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

MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Winston Churchill
	High School
Date of Test Report	2/21/2023
Round of Testing	Initial
	Follow-up
	Post Remediation
	2 Year Testing
	5 Year Testing
	HVAC Upgrade
	Window Replacement
	New Addition
	New Facility
# Rooms Tested	132
# Rooms Re-tested	6
# Rooms \geq 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	3.1 pCi/L

Project Status:

- 1. Initial testing completed;
- 2. Missing or compromised samples need re-test.
 - 3. Retesting Completed 1/31/23 2/3/23.
 - 4. 5-Year Testing Completed.

KCI Technologies, Inc. WWW.kci.com

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

February 21, 2023

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

Re: Radon Testing Services

KCI Job # 122210551

Location: Winston Churchill High School

11300 Gainsborough Road Potomac, MD 20854

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 Beall Elementary School, located at 451 Beall Avenue in Rockville, Maryland 20850 (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 initially on December 5, 2022 and deployed sixty-six (66) activated charcoal (AC) radon test kits. KCI deployed radon test kits in all frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

KCI returned to the site on December 8, 2022 to retrieve initial testing 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.

KCI re-visited the site on January 31, 2023 to deploy eight (8) activated charcoal (AC) radon test kits for testing of missed rooms or compromised test kits during initial testing.

www.kci.com

KCI returned to the site on February 3, 2023 to retrieve the radon re-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.

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.

Evaluation of Testing Conditions:

These tests represent:

• Follow up to initial testing.

These tests were conducted to:

• Evaluated radon concentrations at the facility.

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

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the initial test period, weather records indicate low temperatures were in the 20s°F and high temperatures ranged to the mid-50s°F. Maximum sustained winds ranged from 0-12 miles per hour. Average humidity was around 75% with .04 inches of precipitation (rain) was recorded during testing period.

During the re-testing period, weather records indicate low temperatures were in the mid-20s°F and high temperatures ranged to the low 40s°F. Maximum sustained winds ranged from 0-21 miles per hour. Average humidity was around 70% with .18 inches of precipitation (rain) was recorded during testing period.

Employee-Owned Since 1988

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	

The results of the radon re-testing 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 P. McCleaf

Radon Measurement Provider

#111004 RT

KCI Technologies, Inc.

Tyler McCleaf

Attachments: A- Floor Plan with Test Locations

B- Table 1-3, Radon Test Summary Spreadsheets

C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Check, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

OC- Quality Control

Winston Churchill HS	Table 1- Radon Testing Results	
	Winston Churchill HS	

Test Period: 12/12/2022 - 12/15/2022

Kit Number	Room / Area	Result
11288104	102	0.6
11288308	105	1.8
11288317	105	1.8
11288105	106	< 0.3
11288132	106	< 0.3
11288314	107	1.3
11288319	107	1.5
11288320	110	< 0.3
11288380	111	1.0
11288386	111	1.1
11288316	112	< 0.3
11288315	114	< 0.3
11288388	115	1.3
11288322	116	< 0.3
11288311	117	1.8
11288329	118	< 0.3
11288337	119	0.9
11288302	120	0.9
11288305	120	< 0.3
11288310	121	1.3
11288330	122	< 0.3
11288301	123	2.1
11288323	124	0.7
11288338	125	0.8
11288335	126	0.8
11288121	129	1.1
11288331	131	< 0.3
11288398	131	1.3
11288108	132	0.9
11288124	132	1.0
11288304	133	0.5
11288397	133	< 0.3
11288138	134	0.7
11288384	135	0.7
11288131	136	0.8
11288123	138	< 0.3
11288358	140	0.7
11288357	142	0.5
11288343	145	1.2
11288363	146	1.2
11288344	147	0.9
11288362	148	2.5

Table 1- Radon Testing Results	
Winston Churchill HS	

Test Period: 12/12/2022 - 12/15/2022

Kit Number	Room / Area	Result
11288364	149	2.3
11288356	150	< 0.3
11288345	151	1.1
11288361	151	1.2
11288392	152	< 0.3
11288389	153	0.8
11288325	154	< 0.3
11288383	159	0.7
11288390	161	< 0.3
11288321	166	< 0.3
11288332	168	< 0.3
11288354	168	< 0.3
11288351	170	0.8
11288373	170	< 0.3
11288352	172	1.4
11288374	174	1.9
11288111	200	< 0.3
11288147	200	< 0.3
11288114	202	< 0.3
11288129	204	< 0.3
11288118	226	0.6
11288153	228	0.8
11288107	232	< 0.3
11288144	239	0.7
11288120	1270	0.6
11288140	100 Health	1.0
11288101	100A	1.0
11288150	100B	1.0
11288309	107A	< 0.3
11288313	107A	1.4
11288312	107B	1.3
11288375	107C	3.1
11288393	107D	1.4
11288385	107E	1.3
11288372	107F	1.4
11288387	107G	1.5
11288379	107H	1.1
11288326	1071	1.3
11288348	107J	1.3
11288394	115A	0.9
11288396	115B	0.7
11288307	115C	1.2

Table 1- Radon Testing Results	
Winston Churchill HS	
Test Period: 12/12/2022 - 12/15/2022	

Kit Number	Room / Area	Result
11288318	115D	2.0
11288324	124A	1.9
11288347	124B	1.2
11288158	127L	0.8
11288159	127M	0.6
11288165	127M	0.8
11288143	127N	0.9
11288339	128A	2.3
11288355	128A	2.4
11288340	128A Office	2.0
11288328	128B	1.4
11288327	128B Office	2.3
11288336	128C	2.3
11288152	129A	1.4
11288113	130A	1.1
11288156	130B	1.3
11288125	130C	0.8
11288155	130C	< 0.3
11288142	132A	0.7
11288163	132A Copy	N/A
11288110	138A	< 0.3
11288136	138A	0.6
11288103	138B	< 0.3
11288148	138B	< 0.3
11288102	138C	0.7
11288382	142A	0.9
11288342	142B	< 0.3
11288365	142B	< 0.3
11288349	142C	N/A
11288350	142C	N/A
11288134	144A	1.3
11288141	144B	1.5
11288149	144C	1.0
11288112	144D	0.9
11288133	144E	1.1
11288106	144F	1.2
11288139	144G	0.9
11288128	144J	1.2
11288137	144J	1.0
11288146	144K	1.4
11288353	156A	0.6
11288360	157 Store	0.7

Table 1- Radon Testing Results	
Winston Churchill HS	
Test Period: 12/12/2022 - 12/15/2022	

Kit Number	Room / Area	Result
11288378	166A	N/A
11288377	166B	0.6
11288371	166C	< 0.3
11288369	166D	< 0.3
11288370	166E	< 0.3
11288154	203A	< 0.3
11288122	203B	< 0.3
11288135	203C	N/A
11288127	243A	< 0.3
11288306	Athletic Trainer	N/A
11288341	Attendance	0.7
11288395	Auditorium	1.0
11288400	Auditorium	1.0
11288303	Aux Gym	1.2
11288346	Aux Gym	1.1
11288381	BS Office	0.6
11288376	Cafe	0.6
11288399	Cafe	0.8
11288366	Gym	1.3
11288367	Gym	1.3
11288368	Gym Office Boys	0.7
11288359	Gym Office Girls	< 0.3
11288334	Kitchen Office	< 0.3
11288109	Mail	1.2
11288126	Main Office	1.1
11288157	Stage	N/A
11288166	Stage	1.0
11288391	Weight Room	0.8
11288333	Wrestling	0.8

	Table 2- Ra	ndon Testing Results				
	Winston Churchill HS					
	Test Period: 12/12/22 - 12/15/22					
Kit Number	QC Type	Room / Area	Result			
11288317	D	105	1.8			
11288105	FB	106	< 0.3			
11288314	D	107	1.3			
11288380	D	111	1.0			
11288305	D	120	< 0.3			
11288331	FB	131	< 0.3			
11288124	D	132	1.0			
11288304	D	133	0.5			
11288361	D	151	1.2			
11288354	D	168	< 0.3			
11288373	FB	170	< 0.3			
11288111	D	200	< 0.3			
11288309	FB	107A	< 0.3			
11288159	D	127M	0.6			
11288339	D	128A	2.3			
11288155	FB	130C	< 0.3			
11288136	D	138A	0.6			
11288103	FB	138B	< 0.3			
11288342	D	142B	< 0.3			
11288350	FB	142C	N/A			
11288141	D	144B	1.5			
11288137	D	144J	1.0			
11288367	D	Gym	1.3			
11286981	ОВ	OFFICE BLANK	< 0.3			

< 0.3

TRAVEL BLANK

11286982

ТВ

Summary of Missed Locations						
Winston Churchill HS						
Test Period: 12/12/22 - 12/15/22						
Kit Number	Kit Number Room/Area					
	N/A					

Summary of Missing, Compromised and >/= 4 piC/L Tests						
Winston Churchill HS						
	Test Period: 12/12/22 - 12/15/22					
Kit Number	Kit Number Room/Area					
11288163	132A	Missing				
11288135	203C	Missing				
11288306	Athletic Training	Missing				
11288349	142C	Missing				
11288350	142C	Missing				
11288354	168	Missing				
11288378	166A	Missing				

Table Note:

^{*} Missing or Compromised Sample

Table 1- Radon Testing Results					
	Winston Churchill HS RT				
Tes	t Period: 01/31/2023 - 02/03/2023	3			
Kit Number	Room / Area	Result			
11634687	< 0.3				
11634693	< 0.3				
11634698 168 < 0.3					
11634689 132A < 0.3					
11634692 139A < 0.3					
11634691 142C 1.2					
11634696	11634696 166A < 0.3				
11634697	203C	< 0.3			

	Table 2- Ra	adon Testing Results				
	Winsto	n Churchill HS RT				
	Test Period:	01/31/23 - 02/03/23				
Kit Number	Number QC Type Room / Area Result					
11634687	D	168	< 0.3			
11634698 FB 168 < 0.3						
11634990	ОВ	OFFICE BLANK	< 0.3			
11634991	TB	TRAVEL BLANK	< 0.3			

Summary of Missed Locations							
Winston Churchill HS RT							
Test Period: 01/31/23 - 02/03/23							
Kit Number	t Number Room/Area						
	N/A						

Summary of Missing, Compromised and >/= 4 piC/L Tests							
	Winston Churchill HS RT						
Test Period: 01/31/23 - 02/03/23							
Kit Number	Room/Area	Result					
	N/A						

Table Note:

^{*} Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Kit#	Room Id	Started	Ended	pCi/L	Analyzed
1288140	100 HEALTH	2022-12-12 @ 12:00 pm	2022-12-15 @ 12:00 pm	1.0 ± 0.4	2022-12-19
11288101	100A	2022-12-12 @ 12:00 pm	2022-12-15 @ 12:00 pm	1.0 ± 0.4	2022-12-19
11288150	100B	2022-12-12 @ 12:00 pm	2022-12-15 @ 12:00 pm	1.0 ± 0.4	2022-12-19
11288104	102	2022-12-12 @ 12:00 pm	2022-12-15 @ 1:00 pm	0.6 ± 0.3	2022-12-19
11288317	105	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	1.8 ± 0.4	2022-12-19
11288308	105	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	1.8 ± 0.4	2022-12-19
11288132	106	2022-12-12 @ 12:00 pm	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
11288105	106	2022-12-12 @ 12:00 pm	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
1288319	107	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	1.5 ± 0.4	2022-12-19
1288314	107	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	1.3 ± 0.4	2022-12-19
1288313	107A	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	1.4 ± 0.4	2022-12-19
11288309	107A	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	< 0.3	2022-12-19
11288312	107B	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	1.3 ± 0.4	2022-12-19
11288375	107C	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	3.1 ± 0.4	2022-12-19
11288393	107D	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	1.4 ± 0.4	2022-12-19
11288385	107E	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	1.3 ± 0.3	2022-12-19
11288372	107F	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	1.4 ± 0.4	2022-12-19
11288387	107G	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	1.5 ± 0.4	2022-12-19
11288379	107H	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	1.1 ± 0.3	2022-12-19
11288326	107I	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	1.3 ± 0.4	2022-12-19
11288348	107J	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	1.3 ± 0.4	2022-12-19
11288320	110	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	< 0.3	2022-12-19
11288386	111	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	1.1 ± 0.4	2022-12-19
11288380	111	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	1.0 ± 0.4	2022-12-19
11288316	112	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	< 0.3	2022-12-19
11288315	114	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	< 0.3	2022-12-19
11288388	115	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	1.3 ± 0.4	2022-12-19
11288394	115A	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	0.9 ± 0.4	2022-12-19
11288396	115B	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	0.7 ± 0.3	2022-12-19
11288307	115C	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	1.2 ± 0.4	2022-12-19
11288318	115D	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	2.0 ± 0.4	2022-12-19
11288322	116	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
11288311	117	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	1.8 ± 0.4	2022-12-19
11288329	118	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
11288337	119	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	0.9 ± 0.4	2022-12-19
11288305	120	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
11288302	120	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	0.9 ± 0.4	2022-12-19

T7*4 II	D 11	G4 4 1	D 1.1	C! A	A 1 1
Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11288310	121	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	1.3 ± 0.4	2022-12-19
11288330	122	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
11288301	123	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	2.1 ± 0.4	2022-12-19
11288323	124	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	0.7 ± 0.3	2022-12-19
11288324	124A	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	1.9 ± 0.4	2022-12-19
11288347	124B	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	1.2 ± 0.4	2022-12-19
11288338	125	2022-12-12 @ 11:00 am	2022-12-15 @ 1:00 pm	0.8 ± 0.3	2022-12-19
11288335	126	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	0.8 ± 0.3	2022-12-19
11288120	1270	2022-12-12 @ 1:00 pm	2022-12-15 @ 1:00 pm	0.6 ± 0.3	2022-12-19
11288158	127L	2022-12-12 @ 1:00 pm	2022-12-15 @ 1:00 pm	0.8 ± 0.4	2022-12-19
11288165	127M	2022-12-12 @ 1:00 pm	2022-12-15 @ 1:00 pm	0.8 ± 0.4	2022-12-19
11288159	127M	2022-12-12 @ 1:00 pm	2022-12-15 @ 1:00 pm	0.6 ± 0.3	2022-12-19
11288143	127N	2022-12-12 @ 1:00 pm	2022-12-15 @ 1:00 pm	0.9 ± 0.3	2022-12-19
11288355	128A	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	2.4 ± 0.4	2022-12-19
11288339	128A	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	2.3 ± 0.4	2022-12-19
11288340	128A OFFICE	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	2.0 ± 0.4	2022-12-19
11288328	128B	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	1.4 ± 0.4	2022-12-19
11288327	128B OFFICE	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	2.3 ± 0.4	2022-12-19
11288336	128C	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	2.3 ± 0.4	2022-12-19
11288121	129	2022-12-12 @ 1:00 pm	2022-12-15 @ 12:00 pm	1.1 ± 0.4	2022-12-19
11288152	129A	2022-12-12 @ 1:00 pm	2022-12-15 @ 12:00 pm	1.4 ± 0.4	2022-12-19
11288113	130A	2022-12-12 @ 12:00 pm	2022-12-15 @ 12:00 pm	1.1 ± 0.4	2022-12-19
11288156	130B	2022-12-12 @ 12:00 pm	2022-12-15 @ 12:00 pm	1.3 ± 0.4	2022-12-19
11288155	130C	2022-12-12 @ 12:00 pm	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19
11288125	130C	2022-12-12 @ 12:00 pm	2022-12-15 @ 12:00 pm	0.8 ± 0.4	2022-12-19
11288398	131	2022-12-12 @ 11:00 am	2022-12-15 @ 12:00 pm	1.3 ± 0.4	2022-12-19
11288331	131	2022-12-12 @ 11:00 am	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19
11288108	132	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	0.9 ± 0.4	2022-12-19
11288124	132	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	1.0 ± 0.4	2022-12-19
11288142	132A	2022-12-12 @ 1:00 pm	2022-12-15 @ 11:00 am	0.7 ± 0.4	2022-12-19
11288397	133	2022-12-12 @ 11:00 am	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19
11288304	133	2022-12-12 @ 11:00 am	2022-12-15 @ 12:00 pm	0.5 ± 0.3	2022-12-19
11288138	134	2022-12-12 @ 1:00 pm	2022-12-15 @ 11:00 am	0.7 ± 0.4	2022-12-19
11288384	135	2022-12-12 @ 11:00 am	2022-12-15 @ 12:00 pm	0.7 ± 0.4	2022-12-19
11288131	136	2022-12-12 @ 1:00 pm	2022-12-15 @ 11:00 am	0.8 ± 0.4	2022-12-19
11288123	138	2022-12-12 @ 1:00 pm	2022-12-15 @ 11:00 am	< 0.3	2022-12-19
11288110	138A	2022-12-12 @ 1:00 pm	2022-12-15 @ 11:00 am	< 0.3	2022-12-19
		•			

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11288136	138A	2022-12-12 @ 1:00 pm	2022-12-15 @ 11:00 am	0.6 ± 0.4	2022-12-19
11288148	138B	2022-12-12 @ 1:00 pm	2022-12-15 @ 11:00 am	< 0.3	2022-12-19
11288103	138B	2022-12-12 @ 1:00 pm	2022-12-15 @ 11:00 am	< 0.3	2022-12-19
11288102	138C	2022-12-12 @ 1:00 pm	2022-12-15 @ 11:00 am	0.7 ± 0.4	2022-12-19
11288358	140	2022-12-12 @ 9:00 am	2022-12-15 @ 11:00 am	0.7 ± 0.4	2022-12-19
11288357	142	2022-12-12 @ 9:00 am	2022-12-15 @ 11:00 am	0.5 ± 0.4	2022-12-19
11288382	142A	2022-12-12 @ 9:00 am	2022-12-15 @ 11:00 am	0.9 ± 0.4	2022-12-19
11288342	142B	2022-12-12 @ 9:00 am	2022-12-15 @ 11:00 am	< 0.3	2022-12-19
11288365	142B	2022-12-12 @ 9:00 am	2022-12-15 @ 11:00 am	< 0.3	2022-12-19
11288134	144A	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	1.3 ± 0.4	2022-12-19
11288141	144B	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	1.5 ± 0.4	2022-12-19
11288149	144C	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	1.0 ± 0.4	2022-12-19
11288112	144D	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	0.9 ± 0.4	2022-12-19
11288133	144E	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	1.1 ± 0.4	2022-12-19
11288106	144F	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	1.2 ± 0.4	2022-12-19
11288139	144G	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	0.9 ± 0.3	2022-12-19
11288137	144J	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	1.0 ± 0.4	2022-12-19
11288128	144J	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	1.2 ± 0.4	2022-12-19
11288146	144K	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	1.4 ± 0.4	2022-12-19
11288343	145	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	1.2 ± 0.4	2022-12-19
11288363	146	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	1.2 ± 0.4	2022-12-19
11288344	147	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	0.9 ± 0.4	2022-12-19
11288362	148	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	2.5 ± 0.4	2022-12-19
11288364	149	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	2.3 ± 0.4	2022-12-19
11288356	150	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19
11288361	151	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	1.2 ± 0.4	2022-12-19
11288345	151	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	1.1 ± 0.4	2022-12-19
11288392	152	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19
11288389	153	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	0.8 ± 0.4	2022-12-19
11288325	154	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19
11288353	156A	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	0.6 ± 0.3	2022-12-19
11288360	157 STORE	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	0.7 ± 0.4	2022-12-19
11288383	159	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	0.7 ± 0.3	2022-12-19
11288390	161	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19
11288321	166	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19
11288377	166B	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	0.6 ± 0.3	2022-12-19
11288371	166C	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11288369	166D	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19
11288370	166E	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19
11288332	168	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19
11288354	168	2022-12-12 @ 10:00 am	2022-12-15 @ 2:00 pm	< 0.3	2022-12-19
11288351	170	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	0.8 ± 0.3	2022-12-19
11288352	172	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	1.4 ± 0.4	2022-12-19
11288374	174	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	1.9 ± 0.4	2022-12-19
11288147	200	2022-12-12 @ 2:00 pm	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
11288111	200	2022-12-12 @ 2:00 pm	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
11288114	202	2022-12-12 @ 2:00 pm	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
11288154	203A	2022-12-12 @ 2:00 pm	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
11288122	203B	2022-12-12 @ 2:00 pm	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
11288129	204	2022-12-12 @ 2:00 pm	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
11288118	226	2022-12-12 @ 2:00 pm	2022-12-15 @ 1:00 pm	0.6 ± 0.3	2022-12-19
11288153	228	2022-12-12 @ 2:00 pm	2022-12-15 @ 1:00 pm	0.8 ± 0.4	2022-12-19
11288107	232	2022-12-12 @ 2:00 pm	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
11288144	239	2022-12-12 @ 2:00 pm	2022-12-15 @ 1:00 pm	0.7 ± 0.3	2022-12-19
11288127	243A	2022-12-12 @ 2:00 pm	2022-12-15 @ 1:00 pm	< 0.3	2022-12-19
11288341	ATTENDANCE	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	0.7 ± 0.3	2022-12-19
11288400	AUDITORIUM	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	1.0 ± 0.4	2022-12-19
11288395	AUDITORIUM	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	1.0 ± 0.4	2022-12-19
11288346	AUX GYM	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	1.1 ± 0.3	2022-12-19
11288303	AUX GYM	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	1.2 ± 0.3	2022-12-19
11288381	BS OFFICE	2022-12-12 @ 8:00 am	2022-12-15 @ 12:00 pm	0.6 ± 0.3	2022-12-19
11288376	CAFE	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	0.6 ± 0.4	2022-12-19
11288399	CAFE	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	0.8 ± 0.3	2022-12-19
11288366	GYM	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	1.3 ± 0.4	2022-12-19
11288367	GYM	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	1.3 ± 0.4	2022-12-19
11288368	GYM OFFICE BOYS	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	0.7 ± 0.3	2022-12-19
11288359	GYM OFFICE GIRLS	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19
11288334	KITCHEN OFFICE	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	< 0.3	2022-12-19
11288109	MAIL	2022-12-12 @ 12:00 pm	_	1.2 ± 0.4	2022-12-19
11288126	MAIN OFFICE	2022-12-12 @ 12:00 pm	2022-12-15 @ 11:00 am	1.1 ± 0.4	2022-12-19
11288166	STAGE	2022-12-12 @ 1:00 pm	2022-12-15 @ 1:00 pm	1.0 ± 0.4	2022-12-19
11288391	WEIGHT ROOM	2022-12-12 @ 9:00 am	2022-12-15 @ 12:00 pm	0.8 ± 0.4	2022-12-19
11288333	WRESTLING	2022-12-12 @ 10:00 am	2022-12-15 @ 12:00 pm	0.8 ± 0.4	2022-12-19

December 27, 2022

** LABORATORY ANALYSIS REPORT **

Radon test result report for:
WINSTON CHURCHILL HS
MAIN

Kit#	Room Id	Started	Ended	pCi/L	Analyzed
11288373	170	2022-12-12 @ 11:00 am	2022-12-15 @ 11:00 am	< 0.3	2022-12-19

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

Kit#	Room Id	Started	Ended	pCi/L	Analyzed
11634689	132A	2023-01-31 @ 12:00 pr	n 2023-02-03 @ 9:00 am	< 0.3	2023-02-07
11634692	139A	2023-01-31 @ 12:00 pr	n 2023-02-03 @ 9:00 am	< 0.3	2023-02-07
11634691	142C	2023-01-31 @ 12:00 pr	n 2023-02-03 @ 9:00 am	1.2 ± 0.4	2023-02-07
11634696	166A	2023-01-31 @ 12:00 pr	n 2023-02-03 @ 9:00 am	< 0.3	2023-02-07
11634693	168	2023-01-31 @ 12:00 pr	n 2023-02-03 @ 9:00 am	< 0.3	2023-02-07
11634698	168	2023-01-31 @ 12:00 pr	n 2023-02-03 @ 9:00 am	< 0.3	2023-02-07
11634697	203C	2023-01-31 @ 12:00 pr	m 2023-02-03 @ 9:00 am	< 0.3	2023-02-07

February 7, 2023

** LABORATORY ANALYSIS REPORT **

$\frac{\text{Radon test result report for:}}{\textbf{D}}$

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11634687	168	2023-01-31 @ 12:00 pm	2023-02-03 @ 9:00 am	< 0.3	2023-02-07
		•			

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI TECHNOLOGI	ES, /NC Job Number 208802
	_pCi/L Rel. Hum <u> </u>
Date Start: 1/27/23 Date Stop: 1/30/	3 Date Start: Date Stop:
	Time Start: Time Stop:
Device No.'s: (5) CHAR BAGS.	Device No.'s:
11633682,11633687,11633688	
11633695 11633696	
F3 Celt	
Date Start: Date Stop:	Date Start: Date Stop:
Time Start: Time Stop:	Time Start: Time Stop:
B 1 22	Device No.'s:
Date Start: Date Stop:	Date Start: Date Stop:
Time Start: Time Stop:	Time Start: Time Stop:
Device No.'s:	Device No.'s:

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

February 3, 2023

** LABORATORY ANALYSIS REPORT **

Radon test result report for: OFFICE MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11633696	SK10	2023-01-27 @ 8:00 am	2023-01-30 @ 8:00 am	24.2 ± 1.9	2023-02-03
11633682	SK6	2023-01-27 @ 8:00 am	2023-01-30 @ 8:00 am	26.9 ± 2.1	2023-02-03
11633687	SK7	2023-01-27 @ 8:00 am	2023-01-30 @ 8:00 am	23.8 ± 1.9	2023-02-03
11633688	SK8	2023-01-27 @ 8:00 am	2023-01-30 @ 8:00 am	25.9 ± 2.1	2023-02-03
11633695	SK9	2023-01-27 @ 8:00 am	2023-01-30 @ 8:00 am	27.0 ± 2.2	2023-02-03



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

<u>Project Name:</u> MCPS Radon – Week 2 January Schools

Name of Schools:

- 1. Beall ES
- 2. Gaithersburg HS
- 3. Kingsview MS
- 4. Lucy V. Barnsley ES
- 5. Martin Luther King Jr. MS
- 6. Mill Creek Towne ES
- 7. North Bethesda MS
- 8. Radnor Center
- 9. Winston Churchill HS

	Date	Initials
Radon Test Kits Deployed	01/31/2023	m
Radon Test Kits Collected	02/03/2023	om
Radon Test Kits Shipped to Lab*	02/03/2023	OM
Radon Test Kits Received by Lab*	02/06/2023	MA

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



MONTGOMERY COUNTY PUBLIC SCHOOLS RADON TESTING

Executive Summary:Winston Churchill High School

11300 Gainsborough Road, Potomac, MD 20854

Date of Test Report:	3/20/2019	
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:	5	
# of Rooms ≥ 4.0 pCi/L:	0	
Low Value:	<0.4	
High Value:	<0.4	

Project Status

Retesting completed: No further action at this time.



March 20, 2019

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

Re: Radon Testing Services

Location: Winston Churchill High School

11300 Gainsborough Road,

Potomac, MD 20854

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 Winston Churchill High School, located at 11300 Gainsborough Road, Potomac, MD 20854 (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 five (5) 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 \leq 65°F.

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



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

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

Results:

The results of the radon test analysis indicated the following:

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

Notes:

D - Duplicate Sample

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

The sampling locations, field observations, and analytical results are listed on Table 1 (Attachment B). The laboratory analytical results are also attached (Attachment C).

Laboratory results and exposure data for the spike samples are also included in Attachment C. Our professional services have been performed in accordance with customary principles and practices in the field of industrial hygiene and engineering. If you have any questions or comments regarding this report, please feel free to contact me at (703) 698-9300.

Respectfully Submitted,

INTERTEK - PSI

Nand Kaushik, P.E.

Department Manager, Environmental Services

Nand.Kaushik@intertek.com

Non-April Fourth

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								
	Churchill High School							
Testing period: 2/26/19 - 3/01/19								
Kit Number	Kit Number Room / Area Result (pCi/L)							
3923500	112	<0.4						
3923302	120	<0.4						
3923449	137E/175	<0.4						
3923301	155B	<0.4						
3923498	166B	<0.4						

Table Notes:

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

ATTACHMENT C

Laboratory Analytical Results



NRPP 105011 AL NRSB ARL0007

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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey Churchill HS 11300 Gainsborough Rd Potomac MD 20854

Log Number	Device Number		Test Expo	sure Duratio	n:	Area Tested	Result pCi/L
3220684	3923500	02/26/2019	12:39 pm	03/01/2019	10:24 am	First Floor Room 112	< 0.4
3220685	3923302	02/26/2019	12:41 pm	03/01/2019	10:25 am	First Floor Room 120	< 0.4
3220686	3923498	02/26/2019	12:45 pm	03/01/2019	10:27 am	First Floor Room 166B	< 0.4
3220687	3923301	02/26/2019	12:53 pm	03/01/2019	10:28 am	First Floor Room 155B	< 0.4
3220688	3923499	02/26/2019	12:55 pm	03/01/2019	10:26 am	First Floor Room 137F/175	< 0.4

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

Distributed by: Intertek-PSI (VA)

Date Received: 03/04/2019 03/04/2019 Date Analyzed: 03/05/2019 Date Reported: 03/05/2019 Date Logged:

Report Reviewed By: _

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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

Disclaimer:



MONTGOMERY COUNTY PUBLIC SCHOOLS RADON TESTING

Executive Summary: Winston Churchill High School

11300 Victory Lane, Potomac, MD 20854

Date of Test Report:	02/21/2019			
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:	136			
# of Rooms ≥ 4.0 pCi/L:	0			
Low Value:	< 0.4			
High Value:	1.9			

Project Status

Initial testing complete: Missing or compromised samples need re-test.



February 21, 2019

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

Re: Radon Testing Services

Location: Winston Churchill High School

11300 Victory Lane, Potomac, MD 20854

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 Winston Churchill High School, located at 11300 Victory Lane, Potomac, MD 20854 (subject site).

Scope of Services:

PSI conducted radon testing at the subject site to evaluate indoor radon levels relative to the USEPA's recommended action level of 4.0 picocuries per Liter (pCi/L) - the level at which EPA recommends that schools take action to reduce the level. PSI conducted the radon testing in accordance with American Association of Radon Scientists and Technologists (AARST) Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings. A National Radon Safety Board (NRSB) Radon Measurement Specialist (certification #14SS007) supervised the testing. Additional information on radon management and the health effects of radon exposure is available from www.montgomerycountymd.gov/dep/air/radon or www.epa.gov/radon.

PSI visited the site on November 12, 2018 and deployed one hundred and sixty-two (162) activated charcoal (AC) radon test kits. PSI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. PSI returned to the site on November 15, 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 \leq 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

Non-April Coulin

Attachments: A – Floor Plan with Test Locations

B – Table 1 – Radon Test Summary Spreadsheet

C – Laboratory Analytical Results

ATTACHMENT B

Radon Test Summary Spreadsheet

High School 1/12/18 - 11/15/18
n / Area Result (pCi/L)
.00 <0.4
0.6
00B <0.4
.02 <0.4
.05 <0.4
.06 <0.4
.07 0.5
07A <0.4
07B <0.4
07C 1.0
07D <0.4
0.7
07F <0.4
07G <0.4
O7H <0.4
071 0.5
07J
.10 <0.4
.11 <0.4
AISSING)
.14 <0.4
15A <0.4
15B <0.4
15D 1.4
.16 <0.4
.17 0.5
.18 <0.4
.19 <0.4
.20 Unable to Report
.21 <0.4
.22 0.8
.23 <0.4
.24 <0.4
.25 <0.4
.26 <0.4
torium 1.9
torium <0.4
27H <0.4
27L 0.4
27M 0.4
27N 0.4
270 <0.4
28A 1.9

	Radon Testing Results						
	Churchill High School						
Testing period: 11/12/18 - 11/15/18							
Kit Number	Room / Area	Result (pCi/L)					
3916720	128B.3	1.4					
3916704	128A.4	<0.4					
3916717	128B	0.7					
3916750	128C	0.4					
3916753	129	0.5					
3916691	130A	<0.4					
3916687	130B	<0.4					
3916602	130B	<0.4					
3916686	130C	<0.4					
3916747	132	0.4					
3916676	132	0.5					
3916685	132A	0.4					
3916746	132A1	<0.4					
3916713	132H	<0.4					
3916803	133	<0.4					
3916696	134	0.4					
3916810	135	<0.4					
3916697	136	<0.4					
3881276	Aux Gym	<0.4					
3881283	Aux Gym	<0.4					
3916748	137A	<0.4					
3916816	137C	<0.4					
3916718	137D	<0.4					
3916714	137E	<0.4					
3916693	138	<0.4					
3916692	138A	<0.4					
3916694	138B	<0.4					
3916695	138C	<0.4					
3881288	139	<0.4					
3881290	139A	0.6					
3881301	139B	<0.4					
3916755	140	<0.4					
3916715	141	<0.4					
3916736	142	<0.4					
3916689	142A	<0.4					
3916738	142B	<0.4					
3916731	142C	<0.4					
3916690	143	0.4					
3916712	144A	<0.4					
3916756	144B	0.7					
3916653	144C	<0.4					
3916603	144D	<0.4					
3916610	144E	<0.4					

	Radon Testing Results						
	Churchill High School						
Testing period: 11/12/18 - 11/15/18							
Kit Number	Room / Area	Result (pCi/L)					
3916604	144F	<0.4					
3916682	144G	<0.4					
3916683	144J	0.4					
3916732	145	<0.4					
3916733	146	<0.4					
3916740 3916735	147 147A	0.5 <0.4					
3916739	147A	1.0					
3916737	149	0.8					
3916799	150	<0.4					
3916792	151	0.5					
3916794	152	<0.4					
3916793	153	<0.4					
3916798	154	<0.4					
3916795	155	<0.4					
	155B (MISSED)	(011					
3881295	156	<0.4					
3881302	156	<0.4					
3916800	156A	<0.4					
3916669	157	<0.4					
3916796	158	<0.4					
3916797	158B	<0.4					
3916661	159	<0.4					
3916667	161	<0.4					
3881284	Main Gym	0.9					
3881287	Main Gym	1.1					
3916663	163B	<0.4					
3916670	164B	<0.4					
3916664	166	<0.4					
3916668	166A	<0.4					
3916818	166B (MISSING)						
3916819	166C	<0.4					
3916820	166D	<0.4					
3916666	166E	<0.4					
3916815	167	0.4					
3916662	168	<0.4					
3881294	169	0.8					
3881292	169A	1.1					
3881277	169B	<0.4					
3916814	170	<0.4					
3916817	172	<0.4					
3916749	174	<0.4					
	175 (MISSED)						

Radon Testing Results										
T	Churchill High School Testing period: 11/12/18 - 11/15/18									
Kit Number	Kit Number Room / Area Result (pCi/L)									
3916813	176	<0.4								
3916709	205	<0.4								
3916710	213	<0.4								
3916760	216	<0.4								
3916706	229	<0.4								
3916707	230	<0.4								
3916806	237	0.4								
3916758	240	<0.4								
3916805	249	<0.4								
3916708	256	<0.4								
3916807	264	<0.4								
3916766	Call Box	<0.4								
3916767	Call Box	<0.4								
3916764	Concession	<0.4								
3916762	Mail	0.4								
3916601	Main Office	<0.4								

Radon Testing Results								
Churchill High School								
Te	sting period: 11/12/18 - 11/15	5/18						
Kit Number	Kit Number QC Type Result (p							
3916721	107 (D)	0.5						
3916757	107F (D)	0.5						
3916677	117 (D)	0.4						
3916752	127M (D)	0.4						
3916754	129 (D)	0.5						
3916688	130A (D)	<0.4						
3916719	141 (D)	<0.4						
3916734	142 (D)	<0.4						
3916791	151 (D)	0.7						
3916665	157 (D)	<0.4						
3916812	167 (D)	0.4						
3916705	216 (D)	<0.4						
3916759	249 (D)	<0.4						
3916768	Concession (D)	<0.4						
3916761	Mail Room (D)	0.4						
3916277	Field Blank	0.4						
3916194	Field Blank	Unable to Report						
3916193	Office Blank	<0.4						
3916279	Trip Blank	<0.4						

Table Notes:

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

ATTACHMENT C

Laboratory Analytical Results



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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey
Churchill High School
Potomac MD 20854

Log Number	Device Number	Test Exposure Duration	n: Area Tested		Result pCi/L
2393244	3916602 11/12/20	18 7:53 am 11/15/2018	6:43 am Not Indicated		< 0.4
2393245	3916601 11/12/20	18 6:29 am 11/15/2018	6:16 am Bldg. Churchill Hig	h School Flr 1 Rm Main office	< 0.4
2393246	3916673 11/12/20	18 7:29 am 11/15/2018	6:30 am Not Indicated		0.5
2393247	3916762 11/12/20	18 6:33 am 11/15/2018	6:16 am Bldg. Churchill Hig	h School Flr 1 Rm Mail Rm	0.4
2393248	3916761 11/12/20	18 6:36 am 11/15/2018	6:16 am Bldg. Churchill Hig	h School Flr 1 Rm Mail Rm	0.4
2393249	3916712 11/12/20	18 6:38 am 11/15/2018	7:10 am Bldg. Churchill Hig	h School Floor 1 Room 144A	< 0.4
2393250	3916756 11/12/20	18 6:39 am 11/15/2018	7:10 am Bldg. Churchill Hig	h School Floor 1 Room 144B	0.7
2393251	3916653 11/12/20	18 6:40 am 11/15/2018	7:10 am Bldg. Churchill Hig	h School Floor 1 Room 144C	< 0.4
2393252	3916683 11/12/20	18 6:41 am 11/15/2018	7:10 am Bldg. Churchill Hig	h School Floor 1 Room 144J	0.4
2393253	3916682 11/12/20	18 6:43 am 11/15/2018	7:11 am Bldg. Churchill Hig	h School Floor 1 Room 144G	< 0.4
2393254	3916603 11/12/20	18 6:44 am 11/15/2018	7:11 am Bldg. Churchill Hig	h School Floor 1 Room 144D	< 0.4

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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



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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey
Churchill High School
Potomac MD 20854

Log Number	Device Number		Test Expo	sure Duratio	on:	Area Tested				Result pCi/L
2393255	3916610	11/12/2018	6:44 am	11/15/2018	7:12 am	Bldg. Churchill High	n School	Floor 1	Room 144I	< 0.4
2393256	3916604	11/12/2018	6:45 am	11/15/2018	6:20 am	Bldg. Churchill High	n School	Floor 1	Room 144I	< 0.4
2393257	3916605	11/12/2018	6:47 am	11/15/2018	6:20 am	Bldg. Churchill High	n School	Floor 1	Room 100	< 0.4
2393258	3916642	11/12/2018	6:51 am	11/15/2018	6:20 am	Bldg. Churchill High	n School	Floor 1	Room 102	< 0.4
2393259	3916607	11/12/2018	6:52 am	11/15/2018	6:22 am	Bldg. Churchill High	n School	Floor 1	Room 105	< 0.4
2393260	3916608	11/12/2018	6:55 am	11/15/2018	6:22 am	Bldg. Churchill High	n School	Floor 1	Room 107	0.5
2393261	3916721	11/12/2018	6:56 am	11/15/2018	6:22 am	Bldg. Churchill High	n School	Floor 1	Room 107	0.5
2393262	3916726	11/12/2018	6:56 am	11/15/2018	6:23 am	Bldg. Churchill High	n School	Floor 1	Room 107	< 0.4
2393263	3916730	11/12/2018	6:58 am	11/15/2018	6:23 am	Bldg. Churchill High	n School	Floor 1	Room 107	0.5
2393264	3916722	11/12/2018	6:58 am	11/15/2018	6:03 am	Bldg. Churchill High	n School	Floor 1	Room 107I	0.5
2393265	3916723	11/12/2018	7:00 am	11/15/2018	6:24 am	Bldg. Churchill High	School	Floor 1	Room 107I	< 0.4

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

Report Reviewed By: _________

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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



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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey
Churchill High School
Potomac MD 20854

Log Number	Device Number		Test Expo	sure Duratio	on:	Area Tested			Result pCi/L
2393266	3916728	11/12/2018	7:00 am	11/15/2018	6:25 am	Bldg. Churchill High School	Floor 1	Room 107H	< 0.4
2393267	3916727	11/12/2018	7:02 am	11/15/2018	6:25 am	Bldg. Churchill High School	Floor 1	Room 107C	1.0
2393268	3916742	11/12/2018	7:03 am	11/15/2018	6:25 am	Bldg. Churchill High School	Floor 1	Room 107B	< 0.4
2393269	3916724	11/12/2018	7:05 am	11/15/2018	6:24 am	Bldg. Churchill High School	Floor 1	Room 111	< 0.4
2393270	3916711	11/12/2018	7:06 am	11/15/2018	7:14 am	Bldg. Churchill High School	Floor 1	Room 107E	0.7
2393271	3916745	11/12/2018	7:07 am	11/15/2018	6:25 am	Bldg. Churchill High School	Floor 1	Room 107F	< 0.4
2393272	3916757	11/12/2018	7:07 am	11/15/2018	12:00 am	Bldg. Churchill High School	Floor 1	Room 107F	0.5
2393273	3916684	11/12/2018	7:08 am	11/15/2018	6:26 am	Bldg. Churchill High School	Floor 1	Room 107G	< 0.4
2393274	3916743	11/12/2018	7:09 am	11/15/2018	8:02 am	Bldg. Churchill High School	Floor 1	Room 115A	< 0.4
2393275	3916811	11/12/2018	7:10 am	11/15/2018	8:04 am	Bldg. Churchill High School	Floor 1	Room 115B	< 0.4
2393276	3916725	11/12/2018	7:11 am	11/15/2018	6:27 am	Bldg. Churchill High School	Floor 1	Room 115D	1.4

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

Report Reviewed By: _________

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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



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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey Churchill High School Potomac MD 20854

Log Number	Device Number		Test Expo	sure Duratio	n:	Area Tested			Result pCi/L
2393277	3916744	11/12/2018	7:13 am	11/15/2018	6:27 am	Bldg. Churchill High School	l Floor 1	Room 106	< 0.4
2393278	3916681	11/12/2018	7:14 am	11/15/2018	6:28 am	Bldg. Churchill High School	l Floor 1	Room 110	< 0.4
2393280	3916763	11/12/2018	7:01 am	11/15/2018	6:28 am	Bldg. Churchill High School	l Floor 1	Room 114	< 0.4
2393281	3916692	11/12/2018	7:20 am	11/15/2018	6:36 am	Bldg. Churchill High School	l Floor 1	Room 138A	< 0.4
2393282	3916693	11/12/2018	7:20 am	11/15/2018	6:36 am	Bldg. Churchill High School	l Floor 1	Room 138	< 0.4
2393283	3916694	11/12/2018	7:22 am	11/15/2018	6:36 am	Bldg. Churchill High School	l Floor 1	Room 138B	< 0.4
2393284	3916695	11/12/2018	7:23 am	11/15/2018	6:37 am	Bldg. Churchill High School	l Floor 1	Room 138C	< 0.4
2393285	3916696	11/12/2018	7:25 am	11/15/2018	6:37 am	Bldg. Churchill High School	l Floor 1	Room 134	0.4
2393286	3916697	11/12/2018	7:25 am	11/15/2018	6:37 am	Bldg. Churchill High School	l Floor 1	Room 136	< 0.4
2393287	3916698	11/12/2018	7:27 am	11/15/2018	6:30 am	Bldg. Churchill High School	l Floor 1	Room 116	< 0.4
2393288	3916677	11/12/2018	7:30 am	11/15/2018	6:30 am	Bldg. Churchill High School	l Floor 1	Room 117	0.4

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

Report Reviewed By: _________

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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



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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey
Churchill High School
Potomac MD 20854

Log Number	Device Number		Test Expo	sure Duratio	on:	Area Tested				Result pCi/L
2393289	3916679	11/12/2018	7:31 am	11/15/2018	6:31 am	Bldg. Churchill High	School	Floor 1	Room 118	< 0.4
2393290	3916671	11/12/2018	7:32 am	11/15/2018	6:31 am	Bldg. Churchill High	School	Floor 1	Room 119	< 0.4
2393291	3916700	11/12/2018	7:34 am	11/15/2018	6:23 am	Bldg. Churchill High	School	Floor 1	Room 120	Invalid
2393292	3916699	11/12/2018	7:34 am	11/15/2018	6:23 am	Bldg. Churchill High	School	Floor 1	Room 121	< 0.4
2393293	3916675	11/12/2018	7:35 am	11/15/2018	6:33 am	Bldg. Churchill High	School	Floor 1	Room 122	0.8
2393294	3916678	11/12/2018	7:36 am	11/15/2018	6:34 am	Bldg. Churchill High	School	Floor 1	Room 123	< 0.4
2393295	3916680	11/12/2018	7:37 am	11/15/2018	6:34 am	Bldg. Churchill High	School	Floor 1	Room 124	< 0.4
2393296	3916674	11/12/2018	7:38 am	11/15/2018	6:40 am	Bldg. Churchill High	School	Floor 1	Room 125	< 0.4
2393297	3916676	11/12/2018	7:44 am	11/15/2018	6:39 am	Bldg. Churchill High	School	Floor 1	Room 132	0.5
2393298	3916685	11/12/2018	7:44 am	11/15/2018	6:41 am	Bldg. Churchill High	School	Floor 1	Room 132A	0.4
2393299	3916686	11/12/2018	7:46 am	11/15/2018	6:42 am	Bldg. Churchill High	School	Floor 1	Room 1300	< 0.4

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

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.



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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey Churchill High School Potomac MD 20854

Log Number	Device Number		Test Expo	sure Duratio	on:	Area Tested				Result pCi/L
2393300	3916687	11/12/2018	7:53 am	11/15/2018	6:42 am	Bldg. Churchill High	School	Floor 1	Room 13	0B < 0.4
2393301	3916606	11/12/2018	7:53 am	11/15/2018	6:43 am	Bldg. Churchill High	School	Floor 1	Room 13	OB < 0.4
2393302	3916690	11/12/2018	7:58 am	11/15/2018	6:03 am	Bldg. Churchill High	School	Floor 1	Room 14	3 0.4
2393303	3916691	11/12/2018	7:48 am	11/15/2018	6:41 am	Bldg. Churchill High	School	Floor 1	Room 13	0A < 0.4
2393304	3916688	11/12/2018	7:48 am	11/15/2018	6:41 am	Bldg. Churchill High	School	Floor 1	Room 13	0A < 0.4
2393305	3916713	11/12/2018	8:05 am	11/15/2018	6:39 am	Bldg. Churchill High	School	Floor 1	Room 13	2H < 0.4
2393306	3916755	11/12/2018	8:06 am	11/15/2018	6:45 am	Bldg. Churchill High	School	Floor 1	Room 14	0 < 0.4
2393307	3916746	11/12/2018	8:07 am	11/15/2018	6:39 am	Bldg. Churchill High	School	Floor 1	Room 13	2A1 < 0.4
2393308	3916747	11/12/2018	8:08 am	11/15/2018	6:39 am	Bldg. Churchill High	School	Floor 1	Room 13	2 0.4
2393309	3916689	11/12/2018	8:10 am	11/15/2018	6:46 am	Bldg. Churchill High	School	Floor 1	Room 14	2A < 0.4
2393310	3916736	11/12/2018	8:10 am	11/15/2018	6:47 am	Bldg. Churchill High	School	Floor 1	Room 14	2 < 0.4

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

Report Reviewed By: _________

the Pah

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.



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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey
Churchill High School
Potomac MD 20854

Log Number	Device Number		Test Expo	sure Duratio	on:	Area Tested				Result pCi/L
2393311	3916734	11/12/2018	8:11 am	11/15/2018	6:47 am	Bldg. Churchill High S	School	Floor 1	Room 142	< 0.4
2393312	3916738	11/12/2018	8:12 am	11/15/2018	6:47 am	Bldg. Churchill High S	School	Floor 1	Room 142B	< 0.4
2393313	3916731	11/12/2018	8:12 am	11/15/2018	6:09 am	Bldg. Churchill High S	School	Floor 1	Room 142C	< 0.4
2393314	3916732	11/12/2018	8:14 am	11/15/2018	6:49 am	Bldg. Churchill High S	School	Floor 1	Room 145	< 0.4
2393315	3916740	11/12/2018	8:15 am	11/15/2018	6:49 am	Bldg. Churchill High S	School	Floor 1	Room 147	0.5
2393316	3916735	11/12/2018	8:17 am	11/15/2018	6:51 am	Bldg. Churchill High S	School	Floor 1	Room 147A	< 0.4
2393317	3916737	11/12/2018	8:20 am	11/15/2018	6:51 am	Bldg. Churchill High S	School	Floor 1	Room 149	0.8
2393318	3916733	11/12/2018	8:20 am	11/15/2018	6:52 am	Bldg. Churchill High S	School	Floor 1	Room 146	< 0.4
2393319	3916739	11/12/2018	8:20 am	11/15/2018	6:52 am	Bldg. Churchill High S	School	Floor 1	Room 148	1.0
2393320	3916792	11/12/2018	8:21 am	11/15/2018	6:52 am	Bldg. Churchill High S	School	Floor 1	Room 151	0.5
2393321	3916791	11/12/2018	8:21 am	11/15/2018	6:53 am	Bldg. Churchill High S	School	Floor 1	Room 151	0.7

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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



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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey Churchill High School Potomac MD 20854

Log Number	Device Number		Test Expo	sure Duration	n:	Area Tested				Result pCi/L
2393322	3916799	11/12/2018	8:24 am	11/15/2018	6:54 am	Bldg. Churchill High	School	Floor 1	Room 150	< 0.4
2393323	3916793	11/12/2018	8:24 am	11/15/2018	6:54 am	Bldg. Churchill High	School	Floor 1	Room 153	< 0.4
2393324	3916794	11/12/2018	8:25 am	11/15/2018	6:55 am	Bldg. Churchill High	School	Floor 1	Room 152	< 0.4
2393325	3916798	11/12/2018	8:25 am	11/15/2018	6:56 am	Bldg. Churchill High	School	Floor 1	Room 154	< 0.4
2393326	3916795	11/12/2018	8:28 am	11/15/2018	6:56 am	Bldg. Churchill High	School	Floor 1	Room 155	< 0.4
2393327	3916800	11/12/2018	8:28 am	11/15/2018	6:55 am	Bldg. Churchill High	School	Floor 1	Room 156	A < 0.4
2393328	3916796	11/12/2018	8:37 am	11/15/2018	6:59 am	Bldg. Churchill High	School	Floor 1	Room 158	< 0.4
2393329	3916797	11/12/2018	8:42 am	11/15/2018	7:14 am	Bldg. Churchill High	School	Floor 1	Room 158	B < 0.4
2393330	3916669	11/12/2018	8:43 am	11/15/2018	7:14 am	Bldg. Churchill High	School	Floor 1	Room 157	< 0.4
2393331	3916665	11/12/2018	8:43 am	11/15/2018	7:17 am	Bldg. Churchill High	School	Floor 1	Room 157	< 0.4
2393332	3916667	11/12/2018	8:44 am	11/15/2018	7:14 am	Bldg. Churchill High	School	Floor 1	Room 161	< 0.4

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

Report Reviewed By: _________

Report Approved By:

Disclaimer:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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.



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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey
Churchill High School
Potomac MD 20854

Log Number	Device Number		Test Expo	sure Duratio	on:	Are	a Tested					Result pCi/L
2393333	3916661	11/12/2018	8:44 am	11/15/2018	7:14 am	Bldg.	Churchill High	School	Floor 1	Room	159	< 0.4
2393334	3916663	11/12/2018	8:46 am	11/15/2018	7:01 am	Bldg.	Churchill High	School	Floor 1	Room	163B	< 0.4
2393335	3916670	11/12/2018	8:49 am	11/15/2018	7:03 am	Bldg.	Churchill High	School	Floor 1	Room	164B	< 0.4
2393336	3916666	11/12/2018	8:50 am	11/15/2018	7:03 am	Bldg.	Churchill High	School	Floor 1	Room	166E	< 0.4
2393337	3916664	11/12/2018	8:51 am	11/15/2018	7:04 am	Bldg.	Churchill High	School	Floor 1	Room	166	< 0.4
2393338	3916819	11/12/2018	8:52 am	11/15/2018	7:04 am	Bldg.	Churchill High	School	Floor 1	Room	166C	< 0.4
2393339	3916820	11/12/2018	8:53 am	11/15/2018	7:04 am	Bldg.	Churchill High	School	Floor 1	Room	166D	< 0.4
2393341	3916668	11/12/2018	8:54 am	11/15/2018	7:04 am	Bldg.	Churchill High	School	Floor 1	Room	166A	< 0.4
2393342	3916815	11/12/2018	8:56 am	11/15/2018	7:20 am	Bldg.	Churchill High	School	Floor 1	Room	167	0.4
2393343	3916812	11/12/2018	8:56 am	11/15/2018	7:20 am	Bldg.	Churchill High	School	Floor 1	Room	167	0.4
2393344	3916662	11/12/2018	8:58 am	11/15/2018	7:21 am	Bldg.	Churchill High	School	Floor 1	Room	168	< 0.4

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

Report Reviewed By: _________

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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



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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey
Churchill High School
Potomac MD 20854

Log Number	Device Number		Test Expo	sure Duratio	on:	Area Tested			Result pCi/L
2393345	3916814	11/12/2018	8:58 am	11/15/2018	10:32 am	Bldg. Churchill High School	l Floor 1	Room 170	< 0.4
2393346	3916817	11/12/2018	8:59 am	11/15/2018	7:21 am	Bldg. Churchill High School	l Floor 1	Room 172	< 0.4
2393347	3916813	11/12/2018	9:01 am	11/15/2018	7:22 am	Bldg. Churchill High School	l Floor 1	Room 176	< 0.4
2393348	3916749	11/12/2018	9:02 am	11/15/2018	7:22 am	Bldg. Churchill High School	l Floor 1	Room 174	< 0.4
2393349	3916714	11/12/2018	9:04 am	11/15/2018	7:26 am	Bldg. Churchill High School	l Floor 1	Room 137E	< 0.4
2393350	3916718	11/12/2018	9:14 am	11/15/2018	7:26 am	Bldg. Churchill High School	l Floor 1	Room 137D	< 0.4
2393351	3916816	11/12/2018	9:15 am	11/15/2018	7:26 am	Bldg. Churchill High School	l Floor 1	Room 137C	< 0.4
2393352	3916748	11/12/2018	9:17 am	11/15/2018	7:27 am	Bldg. Churchill High School	l Floor 1	Room 137A	< 0.4
2393353	3916715	11/12/2018	9:23 am	11/15/2018	7:44 am	Bldg. Churchill High School	l Floor 1	Room 141	< 0.4
2393354	3916719	11/12/2018	9:23 am	11/15/2018	7:44 am	Bldg. Churchill High School	ol Floor 1	Room 141	< 0.4
2393355	3916750	11/12/2018	9:24 am	11/15/2018	7:19 am	Bldg. Churchill High School	l Floor 1	Room 128C	0.4

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

Report Reviewed By: _________

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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



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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey Churchill High School Potomac MD 20854

Log Number	Device Number		Test Expo	sure Duratio	on:	Area Tested			Result pCi/L
2393356	3916704	11/12/2018	9:29 am	11/15/2018	7:30 am	Bldg. Churchill High School F	loor 1	Room 128A.4	< 0.4
2393357	3916720	11/12/2018	9:29 am	11/15/2018	7:30 am	Bldg. Churchill High School F	loor 1	Room 128A.3	1.4
2393358	3916717	11/12/2018	9:30 am	11/15/2018	7:30 am	Bldg. Churchill High School F	loor 1	Room 128B	0.7
2393359	3916716	11/12/2018	9:30 am	11/15/2018	7:32 am	Bldg. Churchill High School F	loor 1	Room 128	1.9
2393360	3916703	11/12/2018	9:33 am	11/15/2018	7:33 am	Bldg. Churchill High School F	loor 1	Room 126	< 0.4
2393361	3916810	11/12/2018	9:36 am	11/15/2018	7:34 am	Bldg. Churchill High School F	loor 1	Room 135	< 0.4
2393362	3916803	11/12/2018	9:37 am	11/15/2018	7:35 am	Bldg. Churchill High School F	loor 1	Room 133	< 0.4
2393363	3916801	11/12/2018	9:39 am	11/15/2018	7:07 am	Bldg. Churchill High School F	loor 1	Room 127	1.9
2393364	3916802	11/12/2018	9:39 am	11/15/2018	7:37 am	Bldg. Churchill High School F	loor 1	Room 127	< 0.4
2393365	3916754	11/12/2018	9:40 am	11/15/2018	7:39 am	Bldg. Churchill High School F	loor 1	Room 129	0.5
2393366	3916753	11/12/2018	9:40 am	11/15/2018	7:39 am	Bldg. Churchill High School F	loor 1	Room 129	0.5

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

Report Reviewed By: ________

Mother Pah

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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



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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey
Churchill High School
Potomac MD 20854

Log Number	Device Number		Test Expo	sure Duratio	on:	Area Tested			Result pCi/L
2393367	3916751	11/12/2018	9:41 am	11/15/2018	7:38 am	Bldg. Churchill High School	Floor 1	Room 127H	< 0.4
2393368	3916741	11/12/2018	9:44 am	11/15/2018	7:40 am	Bldg. Churchill High School	Floor 1	Room 1270	< 0.4
2393369	3916701	11/12/2018	9:45 am	11/15/2018	7:40 am	Bldg. Churchill High School	Floor 1	Room 127N	0.4
2393370	3916804	11/12/2018	9:46 am	11/15/2018	7:41 am	Bldg. Churchill High School	Floor 1	Room 127M	0.4
2393371	3916702	11/12/2018	9:46 am	11/15/2018	7:01 am	Bldg. Churchill High School	Floor 1	Room 127L	0.4
2393372	3916752	11/12/2018	9:54 am	11/15/2018	7:41 am	Bldg. Churchill High School	Floor 2	Room 127M	0.4
2393373	3916806	11/12/2018	10:00 am	11/15/2018	7:47 am	Bldg. Churchill High School	Floor 2	Room 237	0.4
2393374	3916706	11/12/2018	10:02 am	11/15/2018	7:48 am	Bldg. Churchill High School	Floor 2	Room 229	< 0.4
2393375	3916705	11/12/2018	10:04 am	11/15/2018	7:49 am	Bldg. Churchill High School	Floor 2	Room 216	< 0.4
2393376	3916760	11/12/2018	10:04 am	11/15/2018	7:49 am	Bldg. Churchill High School	Floor 2	Room 216	< 0.4
2393377	3916710	11/12/2018	10:06 am	11/15/2018	7:50 am	Bldg. Churchill High School	Floor 2	Room 213	< 0.4

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

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.



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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey Churchill High School Potomac MD 20854

Log Number	Device Number		Test Expo	sure Duratio	on:	Area Tested		Result pCi/L
2393378	3916709	11/12/2018	10:07 am	11/15/2018	7:51 am	Bldg. Churchill High School	Floor 2 Room 205	< 0.4
2393379	3916759	11/12/2018	10:10 am	11/15/2018	7:53 am	Bldg. Churchill High School	Floor 2 Room 249	< 0.4
2393380	3916805	11/12/2018	10:10 am	11/15/2018	7:03 am	Bldg. Churchill High School	Floor 2 Room 249	< 0.4
2393381	3916708	11/12/2018	10:12 am	11/15/2018	7:56 am	Bldg. Churchill High School	Floor 2 Room 256	< 0.4
2393382	3916807	11/12/2018	10:14 am	11/15/2018	7:57 am	Bldg. Churchill High School	Floor 2 Room 264	< 0.4
2393383	3916758	11/12/2018	10:15 am	11/15/2018	7:58 am	Bldg. Churchill High School	Floor 2 Room 240	< 0.4
2393384	3916707	11/12/2018	10:15 am	11/15/2018	7:59 am	Bldg. Churchill High School	Floor 2 Room 230	< 0.4
2393385	3916764	11/12/2018	10:31 am	11/15/2018	8:15 am	Bldg. Churchill High School	Flr 1 Rm Concession	< 0.4
2393386	3916768	11/12/2018	10:31 am	11/15/2018	8:05 am	Bldg. Churchill High School	Flr 1 Rm Concession	< 0.4
2393387	3916766	11/12/2018	10:36 am	11/15/2018	8:06 am	Bldg. Churchill High School	Fir 1 Rm Call Box	< 0.4
2393388	3916767	11/12/2018	10:37 am	11/15/2018	8:06 am	Bldg. Churchill High School	Flr 2 Rm Call Box	< 0.4

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

Report Reviewed By: ________

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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



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

Laboratory Report for:

Property Tested: Project # 04481387-1

Intertek-PSI (VA) MCPS Radon Survey
2930 Eskridge Road Churchill High School
Fairfax VA 22031 Potomac MD 20854

Log Number	Device Number		Test Expos	sure Duratio	n:	Area Tested		Result pCi/L
2393389	3916194 1	1/12/2018	6:29 am	11/15/2018	8:06 am	Bldg. Churchill High School	Floor 1	Invalid
2393390	3916277 1	1/12/2018	6:29 am	11/15/2018	8:16 am	Bldg. Churchill High School	Floor 1	0.4
2393391	3916193 1	1/12/2018	6:00 am	11/15/2018	8:16 am	Bldg. Churchill High School	Floor 1	< 0.4
2393392	3916279 1°	1/12/2018	6:00 am	11/15/2018	8:16 am	Bldg. Churchill High School	Floor 1	< 0.4

Comment: AMENDED REPORT on 1/10/2019 to add the start and end dates and times for device numbers 3916602 and 3916673. Unable to report results for 3916700 and 3916194. Device counts are below blank counts. Confidential:

Distributed by: Intertek-PSI (VA)

Date Received: 11/17/2018 Date Logged: 11/17/2018 Date Analyzed: 11/17/2018 Date Reported: 01/02/2019

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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



NRPP 105011 AL NRSB ARL0007 Ohio RL41

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

Laboratory Report for:

Property Tested:

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

MCPS Radon Survey 4514 Taylorsville Road Dayton OH 45424

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

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

Test Performed By: Unknown

Distributed by: Intertek-PSI (VA)

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

Report Reviewed By: _

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

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

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



Chain of Custody

Project Name: MCPS Radon Survey 2018

Name of Schools:

1. Arcola ES

2. Glen Haven ES

3. Jackson Road

4. Cashell ES

5. Frost MS

6. Meadow Hall ES

7. North Lake Center

8. Barnsley ES

9. Bayard Rustin ES

10. Julius West MS

11. Rock Terrace HS

12. Churchill HS

13. Cold Spring ES

14. Hoover MS

15. Wayside ES

16. English Manor

	Date	Initials
Radon Test Kits Deployed	11/12/2018	NL
Radon Test Kits Sampled	11/15/2018	NL
Radon Test Kits Shipped to Lab*	11/15/2018	NL
Radon Test Kits Received by Lab*	11/17/2018;	111
radon lest kits received by Lab.	11/18/2018	NL

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

RADON SCREENING SURVEY – FOLLOW-UP WINSTON CHURCHILL HIGH SCHOOL

11300 Gainsborough Road, Potomac, Maryland 20854

EXECUTIVE SUMMARY

Date of Test Report:	4/12/16 Follow-Up	
Round of Testing:	Initial	
	Follow-up	
	Post Remediation	
# Rooms Tested	4	
# Rooms ≥ 4.0 pCi/L:	0	
Low Value:	<0.4	
High Value:	0.6	
Confirmed Rooms ≥ 4.0 pCi/L US EPA	0	
Action Level		

Summary of Sampling Events ≥ 4.0 pCi/L

Room	Result (pCi/L)	Result (pCi/L)	Average Result	
	2/24/16 (Rev 1 Initial)	4/12/16 Follow-Up	(pCi/L)	
125	0.6 Window Open	<0.4	4 0.5	
137A	1.0 Tampered	Not sampled	1.0	
156A	1.0 Tampered	0.5	0.8	
Auditorium	0.6 Tampered	<0.4	0.5	
Auditorium	0.6 Tampered	0.5	0.6	
CUST BREAK	Damaged	Not sampled	n/a	
Principal	<0.3 Tampered	0.5	0.4	



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

MCPS RADON TESTING

Executive Summary: Winston Churchill High School

Date of Test Report:	4/12/2016
Round of Testing:	Initial
	Follow-up
	Post Remediation
# Rooms Tested:	4
# Rooms \geq 4.0 pCi/L:	0
Low Value:	< 0.4
High Value:	0.6

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

www.kci.com KCI TECHNOLOGIES, INC.

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

April 12, 2016

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

Re: Radon Testing Services

KCI Job # 12146341.31

Location: Winston Churchill High School

11300 Gainsborough Road

Potomac, MD 20854

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 Winston Churchill High School, located at 11300 Gainsborough Road in Potomac, Maryland 20854 (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 8, 2016 and deployed eight (8) 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 11, 2016 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to AccuStar Labs for analysis by gamma-ray spectroscopy. Accustar Labs is a NRSB certified analytical laboratory for radon analysis (certification # ARL0007) located at 929 Mount

KCI TECHNOLOGIES, INC. WWW.kci.com

Zion Road, Lebanon, Pennsylvania.

Evaluation of Testing Conditions:

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

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

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

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

Results:

The results of the radon test analysis indicated the following:

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

Notes:

D- Duplicate sample

The office blanks and lab transit blanks had test results of less than the laboratory detection limit of 0.4 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.

www.kci.com

Mr. Richard Cox April 12, 2016 Page 4

Sincerely,

James M. Moulsdale

James Makden

Radon Measurement Specialist

KCI Technologies, Inc.

Attachments: A- Floor Plan with Test Locations

B- Table 1-Radon Test Summary Spreadsheet

C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank*

PM- Project Manager

QC- Quality Control

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

	Winston Churchill HS	
	Test Period: 03/08/16-03/11/16	
Kit Number	Room / Area	Result
3029017	125	<0.4
3029020	156A	0.5
3029015	Auditorium	<0.4
3029019	Auditorium	0.5
3029016	Auditorium	<0.4
3029018	Auditorium	<0.4
3029111	Principal	0.5

	Radon Testing Results	
	Winston Churchill HS	
	Test Period: 03/08/16-03/11/16	
Kit Number	QC Type	Result
3028995	D (Principal)	0.6

ATTACHMENT C

Laboratory Analytical Results



NRPP 10511AL NRSB ARL0007 EPA Method #402-R-92-004 Charcoal Canister NRPP Device Code 6048 NRSB Device Code 10317

Laboratory Report for:

Property Tested: Project # 12146341

KCI Technologies 936 Ridgebrook Rd Sparks MD 21152 Winston Churchill HS 11300 Gainesborough Rd Potomac MD 20854

Log Number	Device Number	Test Exposur	e Duration:	Area Tested	Result (pCi/L)
3016759	3029111	03/08/2016 12:03 pm	03/11/2016 10:34 am	Unit 144B Principal Office First Floor	0.5
3016760	3029020	03/08/2016 12:15 pm	03/11/2016 10:43 am	Unit 156A First Floor	0.5
3016761	3029019	03/08/2016 12:31 pm	03/11/2016 10:49 am	Unit 127 Áuditorium	0.5
3016762	3029018	03/08/2 € FÎ ÁÁ 2:33 pm	03/11/2016 10:49 am	Unit 127ÁCE åã[¦ã {	<0.4
3016763	3029016	03/08/201Î 12:35 pm	03/11/2016 10:50 am	unit 127 Œ åã्द ¦ã {	<0.4
3016764	3029015	03/08/201Î 12:37 pm	03/11/2016 10:50 am	Unit 127 Œ åã[¦ã {	<0.4
3016765	3028995	03/08/2016 12:40 pm	03/11/2016 10:34 am	Unit 144B Principal Office First Floor	0.6
3016766	3029017	03/08/2016 12:38 pm	03/11/2016 10:54 am	Unit 125 First Floor	<0.4

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

Distributed by: KCI Technologies, Inc.

Date Received: 03/15/2016 Date Logged: 03/15/2016 Date Analyzed: 03/16/2016 Date Reported: 03/16/2016

Report Reviewed By: __

effry (anten

Carolyn D. Koke, President, AccuStar Labs

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

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

Disclaimer:

	Accison C
	Accusial La
つつつ	11 Awl Stree
Professional Radon Laboratory Sorvices Since 1984	Machine MA

Send Written Report To:

Aedway MA 02053 abs

Radon Device Type Open Face Canister

888-480-8812 www.accustarlabs.com

Site Tested:

KCI Technologies, Inc 936 Ridgebrook Road

> Address Address

Name

Site Name Address Address

City / Town

11300 Gaines barologh Rd State/Province Postal Code MD

Contact

Winston Churchill HS.

0
:=
ल
5
=
0
4
_
ب
0
G
=
_
0
()

	/ala
	Aurangabadwa
	rang
	 Fehsin Αι
	 Teh
;	
	Contact

0	410-891-1726	
	Telephone	

Technician	Cert. Number	Signature
<u>_</u>	Ö	S

30854

Montgomery County

Test Country

21152

State/Province Postal Code MD Report Country Baltimore County Email Address tehsin@kci.com

Sparks

City / Town

Project Number 12146341

Potemoc

40		T		T	T	T	T	T	T	 T
Lab Use	<u>(</u>									
Stop Time	hh:mm am / pm	45:01	:0;43	10:49	16:49	05:01	05:0/	10:34	45:01	
Stop Date	mm/dd/yyyy	03/11//2016	03/11/2016	03/11/2016	03/11/2016	03/11/2016	03/11/2016	03/11/2016	03/11/2016	
Start Time	hh:mm am / pm	12:03	51:21	12,31	12:33	12:35	(2:37	12:40	12:38	
Start Date	mm/dd/yyyy	03/08/2016	03/08/2016	03/06//2016	03/06/2016	03/08/2016	03/0&/2016	03/08/2016	03/08/2016	
Name of Room		Principal Office 83°	79°	75°	2		\rightarrow	finance Office 83°		
Floor			~)	ĵ	/		į	
Unit Number		(4B	156A	(27	127	127	127	144B	(35	
Building Number										
Device Number		329111	3029020	3024014	3029018	3029016	3029015	302845	3029017	
Lab Use Only										

1 of 1



NRPP 10511AI NRSB ARL0007 EPA Method #402-R-92-004 **Charcoal Canister** NRPP Device Code 6048 NRSB Device Code 10317

Laboratory Report for:

Property Tested: Project # 12146341

KCI Technologies 936 Ridgebrook Rd MCPS Radon Phase 11 Office Blank

Sparks MD 21152

Device Log Number Number

3029191

3016739

Test Exposure Duration: Area Tested

03/08/2016 10:00 am 03/11/2016 10:00 am Office Blank

Result (pCi/L)

< 0.4

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

Distributed by: KCI Technologies, Inc.

Date Received: 03/15/2016 Date Logged: 03/15/2016 Date Analyzed: 03/15/2016 Date Reported: 03/16/2016

Report Reviewed By: __

Carolyn D. Koke, President, AccuStar Labs

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

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

Disclaimer:



888-480-8812 Medway MA 02053 www.accustarlabs.com

Radon Device Type Open Face Canister

Send Written F	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	Winston Cha	mehill HS.
Address	11300 Gaine	
Address		
City / Town	F	Stomac
State/Province	Postal Code MD	20854
Test Country	Montgomery Cour	
Project Number	r 12146341	

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

Lab Use Only	Device Number	Building Number	Unit Number	Floor	Name of Room		Start Date	Start Time	Stop Date	Stop Time	Lab Use Only
	3029111		144B		Principal Office	83°	03/08/2016	12:03	03/11/2016	10134	
	3029020		156A	Ĺ		79°	03/0&/2016	12:15	03/11/2016	10;43	
	3029019		107			75°	03/08/2016	12:31	03/11/2016	10:49	
	3029018		127	(13	03/0∂/2016	12:33	03/11/2016	10:49	
	3029016		127	ť			03/08/2016	12:35	03/11/2016	10:50	
	3029015		127	1		1	03/08/2016	12:37	03/11/2016	10:50	
	3028995		144 B	1	Principal Office	83°	03/08/2016	12:40	03/11/2016	101.34	
	3029017		125	ĺ			03/08/2016	12:38	03/11/2016	10:54	



Email Address | tehsin@kci.com

AccuStar Labs 11 Awl Street Medway MA 0205

888-480-8812 www.accustarlabs.com

Radon Device Type Open Face Canister

Project Number 12146341

Send Written	Report To:	Site Tested:	Contact Inform	nation:
Name	KCI Technologies, Inc	Site Name MCPS Office Bi	lance Contact	Tehsin Aurangabadwala
Address	936 Ridgebrook Road	Address 936 Ridge brook		410-891-1726
Address		Address		
City / Town	Sparks	City / Town Sparks	Technician	
State/Province	Postal Code MD 21152	State/Province Postal Code MD Z.It	62 Cert. Number	0
Report Countr	y Baltimore County	Test Country Montgomery County	Signature	1 6 - 11/11

Lab Use Only	Device Number	Building Number	Unit Number	Floor	Name of Room	Start Date	Start Time	Stop Date	Stop Time	Lab Use Only
	3029191	1	1	1	Office Blank	03/08/2016	10:00 am	03/11/2016	10:00 am	
- -				188						
27		· ·								



NRPP 10511AL NRSB ARL0007 EPA Method #402-R-92-004 **Charcoal Canister** NRPP Device Code 6048 NRSB Device Code 10317

Laboratory Report for:

Property Tested:

KCI Technologies

MCPS

936 Ridgebrook Rd

Transit Blanks

Sparks MD 21152

Log Number	Device Number	Test Exposu	re 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: Cristo Sates Report Approved By: Buly D. Kole 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 Labs

929 Mt. Zion Rd., Lebanon, PA 17046 RECEIVED JAN 2NFORRMATION FORM - Large Buildings 800-523-4964

Projects - Apartments AccuStar Labs - Lebanon, PA Projects - Apartments Return canisters for analysis to:

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

	Test Site Info							Do not u	Do not use this form in	
	Name of Building Site Address:	Name of Building/Project or Owner / Lansat &			Planta managan	Core His about	and three professions for a	New Jers	New Jersey or Florida	
	-	State	Zip		County			Call Tor	Call for correct forms.	
	Projects Contact Name:	Der Coole Phone:			Email:			Multi-Pag	Multi-Page Report Y-N	District Control
	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	Wgt. Gain	in pCi/L	1
0	W 3028953	Trans. +	1	Mall	growt. Ch.	1/22/1/	9130am	2	3 3	D
	8955	Trans. 4 3010589	_	1/10/11				551	407	
4	1288	Trans. + 3010590	_	7116111				. 0	7.07	
3	7 998	Trans, 7)	9116111	>)	>	C	427	
									000 W 000	
	7								1/23/64	T
		and a treduced to the following the property of the particular						,,,	1/27/2016	1
		and the second s			TAR Absolu	KCI Technologies, Inc.	gies, Inc.		9107/12	1
		The state of the s				3010588 3028953	028953 ACPC275B	275B EXP12/31/2018	11/2018	1
		une de sue dimente english falled odgast an ende alle en an								l in the second
	Structure Type: (c	(circle one or more) Basement - Crawlspace - Slab on Grade - Other		3oth Placed by	and Retrieved	Both Placed by and Retrieved by signatures are required	are required	Certilled residual	# 0	1
	Test Purpose:	Initial Screening - Follow Up Test -	0	Canisters placed by	ced by				#	1
	(Circle all that apply)	Post Mitigation - Real Estate - Other								
	Building Type:	Residential - Non Residential		Canisters retrieved by	ieved by				#	II
	(Circle One)	Private Day Care - Private School		Owner waives confidentiality	nfidentjalify	6	1/00/1	Were g	Were general operating	
		-		by signing here	1		Date ((C)	conditi	conditions maintained?	
	Send Results To:	(-	ø	1) [1 1 1		Yes - No	o explain if NO	O
	7	Li Cel	Ŧ T	Attention:	James.	Taysclale		Were	Were closed building	
	Address: 936	Kirlychock		28	The rest &			conditi	conditions maintained?	
	City: Sparks		State: M	MO Zip	21250	\ \	ā	Yes - No	o explain if NO	0
	Phone: 410-59	410-599-3826	I	Fax:				Normal Temp.	Femp. Yes - No	
	EMAIL Results to:	To James. Moulsdale O les	. com	2				Normal Humidity	umidity Yes - No	_

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

Revision 5

Rainy Y-N

Windy Y-N

TCS INDUSTRIES, INC.

(717) 657-7032

RADON GAS DETECTION

www.radondetek.com

4326 Crestview Road, Harrisburg, PA 17112

James Moulsdale KCI 936 Ridgebrook Rd. Sparks, MD 21152 April 04, 2016

Dear Mr. Moulsdale:

The spike exposure data were:

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

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

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

Avg, Temp. was 71F

Avg. RH was 51%

Elevation was 490 feet above sea level

Sincerely,

Carl H. Distenfeld, CHP

TCS Radon Chamber NRSB CHM 0002



NRPP 10511AL NRSB ARL0007 EPA Method #402-R-92-004 Charcoal Canister NRPP Device Code 6048 NRSB Device Code 10317

Laboratory Report for:

Property Tested:

KCI Technologies

MCPS

936 Ridgebrook Rd

Radon Spike Sample Laboratory Results

Sparks MD 21152

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

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

Distributed by: KCI Technologies, Inc.

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

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

Report Reviewed By: __

Report Approved By: Bully A Kole

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.

Radon Device Type Open Face Canister

888-480-8812 www.accustarlabs.com

Send Written Report To:	Report To:	Site Tested:			Contact Information:	nation:
Name	KCI Technologies, Inc	Site Name	MCPS		Contact	Tehsin Aurangabadwala
Address	936 Ridgebrook Road	Address	840 Hansel d	7	Telephone	410-891-1726
Address		Address				
City / Town	Sparks	City / Town	Rocky 16		Technician	
State/Province	State/Province Postal Code MD 21152	State/Province F	State/Province Postal Code MD	20850	Cert. Number	
Report Country	Report Country Baltimore County	Test Country	Montgomery County		Signature	i him My
Email Address	Email Address tehsin@kci.com	Project Number 12146341	12146341			MANS
		-				

	.,			- 					,
Lab Use Only									
Stop Time	11:13an	_				->			
Stop Date mm/dd/yyyy	91/9/4)			
Start Time	11:10an					>			
Start Date	91/4/4					->			
Name of Room Temp		2	8	J	5	9			
Floor	1	,)	_	_			
Unit									
Building Number	1		1	1	_	_			
Device Number	3029166	3029214	3029217	3029218	8029219	3029220		-	
Lab Use Only									

1 of 1



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

MCPS RADON TESTING

Executive Summary: Winston Churchill High School

Date of Test Report:	2/24/2016 (Rev 1)
Round of Testing:	Initial
	Follow-up
	Post Remediation
# Rooms Tested:	122
# Rooms \geq 4.0 pCi/L:	0
Low Value:	< 0.3
High Value:	2.0

Project Status:

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

KCI TECHNOLOGIES, INC. WWW.kci.com

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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

February 24, 2016 (Rev 1)

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

Re: Radon Testing Services

KCI Job # 12146341.23

Location: Winston Churchill High School

11300 Gainsborough Road

Potomac, MD 20854

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 Winston Churchill High School, located at 11300 Gainsborough Road in Potomac, Maryland 20854 (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 one hundred fifty (150) 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

KCI TECHNOLOGIES, INC. WWW.kci.com

Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

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

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

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

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

Results:

The results of the radon test analysis indicated the following:

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

Notes:

D- Duplicate sample

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

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

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

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	
	Radon Testing Results Winston Churchill HS Test Period: 01/04/16-01/07/16	
	Winston Churchill HS Test Period: 01/04/16-01/07/16 Room / Area Result 100 0.6 102 < 0.3 105 0.5 106 < 0.3 107 < 0.3 110 < 0.3 111 < 0.3 111 < 0.3 114 0.6 116 < 0.3 117 0.7 118 < 0.3 119 0.6 120 0.6 121 0.7 122 0.6 123 0.8 124 < 0.3 125 0.8 132 0.6 133 0.6 134 < 0.3 135 0.8 136 < 0.3 137 0.6 133 0.6 134 < 0.3 135 0.8 136 < 0.3 141 <td< th=""></td<>	
Kit Number	Room / Area	Result
7704654		
7708088		
7706467		
7708092		
7706224		
7708019		
7705068		
7708093		
7708091		
7708651		
7708666		
7708668		
7712869		
7706230		
7712864		
7706223		
7706675		
7712871		
7704282		
7708057		
7708099		
7708065		
7708100		
7708066		
7708097		
7708095		
7708074		
7708072		
7708080		
7708643		
7704694		
7708085	145	
7705134	146	
7708083		
7704254		
7704640	149	
7706688	150	< 0.3
7704255	151	
7704616		
7708654		
7704629		
7706221		
7706219	156	< 0.3
7706685	156	0.6
7708046	158	< 0.3
7708076	159	< 0.3

Table Note:
* Missing or Compromised Sample

Radon Testing Results Winston Churchill HS					
	Test Period: 01/04/16-01/07/16				
Kit Number	Room / Area	Result			
7708077	161	0.6			
7708677	166	< 0.3			
7708077	167	0.6			
7708073	168	0.6			
7708020	170	0.8			
7708053	170	0.8			
7708059	172	0.9			
7708063	175	< 0.3			
7708060	176	0.9			
7712878	244	< 0.3			
7712875	253	0.5			
7706678	256	< 0.3			
7712879	258	0.8			
7712881	262	0.6			
7712883	270	< 0.3			
7712885	274	0.7			
7712882	276	< 0.3			
7712889	278	< 0.3			
7704626	100B	0.7			
7706235	107A	< 0.3			
7704680	107B	0.5			
7704679	107C	1.0			
7706471	107D	< 0.3			
7704653	107E	1.0			
7704604	107F	< 0.3			
7706533	107G	0.8			
7706529	107GA	0.6			
7706520	107H	< 0.3			
7704619	1071	< 0.3			
7704667	107J	0.8			
7706209	115A	0.7			
7704603	115B	< 0.3			
7704627	115D	< 0.3			
7708649	124A	< 0.3			
7708680 *	125 (Open Window)	0.6			
7708058	128A	0.9			
7708061	128A.4	2.0			
7708067	128B	0.6			
7708062	128B.3	1.1			
7708064	128C	1.9			
7708698	130A	< 0.3			
7714986	130B	0.7			
7708040	132A	1.1			
7708068 *	137A (Tampered)	1.0			
7708078	137C	1.1			
7708081	137D	1.3			
7705052	138A	< 0.3			
7708096	138B	0.6			
7708090	138C	< 0.3			
7706679	140B	< 0.3			

Table Note:

^{*} Missing or Compromised Sample

	Radon Testing Results				
	Winston Churchill HS				
	Test Period: 01/04/16-01/07/16				
Kit Number	Room / Area	Result			
7708084	142A	0.6			
7708086	142B	< 0.3			
7708082	142C	< 0.3			
7706466	144C	< 0.3			
7706584	144D	< 0.3			
7704624	144E	< 0.3			
7704006	144F	< 0.3			
7706667	144G	< 0.3			
7706210	144H	< 0.3			
7708087	147A	0.6			
7708682	155B	< 0.3			
7708676	155C	< 0.3			
7706683	* 156A (Tampered)	1.0			
7708071	164B	< 0.3			
7708674	166A	0.6			
7708051	166B	0.6			
7708048	166C	0.7			
7708039	166D	< 0.3			
7706684	166E	< 0.3			
7704666	ADMIN WORK RM	< 0.3			
7708036	* AUDITORIUM (Tampered)	0.6			
7708056	* AUDITORIUM (Tampered)	0.6			
7708069	AUX GYM	1.1			
7708070	AUX GYM	1.3			
7708644	* CUST BREAK (Damaged - Voided by Lab)	-			
7708054	MAIN GYM	1.0			
7708675	MAIN GYM	1.0			
7704623	* PRICIPAL (Tampered)	< 0.3			
7704649	PRINC SECRET	< 0.3			
7708098	SIG PROG OFF	0.6			

	Radon Testing Results				
Winston Churchill HS Test Period: 01/04/16-01/07/16					
7708089	D (102)	< 0.3			
7712868	D (119)	0.7			
7708650	D (123)	0.9			
7708665	D (124A)	0.6			
7708699	D (130A)	< 0.3			
7708041	D (132)	0.5			
7708075	D (140)	0.7			
7704696	D (144)	< 0.3			
7708079	D (145)	< 0.3			
7704641	D (152)	< 0.3			
7712877	D (244)	< 0.3			
7712893	D (256)	< 0.3			
7712873	D (258)	< 0.3			
7712876	D (270)	0.6			
7712884	D (274)	0.6			
7712874	D (276)	< 0.3			
7706686	D (MAIN GYM)	1.1			
7708695	FB (117)	< 0.3			
7708684	FB (124)	< 0.3			
7708094	FB (136)	< 0.3			
7706689	FB (156)	< 0.3			
7712890	FB (278)	< 0.3			
7710051	OB (0)	< 0.3			
7710052	OB (0)	< 0.3			

Table Note:
* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7710051	0	2016-01-04 @ 10:00 am	2016-01-07 @ 2:00 pm	< 0.3	2016-01-11
7710052	0	2016-01-04 @ 10:00 am	2016-01-07 @ 2:00 pm	< 0.3	2016-01-11
7704654	100	2016-01-04 @ 10:00 am	2016-01-07 @ 9:00 am	0.6 ± 0.3	2016-01-12
7704626	100B	2016-01-04 @ 10:00 am	2016-01-07 @ 9:00 am	0.7 ± 0.3	2016-01-12
7708088	102	2016-01-04 @ 12:00 pm	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7708089	102	2016-01-04 @ 12:00 pm	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7706467	105	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	0.5 ± 0.3	2016-01-12
7708092	106	2016-01-04 @ 12:00 pm	2016-01-07 @ 9:00 am	< 0.3	2016-01-11
7706224	107	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7706235	107A	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7704680	107B	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	0.5 ± 0.3	2016-01-11
7704679	107C	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	1.0 ± 0.3	2016-01-11
7706471	107D	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7704653	107E	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	1.0 ± 0.4	2016-01-12
7704604	107F	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7706533	107G	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	0.8 ± 0.3	2016-01-12
7706529	107GA	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	0.6 ± 0.4	2016-01-12
7706520	107H	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-11
7704619	107I	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7704667	107J	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	0.8 ± 0.3	2016-01-11
7708019	110	2016-01-04 @ 12:00 pm	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7705068	111	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7708093	112	2016-01-04 @ 12:00 pm	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7708091	114	2016-01-04 @ 12:00 pm	2016-01-07 @ 9:00 am	0.6 ± 0.3	2016-01-12
7706209	115A	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	0.7 ± 0.3	2016-01-12
7704603	115B	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7704627	115D	2016-01-04 @ 10:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7708651	116	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7708666	117	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.7 ± 0.3	2016-01-12
7708695	117	2016-01-04 @ 1:00 pm	2016-01-07 @ 10:00 am	< 0.3	2016-01-12
7708668	118	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7712869	119	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-11
7712868	119	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.7 ± 0.3	2016-01-12
7706230	120	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-12
7712864	121	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.7 ± 0.3	2016-01-11
7706223	122	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-12
7706675	123	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.8 ± 0.4	2016-01-12

Kit#	Room Id	Started	Ended	pCi/L	Analyzed
7708650	123	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.9 ± 0.3	2016-01-12
7708684	124	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7712871	124	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7708665	124A	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-12
7708649	124A	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7708680	125	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-12
7704282	126	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-12
7708058	128A	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	0.9 ± 0.4	2016-01-12
7708061	128A.4	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	2.0 ± 0.4	2016-01-12
7708067	128B	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	0.6 ± 0.3	2016-01-12
7708062	128B.3	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	1.1 ± 0.3	2016-01-11
7708064	128C	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	1.9 ± 0.4	2016-01-11
7708057	129	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	0.8 ± 0.4	2016-01-12
7708698	130A	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7708699	130A	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7714986	130B	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.7 ± 0.3	2016-01-12
7708041	132	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	0.5 ± 0.3	2016-01-11
7708099	132	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-12
7708040	132A	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	1.1 ± 0.4	2016-01-12
7708065	133	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	0.6 ± 0.3	2016-01-12
7708100	134	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7708066	135	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	0.8 ± 0.3	2016-01-12
7708094	136	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7708097	136	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7708068	137A	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	1.0 ± 0.4	2016-01-12
7708078	137C	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	1.1 ± 0.4	2016-01-12
7708081	137D	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	1.3 ± 0.4	2016-01-12
7708095	138	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7705052	138A	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7708096	138B	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-12
7708090	138C	2016-01-04 @ 12:00 pm	2016-01-07 @ 10:00 am	< 0.3	2016-01-12
7708074	140	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7708075	140	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	0.7 ± 0.3	2016-01-12
7706679	140B	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7708072	141	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	0.6 ± 0.3	2016-01-12
7708080	142	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7708084	142A	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-12

Kit#	Room Id	Started	Ended	pCi/L	Analyzed
7708086	142B	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7708082	142C	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7708643	143	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.0 ± 0.4	2016-01-12
7704694	144	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7704696	144	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7706466	144C	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7706584	144D	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7704624	144E	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7704006	144F	2016-01-04 @ 9:00 am	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7706667	144G	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-11
7706210	144H	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7708079	145	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7708085	145	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7705134	146	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-12
7708083	147	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	0.7 ± 0.3	2016-01-12
7708087	147A	2016-01-04 @ 12:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-11
7704254	148	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	1.0 ± 0.3	2016-01-11
7704640	149	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	1.7 ± 0.4	2016-01-11
7706688	150	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-11
7704255	151	2016-01-04 @ 10:00 am	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7704616	152	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	0.9 ± 0.4	2016-01-12
7704641	152	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-12
7708654	153	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-11
7704629	154	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	0.7 ± 0.3	2016-01-12
7706221	155	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-11
7708682	155B	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-12
7708676	155C	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-11
7706685	156	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	0.6 ± 0.3	2016-01-11
7706689	156	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-11
7706219	156	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-12
7706683	156A	2016-01-04 @ 10:00 am	2016-01-07 @ 9:00 am	1.0 ± 0.4	2016-01-12
7708046	158	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-11
7708076	159	2016-01-04 @ 11:00 am	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7708077	161	2016-01-04 @ 11:00 am	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-12
7708071	164B	2016-01-04 @ 12:00 pm	2016-01-07 @ 10:00 am	< 0.3	2016-01-12
7708677	166	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-12
7708674	166A	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	0.6 ± 0.3	2016-01-12

January LABORATORY ANALYSIS 25, REPORT **

Kit#	Room Id	Started	Ended	pCi/L	Analyzed
7708051	166B	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	0.6 ± 0.3	2016-01-12
7708048	166C	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	0.7 ± 0.3	2016-01-12
7708039	166D	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-11
7706684	166E	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-12
7708073	167	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	0.6 ± 0.3	2016-01-11
7708052	168	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	0.6 ± 0.3	2016-01-12
7708020	170	2016-01-04 @ 11:00 am	2016-01-07 @ 11:00 am	0.9 ± 0.3	2016-01-12
7708053	172	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	0.8 ± 0.4	2016-01-12
7708059	174	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	0.9 ± 0.3	2016-01-11
7708063	175	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	< 0.3	2016-01-11
7708060	176	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	0.9 ± 0.3	2016-01-11
7712877	244	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7712878	244	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7712875	253	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.5 ± 0.3	2016-01-11
7712893	256	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7706678	256	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7712873	258	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7712879	258	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.8 ± 0.3	2016-01-12
7712881	262	2016-01-04 @ 2:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-12
7712876	270	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-11
7712883	270	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7712884	274	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.6 ± 0.3	2016-01-12
7712885	274	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	0.7 ± 0.3	2016-01-12
7712874	276	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7712882	276	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7712889	278	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-11
7712890	278	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	< 0.3	2016-01-12
7704666	ADMIN WORK RM	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12
7708036	AUDITORIUM	2016-01-04 @ 11:00 am	2016-01-07 @ 12:00 pm	0.6 ± 0.3	2016-01-12
7708056	AUDITORIUM	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	0.6 ± 0.3	2016-01-12
7708069	AUX GYM	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	1.1 ± 0.3	2016-01-12
7708070	AUX GYM	2016-01-04 @ 11:00 am	2016-01-07 @ 10:00 am	1.3 ± 0.4	2016-01-12
7706686	MAIN GYM	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	1.1 ± 0.3	2016-01-11
7708054	MAIN GYM	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	1.0 ± 0.3	2016-01-11
7708675	MAIN GYM	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	1.0 ± 0.3	2016-01-11
7704623	PRICIPAL	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-11
7704649	PRINC SECRET	2016-01-04 @ 9:00 am	2016-01-07 @ 9:00 am	< 0.3	2016-01-12

Januar* LABORATORY ANALYSIS 25, REPORT **

Radon test result report for:
WINSTON CHURCHILL HS
1

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7708098	SIG PROG OFF	2016-01-04 @ 12:00 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 LABORATORY ANALYSIS 25, REPORT **

Radon test result report for:
WINSTON CHURCHILL HS
MAIN

Kit#	Room Id	Started	Ended	pCi/L	Analyzed
7708644	CUST BREAK	2016-01-04 @ 10:00 am	2016-01-07 @ 10:00 am	???? IF4	2016-01-12

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

January LABORATORY ANALYSIS 15, REPORT **

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

7708200 TRANSIT 1 2015-12 7708190 TRANSIT 10 2015-12 7708189 TRANSIT 11 2015-12 7708181 TRANSIT 12 2015-12 7708188 TRANSIT 13 2015-12 7708186 TRANSIT 14 2015-12 7708186 TRANSIT 15 2015-12 7708185 TRANSIT 16 2015-12 7708184 TRANSIT 17 2015-12 7708182 TRANSIT 18 2015-12 7708187 TRANSIT 18 2015-12 7708180 TRANSIT 2 2015-12 7708181 TRANSIT 20 2015-12 7708183 TRANSIT 21 2015-12 7708184 TRANSIT 22 2015-12 7708178 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708176 TRANSIT 25 2015-12 7708176 TRANSIT 26 2015-12 7708177 TRANSIT 27 2015-12 7708173 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708175 TRANSIT 29 2015-12 7708175 TRANSIT 29 2015-12 7708176 TRANSIT 29 2015-12 7708177 TRANSIT 29 2015-12 7708178 TRANSIT 29 2015-12 7708179 TRANSIT 29 2015-12 7708170 TRANSIT 29 2015-12 7708171 TRANSIT 29 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm 2-18 @ 12:00 pm	Ended 2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm	< 0.3 < 0.3 < 0.3 < 0.3 < 0.3 < 0.3	Analyzed 2015-12-23 2015-12-23 2015-12-23 2015-12-23 2015-12-23 2015-12-23 2015-12-23
7708200 TRANSIT 1 2015-12 7708190 TRANSIT 10 2015-12 7708189 TRANSIT 11 2015-12 7708191 TRANSIT 12 2015-12 7708181 TRANSIT 13 2015-12 7708188 TRANSIT 14 2015-12 7708186 TRANSIT 15 2015-12 7708185 TRANSIT 16 2015-12 7708184 TRANSIT 17 2015-12 7708182 TRANSIT 18 2015-12 7708187 TRANSIT 18 2015-12 7708180 TRANSIT 2 2015-12 7708181 TRANSIT 20 2015-12 7708183 TRANSIT 21 2015-12 7708184 TRANSIT 22 2015-12 7708175 TRANSIT 24 2015-12 7708176 TRANSIT 25 2015-12 7708177 TRANSIT 26 2015-12 7708174 TRANSIT 27 2015-12 7708175 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708176 TRANSIT 29 2015-12 7708177 TRANSIT 29 2015-12 7708178 TRANSIT 29 2015-12 7708179 TRANSIT 27 2015-12 7708170 TRANSIT 28 2015-12 7708171 TRANSIT 29 2015-12 7708172 TRANSIT 30 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm 2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm	< 0.3 < 0.3 < 0.3 < 0.3 < 0.3 < 0.3	2015-12-23 2015-12-23 2015-12-23 2015-12-23 2015-12-23 2015-12-23
7708190 TRANSIT 10 2015-12 7708189 TRANSIT 11 2015-12 7708191 TRANSIT 12 2015-12 7708188 TRANSIT 13 2015-12 7708197 TRANSIT 14 2015-12 7708186 TRANSIT 15 2015-12 7708185 TRANSIT 16 2015-12 7708184 TRANSIT 17 2015-12 7708182 TRANSIT 18 2015-12 7708187 TRANSIT 18 2015-12 7708199 TRANSIT 2 2015-12 7708180 TRANSIT 20 2015-12 7708183 TRANSIT 21 2015-12 7708179 TRANSIT 22 2015-12 7708179 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708170 TRANSIT 25 2015-12 7708171 TRANSIT 26 2015-12 7708172 TRANSIT 27 2015-12 7708173 TRANSIT 27 2015-12 7708174 TRANSIT 27 2015-12 7708175 TRANSIT 29 2015-12 7708176 TRANSIT 29 2015-12 7708177 TRANSIT 29 2015-12 7708178 TRANSIT 29 2015-12 7708179 TRANSIT 29 2015-12 7708170 TRANSIT 29 2015-12 7708171 TRANSIT 29 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm 2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm	< 0.3 < 0.3 < 0.3 < 0.3 < 0.3	2015-12-23 2015-12-23 2015-12-23 2015-12-23 2015-12-23
7708189 TRANSIT 11 2015-12 7708191 TRANSIT 12 2015-12 7708188 TRANSIT 13 2015-12 7708197 TRANSIT 14 2015-12 7708186 TRANSIT 15 2015-12 7708185 TRANSIT 16 2015-12 7708184 TRANSIT 17 2015-12 7708182 TRANSIT 18 2015-12 7708187 TRANSIT 18 2015-12 7708199 TRANSIT 2 2015-12 7708180 TRANSIT 20 2015-12 7708183 TRANSIT 21 2015-12 7708178 TRANSIT 22 2015-12 7708179 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708170 TRANSIT 25 2015-12 7708171 TRANSIT 26 2015-12 7708172 TRANSIT 27 2015-12 7708173 TRANSIT 28 2015-12 7708174 TRANSIT 29 2015-12 7708175 TRANSIT 29 2015-12 7708176 TRANSIT 29 2015-12 7708177 TRANSIT 29 2015-12 7708178 TRANSIT 29 2015-12 7708179 TRANSIT 27 2015-12 7708170 TRANSIT 28 2015-12 7708171 TRANSIT 29 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm 2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm	< 0.3 < 0.3 < 0.3 < 0.3 < 0.3	2015-12-23 2015-12-23 2015-12-23 2015-12-23
7708191 TRANSIT 12 2015-12 7708188 TRANSIT 13 2015-12 7708197 TRANSIT 14 2015-12 7708186 TRANSIT 15 2015-12 7708185 TRANSIT 16 2015-12 7708184 TRANSIT 17 2015-12 7708182 TRANSIT 18 2015-12 7708187 TRANSIT 18 2015-12 7708199 TRANSIT 2 2015-12 7708180 TRANSIT 20 2015-12 7708183 TRANSIT 21 2015-12 7708178 TRANSIT 22 2015-12 7708179 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708170 TRANSIT 25 2015-12 7708171 TRANSIT 25 2015-12 7708172 TRANSIT 26 2015-12 7708173 TRANSIT 27 2015-12 7708174 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708176 TRANSIT 29 2015-12 7708177 TRANSIT 29 2015-12 7708177 TRANSIT 29 2015-12 7708178 TRANSIT 29 2015-12 7708179 TRANSIT 29 2015-12 7708170 TRANSIT 29 2015-12 7708171 TRANSIT 29 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm 2-18 @ 12:00 pm 2-18 @ 12:00 pm 2-18 @ 12:00 pm 2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm	< 0.3 < 0.3 < 0.3	2015-12-23 2015-12-23
7708188 TRANSIT 13 2015-12 7708197 TRANSIT 14 2015-12 7708186 TRANSIT 15 2015-12 7708185 TRANSIT 16 2015-12 7708184 TRANSIT 17 2015-12 7708182 TRANSIT 18 2015-12 7708187 TRANSIT 18 2015-12 7708199 TRANSIT 2 2015-12 7708180 TRANSIT 20 2015-12 7708183 TRANSIT 21 2015-12 7708178 TRANSIT 22 2015-12 7708179 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708170 TRANSIT 25 2015-12 7708171 TRANSIT 26 2015-12 7708172 TRANSIT 27 2015-12 7708173 TRANSIT 27 2015-12 7708174 TRANSIT 27 2015-12 7708175 TRANSIT 29 2015-12 7708176 TRANSIT 29 2015-12 7708177 TRANSIT 29 2015-12 7708178 TRANSIT 29 2015-12 7708179 TRANSIT 30 2015-12	2-18 @ 12:00 pm 2-18 @ 12:00 pm 2-18 @ 12:00 pm 2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm	< 0.3 < 0.3 < 0.3	2015-12-23
7708186 TRANSIT 15 2015-12 7708185 TRANSIT 16 2015-12 7708184 TRANSIT 17 2015-12 7708182 TRANSIT 18 2015-12 7708187 TRANSIT 18 2015-12 7708199 TRANSIT 2 2015-12 7708181 TRANSIT 20 2015-12 7708180 TRANSIT 21 2015-12 7708183 TRANSIT 22 2015-12 7708178 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708177 TRANSIT 25 2015-12 7708176 TRANSIT 26 2015-12 7708177 TRANSIT 27 2015-12 7708178 TRANSIT 27 2015-12 7708179 TRANSIT 27 2015-12 7708170 TRANSIT 27 2015-12 7708171 TRANSIT 28 2015-12 7708172 TRANSIT 29 2015-12 7708173 TRANSIT 29 2015-12 7708174 TRANSIT 29 2015-12 7708175 TRANSIT 30 2015-12	2-18 @ 12:00 pm 2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm	< 0.3	
7708186 TRANSIT 15 2015-12 7708185 TRANSIT 16 2015-12 7708184 TRANSIT 17 2015-12 7708182 TRANSIT 18 2015-12 7708187 TRANSIT 18 2015-12 7708199 TRANSIT 2 2015-12 7708181 TRANSIT 20 2015-12 7708180 TRANSIT 21 2015-12 7708183 TRANSIT 22 2015-12 7708178 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708177 TRANSIT 25 2015-12 7708176 TRANSIT 26 2015-12 7708177 TRANSIT 27 2015-12 7708178 TRANSIT 27 2015-12 7708179 TRANSIT 27 2015-12 7708170 TRANSIT 27 2015-12 7708171 TRANSIT 28 2015-12 7708172 TRANSIT 29 2015-12 7708173 TRANSIT 29 2015-12 7708174 TRANSIT 29 2015-12 7708175 TRANSIT 30 2015-12	2-18 @ 12:00 pm 2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm		2015 12 22
7708185 TRANSIT 16 2015-12 7708184 TRANSIT 17 2015-12 7708182 TRANSIT 18 2015-12 7708187 TRANSIT 18 2015-12 7708199 TRANSIT 2 2015-12 7708180 TRANSIT 20 2015-12 7708183 TRANSIT 21 2015-12 7708178 TRANSIT 22 2015-12 7708179 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708170 TRANSIT 25 2015-12 7708171 TRANSIT 26 2015-12 7708172 TRANSIT 27 2015-12 7708173 TRANSIT 27 2015-12 7708174 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708176 TRANSIT 29 2015-12 7708177 TRANSIT 29 2015-12 7708178 TRANSIT 29 2015-12 7708179 TRANSIT 30 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	ZU13-1Z-Z3
7708182 TRANSIT 18 2015-12 7708187 TRANSIT 18 2015-12 7708199 TRANSIT 2 2015-12 7708181 TRANSIT 20 2015-12 7708180 TRANSIT 21 2015-12 7708183 TRANSIT 22 2015-12 7708178 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708177 TRANSIT 25 2015-12 7708176 TRANSIT 26 2015-12 7708174 TRANSIT 27 2015-12 7708175 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708198 TRANSIT 3 2015-12 7708172 TRANSIT 3 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm		2015-12-23
7708187 TRANSIT 18 2015-12 7708199 TRANSIT 2 2015-12 7708181 TRANSIT 20 2015-12 7708180 TRANSIT 21 2015-12 7708183 TRANSIT 22 2015-12 7708178 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708177 TRANSIT 25 2015-12 7708174 TRANSIT 26 2015-12 7708174 TRANSIT 27 2015-12 7708175 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708198 TRANSIT 3 2015-12 7708172 TRANSIT 30 2015-12			< 0.3	2015-12-23
7708199 TRANSIT 2 2015-12 7708181 TRANSIT 20 2015-12 7708180 TRANSIT 21 2015-12 7708183 TRANSIT 22 2015-12 7708178 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708177 TRANSIT 25 2015-12 7708176 TRANSIT 26 2015-12 7708174 TRANSIT 27 2015-12 7708173 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708198 TRANSIT 3 2015-12 7708172 TRANSIT 3 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708181 TRANSIT 20 2015-12 7708180 TRANSIT 21 2015-12 7708183 TRANSIT 22 2015-12 7708178 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708177 TRANSIT 25 2015-12 7708176 TRANSIT 26 2015-12 7708174 TRANSIT 27 2015-12 7708173 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708176 TRANSIT 29 2015-12 7708177 TRANSIT 29 2015-12 7708178 TRANSIT 30 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708180 TRANSIT 21 2015-12 7708183 TRANSIT 22 2015-12 7708178 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708177 TRANSIT 25 2015-12 7708176 TRANSIT 26 2015-12 7708174 TRANSIT 27 2015-12 7708173 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708198 TRANSIT 3 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708183 TRANSIT 22 2015-12 7708178 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708177 TRANSIT 25 2015-12 7708176 TRANSIT 26 2015-12 7708174 TRANSIT 27 2015-12 7708173 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708198 TRANSIT 3 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708178 TRANSIT 23 2015-12 7708179 TRANSIT 24 2015-12 7708177 TRANSIT 25 2015-12 7708176 TRANSIT 26 2015-12 7708174 TRANSIT 27 2015-12 7708173 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708198 TRANSIT 3 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708179 TRANSIT 24 2015-12 7708177 TRANSIT 25 2015-12 7708176 TRANSIT 26 2015-12 7708174 TRANSIT 27 2015-12 7708173 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708198 TRANSIT 3 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708177 TRANSIT 25 2015-12 7708176 TRANSIT 26 2015-12 7708174 TRANSIT 27 2015-12 7708173 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708198 TRANSIT 3 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708176 TRANSIT 26 2015-12 7708174 TRANSIT 27 2015-12 7708173 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708198 TRANSIT 3 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708174 TRANSIT 27 2015-12 7708173 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708198 TRANSIT 3 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708173 TRANSIT 28 2015-12 7708175 TRANSIT 29 2015-12 7708198 TRANSIT 3 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708175 TRANSIT 29 2015-12 7708198 TRANSIT 3 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708198 TRANSIT 3 2015-12 7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708172 TRANSIT 30 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
	, 10 € 12.00 hiii	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708194 TRANSIT 5 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708196 TRANSIT 6 2015-12	-		< 0.3	2015-12-23
7708193 TRANSIT 7 2015-12	2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm	< 0.3	2015-12-23
7708192 TRANSIT 8 2015-12	2-18 @ 12:00 pm 2-18 @ 12:00 pm	2015-12-21 @ 12:00 pm 2015-12-21 @ 12:00 pm		2015-12-23
7708195 TRANSIT 9 2015-12	2-18 @ 12:00 pm 2-18 @ 12:00 pm 2-18 @ 12:00 pm	•	< 0.3	

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

December LABORATORY ANALYSIS 23, REPORT **

Spike Sample Laboratory Results

Radon test result report for: MCPS

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

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies.	Inc. Job Number 173224
	pCi/L Rel. Hum <u>49.6</u> % Temp. <u>69.9</u>
Date Start: 12/18/15 Date Stop: 12/21/5	Date Start: Date Stop:
Time Start: <u>0929</u> Time Stop: <u>0929</u>	Time Start: Time Stop:
Device No.'s: 7705132,7766208	Device No.'s:
7706211,7706366,	
7706380, 7706381	
F3 Loft	
Date Start: Date Stop:	Date Start: Date Stop:
Time Start: Time Stop:	Time Start: Time Stop:
Device No.'s:	Device No.'s:
	-
1	
Date Start: Date Stop:	Date Start: Date Stop:
Time Start: Time Stop:	Time Start: Time Stop:
Device No.'s:	Device No.'s:

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



Engineers • Planners • Scientists • Construction Managers

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

Chain of Custody

Project Name: MCPS Radon Phase IV

Name of Schools:

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

	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