



MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Montgomery Blair High School
Date of Test Report	05/27/2022
Round of Testing	Initial Follow-up Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	8
# Rooms \geq 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	0.8 pCi/L

Project Status

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



May 27, 2022

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

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

Location: Montgomery Blair High School
51 University Blvd. East
Silver Spring, MD 20901

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 Montgomery Blair High School, 51 University Blvd. East, Silver Spring, MD 20901 (subject site).

Scope of Services:

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

KCI visited the site on March 28, 2022 and deployed ten (10) activated charcoal (AC) radon test kits. KCI deployed radon test kits in all frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

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

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

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

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

KCI returned to the site on March 31, 2022 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

These tests represent:

- Follow-up to initial testing.

These tests were conducted to:

- Evaluate radon concentrations at the facility.

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

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the mid 20°Fs and high temperatures ranged from the low 50°Fs to the mid 70°Fs. Maximum sustained winds ranged from 0-33 miles per hour. Average humidity was around 47% with 0.23 inches of precipitation (rain) was recorded during testing period.

Results:

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

The results of the radon test analysis indicated the following:

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

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

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

Sincerely,



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

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

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Check, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

OC- Quality Control

Table 1- Radon Testing Results		
Montgomery Blair HS RT		
Test Period: 03/28/2022 - 03/31/2022		
Kit Number	Room / Area	Result
11140018	5	0.8
11140019	5	< 0.3
11140020	5	0.8
11140005	122	< 0.3
11140001	149	< 0.3
11140006	152	< 0.3
11140029	158	0.6
11140016	170	< 0.3
11140017	177	0.7
11140034	PCC	< 0.3

Table 2- Radon Testing Results			
Montgomery Blair HS RT			
Test Period: 03/28/2022 - 03/31/2022			
Kit Number	QC Type	Room / Area	Result
11140018	D	5	0.8
11140019	FB	5	< 0.3
11139883	OB	OFFICE BLANK	< 0.3
11139841	TB	TRAVEL BLANK	< 0.3

Summary of Missed Locations		
Montgomery Blair HS RT		
Test Period: 03/28/22 - 03/31/22		
Kit Number	Room/Area	Result
	NA	

Summary of Missing, Compromised and ≥ 4 piC/L Tests		
Montgomery Blair HS RT		
Test Period: 03/28/22 - 03/31/22		
Kit Number	Room/Area	Result
	NA	

Table Note:
* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

April 4, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
MONTGOMERY BLAIR HS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11140005	122	2022-03-28 @ 12:00 pm	2022-03-31 @ 12:00 pm	< 0.3	2022-04-04
11140001	149	2022-03-28 @ 12:00 pm	2022-03-31 @ 11:00 am	< 0.3	2022-04-04
11140006	152	2022-03-28 @ 12:00 pm	2022-03-31 @ 11:00 am	< 0.3	2022-04-04
11140029	158	2022-03-28 @ 12:00 pm	2022-03-31 @ 11:00 am	0.6 ± 0.3	2022-04-04
11140016	170	2022-03-28 @ 12:00 pm	2022-03-31 @ 11:00 am	< 0.3	2022-04-04
11140017	177	2022-03-28 @ 12:00 pm	2022-03-31 @ 11:00 am	0.7 ± 0.3	2022-04-04
11140018	5	2022-03-28 @ 12:00 pm	2022-03-31 @ 11:00 am	0.8 ± 0.3	2022-04-04
11140019	5	2022-03-28 @ 12:00 pm	2022-03-31 @ 11:00 am	< 0.3	2022-04-04
11140020	5	2022-03-28 @ 12:00 pm	2022-03-31 @ 11:00 am	0.8 ± 0.3	2022-04-04
11140034	PCC	2022-03-28 @ 12:00 pm	2022-03-31 @ 11:00 am	< 0.3	2022-04-04

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies, Inc. Job Number 204620

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

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

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

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

11139367, 11139368, 11139371, _____

11139710, 11139717 _____

E3 light

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

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

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

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

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

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

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

March 30, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

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

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

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon – March 2022 Schools – Retesting

Name of Schools:

1. Rock Terrace School
2. S. Christa McAuliffe ES
3. Cedar Grove ES
4. DuFief ES
5. Emory Grove Center
6. Gaithersburg ES
7. Gaithersburg MS
8. Jones Lane ES
9. Rachel Carson ES
10. Rosemont ES
11. Shady Grove MS
12. Summit Hall ES
13. Albert Einstein HS
14. Eastern MS
15. Montgomery Blair HS
16. Newport Mill MS
17. Strawberry Knoll ES

	Date	Initials
Radon Test Kits Deployed	03/28/2022	BMM
Radon Test Kits Collected	03/31/2022	BMM
Radon Test Kits Shipped to Lab*	04/01/2022	BMM
Radon Test Kits Received by Lab*	04/04/2022	BMM

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



MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Montgomery Blair High School
Date of Test Report	4/26/2022
Round of Testing	Initial Follow-up Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	168
# Rooms \geq 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	2.8 pCi/L

Project Status:

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



April 26, 2022

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

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

Location: Montgomery Blair High School
51 University Blvd.
Silver Spring, MD 20901

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 Montgomery Blair HS, located at 51 University Blvd. Silver Spring, MD 20901 (subject site).

Scope of Services:

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

KCI visited the site on March 1, 2022 and deployed one hundred and ninety four (194) activated charcoal (AC) radon test kits. KCI deployed radon test kits in all frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

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

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

KCI returned to the site on March 4, 2022 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a

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

Evaluation of Testing Conditions:

These tests represent:

- Follow-up to biennial post-mitigation testing.

These tests were conducted to:

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

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

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the 20s and high temperatures ranged from the high 50s to the low 60s Fahrenheit. Maximum sustained winds ranged from 9-17 miles per hour. Average humidity was around 40% with 0 inches of precipitation (rain) was recorded during testing period.

Results:

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

The results of the radon test analysis indicated the following:

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

Quality Control Samples	
Results of Blank Canisters:	The office blanks, and lab transit blanks had test results of

	less than the laboratory detection limit of 0.3 pCi/L.
Adequate Laboratory Precision?	Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved.
Spike Sample Analysis:	The Spike Sample analysis results indicate the laboratory is operating within statistical control limits.

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

Sincerely,



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

Attachments: A- Floor Plan with Test Locations
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ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Check, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

OC- Quality Control

Table 1- Radon Testing Results		
Montgomery Blair HS		
Test Period: 03/01/2022 - 03/04/2022		
Kit Number	Room / Area	Result
11133951	1	0.8
11133942	2	1.1
11133943	2	1.0
11133952	3	1.0
11133919	4	0.8
11133941	6	1.0
11133950	7	0.6
11133944	9	0.8
11133936	11	0.5
11133935	13	1.1
11133932	14	0.9
11133911	16	0.6
11134131	100	< 0.3
11134129	101	< 0.3
11134135	102	< 0.3
11134132	103	< 0.3
11133174	110	< 0.3
11133172	111	0.8
11133175	112	< 0.3
11133152	114	< 0.3
11133148	116	< 0.3
11133149	116	0.5
11133163	117	< 0.3
11133145	119	0.6
11133178	120	< 0.3
11133179	121	< 0.3
11133180	122	0.6
11133129	123	< 0.3
11133151	124	< 0.3
11133150	125	< 0.3
11133136	126	0.6
11133142	128	< 0.3
11133143	128	< 0.3
11133144	128	0.6
11133157	130	0.7
11133146	131	< 0.3
11133154	132	< 0.3
11133165	133	0.8
11133159	134	0.9
11133166	134	0.7
11133160	135	< 0.3
11133162	136	< 0.3

Table 1- Radon Testing Results		
Montgomery Blair HS		
Test Period: 03/01/2022 - 03/04/2022		
Kit Number	Room / Area	Result
11133167	137	< 0.3
11133161	138	< 0.3
11133115	140	< 0.3
11133128	141	0.6
11133132	141	0.6
11133118	142	0.6
11133117	143	0.8
11133130	144	< 0.3
11133116	145	< 0.3
11133123	145	0.7
11133124	145	0.7
11133122	146	< 0.3
11133121	147	< 0.3
11133127	148	< 0.3
11133131	151	< 0.3
11133139	152	< 0.3
11133133	153	< 0.3
11133103	154	1.1
11133101	155	< 0.3
11133104	155	< 0.3
11133105	155	0.8
11133102	156	2.8
11133106	157	0.7
11134107	160	0.7
11134108	161	0.8
11134106	162	0.6
11134116	163	< 0.3
11134115	164	0.9
11134123	165	0.5
11133112	166	0.6
11133111	167	< 0.3
11133114	167	1.0
11133113	168	0.8
11133107	171	0.7
11133108	172	0.9
11133109	173	< 0.3
11133110	174	0.8
11133906	217	0.5
11133908	227	< 0.3
11133913	263	< 0.3
11133916	267	< 0.3
11133937	11 OFFICE	1.2

Table 1- Radon Testing Results		
Montgomery Blair HS		
Test Period: 03/01/2022 - 03/04/2022		
Kit Number	Room / Area	Result
11133155	121 OFFICE	< 0.3
11133137	128 OFFICE 1	0.6
11133153	128 OFFICE 2	< 0.3
11133138	128 OFFICE 3	< 0.3
11133934	13 KILN	0.6
11133158	130 OFFICE	< 0.3
11133147	133 OFFICE	0.8
11133903	14 OFFICE	0.5
11133924	14 PRACTICE A	0.7
11133931	14 PRACTICE A	0.7
11133920	14 PRACTICE B	0.7
11133923	14 PRACTICE B	< 0.3
11133925	14 PRACTICE C	< 0.3
11133926	14 PRACTICE D	1.0
11133119	140 OFFICE 2	< 0.3
11133120	140 OFFICE 2	< 0.3
11133135	146 OFFICE	0.5
11133933	14A	0.6
11133140	153 OFFICE	< 0.3
11133141	153 OFFICE 2	< 0.3
11133904	16 OFFICE	0.7
11133917	16 PRACTICE A	0.6
11133909	16 PRACTICE B	0.8
11133910	16 PRACTICE C	1.0
11133912	16A	0.7
11133918	16A	0.8
11133915	238 OFFICE	< 0.3
11133914	240 ASST PRINCIPAL	< 0.3
11133938	3 OFFICE	0.6
11133907	340 SECRETARY LOPEZ	< 0.3
11133921	4 OFFICE	< 0.3
11133949	7 OFFICE	0.6
11133189	AGBEDINA	< 0.3
11134151	AP	< 0.3
11134138	ATT	< 0.3
11134145	ATT	0.5
11134128	ATT B	< 0.3
11133901	AUDITORIUM	1.0
11133905	AUDITORIUM	0.7
11134199	BREAKROOM	< 0.3
11134137	BSM	< 0.3
11133181	BURWELL	< 0.3

Table 1- Radon Testing Results		
Montgomery Blair HS		
Test Period: 03/01/2022 - 03/04/2022		
Kit Number	Room / Area	Result
11134136	BUSINESS ADMIN	< 0.3
11134130	COMMUNICATION	< 0.3
11133200	CONFERENCE	< 0.3
11133191	CONFERENCE A	< 0.3
11134103	CONFERENCE A	0.5
11134141	CONFERENCE B	0.6
11133192	CONTRERAS	< 0.3
11133187	COU BACK ROOM	< 0.3
11133195	COU BACK ROOM	< 0.3
11133198	COU BACK ROOM	< 0.3
11133176	COUNSELOR	< 0.3
11133183	COUNSELOR	< 0.3
11133185	COUNSELOR	< 0.3
11133902	DARKROOM	1.0
11134200	EDITING A	< 0.3
11134113	EDITING B	< 0.3
11134114	EDITING B	< 0.3
11134119	EDITING B	0.6
11134121	EDITING C	< 0.3
11134176	EDITING D	< 0.3
11134143	EDITING E	1.5
11134125	EQUIPMENT STORAGE	1.6
11133125	EXAM ROOM	< 0.3
11134134	FINANCIAL	< 0.3
11133188	GUIDANCE	< 0.3
11133168	GYM 1	< 0.3
11133170	GYM 1	< 0.3
11133156	GYM 2	< 0.3
11133164	GYM 2	0.7
11133169	GYM 2	< 0.3
11133177	GYM 2	< 0.3
11134124	HC EDITING	< 0.3
11134122	HEAD IN ROOM	1.0
11134105	KITCHEN OFFICE	< 0.3
11134152	MAIN OFFICE	< 0.3
11133927	MAKEUP ROOM	0.7
11133928	MAKEUP ROOM	< 0.3
11134112	MC	0.6
11134142	MC	0.6
11134117	MC OFFICE	0.7
11134111	MC OFFICE 2	< 0.3
11134118	MC OFFICE 2	0.8

Table 1- Radon Testing Results		
Montgomery Blair HS		
Test Period: 03/01/2022 - 03/04/2022		
Kit Number	Room / Area	Result
11133126	NURSE	< 0.3
11133182	OLESZEWSKI	< 0.3
11133196	OVERTON	< 0.3
11133194	POOLE	< 0.3
11134140	PRINCIPAL	< 0.3
11134144	PRINCIPAL SECRETARY	< 0.3
11133186	PUTNEY	< 0.3
11134120	RADIO	< 0.3
11133190	REDDICKS	0.7
11133193	REGISTRAR	< 0.3
11133134	REST AREA	< 0.3
11133199	RUSSELL	< 0.3
11134102	SAC	< 0.3
11134109	SAC	0.5
11134133	SECURITY	< 0.3
11133184	SIMS	< 0.3
11134101	STAFF DINING	0.5
11134104	STAFF DINING	< 0.3
11134110	STAFF DINING	< 0.3
11133929	STAGE	0.9
11133930	STAGE	1.3
11133958	STAGE SHOP	0.9
11134127	TAPE	< 0.3
11133197	WR	0.5
11133171	WRESTLING	0.7
11133173	WRESTLING	< 0.3

Table 2- Radon Testing Results			
Montgomery Blair HS			
Test Period: 03/01/2022 - 03/04/2022			
Kit Number	QC Type	Room / Area	Result
11133918	D	16A	0.8
11133924	D	14 Practice A	0.7
11133923	FB	14 Practice B	< 0.3
11133942	D	2	1.1
11133929	D	Stage	0.9
11133928	FB	Makeup Room	< 0.3
11134138	D	Att	< 0.3
11134113	D	Editing b	< 0.3
11134114	FB	Editing b	< 0.3
11134118	D	MC office 2	0.8
11134101	D	Staff dining	0.5
11134104	FB	Staff Dining	< 0.3
11133114	D	167	1.0
11133105	D	155	0.8
11133104	FB	155	< 0.3
11133120	D	140 office 2	< 0.3
11133124	D	145	0.7
11133116	FB	145	< 0.3
11133166	D	134	0.7
11133144	D	128	0.6
11133143	FB	128	< 0.3
11133148	D	116	< 0.3
11133164	D	Gym 2	0.7
11133156	FB	Gym 2	< 0.3
11133183	D	Counselor	< 0.3
11133198	D	COU back room	< 0.3
11133187	FB	COU back room	< 0.3
11130861	OB	OFFICE BLANK	< 0.3
11130854	TB	TRAVEL BLANK	< 0.3

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11133951	1	2022-03-01 @ 1:00 pm	2022-03-04 @ 8:00 am	0.8 ± 0.3	2022-03-07
11133936	11	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.5 ± 0.3	2022-03-07
11133937	11 OFFICE	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	1.2 ± 0.3	2022-03-07
11133935	13	2022-03-01 @ 1:00 pm	2022-03-04 @ 8:00 am	1.1 ± 0.3	2022-03-07
11133934	13 KILN	2022-03-01 @ 1:00 pm	2022-03-04 @ 8:00 am	0.6 ± 0.3	2022-03-07
11133932	14	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.9 ± 0.3	2022-03-07
11133903	14 OFFICE	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.5 ± 0.3	2022-03-07
11133924	14 PRACTICE A	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.7 ± 0.3	2022-03-07
11133931	14 PRACTICE A	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.7 ± 0.3	2022-03-07
11133923	14 PRACTICE B	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133920	14 PRACTICE B	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.7 ± 0.3	2022-03-07
11133925	14 PRACTICE C	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133926	14 PRACTICE D	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	1.0 ± 0.3	2022-03-07
11133933	14A	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.6 ± 0.3	2022-03-07
11133911	16	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.6 ± 0.3	2022-03-07
11133904	16 OFFICE	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.7 ± 0.3	2022-03-07
11133917	16 PRACTICE A	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.6 ± 0.3	2022-03-07
11133909	16 PRACTICE B	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.8 ± 0.3	2022-03-07
11133910	16 PRACTICE C	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	1.0 ± 0.3	2022-03-07
11133912	16A	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.7 ± 0.3	2022-03-07
11133918	16A	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.8 ± 0.3	2022-03-07
11133943	2	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	1.0 ± 0.3	2022-03-07
11133942	2	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	1.1 ± 0.3	2022-03-07
11133906	217	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	0.5 ± 0.3	2022-03-07
11133908	227	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133915	238 OFFICE	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133914	240 ASST PRINCIPAL	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133913	263	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133916	267	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133952	3	2022-03-01 @ 1:00 pm	2022-03-04 @ 8:00 am	1.0 ± 0.3	2022-03-07
11133938	3 OFFICE	2022-03-01 @ 1:00 pm	2022-03-04 @ 8:00 am	0.6 ± 0.3	2022-03-07
11133907	340 SECRETARY LOPEZ	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133919	4	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.8 ± 0.3	2022-03-07
11133921	4 OFFICE	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133941	6	2022-03-01 @ 1:00 pm	2022-03-04 @ 8:00 am	1.0 ± 0.3	2022-03-07
11133950	7	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.6 ± 0.3	2022-03-07
11133949	7 OFFICE	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.6 ± 0.3	2022-03-07

March 8, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11133944	9	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	0.8 ± 0.3	2022-03-07
11133905	AUDITORIUM	2022-03-01 @ 11:00 am	2022-03-04 @ 7:00 am	0.7 ± 0.3	2022-03-07
11133901	AUDITORIUM	2022-03-01 @ 11:00 am	2022-03-04 @ 7:00 am	1.0 ± 0.3	2022-03-07
11133902	DARKROOM	2022-03-01 @ 12:00 pm	2022-03-04 @ 8:00 am	1.0 ± 0.3	2022-03-07
11133928	MAKEUP ROOM	2022-03-01 @ 1:00 pm	2022-03-04 @ 7:00 am	< 0.3	2022-03-07
11133927	MAKEUP ROOM	2022-03-01 @ 1:00 pm	2022-03-04 @ 7:00 am	0.7 ± 0.3	2022-03-07
11133930	STAGE	2022-03-01 @ 1:00 pm	2022-03-04 @ 7:00 am	1.3 ± 0.3	2022-03-07
11133929	STAGE	2022-03-01 @ 1:00 pm	2022-03-04 @ 7:00 am	0.9 ± 0.3	2022-03-07
11133958	STAGE SHOP	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	0.9 ± 0.3	2022-03-07

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

Radon test result report for:
MONTGOMERY BLAIR HS
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11134131	100	2022-03-01 @ 8:00 am	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134129	101	2022-03-01 @ 8:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11134135	102	2022-03-01 @ 8:00 am	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134132	103	2022-03-01 @ 9:00 am	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133174	110	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133172	111	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	0.8 ± 0.3	2022-03-07
11133175	112	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133152	114	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133148	116	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133149	116	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	0.5 ± 0.3	2022-03-07
11133163	117	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133145	119	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	0.6 ± 0.3	2022-03-07
11133178	120	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133179	121	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133155	121 OFFICE	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133180	122	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	0.6 ± 0.3	2022-03-07
11133129	123	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133151	124	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133150	125	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133136	126	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	0.6 ± 0.3	2022-03-07
11133143	128	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133144	128	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	0.6 ± 0.3	2022-03-07
11133142	128	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133137	128 OFFICE 1	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	0.6 ± 0.3	2022-03-07
11133153	128 OFFICE 2	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133138	128 OFFICE 3	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133157	130	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	0.7 ± 0.3	2022-03-07
11133158	130 OFFICE	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133146	131	2022-03-01 @ 11:00 am	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133154	132	2022-03-01 @ 11:00 am	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133165	133	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	0.8 ± 0.3	2022-03-07
11133147	133 OFFICE	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	0.8 ± 0.3	2022-03-07
11133159	134	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	0.9 ± 0.3	2022-03-07
11133166	134	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	0.7 ± 0.3	2022-03-07
11133160	135	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133162	136	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133167	137	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07

Radon test result report for:
MONTGOMERY BLAIR HS
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11133161	138	2022-03-01 @ 11:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11133115	140	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133120	140 OFFICE 2	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133119	140 OFFICE 2	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133132	141	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	0.6 ± 0.3	2022-03-07
11133128	141	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	0.6 ± 0.3	2022-03-07
11133118	142	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	0.6 ± 0.3	2022-03-07
11133117	143	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	0.8 ± 0.3	2022-03-07
11133130	144	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133116	145	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133123	145	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	0.7 ± 0.3	2022-03-07
11133124	145	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	0.7 ± 0.3	2022-03-07
11133122	146	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133135	146 OFFICE	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	0.5 ± 0.3	2022-03-07
11133121	147	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133127	148	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133131	151	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133139	152	2022-03-01 @ 10:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11133133	153	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133140	153 OFFICE	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133141	153 OFFICE 2	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133103	154	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	1.1 ± 0.3	2022-03-07
11133105	155	2022-03-01 @ 10:00 am	2022-03-04 @ 10:00 am	0.8 ± 0.3	2022-03-07
11133104	155	2022-03-01 @ 10:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11133101	155	2022-03-01 @ 10:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11133102	156	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	2.8 ± 0.4	2022-03-07
11133106	157	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	0.7 ± 0.3	2022-03-07
11134107	160	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	0.7 ± 0.3	2022-03-07
11134108	161	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	0.8 ± 0.3	2022-03-07
11134106	162	2022-03-01 @ 10:00 am	2022-03-04 @ 10:00 am	0.6 ± 0.3	2022-03-07
11134116	163	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11134115	164	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	0.9 ± 0.3	2022-03-07
11134123	165	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	0.5 ± 0.3	2022-03-07
11133112	166	2022-03-01 @ 10:00 am	2022-03-04 @ 10:00 am	0.6 ± 0.3	2022-03-07
11133114	167	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	1.0 ± 0.3	2022-03-07
11133111	167	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133113	168	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	0.8 ± 0.3	2022-03-07

Radon test result report for:
MONTGOMERY BLAIR HS
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11133107	171	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	0.7 ± 0.3	2022-03-07
11133108	172	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	0.9 ± 0.3	2022-03-07
11133109	173	2022-03-01 @ 10:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133110	174	2022-03-01 @ 10:00 am	2022-03-04 @ 10:00 am	0.8 ± 0.3	2022-03-07
11133189	AGBEDINA	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134151	AP	2022-03-01 @ 8:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11134138	ATT	2022-03-01 @ 8:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11134145	ATT	2022-03-01 @ 8:00 am	2022-03-04 @ 10:00 am	0.5 ± 0.3	2022-03-07
11134128	ATT B	2022-03-01 @ 8:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11134199	BREAKROOM	2022-03-01 @ 8:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11134137	BSM	2022-03-01 @ 8:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11133181	BURWELL	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134136	BUSINESS ADMIN	2022-03-01 @ 8:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11134130	COMMUNICATION	2022-03-01 @ 8:00 am	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133200	CONFERENCE	2022-03-01 @ 1:00 pm	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133191	CONFERENCE A	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134103	CONFERENCE A	2022-03-01 @ 9:00 am	2022-03-04 @ 8:00 am	0.5 ± 0.3	2022-03-07
11134141	CONFERENCE B	2022-03-01 @ 9:00 am	2022-03-04 @ 7:00 am	0.6 ± 0.3	2022-03-07
11133192	CONTRERAS	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133198	COU BACK ROOM	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133195	COU BACK ROOM	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133187	COU BACK ROOM	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133185	COUNSELOR	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133183	COUNSELOR	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133176	COUNSELOR	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134200	EDITING A	2022-03-01 @ 9:00 am	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134113	EDITING B	2022-03-01 @ 9:00 am	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134114	EDITING B	2022-03-01 @ 9:00 am	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134119	EDITING B	2022-03-01 @ 9:00 am	2022-03-04 @ 9:00 am	0.6 ± 0.3	2022-03-07
11134121	EDITING C	2022-03-01 @ 9:00 am	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134176	EDITING D	2022-03-01 @ 9:00 am	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134143	EDITING E	2022-03-01 @ 9:00 am	2022-03-04 @ 9:00 am	1.5 ± 0.3	2022-03-07
11134125	EQUIPMENT STORAGE	2022-03-01 @ 9:00 am	2022-03-04 @ 7:00 am	1.6 ± 0.3	2022-03-07
11133125	EXAM ROOM	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11134134	FINANCIAL	2022-03-01 @ 8:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11133188	GUIDANCE	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133168	GYM 1	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07

Radon test result report for:

**MONTGOMERY BLAIR HS
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11133170	GYM 1	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133156	GYM 2	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133177	GYM 2	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133169	GYM 2	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133164	GYM 2	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	0.7 ± 0.3	2022-03-07
11134124	HC EDITING	2022-03-01 @ 9:00 am	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134122	HEAD IN ROOM	2022-03-01 @ 9:00 am	2022-03-04 @ 8:00 am	1.0 ± 0.3	2022-03-07
11134105	KITCHEN OFFICE	2022-03-01 @ 9:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11134152	MAIN OFFICE	2022-03-01 @ 8:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11134112	MC	2022-03-01 @ 9:00 am	2022-03-04 @ 8:00 am	0.6 ± 0.3	2022-03-07
11134142	MC	2022-03-01 @ 9:00 am	2022-03-04 @ 8:00 am	0.6 ± 0.3	2022-03-07
11134117	MC OFFICE	2022-03-01 @ 9:00 am	2022-03-04 @ 8:00 am	0.7 ± 0.3	2022-03-07
11134118	MC OFFICE 2	2022-03-01 @ 9:00 am	2022-03-04 @ 8:00 am	0.8 ± 0.3	2022-03-07
11134111	MC OFFICE 2	2022-03-01 @ 9:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133126	NURSE	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133182	OLESZEWSKI	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133196	OVERTON	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133194	POOLE	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134140	PRINCIPAL	2022-03-01 @ 8:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11134144	PRINCIPAL SECRETARY	2022-03-01 @ 8:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11133186	PUTNEY	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134120	RADIO	2022-03-01 @ 9:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11133190	REDDICKS	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	0.7 ± 0.3	2022-03-07
11133193	REGISTRAR	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133134	REST AREA	2022-03-01 @ 11:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11133199	RUSSELL	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134102	SAC	2022-03-01 @ 9:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11134109	SAC	2022-03-01 @ 9:00 am	2022-03-04 @ 10:00 am	0.5 ± 0.3	2022-03-07
11134133	SECURITY	2022-03-01 @ 8:00 am	2022-03-04 @ 10:00 am	< 0.3	2022-03-07
11133184	SIMS	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11134104	STAFF DINING	2022-03-01 @ 9:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11134101	STAFF DINING	2022-03-01 @ 9:00 am	2022-03-04 @ 8:00 am	0.5 ± 0.3	2022-03-07
11134110	STAFF DINING	2022-03-01 @ 9:00 am	2022-03-04 @ 8:00 am	< 0.3	2022-03-07
11134127	TAPE	2022-03-01 @ 9:00 am	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133197	WR	2022-03-01 @ 1:00 pm	2022-03-04 @ 9:00 am	0.5 ± 0.3	2022-03-07
11133173	WRESTLING	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	< 0.3	2022-03-07
11133171	WRESTLING	2022-03-01 @ 12:00 pm	2022-03-04 @ 9:00 am	0.7 ± 0.3	2022-03-07

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies, Inc. Job Number 204620

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

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

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

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

11139367, 11139368, 11139371, _____

11139710, 11139717 _____

E3 light

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

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

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

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

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

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

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

March 30, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

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

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

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

March 30, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**RSH
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11139726	BASEMENT	2022-03-20 @ 8:00 am	2022-03-23 @ 7:00 am	0.9 ± 0.5	2022-03-30
11139725	DINING	2022-03-20 @ 8:00 am	2022-03-23 @ 7:00 am	< 0.3	2022-03-30

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon – March 2022 Schools

Name of Schools:

1. Newport Mill MS
2. Rock View ES
3. Eastern MS
4. Blair, Montgomery HS
5. Montgomery Knolls ES
6. Northwood HS
7. Oakview ES
8. Pine Crest ES
9. Arcola ES
10. Glenallen ES

	Date	Initials
Radon Test Kits Deployed	03/01/2022	PM
Radon Test Kits Collected	03/04/2022	PM
Radon Test Kits Shipped to Lab*	03/04/2022	PM
Radon Test Kits Received by Lab*	03/07/2022	PM

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



MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Montgomery Blair High School
Date of Report	3/5/2020
Round of Testing	Initial Follow-up Post Remediation 2 year testing 5 year testing HVAC Upgrade Window Replacement New Addition New Facility
# of Rooms Tested	5
# Rooms \geq 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	1.0 pCi/L

Project Status

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



3/5/2020

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

Re: Radon Testing Services

KCI Job #12146341.126

Location: Montgomery Blair High School

51 University Boulevard East
Silver Spring, Maryland 20901

Dear Mr. Cox:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools pursuant to completing a “short-term” 3-day radon test for the Montgomery Blair High School, located at 51 University Boulevard East in Silver Spring, Maryland 20901 (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 #111004 RT) 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 2/18/2020 and deployed six (6) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

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

1. Rooms with missing test kits from the December 2019 testing period (i.e. test kit was deployed but not recovered),

-
2. Rooms with invalidated test kits from the December 2019 testing period (e.g. an open window in the room or disturbed test kit),
 3. Rooms which were locked/inaccessible during the December 2019 testing period,
 4. Rooms with elevated December 2019 results (i.e. ≥ 3.5 pCi/L),
 5. Rooms previously tested for radon but not tested in December 2019, and
 6. Additional rooms that require testing (if applicable.)

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

As a quality control measure, KCI included duplicate samples, field blanks, lab transit blanks, and office blanks in accordance with AARST recommendations. In addition, KCI submitted nine (9) test kits to Bowser-Morner, Inc. as spike samples. The spiked tests were exposed to a known radon concentration by Bowser-Morner, Inc. prior to being returned to the laboratory for analysis.

KCI returned to the site on 2/21/2020 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Aircheck, Inc. for analysis by gamma-ray spectroscopy. Aircheck, Inc. is a NRSB certified analytical laboratory for radon analysis (certification #ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

EVALUATION OF TESTING CONDITIONS

These tests represent:

- Follow-up to initial testing.

These tests were conducted to:

- Evaluate radon concentrations at the facility.

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

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the mid-20s to the lower-40s; and high temperatures ranged from the upper-30s to the upper-50s. Maximum sustained winds ranged from 13-21 miles per hour. Average humidity was approximately 50%. A total of .01 inches of rain were recorded during the testing period. The weather conditions during the testing period may have resulted in atypical radon test results for this facility.

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

The results of the radon test analysis indicated the following:

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

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

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

Sincerely,

Mr. Tyler P. McCleaf
 Radon Measurement Provider
 KCI Technologies, Inc.

Attachments:

A- Floor Plan with Test Locations

B - Tables 1-3, Radon Test Summary Spreadsheets

C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

Floor Plan Legend

X-Sample Location (in red)

X- Previous Sample Location

1- Not Samled; No Ground Contact

2- Not Samled; Unoccupied (e.g. Storage, Mechanical)

3- Not Samled; High Humidity/Moisture

4- Not Samled; Bathroom/Hallway

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

Table 1- Radon Testing Results		
Montgomery Blair High School		
Test Period: 02/18/20-02/21/20		
Kit Number	Room / Area	Result
9348503	16C	0.5
9348505	HC EDITING	0.9
9348512	16B	0.7
9348514	145	< 0.3
9348539	GUIDANCE H	1
9348571	OFFICE BLANK	< 0.3

Table 2- Radon Testing Results			
Montgomery Blair High School			
Test Period: 02/18/20-02/21/20			
Kit Number	QC Type	Room / Area	Result
9348506	TRANSIT BLANK	NA	< 0.3

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:

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

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9341725	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.9 \pm 1.6	2020-02-26
9341730	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.1 \pm 1.6	2020-02-26
9341728	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.9 \pm 1.6	2020-02-26
9341726	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	25.8 \pm 1.5	2020-02-26
9341731	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	25.1 \pm 1.5	2020-02-26
9341729	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.2 \pm 1.6	2020-02-26
9341727	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	27.2 \pm 1.6	2020-02-26
9341732	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	27.3 \pm 1.6	2020-02-26

March 5, 2020

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

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

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9341733		2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.4 \pm 1.6	2020-02-26

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March 5, 2020

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

S

N/A

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9341729	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.2 ± 1.6	2020-02-26
9341727	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	27.2 ± 1.6	2020-02-26
9341732	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	27.3 ± 1.6	2020-02-26
9341725	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.9 ± 1.6	2020-02-26
9341730	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.1 ± 1.6	2020-02-26
9341728	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.9 ± 1.6	2020-02-26
9341726	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	25.8 ± 1.5	2020-02-26
9341731	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	25.1 ± 1.5	2020-02-26

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies, Inc. Job Number 194523

NOMINAL Conditions: Radon Conc 25.8 pCi/L Rel. Hum 49.8 % Temp. 70.2 F

Date Start: 2/21/20 Date Stop: 2/24/20 Date Start: _____ Date Stop: _____

Time Start: 0745 Time Stop: 0745 Time Start: _____ Time Stop: _____

Device No.'s: (9) Char Bags - Device No.'s: _____

9341725 thru 9341733

52 ceph

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

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

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

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

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

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

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

P4792 / WILLIAM LYMAN

Kit Number	Start Date	Start Time	End Date	End Time	Temp.	Facility	Building	Room	Project ID	Floor	Result
9348503	2020-02-18	12:00 pm	2020-02-21	11:00 am	70	MONTGOMERY BLAIR HS	757	16C		1	0.5
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
9348505	2020-02-18	11:00 am	2020-02-21	11:00 am	70	MONTGOMERY BLAIR HS	757	HC EDITING		1	0.9
9348506	2020-02-18	9:00 am	2020-02-21	2:00 pm	70	TRANIST BLANK				3	< 0.3
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
9348512	2020-02-18	12:00 pm	2020-02-21	11:00 am	70	MONTGOMERY BLAIR HS	757	16B		1	0.7
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
9348514	2020-02-18	12:00 pm	2020-02-21	11:00 am	70	MONTGOMERY BLAIR HS	757	145		1	< 0.3
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
9348539	2020-02-18	11:00 am	2020-02-21	11:00 am	70	MONTGOMERY BLAIR HS	757	GUIDANCE H		1	1.0
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
9348571	2020-02-18	9:00 am	2020-02-21	2:00 pm	70	OFFICE BLANK				3	< 0.3
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]



Radon Test Kit Chain of Custody

Project Name: MCPS Radon 2019 Week 3

Name of Schools:

1. Bannockburn E.S.
2. Bradley Hills E.S.
3. East Silver Spring E.S.
4. Einstein H.S.
5. Flora M. Singer E.S.
6. Francis Scott Key M.S.
7. Jones Lane E.S
8. Montgomery Blair H.S.
9. Oak View E.S.
10. Redland M.S.
11. Springbrook H.S.

	Date	Initials
Radon Test Kits Deployed	2/18/20	
Radon Test Kits Collected	2/21/20	
Radon Test Kits Shipped to Lab*	2/21/20	
Radon Test Kits Received by Lab*	2/24/20	

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



MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Montgomery Blair High School
Date of Report	2/21/2020
Round of Testing	Initial Follow-up Post Remediation 2 year testing 5 year testing HVAC Upgrade Window Replacement New Addition New Facility
# of Rooms Tested	160
# Rooms \geq 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	2.0 pCi/L

Project Status

Current Project Status at this time: Testing Complete; missing/compromised tests to be sampled.



2/21/2020

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

Re: Radon Testing Services

KCI Job #12146341126

Location: Montgomery Blair High School

51 University Boulevard East
Silver Spring, Maryland 20901

Dear Mr. Cox:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools pursuant to completing a “short-term” 3-day radon test for the Montgomery Blair High School, located at 51 University Boulevard East in Silver Spring, Maryland 20901 (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 Provider (certification #111004 RT) 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 1/7/2020 and deployed one-hundred ninety-two (192) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

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

As a quality control measure, KCI included duplicate samples, field blanks, lab transit blanks, and office blanks in accordance with AARST recommendations. In addition, KCI submitted sixty (60) test kits to Bowser-Morner, Inc. as spike samples. The spiked tests were exposed to a known radon concentration by Bowser-Morner, Inc. prior to being returned to the laboratory for analysis.

KCI returned to the site on 1/10/2020 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Aircheck, Inc. for analysis by gamma-ray spectroscopy. Aircheck, Inc. is a National Radon Safety Board (NRSB) radon measurement provider and is a certified analytical laboratory for radon analysis (certification #ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

EVALUATION OF TESTING CONDITIONS

These tests represent:

- Follow-up to initial testing.

These tests were conducted to:

- Evaluate radon concentrations at the facility.

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

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the upper-20s and high temperatures were in the mid-50s. Maximum sustained winds ranged from 10-23 miles per hour. Average humidity was around 64%. 0.32 inches of precipitation (rain) was recorded during the testing period.

RESULTS

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

The results of the radon test analysis indicated the following:

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

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

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

Sincerely,

Mr. Tyler P. McCleaf
Radon Measurement Provider
111004 RT

KCI Technologies, Inc.

Attachments:

A- Floor Plan with Test Locations

B - Tables 1-3, Radon Test Summary Spreadsheets

C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

Table 1- Radon Testing Results		
Montgomery Blair High School		
Test Period: 1/6/2020-1/13/2020		
Kit Number	Room / Area	Result
9347240	1	< 0.3
9347310	100	< 0.3
9347320	101	< 0.3
9347311	101 OFFICE	< 0.3
9347276	102	< 0.3
9347309	102	< 0.3
9347233	102	< 0.3
9347317	102 CONTROL ROOM	< 0.3
9347331	102 EDITING	< 0.3
9347319	102 RADIO	< 0.3
9347330	102 TAPE LIBRARY	< 0.3
9347314	102 TV STUDIO	< 0.3
9347236	11	< 0.3
9347212	11	< 0.3
9347227	11 OFFICE	< 0.3
9347225	110	< 0.3
9347245	111	< 0.3
9347235	112	< 0.3
9347209	113	< 0.3
9347248	114	< 0.3
9347247	116	< 0.3
9347256	117	< 0.3
9347216	119	< 0.3
9347258	120	< 0.3
9347282	121	< 0.3
9347255	121	< 0.3
9347202	121 OFFICE	< 0.3
9347219	122	< 0.3
9347207	122	< 0.3
9347272	122 OFFICE	< 0.3
9347259	123	< 0.3
9347206	124	< 0.3
9347374	125	< 0.3
9347263	126	< 0.3
9347365	128	< 0.3
9347356	128 A	< 0.3
9347213	128B	< 0.3
9347280	13	< 0.3
9347222	13	< 0.3
9347340	130	< 0.3
9347377	130 OFFICE	< 0.3
9347383	131	< 0.3

9347360	132	< 0.3
9347353	133	< 0.3
9347375	133 OFFICE	< 0.3
9347363	134	0.5
9347342	135	< 0.3
9347379	136	< 0.3
9347371	137	< 0.3
9347376	138	< 0.3
9347296	14	< 0.3
9347281	14 OFFICE	< 0.3
9347297	14 OFFICE	< 0.3
9347391	140	< 0.3
9347345	140 EXAM ROOM	< 0.3
9347381	140 OFFICE	< 0.3
9347378	140 REST AREA	< 0.3
9347370	141	< 0.3
9347210	141 OFFICE	< 0.3
9347382	141 OFFICE	< 0.3
9347287	141 OFFICE	< 0.3
9347267	141 OFFICE	< 0.3
9347373	142	< 0.3
9347394	143	< 0.3
9347359	144	< 0.3
9347384	145	< 0.3
9347380	146	< 0.3
9347372	146 OFFICE	< 0.3
9347389	147	< 0.3
9347291	148	< 0.3
9347385	148	< 0.3
9347273	148	< 0.3
9347299	14A	< 0.3
9347295	14B	< 0.3
9347300	14C	< 0.3
9347298	14D	< 0.3
9347288	151	< 0.3
9347277	151	< 0.3
9347398	151	< 0.3
9347390	152	< 0.3
9347395	152 WORK ROOM	< 0.3
9347387	153	< 0.3
9347397	153 OFFICE A	< 0.3
9347386	153 OFFICE B	0.7
9347399	154	0.8
9347388	155	< 0.3
9347392	156	< 0.3
9347393	157	< 0.3
9347400	158	< 0.3

9347289	16	< 0.3
9347211	16 OFFICE	< 0.3
9347352	160	< 0.3
9347346	161	< 0.3
9347351	162	< 0.3
9347364	163	< 0.3
9347290	163	< 0.3
9347278	163	< 0.3
9347361	164	< 0.3
9347344	165	< 0.3
9347349	166	< 0.3
9347369	167	< 0.3
9347284	167	< 0.3
9347283	167	< 0.3
9347366	168	< 0.3
9347294	16A	< 0.3
9347292	16C	TAMPERED
9347368	170	< 0.3
9347347	170 OFFICE	< 0.3
9347354	171	< 0.3
9347350	172	< 0.3
9347348	173	< 0.3
9347355	174	< 0.3
9347341	177	< 0.3
9347244	2	< 0.3
9347270	223	< 0.3
9347269	238	< 0.3
9347203	240	< 0.3
9347266	250	< 0.3
9347262	262	< 0.3
9347217	270	< 0.3
9347241	3	< 0.3
9347223	3 OFFICE	< 0.3
9347264	321	< 0.3
9347215	4	< 0.3
9347239	5	< 0.3
9347204	6	0.5
9347205	7	< 0.3
9347237	7 OFFICE	< 0.3
9347274	9	< 0.3
9347214	9	< 0.3
9347268	ATHLETIC DIRECTOR	< 0.3
9347337	ATTENDANCE OFFICE	< 0.3
9347326	ATTENDANCE OFFICE B	< 0.3
9347265	AUDITORIUM	1.3
9347201	AUDITORIUM	0.5
9347221	AUDITORIUM	2

9347275	AUDITORIUM	< 0.3
9347338	BUILDING SERVICE MGR	< 0.3
9347335	BUSINESS ADMIN	< 0.3
9347228	CONSESSION STAND	< 0.3
9347318	EDITING A	< 0.3
9347307	EDITING B	< 0.3
9347321	EDITING C	< 0.3
9347315	EDITING D	< 0.3
9347313	EDITING E	< 0.3
9347336	FINANCIAL SPECIALIST	< 0.3
9347231	GUIDANCE A	< 0.3
9347238	GUIDANCE B	< 0.3
9347232	GUIDANCE C	< 0.3
9347250	GUIDANCE D	< 0.3
9347251	GUIDANCE E	< 0.3
9347252	GUIDANCE F	< 0.3
9347243	GUIDANCE G	< 0.3
9347254	GUIDANCE I	< 0.3
9347260	GUIDANCE J	< 0.3
9347246	GUIDANCE K	< 0.3
9347224	GUIDANCE L	< 0.3
9347226	GUIDANCE M	< 0.3
9347230	GUIDANCE N	< 0.3
9347229	GUIDANCE O	< 0.3
9347101	GUIDANCE OFFICE	< 0.3
9347102	GUIDANCE OFFICE	< 0.3
9347234	GUIDANCE OFFICE	< 0.3
9347242	GYM	< 0.3
9347279	GYM	< 0.3
9347257	GYM	< 0.3
9347308	HC EDITING	TAMPERED
9347343	KITCHEN OFFICE	< 0.3
9347286	MAIN OFFICE	< 0.3
9347208	MAIN OFFICE	< 0.3
9347362	MAIN OFFICE	< 0.3
9347327	MAIN OFFICE ASSIST. PRINCIPAL	< 0.3
9347322	MAIN OFFICE CONF ROOM	< 0.3
9347324	MAIN OFFICE WORK ROOM	< 0.3
9347103	MEDIA CENTER	< 0.3
9347332	MEDIA CENTER	< 0.3
9347285	MEDIA CENTER	< 0.3
9347333	MEDIA CENTER	< 0.3
9347367	MEDIA CONF A	< 0.3
9347316	MEDIA CONF B	< 0.3
9347334	MEDIA OFFICE A	< 0.3
9347329	MEDIA OFFICE B (LATINO)	< 0.3
9347328	MEDIA WORK ROOM	< 0.3

9347312	PCC OFFICE	< 0.3
9347325	PRINCIPAL	< 0.3
9347323	PRINCIPAL SECRETARY	< 0.3
9347220	REGISTRAR	< 0.3
9347261	SCHOOL STORE	< 0.3
9347358	SECURITY	< 0.3
9347249	SECURITY OFFICE (BY 119)	< 0.3
9347339	STAFF DINING	< 0.3
9347218	STAGE	< 0.3
9348303	OFFICE BLANK	<0.3
9347253	GUID H	MISSING
9347271	226	MISSING
9347293	16B	MISSING
9347396	149	MISSING

Table 2- Radon Testing Results			
Montgomery Blair High School			
Test Period: 1/6/2020-1/13/2020			
Kit Number	QC Type	Room / Area	Result
9347265	D	AUDITORIUM	1.3
9347275	FB	AUDITORIUM	<0.3
9347208	D	MAIN OFFICE	<0.3
9347286	FB	MAIN OFFICE	<0.3
9347101	D	GUIDANCE OFFICE	<0.3
9347102	FB	GUIDANCE OFFICE	<0.3
9347285	FB	MEDIA CENTER	<0.3
9347103	D	MEDIA CENTER	<0.3
9347287	FB	141 OFFICE	<0.3
9347267	D	141 OFFICE	<0.3
9347273	D	148	<0.3
9347291	FB	148	<0.3
9347288	FB	151	<0.3
9347277	D	151	<0.3
9347283	D	167	<0.3
9347284	FB	167	<0.3
9347278	D	163	<0.3
9347290	FB	163	<0.3
9347233	D	102	<0.3
9347276	FB	102	<0.3
9347207	D	122	<0.3
9347282	D	121	<0.3
9347279	D	GYM	<0.3
9347281	D	14 OFFICE	<0.3
9347274	D	9	<0.3
9347212	D	11	<0.3
9347280	D	13	<0.3
9348319	TRANSIT BLANK	NA	<0.3
9348320	TRANSIT BLANK	NA	<0.3
9348313	TRANSIT BLANK	NA	<0.3

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:

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

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9340067	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 \pm 2.4 D	2020-01-03
9340035	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	22.5 \pm 2.3 D	2020-01-03
9340003	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.2 \pm 2.4 D	2020-01-03
9340089	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	23.3 \pm 2.3 D	2020-01-03
9340072	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	18.3 \pm 2.0 D	2020-01-03
9340040	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.3 \pm 2.6 D	2020-01-03
9340008	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	24.8 \pm 2.5 D	2020-01-03
9340094	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.7 \pm 2.5 D	2020-01-03
9340099	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	27.5 \pm 2.6 D	2020-01-03
9340077	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.2 \pm 2.5 D	2020-01-03
9340045	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	24.7 \pm 2.4 D	2020-01-03
9340013	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.9 \pm 2.6 D	2020-01-03
9340018	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	29.1 \pm 2.8 D	2020-01-03
9341704	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 \pm 2.4 D	2020-01-03
9340050	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.2 \pm 2.6 D	2020-01-03
9340023	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.2 \pm 2.7 D	2020-01-03
9341709	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.5 \pm 2.4 D	2020-01-03
9340055	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.8 \pm 2.6 D	2020-01-03
9340060	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.3 \pm 2.5 D	2020-01-03
9340028	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	23.9 \pm 2.3 D	2020-01-03
9341714	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	28.3 \pm 2.7 D	2020-01-03
9340082	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.4 \pm 2.6 D	2020-01-03
9340065	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.2 \pm 2.4 D	2020-01-03
9340033	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.2 \pm 2.5 D	2020-01-03
9341719	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.7 \pm 2.5 D	2020-01-03
9340001	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.3 \pm 2.5 D	2020-01-03
9340087	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.8 \pm 2.4 D	2020-01-03
9340070	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	19.5 \pm 2.4 D	2020-01-03
9340038	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	24.7 \pm 2.3 D	2020-01-03
9340006	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.2 \pm 2.4 D	2020-01-03
9340092	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	31.4 \pm 2.8 D	2020-01-03
9340097	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.7 \pm 2.5 D	2020-01-03
9340075	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	29.6 \pm 2.6 D	2020-01-03
9340043	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.1 \pm 2.6 D	2020-01-03
9340011	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.8 \pm 2.5 D	2020-01-03
9340016	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	23.2 \pm 2.4 D	2020-01-03
9341702	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.8 \pm 2.5 D	2020-01-03

Radon test result report for:

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

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9340048	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.5 \pm 2.4 D	2020-01-03
9340021	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.7 \pm 2.6 D	2020-01-03
9341707	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.8 \pm 2.4 D	2020-01-03
9340053	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.8 \pm 2.5 D	2020-01-03
9340058	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.5 \pm 2.7 D	2020-01-03
9340026	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.9 \pm 2.4 D	2020-01-03
9341712	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.3 \pm 2.4 D	2020-01-03
9340080	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 \pm 2.4 D	2020-01-03
9340063	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.8 \pm 2.5 D	2020-01-03
9340031	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	24.9 \pm 2.4 D	2020-01-03
9341717	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.7 \pm 2.4 D	2020-01-03
9340085	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.9 \pm 2.5 D	2020-01-03
9340068	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.2 \pm 2.5 D	2020-01-03
9340036	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	23.6 \pm 2.3 D	2020-01-03
9340004	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.9 \pm 2.6 D	2020-01-03
9340090	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.3 \pm 2.5 D	2020-01-03
9340073	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.8 \pm 2.5 D	2020-01-03
9340041	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.6 \pm 2.4 D	2020-01-03
9340009	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	24.1 \pm 2.4 D	2020-01-03
9340095	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.2 \pm 2.5 D	2020-01-03
9340100	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.5 \pm 2.4 D	2020-01-03
9340078	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.0 \pm 2.4 D	2020-01-03
9340046	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.0 \pm 2.6 D	2020-01-03
9340014	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	21.8 \pm 2.8 D	2020-01-03
9340019	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.0 \pm 2.5 D	2020-01-03
9341705	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	27.8 \pm 2.6 D	2020-01-03
9340051	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.5 \pm 2.4 D	2020-01-03
9340056	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.7 \pm 2.6 D	2020-01-03
9340024	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.3 \pm 2.5 D	2020-01-03
9341710	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.2 \pm 2.3 D	2020-01-03
9340061	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	28.9 \pm 2.6 D	2020-01-03
9340029	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	23.0 \pm 2.3 D	2020-01-03
9341715	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	27.0 \pm 2.5 D	2020-01-03
9340083	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.9 \pm 2.4 D	2020-01-03
9340066	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 \pm 2.4 D	2020-01-03
9340034	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.4 \pm 2.5 D	2020-01-03
9341720	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.3 \pm 2.5 D	2020-01-03

Radon test result report for:

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

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9340002	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.7 \pm 2.5 D	2020-01-03
9340088	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.4 \pm 2.5 D	2020-01-03
9340071	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.9 \pm 2.4 D	2020-01-03
9340039	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.9 \pm 2.5 D	2020-01-03
9340007	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.9 \pm 2.4 D	2020-01-03
9340093	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 \pm 2.5 D	2020-01-03
9340098	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.8 \pm 2.5 D	2020-01-03
9340076	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 \pm 2.5 D	2020-01-03
9340044	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.2 \pm 2.5 D	2020-01-03
9340012	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	22.5 \pm 2.2 D	2020-01-03
9340017	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.3 \pm 2.5 D	2020-01-03
9341703	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.0 \pm 2.5 D	2020-01-03
9340049	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.0 \pm 2.5 D	2020-01-03
9340022	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.6 \pm 2.6 D	2020-01-03
9341708	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	28.8 \pm 2.8 D	2020-01-03
9340054	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.8 \pm 2.5 D	2020-01-03
9340059	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.5 \pm 2.6 D	2020-01-03
9340027	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.6 \pm 2.5 D	2020-01-03
9341713	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.5 \pm 2.5 D	2020-01-03
9340081	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	18.4 \pm 2.1 D	2020-01-03
9340064	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.5 \pm 2.5 D	2020-01-03
9340032	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.1 \pm 2.4 D	2020-01-03
9341718	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	23.7 \pm 2.4 D	2020-01-03
9340086	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.9 \pm 2.6 D	2020-01-03
9340069	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.6 \pm 2.5 D	2020-01-03
9340037	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	28.4 \pm 2.6 D	2020-01-03
9340005	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	???? DIF1	2020-01-03
9340091	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.5 \pm 2.5 D	2020-01-03
9340096	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.2 \pm 2.5 D	2020-01-03
9340074	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	27.7 \pm 2.5 D	2020-01-03
9340042	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.6 \pm 2.5 D	2020-01-03
9340010	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.5 \pm 2.5 D	2020-01-03
9341701	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	22.9 \pm 2.3 D	2020-01-03
9340047	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	26.7 \pm 2.5 D	2020-01-03
9340015	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.4 \pm 2.5 D	2020-01-03
9340020	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	24.1 \pm 2.4 D	2020-01-03
9341706	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	31.0 \pm 2.7 D	2020-01-03

Radon test result report for:

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

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9340052	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.4 \pm 2.6 D	2020-01-03
9340057	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	27.3 \pm 2.5 D	2020-01-03
9340025	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.1 \pm 2.4 D	2020-01-03
9341711	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	22.5 \pm 2.2 D	2020-01-03
9340079	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	26.9 \pm 2.5 D	2020-01-03
9340062	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.6 \pm 2.5 D	2020-01-03
9340030	N/A	2019-12-21 @ 8:00 am	2019-12-23 @ 8:00 am	25.0 \pm 2.4 D	2020-01-03
9341716	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	25.1 \pm 2.4 D	2020-01-03
9340084	N/A	2019-12-21 @ 9:00 am	2019-12-23 @ 9:00 am	24.5 \pm 2.3 D	2020-01-03

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies Inc Job Number 193598

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

Date Start: 12/21/19 Date Stop: 12/23/19

Time Start: 0830 Time Stop: 0830

(Group 4)
Device No.'s: (20) Char. Bags -

9340061 thru 9340080

Temp of _____
RH % 50.1
Avg pCi/L 25.5

52

Date Start: 12/21/19 Date Stop: 12/23/19

Time Start: 0835 Time Stop: 0835

(Group 5)
Device No.'s: (20) Char. Bags -

9340081 thru 9340100

Temp of _____
RH % 50.1
Avg pCi/L 25.5

25

Date Start: 12/21/19 Date Stop: 12/23/19

Time Start: 0840 Time Stop: 0840

(Group 6)
Device No.'s: (20) Char. Bags -

9341701 thru 9341720

Temp of _____
RH % 50.1
Avg pCi/L 25.5

25

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

Radon test result report for:
MONTGOMERY BLAIR HS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9347240	1	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347310	100	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347320	101	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347311	101 OFFICE	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347276	102	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347309	102	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347233	102	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347317	102 CONTROL ROOM	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347331	102 EDITING	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347319	102 RADIO	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347330	102 TAPE LIBRARY	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347314	102 TV STUDIO	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347236	11	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347212	11	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347227	11 OFFICE	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347225	110	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347245	111	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347235	112	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347209	113	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347248	114	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347247	116	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347256	117	2020-01-06 @ 6:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347216	119	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347258	120	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347282	121	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347255	121	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347202	121 OFFICE	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347219	122	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347207	122	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347272	122 OFFICE	2020-01-06 @ 2:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347259	123	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347206	124	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347374	125	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347263	126	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347365	128	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347356	128 A	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347213	128B	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13

Radon test result report for:
MONTGOMERY BLAIR HS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9347280	13	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347222	13	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347340	130	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347377	130 OFFICE	2020-01-06 @ 1:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347383	131	2020-01-06 @ 1:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347360	132	2020-01-06 @ 1:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347353	133	2020-01-06 @ 1:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347375	133 OFFICE	2020-01-06 @ 1:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347363	134	2020-01-06 @ 1:00 am	2020-01-13 @ 11:00 am	0.5 ± 0.3 L	2020-01-13
9347342	135	2020-01-06 @ 1:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347379	136	2020-01-06 @ 1:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347371	137	2020-01-06 @ 1:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347376	138	2020-01-06 @ 1:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347296	14	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347281	14 OFFICE	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347297	14 OFFICE	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347391	140	2020-01-06 @ 1:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347345	140 EXAM ROOM	2020-01-06 @ 1:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347381	140 OFFICE	2020-01-06 @ 1:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347378	140 REST AREA	2020-01-06 @ 1:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347370	141	2020-01-06 @ 1:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347210	141 OFFICE	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347382	141 OFFICE	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347287	141 OFFICE	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347267	141 OFFICE	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347373	142	2020-01-06 @ 1:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347394	143	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347359	144	2020-01-06 @ 1:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347384	145	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347380	146	2020-01-06 @ 1:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347372	146 OFFICE	2020-01-06 @ 1:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347389	147	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347291	148	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347385	148	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347273	148	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347299	14A	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347295	14B	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13

Radon test result report for:
MONTGOMERY BLAIR HS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9347300	14C	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347298	14D	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347288	151	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347277	151	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347398	151	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347390	152	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347395	152 WORK ROOM	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347387	153	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347397	153 OFFICE A	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347386	153 OFFICE B	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	0.7 ± 0.3	2020-01-13
9347399	154	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	0.8 ± 0.3	2020-01-13
9347388	155	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347392	156	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347393	157	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347400	158	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347289	16	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347211	16 OFFICE	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347352	160	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347346	161	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347351	162	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347364	163	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347290	163	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347278	163	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347361	164	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347344	165	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347349	166	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347369	167	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347284	167	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347283	167	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347366	168	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347294	16A	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347292	16C	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347368	170	2020-01-06 @ 12:00 pm	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347347	170 OFFICE	2020-01-06 @ 12:00 pm	2020-01-13 @ 11:00 am	< 0.3	2020-01-13
9347354	171	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347350	172	2020-01-06 @ 12:00 pm	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347348	173	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13

Radon test result report for:
MONTGOMERY BLAIR HS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9347355	174	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347341	177	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347244	2	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347270	223	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347269	238	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347203	240	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347266	250	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347262	262	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347217	270	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347241	3	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347223	3 OFFICE	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347264	321	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347215	4	2020-01-06 @ 1:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347239	5	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347204	6	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	0.5 ± 0.3 L	2020-01-13
9347205	7	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347237	7 OFFICE	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347274	9	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347214	9	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347268	ATHLETIC DIRECTOR	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347337	ATTENDANCE OFFICE	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347326	ATTENDANCE OFFICE B	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347265	AUDITORIUM	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	1.3 ± 0.3 L	2020-01-13
9347201	AUDITORIUM	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	0.5 ± 0.3 L	2020-01-13
9347221	AUDITORIUM	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	2.0 ± 0.3 L	2020-01-13
9347275	AUDITORIUM	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347338	BUILDING SERVICE MGR	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347335	BUSINESS ADMIN	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347228	CONSESSION STAND	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347318	EDITING A	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347307	EDITING B	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347321	EDITING C	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347315	EDITING D	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347313	EDITING E	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347336	FINANCIAL SPECIALIST	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347231	GUIDANCE A	2020-01-06 @ 2:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347238	GUIDANCE B	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13

Radon test result report for:

MONTGOMERY BLAIR HS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9347232	GUIDANCE C	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347250	GUIDANCE D	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347251	GUIDANCE E	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347252	GUIDANCE F	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347243	GUIDANCE G	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347254	GUIDANCE I	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347260	GUIDANCE J	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347246	GUIDANCE K	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347224	GUIDANCE L	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347226	GUIDANCE M	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347230	GUIDANCE N	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347229	GUIDANCE O	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347101	GUIDANCE OFFICE	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347102	GUIDANCE OFFICE	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347234	GUIDANCE OFFICE	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347242	GYM	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347279	GYM	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347257	GYM	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347308	HC EDITING	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347343	KITCHEN OFFICE	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347286	MAIN OFFICE	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347208	MAIN OFFICE	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347362	MAIN OFFICE	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347327	MAIN OFFICE ASSIST. PRINCIPAL	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347322	MAIN OFFICE CONF ROOM	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347324	MAIN OFFICE WORK ROOM	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347103	MEDIA CENTER	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347332	MEDIA CENTER	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347285	MEDIA CENTER	2020-01-06 @ 5:00 am	2020-01-13 @ 1:00 pm	< 0.3 L	2020-01-13
9347333	MEDIA CENTER	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347367	MEDIA CONF B	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347316	MEDIA CONF B	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347334	MEDIA OFFICE A	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347329	MEDIA OFFICE B (LATINO)	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347328	MEDIA WORK ROOM	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347312	PCC OFFICE	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347325	PRINCIPAL	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13

January 15, 2020

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
MONTGOMERY BLAIR HS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9347323	PRINCIPAL SECRETARY	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347220	REGISTRAR	2020-01-06 @ 3:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347261	SCHOOL STORE	2020-01-06 @ 5:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13
9347358	SECURITY	2020-01-06 @ 10:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347249	SECURITY OFFICE (BY 119)	2020-01-06 @ 2:00 am	2020-01-13 @ 11:00 am	< 0.3 L	2020-01-13
9347339	STAFF DINING	2020-01-06 @ 11:00 am	2020-01-13 @ 10:00 am	< 0.3	2020-01-13
9347218	STAGE	2020-01-06 @ 4:00 am	2020-01-13 @ 12:00 pm	< 0.3 L	2020-01-13

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon 2019 Week 3

Name of Schools:

- | | |
|------------------------------|----------------------------|
| 1. Bannockburn E.S. | 12. Montgomery Knolls E.S. |
| 2. Bethesda E.S. | 13. Newport Mills M.S. |
| 3. Bethesda-Chevy Chase H.S. | 14. Oak View E.S. |
| 4. Bradley Hill E.S. | 15. Rock View E.S. |
| 5. Burning Tree E.S. | 16. Roscoe Nix E.S. |
| 6. Burnt Mills E.S. | 17. Sligo M.S. |
| 7. East Silver Springs E.S. | 18. Spring Mill Center |
| 8. Einstein H.S. | 19. Springbrook H.S. |
| 9. Flora Singer E.S. | 20. Westland M.S. |
| 10. Key M.S. | 21. Woodlin M.S. |
| 11. Montgomery Blair H.S. | |

	Date	Initials
Radon Test Kits Deployed	1/6/20 to 1/7/20	JM
Radon Test Kits Collected	1/9/20 to 1/10/20	JM
Radon Test Kits Shipped to Lab*	1/10/20	JM
Radon Test Kits Received by Lab*	1/13/202	JM

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



MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Montgomery Blair High School
Date of Report	March 13, 2018
Round of Testing	Initial Follow-up Post Remediation 2 year testing 5 year testing HVAC Upgrade Window Replacement New Addition New Facility
# of Rooms Tested	71
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	2.1 pCi/L

Project Status

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



March 13, 2018

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

Re: Radon Testing Services

KCI Job #1214634188

Location: Montgomery Blair High School

51 University Blvd. E.
Silver Spring, Maryland 20901

Dear Mr. Cox:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools pursuant to completing a “short-term” 3-day radon test for the Montgomery Blair High School, located at 51 University Blvd. E. in Silver Spring, Maryland 20901 (subject site).

SCOPE OF SERVICES

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

KCI visited the site on February 12, 2018 and deployed ninety (90) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

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

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

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

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

KCI returned to the site on February 15, 2018 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Aircheck, Inc. for analysis by gamma-ray spectroscopy. Aircheck, Inc. is a NRSB certified analytical laboratory for radon analysis (certification #ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

EVALUATION OF TESTING CONDITIONS

These tests represent:

- Follow-up to post-mitigation biennial testing.

These tests were conducted to:

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

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

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures ranged from the mid-20s to upper 40s and high temperatures ranged from the high-30s to the high-60s. Maximum sustained winds ranged from 10-15 miles per hour. Average humidity was around 69%. 0.05 Inches of precipitation was recorded during the testing period.

RESULTS

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

The results of the radon test analysis indicated the following:

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

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

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

Sincerely,



Radon Measurement Specialist
KCI Technologies, Inc.

Attachments:

B - Radon Test Summary Spreadsheets

C - Laboratory Analytical Results

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

Table 1 - Radon Testing Results		
Montgomery Blair High School		
Test Period: 02/12/18-02/15/18		
Kit Number	Room / Area	Result
7979413	1	1.0
7979402	14	0.8
7979483	16	1.1
7979425	110	1.1
7979431	112	< 0.3
7979426	113	< 0.3
7979463	114	< 0.3
7979432	118	< 0.3
7979459	125	0.7
7979462	126	< 0.3
7979460	138	0.6
7979451	141	< 0.3
7979470	153	2.1
7979468	311	< 0.3
7979484	101 MULTIMEDIA	0.9
7979490	101 TELECOM	0.8
7979489	11 OFFICE	0.8
7979415	11 PRINT	1.0
7979417	112 OFFICE	< 0.3
7979409	118SCR	< 0.3
7979461	133 OFFICE	0.6
7979406	14 OFFICE	0.8
7979412	14 PRACTICE A	0.9
7979407	14 PRACTICE B	0.8
7979408	14 PRACTICE C	0.7
7979411	14 PRACTICE D	1.0
7979458	140 EXAM ROOM	< 0.3
7979442	140 NURSE OFFICE	< 0.3
7979441	140 REST AREA	0.6
7979456	141 OFFICE	< 0.3
7979404	16A	1.1
7979499	16A OFFICE	1.0
7979495	16A PRACTICE A	1.0
7979500	16A PRACTICE B	1.0
7979447	16A PRACTICE C	1.4
7979464	170 OFFICE	< 0.3
7979448	2 OFFICE	0.9
7979414	3 OFFICE	0.8
7979421	7 OFFICE	1.2
7979477	* AUDITORIUM (Missing)	-
7979478	AUDITOTIUM	1.8
7979438	COUNSELOR	< 0.3
7979423	BLR	< 0.3
7979454	BLR TEAM ROOM	< 0.3
7979467	BOYS DRESSING	0.6
7979422	CONCESSIONS	< 0.3

Table Note:

* Missing or Compromised Sample

Table 1 - Radon Testing Results		
Montgomery Blair High School		
Test Period: 02/12/18-02/15/18		
Kit Number	Room / Area	Result
7979465	CONFERENCE 1	0.5
7979434	CONFERENCE A	1.0
7979491	EDITING B	1.1
7979492	EDITING C	0.9
7979497	EDITING D	1.0
7979496	EDITING E	1.0
7979466	FINANCIAL SPECIAL	< 0.3
7979475	GIRLS DRESSING	0.8
7979430	GLR	0.7
7979418	GLR TEAM ROOM	< 0.3
7979474	GYM	< 0.3
7979471	* GYM (Missing)	-
7979472	* GYM (Missing)	-
7979429	GYM B	0.7
7979424	GYM B	0.7
7979420	* GYM B (Missing)	-
7979427	* GYM B (Missing)	-
7979498	HC EDITING	1.2
7979457	KITCHEN	< 0.3
7979455	KITCHEN OFFICE	< 0.3
7979443	LIBRARY	0.9
7979444	LIBRARY	0.7
7979445	LIBRARY	0.6
7979419	MAKEUP	0.8
7979439	MEDIA HEAD IN	1.2
7979433	OFFICE	< 0.3
7979440	OFFICE WORK ROOM	0.6
7979437	OFFICE CONFERENCE	0.6
7979493	RADIO	0.8
7979453	STAGE	1.7
7979452	STAGE	1.8
7979401	STAGE OFFICE	1.2
7979410	STAGE SHOP	1.3
7979494	TV CONTROL	1.0

Table Note:

* Missing or Compromised Sample

Table 2 - Radon Testing Results		
Montgomery Blair High School		
Test Period: 02/12/18-02/15/18		
Kit Number	QC Type	Result
7979428	D (114)	< 0.3
7979416	D (118SCR)	< 0.3
7979469	D (138)	< 0.3
7979446	D (14 PRACTICE A)	0.9
7979449	D (140 NURSE OFFICE)	0.7
7979403	D (16A)	0.9
7979436	D (OFFICE CONFERENCE)	< 0.3
7979450	FB (140 NURSE OFFICE)	< 0.3
7979405	FB (16A)	< 0.3
7979435	FB (OFFICE CONFERENCE)	< 0.3

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:

**MONTGOMERY BLAIR HIGH SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7979413	1	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	1.0 ± 0.3	2018-02-19
7979484	101 MULTIMEDIA	2018-02-12 @ 8:00 am	2018-02-15 @ 8:00 am	0.9 ± 0.4	2018-02-19
7979490	101 TELECOM	2018-02-12 @ 8:00 am	2018-02-15 @ 8:00 am	0.8 ± 0.4	2018-02-19
7979489	11 OFFICE	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	0.8 ± 0.4	2018-02-19
7979415	11 PRINT	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	1.0 ± 0.3	2018-02-19
7979425	110	2018-02-12 @ 11:00 am	2018-02-15 @ 10:00 am	1.1 ± 0.3	2018-02-19
7979431	112	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979417	112 OFFICE	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979426	113	2018-02-12 @ 11:00 am	2018-02-15 @ 10:00 am	< 0.3	2018-02-19
7979428	114	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979463	114	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979432	118	2018-02-12 @ 10:00 am	2018-02-15 @ 10:00 am	< 0.3	2018-02-19
7979409	118SCR	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979416	118SCR	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979459	125	2018-02-12 @ 12:00 pm	2018-02-15 @ 10:00 am	0.7 ± 0.4	2018-02-19
7979462	126	2018-02-12 @ 11:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979461	133 OFFICE	2018-02-12 @ 12:00 pm	2018-02-15 @ 9:00 am	0.6 ± 0.3	2018-02-19
7979460	138	2018-02-12 @ 12:00 pm	2018-02-15 @ 10:00 am	0.6 ± 0.3	2018-02-19
7979469	138	2018-02-12 @ 12:00 pm	2018-02-15 @ 10:00 am	< 0.3	2018-02-19
7979402	14	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	0.8 ± 0.4	2018-02-19
7979406	14 OFFICE	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	0.8 ± 0.4	2018-02-19
7979412	14 PRACTICE A	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	0.9 ± 0.3	2018-02-19
7979446	14 PRACTICE A	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	0.9 ± 0.3	2018-02-19
7979407	14 PRACTICE B	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	0.8 ± 0.4	2018-02-19
7979408	14 PRACTICE C	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	0.7 ± 0.3	2018-02-19
7979411	14 PRACTICE D	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	1.0 ± 0.4	2018-02-19
7979458	140 EXAM ROOM	2018-02-12 @ 11:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979450	140 NURSE OFFICE	2018-02-12 @ 11:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979442	140 NURSE OFFICE	2018-02-12 @ 11:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979449	140 NURSE OFFICE	2018-02-12 @ 11:00 am	2018-02-15 @ 9:00 am	0.7 ± 0.3	2018-02-19
7979441	140 REST AREA	2018-02-12 @ 11:00 am	2018-02-15 @ 9:00 am	0.6 ± 0.3	2018-02-19
7979451	141	2018-02-12 @ 11:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979456	141 OFFICE	2018-02-12 @ 11:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979470	153	2018-02-12 @ 12:00 pm	2018-02-15 @ 9:00 am	2.1 ± 0.4	2018-02-19
7979483	16	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	1.1 ± 0.3	2018-02-19
7979403	16A	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	0.9 ± 0.3	2018-02-19
7979404	16A	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	1.1 ± 0.3	2018-02-19

Radon test result report for:

**MONTGOMERY BLAIR HIGH SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7979405	16A	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	< 0.3	2018-02-19
7979499	16A OFFICE	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	1.0 ± 0.3	2018-02-19
7979495	16A PRACTICE A	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	1.0 ± 0.3	2018-02-19
7979500	16A PRACTICE B	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	1.0 ± 0.3	2018-02-19
7979447	16A PRACTICE C	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	1.4 ± 0.4	2018-02-19
7979464	170 OFFICE	2018-02-12 @ 12:00 pm	2018-02-15 @ 8:00 am	< 0.3	2018-02-19
7979448	2 OFFICE	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	0.9 ± 0.3	2018-02-19
7979414	3 OFFICE	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	0.8 ± 0.3	2018-02-19
7979468	311	2018-02-12 @ 12:00 pm	2018-02-15 @ 10:00 am	< 0.3	2018-02-19
7979421	7 OFFICE	2018-02-12 @ 9:00 am	2018-02-15 @ 10:00 am	1.2 ± 0.3	2018-02-19
7979477	AUDITORIUM	@	@		
7979478	AUDITOTIUM	2018-02-12 @ 1:00 pm	2018-02-15 @ 9:00 am	1.8 ± 0.4	2018-02-19
7979438	COUNSELOR	2018-02-12 @ 11:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979423	BLR	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979454	BLR TEAM ROOM	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979467	BOYS DRESSING	2018-02-12 @ 12:00 pm	2018-02-15 @ 9:00 am	0.6 ± 0.3	2018-02-19
7979422	CONCESSIONS	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979465	CONFERENCE 1	2018-02-12 @ 12:00 pm	2018-02-15 @ 9:00 am	0.5 ± 0.3	2018-02-19
7979434	CONFERENCE A	2018-02-12 @ 11:00 am	2018-02-15 @ 8:00 am	1.0 ± 0.4	2018-02-19
7979491	EDITING B	2018-02-12 @ 8:00 am	2018-02-15 @ 8:00 am	1.1 ± 0.4	2018-02-19
7979492	EDITING C	2018-02-12 @ 8:00 am	2018-02-15 @ 8:00 am	0.9 ± 0.3	2018-02-19
7979497	EDITING D	2018-02-12 @ 8:00 am	2018-02-15 @ 8:00 am	1.0 ± 0.3	2018-02-19
7979496	EDITING E	2018-02-12 @ 8:00 am	2018-02-15 @ 8:00 am	1.0 ± 0.3	2018-02-19
7979466	FINANCIAL SPECIA	2018-02-12 @ 12:00 pm	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979475	GIRLS DRESSING	2018-02-12 @ 1:00 pm	2018-02-15 @ 9:00 am	0.8 ± 0.3	2018-02-19
7979430	GLR	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	0.7 ± 0.3	2018-02-19
7979418	GLR TEAM ROOM	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	< 0.3	2018-02-19
7979471	GYM	@	@		
7979472	GYM	@	@		
7979474	GYM	2018-02-12 @ 12:00 pm	2018-02-15 @ 10:00 am	< 0.3	2018-02-19
7979420	GYM B	@	@		
7979427	GYM B	@	@		
7979429	GYM B	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	0.7 ± 0.3	2018-02-19
7979424	GYM B	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	0.7 ± 0.3	2018-02-19
7979498	HC EDITING	2018-02-12 @ 8:00 am	2018-02-15 @ 8:00 am	1.2 ± 0.4	2018-02-19
7979457	KITCHEN	2018-02-12 @ 12:00 pm	2018-02-15 @ 8:00 am	< 0.3	2018-02-19
7979455	KITCHEN OFFICE	2018-02-12 @ 12:00 pm	2018-02-15 @ 8:00 am	< 0.3	2018-02-19

Radon test result report for:

**MONTGOMERY BLAIR HIGH SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7979444	LIBRARY	2018-02-12 @ 11:00 am	2018-02-15 @ 8:00 am	0.7 ± 0.3	2018-02-19
7979445	LIBRARY	2018-02-12 @ 11:00 am	2018-02-15 @ 8:00 am	0.6 ± 0.3	2018-02-19
7979443	LIBRARY	2018-02-12 @ 11:00 am	2018-02-15 @ 8:00 am	0.9 ± 0.3	2018-02-19
7979419	MAKEUP	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	0.8 ± 0.3	2018-02-19
7979439	MEDIA HEAD IN	2018-02-12 @ 11:00 am	2018-02-15 @ 8:00 am	1.2 ± 0.4	2018-02-19
7979433	OFFICE	2018-02-12 @ 11:00 am	2018-02-15 @ 8:00 am	< 0.3	2018-02-19
7979435	OFFICE CONFERENC	2018-02-12 @ 11:00 am	2018-02-15 @ 8:00 am	< 0.3	2018-02-19
7979436	OFFICE CONFERENC	2018-02-12 @ 11:00 am	2018-02-15 @ 8:00 am	< 0.3	2018-02-19
7979440	OFFICE WORK ROOM	2018-02-12 @ 11:00 am	2018-02-15 @ 8:00 am	0.6 ± 0.3	2018-02-19
7979437	OFFICW CONFERENC	2018-02-12 @ 11:00 am	2018-02-15 @ 8:00 am	0.6 ± 0.3	2018-02-19
7979493	RADIO	2018-02-12 @ 8:00 am	2018-02-15 @ 8:00 am	0.8 ± 0.3	2018-02-19
7979452	STAGE	2018-02-12 @ 9:00 am	2018-02-15 @ 9:00 am	1.8 ± 0.4	2018-02-19
7979453	STAGE	2018-02-12 @ 9:00 am	2018-02-15 @ 9:00 am	1.7 ± 0.4	2018-02-19
7979401	STAGE OFFICE	2018-02-12 @ 9:00 am	2018-02-15 @ 9:00 am	1.2 ± 0.4	2018-02-19
7979410	STAGE SHOP	2018-02-12 @ 10:00 am	2018-02-15 @ 9:00 am	1.3 ± 0.4	2018-02-19
7979494	TV CONTROL	2018-02-12 @ 8:00 am	2018-02-15 @ 8:00 am	1.0 ± 0.3	2018-02-19



Radon Test Kit Chain of Custody

Project Name: MCPS Radon

Names of Schools:

1. Highland Elementary School
2. Stephen Knolls Elementary School
3. Silver Creek Middle School
4. Woodlin Elementary School
5. Sligo Creek Elementary School
6. Francis Scott Key Middle School
7. John T. Baker Middle School
8. Cedar Grove Elementary School
9. Clarksburg Elementary School
10. Clarksburg Elementary School Annex
11. Fields Road Elementary School
12. Dufief Elementary School
13. Brown Station Elementary School
14. Diamond Elementary School
15. Fallsmeade Elementary School
16. Thomas Whootton High School
17. Lake Seneca Elementary School
18. Redland Middle School
19. Newport Mill Middle School
20. Bethesda Trans. and Maint. Depot
21. Sequoyah Elementary School
22. Gaithersburg Middle School
23. Wayside Elementary School
24. Travilah Elementary School
25. Damascus High School
26. Jones Lane Elementary School
27. Greencastle Elementary School
28. Spring Brook High School
29. Montgomery Blair High School
30. Watkins Mill High School

	Date	Initials
Radon Test Kits Deployed	2/12/18	JM
Radon Test Kits Collected	2/15/18	JM
Radon Test Kits Shipped to Lab*	2/15/18	JM
Radon Test Kits Received by Lab*	2/19/15	JM

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

Radon test result report for:
OFFICE BLANKS

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

Radon test result report for:
TRANSIT BLANKS

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

February 28, 2018

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

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

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies Inc. Job Number 183530

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

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

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

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

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



MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Montgomery Blair High School
Date of Report	January 30, 2018
Round of Testing	Initial Follow-up Post Remediation 2 year testing 5 year testing HVAC Upgrade Window Replacement New Addition New Facility
# of Rooms Tested	132
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	< 0.3 pCi/L
Highest Value	3.1 pCi/L

Project Status

Current Project Status at this time: Results satisfactory to date; missed locations and missing/compromised tests to be sampled.



January 30, 2018

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

Re: Radon Testing Services

KCI Job #1214694182

Location: Montgomery Blair High School

51 University Blvd.
Silver Spring, Maryland 20901

Dear Mr. Cox:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools pursuant to completing a “short-term” 3-day radon test for the Montgomery Blair High School, located at 51 University Blvd. in Silver Spring, Maryland 20901 (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 November 27, 2017 and deployed one-hundred-seventy-one (171) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Appendix A of this report.

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

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

KCI returned to the site on November 30, 2017 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Aircheck, Inc. for analysis by gamma-ray spectroscopy. Aircheck, Inc. is a NRSB certified analytical laboratory for radon analysis (certification #ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

EVALUATION OF TESTING CONDITIONS

These tests represent:

- Post-mitigation biennial testing.

These tests were conducted to:

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

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

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the 30s and high temperatures ranged from the low-50s to mid-60s. Maximum sustained winds ranged from 8-15 miles per hour. Average humidity was around 65%. 0.02 Inches of precipitation was recorded during the testing period.

A magnitude 4.1 earthquake was reported on Thursday, November 30 near Dover, Delaware approximately 95 miles east of Gaithersburg, Maryland. The earthquake occurred during or just after the radon testing period for this facility. In general, enhanced radon emissions have been observed prior to earthquakes and this has been recorded all over the world, according to the research article entitled *Radon-222: A Potential Short-Term Earthquake Precursor*, published June 30, 2015 in the Journal of Earth Science and Climate

Change. The nearby earthquake, which occurred during or prior to the testing period, may have resulted in higher-than-normal radon test results for this facility.

RESULTS

The sampling locations, field observations, and analytical results are listed on Table 1 (Attachment B). The quality control sample locations and analytical results are listed on Table 2 (Attachment B). Missing/compromised tests, missed rooms, and locked rooms are listed on Table 3 (Attachment B). The laboratory analytical results are included in Attachment C. Laboratory results and exposure data for the spike samples are also included in Attachment C.

The results of the radon test analysis indicated the following:

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

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

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

Sincerely,



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

Attachments:

B - Tables 1-3, Radon Test Summary Spreadsheets

C- Laboratory Analytical Results

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

Radon Testing Results		
Montgomery Blair High School		
Test Period: 11/27/17-11/30/17		
Kit Number	Room / Area	Result
7975597	2	1.3
7977226	3	1.6
7975594	4	1.0
7975598	5	1.4
7977227	6	1.7
7975503	7	1.2
7975595	9	1.2
7975552	11	1.3
7975593	13	1.6
7975591	100	0.5
7977243	101	1.0
7977247	102	1.4
7975582	103	< 0.3
7975570	111	0.6
7977254	116	0.6
7975568	117	< 0.3
7975567	119	< 0.3
7975558	120	< 0.3
7977202	121	< 0.3
7977259	122	< 0.3
7977204	123	< 0.3
7975554	124	0.8
7977205	128	0.7
7975599	130	< 0.3
7977207	131	< 0.3
7977208	132	0.9
7977213	133	0.5
7977214	134	1.2
7977217	135	0.6
7977216	136	0.8
7975600	137	< 0.3
7977223	138	< 0.3
7977219	140	< 0.3
7975620	141	0.8
7977222	142	0.7
7975642	143	0.6
7975619	144	0.7
7975617	145	1.0
7975614	146	0.9
7975613	147	< 0.3
7975611	148	< 0.3
7975610	149	< 0.3
7975609	151	0.5
7975608	152	0.5
7975607	153	0.7
7975606	153	1.0

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Montgomery Blair High School		
Test Period: 11/27/17-11/30/17		
Kit Number	Room / Area	Result
7975603	154	3.1
7975605	155	1.1
7975659	156	1.0
7975602	157	0.9
7975643	158	< 0.3
7975641	160	0.7
7975626	161	< 0.3
7975639	162	< 0.3
7975656	163	0.8
7975636	164	< 0.3
7975653	165	0.5
7975635	166	0.6
7975654	167	0.8
7975631	168	0.6
7975629	170	0.6
7975628	171	< 0.3
7975634	172	< 0.3
7975658	173	< 0.3
7975633	174	0.5
7975657	177	0.7
7977206	214	< 0.3
7977235	217	0.6
7977229	238	< 0.3
7977228	241	< 0.3
7975504	249	0.6
7975507	261	0.6
7975506	265	< 0.3
7975508	270	0.6
7977221	311	< 0.3
7975510	317	< 0.3
7975509	325	< 0.3
7977299	327	< 0.3
7975511	332	< 0.3
7977298	333	< 0.3
7975513	360	< 0.3
7975569	* 113 (Missing)	-
7977201	121 OFFICE	< 0.3
7977203	* 125 (Open Window)	0.7
7975553	130 OFFICE	< 0.3
7977209	* 133 OFFICE (Missing)	-
7975623	140 OFFICE	< 0.3
7977215	* 141 OFFICE (Missing)	0.6
7975618	146 OFFICE	0.8
7975652	152 WORKROOM	1.3
7975502	3 OFFICE	0.6
7975622	ACTIVITY CENTER	0.8
7975648	ACTIVITY CENTER	< 0.3
7975644	ACTIVITY CENTER	< 0.3
7975646	ACTIVITY CENTER	< 0.3
7975645	ACTIVITY CENTER	< 0.3

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Montgomery Blair High School		
Test Period: 11/27/17-11/30/17		
Kit Number	Room / Area	Result
7975647	ACTIVITY CENTER	< 0.3
7975572	ASSISTANT PRINCI	< 0.3
7975587	ATTENDANCE	< 0.3
7975592	ATTENDANCE OFFIC	0.9
7977230	AUDITORIUM	1.5
7977242	AUDITORIUM	1.9
7977248	* AUDITORIUM (Tampered)	2.2
7975578	BUILDING SERVIVE	< 0.3
7975590	BUSINESS ADMINIS	< 0.3
7975649	CAFETERIA OFFICE	< 0.3
7975561	CONFERENCE A	0.7
7975575	CONFERENCE B	1.1
7975584	CONTROL ROOM	0.8
7975564	COUNSELOR A	0.8
7975563	COUNSELOR B	< 0.3
7977251	COUNSELOR C	0.5
7977250	COUNSELOR D	< 0.3
7977258	COUNSELOR E	0.6
7977253	COUNSELOR F	0.7
7977245	COUNSELOR G	0.5
7977249	COUNSELOR H	< 0.3
7975566	COUNSELOR I	< 0.3
7975565	COUNSELOR J	0.8
7975562	COUNSELOR L	0.7
7975583	EDITING A	0.7
7975555	GUIDANCE OFFICE	0.9
7975573	GYMNASIUM	0.6
7975581	GYMNASIUM	< 0.3
7975580	GYMNASIUM	< 0.3
7975579	* GYMNASIUM (Missing)	-
7975640	GYMNASIUM SMALL	0.8
7977218	GYMNASIUM SMALL	< 0.3
7975560	K	< 0.3
7975589	MAIN OF WORKROOM	< 0.3
7977241	MAIN OFF CONFERE	< 0.3
7975588	MAIN OFFICE	< 0.3
7977233	MEDIA CENTER	0.8
7977237	MEDIA CENTER	0.9
7977238	MEDIA CENTER	1.1
7977239	MEDIA CENTER	0.9
7975576	MEDIA OFFICE A	< 0.3
7977232	MEDIA OFFICE B	1.0
7975585	MEDIA WORK ROOM	1.0
7975571	PRINCIPAL	< 0.3
7975586	PRINCIPALS SECRE	0.6
7975651	REGISTRAR	0.7
7977212	RMS	< 0.3
7977240	SECURITY	< 0.3
7975650	STAFF DINING	0.6
7975596	STU ART OFFICE	1.3

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Montgomery Blair High School		
Test Period: 11/27/17-11/30/17		
Kit Number	Room / Area	Result
7977255	WORKROOM GUIDEN	< 0.3

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Montgomery Blair High School		
Test Period: 11/27/17-11/30/17		
Kit Number	QC Type	Result
7977244	D (102)	1.3
7977252	D (116)	< 0.3
7977210	D (132)	1.1
7975621	* D (138:Missing)	-
7975604	D (154)	3.1
7975625	D (161)	0.5
7975627	D (172)	0.6
7977234	D (217)	0.5
7977257	* D (311:Tampered)	< 0.3
7975501	D (5)	1.1
7975574	D (CONFERENCE B)	0.7
7975559	D (GUIDANCE OFFICE)	0.7
7977246	D (MAIN OFF CONFERE)	< 0.3
7975615	D (REGISTRAR)	< 0.3
7975577	D (SECURITY)	0.6
7977211	FB (122)	< 0.3
7975655	FB (161)	< 0.3
7975505	FB (217)	< 0.3
7977225	FB (311)	< 0.3
7977231	FB (MAIN OFF CONFERE)	< 0.3
7975616	FB (REGISTRAR)	< 0.3
7975612	OB (148)	< 0.3
7978495	OB (OB)	< 0.3
7978500	OB (OB)	< 0.3

Table Note:

* Missing or Compromised Sample

Summary of Missed Locations		
Spring Mill Center		
Test Period: 11/27/17-12/01/17		
Kit Number	Room / Area	Result
-	1 (Missed location)	-
-	14 (Missed location)	-
-	110 (Locked)	-
-	112 (Missed location)	-
-	114 (Locked)	-
-	126 (Missed location)	-
-	101 Multimedia (Missed location)	-
-	101 Telecom (Missed location)	-
-	11 Office (Missed location)	-
-	11 Print (Missed location)	-
-	112C (Missed location)	-
-	118SCR (Missed location)	-
-	112 Office (Missed location)	-
-	14 Office (Locked)	-
-	14 Practice A (Locked)	-
-	14 Practice B (Locked)	-
-	14 Practice C (Locked)	-
-	14 Practice D (Locked)	-
-	140 Exam Room (Missed location)	-
-	140 Nurse Office (Missed location)	-
-	140 Rest Area (Missed location)	-
-	Kitchen (Missed location)	-
-	C14A (Missed location)	-
-	C14B (Missed location)	-
-	C14C (Missed location)	-
-	C14 Office (Missed location)	-
-	153 (Missed location)	-
-	16A (Missed location)	-
-	16A Office (Missed location)	-
-	16A PracticeA (Missed location)	-
-	16A PracticeB (Missed location)	-
-	16A PracticeC (Missed location)	-
-	170 Office (Missed location)	-
-	2 Office (Missed location)	-
-	3 Office (Missed location)	-
-	7 Office (Missed location)	-
-	BINICK (Missed location)	-
-	BLR (Missed location)	-
-	BLR Team Room (Missed location)	-
-	Boys Dressing (Missed location)	-
-	Concessions (Missed location)	-
-	Conference 1 (Missed location)	-
-	Editing B (Missed location)	-
-	Editing C (Missed location)	-
-	Editing D (Missed location)	-
-	Editing E (Missed location)	-
-	Financial Special (Missed location)	-
-	Girls Dressing (Missed location)	-
-	GLR (Missed location)	-
-	GLR Team Room (Missed location)	-
-	Gym B (Missed location)	-
-	Gym B (Missed location)	-
-	Gym B (Missed location)	-
-	Gym B (Missed location)	-
-	HC Editing (Missed location)	-
-	Kitchen Office (Missed location)	-
-	Library (Missed location)	-
-	Library (Missed location)	-
-	Library (Missed location)	-
-	Makeup (Missed location)	-

-	Media Head In (Missed location)	-
-	Office (Missed location)	-
-	Office Conf. (Missed location)	-
-	Office Work Room (Missed location)	-
-	Radio (Missed location)	-
-	Stage (Missed location)	-
-	Stage (Missed location)	-
-	Stage Office (Missed location)	-
-	Stage Shop (Missed location)	-
-	Team Room (Missed location)	-
-	TV Control (Missed location)	-
-	141 (Locked)	-
-	118 (Locked)	-
-	Conference A (Locked)	-
-	16 (Locked)	-

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:
MONTGOMERY BLAIR HS
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7975591	100	2017-11-27 @ 2:00 pm	2017-11-30 @ 11:00 am	0.5 ± 0.4	2017-12-04
7977243	101	2017-11-27 @ 2:00 pm	2017-11-30 @ 11:00 am	1.0 ± 0.4	2017-12-04
7977247	102	2017-11-27 @ 2:00 pm	2017-11-30 @ 11:00 am	1.4 ± 0.4	2017-12-04
7977244	102	2017-11-27 @ 2:00 pm	2017-11-30 @ 11:00 am	1.3 ± 0.4	2017-12-05
7975552	11	2017-11-27 @ 4:00 pm	2017-11-30 @ 12:00 pm	1.3 ± 0.4	2017-12-05
7977254	116	2017-11-27 @ 2:00 pm	2017-11-30 @ 11:00 am	0.6 ± 0.4	2017-12-04
7977252	116	2017-11-27 @ 2:00 pm	2017-11-30 @ 11:00 am	< 0.3	2017-12-05
7975568	117	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7975567	119	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7975558	120	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7977201	121 OFFICE	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-05
7977259	122	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-05
7977211	122	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-05
7977204	123	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7975554	124	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	0.8 ± 0.4	2017-12-05
7977203	125	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	0.7 ± 0.4	2017-12-05
7977205	128	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	0.7 ± 0.4	2017-12-05
7975599	130	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7977208	132	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	0.9 ± 0.4	2017-12-05
7977210	132	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	1.1 ± 0.4	2017-12-05
7977217	135	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	0.6 ± 0.4	2017-12-04
7977216	136	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	0.8 ± 0.4	2017-12-04
7975600	137	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7977223	138	2017-11-27 @ 12:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7975623	140 OFFICE	2017-11-27 @ 11:00 am	2017-11-30 @ 10:00 am	< 0.3	2017-12-05
7975620	141	2017-11-27 @ 11:00 am	2017-11-30 @ 10:00 am	0.8 ± 0.4	2017-12-04
7977215	141 OFFICE	2017-11-27 @ 5:00 pm	2017-11-30 @ 10:00 am	0.6 ± 0.4	2017-12-05
7977222	142	2017-11-27 @ 11:00 am	2017-11-30 @ 10:00 am	0.7 ± 0.4	2017-12-05
7975617	145	2017-11-27 @ 11:00 am	2017-11-30 @ 10:00 am	1.0 ± 0.4	2017-12-04
7975618	146 OFFICE	2017-11-27 @ 11:00 am	2017-11-30 @ 10:00 am	0.8 ± 0.4	2017-12-05
7975613	147	2017-11-27 @ 11:00 am	2017-11-30 @ 10:00 am	< 0.3	2017-12-05
7975611	148	2017-11-27 @ 11:00 am	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7975612	148	2017-11-27 @ 11:00 am	2017-11-30 @ 10:00 am	< 0.3	2017-12-05
7975610	149	2017-11-27 @ 11:00 am	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7975607	153	2017-11-27 @ 10:00 am	2017-11-30 @ 9:00 am	0.7 ± 0.4	2017-12-05
7975606	153	2017-11-27 @ 10:00 am	2017-11-30 @ 9:00 am	1.0 ± 0.4	2017-12-05
7975604	154	2017-11-27 @ 10:00 am	2017-11-30 @ 9:00 am	3.1 ± 0.5	2017-12-05

Radon test result report for:

**MONTGOMERY BLAIR HS
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7975605	155	2017-11-27 @ 10:00 am	2017-11-30 @ 9:00 am	1.1 ± 0.4	2017-12-05
7975659	156	2017-11-27 @ 10:00 am	2017-11-30 @ 9:00 am	1.0 ± 0.4	2017-12-05
7975602	157	2017-11-27 @ 10:00 am	2017-11-30 @ 9:00 am	0.9 ± 0.4	2017-12-05
7975643	158	2017-11-27 @ 10:00 am	2017-11-30 @ 9:00 am	< 0.3	2017-12-05
7975655	161	2017-11-27 @ 9:00 am	2017-11-30 @ 9:00 am	< 0.3	2017-12-05
7975639	162	2017-11-27 @ 10:00 am	2017-11-30 @ 9:00 am	< 0.3	2017-12-05
7975656	163	2017-11-27 @ 9:00 am	2017-11-30 @ 9:00 am	0.8 ± 0.4	2017-12-04
7975653	165	2017-11-27 @ 9:00 am	2017-11-30 @ 9:00 am	0.5 ± 0.4	2017-12-05
7975635	166	2017-11-27 @ 10:00 am	2017-11-30 @ 9:00 am	0.6 ± 0.4	2017-12-05
7975654	167	2017-11-27 @ 9:00 am	2017-11-30 @ 9:00 am	0.8 ± 0.4	2017-12-04
7975629	170	2017-11-27 @ 10:00 am	2017-11-30 @ 9:00 am	0.6 ± 0.4	2017-12-04
7975628	171	2017-11-27 @ 9:00 am	2017-11-30 @ 9:00 am	< 0.3	2017-12-05
7975634	172	2017-11-27 @ 10:00 am	2017-11-30 @ 9:00 am	< 0.3	2017-12-04
7975627	172	2017-11-27 @ 10:00 am	2017-11-30 @ 9:00 am	0.6 ± 0.4	2017-12-04
7975633	174	2017-11-27 @ 9:00 am	2017-11-30 @ 9:00 am	0.5 ± 0.4	2017-12-04
7975597	2	2017-11-27 @ 4:00 pm	2017-11-30 @ 12:00 pm	1.3 ± 0.4	2017-12-04
7977206	214	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	< 0.3	2017-12-04
7977234	217	2017-11-27 @ 4:00 pm	2017-11-30 @ 12:00 pm	0.5 ± 0.4	2017-12-04
7977228	241	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	< 0.3	2017-12-04
7975504	249	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	0.6 ± 0.4	2017-12-04
7975507	261	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	0.6 ± 0.4	2017-12-04
7975506	265	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	< 0.3	2017-12-04
7975508	270	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	0.6 ± 0.4	2017-12-04
7977226	3	2017-11-27 @ 4:00 pm	2017-11-30 @ 12:00 pm	1.6 ± 0.4	2017-12-04
7975502	3 OFFICE	2017-11-27 @ 4:00 pm	2017-11-30 @ 12:00 pm	0.6 ± 0.4	2017-12-05
7977257	311	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	< 0.3	2017-12-04
7977221	311	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	< 0.3	2017-12-04
7977225	311	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	< 0.3	2017-12-05
7975510	317	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	< 0.3	2017-12-04
7975509	325	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	< 0.3	2017-12-04
7977299	327	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	< 0.3	2017-12-05
7977298	333	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	< 0.3	2017-12-04
7975513	360	2017-11-27 @ 5:00 pm	2017-11-30 @ 12:00 pm	< 0.3	2017-12-05
7975594	4	2017-11-27 @ 4:00 pm	2017-11-30 @ 12:00 pm	1.0 ± 0.4	2017-12-04
7975501	5	2017-11-27 @ 4:00 pm	2017-11-30 @ 12:00 pm	1.1 ± 0.4	2017-12-04
7977227	6	2017-11-27 @ 4:00 pm	2017-11-30 @ 12:00 pm	1.7 ± 0.4	2017-12-04
7975503	7	2017-11-27 @ 4:00 pm	2017-11-30 @ 12:00 pm	1.2 ± 0.4	2017-12-05

Radon test result report for:

**MONTGOMERY BLAIR HS
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7975595	9	2017-11-27 @ 4:00 pm	2017-11-30 @ 12:00 pm	1.2 ± 0.4	2017-12-04
7975622	ACTIVITY CENTER	2017-11-27 @ 8:00 am	2017-11-30 @ 9:00 am	0.8 ± 0.4	2017-12-04
7975644	ACTIVITY CENTER	2017-11-27 @ 8:00 am	2017-11-30 @ 9:00 am	< 0.3	2017-12-04
7975645	ACTIVITY CENTER	2017-11-27 @ 8:00 am	2017-11-30 @ 9:00 am	< 0.3	2017-12-05
7975646	ACTIVITY CENTER	2017-11-27 @ 8:00 am	2017-11-30 @ 9:00 am	< 0.3	2017-12-05
7975648	ACTIVITY CENTER	2017-11-27 @ 8:00 am	2017-11-30 @ 9:00 am	< 0.3	2017-12-05
7975572	ASSISTANT PRINCI	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	< 0.3	2017-12-04
7977242	AUDITORIUM	2017-11-27 @ 6:00 pm	2017-11-30 @ 10:00 am	1.9 ± 0.4	2017-12-04
7977248	AUDITORIUM	2017-11-27 @ 6:00 pm	2017-11-30 @ 10:00 am	2.2 ± 0.5	2017-12-05
7975578	BUILDING SERVIVE	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	< 0.3	2017-12-05
7975590	BUSINESS ADMINIS	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	< 0.3	2017-12-04
7975649	CAFETERIA OFFICE	2017-11-27 @ 9:00 am	2017-11-30 @ 9:00 am	< 0.3	2017-12-04
7975561	CONFERENCE A	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	0.7 ± 0.4	2017-12-04
7975574	CONFERENCE B	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	0.7 ± 0.4	2017-12-04
7975575	CONFERENCE B	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	1.1 ± 0.5	2017-12-05
7975584	CONTROL ROOM	2017-11-27 @ 2:00 pm	2017-11-30 @ 11:00 am	0.8 ± 0.4	2017-12-04
7975563	COUNSELOR B	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7977250	COUNSELOR D	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-05
7977258	COUNSELOR E	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	0.6 ± 0.4	2017-12-05
7977253	COUNSELOR F	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	0.7 ± 0.4	2017-12-04
7977249	COUNSELOR H	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7975566	COUNSELOR I	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-05
7975565	COUNSELOR J	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	0.8 ± 0.4	2017-12-04
7975562	COUNSELOR L	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	0.7 ± 0.4	2017-12-05
7975583	EDITING A	2017-11-27 @ 2:00 pm	2017-11-30 @ 11:00 am	0.7 ± 0.4	2017-12-05
7975555	GUIDANCE OFFICE	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	0.9 ± 0.5	2017-12-05
7975580	GYMNASIUM	2017-11-27 @ 2:00 pm	2017-11-30 @ 11:00 am	< 0.3	2017-12-04
7975573	GYMNASIUM	2017-11-27 @ 2:00 pm	2017-11-30 @ 11:00 am	0.6 ± 0.4	2017-12-04
7975581	GYMNASIUM	2017-11-27 @ 2:00 pm	2017-11-30 @ 11:00 am	< 0.3	2017-12-04
7975640	GYMNASIUM SMALL	2017-11-27 @ 2:00 pm	2017-11-30 @ 11:00 am	0.8 ± 0.4	2017-12-04
7977218	GYMNASIUM SMALL	2017-11-27 @ 2:00 pm	2017-11-30 @ 11:00 am	< 0.3	2017-12-05
7975560	K	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7975589	MAIN OF WORKROOM	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	< 0.3	2017-12-04
7977231	MAIN OFF CONFERE	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	< 0.3	2017-12-04
7977241	MAIN OFF CONFERE	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	< 0.3	2017-12-04
7975588	MAIN OFFICE	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	< 0.3	2017-12-05
7977238	MEDIA CENTER	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	1.1 ± 0.4	2017-12-04

Radon test result report for:
MONTGOMERY BLAIR HS
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7977239	MEDIA CENTER	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	0.9 ± 0.4	2017-12-04
7977233	MEDIA CENTER	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	0.8 ± 0.4	2017-12-05
7977237	MEDIA CENTER	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	0.9 ± 0.4	2017-12-05
7977232	MEDIA OFFICE B	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	1.0 ± 0.4	2017-12-04
7975585	MEDIA WORK ROOM	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	1.0 ± 0.4	2017-12-04
7978500	OB	2017-11-27 @ 1:00 pm	2017-11-30 @ 1:00 pm	< 0.3	2017-12-04
7978495	OB	2017-11-27 @ 1:00 pm	2017-11-30 @ 1:00 pm	< 0.3	2017-12-05
7975571	PRINCIPAL	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	< 0.3	2017-12-05
7975586	PRINCIPALS SECRE	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	0.6 ± 0.4	2017-12-04
7975615	REGISTRAR	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7975616	REGISTRAR	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-04
7975651	REGISTRAR	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	0.7 ± 0.4	2017-12-05
7977212	RMS	2017-11-27 @ 3:00 pm	2017-11-30 @ 11:00 am	< 0.3	2017-12-04
7975577	SECURITY	2017-11-27 @ 4:00 pm	2017-11-30 @ 11:00 am	0.6 ± 0.5	2017-12-05
7975650	STAFF DINING	2017-11-27 @ 9:00 am	2017-11-30 @ 9:00 am	0.6 ± 0.3	2017-12-04
7975596	STU ART OFFICE	2017-11-27 @ 4:00 pm	2017-11-30 @ 12:00 pm	1.3 ± 0.4	2017-12-05
7977255	WORKROOM GUIDEN	2017-11-27 @ 1:00 pm	2017-11-30 @ 10:00 am	< 0.3	2017-12-05

December 21, 2017

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**MONTGOMERY BLAIR HS
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7975569	113	@	@		
7977209	133 OFFICE	@	@		
7975621	138	@	@		
7975579	GYMNASIUM	@	@		

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase

Names of Schools:

- | | |
|--|---------------------------------------|
| 1. Montgomery Knolls Elementary School | 14. Flora Singer Elementary School |
| 2. New Hampshire Estates Elementary School | 15. Sligo Middle School |
| 3. Montgomery Blair High School | 16. Mario Loiederman Middle School |
| 4. Silver Creek Middle School | 17. Roscoe Nix Elementary School |
| 5. Sligo Creek Elementary School | 18. Sargent Shriver Elementary School |
| 6. East Silver Spring Elementary School | 19. |
| 7. Silver Spring International Middle School | 20. |
| 8. Woodlin Elementary School | 21. |
| 9. Northwood High School | 22. |
| 10. Spring Mill Center | 23. |
| 11. Westbrook Elementary School | 24. |
| 12. Westland Middle School | 25. |
| 13. Cloverly Elementary School | 26. |

	Date	Initials
Radon Test Kits Deployed	11/27/17	JM
Radon Test Kits Collected	11/30/17	JM
Radon Test Kits Shipped to Lab*	11/30/17	JM
Radon Test Kits Received by Lab*	12/04/17	JM

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

Radon test result report for:**TRANSIT 1****NONE**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7978062	TRANSIT 1	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7975804	TRANSIT 10	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7977990	TRANSIT 11	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7978201	TRANSIT 12	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7978203	TRANSIT 13	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7978206	TRANSIT 14	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-05
7978246	TRANSIT 15	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-05
7978239	TRANSIT 16	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-05
7978226	TRANSIT 17	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-05
7975078	TRANSIT 18	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-05
7975077	TRANSIT 19	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-05
7978074	TRANSIT 2	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7975076	TRANSIT 20	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7975684	TRANSIT 21	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7975683	TRANSIT 22	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7975601	TRANSIT 23	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7978011	TRANSIT 24	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7978012	TRANSIT 25	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7978094	TRANSIT 26	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-05
7975624	TRANSIT 27	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-05
7834562	TRANSIT 28	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-05
7977995	TRANSIT 29	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-05
7978098	TRANSIT 3	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7977992	TRANSIT 30	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7978719	TRANSIT 4	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-05
7978732	TRANSIT 5	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7978731	TRANSIT 6	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7975806	TRANSIT 7	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7975815	TRANSIT 8	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04
7975805	TRANSIT 9	2017-11-27 @ 4:00 pm	2017-11-30 @ 4:00 pm	< 0.3	2017-12-04

December 19, 2017

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

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

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies Inc. Job Number 182393

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

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

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

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

7975075, 7975064, 7975063, _____

7975065, 7975069, 7975070 _____

F4 Right

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

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

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

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

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

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

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



MCPS RADON TESTING

Executive Summary: Montgomery Blair High School

Date of Test Report:	11/28/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	1
# Rooms \geq 4.0 pCi/L:	0
Low Value:	1.2
High Value:	1.2

Project Status:

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



November 28, 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 # 12146341.60

Location: Montgomery Blair High School
51 University Boulevard East
Silver Spring, MD 20901

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 Montgomery Blair High School, located at 51 University Boulevard East in Silver Spring, Maryland 20901 (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 November 15, 2016 and deployed one (1) activated charcoal (AC) radon test kit. 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 three (3) 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 November 18, 2016 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

These tests represent:

- Post-mitigation testing for radon mitigation systems installed recently

These tests were conducted to:

- Confirm the success of the mitigation system(s)

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

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the 30s and high temperatures ranged from 60-70. Maximum sustained winds ranged from 8-14 miles per hour. Average humidity was around 65%. No precipitation was recorded during the testing period.

Results:

The results of the radon test analysis indicated the following:

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

Notes:
D- Duplicate sample

The office blank and lab transit blank 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. Mouldsdale
Radon Measurement Specialist
KCI Technologies, Inc.

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

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Radon Testing Results		
Montgomery Blair High School		
Test Period: 11/15/16-11/18/16		
Kit Number	Room / Area	Result
7802097	EDITING	1.2

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

November 22, 2016

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
**BLAIR HIGH SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7802097	EDITING A	2016-11-15 @ 8:00	2016-11-18 @ 8:00 am	1.2 ± 0.3	2016-11-21
am					

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

November 22, 2016

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

MCPS Radon

Phase 19 BLANKS

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7802909	OFFICE	2016-11-11 @ 10:00 am	2016-11-14 @ 10:00 am	< 0.3	2016-11-16
7802910	TRANSIT	2016-11-11 @ 10:00 am	2016-11-14 @ 10:00 am	< 0.3	2016-11-16

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

November 22, 2016

**** LABORATORY ANALYSIS REPORT ****

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

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7802912	1	2016-11-11 @ 10:00 am	2016-11-14 @ 10:00 am	23.5 ± 0.8	2016-11-16
7802913	2	2016-11-11 @ 10:00 am	2016-11-14 @ 10:00 am	23.0 ± 0.8	2016-11-16
7802911	3	2016-11-11 @ 10:00 am	2016-11-14 @ 10:00 am	25.6 ± 0.9	2016-11-16

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 177376

NOMINAL Conditions: Radon Conc 26.3 pCi/L Rel. Hum 59.1 % Temp. 29.0 F

Date Start: 11/11/16 Date Stop: 11/14/16 Date Start: _____ Date Stop: _____

Time Start: 0958 Time Stop: 0958 Time Start: _____ Time Stop: _____

Device No.'s: (3) Char. Bags - Device No.'s: _____

7802911 thro 7802913

GS Middle

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

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

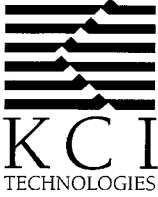
Device No.'s: _____ Device No.'s: _____

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

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

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

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 19

Names of Schools:

1. Wood Acres Elementary School
2. Walt Whitman High School
3. East Silver Spring Elementary School

	Date	Initials
Radon Test Kits Deployed	11/14/16	JM
Radon Test Kits Collected	11/17/16	JM
Radon Test Kits Shipped to Lab*	11/18/16	JM
Radon Test Kits Received by Lab*	11/21/16	JM

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 19

Names of Schools:

1. Montgomery Blair High School
2. Springbrook High School
3. Sligo Middle School
4. Einstein High School
5. John F. Kennedy High School
6. Blair Ewing Center
7. Rock Terrace School
8. Thomas Wootton High School
9. Fields Road Elementary School

	Date	Initials
Radon Test Kits Deployed	11/15/16	JM
Radon Test Kits Collected	11/18/16	JM
Radon Test Kits Shipped to Lab*	11/18/16	JM
Radon Test Kits Received by Lab*	11/21/16	JM

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



MCPS RADON TESTING

Executive Summary: Montgomery Blair High School

Date of Test Report:	10/19/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	12
# Rooms \geq 4.0 pCi/L:	0
Low Value:	< 0.3
High Value:	1.3

Project Status:

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



October 19, 2016

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

Re: **Radon Testing Services**
KCI Job # 12146341.54

Location: Montgomery Blair High School
51 University Boulevard East
Silver Spring, MD 20901

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 Montgomery Blair High School, located at 51 University Boulevard East in Silver Spring, Maryland 20901 (subject site).

Scope of Services:

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

KCI visited the site on September 26, 2016 and deployed fifteen (15) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on September 29, 2016 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

These tests represent:

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

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

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

Future periodic testing should be conducted during the heating season in ideal conditions as described below. According to AARST, *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*, ideal testing conditions would be when the building is fully occupied and the heating system is active. For this test, the facility's HVAC system was operating in cooling mode; therefore, KCI concludes that this test was not conducted during ideal testing conditions.

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the 50s and high temperatures in the mid-60s to mid-70s. Maximum sustained winds ranged from 3-15 miles per hour. Average humidity ranged from 71 to 89 percent. Rain (1.83 inches in Gaithersburg, MD) was recorded on 9/29/16. The weather conditions during the testing period may have resulted in atypical radon test results for this facility.

Results:

The results of the radon test analysis indicated the following:

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

Notes:

D- Duplicate sample

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

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

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

Sincerely,



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

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

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Radon Testing Results		
Montgomery Blair High School		
Test Period: 09/26/16-09/29/16		
Kit Number	Room / Area	Result
7802227	152	< 0.3
7802234	153	< 0.3
7801881	154	1.1
7802244	155	< 0.3
7802229	156	0.6
7802236	157	< 0.3
7802237	152 WR	0.5
7802241	ASST PRINCIPAL	< 0.3
7802233	* EDITING A (Missing)	-
7802228	EDITING B	1.3
7802230	PRINCIPAL	0.5
7802235	SECURITY - OFFICE BETWEEN AP & BSO	< 0.3

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Montgomery Blair High School		
Test Period: 09/26/16-09/29/16		
Kit Number	QC Type	Result
7802240	D (PRINCIPAL)	< 0.3
7802231	D (SECURITY - OFFICE BETWEEN AP & BSO)	0.6
7802239	FB (SECURITY - OFFICE BETWEEN AP & BSO)	< 0.3

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:

**MONTGOMERY BLAIR HIGH SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7802227	152	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	< 0.3	2016-10-03
7802237	152 WR	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	0.5 ± 0.3	2016-10-03
7802234	153	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	< 0.3	2016-10-03
7801881	154	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	1.1 ± 0.3	2016-10-03
7802244	155	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	< 0.3	2016-10-03
7802229	156	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	0.6 ± 0.3	2016-10-03
7802236	157	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	< 0.3	2016-10-03
7802241	ASST PRINCIPAL	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	< 0.3	2016-10-03
7802233	EDITING A	@	@		
7802228	EDITING B	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	1.3 ± 0.3	2016-10-03
7802240	PRINCIPAL	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	< 0.3	2016-10-03
7802230	PRINCIPAL	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	0.5 ± 0.3	2016-10-03
7802235	SECURITY	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	< 0.3	2016-10-03
7802231	SECURITY	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	0.6 ± 0.3	2016-10-03
7802239	SECURITY	2016-09-26 @ 4:00 pm	2016-09-29 @ 2:00 pm	< 0.3	2016-10-03

October 7, 2016

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

MCPS Radon

Phase 18 Office Blanks

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

Radon test result report for:**MCPS Radon****Phase 18 Transit Blanks**

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

October 12, 2016

**** LABORATORY ANALYSIS REPORT ****

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

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

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies Inc. Job Number 176788

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

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

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

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

7769899, 7769884, 7769885, _____

7769889, 7769890, 7769891 _____

F3 Left

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

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

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

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

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

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

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 18

Name of Schools:

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

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

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 18

Name of Schools:

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

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

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

RADON SCREENING SURVEY – FOLLOW-UP MONTGOMERY BLAIR HIGH SCHOOL

51 University Boulevard East, Silver Spring, Maryland 20901

EXECUTIVE SUMMARY

Date of Test Report:	3/16/16 Follow-Up
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested	9
# Rooms \geq 4.0 pCi/L:	2
Low Value:	<0.3
High Value:	4.9
Confirmed Rooms \geq 4.0 pCi/L US EPA Action Level	1

Summary of Sampling Events \geq 4.0 pCi/L

Room	Result (pCi/L) 1/29/16 Initial	Result (pCi/L) 3/16/16 Follow-Up	Average Result (pCi/L)
Editing A	4.2	1.2	2.7
119	--- Missing	0.6	0.6
122 Office	<0.3 Tampered	<0.3	<0.3
Activity Center	--- Missing	<0.3	<0.3
GYM	--- Missing	0.5	0.5
Gym B	--- Missing	<0.3	<0.3
154	3.6	4.9	4.3
Assist Principal	3.4	4.2	3.8
Editing B	3.4	2.3	2.9



MCPS RADON TESTING

Executive Summary: Montgomery Blair High School

Date of Test Report:	3/16/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	9
# Rooms \geq 4.0 pCi/L:	2
Low Value:	< 0.3
High Value:	4.9

Rooms with results \geq 4.0 pCi/L:
154 (4.9 pCi/L), Assist Principal (4.2 pCi/L)

Project Status:

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



March 16, 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 # 12146341.29

Location: Montgomery Blair High School
51 University Boulevard East
Silver Spring, MD 20901

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 Montgomery Blair High School, located at 51 University Boulevard East in Silver Spring, Maryland 20901 (subject site).

Scope of Services:

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

KCI visited the site on February 22, 2016 and deployed twelve (12) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on February 25, 2016 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936

Butler Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

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

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

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

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

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

Results:

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥ 4.0 pCi/L	154	4.9
≥ 4.0 pCi/L	Assist. Principal	4.2
< 4.0 pCi/L	See Attachment B	

Notes:

D- Duplicate sample

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

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

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

Sincerely,



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

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

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank*

PM- Project Manager

QC- Quality Control

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

Radon Testing Results		
Montgomery Blair High School		
Test Period: 02/23/16-02/26/16		
Kit Number	Room / Area	Result
7731190	119	0.5
7731160	122	< 0.3
7719190	154	4.9
7731172	ACTIVITY CENTER	< 0.3
7731156	* ACTIVITY CENTER (Missing)	-
7731162	ASSIST PRINCIPAL	4.2
7731180	EDITING A	1.2
7731194	EDITING B	2.3
7731169	GYM	0.5
7731197	GYM B	< 0.3

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Montgomery Blair High School		
Test Period: 02/23/16-02/26/16		
Kit Number	QC Type	Result
7731166	D (119)	0.6
7731161	FB (ASSIST PRINCIPAL)	< 0.3

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

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

Radon test result report for:
**MONTGOMERY BLAIR HIGH SCHOOL
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7731166	119	2016-02-23 @ 12:00 pm	2016-02-26 @ 11:00 am	0.6 ± 0.3	2016-03-01
7731190	119	2016-02-23 @ 12:00 pm	2016-02-26 @ 11:00 am	0.5 ± 0.3	2016-03-01
7731160	122	2016-02-23 @ 12:00 pm	2016-02-26 @ 11:00 am	< 0.3	2016-03-01
7719190	154	2016-02-23 @ 11:00 am	2016-02-26 @ 11:00 am	4.9 ± 0.4	2016-03-01
7731156	ACTIVITY CENTER	@	@		
7731172	ACTIVITY CENTER	2016-02-23 @ 12:00 pm	2016-02-26 @ 11:00 am	< 0.3	2016-03-01
7731161	ASSIST PRINCIPAL	2016-02-23 @ 11:00 am	2016-02-26 @ 10:00 am	< 0.3	2016-03-01
7731162	ASSIST PRINCIPAL	2016-02-23 @ 11:00 am	2016-02-26 @ 10:00 am	4.2 ± 0.4	2016-03-01
7731180	EDITING A	2016-02-23 @ 12:00 pm	2016-02-26 @ 10:00 am	1.2 ± 0.3	2016-03-01
7731194	EDITING B	2016-02-23 @ 12:00 pm	2016-02-26 @ 10:00 am	2.3 ± 0.3	2016-03-01
7731169	GYM	2016-02-23 @ 11:00 am	2016-02-26 @ 11:00 am	0.5 ± 0.3	2016-03-01
7731197	GYM	2016-02-23 @ 11:00 am	2016-02-26 @ 11:00 am	< 0.3	2016-03-01

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

Radon test result report for:
MCPS
Phase 9 Office Blanks

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

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

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

Radon test result report for:
MCPS
Phase 9 Office Blanks

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

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

February 23, 2016
LABORATORY ANALYSIS REPORT

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

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

February
15,
2016

****LABORATORY ANALYSIS
REPORT****

Spike Sample Laboratory Results

Radon test result report for:
MCPS

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

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCF Technologies Inc. Job Number 173704

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

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

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

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

7718281, 7718282, 7718291, _____

7718288, 7718289, 7718273 _____

ε3 Left

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

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

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

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

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

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

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 9

Name of Schools:

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

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

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 9

Name of Schools:

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

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

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



MCPS RADON TESTING

Executive Summary: Montgomery Blair High School

Date of Test Report:	1/29/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	209
# Rooms \geq 4.0 pCi/L:	1
Low Value:	< 0.3
High Value:	4.2

Rooms with results \geq 4.0 pCi/L:
Editing A (4.2 pCi/L)

Project Status:

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



January 29, 2016

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

Re: **Radon Testing Services**
KCI Job # 12146341.22

Location: Montgomery Blair High School
51 University Boulevard East
Silver Spring, MD 20901

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 Montgomery Blair High School, located at 51 University Boulevard East in Silver Spring, Maryland 20901 (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 two hundred forty-two (242) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

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

Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

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

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

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

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

Results:

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥ 4.0 pCi/L	Editing A	4.2
< 4.0 pCi/L	See Attachment 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. Mouldale
Radon Measurement Specialist
KCI Technologies, Inc.

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

ATTACHMENT 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		
Montgomery Blair H.S.		
Test Period: 01/04/16-01/08/16		
Kit Number	Room / Area	Result
7713118	1	1.1
7715295	2	0.7
7711487	3	0.9
7714902	4	1.1
7711499	5	1.1
7720642	6	3
7720603	7	0.7
7720601	9	0.9
7720321	11	1.2
7719896	13	1.1
7715296	14	0.6
7707602	100	2
7720314	101	1.7
7714983	102	2.2
7711108	110	1
7711107	110	0.7
7711103	111	1.1
7711101	112	< 0.3
7711106	113	0.7
7711109	113	1
7711140	114	0.7
7711142	116	0.8
7711112	117	0.7
7714617	120	0.7
7711153	121	1.2
7714606	122	0.9
7711147	123	0.7
7711155	124	0.6
7711119	125	0.7
7711157	126	< 0.3
7711144	128	0.7
7714631	130	0.7
7714634	131	0.9
7714628	132	< 0.3
7714626	133	< 0.3
7714640	133	0.6
7714625	134	1.2
7714623	135	0.5
7714610	136	0.8
7714622	137	< 0.3
7714608	138	0.5
7714649	140	0.5
7714639	141	0.7
7714629	141	0.7
7714641	142	0.9
7714624	143	1.8

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Montgomery Blair H.S.		
Test Period: 01/04/16-01/08/16		
Kit Number	Room / Area	Result
7714615	144	< 0.3
7714618	145	1
7714619	146	1.2
7714614	147	0.5
7714621	148	0.8
7714616	149	< 0.3
7714646	151	< 0.3
7714607	152	< 0.3
7714696	152	1.6
7714662	153	0.9
7714603	153	0.5
7714659	154	3.6
7714660	155	1.2
7714668	156	0.9
7714601	157	0.9
7714650	158	0.8
7714671	160	0.6
7714672	161	0.9
7714685	162	0.6
7714681	163	< 0.3
7714677	164	0.6
7714679	165	< 0.3
7714682	166	0.7
7714654	167	< 0.3
7714673	168	0.5
7714670	170	0.6
7714676	171	0.6
7714666	172	0.6
7714693	173	0.7
7714689	174	0.5
7714695	177	0.6
7711127	217	0.8
7711124	238	0.6
7711137	238	< 0.3
7711125	251	0.6
7711131	262	< 0.3
7711122	265	0.5
7711123	270	< 0.3
7711128	311	< 0.3
7711134	317	0.7
7711132	325	< 0.3
7711130	327	< 0.3
7711126	332	0.7
7711129	333	< 0.3
7711139	342	< 0.3
7711136	360	0.7
7720336	101 MULTIMEDIA	1.6
7720609	101 TELECOM.	2.3
7720301	11 OFFICE	1.7
7720643	11 PRINT	0.7

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Montgomery Blair H.S.		
Test Period: 01/04/16-01/08/16		
Kit Number	Room / Area	Result
7711104	112C	< 0.3
7711152	118SCR	< 0.3
7711111	* 119 (Missing)	0
7714620	* 122 OFFICE (Tampered)	< 0.3
7719897	13 KILN	0.9
7714981	14 INSTRUMENT ST	1.3
7715287	14 OFFICE	0.6
7715297	14 PRACTICE A	0.8
7715298	14 PRACTICE B	1.1
7715299	14 PRACTICE C	0.8
7715294	14 PRACTICE D	0.9
7714652	140 EXAM ROOM	0.6
7714656	140 NURSE OFFICE	0.6
7714643	140 REST AREA	< 0.3
7714664	141 OFFICE	0.6
7714611	146 OFFICE	< 0.3
7714686	153 BREAK ROOM	0.6
7714959	16A	0.6
7715289	16A OFFICE	0.7
7715290	16A PRACTICE A	0.6
7715281	16A PRACTICE B	0.6
7715292	16A PRACTICE C	1
7714680	170 OFFICE	0.6
7715300	2 OFFICE	0.9
7720651	3 OFFICE	0.6
7714980	4 DARK ROOM	2
7711379	7 OFFICE	0.6
7714661	ACTIVITY CENTER	0.7
7714644	ACTIVITY CENTER	0.6
7714665	ACTIVITY CENTER	< 0.3
7714699	ACTIVITY CENTER	0.8
7714697	ACTIVITY CENTER	0.7
7714663	* ACTIVITY CENTER (Missing)	0
7711400	ASSIST PRINCIPLE	3.4
7708696	ATHLETIC DIRECTO	2.3
7708690	ATTEND.	1.1
7720604	ATTEND. OFFICE 1	1
7713158	ATTEND. OFFICE 2	0.9
7713192	AUDITORIUM	1.8
7713189	AUDITORIUM	2.9
7719900	AUDITORIUM	1.6
7720606	AUDITORIUM	2.1
7711151	BINICK	1.4
7707924	BLDG SERV. MANGR	1
7711158	BLR	0.8
7711154	BLR TEAM RM	< 0.3
7720618	BOYS DRESSING	0.6
7713193	BUSINESS ADMIN.	1
7714647	CAFETERIA LOCKER	0.9
7720654	CONCESSION	1.4

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Montgomery Blair H.S.		
Test Period: 01/04/16-01/08/16		
Kit Number	Room / Area	Result
7714604	CONFERENCE 1	1
7714630	CONFERENCE A	1
7714633	CONFERENCE B	1.3
7714635	COUNSELOR B	0.6
7711102	COUNSELOR G	0.9
7711161	COUNSELOR H	1.3
7714637	COUNSELOR I	1.9
7714632	COUNSELOR J	0.8
7714636	COUNSELOR L	0.7
7711149	COUNSLER	1.1
7711159	COUNSLER C	1.1
7711160	COUNSLER D	1.3
7720632	EDITING A	4.2
7720635	EDITING B	3.4
7720636	EDITING C	2.2
7720637	EDITING D	2.7
7719984	EDITING E	3.2
7720308	EQUIPMENT STORAG	1
7720622	FINANCIAL SPECIA	1.7
7720605	GIRLS DRESSING	0.9
7714684	GLR	0.9
7714688	GLR TEAM ROOM	0.6
7714648	GUIDANCE	0.8
7711110	GYM	0.5
7711121	GYM	0.5
7711115	* GYM (Missing)	0
7711116	GYM B	0.9
7711117	GYM B	1.7
7711120	* GYM B (Missing)	0
7711113	GYMB	0.9
7711150	GYMB	0.6
7708658	HC EDITING	1.8
7714651	KITCHEN OFFICE	0.6
7714669	LIBRARY	< 0.3
7714667	LIBRARY	< 0.3
7714653	LIBRARY	< 0.3
7719899	MAIN OFFICE	1.1
7713125	MAKEUP	0.8
7714694	MEDIA CONF. RM A	0.7
7714674	MEDIA CONF. RM B	0.8
7714698	MEDIA GENERAL ST	1.2
7708693	MEDIA HEAD IN	0.9
7714700	MEDIA OFFICE A	0.7
7714657	MEDIA OFFICE B	0.9
7714655	MEDIA WORK ROOM	0.7
7711143	OFFICE	0.8
7708661	OFFICE CONFERENC	0.8
7719882	OFFICE WORK ROOM	0.7
7706671	PRINC. SECRETARY	0.8
7720339	PRINCIPAL	0.8

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Montgomery Blair H.S.		
Test Period: 01/04/16-01/08/16		
Kit Number	Room / Area	Result
7719865	RADIO	1.4
7714609	REGISTRAR	2.3
7720638	SECURITY	0.9
7714638	STAFF DINING	0.8
7706681	STAGE	1.4
7720612	STAGE	1.3
7713188	STAGE OFFICE	1.4
7720625	STAGE SHOP	1.3
7711497	STORAGE	0.8
7720621	TAPE LIBRARY	1.5
7711148	TEAM RM	< 0.3
7720617	TV CONTROL ROOM	2.1
7714605	WORK ROOM	0.7

Table Note:

* Missing or Compromised Sample

Radon Testing Results		
Montgomery Blair H.S.		
Test Period: 01/04/16-01/08/16		
Kit Number	QC Type	Result
7719859	D (100)	1.9
7711105	D (111)	0.7
7711146	D (114)	< 0.3
7711114	* D (119:Missing)	0
7711145	D (123)	1
7714627	D (130)	0.7
7714612	D (136)	1.2
7714642	D (142)	< 0.3
7714658	D (151)	< 0.3
7714687	D (158)	< 0.3
7714675	D (161)	0.9
7715288	D (16A)	0.7
7714691	D (173)	< 0.3
7714779	D (2)	0.8
7711133	D (238)	0.6
7713126	D (9)	0.8
7713196	D (ATTEND. OFFICE 2)	1.1
7714984	D (BOYS DRESSING)	0.9
7714602	D (CONFERENCE 1)	1.2
7708694	D (EQUIPMENT STORAG)	1
7720639	D (FINANCIAL SPECIA)	1.8
7714678	D (MEDIA CONF. RM B)	1
7713110	FB (102)	< 0.3
7711156	FB (116)	< 0.3
7714645	FB (120)	< 0.3
7714613	FB (148)	< 0.3
7714683	FB (164)	< 0.3
7714960	FB (16A PRACTICE C)	< 0.3
7714777	FB (4)	< 0.3
7713156	FB (OFFICE WORK ROOM)	< 0.3
7708806	OB (0)	< 0.3
7708807	OB (0)	< 0.3
7708809	OB (0)	< 0.3

Table Note:

* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

January 25, 2016 **LABORATORY ANALYSIS REPORT ****

Radon test result report for:
MONTGOMERY BLAIR H.S.
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7708806	0	2016-01-04 @ 2:00 pm	2016-01-07 @ 2:00 pm	< 0.3	2016-01-11
7708807	0	2016-01-04 @ 2:00 pm	2016-01-07 @ 2:00 pm	< 0.3	2016-01-11
7708809	0	2016-01-05 @ 2:00 pm	2016-01-08 @ 2:00 pm	< 0.3	2016-01-11
7713118	1	2016-01-05 @ 4:00 pm	2016-01-08 @ 11:00 am	1.1 ± 0.3	2016-01-11
7707602	100	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	2.0 ± 0.3	2016-01-11
7719859	100	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	1.9 ± 0.3	2016-01-11
7720314	101	2016-01-05 @ 12:00 pm	2016-01-08 @ 11:00 am	1.7 ± 0.3	2016-01-11
7720336	101 MULTIMEDIA	2016-01-05 @ 1:00 pm	2016-01-08 @ 11:00 am	1.6 ± 0.3	2016-01-11
7720609	101 TELECOM.	2016-01-05 @ 12:00 pm	2016-01-08 @ 11:00 am	2.3 ± 0.3	2016-01-11
7713110	102	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	< 0.3	2016-01-11
7714983	102	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	2.2 ± 0.3	2016-01-11
7720321	11	2016-01-05 @ 3:00 pm	2016-01-08 @ 11:00 am	1.2 ± 0.3	2016-01-11
7720301	11 OFFICE	2016-01-05 @ 3:00 pm	2016-01-08 @ 11:00 am	1.7 ± 0.3	2016-01-11
7720643	11 PRINT	2016-01-05 @ 3:00 pm	2016-01-08 @ 11:00 am	0.7 ± 0.2	2016-01-11
7711108	110	2016-01-04 @ 3:00 pm	2016-01-07 @ 2:00 pm	1.0 ± 0.3	2016-01-11
7711107	110	2016-01-04 @ 3:00 pm	2016-01-07 @ 2:00 pm	0.7 ± 0.4	2016-01-12
7711105	111	2016-01-04 @ 3:00 pm	2016-01-07 @ 2:00 pm	0.7 ± 0.3	2016-01-11
7711103	111	2016-01-04 @ 3:00 pm	2016-01-07 @ 2:00 pm	1.1 ± 0.4	2016-01-12
7711101	112	2016-01-04 @ 3:00 pm	2016-01-07 @ 2:00 pm	< 0.3	2016-01-12
7711104	112C	2016-01-04 @ 3:00 pm	2016-01-07 @ 2:00 pm	< 0.3	2016-01-12
7711109	113	2016-01-04 @ 3:00 pm	2016-01-07 @ 2:00 pm	1.0 ± 0.3	2016-01-11
7711106	113	2016-01-04 @ 3:00 pm	2016-01-07 @ 2:00 pm	0.7 ± 0.4	2016-01-12
7711140	114	2016-01-04 @ 4:00 pm	2016-01-07 @ 2:00 pm	0.7 ± 0.3	2016-01-12
7711146	114	2016-01-04 @ 4:00 pm	2016-01-07 @ 2:00 pm	< 0.3	2016-01-12
7711142	116	2016-01-04 @ 4:00 pm	2016-01-07 @ 2:00 pm	0.8 ± 0.3	2016-01-11
7711156	116	2016-01-04 @ 4:00 pm	2016-01-07 @ 2:00 pm	< 0.3	2016-01-11
7711112	117	2016-01-04 @ 4:00 pm	2016-01-07 @ 3:00 pm	0.7 ± 0.3	2016-01-12
7711152	118SCR	2016-01-04 @ 4:00 pm	2016-01-07 @ 3:00 pm	< 0.3	2016-01-11
7711111	119	@	@		
7711114	119	@	@		
7714645	120	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-12
7714617	120	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-12
7711153	121	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	1.2 ± 0.3	2016-01-11
7714606	122	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	0.9 ± 0.3	2016-01-12
7714620	122 OFFICE	2016-01-04 @ 5:00 pm	2016-01-07 @ 3:00 pm	< 0.3	2016-01-11
7711145	123	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	1.0 ± 0.3	2016-01-11
7711147	123	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.4	2016-01-12

January 25, 2016 **LABORATORY ANALYSIS REPORT ****

Radon test result report for:
MONTGOMERY BLAIR H.S.
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7711155	124	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.4	2016-01-12
7711119	125	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-11
7711157	126	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7711144	128	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.4	2016-01-12
7719896	13	2016-01-05 @ 3:00 pm	2016-01-08 @ 11:00 am	1.1 ± 0.3	2016-01-11
7719897	13 KILN	2016-01-05 @ 3:00 pm	2016-01-08 @ 11:00 am	0.9 ± 0.3	2016-01-11
7714627	130	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-11
7714631	130	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-11
7714634	131	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	0.9 ± 0.3	2016-01-11
7714628	132	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7714626	133	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7714640	133	2016-01-04 @ 5:00 pm	2016-01-07 @ 3:00 pm	0.6 ± 0.3	2016-01-12
7714625	134	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	1.2 ± 0.4	2016-01-12
7714623	135	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	0.5 ± 0.3	2016-01-11
7714610	136	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	0.8 ± 0.3	2016-01-11
7714612	136	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	1.2 ± 0.3	2016-01-11
7714622	137	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7714608	138	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	0.5 ± 0.3	2016-01-11
7715296	14	2016-01-05 @ 5:00 pm	2016-01-08 @ 11:00 am	0.6 ± 0.3	2016-01-11
7714981	14 INSTRUMENT ST	2016-01-05 @ 6:00 pm	2016-01-08 @ 11:00 am	1.3 ± 0.3	2016-01-11
7715287	14 OFFICE	2016-01-05 @ 6:00 pm	2016-01-08 @ 11:00 am	0.6 ± 0.3	2016-01-11
7715297	14 PRACTICE A	2016-01-05 @ 5:00 pm	2016-01-08 @ 11:00 am	0.8 ± 0.2	2016-01-11
7715298	14 PRACTICE B	2016-01-05 @ 5:00 pm	2016-01-08 @ 11:00 am	1.1 ± 0.3	2016-01-11
7715299	14 PRACTICE C	2016-01-05 @ 5:00 pm	2016-01-08 @ 11:00 am	0.8 ± 0.3	2016-01-11
7715294	14 PRACTICE D	2016-01-05 @ 6:00 pm	2016-01-08 @ 11:00 am	0.9 ± 0.3	2016-01-11
7714649	140	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.5 ± 0.3	2016-01-11
7714652	140 EXAM ROOM	2016-01-04 @ 6:00 pm	2016-01-07 @ 3:00 pm	0.6 ± 0.4	2016-01-12
7714656	140 NURSE OFFICE	2016-01-04 @ 6:00 pm	2016-01-07 @ 3:00 pm	0.6 ± 0.4	2016-01-12
7714643	140 REST AREA	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-12
7714629	141	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-11
7714639	141	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-11
7714664	141 OFFICE	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.3	2016-01-11
7714641	142	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.9 ± 0.3	2016-01-11
7714642	142	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-12
7714624	143	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	1.8 ± 0.4	2016-01-11
7714615	144	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7714618	145	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	1.0 ± 0.3	2016-01-11

January 25, 2016 **LABORATORY ANALYSIS REPORT ****

Radon test result report for:
MONTGOMERY BLAIR H.S.
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7714619	146	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	1.2 ± 0.3	2016-01-11
7714611	146 OFFICE	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-12
7714614	147	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	0.5 ± 0.3	2016-01-11
7714613	148	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-12
7714621	148	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.8 ± 0.4	2016-01-12
7714616	149	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-12
7714646	151	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7714658	151	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-12
7714607	152	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7714696	152	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	1.6 ± 0.4	2016-01-11
7714603	153	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.5 ± 0.3	2016-01-11
7714662	153	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.9 ± 0.3	2016-01-11
7714686	153 BREAK ROOM	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.4	2016-01-12
7714659	154	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	3.6 ± 0.4	2016-01-11
7714660	155	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	1.2 ± 0.4	2016-01-12
7714668	156	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.9 ± 0.3	2016-01-11
7714601	157	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.9 ± 0.3	2016-01-11
7714687	158	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7714650	158	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.8 ± 0.4	2016-01-12
7714671	160	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.4	2016-01-12
7714672	161	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.9 ± 0.4	2016-01-12
7714675	161	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.9 ± 0.4	2016-01-12
7714685	162	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.4	2016-01-12
7714681	163	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-12
7714677	164	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.3	2016-01-11
7714683	164	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7714679	165	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-12
7714682	166	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-11
7714654	167	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7714673	168	2016-01-04 @ 6:00 pm	2016-01-07 @ 12:00 pm	0.5 ± 0.3	2016-01-11
7715288	16A	2016-01-05 @ 6:00 pm	2016-01-08 @ 11:00 am	0.7 ± 0.2	2016-01-11
7714959	16A	2016-01-05 @ 6:00 pm	2016-01-08 @ 11:00 am	0.6 ± 0.2	2016-01-11
7715289	16A OFFICE	2016-01-05 @ 6:00 pm	2016-01-08 @ 11:00 am	0.7 ± 0.2	2016-01-11
7715290	16A PRACTICE A	2016-01-05 @ 6:00 pm	2016-01-08 @ 11:00 am	0.6 ± 0.3	2016-01-11
7715281	16A PRACTICE B	2016-01-05 @ 6:00 pm	2016-01-08 @ 11:00 am	0.6 ± 0.3	2016-01-11
7715292	16A PRACTICE C	2016-01-05 @ 6:00 pm	2016-01-08 @ 11:00 am	1.0 ± 0.3	2016-01-11
7714960	16A PRACTICE C	2016-01-05 @ 6:00 pm	2016-01-08 @ 11:00 am	< 0.3	2016-01-11

January* **LABORATORY ANALYSIS**
 25, **REPORT ****
 2016

Radon test result report for:
MONTGOMERY BLAIR H.S.
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7714670	170	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.4	2016-01-11
7714680	170 OFFICE	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.3	2016-01-11
7714676	171	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.3	2016-01-11
7714666	172	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.3	2016-01-11
7714691	173	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7714693	173	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-11
7714689	174	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.5 ± 0.3	2016-01-11
7714695	177	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.4	2016-01-12
7715295	2	2016-01-05 @ 5:00 pm	2016-01-08 @ 11:00 am	0.7 ± 0.3	2016-01-11
7714779	2	2016-01-05 @ 5:00 pm	2016-01-08 @ 11:00 am	0.8 ± 0.3	2016-01-11
7715300	2 OFFICE	2016-01-05 @ 5:00 pm	2016-01-08 @ 11:00 am	0.9 ± 0.3	2016-01-11
7711127	217	2016-01-04 @ 2:00 pm	2016-01-07 @ 12:00 pm	0.8 ± 0.3	2016-01-12
7711124	238	2016-01-04 @ 2:00 pm	2016-01-07 @ 1:00 pm	0.6 ± 0.3	2016-01-11
7711133	238	2016-01-04 @ 2:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.3	2016-01-11
7711137	238	2016-01-04 @ 2:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7711125	251	2016-01-04 @ 2:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.3	2016-01-11
7711131	262	2016-01-04 @ 2:00 pm	2016-01-07 @ 1:00 pm	< 0.3	2016-01-12
7711122	265	2016-01-04 @ 2:00 pm	2016-01-07 @ 1:00 pm	0.5 ± 0.3	2016-01-12
7711123	270	2016-01-04 @ 2:00 pm	2016-01-07 @ 1:00 pm	< 0.3	2016-01-12
7711487	3	2016-01-05 @ 4:00 pm	2016-01-08 @ 11:00 am	0.9 ± 0.3	2016-01-11
7720651	3 OFFICE	2016-01-05 @ 4:00 pm	2016-01-08 @ 11:00 am	0.6 ± 0.3	2016-01-11
7711128	311	2016-01-04 @ 1:00 pm	2016-01-07 @ 1:00 pm	< 0.3	2016-01-11
7711134	317	2016-01-04 @ 1:00 pm	2016-01-07 @ 1:00 pm	0.7 ± 0.3	2016-01-12
7711132	325	2016-01-04 @ 1:00 pm	2016-01-07 @ 1:00 pm	< 0.3	2016-01-11
7711130	327	2016-01-04 @ 1:00 pm	2016-01-07 @ 1:00 pm	< 0.3	2016-01-11
7711126	332	2016-01-04 @ 1:00 pm	2016-01-07 @ 1:00 pm	0.7 ± 0.3	2016-01-11
7711129	333	2016-01-04 @ 2:00 pm	2016-01-07 @ 1:00 pm	< 0.3	2016-01-12
7711139	342	2016-01-04 @ 2:00 pm	2016-01-07 @ 1:00 pm	< 0.3	2016-01-12
7711136	360	2016-01-04 @ 2:00 pm	2016-01-07 @ 1:00 pm	0.7 ± 0.3	2016-01-12
7714777	4	2016-01-05 @ 5:00 pm	2016-01-08 @ 11:00 am	< 0.3	2016-01-11
7714902	4	2016-01-05 @ 5:00 pm	2016-01-08 @ 11:00 am	1.1 ± 0.3	2016-01-11
7714980	4 DARK ROOM	2016-01-05 @ 5:00 pm	2016-01-08 @ 11:00 am	2.0 ± 0.3	2016-01-11
7711499	5	2016-01-05 @ 4:00 pm	2016-01-08 @ 11:00 am	1.1 ± 0.3	2016-01-11
7720642	6	2016-01-05 @ 3:00 pm	2016-01-08 @ 11:00 am	3.0 ± 0.4	2016-01-11
7720603	7	2016-01-05 @ 4:00 pm	2016-01-08 @ 11:00 am	0.7 ± 0.3	2016-01-11
7711379	7 OFFICE	2016-01-05 @ 4:00 pm	2016-01-08 @ 11:00 am	0.6 ± 0.3	2016-01-11
7713126	9	2016-01-05 @ 4:00 pm	2016-01-08 @ 11:00 am	0.8 ± 0.3	2016-01-11

January 25, 2016
LABORATORY ANALYSIS REPORT **

Radon test result report for:
MONTGOMERY BLAIR H.S.
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7720601	9	2016-01-05 @ 4:00 pm	2016-01-08 @ 11:00 am	0.9 ± 0.3	2016-01-11
7714663	ACTIVITY CENTER	@	@		
7714665	ACTIVITY CENTER	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7714644	ACTIVITY CENTER	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.3	2016-01-11
7714661	ACTIVITY CENTER	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-11
7714697	ACTIVITY CENTER	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-11
7714699	ACTIVITY CENTER	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.8 ± 0.3	2016-01-11
7711400	ASSIST PRINCIPLE	2016-01-05 @ 1:00 pm	2016-01-08 @ 11:00 am	3.4 ± 0.4	2016-01-11
7708696	ATHLETIC DIRECTO	2016-01-05 @ 12:00 pm	2016-01-08 @ 11:00 am	2.3 ± 0.3	2016-01-11
7720604	ATTEND. OFFICE 1	2016-01-05 @ 12:00 pm	2016-01-08 @ 11:00 am	1.0 ± 0.3	2016-01-11
7713158	ATTEND. OFFICE 2	2016-01-05 @ 12:00 pm	2016-01-08 @ 11:00 am	0.9 ± 0.3	2016-01-11
7713196	ATTEND. OFFICE 2	2016-01-05 @ 12:00 pm	2016-01-08 @ 11:00 am	1.1 ± 0.3	2016-01-11
7713189	AUDITORIUM	2016-01-05 @ 2:00 pm	2016-01-08 @ 11:00 am	2.9 ± 0.3	2016-01-11
7713192	AUDITORIUM	2016-01-05 @ 2:00 pm	2016-01-08 @ 11:00 am	1.8 ± 0.3	2016-01-11
7719900	AUDITORIUM	2016-01-05 @ 2:00 pm	2016-01-08 @ 11:00 am	1.6 ± 0.3	2016-01-11
7720606	AUDITORIUM	2016-01-05 @ 2:00 pm	2016-01-08 @ 11:00 am	2.1 ± 0.3	2016-01-11
7711151	BINICK	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	1.4 ± 0.4	2016-01-11
7707924	BLDG SERV. MANGR	2016-01-05 @ 1:00 pm	2016-01-07 @ 12:00 pm	1.0 ± 0.4	2016-01-11
7711158	BLR	2016-01-04 @ 4:00 pm	2016-01-07 @ 3:00 pm	0.8 ± 0.4	2016-01-12
7711154	BLR TEAM RM	2016-01-04 @ 4:00 pm	2016-01-07 @ 3:00 pm	< 0.3	2016-01-11
7720618	BOYS DRESSING	2016-01-05 @ 3:00 pm	2016-01-08 @ 11:00 am	0.6 ± 0.3	2016-01-11
7714984	BOYS DRESSING	2016-01-05 @ 3:00 pm	2016-01-08 @ 11:00 am	0.9 ± 0.2	2016-01-11
7713193	BUSINESS ADMIN.	2016-01-05 @ 1:00 pm	2016-01-08 @ 11:00 am	1.0 ± 0.3	2016-01-11
7714647	CAFETERIA LOCKER	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.9 ± 0.3	2016-01-12
7720654	CONCESSION	2016-01-05 @ 12:00 pm	2016-01-08 @ 11:00 am	1.4 ± 0.3	2016-01-11
7714604	CONFERENCE 1	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	1.0 ± 0.3	2016-01-11
7714602	CONFERENCE 1	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	1.2 ± 0.4	2016-01-12
7714630	CONFERENCE A	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	1.0 ± 0.3	2016-01-11
7714633	CONFERENCE B	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	1.3 ± 0.4	2016-01-12
7714635	COUNSELOR B	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.3	2016-01-12
7711102	COUNSELOR G	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	0.9 ± 0.4	2016-01-11
7711161	COUNSELOR H	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	1.3 ± 0.4	2016-01-12
7714637	COUNSELOR I	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	1.9 ± 0.4	2016-01-11
7714632	COUNSELOR J	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	0.8 ± 0.3	2016-01-11
7714636	COUNSELOR L	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-11
7711149	COUNSLER	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	1.1 ± 0.4	2016-01-11
7711159	COUNSLER C	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	1.1 ± 0.4	2016-01-12

January
25,
2016

**LABORATORY ANALYSIS
REPORT ****

Radon test result report for:
**MONTGOMERY BLAIR H.S.
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7711160	COUNSLER D	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	1.3 ± 0.4	2016-01-12
7720632	EDITING A	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	4.2 ± 0.4	2016-01-11
7720635	EDITING B	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	3.4 ± 0.4	2016-01-11
7720636	EDITING C	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	2.2 ± 0.3	2016-01-11
7720637	EDITING D	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	2.7 ± 0.3	2016-01-11
7719984	EDITING E	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	3.2 ± 0.4	2016-01-11
7708694	EQUIPMENT STORAG	2016-01-05 @ 12:00 pm	2016-01-08 @ 11:00 am	1.0 ± 0.2	2016-01-11
7720308	EQUIPMENT STORAG	2016-01-05 @ 12:00 pm	2016-01-08 @ 11:00 am	1.0 ± 0.3	2016-01-11
7720639	FINANCIAL SPECIA	2016-01-05 @ 1:00 pm	2016-01-08 @ 11:00 am	1.8 ± 0.3	2016-01-11
7720622	FINANCIAL SPECIA	2016-01-05 @ 1:00 pm	2016-01-08 @ 11:00 am	1.7 ± 0.3	2016-01-11
7720605	GIRLS DRESSING	2016-01-05 @ 3:00 pm	2016-01-08 @ 11:00 am	0.9 ± 0.3	2016-01-11
7714684	GLR	2016-01-04 @ 8:00 pm	2016-01-07 @ 2:00 pm	0.9 ± 0.3	2016-01-12
7714688	GLR TEAM ROOM	2016-01-04 @ 8:00 pm	2016-01-07 @ 2:00 pm	0.6 ± 0.3	2016-01-12
7714648	GUIDANCE	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	0.8 ± 0.3	2016-01-11
7711115	GYM	@	@		
7711110	GYM	2016-01-04 @ 3:00 pm	2016-01-07 @ 2:00 pm	0.5 ± 0.3	2016-01-11
7711121	GYM	2016-01-04 @ 4:00 pm	2016-01-07 @ 2:00 pm	0.5 ± 0.3	2016-01-11
7711120	GYM B	@	@		
7711117	GYM B	2016-01-04 @ 3:00 pm	2016-01-07 @ 12:00 pm	1.7 ± 0.3	2016-01-11
7711150	GYMB	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.3	2016-01-11
7711113	GYMB	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	0.9 ± 0.3	2016-01-12
7708658	HC EDITING	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	1.8 ± 0.3	2016-01-11
7714651	KITCHEN OFFICE	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.6 ± 0.3	2016-01-12
7714667	LIBRARY	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7714669	LIBRARY	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-11
7714653	LIBRARY	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	< 0.3	2016-01-12
7719899	MAIN OFFICE	2016-01-05 @ 12:00 pm	2016-01-07 @ 12:00 pm	1.1 ± 0.3	2016-01-11
7713125	MAKEUP	2016-01-05 @ 3:00 pm	2016-01-08 @ 11:00 am	0.8 ± 0.3	2016-01-11
7714694	MEDIA CONF. RM A	2016-01-04 @ 8:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-11
7714674	MEDIA CONF. RM B	2016-01-04 @ 8:00 pm	2016-01-07 @ 12:00 pm	0.8 ± 0.3	2016-01-11
7714678	MEDIA CONF. RM B	2016-01-04 @ 8:00 pm	2016-01-07 @ 12:00 pm	1.0 ± 0.3	2016-01-11
7714698	MEDIA GENERAL ST	2016-01-04 @ 8:00 pm	2016-01-07 @ 12:00 pm	1.2 ± 0.4	2016-01-12
7708693	MEDIA HEAD IN	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	0.9 ± 0.3	2016-01-11
7714700	MEDIA OFFICE A	2016-01-04 @ 8:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-12
7714657	MEDIA OFFICE B	2016-01-04 @ 8:00 pm	2016-01-07 @ 12:00 pm	0.9 ± 0.3	2016-01-11
7714655	MEDIA WORK ROOM	2016-01-04 @ 8:00 pm	2016-01-07 @ 12:00 pm	0.7 ± 0.3	2016-01-11
7711143	OFFICE	2016-01-04 @ 4:00 pm	2016-01-07 @ 12:00 pm	0.8 ± 0.3	2016-01-12

January
25,
2016

**LABORATORY ANALYSIS
REPORT ****

Radon test result report for:
**MONTGOMERY BLAIR H.S.
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7708661	OFFICE CONFERENC	2016-01-05 @ 12:00 pm	2016-01-08 @ 11:00 am	0.8 ± 0.3	2016-01-11
7713156	OFFICE WORK ROOM	2016-01-05 @ 1:00 pm	2016-01-08 @ 11:00 am	< 0.3	2016-01-11
7719882	OFFICE WORK ROOM	2016-01-05 @ 1:00 pm	2016-01-08 @ 11:00 am	0.7 ± 0.2	2016-01-11
7706671	PRINC. SECRETARY	2016-01-05 @ 12:00 pm	2016-01-08 @ 11:00 am	0.8 ± 0.3	2016-01-11
7720339	PRINCIPAL	2016-01-05 @ 1:00 pm	2016-01-08 @ 11:00 am	0.8 ± 0.2	2016-01-11
7719865	RADIO	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	1.4 ± 0.3	2016-01-11
7714609	REGISTRAR	2016-01-04 @ 5:00 pm	2016-01-07 @ 12:00 pm	2.3 ± 0.4	2016-01-11
7720638	SECURITY	2016-01-05 @ 1:00 pm	2016-01-08 @ 11:00 am	0.9 ± 0.3	2016-01-11
7714638	STAFF DINING	2016-01-04 @ 7:00 pm	2016-01-07 @ 12:00 pm	0.8 ± 0.3	2016-01-11
7706681	STAGE	2016-01-05 @ 2:00 pm	2016-01-08 @ 11:00 am	1.4 ± 0.3	2016-01-11
7720612	STAGE	2016-01-05 @ 2:00 pm	2016-01-08 @ 11:00 am	1.3 ± 0.3	2016-01-11
7713188	STAGE OFFICE	2016-01-05 @ 3:00 pm	2016-01-08 @ 11:00 am	1.4 ± 0.3	2016-01-11
7720625	STAGE SHOP	2016-01-05 @ 3:00 pm	2016-01-08 @ 11:00 am	1.3 ± 0.3	2016-01-11
7711497	STORAGE	2016-01-05 @ 4:00 pm	2016-01-08 @ 11:00 am	0.8 ± 0.3	2016-01-11
7720621	TAPE LIBRARY	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	1.5 ± 0.3	2016-01-11
7711148	TEAM RM	2016-01-04 @ 4:00 pm	2016-01-07 @ 3:00 pm	< 0.3	2016-01-11
7720617	TV CONTROL ROOM	2016-01-05 @ 11:00 am	2016-01-08 @ 11:00 am	2.1 ± 0.3	2016-01-11
7714605	WORK ROOM	2016-01-04 @ 5:00 pm	2016-01-07 @ 3:00 pm	0.7 ± 0.3	2016-01-12

January 25, 2016
**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
**MONTGOMERY BLAIR
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7708690	ATTEND.	2016-01-04 @ 1:00 pm	2016-01-07 @ 11:00 am	1.1 ± 0.3	2016-01-11
7711116	GYM B	2016-01-04 @ 3:00 pm	2016-01-07 @ 12:00 pm	0.9 ± 0.3	2016-01-11

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

January 15, 2016
** LABORATORY ANALYSIS REPORT **

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

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

December
23,
2015

**LABORATORY ANALYSIS
REPORT ****

Spike Sample Laboratory Results

Radon test result report for:
MCPS

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

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies Inc. Job Number 173224

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

Date Start: 12/18/15 Date Stop: 12/21/15 Date Start: _____ Date Stop: _____

Time Start: 0929 Time Stop: 0929 Time Start: _____ Time Stop: _____

Device No.'s: 7705132, 7706208, Device No.'s: _____

7706211, 7706366, _____

7706380, 7706381 _____

F3 Left

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

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

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

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

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

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

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



Chain of Custody

Project Name: MCPS Radon Phase 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