



MCPS RADON TESTING – EXECUTIVE SUMMARY

Site Name	Parkland Middle School
Date of Test Report	05/12/2022
Round of Testing	Initial Follow-up Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	5
# Rooms \geq 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	0.6 pCi/L

Project Status

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



May 12, 2022

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

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

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

Dear Mr. Croyle:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools (MCPS) pursuant to completing a “short-term” 3 day radon test for the Parkland Middle School 4610 West Frankfort Dr. Rockville, MD 20853 (subject site).

Scope of Services:

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

KCI visited the site on March 22, 2022 and deployed seven (7) activated charcoal (AC) radon test kits. KCI deployed radon test kits in all frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

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

1. Rooms with missing test kits from the Radon 2022 testing period (i.e. test kit was deployed but not recovered),
2. Rooms with invalidated test kits from the Radon 2022 testing period (e.g. an open window in the room or disturbed test kit),
3. Rooms which were locked/inaccessible during the Radon 2022 testing period,
4. Rooms with elevated radon results (i.e. ≥ 3.5 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 25, 2022 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc. is a NRSB certified analytical laboratory for radon analysis (certification # ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

Evaluation of Testing Conditions:

These tests represent:

- Follow-up to initial testing.

These tests were conducted to:

- Evaluate radon concentrations at the facility.

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

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the low 40°Fs and high temperatures ranged from the low 50°Fs to the low 70°Fs. Maximum sustained winds ranged from 0-29 miles per hour. Average humidity was around 56% with 0.51 inches of precipitation (rain) was recorded during testing period.

Results:

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

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥4.0 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		
Parkland MS RT		
Test Period: 03/22/2022 - 03/25/2022		
Kit Number	Room / Area	Result
11138973	1311	0.6
11138972	1000C	< 0.3
11138974	1000C	< 0.3
11139097	1000C	< 0.3
11138967	1022A	< 0.3
11139077	1200A	0.5
11139091	STAFFLOUNGE	< 0.3

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

ATTACHMENT C

Laboratory Analytical Results

March 28, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
**PARKLAND MS RT
MAIN**

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies, Inc. Job Number 204620

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

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

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

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

11139367, 11139368, 11139371, _____

11139710, 11139717 _____

E3 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

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

	Date	Initials
Radon Test Kits Deployed	03/22/2022	BMM
Radon Test Kits Collected	03/25/2022	BMM
Radon Test Kits Shipped to Lab*	03/25/2022	BMM
Radon Test Kits Received by Lab*	03/28/2022	BMM

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



MCPS RADON TESTING – EXECUTIVE SUMMARY

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

Project Status:

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



April 6, 2022

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

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

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

Dear Mr. Croyle:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools (MCPS) pursuant to completing a “short-term” 3 day radon test for the Parkland MS, located at 4610 W. Frankfort Dr. Rockville, MD 20853 (subject site).

Scope of Services:

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

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

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

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

KCI returned to the site on February 11, 2022 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Airchek, Inc. for analysis by gamma-ray spectroscopy. Airchek, Inc.

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

Evaluation of Testing Conditions:

These tests represent:

- Follow-up to initial testing.

These tests were conducted to:

- Evaluate radon concentration levels at the facility.

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

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

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

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the 30s and high temperatures ranged from the mid 30s to the mid 50s Fahrenheit. Maximum sustained winds ranged from 3-12 miles per hour. Average humidity was around 23% with 0.1 inches of precipitation (rain) was recorded during testing period.

Results:

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

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥4.0 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.

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

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

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

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

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

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

Table Note:
 * Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

Radon test result report for:**PARKLAND MS**

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

Radon test result report for:**PARKLAND MS**

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

Radon test result report for:**PARKLAND MS**

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

February 15, 2022

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
PARKLAND MS
MAIN

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

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies, Inc. Job Number 204186

NOMINAL Conditions: Radon Conc 25.8 pCi/L Rel. Hum 50.1 % Temp. 70.9 F

Date Start: 2/18/22 Date Stop: 2/21/22 Date Start: _____ Date Stop: _____

Time Start: 0911 Time Stop: 0911 Time Start: _____ Time Stop: _____

Device No.'s: (3) Char Bags -
11113484, 1112998, 20107126 Device No.'s: _____

23 Right

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

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

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

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

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

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

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

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

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



Radon Test Kit Chain of Custody

Project Name: MCPS Radon – February 2022 Schools

Name of Schools:

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

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

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