KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Kensington-Parkwood Elementary School
Date of Test Report	2/16/2023
Round of Testing	Initial Follow-up Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	72
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	2.9 pCi/L

Project Status:

1. 5-Year retesting completed.

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

February 16, 2023

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

Re: **Radon Testing Services**
KCI Job # 122210551

Location: Kensington-Parkwood Elementary School
4710 Saul Road
Kensington, MD 20895

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 Kensington-Parkwood Elementary School, located at 4710 Saul Rd. Kensington, MD 20895 (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 10, 2023 and deployed eighty-four (84) 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 13, 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.

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 26°F to the mid 56°F. Maximum sustained winds ranged from 0-21 miles per hour. Average humidity was around 68% with .09 inches of precipitation (rain) was recorded during testing period.

Results:

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

The results of the radon test analysis indicated the following:

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

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

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

Sincerely,

Tyler McCleaf

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

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

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal
ACI- Air Check, Inc.
D- Duplicate
FB- Field Blank
KCI- KCI Technologies, Inc.
OB- Office Blank
PM- Project Manager
QC- Quality Control

Table 1- Radon Testing Results		
Kensington-Parkwood ES		
Test Period: 01/10/2023 - 01/13/2023		
Kit Number	Room / Area	Result
11633478	1	1.2
11633476	5	0.8
11633402	6	0.9
11633481	8	2.0
11633468	10	1.0
11633469	10	0.7
11633470	12	0.7
11633477	14	0.8
11633483	31	0.6
11633482	34	1.1
11633474	35	0.7
11633473	36	0.6
11633454	39	< 0.3
11633457	39	0.6
11633467	40	0.8
11633415	102	1.0
11633463	103	1.9
11633420	104	1.2
11633433	105	1.4
11633455	108	0.6
11633475	108	0.9
11633462	111	0.6
11633458	112	< 0.3
11633461	115	< 0.3
11633460	120	1.7
11633412	126	1.5
11633421	127	0.8
11633409	128	1.4
11633413	129	2.3
11633422	129	2.3
11633410	130	1.2
11633414	131	1.1
11633407	133	1.5
11633405	134	2.1
11633406	134	2.2
11633408	135	1.2
11633411	137	0.8
11633429	138	1.5
11633435	139	0.9
11633464	139	0.9
11633491	140	0.6
11633430	141	0.9

Table 1- Radon Testing Results		
Kensington-Parkwood ES		
Test Period: 01/10/2023 - 01/13/2023		
Kit Number	Room / Area	Result
11633489	144	0.7
11633497	144	0.7
11633418	145	< 0.3
11633432	145	0.8
11633425	149	2.9
11633490	151	1.4
11633493	154	0.7
11633496	155	1.3
11633494	156	1.1
11633498	157	< 0.3
11633484	161	1.2
11633488	162	0.8
11633443	164	0.7
11633444	164	< 0.3
11633466	165	0.9
11633459	167	0.9
11633451	168	0.5
11633452	168	0.7
11633485	170	0.6
11633445	171	1.1
11633495	173	0.6
11633465	175	0.7
11633453	176	0.6
11633486	179	0.6
11633436	1722	0.6
11633419	100A	0.7
11633424	100C	1.0
11633441	101 MEDIA	1.7
11633449	101 MEDIA	3.2
11633456	101A	1.7
11633416	102B	1.2
11633434	104A	0.7
11633437	13 MPR	0.6
11633440	13 MPR	0.6
11633446	BS OFFICE	2.2
11633442	GYM	< 0.3
11633450	GYM	< 0.3
11633439	GYM OFFICE	1.2
11633447	GYM OFFICE	< 0.3
11633438	KITCHEN OFFICE	0.8
11633417	MAIN OFFICE	1.1
11633448	STAGE	< 0.3

Table 2- Radon Testing Results			
Kensington Parkwood ES			
Test Period: 01/10/23 - 01/13/23			
Kit Number	QC Type	Room / Area	Result
11633469	D	10	0.7
11633454	FB	39	< 0.3
11633455	D	108	0.6
11633413	D	129	2.3
11633406	D	134	2.2
11633464	D	139	0.9
11633497	D	144	0.7
11633418	FB	145	< 0.3
11633444	FB	164	< 0.3
11633452	D	168	0.7
11633450	D	Gym	0.7
11633447	FB	Gym Office	< 0.3
11285162	OB	OFFICE BLANK	< 0.3
11284899	TB	TRAVEL BLANK	< 0.3

Summary of Missed Locations		
Kensington-Parkwood ES		
Test Period: 01/10/23 - 01/13/23		
Kit Number	Room/Area	Result
	N/A	

Summary of Missing, Compromised and >/= 4 piC/L Tests		
Kensington-Parkwood ES		
Test Period: 01/10/23 - 01/13/23		
Kit Number	Room/Area	Result
	N/A	

Table Note:
* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

January 16, 2023

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11633478	1	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	1.2 ± 0.3	2023-01-16
11633468	10	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	1.0 ± 0.3	2023-01-16
11633469	10	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.7 ± 0.3	2023-01-16
11633419	100A	2023-01-10 @ 8:00 am	2023-01-13 @ 10:00 am	0.7 ± 0.3	2023-01-16
11633424	100C	2023-01-10 @ 8:00 am	2023-01-13 @ 10:00 am	1.0 ± 0.3	2023-01-16
11633441	101 MEDIA	2023-01-10 @ 10:00 am	2023-01-13 @ 10:00 am	1.7 ± 0.3	2023-01-16
11633449	101 MEDIA	2023-01-10 @ 10:00 am	2023-01-13 @ 10:00 am	3.2 ± 0.4	2023-01-16
11633456	101A	2023-01-10 @ 10:00 am	2023-01-13 @ 10:00 am	1.7 ± 0.3	2023-01-16
11633415	102	2023-01-10 @ 8:00 am	2023-01-13 @ 10:00 am	1.0 ± 0.3	2023-01-16
11633416	102B	2023-01-10 @ 8:00 am	2023-01-13 @ 10:00 am	1.2 ± 0.3	2023-01-16
11633463	103	2023-01-10 @ 10:00 am	2023-01-13 @ 10:00 am	1.9 ± 0.3	2023-01-16
11633420	104	2023-01-10 @ 8:00 am	2023-01-13 @ 10:00 am	1.2 ± 0.3	2023-01-16
11633434	104A	2023-01-10 @ 8:00 am	2023-01-13 @ 10:00 am	0.7 ± 0.3	2023-01-16
11633433	105	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	1.4 ± 0.3	2023-01-16
11633455	108	2023-01-10 @ 10:00 am	2023-01-13 @ 10:00 am	0.6 ± 0.3	2023-01-16
11633475	108	2023-01-10 @ 10:00 am	2023-01-13 @ 10:00 am	0.9 ± 0.3	2023-01-16
11633462	111	2023-01-10 @ 10:00 am	2023-01-13 @ 10:00 am	0.6 ± 0.3	2023-01-16
11633458	112	2023-01-10 @ 10:00 am	2023-01-13 @ 10:00 am	< 0.3	2023-01-16
11633461	115	2023-01-10 @ 10:00 am	2023-01-13 @ 10:00 am	< 0.3	2023-01-16
11633470	12	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.7 ± 0.3	2023-01-16
11633460	120	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	1.7 ± 0.3	2023-01-16
11633412	126	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	1.5 ± 0.3	2023-01-16
11633421	127	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	0.8 ± 0.3	2023-01-16
11633409	128	2023-01-10 @ 9:00 am	2023-01-13 @ 11:00 am	1.4 ± 0.3	2023-01-16
11633413	129	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	2.3 ± 0.3	2023-01-16
11633422	129	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	2.3 ± 0.3	2023-01-16
11633440	13 MPR	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.6 ± 0.3	2023-01-16
11633437	13 MPR	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.6 ± 0.3	2023-01-16
11633410	130	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	1.2 ± 0.3	2023-01-16
11633414	131	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	1.1 ± 0.3	2023-01-16
11633407	133	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	1.5 ± 0.3	2023-01-16
11633405	134	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	2.1 ± 0.3	2023-01-16
11633406	134	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	2.2 ± 0.3	2023-01-16
11633408	135	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	1.2 ± 0.3	2023-01-16
11633411	137	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	0.8 ± 0.3	2023-01-16
11633429	138	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	1.5 ± 0.3	2023-01-16
11633435	139	2023-01-10 @ 10:00 am	2023-01-13 @ 10:00 am	0.9 ± 0.3	2023-01-16

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

January 16, 2023

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11633464	139	2023-01-10 @ 10:00 am	2023-01-13 @ 10:00 am	0.9 ± 0.3	2023-01-16
11633477	14	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.8 ± 0.3	2023-01-16
11633491	140	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	0.6 ± 0.3	2023-01-16
11633430	141	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	0.9 ± 0.3	2023-01-16
11633497	144	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	0.7 ± 0.3	2023-01-16
11633489	144	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	0.7 ± 0.3	2023-01-16
11633432	145	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	0.8 ± 0.3	2023-01-16
11633418	145	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	< 0.3	2023-01-16
11633425	149	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	2.9 ± 0.3	2023-01-16
11633490	151	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	1.4 ± 0.3	2023-01-16
11633493	154	2023-01-10 @ 9:00 am	2023-01-13 @ 11:00 am	0.7 ± 0.3	2023-01-16
11633496	155	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	1.3 ± 0.3	2023-01-16
11633494	156	2023-01-10 @ 9:00 am	2023-01-13 @ 11:00 am	1.1 ± 0.3	2023-01-16
11633498	157	2023-01-10 @ 9:00 am	2023-01-13 @ 11:00 am	< 0.3	2023-01-16
11633484	161	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	1.2 ± 0.3	2023-01-16
11633488	162	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	0.8 ± 0.3	2023-01-16
11633444	164	2023-01-10 @ 9:00 am	2023-01-13 @ 11:00 am	< 0.3	2023-01-16
11633443	164	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	0.7 ± 0.3	2023-01-16
11633466	165	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	0.9 ± 0.3	2023-01-16
11633459	167	2023-01-10 @ 9:00 am	2023-01-13 @ 10:00 am	0.9 ± 0.3	2023-01-16
11633452	168	2023-01-10 @ 9:00 am	2023-01-13 @ 11:00 am	0.7 ± 0.3	2023-01-16
11633451	168	2023-01-10 @ 9:00 am	2023-01-13 @ 11:00 am	0.5 ± 0.3	2023-01-16
11633485	170	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.6 ± 0.3	2023-01-16
11633445	171	2023-01-10 @ 9:00 am	2023-01-13 @ 11:00 am	1.1 ± 0.3	2023-01-16
11633436	1722	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.6 ± 0.3	2023-01-16
11633495	173	2023-01-10 @ 9:00 am	2023-01-13 @ 11:00 am	0.6 ± 0.3	2023-01-16
11633465	175	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.7 ± 0.3	2023-01-16
11633453	176	2023-01-10 @ 10:00 am	2023-01-13 @ 10:00 am	0.6 ± 0.3	2023-01-16
11633486	179	2023-01-10 @ 10:00 am	2023-01-13 @ 10:00 am	0.6 ± 0.3	2023-01-16
11633483	31	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.6 ± 0.3	2023-01-16
11633482	34	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	1.1 ± 0.3	2023-01-16
11633474	35	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.7 ± 0.3	2023-01-16
11633473	36	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.6 ± 0.3	2023-01-16
11633457	39	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.6 ± 0.3	2023-01-16
11633454	39	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	< 0.3	2023-01-16
11633467	40	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.8 ± 0.3	2023-01-16
11633476	5	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.8 ± 0.3	2023-01-16

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

January 16, 2023

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11633402	6	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.9 ± 0.3	2023-01-16
11633481	8	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	2.0 ± 0.3	2023-01-16
11633446	BS OFFICE	2023-01-10 @ 11:00 am	2023-01-13 @ 11:00 am	2.2 ± 0.3	2023-01-16
11633442	GYM	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	< 0.3	2023-01-16
11633450	GYM	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	< 0.3	2023-01-16
11633447	GYM OFFICE	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	< 0.3	2023-01-16
11633439	GYM OFFICE	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	1.2 ± 0.3	2023-01-16
11633438	KITCHEN OFFICE	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	0.8 ± 0.3	2023-01-16
11633417	MAIN OFFICE	2023-01-10 @ 8:00 am	2023-01-13 @ 11:00 am	1.1 ± 0.3	2023-01-16
11633448	STAGE	2023-01-10 @ 10:00 am	2023-01-13 @ 11:00 am	< 0.3	2023-01-16

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 I TECHNOLOGIES, INC 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: 12/27/22	Date Start: _____ Date Stop: _____
Time Start: 0810 Time Stop: 0810	Time Start: _____ Time Stop: _____
Device No.'s: (5) CHAR BAGS -	Device No.'s: _____
11285109, 11285110, 11285101	_____
THRU 11285103	_____
BY CRF	_____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
_____	_____
_____	_____
_____	_____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
_____	_____
_____	_____
_____	_____

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

December 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

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

Radon Test Kit Chain of Custody

Project Name: MCPS Radon – Week 1 January Schools

Name of Schools:

1. Woodfield ES
2. Montgomery Village MS
3. Albert Einstein HS
4. Garrett Park Annex
5. Garrett Park ES
6. Kensington-Parkwood ES
7. Silver Creek MS
8. Stephen Knolls School
9. Highland View ES
10. MacDonald Knolls ECC
11. Montgomery Knolls ES
12. Rock Terrace HS

	Date	Initials
Radon Test Kits Deployed	01/10/2023	BMM
Radon Test Kits Collected	01/13/2023	BMM
Radon Test Kits Shipped to Lab*	01/13/2023	BMM
Radon Test Kits Received by Lab*	01/17/2023	BMM

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

MONTGOMERY COUNTY PUBLIC SCHOOLS
RADON TESTING

Executive Summary:
Kensington Parkwood Elementary School

4710 Saul Road,
Kensington, MD 20895

Date of Test Report:	3/15/2019
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:	1
# of Rooms ≥ 4.0 pCi/L:	0
Low Value:	0.9
High Value:	0.9

Project Status

Retesting completed: No further action at this time.

March 15, 2019

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

Re: Radon Testing Services

Location: Kensington Parkwood Elementary School
4710 Saul Road,
Kensington, MD 20895

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 Kensington Parkwood Elementary School, located at 4710 Saul Road, Kensington, MD 20895 (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 February 26, 2019 and deployed one (1) activated charcoal (AC) radon test kit. 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 March 01, 2019 to retrieve the radon sampling test kit. A floor plan map of the building with the test location is included as Attachment A of this report.

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).

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 Attachment B	

Notes:
D -Duplicate Sample

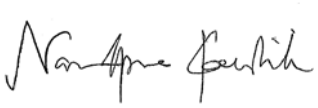
The office blank and lab transit blanks had test results of less than the laboratory detection limit of 0.4 pCi/L. Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved. The Spike sample analysis results indicate the laboratory is operating within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

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

ATTACHMENT B

Radon Test Summary Spreadsheet

Radon Testing Results		
Kensington Parkwood Elementary School		
Testing period: 2/26/19 - 3/01/19		
Kit Number	**Room / Area**	**Result (pCi/L)**
3923322	131	0.9

Table Notes:

D – Duplicate

FB – Field Blank

OB – Office Blank

TB – Transit Blank

QC – Quality Control

ATTACHMENT C

Laboratory Analytical Results

AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NRPP 105011 AL
NRSB ARL0007

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

Laboratory Report for:

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

Property Tested: Project # 04481387-1

MCPS Radon Survey Kensington Parkway ES
4710 Saul Road
Kensington MD 20895

Log Number	Device Number	Test Exposure Duration:		Area Tested	Result pCi/L
3220814	3923322	02/26/2019 11:52 am	03/01/2019 10:16 am	Floor Main Level Room 131	0.9

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

Distributed by: Intertek-PSI (VA)

Date Received: 03/05/2019 Date Logged: 03/05/2019 Date Analyzed: 03/05/2019 Date Reported: 03/06/2019

Report Reviewed By: _____ Report Approved By: _____

Shawn Price, Director of Laboratory Operations, AccuStar Labs

Disclaimer:

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

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

MONTGOMERY COUNTY PUBLIC SCHOOLS
RADON TESTING

Executive Summary:
Kensington Parkwood Elementary School

4710 Saul Road,
Kensington, MD 20895

Date of Test Report:	02/13/2019
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:	66
# of Rooms ≥ 4.0 pCi/L:	0
Low Value:	< 0.4
High Value:	1.7

Project Status

Initial testing complete: MIssing or compromised samples need re-test

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: Kensington Parkwood Elementary School
4710 Saul Road,
Kensington, MD 20895

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 Kensington Parkwood Elementary School, located at 4710 Saul Road, Kensington, MD 20895 (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 December 03, 2018 and deployed eighty-five (85) 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 December 06, 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 Attachment 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

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

ATTACHMENT B

Radon Test Summary Spreadsheet

Radon Testing Results		
Kensington Parkwood Elementary School		
Testing period: 12/3/18 - 12/6/18		
Kit Number	**Room / Area**	**Result (pCi/L)**
3927816	1 (CR1)	<0.4
3927813	5 (CR5)	<0.4
3927814	6	<0.4
3927817	10	1.3
3927972	11	<0.4
3927971	11	<0.4
3927815	12	<0.4
3927976	13 (APR)	<0.4
3927977	13 (APR)	<0.4
3927811	14	<0.4
3927975	15 (Kitchen)	0.5
3927979	15A	<0.4
3927980	22	1.0
3927812	31	0.7
3927819	34	0.5
3927818	35	0.4
3927820	36	0.9
3927928	39	0.4
3927922	40	<0.4
3928027	100	0.5
3928029	100A	1.7
3928030	100C	0.4
3927932	101	1.1
3927931	101	1.1
3927925	101A	0.8
3928026	102	0.8
3928021	102B	0.8
3927929	103	0.6
3928024	104	0.4
3927926	105	0.6
3927930	111	<0.4
3927933	120	0.6
3927864	126	<0.4
3927935	127	<0.4
3927936	129	1.1
3927863	130	0.6
3927937	131 (MISSING)	--
3927938	133	0.4
3927868	134	0.8
3927939	135	0.4
3927940	135	0.6
3927861	137	<0.4
3927870	138	1.6

Radon Testing Results		
Kensington Parkwood Elementary School		
Testing period: 12/3/18 - 12/6/18		
Kit Number	**Room / Area**	**Result (pCi/L)**
3927862	139	<0.4
3928001	140	<0.4
3927867	141	<0.4
3928006	144	<0.4
3927866	145	0.8
3927869	149	0.9
3928002	151	<0.4
3928005	154	<0.4
3928010	155	<0.4
3928007	156	<0.4
3928003	157	<0.4
3928004	161	<0.4
3928020	162	<0.4
3928017	164	<0.4
3928009	165	<0.4
3928018	167	<0.4
3928016	168	<0.4
3928014	170	0.6
3928012	171	<0.4
3928013	172	<0.4
3928015	173	0.5
3928025	175	0.4
3928022	176	0.4
3928023	179	<0.4
3927923	200	<0.4
3927924	206	<0.4
3927927	212	<0.4
3927974	Gym	<0.4
3927973	Gym	<0.4

Radon Testing Results		
Kensington Parkwood Elementary School		
Testing period: 12/3/18 - 12/6/18		
Kit Number	**QC Type**	**Result (pCi/L)**
3927921	39 (D)	<0.4
3928028	100 (D)	<0.4
3927934	127 (D)	<0.4
3927865	130 (D)	<0.4
3928008	157 (D)	<0.4
3927978	15A (D)	<0.4
3928019	167 (D)	<0.4
3928011	175 (D)	<0.4
3926210	Field Blank	<0.4
3926209	Field Blank	<0.4
3927833	Field Blank	<0.4
3927840	Office Blank	<0.4
3927834	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

AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NELAC NY 11769
NRPP 103216 AL
NRSB ARL0017

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

Laboratory Report for:

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

Property Tested: Project # 04481387-1

MCPS Radon Survey
Kensington Parkwood ES
4710 Saul Road
Kensington MD 20895

Log Number	Device Number	Test Exposure Duration:				Area Tested	Result pCi/L
2404703	3927820	12/03/2018	1:29 pm	12/06/2018	10:42 am	Room 36	0.9
2404704	3928027	12/03/2018	12:02 pm	12/06/2018	9:52 am	Kensington Parkwood ES Floor Main Room 100	0.5
2404705	3928028	12/03/2018	12:02 pm	12/06/2018	9:52 am	Kensington Parkwood ES Floor Main Room 100	< 0.4
2404706	3928029	12/03/2018	12:04 pm	12/06/2018	9:53 am	Kensington Parkwood ES Flr Main Rm 100C	0.4
2404707	3928030	12/03/2018	12:05 pm	12/06/2018	9:54 am	Kensington Parkwood ES Floor Main Room 104	1.7
2404708	3928024	12/03/2018	12:06 pm	12/06/2018	9:55 am	Kensington Parkwood ES Floor Main Room 104	0.4
2404709	3928026	12/03/2018	12:07 pm	12/06/2018	9:56 am	Kensington Parkwood ES Floor Main Room 102	0.8
2404710	3928021	12/03/2018	12:08 pm	12/06/2018	9:57 am	Kensington Parkwood ES Flr Main Rm 102B	0.8
2404711	3928023	12/03/2018	12:10 pm	12/06/2018	9:59 am	Kensington Parkwood ES Floor Main Room 179	< 0.4
2404712	3928022	12/03/2018	12:12 pm	12/06/2018	10:00 am	Kensington Parkwood ES Floor Main Room 176	0.4
2404713	3928025	12/03/2018	12:13 pm	12/06/2018	10:01 am	Kensington Parkwood ES Floor Main Room 175	0.4

Comment: AMENDED REPORT for !! on $$ to add the beginning & ending date & time for device 3927820. Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3927975 (Kitchen).

Distributed by: Intertek-PSI (VA)

Date Received: 12/08/2018 Date Logged: 12/12/2018 Date Analyzed: 12/14/2018 Date Reported: 01/15/2019

Report Reviewed By: Michael Cleveland Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

Disclaimer:

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

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

NELAC NY 11769
NRPP 103216 AL
NRSB ARL0017

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

Laboratory Report for:

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

Property Tested: Project # 04481387-1

MCPS Radon Survey
Kensington Parkwood ES
4710 Saul Road
Kensington MD 20895

Log Number	Device Number	Test Exposure Duration:				Area Tested			Result pCi/L
2404714	3928011	12/03/2018	12:13 pm	12/06/2018	10:01 am	Kensington Parkwood ES	Floor Main	Room 175	< 0.4
2404715	3928013	12/03/2018	12:15 pm	12/06/2018	10:02 am	Kensington Parkwood ES	Floor Main	Room 172	< 0.4
2404716	3928014	12/03/2018	12:17 pm	12/06/2018	10:02 am	Kensington Parkwood ES	Floor Main	Room 170	0.6
2404717	3928015	12/03/2018	12:20 pm	12/06/2018	10:02 am	Kensington Parkwood ES	Floor Main	Room 173	0.5
2404718	3928016	12/03/2018	12:22 pm	12/06/2018	10:03 am	Kensington Parkwood ES	Floor Main	Room 168	< 0.4
2404719	3928012	12/03/2018	12:24 pm	12/06/2018	10:03 am	Kensington Parkwood ES	Floor Main	Room 171	< 0.4
2404720	3928017	12/03/2018	12:26 pm	12/06/2018	10:04 am	Kensington Parkwood ES	Floor Main	Room 164	< 0.4
2404721	3928018	12/03/2018	12:28 pm	12/06/2018	10:05 am	Kensington Parkwood ES	Floor Main	Room 167	< 0.4
2404722	3928019	12/03/2018	12:28 pm	12/06/2018	10:05 am	Kensington Parkwood ES	Floor Main	Room 167	< 0.4
2404723	3928020	12/03/2018	12:30 pm	12/06/2018	10:06 am	Kensington Parkwood ES	Floor Main	Room 162	< 0.4
2404724	3928009	12/03/2018	12:32 pm	12/06/2018	10:06 am	Kensington Parkwood ES	Floor Main	Room 165	< 0.4

Comment: AMENDED REPORT for !! on $$ to add the beginning & ending date & time for device 3927820. Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3927975 (Kitchen).

Distributed by: Intertek-PSI (VA)

Date Received: 12/08/2018 Date Logged: 12/12/2018 Date Analyzed: 12/14/2018 Date Reported: 01/15/2019

Report Reviewed By: Michael Cleveland Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

Disclaimer:

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

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

NELAC NY 11769
NRPP 103216 AL
NRSB ARL0017

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

Laboratory Report for:

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

Property Tested: Project # 04481387-1

MCPS Radon Survey
Kensington Parkwood ES
4710 Saul Road
Kensington MD 20895

Log Number	Device Number	Test Exposure Duration:				Area Tested			Result pCi/L
2404725	3928007	12/03/2018	12:50 pm	12/06/2018	10:07 am	Kensington Parkwood ES	Floor Main	Room 156	< 0.4
2404726	3928005	12/03/2018	12:51 pm	12/06/2018	10:08 am	Kensington Parkwood ES	Floor Main	Room 154	< 0.4
2404727	3928004	12/03/2018	12:52 pm	12/06/2018	10:09 am	Kensington Parkwood ES	Floor Main	Room 161	< 0.4
2404728	3928003	12/03/2018	12:54 pm	12/06/2018	10:10 am	Kensington Parkwood ES	Floor Main	Room 157	< 0.4
2404729	3928008	12/03/2018	12:54 pm	12/06/2018	10:10 am	Kensington Parkwood ES	Floor Main	Room 157	< 0.4
2404730	3928006	12/03/2018	12:56 pm	12/06/2018	10:11 am	Kensington Parkwood ES	Floor Main	Room 144	< 0.4
2404731	3928010	12/03/2018	12:57 pm	12/06/2018	10:12 am	Kensington Parkwood ES	Floor Main	Room 155	< 0.4
2404732	3928002	12/03/2018	12:58 pm	12/06/2018	10:13 am	Kensington Parkwood ES	Floor Main	Room 151	< 0.4
2404733	3928001	12/03/2018	12:59 pm	12/06/2018	10:14 am	Kensington Parkwood ES	Floor Main	Room 140	< 0.4
2404734	3927870	12/03/2018	1:00 pm	12/06/2018	10:15 am	Kensington Parkwood ES	Floor Main	Room 138	1.6
2404735	3927869	12/03/2018	1:00 pm	12/06/2018	10:16 am	Kensington Parkwood ES	Floor Main	Room 149	0.9

Comment: AMENDED REPORT for !! on $$ to add the beginning & ending date & time for device 3927820. Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3927975 (Kitchen).

Distributed by: Intertek-PSI (VA)

Date Received: 12/08/2018 Date Logged: 12/12/2018 Date Analyzed: 12/14/2018 Date Reported: 01/15/2019

Report Reviewed By: Michael Cleveland Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

Disclaimer:

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

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

NELAC NY 11769
NRPP 103216 AL
NRSB ARL0017

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

Laboratory Report for:

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

Property Tested: Project # 04481387-1

MCPS Radon Survey
Kensington Parkwood ES
4710 Saul Road
Kensington MD 20895

Log Number	Device Number	Test Exposure Duration:				Area Tested	Result pCi/L
2404736	3927868	12/03/2018	1:01 pm	12/06/2018	10:16 am	Kensington Parkwood ES Floor Main Room 134	0.8
2404737	3927866	12/03/2018	1:01 pm	12/06/2018	10:17 am	Kensington Parkwood ES Floor Main Room 145	0.8
2404738	3927867	12/03/2018	1:02 pm	12/06/2018	10:17 am	Kensington Parkwood ES Floor Main Room 141	< 0.4
2404739	3927863	12/03/2018	1:04 pm	12/06/2018	10:18 am	Kensington Parkwood ES Floor Main Room 130	0.6
2404740	3927865	12/03/2018	1:04 pm	12/06/2018	10:18 am	Kensington Parkwood ES Floor Main Room 130	< 0.4
2404741	3927864	12/03/2018	1:05 pm	12/06/2018	10:19 am	Kensington Parkwood ES Floor Main Room 126	< 0.4
2404742	3927861	12/03/2018	1:06 pm	12/06/2018	10:20 am	Kensington Parkwood ES Floor Main Room 137	< 0.4
2404743	3927862	12/03/2018	1:07 pm	12/06/2018	10:20 am	Kensington Parkwood ES Floor Main Room 139	< 0.4
2404744	3927940	12/03/2018	1:08 pm	12/06/2018	10:21 am	Kensington Parkwood ES Floor Main Room 135	0.6
2404745	3927939	12/03/2018	1:09 pm	12/06/2018	10:22 am	Kensington Parkwood ES Floor Main Room 135	0.4
2404746	3927938	12/03/2018	1:10 pm	12/06/2018	10:23 am	Kensington Parkwood ES Floor Main Room 133	0.4

Comment: AMENDED REPORT for !! on $$ to add the beginning & ending date & time for device 3927820. Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3927975 (Kitchen).

Distributed by: Intertek-PSI (VA)

Date Received: 12/08/2018 Date Logged: 12/12/2018 Date Analyzed: 12/14/2018 Date Reported: 01/15/2019

Report Reviewed By: Michael Cleveland Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

Disclaimer:

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

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

NELAC NY 11769
NRPP 103216 AL
NRSB ARL0017

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

Laboratory Report for:

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

Property Tested: Project # 04481387-1

MCPS Radon Survey
Kensington Parkwood ES
4710 Saul Road
Kensington MD 20895

Log Number	Device Number	Test Exposure Duration:		Area Tested	Result pCi/L
2404747	3927936	12/03/2018 1:12 pm	12/06/2018 10:25 am	Kensington Parkwood ES Floor Main Room 129	1.1
2404748	3927935	12/03/2018 1:14 pm	12/06/2018 10:26 am	Kensington Parkwood ES Floor Main Room 127	< 0.4
2404749	3927934	12/03/2018 1:14 pm	12/06/2018 10:26 am	Kensington Parkwood ES Floor Main Room 127	< 0.4
2404750	3927933	12/03/2018 1:15 pm	12/06/2018 10:27 am	Kensington Parkwood ES Floor Main Room 120	0.6
2404751	3927932	12/03/2018 1:16 pm	12/06/2018 10:28 am	Kensington Parkwood ES Floor Main Room 101	1.1
2404752	3927931	12/03/2018 1:17 pm	12/06/2018 10:29 am	Kensington Parkwood ES Floor Main Room 101	1.1
2404753	3927925	12/03/2018 1:18 pm	12/06/2018 10:30 am	Kensington Parkwood ES Flr Main Rm 101A	0.8
2404754	3927929	12/03/2018 1:18 pm	12/06/2018 10:31 am	Kensington Parkwood ES Floor Main Room 103	0.6
2404755	3927926	12/03/2018 1:19 pm	12/06/2018 10:32 am	Kensington Parkwood ES Floor Upper Room 105	0.6
2404756	3927930	12/03/2018 1:20 pm	12/06/2018 10:33 am	Kensington Parkwood ES Floor Upper Room 111	< 0.4
2404757	3927923	12/03/2018 1:21 pm	12/06/2018 10:34 am	Kensington Parkwood ES Floor Upper Room 200	< 0.4

Comment: AMENDED REPORT for !! on $$ to add the beginning & ending date & time for device 3927820. Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3927975 (Kitchen).

Distributed by: Intertek-PSI (VA)

Date Received: 12/08/2018 Date Logged: 12/12/2018 Date Analyzed: 12/14/2018 Date Reported: 01/15/2019

Report Reviewed By: Michael Cleveland Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

Disclaimer:

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

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

NELAC NY 11769
NRPP 103216 AL
NRSB ARL0017

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

Laboratory Report for:

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

Property Tested: Project # 04481387-1

MCPS Radon Survey
Kensington Parkwood ES
4710 Saul Road
Kensington MD 20895

Log Number	Device Number	Test Exposure Duration:				Area Tested			Result pCi/L
2404758	3927924	12/03/2018	1:22 pm	12/06/2018	10:35 am	Kensington Parkwood ES	Floor Upper	Room 206	< 0.4
2404759	3927927	12/03/2018	1:23 pm	12/06/2018	10:38 am	Kensington Parkwood ES	Floor Upper	Room 212	< 0.4
2404760	3927928	12/03/2018	1:28 pm	12/06/2018	10:39 am	Kensington Parkwood ES	Floor Lower	Room 39	0.4
2404761	3927921	12/03/2018	1:28 pm	12/06/2018	10:39 am	Kensington Parkwood ES	Floor Lower	Room 39	< 0.4
2404762	3927922	12/03/2018	1:29 pm	12/06/2018	10:41 am	Kensington Parkwood ES	Floor Lower	Room 40	< 0.4
2404763	3927818	12/03/2018	1:30 pm	12/06/2018	10:43 am	Kensington Parkwood ES	Floor Lower	Room 35	0.4
2404764	3927819	12/03/2018	1:31 pm	12/06/2018	10:44 am	Kensington Parkwood ES	Floor Lower	Room 34	0.5
2404765	3927814	12/03/2018	1:35 pm	12/06/2018	10:45 am	Kensington Parkwood ES	Floor Lower	Room 6	< 0.4
2404766	3927815	12/03/2018	1:36 pm	12/06/2018	10:46 am	Kensington Parkwood ES	Floor Lower	Room 12	< 0.4
2404767	3927817	12/03/2018	1:37 pm	12/06/2018	10:46 am	Kensington Parkwood ES	Floor Lower	Room 10	1.3
2404768	3927816	12/03/2018	1:39 pm	12/06/2018	10:47 am	Kensington Parkwood ES	Flr Lower	Room CR1	< 0.4

Comment: AMENDED REPORT for !! on $$ to add the beginning & ending date & time for device 3927820. Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3927975 (Kitchen).

Distributed by: Intertek-PSI (VA)

Date Received: 12/08/2018 Date Logged: 12/12/2018 Date Analyzed: 12/14/2018 Date Reported: 01/15/2019

Report Reviewed By: Michael Cleveland Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

Disclaimer:

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

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

NELAC NY 11769
NRPP 103216 AL
NRSB ARL0017

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

Laboratory Report for:

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

Property Tested: Project # 04481387-1

MCPS Radon Survey
Kensington Parkwood ES
4710 Saul Road
Kensington MD 20895

Log Number	Device Number	Test Exposure Duration:				Area Tested	Result pCi/L
2404769	3927813	12/03/2018	1:41 pm	12/06/2018	10:48 am	Kensington Parkwood ES Flr Lower Room CR5	< 0.4
2404770	3927811	12/03/2018	1:42 pm	12/06/2018	10:49 am	Kensington Parkwood ES Floor Lower Room 14	< 0.4
2404771	3927812	12/03/2018	1:43 pm	12/06/2018	10:50 am	Kensington Parkwood ES Floor Lower Room 31	0.7
2404772	3927980	12/03/2018	1:44 pm	12/06/2018	10:51 am	Kensington Parkwood ES Floor Lower Room 22	1.0
2404773	3927975	12/03/2018	1:45 pm	12/06/2018	10:52 am	Kensington Parkwood ES Flr Lower Rm 15 (Kitch	0.5
2404774	3927979	12/03/2018	1:45 pm	12/06/2018	10:52 am	Kensington Parkwood ES Floor Lower Room 15A	< 0.4
2404775	3927978	12/03/2018	1:46 pm	12/06/2018	10:52 am	Kensington Parkwood ES Flr Lower Rm 15A	< 0.4
2404776	3927976	12/03/2018	1:47 pm	12/06/2018	10:53 am	Kensington Parkwood ES Flr Lower Rm 13 (APR)	< 0.4
2404777	3927977	12/03/2018	1:48 pm	12/06/2018	10:53 am	Kensington Parkwood ES Flr Lower Rm 13 (APR)	< 0.4
2404778	3927974	12/03/2018	1:52 pm	12/06/2018	10:54 am	Kensington Parkwood ES Flr Lower Rm 11 (Gym)	< 0.4
2404779	3927973	12/03/2018	1:53 pm	12/06/2018	10:55 am	Kensington Parkwood ES Flr Lower Rm 11 (gym)	< 0.4

Comment: AMENDED REPORT for !! on $$ to add the beginning & ending date & time for device 3927820. Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3927975 (Kitchen).

Distributed by: Intertek-PSI (VA)

Date Received: 12/08/2018 Date Logged: 12/12/2018 Date Analyzed: 12/14/2018 Date Reported: 01/15/2019

Report Reviewed By: Michael Cleveland Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

Disclaimer:

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

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

NELAC NY 11769
NRPP 103216 AL
NRSB ARL0017

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

Laboratory Report for:

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

Property Tested: Project # 04481387-1

MCPS Radon Survey
Kensington Parkwood ES
4710 Saul Road
Kensington MD 20895

Log Number	Device Number	Test Exposure Duration:				Area Tested			Result pCi/L
2404780	3927972	12/03/2018	1:55 pm	12/06/2018	10:56 am	Kensington Parkwood ES	Floor Lower	Room 11	< 0.4
2404781	3927971	12/03/2018	1:55 pm	12/06/2018	10:58 am	Kensington Parkwood ES	Floor Lower	Room 11	< 0.4
2404782	3926210	12/03/2018	12:02 pm	12/06/2018	10:58 am	Kensington Parkwood ES	Floor Lower	Room 11	< 0.4
2404783	3926209	12/03/2018	12:02 pm	12/06/2018	10:58 am	Kensington Parkwood ES	Field Blank		< 0.4
2404784	3927833	12/03/2018	12:02 pm	12/06/2018	10:58 am	Kensington Parkwood ES	Field Blank		< 0.4
2404785	3927834	12/03/2018	12:02 pm	12/06/2018	10:58 am	Kensington Parkwood ES	Transit Blank		< 0.4
2404786	3927840	12/03/2018	6:00 am	12/06/2018	6:00 pm	Kensington Parkwood ES	Office Blank		< 0.4

Comment: AMENDED REPORT for !! on $$ to add the beginning & ending date & time for device 3927820. Per ANSI/AARST MAH 2014, requirements for test locations within a room were not met for device 3927975 (Kitchen).

Distributed by: Intertek-PSI (VA)

Date Received: 12/08/2018 Date Logged: 12/12/2018 Date Analyzed: 12/14/2018 Date Reported: 01/15/2019

Report Reviewed By: Michael Cleveland Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

Disclaimer:

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

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

AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NRPP 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:

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

Property Tested:

MCPS Radon Survey
4514 Taylorsville Road
Dayton OH 45424

Log Number	Device Number	Test Exposure Duration:				Area Tested	Result pCi/L
3204125	3926831	12/07/2018	9:47 am	12/10/2018	9:47 am	Spike	36.1
3204126	3926832	12/07/2018	9:47 am	12/10/2018	9:47 am	Spike	34.8
3204127	3926833	12/07/2018	9:47 am	12/10/2018	9:47 am	Spike	33.7
3204128	3926834	12/07/2018	9:47 am	12/10/2018	9:47 am	Spike	35.8
3204129	3926835	12/07/2018	9:47 am	12/10/2018	9:47 am	Spike	35.0
3204130	3926836	12/07/2018	9:47 am	12/10/2018	9:47 am	Spike	34.5
3204131	3926837	12/07/2018	9:47 am	12/10/2018	9:47 am	Spike	34.6
3204132	3926838	12/07/2018	9:47 am	12/10/2018	9:47 am	Spike	34.3
3204133	3926839	12/07/2018	9:47 am	12/10/2018	9:47 am	Spike	33.2
3204134	3926840	12/07/2018	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 Date Logged: 12/12/2018 Date Analyzed: 12/12/2018 Date Reported: 12/13/2018

Report Reviewed By: _____ Report Approved By: _____

Shawn Price, Director of Laboratory Operations, AccuStar Labs

Disclaimer:

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT Intertek - PSI Job Number 187732

NOMINAL Conditions: Radon Conc 32.6 pCi/L Rel. Hum 49.1 % Temp. 70.1 F

Date Start: 12/7/18 Date Stop: 12/10/18	Date Start: _____ Date Stop: _____
Time Start: 0947 Time Stop: 0947	Time Start: _____ Time Stop: _____
Device No.'s: (10) Char. Cans -	Device No.'s: _____
3926831 thru 3926840	_____
_____	_____
Gx Left	_____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
_____	_____
_____	_____
_____	_____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
_____	_____
_____	_____
_____	_____

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

intertek psi

Chain of Custody

Project Name: MCPS Radon Survey 2018

Name of Schools:

1. Ewing Center
2. Department of Food & Nutrition Services
3. Damascus HS
4. Edison HS
5. Emory Grove Center
6. John Poole MS
7. Lakelands Park MS
8. Laytonsville ES
9. Gaithersburg HS
10. Neelsville MS
11. Sequoyah ES
12. Clarksburg ES Annex
13. Garrett Park ES Annex
14. Goshen ES
15. Kingsley Wilderness Center
16. Kensington Parkwood ES
17. Monocacy ES
18. Lakewood ES
19. Little Bennett ES
20. Lois P. Rockwell ES
21. Olney ES
22. North Chevy Chase ES
23. Woodfield ES
24. Wootton HS

	Date	Initials
Radon Test Kits Deployed	12/03/2018	NL
Radon Test Kits Sampled	12/06/2018	NL
Radon Test Kits Shipped to Lab*	12/06/2018	NL
Radon Test Kits Received by Lab*	12/07/2018; 12/08/2018	NL

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

RADON SCREENING SURVEY – ADDITIONAL FOLLOW-UP KENSINGTON PARKWOOD ELEMENTARY SCHOOL

4710 Saul Rd, Kensington, Maryland 20895

EXECUTIVE SUMMARY

Date of Test Report:	4/20/16 Follow-Up
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested	1
# Rooms ≥ 4.0 pCi/L:	1
Low Value:	1.1
High Value:	1.4
Confirmed Rooms ≥ 4.0 pCi/L US EPA Action Level	0

Summary of Sampling Events ≥ 4.0 pCi/L

Room	Result (pCi/L) 1/29/16 Initial	Result (pCi/L) 3/23/16 Follow-Up	Result (pCi/L) 4/20/16 Follow-Up	Average Result (pCi/L)
134	--- Missing	4.7	1.4	3.1

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

MCPS RADON TESTING

Executive Summary: Kensington Parkwood Elementary School

Date of Test Report:	4/20/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	1
# Rooms 4.0 pCi/L:	0
Low Value:	1.1
High Value:	1.4

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

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

April 20, 2016

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

Re: **Radon Testing Services**
KCI Job # 12146341.34

Location: Kensington Parkwood Elementary School
4710 Saul Road
Kensington, Maryland 20895

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 Kensington Parkwood Elementary School, located at 4710 Saul Road in Kensington, Maryland 20895 (subject site).

Scope of Services:

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

KCI visited the site on March 29, 2016 and deployed three (3) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on April 1, 2016 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936 Butler

Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

The operating condition that represents the greatest amount of significantly occupied time for this building is; h , ° 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.

School personnel informed KCI during the sample collection that numerous windows were opened for extended periods during the testing due to a problem with the facility's HVAC system.

Results:

The results of the radon test analysis indicated the following:

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

Notes:
D- Duplicate sample

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

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

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

Sincerely,

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

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

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank*

PM- Project Manager

QC- Quality Control

*Office blanks were submitted at a rate of 1% for all samples deployed in Phase 13 testing. Office blanks were not submitted under each school individually.

Radon Testing Results		
Kensington Parkwood Elementary School		
Test Period: 03/29/16-04/01/16		
Kit Number	**Room / Area**	**Result**
7747814	134	1.4

Table Note:
* Missing or Compromised Sample

Radon Testing Results		
Kensington Parkwood Elementary School		
Test Period: 03/29/16-04/01/16		
Kit Number	**QC Type**	**Result**
7747813	D (134)	1.1
7747823	FB (134)	< 0.3

Table Note:
* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

April 8, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

KENSINGTON PARKWOOD ELEMENTARY SCHO
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7747813	134	2016-03-29 @ 11:00 am	2016-04-01 @ 10:00 am	1.1 ± 0.3	2016-04-05
7747814	134	2016-03-29 @ 11:00 am	2016-04-01 @ 10:00 am	1.4 ± 0.3	2016-04-05
7747823	134	2016-03-29 @ 11:00 am	2016-04-01 @ 10:00 am	< 0.3	2016-04-05

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

April 8, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

OFFICE BLANKS
Phase 13

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7726894	0	2016-03-29 @ 3:00 pm	2016-04-01 @ 3:00 pm	< 0.3	2016-04-05
7747563	0	2016-03-29 @ 3:00 pm	2016-04-01 @ 3:00 pm	< 0.3	2016-04-05
7747791	0	2016-03-29 @ 3:00 pm	2016-04-01 @ 3:00 pm	< 0.3	2016-04-05
7747792	0	2016-03-29 @ 3:00 pm	2016-04-01 @ 3:00 pm	< 0.3	2016-04-05

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

April 8, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

TRANSIT BLANKS
Phase 13

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7747741	1	2016-03-29 @ 3:00 pm	2016-04-01 @ 3:00 pm	< 0.3	2016-04-05
7747742	2	2016-03-29 @ 3:00 pm	2016-04-01 @ 3:00 pm	< 0.3	2016-04-05
7726876	3	2016-03-29 @ 3:00 pm	2016-04-01 @ 3:00 pm	< 0.3	2016-04-05
7726875	4	2016-03-29 @ 3:00 pm	2016-04-01 @ 3:00 pm	< 0.3	2016-04-05

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

March 24, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

MCPS

Spike Sample Results

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7735295	1	2016-03-18 @ 1:00 pm	2016-03-21 @ 1:00 pm	30.0 ± 2.0	2016-03-24
7735289	2	2016-03-18 @ 1:00 pm	2016-03-21 @ 1:00 pm	29.9 ± 2.0	2016-03-24
7735274	3	2016-03-18 @ 1:00 pm	2016-03-21 @ 1:00 pm	25.6 ± 1.7	2016-03-24
7735278	4	2016-03-18 @ 1:00 pm	2016-03-21 @ 1:00 pm	26.2 ± 1.8	2016-03-24
7735299	5	2016-03-18 @ 1:00 pm	2016-03-21 @ 1:00 pm	28.3 ± 1.9	2016-03-24
7735293	6	2016-03-18 @ 1:00 pm	2016-03-21 @ 1:00 pm	31.0 ± 2.0	2016-03-24

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 174430

NOMINAL Conditions: Radon Conc 26.1 pCi/L Rel. Hum 48.8 % Temp. 70.1 F

Date Start: 3/18/16 Date Stop: 3/21/16	Date Start: _____ Date Stop: _____
Time Start: 1250 Time Stop: 1250	Time Start: _____ Time Stop: _____
Device No.'s: (6) Char. Cans -	Device No.'s: _____
3029154 thru 3029157,	_____
3029083, 3029086	_____
FS Right	_____

Date Start: 3/18/16 Date Stop: 3/21/16	Date Start: _____ Date Stop: _____
Time Start: 1250 Time Stop: 1250	Time Start: _____ Time Stop: _____
Device No.'s: (6) Char. Boggs -	Device No.'s: _____
7735299, 7735293, 7735295,	_____
7735274, 7735278, 7735289	_____
FS Right	_____

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

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

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 13

Name of Schools:

1. Northwood HS
2. South Lake ES
3. Whetstone ES
4. Springbrook HS
5. Kensington Parkwood ES

	Date	Initials
Radon Test Kits Deployed	3/29/16	JM
Radon Test Kits Collected	4/1/16	JM
Radon Test Kits Shipped to Lab*	4/1/16	JM
Radon Test Kits Received by Lab*	4/5/16	JM

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

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

MCPS RADON TESTING

Executive Summary: Kensington Parkwood Elementary School

Date of Test Report:	3/23/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	1
# Rooms ≥ 4.0 pCi/L:	1
Low Value:	3.0
High Value:	4.7

Project Status:
Retesting completed; use the average of the retest and retest duplicate results to determine if remediation is necessary.

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

March 23, 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 # 12146341.30

Location: Kensington Parkwood Elementary School
4710 Saul Road
Kensington, Maryland 20895

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 Kensington Parkwood Elementary School, located at 4710 Saul Road in Kensington, Maryland 20895 (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 29, 2016 and deployed three (3) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on March 3, 2016 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936 Butler

Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

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

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

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

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

Results:

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥4.0 piC/L	134	3.0, 4.7 (D)
<4.0 piC/L	See Attachment B	

Notes:
D- Duplicate sample

The office blanks, and lab transit blanks had test results of less than the laboratory detection limit of 0.3 pCi/L. The field blank had a test result of 0.4 pCi/L. Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved. The Spike sample analysis results indicate the laboratory is operating within statistical control limits.

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

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

Sincerely,

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

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

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank*

PM- Project Manager

QC- Quality Control

*Office blanks were submitted at a rate of 1% for all samples deployed in Phase 10 testing. Office blanks were not submitted under each school individually.

Radon Testing Results		
Kensington Parkwood Elementary School		
Test Period: 02/29/16-03/03/16		
Kit Number	**Room / Area**	**Result**
3028779	134	3.0

Table Note:
* Missing or Compromised Sample

Radon Testing Results		
Kensington Parkwood Elementary School		
Test Period: 02/29/16-03/03/16		
Kit Number	**QC Type**	**Result**
3028777	D (134)	4.7
3028778	FB (134)	0.4

Table Note:
* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NRPP 10511AL
NRSB ARL0007

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

Laboratory Report for:

KCI Technologies
936 Ridgebrook Rd
Sparks MD 21152

Property Tested: Project # 12146341

Kensington Parkwood ES
4710 Saul Road
Kensington MD 20895

Log Number	Device Number	Test Exposure Duration:		Area Tested	Result (pCi/L)
3015289	3028778	02/29/2016 10:35 am	03/03/2016 7:30 am	Unit 134	0.4
3015290	3028779	02/29/2016 10:35 am	03/03/2016 7:30 am	Unit 134	3.0
3015291	3028777	02/29/2016 10:35 am	03/03/2016 7:30 am	Unit 134	4.7

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

Distributed by: KCI Technologies, Inc.

Date Received: 03/07/2016 Date Logged: 03/07/2016 Date Analyzed: 03/08/2016 Date Reported: 03/08/2016

Report Reviewed By: _____ Report Approved By: _____

Carolyn D. Koke, President, AccuStar Labs

Disclaimer:

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

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

AccuStar
Professional Radon Laboratory Services Since 1984

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

Radon Device Type Open Face Canister

Send Written Report To:

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

Site Tested:

Site Name Kensington Parkwood ES
Address 4710 Saul Rd,
Address
City / Town Kensington
State/Province Postal Code MD 20895
Test Country Montgomery County
Project Number 12146341

Contact Information:

Contact Tehsin Aurangabadwala
Telephone 410-891-1726

Technician Atm I.
Cert. Number
Signature

Lab Use Only	Device Number	Building Number	Unit Number	Floor	Name of Room Temp	Start Date mm/dd/yyyy	Start Time hh:mm am / pm	Stop Date mm/dd/yyyy	Stop Time hh:mm am / pm	Lab Use Only
	3028778		134		70°	02/29/2016	10,35 AM	03/03/2016	7,30 AM	
	3028779		134		70°	02/29/2016	10,35 AM	03/03/2016	↓	
	3028777		134		70°	02/29/2016	10,35AM	03/03/2016	↓	
						02/29/2016		03/03/2016		
						02/29/2016		03/03/2016		
						02/29/2016		03/03/2016		
						02/29/2016		03/03/2016		
						02/29/2016		03/03/2016		
						02/29/2016		03/03/2016		
						02/29/2016		03/03/2016		

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

AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NRPP 10511AL
NRSB ARL0007

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

Laboratory Report for:

KCI Technologies
936 Ridgebrook Rd
Sparks MD 21152

Property Tested: Project # 12146341

MCPS Radon Phase 10 Office Blank

Log Number	Device Number	Test Exposure Duration:		Area Tested	Result (pCi/L)
3015360	3028828	02/29/2016 9:30 am	03/03/2016 9:30 am	Office Blank	<0.4

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

Distributed by: KCI Technologies, Inc.

Date Received: 03/07/2016 Date Logged: 03/07/2016 Date Analyzed: 03/08/2016 Date Reported: 03/08/2016

Report Reviewed By: Jeffrey Karten Report Approved By: Carolyn D. Koke

Carolyn D. Koke, President, AccuStar Labs

Disclaimer:

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

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

AccuStar
Professional Radon Laboratory Services Since 1984

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

Radon Device Type Open Face Canister

Send Written Report To:

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

Site Tested:

Site Name	KCI OFFICE
Address	936 Ridgebrook Road
Address	
City / Town	Sparks
State/Province Postal Code	MD 21152
Test Country	Montgomery County
Project Number	12146341

Contact Information:

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

Lab Use Only	Device Number	Building Number	Unit Number	Floor	Name of Room	Start Date mm/dd/yyyy	Start Time hh:mm am / pm	Stop Date mm/dd/yyyy	Stop Time hh:mm am / pm	Lab Use Only
	3028828		0	1	OFFICE (TEMP - 70F)	02/29/2016	9:30 am	03/03/2016	9:30 am	

Rev E1512

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

AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NRPP 10511AL
NRSB ARL0007

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

Laboratory Report for:

KCI Technologies
936 Ridgebrook Rd
Sparks MD 21152

Property Tested:

MCPS
Transit Blanks

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

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

Distributed by: KCI Technologies, Inc.

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

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

Carolyn D. Koke, President, AccuStar Labs

Disclaimer:

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

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.

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

RECEIVED JAN 27 2016

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

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

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

Test Site Info

Name of Building/Project or Owner Transit

Site Address: Transit

City: _____ State _____ Zip _____ County _____

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

Multi-Page Report Y-N

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

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

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

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

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

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

Canisters placed by _____ #_____

Canisters retrieved by _____ #_____

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

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

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

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

Send Results To:

Company Name: KCI Tech Attention: James Moulsdale

Address: 936 Ridgebrook

City: Sparks State: MD Zip 21152

Phone: 410-584-3826 Fax:

EMAIL Results to: James.Moulsdale@kci.com

Make sure information is complete and correct.

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies Inc. Job Number 173618

NOMINAL Conditions: Radon Conc 25.2 pCi/L Rel. Hum 49.1 % Temp. 70.0 F

Date Start: 1/23/16 Date Stop: 1/25/16	Date Start: _____ Date Stop: _____
Time Start: 0821 Time Stop: 0821	Time Start: _____ Time Stop: _____
Device No.'s: (6) Char. Cans -	Device No.'s: _____
3028985 thru 3028990	_____
_____	_____
E2 LOT	_____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
_____	_____
_____	_____
_____	_____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
_____	_____
_____	_____
_____	_____

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

AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NRPP 10511AL
NRSB ARL0007

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

Laboratory Report for:

KCI Technologies
936 Ridgebrook Rd
Sparks MD 21152

Property Tested:

MCPS
Radon Spike Sample Laboratory Results

Log Number	Device Number	Test Exposure Duration:		Area Tested	Result (pCi/L)
3010551	3028985	01/23/2016 8:20 am	01/25/2016 8:20 am	1 First Floor	24.2
3010552	3028986	01/23/2016 8:20 am	01/25/2016 8:20 am	2 First Floor	25.7
3010553	3028987	01/23/2016 8:20 am	01/25/2016 8:20 am	3 First Floor	23.8
3010554	3028988	01/23/2016 8:20 am	01/25/2016 8:20 am	4 First Floor	23.3
3010555	3028989	01/23/2016 8:20 am	01/25/2016 8:20 am	5 First Floor	24.0
3010556	3028990	01/23/2016 8:20 am	01/25/2016 8:20 am	6 First Floor	24.4

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.

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

Distributed by: KCI Technologies, Inc.

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

Report Reviewed By: _____ Report Approved By: _____

Carolyn D. Koke, President, AccuStar Labs

Disclaimer:

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

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.

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

RECEIVED JAN 27 2016

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

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

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

Test Site Info

Name of Building/Project or Owner: MCPS
Site Address: 850 Hungerford dr
City: Rockville MD State: MD Zip: 20850 County: Montgomery
Projects Contact Name: James Moulsdale Phone: 410-891-1842 Email: James.moulsdale@kci.com

Multi-Page Report Y-N

	Detector Serial#	ROOM NAME & NUMBER - LOCATION OF DETECTOR IN ROOM (indicate duplicates and blanks)		Floor	Start Date	Start Time Include AM/PM	Stop Date	Stop Time Include AM/PM	LAB USE ONLY Wgt. Gain	LAB USE ONLY pCi/L
2	3028985	1	3010551	1	1/23/16	08:20	1/25/16	08:20		N/A
3	3028986	2	3010552	1	↓	↓	↓	↓		↓
1	3028987	3	3010553	1						
3	3028988	4	3010554	1						
1	3028989	5	3010555	1						
2	3028990	6	3010556	1						

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

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

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

Both Placed by and Retrieved by signatures are required

Certified Testers Provide #

Canisters placed by James Moulsdale #

Canisters retrieved by James Moulsdale #

Owner waives confidentiality by signing here _____ Date _____

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

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

Normal Temp. (Yes) - No

Normal Humidity (Yes) - No

Windy Y-(N) Rainy Y-(N)

Send Results To:

Company Name: KCI Technologies Inc
Attention: James Moulsdale
Address: 936 Ridgebrook Rd
City: Sparks State: MD Zip: 21152
Phone: 410-891-1842 Fax:
EMAIL Results to: James.moulsdale@kci.com

1/27/2016

KCI Technologies, Inc.

3010551 **3028985** ACPC275B EXP12/31/2018

Make sure information is complete and correct.
If a recalculation is requested there is a $10.00 recalc fee PER Canister.

Mailing: PO Box 990 Jonest
Shipping: 929 Mt Zion Road, Le
800-523-4964 fax 717-2

NEHA 10511AL NRSB ARL 0007

Revision 5
4/2015

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

MCPS RADON TESTING

Executive Summary: Kensington Parkwood Elementary School

Date of Test Report:	1/29/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	61
# Rooms ≥ 4.0 pCi/L:	0
Low Value:	< 0.3
High Value:	1.7

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

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

January 29, 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 # 12146341.22

Location: Kensington Parkwood Elementary School
4710 Saul Road
Kensington, MD 20895

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 Kensington Parkwood Elementary School, located at 4710 Saul Road in Kensington, Maryland 20895 (subject site).

Scope of Services:

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

KCI visited the site on January 4, 2016 and deployed sixty-nine (69) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on January 7, 2016 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936 Butler

Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

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

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

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

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

Results:

The results of the radon test analysis indicated the following:

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

Notes:
D- Duplicate sample

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

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

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

Sincerely,

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		
Kensington E.S.		
Test Period: 01/04/16-01/07/16		
Kit Number	**Room / Area**	**Result**
7720645	1	0.7
7720626	5	< 0.3
7720616	6	0.8
7720619	6	0.8
7720648	10	1.1
7720623	11	< 0.3
7720620	11	0.5
7720668	12	0.6
7720633	13	0.8
7720631	13	0.7
7720677	14	1.1
7720672	22	1.5
7720640	101	1.7
7720652	101	1.5
7720627	102	1.1
7720611	104	1.3
7720657	120	1.3
7720656	127	0.8
7720680	129	1.7
7720688	130	0.9
7720686	133	0.8
7720682	135	1.1
7720689	137	0.9
7720661	138	1.2
7720687	139	1.5
7720653	140	1.2
7720608	141	0.6
7720634	144	1.1
7720676	145	1.5
7720684	149	1.5
7720693	151	1.5
7720695	154	1
7720700	155	1.1
7720666	156	0.8
7720674	157	0.8
7720670	161	1
7720681	164	0.9
7720662	165	1.2
7720697	167	0.9
7720664	168	0.9
7720665	170	1.1
7720690	171	0.8
7720663	172	1
7720658	173	0.7
7720673	173	< 0.3
7720671	175	1

Table Note:
* Missing or Compromised Sample

Radon Testing Results		
Kensington E.S.		
Test Period: 01/04/16-01/07/16		
Kit Number	**Room / Area**	**Result**
7720669	176	0.7
7720667	179	0.8
7720660	100A	0.9
7720659	100C	0.9
7720630	101A	0.8
7720613	* 134 (Missing)	0
7720675	MAIN OFFICE	1.1
7720644	OVER LOOK	1.1
7720685	PORTABLE 1	< 0.3
7720694	PORTABLE 2	< 0.3
7720698	PORTABLE 3	< 0.3
7720699	PORTABLE 4	< 0.3
7720691	PORTABLE 5	< 0.3
7720696	PORTABLE 6	< 0.3
7720692	PORTABLE 7	0.5

Table Note:
* Missing or Compromised Sample

Radon Testing Results		
Kensington E.S.		
Test Period: 01/04/16-01/07/16		
Kit Number	**QC Type**	**Result**
7720683	D (PORTABLE 1)	< 0.3
7720624	D (138)	1.2
7720678	D (167)	0.8
7720679	D (175)	0.6
7720614	D (OVER LOOK)	0.6
7720615	FB (OVERLOOK)	< 0.3
7720655	FB (PORTABLE 1)	< 0.3
7720649	OB (0)	< 0.3

Table Note:
* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

January 25, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

KENSINGTON E.S.
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7720649	0	2016-01-04 @ 3:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7720645	1	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.7 ± 0.3	2016-01-12
7720660	100A	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.9 ± 0.3	2016-01-11
7720659	100C	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.9 ± 0.3	2016-01-11
7720640	101	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	1.7 ± 0.4	2016-01-11
7720652	101	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	1.5 ± 0.4	2016-01-11
7720627	102	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	1.1 ± 0.4	2016-01-12
7720611	104	2016-01-04 @ 12:00 pm	2016-01-07 @ 12:00 pm	1.3 ± 0.4	2016-01-12
7720620	11	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.5 ± 0.3	2016-01-12
7720623	11	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7720668	12	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-11
7720657	120	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	1.3 ± 0.4	2016-01-12
7720656	127	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.8 ± 0.3	2016-01-11
7720680	129	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	1.7 ± 0.4	2016-01-11
7720633	13	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.8 ± 0.3	2016-01-11
7720631	13	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.7 ± 0.3	2016-01-12
7720688	130	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.9 ± 0.3	2016-01-11
7720686	133	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.8 ± 0.3	2016-01-12
7720613	134	@	@		
7720682	135	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	1.1 ± 0.3	2016-01-11
7720689	137	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.9 ± 0.3	2016-01-11
7720624	138	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.2 ± 0.4	2016-01-11
7720661	138	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.2 ± 0.4	2016-01-12
7720687	139	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	1.5 ± 0.4	2016-01-11
7720677	14	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	1.1 ± 0.4	2016-01-11
7720653	140	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.2 ± 0.4	2016-01-12
7720608	141	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-11
7720634	144	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.1 ± 0.4	2016-01-11
7720676	145	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.5 ± 0.4	2016-01-12
7720684	149	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.5 ± 0.4	2016-01-12
7720693	151	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.5 ± 0.4	2016-01-12
7720700	155	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.1 ± 0.4	2016-01-12
7720666	156	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.8 ± 0.4	2016-01-12
7720674	157	2016-01-04 @ 11:00 pm	2016-01-07 @ 12:00 pm	0.8 ± 0.3	2016-01-11
7720670	161	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.0 ± 0.3	2016-01-11
7720681	164	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.9 ± 0.3	2016-01-11
7720662	165	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.2 ± 0.3	2016-01-11

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

January 25, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

KENSINGTON E.S.
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7720697	167	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.9 ± 0.3	2016-01-11
7720678	167	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.8 ± 0.3	2016-01-11
7720664	168	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.9 ± 0.3	2016-01-11
7720665	170	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.1 ± 0.3	2016-01-11
7720690	171	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.8 ± 0.3	2016-01-11
7720663	172	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.0 ± 0.3	2016-01-11
7720673	173	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7720658	173	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.7 ± 0.4	2016-01-12
7720679	175	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-11
7720671	175	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.0 ± 0.4	2016-01-12
7720669	176	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.7 ± 0.3	2016-01-11
7720667	179	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.8 ± 0.3	2016-01-11
7720672	22	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	1.5 ± 0.4	2016-01-11
7720626	5	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7720619	6	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.8 ± 0.3	2016-01-11
7720616	6	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.8 ± 0.3	2016-01-12
7720675	MAIN OFFICE	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	1.1 ± 0.4	2016-01-11
7720644	OVER LOOK	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	1.1 ± 0.4	2016-01-11
7720614	OVER LOOK	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-12

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

January 25, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

KENSINGTON E.S.
PORTABLE

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7720691	PORTABLE 5	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7720683	PORTABLE 1	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7720685	PORTABLE 1	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7720655	PORTABLE 1	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7720694	PORTABLE 2	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7720698	PORTABLE 3	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7720699	PORTABLE 4	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7720696	PORTABLE 6	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7720692	PORTABLE 7	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.5 ± 0.3	2016-01-11

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

January 25, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

KENSINGTON PARKWOOD MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7720648	10	2016-01-04 @ 1:00 pm	2016-01-07 @ 12:00 pm	1.1 ± 0.4	2016-01-11
7720630	101A	2016-01-04 @ 1:00 pm	2016-01-07 @ 1:00 pm	0.8 ± 0.3	2016-01-11
7720695	154	2016-01-04 @ 1:00 pm	2016-01-07 @ 1:00 pm	1.0 ± 0.4	2016-01-12
7720615	OVERLOOK	2016-01-04 @ 1:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11

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

January 15, 2016

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

MCPS PHASE 3 & 4
TRANSIT BLANKS

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

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

December 23, 2015

** LABORATORY ANALYSIS REPORT **

Spike Sample Laboratory Results

Radon test result report for:

MCPS

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

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies Inc. Job Number 173224

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

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

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

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

Chain of Custody

Project Name: MCPS Radon Phase IV

Name of Schools:

1. Albert Einstein HS
2. Bel Pre ES
3. Benjamin Banneker MS
4. Bethesda Chevy Chase HS
5. Beverly Farms ES
6. Cabin John MS
7. Chevy Chase ES
8. Farmland ES
9. Forest Oak MS
10. Gaithersburg HS
11. Garrett Park ES
12. Herbert Hoover MS
13. Kohn F. Kennedy HS
14. Julius West MS
15. Kensington Parkwood ES
16. Lakewood ES
17. Mill Creek ES
18. Montgomery Blair HS
19. Montgomery Village MS
20. Northwood HS
21. Paint Branch ES
22. Rock Creek Forest ES
23. Stephen Knolls School
24. Strathmore ES
25. Summit Hall ES
26. Travilah ES
27. Twinbrook ES
28. Waters Landing ES
29. Watkins Mill HAS
30. Weller Road ES
31. White Oak MS
32. Winston Churchill HS

	Date	Initials
Radon Test Kits Deployed	1/4/16	JM
Radon Test Kits Sampled	1/7/16	JM
Radon Test Kits Shipped to Lab*	1/8/16	JM
Radon Test Kits Received by Lab*	1/11/16	JM

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

Note: tests kits deployed at Montgomery Blair HS 1/4/16 and 1/5/16, test kits sampled at Montgomery Blair HS 1/7/16 and 1/8/16