
3888469	APR	0.8
3919480	Book Room	0.4
3919314	Building Services	<0.4
3919535	Conference Room	0.4
3919536	Copy Room	0.7
3919509	ESOL	0.5
3919537	File Room	0.6
3919477	Gym	2.0
3888470	Gym	2.1
3919478	Gym Office	0.6
3919533	Health Office	0.8
3919532	Health Room	1.4
3919312	Kitchen	0.7
3919313	Kitchen Office	1.1
3919348	Linkages to Learning	0.4
3919349	Linkages to Learning Conference Room	0.5
3919315	Linkages to Learning Family Case Manager	<0.4
3919350	Linkages to Learning Site Coordinator	0.4
3919316	Linkages to Learning Therapist	<0.4
3919531	Main Office	0.7
3919305	Media Center	0.9
3919303	Media Center	1.2
3919307	Media Center Office	1.2
3919539	Media Work Room	1.5
3919510	Office 3	0.8
3919538	Parent Resource	0.5
3919534	Principal's Office	0.6
3919501	Staff Development	0.7
3919310	Staff Lounge	<0.4
3919311	Staff Lounge Telephone Room	<0.4
3919547	Support Room	1.3
3919546	Support Room ISA	0.8

	Radon Testing Results						
	Georgian Forest Elementary School						
	Testing Period: 11/27/18 - 11/30/18						
Kit Number	QC Type	Result (pCi/L)					
3919469	112 (D)	1.2					
3919487	202B (D)	1.0					
3919506	223 (D)	1.0					
3919548	231 (D)	0.9					
3919479	Gym Office (D)	1.2					
3919317	Linkages to Learning Therapist (D)	0.4					
3919304	Media Center (D)	0.7					
3919540	Media Work Room (D)	1.5					
3919309	Staff Lounge (D)	<0.4					
3919577	Field Blank	<0.4					
3918016	Field Blank	<0.4					
3919428	Office Blank	<0.4					
3919424	Transit Blank	<0.4					

Table Notes:

- D Duplicate
- FB Field Blank
- OB Office Blank
- TB Transit Blank
- QC Quality Control

ATTACHMENT C

Laboratory Analytical Results



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

Laboratory Report for:

Property Tested: Project # 04481387-1

Intertek-PSI (VA)
2930 Eskridge Road
Fairfax VA 22031

MCPS Radon Survey
Georgian Forest Elementary School
Silver Spring MD 20906

Log Number	Device Number		Test Expo	sure Duration	ղ:	Area Tested	Result pCi/L
2400767	3919531	11/27/2018	9:45 am	11/30/2018 8	8:27 am	Georgian Forest Elementary Flr 1 Main Office	0.7
2400768	3919532	11/27/2018	9:46 am	11/30/2018 8	8:27 am	Georgian Forest Elementary Flr 1 Health Room	1.4
2400769	3919533	11/27/2018	9:48 am	11/30/2018 8	8:30 am	Georgian Forest Elementary Flr 1 Health Office	0.8
2400770	3919534	11/27/2018	9:50 am	11/30/2018 8	8:28 am	Georgian Forest Elementary Flr 1 Principal's Offic	0.6
2400771	3919535	11/27/2018	9:51 am	11/30/2018 8	8:28 am	Georgian Forest Elementary FIr 1 Conference Roo	0.4
2400772	3919536	11/27/2018	9:52 am	11/30/2018 8	8:29 am	Georgian Forest Elementary Flr 1 Copy Room	0.7
2400773	3919537	11/27/2018	9:54 am	11/30/2018 8	8:29 am	Georgian Forest Elementary FIr 1 File Room	0.6
2400774	3919538	11/27/2018	9:56 am	11/30/2018 8	8:31 am	Georgian Forest Elementary FIr 1 Parent Resource	0.5
2400775	3919539	11/27/2018	9:59 am	11/30/2018 8	8:32 am	Georgian Forest Elementary Flr 1 Media Work Roo	1.5
2400776	3919540	11/27/2018	9:59 am	11/30/2018 8	8:32 am	Georgian Forest Elementary Flr 1 Media Work Rm	1.5
2400777	3919471	11/27/2018	10:01 am	11/30/2018 8	8:33 am	Georgian Forest Elementary Flr 1 Rm 105	< 0.4

Comment: Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3919312 (Kitchen) and 3919313 (Kitchen Office). Your test is for informational purposes only. A copy of this report was emailed to Intertek-PSI (VA).

Distributed by: Intertek-PSI (VA)

Date Received: 12/03/2018 Date Logged: 12/03/2018 Date Analyzed: 12/03/2018 Date Reported: 01/29/2019

Report Reviewed By: ______

M MM

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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.

Disclaimer:



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

Property Tested: Project # 04481387-1

Laboratory Report for:

Intertek-PSI (VA) MCPS Radon Survey
2930 Eskridge Road Georgian Forest Elementary School

Fairfax VA 22031 Silver Spring MD 20906

Log Number	Device Number		Test Expo	sure Duratio	n:	Area Tested			Result pCi/L
2400778	3919472	11/27/2018	10:03 am	11/30/2018	8:35 am	Georgian Forest Elementary	Flr 1	Rm 100	0.6
2400779	3919473	11/27/2018	10:05 am	11/30/2018	8:36 am	Georgian Forest Elementary	Flr 1	Rm 101	0.4
2400780	3919474	11/27/2018	10:06 am	11/30/2018	8:37 am	Georgian Forest Elementary	Flr 1	Rm 104	< 0.4
2400781	3919475	11/27/2018	10:07 am	11/30/2018	8:38 am	Georgian Forest Elementary	Flr 1	Rm 103	0.4
2400782	3919476	11/27/2018	10:08 am	11/30/2018	8:38 am	Georgian Forest Elementary	Flr 1	Rm 102	0.4
2400783	3919477	11/27/2018	10:10 am	11/30/2018	8:41 am	Georgian Forest Elementary	Flr 1	Gym	2.0
2400784	3919478	11/27/2018	10:13 am	11/30/2018	8:42 am	Georgian Forest Elementary	Flr 1	Gym Office Dup	0.6
2400785	3919479	11/27/2018	10:13 am	11/30/2018	8:42 am	Georgian Forest Elementary	Flr 1	Gym Office	1.2
2400786	3919480	11/27/2018	10:19 am	11/30/2018	8:44 am	Georgian Forest Elementary	Flr 1	Book Room	0.4
2400787	3919461	11/27/2018	10:21 am	11/30/2018	8:43 am	Georgian Forest Elementary	Flr 1	Room 124	0.4
2400788	3919462	11/27/2018	10:22 am	11/30/2018	8:43 am	Georgian Forest Elementary	Flr 1	Room 126	0.6

Comment: Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3919312 (Kitchen) and 3919313 (Kitchen Office). Your test is for informational purposes only. A copy of this report was emailed to Intertek-PSI (VA).

Distributed by: Intertek-PSI (VA)

Date Received: 12/03/2018 Date Logged: 12/03/2018 Date Analyzed: 12/03/2018 Date Reported: 01/29/2019

Report Reviewed By:

Report Approved By:

Disclaimer:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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



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

Laboratory Report for:

Property Tested: Project # 04481387-1

Intertek-PSI (VA)
2930 Eskridge Road
Fairfax VA 22031

MCPS Radon Survey
Georgian Forest Elementary School
Silver Spring MD 20906

Log Number	Device Number		Test Expo	sure Duratio	on:	Area Tested	Result pCi/L
2400789	3919463	11/27/2018	10:24 am	11/30/2018	8:45 am	Georgian Forest Elementary Flr 1 Room 1	22 1.3
2400790	3919464	11/27/2018	10:26 am	11/30/2018	8:46 am	Georgian Forest Elementary Flr 1 Room 1	21 1.2
2400791	3919465	11/27/2018	10:27 am	11/30/2018	8:46 am	Georgian Forest Elementary Flr 1 Room 12	20 1.9
2400792	3919466	11/27/2018	10:29 am	11/30/2018	8:46 am	Georgian Forest Elementary Flr 1 Room 1	1.3
2400793	3919467	11/27/2018	10:31 am	11/30/2018	8:47 am	Georgian Forest Elementary Flr 1 Room 1	1.6
2400794	3919468	11/27/2018	10:33 am	11/30/2018	8:47 am	Georgian Forest Elementary Flr 1 Room 1	12 1.1
2400795	3919469	11/27/2018	10:33 am	11/30/2018	8:47 am	Georgian Forest Elementary Flr 1 Room 11	2 Dup 1.2
2400796	3919470	11/27/2018	10:35 am	11/30/2018	8:48 am	Georgian Forest Elementary Flr 1 Room 1	13 2.1
2400797	3919341	11/27/2018	10:40 am	11/30/2018	8:48 am	Georgian Forest Elementary Flr 1 Room 1	09 1.5
2400798	3919342	11/27/2018	10:40 am	11/30/2018	8:48 am	Georgian Forest Elementary Flr 1 Room 1	1.5
2400799	3919343	11/27/2018	10:40 am	11/30/2018	8:49 am	Georgian Forest Elementary Flr 1 Room 1	14 0.6

Comment: Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3919312 (Kitchen) and 3919313 (Kitchen Office). Your test is for informational purposes only. A copy of this report was emailed to Intertek-PSI (VA).

Distributed by: Intertek-PSI (VA)

Date Received: 12/03/2018 Date Logged: 12/03/2018 Date Analyzed: 12/03/2018 Date Reported: 01/29/2019

Report Reviewed By:

Report Approved By:

Disclaimer:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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



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

Laboratory Report for:

MCPS Radon Survey

Georgian Forest Elementary School

Property Tested: Project # 04481387-1

Silver Spring MD 20906

Intertek-PSI (VA)
2930 Eskridge Road
Fairfax VA 22031

Log Number	Device Number		Test Expo	sure Duration	n:	Area Tested	Result pCi/L
2400800	3919344	11/27/2018	10:42 am	11/30/2018	8:51 am	Georgian Forest Elementary Flr 1 Room 116	< 0.4
2400801	3919345	11/27/2018	10:44 am	11/30/2018	8:52 am	Georgian Forest Elementary Flr 1 Room 117	0.4
2400802	3919346	11/27/2018	10:45 am	11/30/2018	8:53 am	Georgian Forest Elementarary Flr 1 Room 119	1.1
2400803	3919347	11/27/2018	10:47 am	11/30/2018	8:54 am	Georgian Forest Elementary Flr 1 Room 118	< 0.4
2400804	3919348	11/27/2018	10:52 am	11/30/2018	8:32 am	Georgian Forest Elementary Flr 1 Linkages to Lear	0.4
2400805	3919349	11/27/2018	10:53 am	11/30/2018	8:33 am	Georgian Forest Elementary Flr 1 Linkages to Lear	0.5
2400806	3919350	11/27/2018	10:59 am	11/30/2018	8:34 am	Georgian Forest Elementary Flr 1 Linkages to Lear	0.4
2400807	3919301	11/27/2018	10:59 am	11/30/2018	8:56 am	Georgian Forest Elementary School Flr 1 Rm 108	1.0
2400808	3919302	11/27/2018	11:02 am	11/30/2018	8:56 am	Georgian Forest Elementary Flr 1 Room 107	0.7
2400809	3919303	11/27/2018	11:02 am	11/30/2018	8:57 am	Georgian Forest Elementary FIr 1 Media Center	1.2
2400810	3919304	11/27/2018	11:02 am	11/30/2018	8:57 am	Georgian Forest Elementary FIr 1 Media Center D	0.7

Comment: Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3919312 (Kitchen) and 3919313 (Kitchen Office). Your test is for informational purposes only. A copy of this report was emailed to Intertek-PSI (VA).

Distributed by: Intertek-PSI (VA)

Date Received: 12/03/2018 Date Logged: 12/03/2018 Date Analyzed: 12/03/2018 Date Reported: 01/29/2019

Report Reviewed By:

Report Approved By:

Disclaimer:

Shawn Price, Director of Laboratory Operations, AccuStar Labs
The uncertainty of this radon measurement is ~+/- 10 %. Factors contributing to uncertainty include statistical variations, daily and seasonal variations in radon

concentrations, sample collection techniques and operation of the dwelling. Interference with test conditions may influence the test results.



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

Laboratory Report for:

MCPS Radon Survey

Intertek-PSI (VA)
2930 Eskridge Road
Fairfax VA 22031

Georgian Forest Elementary School Silver Spring MD 20906

Property Tested: Project # 04481387-1

Log Number	Device Number		Test Expo	sure Duratio	on:	Area Tested	Result pCi/L
2400811	3919305	11/27/2018	11:05 am	11/30/2018	8:58 am	Georgian Forest Elementary Flr 1 Media Center	0.9
2400812	3919306	11/27/2018	11:08 am	11/30/2018	8:47 am	Georgian Forest Elementary Flr 1 Room 109A	1.1
2400813	3919307	11/27/2018	11:10 am	11/30/2018	8:58 am	Georgian Forest Elementary FIr 1 Media Center Off	1.2
2400814	3919308	11/27/2018	11:12 am	11/30/2018	8:59 am	Georgian Forest Elementary Flr 1 Room 106	< 0.4
2400815	3919309	11/27/2018	11:12 am	11/30/2018	8:59 am	Georgian Forest Elementary Flr 1 Staff Lounge Du	< 0.4
2400816	3919310	11/27/2018	11:15 am	11/30/2018	8:59 am	Georgian Forest Elementary Flr 1 Staff Lounge	< 0.4
2400817	3919311	11/27/2018	11:17 am	11/30/2018	9:00 am	Georgian Forest Elementary Flr 1 Staff Lounge Tel	< 0.4
2400818	3919312	11/27/2018	11:23 am	11/30/2018	9:01 am	Georgian Forest Elementary Flr 1 Kitchen	0.7
2400819	3919313	11/27/2018	11:27 am	11/30/2018	9:02 am	Georgian Forest Elementary Flr 1 Kitchen Office	1.1
2400820	3919314	11/27/2018	11:29 am	11/30/2018	9:02 am	Georgian Forest Elementary FIr 1 Building Service	< 0.4
2400821	3919315	11/27/2018	11:29 am	11/30/2018	9:03 am	Georgian Forest Elementary Flr 1 Linkages to Lear	< 0.4

Comment: Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3919312 (Kitchen) and 3919313 (Kitchen Office). Your test is for informational purposes only. A copy of this report was emailed to Intertek-PSI (VA).

Distributed by: Intertek-PSI (VA)

Report Reviewed By:

Report Approved By:

Disclaimer:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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



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

Laboratory Report for:

MCPS Radon Survey

Georgian Forest Elementary School

Property Tested: Project # 04481387-1

Silver Spring MD 20906

Intertek-PSI (VA)
2930 Eskridge Road
Fairfax VA 22031

Log Number	Device Number		Test Expo	sure Duration:		Area Tested	Result pCi/L
2400822	3919316	11/27/2018	11:29 am	11/30/2018 8:3	35 am	Georgian Forest Elementary Flr 1 Linkages to Lear	< 0.4
2400823	3919317	11/27/2018	11:29 am	11/30/2018 8:3	36 am	Georgian Forest Elementary Flr 1 Linkages to Lear	0.4
2400824	3919318	11/27/2018	11:34 am	11/30/2018 9:0	05 am	Georgian Forest Elementary Flr 2 Room 200	0.5
2400825	3919319	11/27/2018	11:36 am	11/30/2018 9:0	09 am	Georgian Forest Elementary Flr 2 Room 205	1.1
2400826	3919320	11/27/2018	11:38 am	11/30/2018 9:0	07 am	Georgian Forest Elementary Flr 2 Room 216	0.9
2400827	3919449	11/27/2018	11:40 am	11/30/2018 9:1	19 am	Georgian Forest Elementary Flr 2 Room 222	0.7
2400828	3919481	11/27/2018	5:48 pm	11/30/2018 9:0	06 am	Georgian Forest Elementary Flr 2 Room 210	0.4
2400829	3919482	11/27/2018	5:51 pm	11/30/2018 9:0	07 am	Georgian Forest Elementary Flr 2 Room 202A	8.0
2400830	3919483	11/27/2018	5:52 pm	11/30/2018 9:0	08 am	Georgian Forest Elementary Flr 2 Room 209	0.8
2400831	3919484	11/27/2018	5:53 pm	11/30/2018 9:0	08 am	Georgian Forest Elementary Flr 2 Room 208	0.4
2400832	3919485	11/27/2018	5:55 pm	11/30/2018 9:0	08 am	Georgian Forest Elementary Flr 2 Room 201	< 0.4

Comment: Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3919312 (Kitchen) and 3919313 (Kitchen Office). Your test is for informational purposes only. A copy of this report was emailed to Intertek-PSI (VA).

Distributed by: Intertek-PSI (VA)

Date Received: 12/03/2018 Date Logged: 12/03/2018 Date Analyzed: 12/03/2018 Date Reported: 01/29/2019

Report Reviewed By: ______

Report Approved By:

Disclaimer:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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



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

Laboratory Report for:

Property Tested: Project # 04481387-1

Intertek-PSI (VA)
2930 Eskridge Road
Fairfax VA 22031

MCPS Radon Survey
Georgian Forest Elementary School
Silver Spring MD 20906

Log Number	Device Number		Test Expo	sure Duratio	n:	Area Tested	Result pCi/L
2400833	3919486	11/27/2018	5:56 pm	11/30/2018	9:08 am	Georgian Forest Elementary Flr 2 Room 202B	1.2
2400834	3919487	11/27/2018	5:56 pm	11/30/2018	9:08 am	Georgian Forest Elementary Flr 2 Room 202B Du	1.0
2400835	3919488	11/27/2018	5:57 pm	11/30/2018	9:09 am	Georgian Forest Elementary Flr 2 Room 207	1.0
2400836	3919489	11/27/2018	5:58 pm	11/30/2018	9:09 am	Georgian Forest Elementary Flr 2 Room 206	1.0
2400837	3919490	11/27/2018	6:02 pm	11/30/2018	9:10 am	Georgian Forest Elementary Flr 2 Room 204	1.5
2400838	3919541	11/27/2018	6:03 pm	11/30/2018	9:08 am	Georgian Forest Elementary Flr 2 Room 203	1.5
2400839	3919542	11/27/2018	6:04 pm	11/30/2018	9:11 am	Georgian Forest Elementary Flr 2 Room 234	1.5
2400840	3919543	11/27/2018	6:06 pm	11/30/2018	9:12 am	Georgian Forest Elementary Flr 2 Room 211	1.2
2400841	3919544	11/27/2018	6:07 pm	11/30/2018	9:13 am	Georgian Forest Elementary Flr 2 Room 213	1.0
2400842	3919545	11/27/2018	6:08 pm	11/30/2018	9:14 am	Georgian Forest Elementary Flr 2 Room 232	1.1
2400843	3919546	11/27/2018	6:09 pm	11/30/2018	9:10 am	Georgian Forest Elementary Flr 2 Support Room I	0.8

Comment: Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3919312 (Kitchen) and 3919313 (Kitchen Office). Your test is for informational purposes only. A copy of this report was emailed to Intertek-PSI (VA).

Distributed by: Intertek-PSI (VA)

Date Received: 12/03/2018 Date Logged: 12/03/2018 Date Analyzed: 12/03/2018 Date Reported: 01/29/2019

Report Reviewed By:

Report Approved By:

Disclaimer:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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



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

Laboratory Report for:

MCPS Radon Survey

2930 Eskridge Road

Intertek-PSI (VA)

Georgian Forest Elementary School

Property Tested: Project # 04481387-1

Fairfax VA 22031

Silver Spring MD 20906

Log Number	Device Number		Test Expo	sure Duration:	Area Tested	Result pCi/L
2400844	3919547	11/27/2018	6:10 pm	11/30/2018 9:10 am	Georgian Forest Elementary Flr 2 Support Room	1.3
2400845	3919548	11/27/2018	6:14 pm	11/30/2018 9:15 am	Georgian Forest Elementary Flr 2 Room 231 Dup	0.9
2400846	3919549	11/27/2018	6:14 pm	11/30/2018 9:15 am	Georgian Forest Elementary Flr 2 Room 231	0.7
2400847	3919550	11/27/2018	6:15 pm	11/30/2018 9:16 am	Georgian Forest Elementary Flr 2 Room 214	1.0
2400848	3919501	11/27/2018	6:21 pm	11/30/2018 9:17 am	Georgian Forest Elementary Flr 2 Staff Dev	0.7
2400849	3919502	11/27/2018	6:22 pm	11/30/2018 9:18 am	Georgian Forest Elementary Flr 2 Room 217	0.7
2400850	3919503	11/27/2018	6:22 pm	11/30/2018 9:18 am	Georgian Forest Elementary Flr 2 Room 219	1.1
2400851	3919504	11/27/2018	6:23 pm	11/30/2018 9:19 am	Georgian Forest Elementary Flr 2 Room 220	1.3
2400852	3919505	11/27/2018	6:25 pm	11/30/2018 9:19 am	Georgian Forest Elementary Flr 2 Room 223	0.6
2400853	3919506	11/27/2018	6:25 pm	11/30/2018 9:20 am	Georgian Forest Elementary Flr 2 Room 223 Dup	1.0
2400854	3919507	11/27/2018	6:27 pm	11/30/2018 9:19 am	Georgian Forest Elementary Flr 2 Room 225	0.8

Comment: Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3919312 (Kitchen) and 3919313 (Kitchen Office). Your test is for informational purposes only. A copy of this report was emailed to Intertek-PSI (VA).

Distributed by: Intertek-PSI (VA)

Date Received: 12/03/2018 Date Logged: 12/03/2018 Date Analyzed: 12/03/2018 Date Reported: 01/29/2019

Report Reviewed By: ______

Report Approved By:

Disclaimer:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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



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

Laboratory Report for:

Property Tested: Project # 04481387-1

Intertek-PSI (VA)
2930 Eskridge Road
Fairfax VA 22031

MCPS Radon Survey
Georgian Forest Elementary School
Silver Spring MD 20906

Log Number	Device Number	Toot Exposure Duration:			on:	Area Tested	Result pCi/L
2400855	3919508	11/27/2018	6:28 pm	11/30/2018	9:19 am	Georgian Forest Elementary Flr 2 Office 1	0.5
2400856	3919509	11/27/2018	6:29 pm	11/30/2018	9:20 am	Georgian Forest Elementary Flr 2 Office 2	0.5
2400857	3919510	11/27/2018	6:30 pm	11/30/2018	9:21 am	Georgian Forest Elementary Flr 2 Office 3	0.8
2400858	3919577	11/27/2018	9:45 am	11/30/2018	9:21 am	Georgian Forest Elementary Flr x Rm x	< 0.4
2400859	3918016	11/27/2018	9:45 am	11/30/2018	9:21 am	Georgian Forest Elementary Flr x Rm x	< 0.4
2400860	3919428	11/27/2018	6:00 am	11/30/2018	9:21 am	Georgian Forest Elementary School Flr x Rm x	< 0.4
2401261	3919424	11/27/2018	6:00 am	11/30/2018	12:00 am	Georgian Forest Elementary School	< 0.4

Comment: Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3919312 (Kitchen) and 3919313 (Kitchen Office). Your test is for informational purposes only. A copy of this report was emailed to Intertek-PSI (VA).

Distributed by: Intertek-PSI (VA)

Date Received: 12/03/2018 Date Logged: 12/03/2018 Date Analyzed: 12/03/2018 Date Reported: 01/29/2019

Report Reviewed By: ______

Report Approved By:

Disclaimer:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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



EPA Method #402-R-92-004 Liquid Scintillation NRPP Device Code 8088 NRSB Device Code 12193

Laboratory Report for:

Property Tested: Project # 04481387-1

Intertek-PSI (VA)
2930 Eskridge Road
Fairfax VA 22031

MCPS Radon Survey
Georgian Forest Elementary School
MD 02906

Log Number	Device Number		Test Exposure Duration:			Area Tested	Result pCi/L
2401262	3888470	11/27/2018	10:10 am	11/30/2018	8:40 am	Bldg Georgian Forest Elementary School Flr 1 R	2.1
2401263	3888469	11/27/2018	11:17 am	11/30/2018	9:00 am	Bldg Georgian Forest Elementary School Flr 1 R	0.8
2401264	3888468	11/27/2018	11:23 am	11/30/2018	9:01 am	Bldg Georgian Forest Elementary School Flr 1 R	0.7

Comment: A copy of this report was emailed to Intertek-PSI (VA).

Distributed by: Intertek-PSI (VA)

Date Received: 12/03/2018 Date Logged: 12/03/2018 Date Analyzed: 12/04/2018 Date Reported: 12/04/2018

Report Reviewed By:

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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.

Disclaimer:



NRPP 105011 AL NRSB ARL0007 Ohio RL41

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

Laboratory Report for:

Property Tested:

Intertek-PSI (VA) 2930 Eskridge Road Fairfax VA 22031

MCPS Radon Survey 4514 Taylorsville Road Dayton OH 45424

Log Device Number Number	Test Exposure Duration:	Area Tested	Result pCi/L
3204125 3926831 12/07/2018	3 9:47 am 12/10/2018 9:47 am	Spike	36.1
3204126 3926832 12/07/2018	3 9:47 am 12/10/2018 9:47 am	Spike	34.8
3204127 3926833 12/07/2018	3 9:47 am 12/10/2018 9:47 am	Spike	33.7
3204128 3926834 12/07/2018	3 9:47 am 12/10/2018 9:47 am	Spike	35.8
3204129 3926835 12/07/2018	3 9:47 am 12/10/2018 9:47 am	Spike	35.0
3204130 3926836 12/07/2018	3 9:47 am 12/10/2018 9:47 am	Spike	34.5
3204131 3926837 12/07/2018	3 9:47 am 12/10/2018 9:47 am	Spike	34.6
3204132 3926838 12/07/2018	3 9:47 am 12/10/2018 9:47 am	Spike	34.3
3204133 3926839 12/07/2018	3 9:47 am 12/10/2018 9:47 am	Spike	33.2
3204134 3926840 12/07/2018	3 9:47 am 12/10/2018 9:47 am	Spike	34.0

Comment: A copy of this report was e-mailed to Intertek-PSI (VA)

Test Performed By: Unknown

Distributed by: Intertek-PSI (VA)

Date Received: 12/12/2018 12/12/2018 Date Analyzed: 12/12/2018 Date Reported: 12/13/2018 Date Logged:

Report Reviewed By: _

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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.

Disclaimer:

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT Intertell - P5	工	Job Number 187732
NOMINAL Conditions: Radon Conc 39.6	pCi/L Rel. Hum	49.1 % Temp. 70.1
Date Start: 12/7/18 Date Stop: 12/10/18	Pate Start:	Date Stop:
Time Start: <u>0947</u> Time Stop: <u>0947</u>	Time Start:	Time Stop:
Device No.'s: (10) Char. Cans-	Device No.'s:_	
3926831 thro 3926840		
Gu Left		
Date Start: Date Stop:	Date Start:	Date Stop:
Time Start: Time Stop:	Time Start:	Time Stop:
Device No.'s:	Device No.'s:_	74
Date Start: Date Stop:	Date Start:	Date Stop:
Time Start: Time Stop:	Time Start:	Time Stop:
Device No.'s:	Device No.'s:	
		2

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



Chain of Custody

Project Name: MCPS Radon Survey 2018

Name of Schools:

1. Ashburton ES

2. Carderock Springs ES

3. Diamond ES

4. Fox Chapel ES

5. Baker MS

6. Damascus ES

7. Clemente MS

8. Clopper Mill ES

9. Broad Acres ES

10. Greencastle ES

11. Harmony Hills ES

12. Silver Spring International MS

13. Gaithersburg MS

14. Garrett Park ES

15. New Hampshire Estates ES

16. Georgian Forest ES

	Date	Initials
Radon Test Kits Deployed	11/27/2018	NL
Radon Test Kits Sampled	11/30/2018	NL
Radon Test Kits Shipped to Lab*	11/30/2018	NL
	12/01/2018;	
Radon Test Kits Received by Lab*	12/02/2018;	NL
	12/03/2018	

^{*}All samples sent to AccuStar Laboratories, 929 Mount Zion Road, Lebanon, PA 17046 and 2 Saber Way, Haverhill, MA 01835

RADON SCREENING SURVEY – FOLLOW-UP GEORGIAN FOREST ELEMENTARY SCHOOL

3100 Regina Drive, Silver Spring, Maryland 20906

EXECUTIVE SUMMARY

Date of Test Report:	3/4/16 Follow-Up	
Round of Testing:	Initial	
	Follow-up	
	Post Remediation	
# Rooms Tested	3	
# Rooms ≥ 4.0 pCi/L:	0	
Low Value:	1.2	
High Value:	3.0	
Confirmed Rooms ≥ 4.0 pCi/L US EPA	0	
Action Level		

Summary of Sampling Events ≥ 4.0 pCi/L

Room	Result (pCi/L)	Result (pCi/L)	Average Result
	3/11/16 (Rev 1 Initial)	3/4/16 Follow-Up	(pCi/L)
Room 234	4.1	2.7	3.4
GYM	2.9 (tampered)	1.8	2.4
GYM	2.2	1.2	1.7
Room 111	3.8	3.0	3.4



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

MCPS RADON TESTING

Executive Summary: Georgian Forest Elementary School

Date of Test Report:	3/4/2016
Round of Testing:	Initial
	Follow-up
	Post Remediation
# Rooms Tested:	3
# Rooms \geq 4.0 pCi/L:	0
Low Value:	1.2
High Value:	3.0

Project Status:

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

KCI TECHNOLOGIES, INC. WWW.kci.com



ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

March 4, 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 # 12146341.28

Location: Georgian Forest Elementary School

3100 Regina Drive

Silver Spring, MD 20906

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 Georgian Forest Elementary School, located at 3100 Regina Drive in Silver Spring, Maryland 20906 (subject site).

Scope of Services:

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

KCI visited the site on February 8, 2016 and deployed six (6) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on February 11, 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

KCI TECHNOLOGIES, INC. WWW.kci.com

Butler Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

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

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

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

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

Results:

The results of the radon test analysis indicated the following:

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

Notes:

D- Duplicate sample

All field blanks, office blanks, and lab transit blanks had test results of less than the laboratory detection limit of 0.3 pCi/L. 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.

KCI TECHNOLOGIES, INC. WWW.kci.com

Employee-Owned Since 1988

Mr. Richard Cox March 4, 2016 Page 4

Sincerely,

James M. Moulsdale

James Makler

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 8 testing. Office blanks were not submitted under each school individually.

Radon Testing Results				
ian Forest Elementary School				
st Period: 02/08/16-02/11/16				
Kit Number Room / Area Result				
111	3.0			
234	2.7			
GYM	1.8			
GYM	1.2			
	gian Forest Elementary School st Period: 02/08/16-02/11/16 Room / Area 111 234 GYM			

	Radon Testing Results				
	Georgian Forest Elementary School				
	Test Period: 02/08/16-02/11/16				
Kit Number	Kit Number QC Type Result				
7730186	D (111)	2.3			
7730187	7730187 FB (111) < 0.3				

Table Note:
* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

February LABORATORY ANALYSIS 25, REPORT **

Radon test result report for: GEORGIAN FOREST ELEMENTARY SCHOOL MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7730185	111	2016-02-08 @ 1:00 pm	2016-02-11 @ 12:00 pm	3.0 ± 0.4	2016-02-15
7730186	111	2016-02-08 @ 1:00 pm	2016-02-11 @ 12:00 pm	2.3 ± 0.4	2016-02-15
7730187	111	2016-02-08 @ 1:00 pm	2016-02-11 @ 12:00 pm	< 0.3	2016-02-15
7730188	234	2016-02-08 @ 1:00 pm	2016-02-11 @ 12:00 pm	2.7 ± 0.4	2016-02-15
7730183	GYM	2016-02-08 @ 1:00 pm	2016-02-11 @ 12:00 pm	1.2 ± 0.3	2016-02-15
7730184	GYM	2016-02-08 @ 1:00 pm	2016-02-11 @ 12:00 pm	1.8 ± 0.4	2016-02-15

February LABORATORY ANALYSIS 25, REPORT **

Radon test result report for: MCPS RADON PHASE 8 OFFICE BLANKS

Kit#	Room Id	Started	Ended	pCi/L	Analyzed
7729754	0	2016-02-08 @ 4:00 pm	2016-02-11 @ 5:00 pm	< 0.3	2016-02-15
7729757	0	2016-02-08 @ 4:00 pm	2016-02-11 @ 5:00 pm	< 0.3	2016-02-15
7729758	0	2016-02-08 @ 4:00 pm	2016-02-11 @ 5:00 pm	< 0.3	2016-02-15

February LABORATORY ANALYSIS 23, REPORT **

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

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

February LABORATORY ANALYSIS 15, REPORT **

Spike Sample Laboratory Results

Radon test result report for: MCPS

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

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologica	Inc. Job Number 173704
	pCi/L Rel. Hum 45.9 % Temp. 79.0
Date Start: 1/30/16 Date Stop: 2/1/16	Date Start: Date Stop:
Time Start: <u>O9ab</u> Time Stop: <u>O9ab</u>	Time Start: Time Stop:
Device No.'s: (6) Char. Bags-	Device No.'s:
7718281, 7718282, 7718291,	
7718288, 7718289, 7718273	
E3 Left	
Date Start: Date Stop:	Date Start: Date Stop:
Time Start: Time Stop:	Time Start: Time Stop:
Device No.'s:	Device No.'s:
Date Start: Date Stop:	Date Start: Date Stop:
Time Start: Time Stop:	Time Start: Time Stop:
Device No.'s:	Device No.'s:
	· · · · · · · · · · · · · · · · · · ·

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



Engineers • Planners • Scientists • Construction M anagers

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

Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 8

Name of Schools:

1.	Blair G. Ewing Center	12. Jackson Road ES

2. Cedar Grove ES	13. Jones Lane ES
-------------------	-------------------

3. Clarksburg ES	14. Lake Seneca ES
------------------	--------------------

11. Glenallen ES	22. Viers Mill ES
------------------	-------------------

	Date	Initials
Radon Test Kits Deployed	2/8/16	JM
Radon Test Kits Collected	2/11/16)M
Radon Test Kits Shipped to Lab*	12/11/16	M
Radon Test Kits Received by Lab*	12/15/16	M

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

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

MCPS RADON TESTING

Executive Summary: Georgian Forest Elementary School

Date of Test Report:	3/11/2016 (Rev 1)
Round of Testing:	Initial
	Follow-up
	Post Remediation
# Rooms Tested:	64
# Rooms \geq 4.0 pCi/L:	1
Low Value:	< 0.3
High Value:	4.1

Rooms with results $\geq 4.0 \text{ pCi/L}$: Room 234 (4.1 pCi/L)

Project Status:

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

KCI TECHNOLOGIES, INC. WWW.kci.com

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

March 11, 2016 (Rev 1)

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

Re: Radon Testing Services

KCI Job # 12146341.22

Location: Georgian Forest Elementary School

3100 Regina Drive

Silver Spring, MD 20906

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 Georgian Forest Elementary School, located at 3100 Regina Drive in Silver Spring, Maryland 20906 (subject site).

Scope of Services:

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

KCI visited the site on December 28, 2015 and deployed eighty (80) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on December 31, 2015 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc.

KCI TECHNOLOGIES, INC. WWW.kci.com

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

Evaluation of Testing Conditions:

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

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

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

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

Results:

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥4.0 piC/L	234	4.1
<4.0 piC/L	See Attachn	nent B

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.

www.kci.com KCI TECHNOLOGIES, INC.

Employee-Owned Since 1988

Sincerely,

James M. Moulsdale

Radon Measurement Specialist

KCI Technologies, Inc.

Attachments: A- Floor Plan with Test Locations

B- Table 1-Radon Test Summary Spreadsheet

C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

Radon Testing Results			
Georgian Forest ES Test Period: 12/28/15-12/31/15			
			Kit Number Room / Area Result
7708586	100	0.8	
7708595	101	0.7	
7708567	102	0.6	
7708573	103	< 0.3	
7708577	104	< 0.3	
7708590	105	< 0.3	
7708558	106	< 0.3	
7708560	107	0.6	
7708598	108	1.6	
7708585	109	2.6	
7708580	110	2.9	
7708576	111	3.8	
7708542	112	2.2	
7708584	113	2.1	
7708592	114	1.6	
7708587	115	3.0	
7708568	116	< 0.3	
7708564	117	1.0	
7708565	118	< 0.3	
7708561	119	2.1	
7708575	120	1.3	
7708538	121	1.9	
7708571	122	2.0	
7708539	124	1.3	
7708570	126	1.0	
7708546	201	1.3	
7708544	203	1.7	
7708550	204	1.0	
7708549	205	1.2	
7708548	206	1.3	
7708540	207	1.2	
7708543	208	0.9	
7708545	210	1.1	
7708519	211	1.4	
7708501	213	1.2	
7708517	214	1.3	
7708502	216	1.3	
7708521	217	1.3	
7708503	219	1.0	
7708504	220	1.6	
7708508	222	1.1	
7708522	223	1.3	
7708523	229	2.0	
7708535	234	4.1	
7708581	109A	2.7	
7708554	ALL PURP	0.9	

Table Note:
* Missing or Compromised Sample

Radon Testing Results				
Georgian Forest ES				
Test Period: 12/28/15-12/31/15				
Kit Number	Kit Number Room / Area Result			
7708555	ALL PURP	0.9		
7708596	AP OFFICE	1.2		
7708537	BOOK	0.9		
7708556	BUILDING SERVICE	< 0.3		
7708559	CHILD	< 0.3		
7708589	CONF 1	0.8		
7708563	CONF 2	0.8		
7708574	GYM	2.4		
7708579	GYM	2.2		
7708582	* GYM (tampered)	2.9		
7708578	GYM OFFICE	1.3		
7708588	HEALTH	1.9		
7708562	LTL	0.6		
7708551	MEDIA	2.1		
7708599	MEDIA	2.0		
7708552	MEDIA OFF 1	1.8		
7708553	MEDIA OFF 2	2.0		
7708600	OFFICE	1.5		
7708593	PRINCIPAL	0.9		
7708524	STAFF DEVLP	1.5		
7708536	STAFF LOUNGE	< 0.3		
7708594	STAFF WORK	0.8		

Table Note:
* Missing or Compromised Sample

Radon Testing Results Georgian Forest ES Test Period: 12/28/15-12/31/15				
Kit Number QC Type Result				
7708597	D (104)	< 0.3		
7708591	D (115)	2.8		
7708541	D (116)	0.9		
7708566	D (118)	0.7		
7708572	D (121)	2.2		
7708516	D (214)	1.5		
7708529	D (STAFF DEVLP)	1.4		
7708583	D (STAFF LOUNGE)	< 0.3		
7708569	FB (104)	< 0.3		
7708520	FB (214)	< 0.3		
7708557	FB (STAFF LOUNGE)	< 0.3		
7706571	OB (0)	< 0.3		

ATTACHMENT C

Laboratory Analytical Results

January LABORATORY ANALYSIS 16, REPORT **

Radon test result report for: GEORGIAN FOREST ES MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7706571	0	2015-12-28 @ 5:00 pm	2015-12-31 @ 12:00 pm	< 0.3	2016-01-04
7708586	100	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	0.8 ± 0.3	2016-01-04
7708595	101	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	0.7 ± 0.3	2016-01-04
7708567	102	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	0.6 ± 0.3	2016-01-04
7708573	103	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	< 0.3	2016-01-04
7708597	104	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	< 0.3	2016-01-04
7708569	104	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	< 0.3	2016-01-04
7708577	104	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	< 0.3	2016-01-04
7708590	105	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	< 0.3	2016-01-04
7708558	106	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7708560	107	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	0.6 ± 0.3	2016-01-04
7708598	108	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	1.6 ± 0.4	2016-01-04
7708585	109	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	2.6 ± 0.4	2016-01-04
7708581	109A	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	2.7 ± 0.4	2016-01-04
7708580	110	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	2.9 ± 0.4	2016-01-04
7708545	210	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	1.1 ± 0.3	2016-01-04
7708576	111	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	3.8 ± 0.5	2016-01-04
7708542	112	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	2.2 ± 0.4	2016-01-04
7708584	113	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	2.1 ± 0.4	2016-01-04
7708592	114	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	1.6 ± 0.4	2016-01-04
7708591	115	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	2.8 ± 0.4	2016-01-04
7708587	115	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	3.0 ± 0.4	2016-01-04
7708568	116	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7708541	116	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	0.9 ± 0.3	2016-01-04
7708564	117	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	1.0 ± 0.3	2016-01-04
7708565	118	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7708566	118	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	0.7 ± 0.3	2016-01-04
7708561	119	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	2.1 ± 0.4	2016-01-04
7708575	120	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	1.3 ± 0.3	2016-01-04
7708572	121	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	2.2 ± 0.4	2016-01-04
7708538	121	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	1.9 ± 0.4	2016-01-04
7708571	122	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	2.0 ± 0.4	2016-01-04
7708539	124	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	1.3 ± 0.3	2016-01-04
7708570	126	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	1.0 ± 0.3	2016-01-04
7708546	201	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.3 ± 0.3	2016-01-04
7708544	203	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.7 ± 0.4	2016-01-04
7708550	204	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.0 ± 0.3	2016-01-04

Radon test result report for: GEORGIAN FOREST ES MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7708549	205	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.2 ± 0.3	2016-01-04
7708548	206	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.3 ± 0.4	2016-01-04
7708540	207	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.2 ± 0.3	2016-01-04
7708543	208	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	0.9 ± 0.3	2016-01-04
7708519	211	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.4 ± 0.4	2016-01-04
7708501	213	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.2 ± 0.3	2016-01-04
7708516	214	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.5 ± 0.3	2016-01-04
7708517	214	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.3 ± 0.3	2016-01-04
7708520	214	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7708502	216	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.3 ± 0.3	2016-01-04
7708521	217	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.3 ± 0.4	2016-01-04
7708503	219	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.0 ± 0.3	2016-01-04
7708504	220	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.6 ± 0.4	2016-01-04
7708508	222	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.1 ± 0.3	2016-01-04
7708522	223	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.3 ± 0.3	2016-01-04
7708523	229	2015-12-28 @ 1:00 pm	2015-12-31 @ 9:00 am	2.0 ± 0.4	2016-01-04
7708535	234	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	4.1 ± 0.5	2016-01-04
7708554	ALL PURP	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	0.9 ± 0.3	2016-01-04
7708555	ALL PURP	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	0.9 ± 0.3	2016-01-04
7708596	AP OFFICE	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	1.2 ± 0.3	2016-01-04
7708537	BOOK	2015-12-28 @ 10:00 am	2015-12-31 @ 8:00 am	0.9 ± 0.3	2016-01-04
7708556	BUILDING SERVICE	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7708559	CHILD	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7708589	CONF 1	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	0.8 ± 0.3	2016-01-04
7708563	CONF 2	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	0.8 ± 0.3	2016-01-04
7708524	STAFF DEVLP	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.5 ± 0.3	2016-01-04
7708529	STAFF DEVLP	2015-12-28 @ 12:00 pm	2015-12-31 @ 9:00 am	1.4 ± 0.3	2016-01-04
7708574	GYM	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	2.4 ± 0.4	2016-01-04
7708579	GYM	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	2.2 ± 0.4	2016-01-04
7708582	GYM	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	2.9 ± 0.4	2016-01-04
7708578	GYM OFFICE	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	1.3 ± 0.3	2016-01-04
7708588	HEALTH	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	1.9 ± 0.4	2016-01-04
7708562	LTL	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	0.6 ± 0.3	2016-01-04
7708551	MEDIA	2015-12-28 @ 10:00 am	2015-12-31 @ 9:00 am	2.1 ± 0.4	2016-01-04
7708552	MEDIA OFF 1	2015-12-28 @ 10:00 am	2015-12-31 @ 9:00 am	1.8 ± 0.4	2016-01-04
7708553	MEDIA OFF 2	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	2.0 ± 0.4	2016-01-04
7708599	MEDIA	2015-12-28 @ 10:00 am	2015-12-31 @ 9:00 am	2.0 ± 0.4	2016-01-04

Janua LABORATORY ANALYSIS 16, REPORT **

Radon test result report for:
GEORGIAN FOREST ES
MAIN

Kit#	Room Id	Started	Ended	pCi/L	Analyzed
7708600	OFFICE	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	1.5 ± 0.3	2016-01-04
7708593	PRINCIPAL	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	0.9 ± 0.3	2016-01-04
7708557	STAFF LOUNGE	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7708536	STAFF LOUNGE	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7708583	STAFF LOUNGE	2015-12-28 @ 11:00 am	2015-12-31 @ 9:00 am	< 0.3	2016-01-04
7708594	STAFF WORK	2015-12-28 @ 9:00 am	2015-12-31 @ 8:00 am	0.8 ± 0.3	2016-01-04

January LABORATORY ANALYSIS 15, REPORT **

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

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

December LABORATORY ANALYSIS 23, 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
	pCi/L Rel. Hum <u>49.6</u> % Temp. <u>69.9</u>
Date Start: 12/18/15 Date Stop: 12/21/5	Date Start: Date Stop:
Time Start: <u>0929</u> Time Stop: <u>0929</u>	Time Start: Time Stop:
Device No.'s: 7705132,7766208	Device No.'s:
7706211,7706366,	
7706380, 7706381	
F3 Loft	
Date Start: Date Stop:	Date Start: Date Stop:
Time Start: Time Stop:	Time Start: Time Stop:
Device No.'s:	Device No.'s:
	-
1	
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 = $7 \mu R/h$ Elevation = 820 ft



Engineers • Planners • Scientists • Construction Managers

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

Chain of Custody

Project Name: MCPS Radon Phase III

Name of Schools:

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

	Date	Initials
Radon Test Kits Deployed	12/28/15	JM
Radon Test Kits Sampled	12/31/15	JM
Radon Test Kits Shipped to Lab*	12/31/15	JM
Radon Test Kits Received by Lab*	114/16	JM

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