



**MCPS RADON TESTING – EXECUTIVE SUMMARY**

Site Name	Lynnbrook Center
Date of Test Report	1/04/2023
Round of Testing	Initial Follow-up Post Remediation 2 Year Testing 5 Year Testing HVAC Upgrade Window Replacement New Addition New Facility
# Rooms Tested	33
# Rooms ≥ 4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	2.9 pCi/L

Project Status:

1. 5-Year retesting completed



January 4, 2023

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

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

Location: Lynbrook Center  
8001 Lynnbrook Dr.  
Bethesda, MD 20814

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 Lynnbrook Center, located at 8001 Lynnbrook Dr. Bethesda, MD 20814 (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](http://www.epa.gov/radon).

KCI visited the site on December 5, 2022 and deployed thirty-seven (37) 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 December 8, 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 20s°F and high temperatures ranged to the mid-50s°F. Maximum sustained winds ranged from 0-12 miles per hour. Average humidity was around 75% with .04 inches of precipitation (rain) was recorded during testing period.

**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:

<b>Radon Concentration</b>	<b>Room</b>	<b>Result</b>
≥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		
Lynnbrook Center		
Test Period: 12/05/2022 - 12/08/2022		
Kit Number	Room / Area	Result
11114382	1	1.9
11106223	2	< 0.3
11138966	2	2.2
11106206	5	1.6
11106204	6	0.8
11138992	6	1.1
11138994	6	1.3
11105959	7	2.9
11138993	7	1.5
11106211	8	0.9
11114381	8	1.3
11138987	8	< 0.3
11138995	8	1.3
11139000	10	1.3
11138965	11	1.8
11106210	12	< 0.3
11106214	12	< 0.3
11106201	13	1.8
11106205	14	< 0.3
11138962	15	1.7
11105968	17	1.5
11138988	17	2.1
11114380	4-MAR	1.6
11106203	APR	1.1
11114390	APR	0.8
11114389	ASSESSMENT TEAM	2.8
11138990	COPY ROOM	1.9
11138981	JANE JULIANO	2.2
11138982	LOUNGE DAY CARE	0.8
11105960	MAIN OFFICE	2.2
11138991	MAIN OFFICE	1.8
11138983	MAIN OFFICE 1	2.8
11114375	MAIN OFFICE 2	2.8
11113899	MAIN OFFICE 3	2.7
11106202	MAIN OFFICE 4	1.5
11114376	OFFICE	2.3
11114374	WORK ROOM	1.8



Table 2- Radon Testing Results			
Lynnbrook Center			
Test Period: 12/05/22 - 12/08/22			
Kit Number	QC Type	Room / Area	Result
11138994	D	6	1.3
11138995	D	8	1.3
11138987	FB	8	< 0.3
11106214	D	12	< 0.3
11133716	OB	OFFICE BLANK	< 0.3
11140129	TB	TRAVEL BLANK	< 0.3



# ATTACHMENT C

## Laboratory Analytical Results

Radon test result report for:  
**LYNBROOK CENTER**

1

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11106210	12	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	< 0.3	2022-12-14
11106214	12	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	< 0.3	2022-12-14
11106205	14	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	< 0.3	2022-12-14
11105968	17	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.5 ± 0.5	2022-12-14
11138988	17	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	2.1 ± 0.5	2022-12-14
11106223	2	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	< 0.3	2022-12-14
11106204	6	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	0.8 ± 0.5	2022-12-14
11105959	7	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	2.9 ± 0.6	2022-12-14
11138995	8	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.3 ± 0.5	2022-12-14
11106211	8	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	0.9 ± 0.5	2022-12-14
11138987	8	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	< 0.3	2022-12-14
11114390	APR	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	0.8 ± 0.4	2022-12-14
11106203	APR	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.1 ± 0.5	2022-12-14
11114389	ASSESSMENT TEAM	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	2.8 ± 0.6	2022-12-14
11138981	JANE JULIANO	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	2.2 ± 0.6	2022-12-14
11138982	LOUNGE DAY CARE	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	0.8 ± 0.5	2022-12-14
11105960	MAIN OFFICE	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	2.2 ± 0.5	2022-12-14
11138983	MAIN OFFICE 1	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	2.8 ± 0.6	2022-12-14
11114375	MAIN OFFICE 2	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	2.8 ± 0.6	2022-12-14
11113899	MAIN OFFICE 3	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	2.7 ± 0.6	2022-12-14
11106202	MAIN OFFICE 4	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.5 ± 0.5	2022-12-14
11114376	OFFICE	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	2.3 ± 0.6	2022-12-14
11114374	WORK ROOM	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.8 ± 0.5	2022-12-14

December 14, 2022

**\*\* LABORATORY ANALYSIS REPORT \*\***

Radon test result report for:  
**LYNBROOK CENTER  
ANNEX**

<b>Kit #</b>	<b>Room Id</b>	<b>Started</b>	<b>Ended</b>	<b>pCi/L</b>	<b>Analyzed</b>
11114382	1	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.9 ± 0.5	2022-12-14
11139000	10	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.3 ± 0.5	2022-12-14
11138965	11	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.8 ± 0.5	2022-12-14
11106201	13	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.8 ± 0.5	2022-12-14
11138962	15	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.7 ± 0.5	2022-12-14
11138966	2	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	2.2 ± 0.5	2022-12-14
11114380	4-MAR	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.6 ± 0.5	2022-12-14
11106206	5	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.6 ± 0.5	2022-12-14
11138992	6	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.1 ± 0.5	2022-12-14
11138994	6	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.3 ± 0.5	2022-12-14
11138993	7	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.5 ± 0.5	2022-12-14
11114381	8	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.3 ± 0.5	2022-12-14
11138990	COPY ROOM	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.9 ± 0.5	2022-12-14
11138991	MAIN OFFICE	2022-12-05 @ 9:00 am	2022-12-08 @ 10:00 am	1.8 ± 0.5	2022-12-14

# EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KC1 TECHNOLOGIES, INC Job Number 208343

NOMINAL Conditions: Radon Conc 34.7 pCi/L Rel. Hum 49.4 % Temp. 69.6 F

Date Start: 12/24/22 Date Stop: 12/27/22 Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: 0810 Time Stop: 0810 Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: (5) CHAR BAGS - Device No.'s: \_\_\_\_\_

11285109, 11285110, 11285101

THRU 11285103

BY LEFT

Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_ Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_ Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: \_\_\_\_\_ Device No.'s: \_\_\_\_\_

Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_ Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_ Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: \_\_\_\_\_ Device No.'s: \_\_\_\_\_

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

December 29, 2022

**\*\* LABORATORY ANALYSIS REPORT \*\***

Radon test result report for:

**OFFICE**

**MA** MCPS - Spike Sample Lab Results. Measured values are satisfactory, i.e., within  $\pm 25\%$  of the chamber's reference value (34.7 pCi/L).

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

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 – April 2022 Schools – Retesting

Name of Schools:

1. Lynnbrook Center
2. Chevy Chase ES
3. North Chevy Chase ES
4. Wood Acres ES
5. Ashburton ES
6. Carderock Springs ES
7. North Bethesda MS
8. Brooke Grove ES

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	Date	Initials
Radon Test Kits Deployed	12/05/2022	Bully
Radon Test Kits Collected	12/08/2022	Bully
Radon Test Kits Shipped to Lab*	12/08/2022	Bully
Radon Test Kits Received by Lab*	12/14/2022	Bully

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





## MONTGOMERY COUNTY PUBLIC SCHOOLS RADON TESTING

**Executive Summary:**  
**Lynbrook Center and Annex**  
8001 and 7921 Lynbrook Drive,  
Bethesda, MD 20814

Date of Test Report:	3/29/2019
Round of Testing:	Initial Follow-up Post Remediation 2 Year Testing <b>5 Year Testing</b> HVAC Upgrade Window Replacement New Addition New Facility
# of Rooms Tested:	34
# of Rooms $\geq$ 4.0 pCi/L:	0
Low Value:	< 0.4
High Value:	2.4

### Project Status

**Initial testing complete:** No further action at this time.



March 29, 2019

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

Re: Radon Testing Services

Location: Lynnbrook Center and Annex  
8001 and 7921 Lynbrook Drive,  
Bethesda, MD 20814

Dear Mr. Cox:

Intertek-PSI (PSI) is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of a "short-term" 3-day radon test for Lynnbrook Center located at 8001 Lynbrook Drive, Bethesda, MD 20814 (subject site) and Lynnbrook Annex, located at 7921 Lynbrook Drive, Bethesda, MD 20814 (subject site).

**Scope of Services:**

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

PSI visited the site on December 4, 2018 and deployed twenty-six (26) activated charcoal (AC) radon test kits. PSI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. PSI returned to the site on December 7, 2018 to retrieve the radon sampling test kits. PSI visited the Annex on February 26, 2019 and deployed fourteen (14) activated charcoal (AC) radon test kit. PSI returned to the site on March 01, 2019 to retrieve the radon sampling A floor plan map of the building with the test locations is included as Attachment A of this report.

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

PSI shipped all radon tests via overnight delivery to AccuStar Labs for analysis by gamma-ray spectroscopy. Accustar Labs is a NRSB certified analytical laboratory for radon analysis located at 929 Mount Zion Road, Lebanon, Pennsylvania (certification # ARL0007) and 2 Saber Way, Haverhill, Massachusetts (certification # ARL0017).



### **Evaluation of Testing Conditions:**

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

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

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

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

### **Results:**

The results of the radon test analysis indicated the following:

<b>Radon Concentration</b>	<b>Room</b>	<b>Result</b>
$\geq 4.0$ pCi/L	None	NA
$\leq 4.0$ pCi/L	See Attachment B	

Notes:

D -Duplicate Sample

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

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

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



Respectfully Submitted,

**INTERTEK-PSI**

Nand Kaushik, P.E.  
Department Manager, Environmental Services  
[Nand.Kaushik@intertek.com](mailto:Nand.Kaushik@intertek.com)

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

# **ATTACHMENT B**

Radon Test Summary Spreadsheet

<b>Radon Testing Results</b>		
<b>Lynnbrook Center</b>		
<b>Testing period: 12/4/18 - 12/7/18</b>		
<b>Kit Number</b>	<b>Room / Area</b>	<b>Result (pCi/L)</b>
3919292	1	<0.4
3919293	2	<0.4
3919296	6	<0.4
3922651	7	2.4
3922652	8	1.2
3919291	13	<0.4
--	Annex (MISSED)	--
3919297	APR	0.7
3922891	Assessment Team	1.8
3922893	Assessment Team Office	1.3
3919295	Lounge	<0.4
3922895	Main Office	1.0
3922896	Main Office 1	1.7
3922897	Main Office 2	1.7
3922898	Main Office 3	1.2
3922900	Main Office 4	1.2
3922894	Office	1.7
3919298	Preschool Office 1	0.4
3919299	Preschool Office 2	0.4
3919300	Preschool Office 2	0.4
3922892	Worm Room	1.9

<b>Radon Testing Results</b>		
<b>Lynnbrook Annex</b>		
<b>Testing period: 2/26/19 - 3/01/19</b>		
<b>Kit Number</b>	<b>Room / Area</b>	<b>Result (pCi/L)</b>
3923341	17	1.1
3923342	Reception	0.5
3923343	1	0.5
3923344	2	<0.4
3923345	3/4	0.7
3923346	6	0.6
3923347	10	0.7
3923348	7	1.1
3923349	8	0.8
3923350	11	<0.4
3923307	13	0.5
3923308	15	0.7
3923309	Copy Room	1.0
3923310	Open office area	0.5

<b>Radon Testing Results</b>		
<b>Lynnbrook Center</b>		
<b>Testing period: 12/4/18 - 12/7/18</b>		
<b>Kit Number</b>	<b>QC Type</b>	<b>Result (pCi/L)</b>
3919294	4 (D)	<0.4
3923165	Field Blank	<0.4
3923166	Field Blank	<0.4
3922899	Main Office 4 (D)	1.5
3917593	Office Blank	<0.4
3917591	Trip Blank	<0.4

**Table Notes:**

D – Duplicate

FB – Field Blank

OB – Office Blank

TB – Transit Blank

QC – Quality Control



# **ATTACHMENT C**

Laboratory Analytical Results

NELAC NY 11769  
NRPP 103216 AL  
NRSB ARL0017

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

Laboratory Report for:

Property Tested: Project # 04481387-1

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


MCPS Radon Survey  
Lynnbrook Center  
Bethesda MD 20814

Log Number	Device Number	Test Exposure Duration:		Area Tested	Result pCi/L
2405119	3922891	12/04/2018 9:06 am	12/07/2018 8:13 am	Lynnbrook Center Floor 1 Room Assessment Tea	1.8
2405120	3922892	12/04/2018 9:07 am	12/07/2018 8:13 am	Lynnbrook Center Floor 1 Worm Room	1.9
2405121	3922893	12/04/2018 9:08 am	12/07/2018 8:03 am	Lynnbrook Center Floor 1 Assessment Team Offic	1.3
2405122	3922894	12/04/2018 9:09 am	12/07/2018 8:10 am	Lynnbrook Center Floor 1 Room Office	1.7
2405123	3922895	12/04/2018 9:10 am	12/07/2018 8:10 am	Lynnbrook Center Floor 1 Room Main Office	1.0
2405124	3922896	12/04/2018 9:10 am	12/07/2018 8:10 am	Lynnbrook Center Floor 1 Main Office 1	1.7
2405125	3922897	12/04/2018 9:10 am	12/07/2018 8:11 am	Lynnbrook Center Floor 1 Main Office 2	1.7
2405126	3922898	12/04/2018 9:10 am	12/07/2018 8:11 am	Lynnbrook Center Floor 1 Main Office 3	1.2
2405127	3922899	12/04/2018 9:11 am	12/07/2018 8:11 am	Lynnbrook Center Floor 1 Main Office 4	1.5
2405128	3922900	12/04/2018 9:11 am	12/07/2018 8:12 am	Lynnbrook Center Floor 1 Main Office 4	1.2
2405129	3919291	12/04/2018 9:11 am	12/07/2018 8:15 am	Lynnbrook Center Floor 1 Room 13	< 0.4

**Comment:** AMENDED REPORT on 1/30/2018 to append additional results. A copy of this report was emailed to Intertek-PSI (VA).

Distributed by: Intertek-PSI (VA)

Date Received: 12/08/2018    Date Logged: 12/08/2018    Date Analyzed: 12/10/2018    Date Reported: 01/30/2019

Report Reviewed By: 

Report Approved By: 

Shawn Price, Director of Laboratory Operations, AccuStar Labs

**Disclaimer:**

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NELAC NY 11769  
NRPP 103216 AL  
NRSB ARL0017

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

Laboratory Report for:

Property Tested: Project # 04481387-1

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


MCPS Radon Survey  
Lynnbrook Center  
Bethesda MD 20814

Log Number	Device Number	Test Exposure Duration:		Area Tested	Result pCi/L
2405130	3919292	12/04/2018 9:14 am	12/07/2018 8:15 am	Lynnbrook Center Floor Lower Level Room 1	< 0.4
2405131	3919293	12/04/2018 9:17 am	12/07/2018 8:17 am	Lynnbrook Center Lower Level Room 2	< 0.4
2405132	3919294	12/04/2018 9:17 am	12/07/2018 8:17 am	Lynnbrook Center Lower Level Room 4	< 0.4
2405133	3919295	12/04/2018 9:18 am	12/07/2018 8:17 am	Lynnbrook Center Lower Level Room Lounge	< 0.4
2405134	3919296	12/04/2018 9:19 am	12/07/2018 8:18 am	Lynnbrook Center Lower Level Room 6	< 0.4
2405135	3919297	12/04/2018 9:20 am	12/07/2018 8:18 am	Lynnbrook Center Lower Level Room APR	0.7
2405136	3919298	12/04/2018 9:20 am	12/07/2018 8:19 am	Lynnbrook Center Lower Level Preschool Office 1	0.4
2405137	3919299	12/04/2018 9:22 am	12/07/2018 8:20 am	Lynnbrook Center Lower Level Preschool Office 2	0.4
2405138	3919300	12/04/2018 9:22 am	12/07/2018 8:20 am	Lynnbrook Center Lower Level Preschool Office 2	0.4
2405139	3922651	12/04/2018 9:24 am	12/07/2018 8:20 am	Lynnbrook Center Floor Lower Level Room 7	2.4
2405140	3922652	12/04/2018 9:24 am	12/07/2018 8:21 am	Lynnbrook Center Floor Lower Level Room 8	1.2

**Comment:** AMENDED REPORT on 1/30/2018 to append additional results. A copy of this report was emailed to Intertek-PSI (VA).

Distributed by: Intertek-PSI (VA)

Date Received: 12/08/2018    Date Logged: 12/08/2018    Date Analyzed: 12/10/2018    Date Reported: 01/30/2019

Report Reviewed By: 

Report Approved By: 

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NELAC NY 11769  
NRPP 103216 AL  
NRSB ARL0017

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

Laboratory Report for:

Property Tested: Project # 04481387-1

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


MCPS Radon Survey  
Lynnbrook Center  
Bethesda MD 20814

Log Number	Device Number	Test Exposure Duration:		Area Tested	Result pCi/L
2405141	3923165	12/04/2018 9:06 am	12/07/2018 8:21 am	Lynnbrook Center	< 0.4
2405142	3923166	12/04/2018 9:06 am	12/07/2018 8:21 am	Lynnbrook Center	< 0.4
2405143	3917593	12/04/2018 6:00 am	12/07/2018 8:21 am	Lynnbrook Center	< 0.4
2405144	3917591	12/04/2018 6:00 am	12/07/2018 8:21 am	Lynnbrook Center	< 0.4

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Distributed by: Intertek-PSI (VA)

Date Received: 12/08/2018    Date Logged: 12/08/2018    Date Analyzed: 12/10/2018    Date Reported: 01/30/2019

Report Reviewed By: 

Report Approved By: 

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NRPP 105011 AL  
NRSB ARL0007  
Ohio RL41

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

Laboratory Report for:

Property Tested:

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

MCPS Radon Survey  
4514 Taylorsville Road  
Dayton OH 45424

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

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

Test Performed By: Unknown

Distributed by: Intertek-PSI (VA)

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

Report Reviewed By: 

Report Approved By: 

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Shawn Price, Director of Laboratory Operations, AccuStar Labs

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NRPP 105011 AL  
NRSB ARL0007

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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

MCPS Radon Survey Lynnbrook Annex  
8810 Postoak Rd  
Potomac MD 20854

Log Number	Device Number	Test Exposure Duration:	Area Tested	Result pCi/L
3220766	3923341	02/26/2019 3:06 pm 03/01/2019 12:08 pm	First Floor Room 17	1.1
3220767	3923342	02/26/2019 3:07 pm 03/01/2019 12:08 pm	First Floor Room Reception	0.5
3220768	3923343	02/26/2019 3:10 pm 03/01/2019 12:09 pm	First Floor Room 1	0.5
3220769	3923344	02/26/2019 3:11 pm 03/01/2019 12:09 pm	First Floor Room 2	< 0.4
3220770	3923345	02/26/2019 3:13 pm 03/01/2019 12:10 pm	First Floor Room 3/4	0.7
3220771	3923346	02/26/2019 3:14 pm 03/01/2019 12:11 pm	First Floor Room 6	0.6
3220772	3923347	02/26/2019 3:16 pm 03/01/2019 12:13 pm	First Floor Room 10	0.7
3220773	3923348	02/26/2019 3:08 pm 03/01/2019 12:13 pm	First Floor Room 7	1.1
3220774	3923349	02/26/2019 3:19 pm 03/01/2019 12:13 pm	First Floor Room 8	0.8
3220775	3923350	02/26/2019 3:21 pm 03/01/2019 12:14 pm	First Floor Room 11	< 0.4
3220776	3923307	02/26/2019 3:30 pm 03/01/2019 12:15 pm	First Floor Room 13	0.5

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

Distributed by: Intertek-PSI (VA)

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

Report Reviewed By: 

Report Approved By: 

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NRPP 105011 AL  
NRSB ARL0007

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

Laboratory Report for:

Property Tested: Project # 04481387-1

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

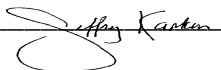
MCPS Radon Survey Lynnbrook Annex  
8810 Postoak Rd  
Potomac MD 20854


Log Number	Device Number	Test Date	Exposure Duration	Area Tested	Result pCi/L
3220777	3923308	02/26/2019	3:31 pm - 03/01/2019 12:15 pm	First Floor Room 15	0.7
3220778	3923309	02/26/2019	3:32 pm - 03/01/2019 12:09 pm	First Floor Copy Room	1.0
3220779	3923310	02/26/2019	3:35 pm - 03/01/2019 12:15 pm	First Floor Room Open Office Area	0.5

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

Distributed by: Intertek-PSI (VA)

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

Report Reviewed By: 

Report Approved By: 

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Shawn Price, Director of Laboratory Operations, AccuStar Labs

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# EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT Intertek - PSI

Job Number 187732

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

Date Start: 12/7/18 Date Stop: 12/10/18 Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: 0947 Time Stop: 0947 Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: (10) Char. Cans- Device No.'s: \_\_\_\_\_

3926831 thru 3926840 \_\_\_\_\_

G2 left

Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_ Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_ Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: \_\_\_\_\_ Device No.'s: \_\_\_\_\_

Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_ Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_ Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: \_\_\_\_\_ Device No.'s: \_\_\_\_\_

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





## Chain of Custody

Project Name: MCPS Radon Survey 2018

Name of Schools:

1. Grosvenor Center (Luxmanor ES)
2. Montrose Center
3. Gibbs ES
4. Westbrook ES
5. Hadley Farms (Resnik ES)
6. Kingsview MS
7. Longview School
8. Lynnbrook Center
9. Magruder HS
10. McAuliffe ES
11. McNair ES
12. Mill Creek Towne ES
13. Martin Luther King MS
14. Montgomery Village MS
15. Great Seneca Creek ES
16. Quince Orchard HS
17. Redland MS
18. North Bethesda MS
19. Spark Matsunaga ES
20. Whetstone ES
21. Wood Acres ES

---

	Date	Initials
Radon Test Kits Deployed	12/04/2018	ML
Radon Test Kits Sampled	12/07/2018	ML
Radon Test Kits Shipped to Lab*	12/07/2018	ML
Radon Test Kits Received by Lab*	12/08/2018; 12/09/2018	ML

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

RADON SCREENING SURVEY – FOLLOW-UP LYNNBROOK CENTER

8001 Lynnbrook Drive, Bethesda, Maryland 20814

EXECUTIVE SUMMARY

Date of Test Report:	4/13/16 Follow-Up
Round of Testing:	Initial <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">Follow-up</span> Post Remediation
# Rooms Tested	1
# Rooms $\geq$ 4.0 pCi/L:	0
Low Value:	<0.4
High Value:	1.7
Confirmed Rooms $\geq$ 4.0 pCi/L US EPA Action Level	0

**Summary of Sampling Events  $\geq$  4.0 pCi/L**

Room	Result (pCi/L) 2/25/16 Initial	Result (pCi/L) 4/13/16 Follow-Up	Average Result (pCi/L)
Main – OFF3	1.7 Tampered	1.7	1.7



## MCPS RADON TESTING

### Executive Summary: Lynnbrook Center

Date of Test Report:	4/13/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	1
# Rooms $\geq$ 4.0 pCi/L:	0
Low Value:	<0.4
High Value:	1.7

#### Project Status:

Retesting completed; no further action at this time.



April 13, 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 # 12146341.32

Location: Lynnbrook Center  
8001 Lynnbrook Drive  
Bethesda, Maryland 20814

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 Lynnbrook Center, located at 8001 Lynnbrook Drive in Bethesda, Maryland 20814 (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](http://www.montgomerycountymd.gov/dep/air/radon) or [www.epa.gov/radon](http://www.epa.gov/radon).

KCI visited the site on March 14, 2016 and deployed three (3) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance. A floor plan map of the building with the test locations is included as Attachment A of this report.

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

KCI returned to the site on March 17, 2016 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to AccuStar Labs for analysis by gamma-ray spectroscopy. Accustar Labs is a NRSB certified analytical laboratory for radon analysis (certification # ARL0007) located at 929 Mount

Zion Road, Lebanon, Pennsylvania.

**Evaluation of Testing Conditions:**

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

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

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

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

**Results:**

The results of the radon test analysis indicated the following:

<b>Radon Concentration</b>	<b>Room</b>	<b>Result</b>
$\geq 4.0$ pCi/L	None	NA
$< 4.0$ pCi/L	See Attachment B	

Notes:  
D- Duplicate sample

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

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

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

<b>Radon Testing Results</b>		
<b>Lynnbrook Center</b>		
<b>Test Period: 03/14/16-03/17/16</b>		
<b>Kit Number</b>	<b>Room / Area</b>	<b>Result</b>
3029005	Main Office 3	1.6

Table Note:

\* Missing or Compromised Sample

<b>Radon Testing Results</b>		
<b>Lynbrook Center</b>		
<b>Test Period: 03/14/16-03/17/16</b>		
<b>Kit Number</b>	<b>QC Type</b>	<b>Result</b>
3029002	D (Main Office 3)	1.7
3028803	FB (Main Office 3)	<0.4

Table Note:

\* Missing or Compromised Sample

# ATTACHMENT C

## Laboratory Analytical Results

NRPP 10511AL  
NRSB ARL0007

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

Laboratory Report for:

Property Tested: Project # 12146341

KCI Technologies  
936 Ridgebrook Rd  
Sparks MD 21152

Lynnbrook Center  
8001 Lynnbrook Dr  
Bethesda MD 20814

Log Number	Device Number	Test Exposure Duration:	Area Tested	Result (pCi/L)
3017470	3029005	03/14/2016 11:35 am 03/17/2016 8:24 am	Main Office 3 First Floor	1.6
3017471	3029002	03/14/2016 11:35 am 03/17/2016 8:22 am	Main Office 3 First Floor	1.7
3017472	3028803	03/14/2016 11:36 am 03/17/2016 8:22 am	Main Office 3 First Floor	<0.4

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

Distributed by: KCI Technologies, Inc.

Date Received: 03/21/2016 Date Logged: 03/21/2016 Date Analyzed: 03/22/2016 Date Reported: 03/22/2016

Report Reviewed By: Christie Bates

Report Approved By: Carolyn D. Koke

Carolyn D. Koke, President, AccuStar Labs

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NRPP 10511AL  
NRSB ARL0007

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

Laboratory Report for:

Property Tested: Project # 12146341

KCI Technologies  
936 Ridgebrook Rd  
Sparks MD 21152

MCPS Radon Phase 12 Office Blank

Log Number	Device Number	Test Exposure Duration:	Area Tested	Result (pCi/L)
3017546	3029151	03/14/2016 9:30 am 03/17/2016 9:30 am	Unit # 0 Office First Floor	<0.4

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

Distributed by: KCI Technologies, Inc.

Date Received: 03/21/2016 Date Logged: 03/21/2016 Date Analyzed: 03/21/2016 Date Reported: 03/22/2016

Report Reviewed By: Grace Heubling

Report Approved By: Carolyn D. Koke

Carolyn D. Koke, President, AccuStar Labs

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NRPP 10511AL  
NRSB ARL0007

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

Laboratory Report for:

Property Tested:

KCI Technologies  
936 Ridgebrook Rd  
Sparks MD 21152

MCPS  
Transit Blanks

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

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

Distributed by: KCI Technologies, Inc.

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

Report Reviewed By: Christie Bates

Report Approved By: Carolyn D. Koke

Carolyn D. Koke, President, AccuStar Labs

**Disclaimer:**

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

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

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

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

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

**Test Site Info**

Name of Building/Project or Owner: Transit  
 Site Address: Transit  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ County: \_\_\_\_\_  
 Projects Contact Name: Don Coale Phone: \_\_\_\_\_ Email: \_\_\_\_\_

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

Multi-Page Report Y-N

LAB USE ONLY	
Wgt. Gain	pCi/L
	LOH
	LOH
	LOH
	LOH

Detector Serial#	ROOM NAME & NUMBER - LOCATION OF DETECTOR IN ROOM (indicate duplicates and blanks)	Floor	Start Date	Start Time Include AM/PM	Stop Date	Stop Time Include AM/PM
3028953	Transit	1	1/19/16	approx: 00pm 1/23/16		9:30am
8955	Transit	1	1/19/16			
8954	Transit	1	1/19/16			
8997	Transit	1	1/19/16			

1/27/2016

KCI Technologies, Inc.

3010588 3028953 ACPC275B EXP12/31/2018

**Structure Type:** (circle one or more) Basement - Crawlspace - Slab on Grade - Other  
**Test Purpose:** (Circle all that apply) Initial Screening - Follow Up Test - Post Mitigation - Real Estate - Other  
**Building Type:** (Circle One) Residential - Non Residential  
 Private Day Care - Private School  
 Day Care in Public School - Public School

**Both Placed by and Retrieved by signatures are required**  
**Canisters placed by** \_\_\_\_\_ # \_\_\_\_\_  
**Canisters retrieved by** \_\_\_\_\_ # \_\_\_\_\_

Were general operating conditions maintained?  
 Yes - No explain if NO  
 Were closed building conditions maintained?  
 Yes - No explain if NO  
 Normal Temp. Yes - No  
 Normal Humidity Yes - No  
 Windy Y-N Rainy Y-N

Send Results To: \_\_\_\_\_  
 Company Name: KCI Tech  
 Address: 936 Ridgebrook  
 City: Sparks State: MD Zip: 21152  
 Phone: 410-599-3826  
 EMAIL Results to: James.Mouldale@kci.com

Owner waives confidentiality by signing here \_\_\_\_\_ Date 1/27/16  
 Attention: James Mouldale

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

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

# TCS INDUSTRIES, INC.

(717) 657-7032

RADON GAS DETECTION

www.radondetek.com

4326 Crestview Road, Harrisburg, PA 17112

James Mouldale  
KCI  
936 Ridgebrook Rd.  
Sparks, MD 21152

April 04, 2016

Dear Mr. Mouldale:

The spike exposure data were:

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

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

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

Avg. Temp. was 71F  
Avg. RH was 51%  
Elevation was 490 feet above sea level

Sincerely,



Carl H. Distenfeld, CHP

\*\*\*\*\*  
TCS Radon Chamber NRSB CHM 0002  
\*\*\*\*\*

NRPP 10511AL  
NRSB ARL0007

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

Laboratory Report for:

Property Tested:

KCI Technologies  
936 Ridgebrook Rd  
Sparks MD 21152

MCPS  
Radon Spike Sample Laboratory Results

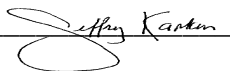
Log Number	Device Number	Test Exposure Duration:	Area Tested	Result (pCi/L)
3020102	3029166	04/04/2016 11:10 am 04/06/2016 11:13 am	Not Indicated	11.9
3020103	3029214	04/04/2016 11:10 am 04/06/2016 11:13 am	Not Indicated	11.5
3020104	3029217	04/04/2016 11:10 am 04/06/2016 11:13 am	Not Indicated	10.7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

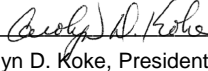
**Comment:** A copy of this report was emailed to james.mouldsdale@kci.com.

Distributed by: KCI Technologies, Inc.

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

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

Report Reviewed By: 

Report Approved By:   
Carolyn D. Koke, President, AccuStar Labs

**Disclaimer:**

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

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





## MCPS RADON TESTING

### Executive Summary: Lynnbrook Center

Date of Test Report:	2/25/2016
Round of Testing:	Initial Follow-up Post Remediation
# Rooms Tested:	34
# Rooms $\geq$ 4.0 pCi/L:	0
Low Value:	< 0.3
High Value:	3.0

#### Project Status:

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



February 25, 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 # 12146341.26

Location: Lynnbrook Center  
8001 Lynnbrook Drive  
Bethesda, MD 20814

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 Lynnbrook Center, located at 8001 Lynnbrook Drive in Bethesda, Maryland 20814 (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](http://www.montgomerycountymd.gov/dep/air/radon) or [www.epa.gov/radon](http://www.epa.gov/radon).

KCI visited the site on February 2, 2016 and deployed forty-four (44) 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 5, 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:

<b>Radon Concentration</b>	<b>Room</b>	<b>Result</b>
$\geq 4.0$ pCi/L	none	n/a
$< 4.0$ pCi/L	See Attachment B	

Notes:  
D- Duplicate sample

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

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

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



Sincerely,



James M. 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

<b>Radon Testing Results</b>		
<b>Lynnbrook Center</b>		
<b>Test Period: 02/02/16-02/05/16</b>		
<b>Kit Number</b>	<b>Room / Area</b>	<b>Result</b>
7732461	7921-1	0.9
7732466	7921-10	1.3
7732469	7921-11	1.0
7732471	7921-13	1.0
7732470	7921-15	1.2
7732456	7921-17	1.1
7732462	7921-2	1.1
7732463	7921-3	1.2
7732464	7921-6	1.1
7732467	7921-7	1.7
7732468	7921-8	1.2
7732458	7921-9	0.9
7732455	Main - 1	0.9
7732446	Main - 14	1.1
7732444	Main - 16	0.8
7732445	Main - 17	0.9
7732441	Main - 18	0.8
7732454	Main - 2	0.9
7732452	Main - 4	1.1
7732450	Main - 6	0.7
7732448	Main - 7	2.6
7732449	Main - 8	2.1
7732447	Main - AP ROOM	1.1
7732437	Main - ASS	2.6
7732439	Main - ASS2	2.3
7732428	Main - OFF1	2.5
7732431	Main - OFF2	2.3
7732432	* Main - OFF3 (Tampered)	1.7
7732433	Main - OFF4	2.7
7732434	Main - OFF5	2.7
7732435	Main - OFF6	2.7
7732451	Main - SC LONG	0.7
7732453	Main - STORAGE RM	0.6
7732440	Main - WORK ROOM	2.3

Table Note:

\* Missing or Compromised Sample

<b>Radon Testing Results</b>		
<b>Lynnbrook Center</b>		
<b>Test Period: 02/02/16-02/05/16</b>		
<b>Kit Number</b>	<b>QC Type</b>	<b>Result</b>
7732465	D (7921-6)	1.1
7732459	D (7921-9)	1.1
7732442	D (Main - 18)	< 0.3
7732438	D (Main - ASS)	2.6
7732429	D (Main - OFF1)	3.0
7732436	D (Main - OFF6)	2.5
7732460	FB (7921-9)	< 0.3
7732443	FB (Main - 18)	< 0.3
7732430	FB (Main - OFF1)	< 0.3
7730072	OB (0)	< 0.3

Table Note:

\* Missing or Compromised Sample

# ATTACHMENT C

## Laboratory Analytical Results

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February 23, 2016 **\*\* LABORATORY ANALYSIS REPORT \*\***

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Radon test result report for:  
**LYNNBROOK CENTER**  
**7921**

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Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7730072	0	2016-02-02 @ 5:00 pm	2016-02-05 @ 12:00 pm	< 0.3	2016-02-09
7732461	1	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	0.9 ± 0.3	2016-02-09
7732466	10	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	1.3 ± 0.4	2016-02-09
7732469	11	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	1.0 ± 0.3	2016-02-09
7732471	13	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	1.0 ± 0.3	2016-02-09
7732470	15	2016-02-02 @ 11:00 am	2016-02-05 @ 8:00 am	1.2 ± 0.3	2016-02-09
7732456	17	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	1.1 ± 0.3	2016-02-09
7732462	2	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	1.1 ± 0.3	2016-02-09
7732463	3	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	1.2 ± 0.3	2016-02-09
7732464	6	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	1.1 ± 0.3	2016-02-09
7732465	6	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	1.1 ± 0.3	2016-02-09
7732467	7	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	1.7 ± 0.4	2016-02-09
7732468	8	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	1.2 ± 0.3	2016-02-09
7732458	9	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	0.9 ± 0.3	2016-02-09
7732459	9	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	1.1 ± 0.3	2016-02-09
7732460	9	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	< 0.3	2016-02-09

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February 23, 2016  
**LABORATORY ANALYSIS  
REPORT \*\***

Radon test result report for:  
**LYNNBROOK CENTER  
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7732455	1	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	0.9 ± 0.3	2016-02-09
7732446	14	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	1.1 ± 0.3	2016-02-09
7732444	16	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	0.8 ± 0.3	2016-02-09
7732445	17	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	0.9 ± 0.3	2016-02-09
7732441	18	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	0.8 ± 0.3	2016-02-09
7732442	18	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	< 0.3	2016-02-09
7732443	18	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	< 0.3	2016-02-09
7732454	2	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	0.9 ± 0.3	2016-02-09
7732452	4	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	1.1 ± 0.3	2016-02-09
7732450	6	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	0.7 ± 0.3	2016-02-09
7732448	7	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	2.6 ± 0.4	2016-02-09
7732449	8	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	2.1 ± 0.4	2016-02-09
7732447	AP ROOM	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	1.1 ± 0.3	2016-02-09
7732437	ASS	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	2.6 ± 0.4	2016-02-09
7732438	ASS	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	2.6 ± 0.4	2016-02-09
7732439	ASS2	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	2.3 ± 0.4	2016-02-09
7732428	OFF1	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	2.5 ± 0.4	2016-02-09
7732429	OFF1	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	3.0 ± 0.5	2016-02-09
7732430	OFF1	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	< 0.3	2016-02-09
7732431	OFF2	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	2.3 ± 0.4	2016-02-09
7732432	OFF3	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	1.7 ± 0.4	2016-02-09
7732433	OFF4	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	2.7 ± 0.4	2016-02-09
7732434	OFF5	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	2.7 ± 0.4	2016-02-09
7732435	OFF6	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	2.7 ± 0.4	2016-02-09
7732436	OFF6	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	2.5 ± 0.4	2016-02-09
7732451	SC LONG	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	0.7 ± 0.3	2016-02-09
7732453	STORAGE RM	2016-02-02 @ 10:00 am	2016-02-05 @ 8:00 am	0.6 ± 0.3	2016-02-09
7732440	WORK ROOM	2016-02-02 @ 10:00 am	2016-02-05 @ 7:00 am	2.3 ± 0.4	2016-02-09

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**

<b>Kit #</b>	<b>Room Id</b>	<b>Started</b>	<b>Ended</b>	<b>pCi/L</b>	<b>Analyzed</b>
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  $\mu$ R/h Elevation = 820 ft



### Radon Test Kit Chain of Custody

Project Name: MCPS Radon Phase 7 (2-1-2016)

Name of School/Facility:

- |                            |                             |                            |
|----------------------------|-----------------------------|----------------------------|
| 1. Wyngate E.S.            | 10. Bethesda Depot          | 18. Stone Mill E.S.        |
| 2. Seven Locks E.S.        | 11. Bethesda Trans Depot    | 19. Strawberry Knoll E.S.  |
| 3. Takoma Park M.S.        | 12. Sligo M.S.              | 20. Shady Grove M.S.       |
| 4. Somerset E.S.           | 13. Stonegate E.S.          | 21. Washington Grove E.S.  |
| 5. Silver Spring Int. M.S. | 14. Randolph Transportation | 22. Sherwood E.S.          |
| 6. Sligo Creek E.S.        | 15. Earl B. Wood M.S.       | 23. Woodfield E.S.         |
| 7. Tilden M.S.             | 16. Sargent Shriver E.S.    | 24. Taylor Learning Center |
| 8. Tilden Center           | 17. Thomas Wooten H.S.      | 25. Kingsley Wilderness    |
| 9. Bethesda Annex          |                             |                            |

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	Date	Initials
Radon Test Kits Deployed	2/1/16	JM
Radon Test Kits Collected	2/4/16	JM
Radon Test Kits Shipped to Lab*	2/4/16	JM
Radon Test Kits Received by Lab*	2/8/16	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 7 (2-2-2016)

Name of School/Facility:

- |                                |                                |
|--------------------------------|--------------------------------|
| 1. Concord Center              | 8. Food & Nutritional Services |
| 2. Lynnbrook Center            | 9. Fairland Center             |
| 3. Carver (CESC)               | 10. Redland M.S. (retest)      |
| 4. Spring Mill (area 1 Office) | 11. Clarksburg Trans Depot     |
| 5. Wheaton H.S                 | 12. Clarksburg Main Depot      |
| 6. Montrose Center             | 13. Clarksburg E.S.            |
| 7. West Farm Trans Depot       |                                |

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	Date	Initials
Radon Test Kits Deployed	2/2/16	JM
Radon Test Kits Collected	2/5/16	JM
Radon Test Kits Shipped to Lab*	2/5/16	JM
Radon Test Kits Received by Lab*	2/9/16	JM

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