



February 29, 2024

Jonathan Spitzer
District Facilities Manager
Fridley Public Schools
6000 West Moore Lake Drive
Fridley, MN 55432

**RE: RL Stevenson Elementary School
Continuous Radon Monitoring Results
IEA Project #202410096**

Dear Jonathan Spitzer:

IEA used a continuous radon monitor (CRM) to measure radon levels in the following locations in RL Stevenson Elementary School:

- Copier Room
- Room 121
- Room 142

In addition, IEA placed one Air Chek Pro Chek short-term radon test kit as a comparison test, as well as required blank tests. See Appendix A for Quality Control information.

The CRMs were placed and retrieved by the following Minnesota Department of Health (MDH) licensed Radon Measurement Professional(s):

Measurement Professional	License Number	Signature
Annie Shimkus	RMEA-00482	
Faith Breeden	RMEA-00538	

INSTITUTE FOR ENVIRONMENTAL ASSESSMENT, INC.
www.ieasafety.com

BROOKLYN PARK
9201 West Broadway, #600
Brooklyn Park, MN 55445
763-315-7900 / FAX 763-315-7920
800-233-9513

MANKATO
610 North Riverfront Drive
Mankato, MN 56001
507-345-8818 / FAX 507-345-5301
800-233-9513

ROCHESTER
210 Woodlake Drive SE
Rochester, MN 55904
507-281-6664 / FAX 507-281-6695
800-233-9513

BRAINERD
601 NW 5th Street, Ste. #4
Brainerd, MN 56401
218-454-0703 / FAX 218-454-0703
800-233-9513

MARSHALL
1420 East College Drive
Marshall, MN 56258
507-476-3599 / FAX 507-537-6985
800-233-9513

VIRGINIA
5525 Emerald Avenue
Mountain Iron, MN 55768
218-410-9521
800-233-9513

INTRODUCTION

Radon is a colorless, odorless, tasteless, radioactive gas that occurs naturally in soil, rocks, and underground water supplies and in the ambient air. According to the U.S. Environmental Protection Agency (EPA) and other scientific organizations, naturally occurring radon gas has been associated with an increased risk of developing lung cancer. The chances of developing lung cancer from radon exposure are dependent on several factors, including individual susceptibility and, perhaps more importantly, the dose and duration of exposure. Radon testing in schools is highly recommended by the Minnesota Department of Health (MDH) and EPA.

Short term radon testing, conducted on December 4, 2023, indicated radon concentrations greater than half of the action level (2-4 pCi/L). A CRM is recommended to determine if elevated levels are present during occupied times. Radon levels can fluctuate with the operation of the ventilation system as well as with changes in barometric pressure. The CRM provides hourly radon readings so that levels can be evaluated for periods while the room is occupied.

The Minnesota Department of Health (MDH) and the Environmental Protection Agency (EPA) have established a recommended action level in frequently occupied areas of 4.0 picoCuries per liter (pCi/L) for an annual average. The average radon level over each workday was compared to the Action Level.

METHODOLOGY

A Radalink, Inc. RADALINK Series 6000 Radon Telemonitor was used for the testing, which is provided and maintained by Radalink, Inc., MDH license #RL-00009, located at 5599 Peachtree Road, Atlanta, GA 30341.

Conditions of air intakes were good and the ventilation system was operating in good condition at the time of placement and retrieval. IEA was informed that the HVAC was on a normal operating schedule during the testing period.

IEA followed *ANSI/AARST MA-MFLB 2023* for quality assurance measurements by including Air Chek Pro Chek short-term radon test kits for comparison purposes, as well as control kits (blanks), and spiked kits.

Client communications and commitments were delivered to the client and are located in Appendix C:

- Client Commitments, Advisories and Authorizations
- Facilitating Staff Commitments

Occupant notices were sent to the client for distribution on January 25, 2024.

EVALUATION CRITERIA

The MDH and the EPA have established a recommended action level in frequently occupied areas of 4.0 picocuries per liter (pCi/L) for an annual average. Testing was conducted during school days when the building is significantly occupied. The HVAC system was set on a normal occupied operating schedule. Testing was conducted during the heating season when the average outdoor temperature is less than 65°F, as recommended by the MDH, when the ventilation system was operating normally, and windows and doors were closed. Consequently, sampling under these “closed” conditions is when the radon risk is most likely to occur.

The MDH recommends follow-up testing for sampling results that are above the action level. Please refer to the following table for MDH guidelines:

RESULTS (pCi/L)	RECOMMENDED ACTION
LESS THAN 4	Re-test after changes to foundation or HVAC and every 5 years
GREATER THAN 4	Conduct CRM short-term testing during winter months
LESS THAN 4 (DURING OCCUPANCY) AFTER CRM TESTING	Repeat CRM testing if not conducted during winter or if conducted during abnormal ventilation. Otherwise consider re-testing after changes to foundation or HVAC and every 5 years
GREATER THAN 4 (DURING OCCUPANCY) AFTER CRM TESTING	Reduce radon in rooms to less than 4 through radon mitigation. Conduct CRM testing to verify radon reduction.

RESULTS & DISCUSSION

Continuous radon monitoring was conducted from February 12, 2024 to February 14, 2024 in the RL Stevenson Elementary School Copier Room, Room 121, and Room 142. A CRM was placed in each room for about 48 hours. The MDH recommends a minimum of 48 hours. Days when these rooms were not occupied (e.g., weekends & holidays) were not included in the monitoring. The hourly CRM data is provided in Appendix C.

A summary of the CRM data, including previous results, is provided in the Table below.

RL Stevenson Elementary School
 6080 E River Rd, Fridley, MN 55432

Continuous Radon Monitoring Results – February 12, 2024 – February 14, 2024

Room	Day 1 Average (pCi/L)		Day 2 Average (pCi/L)		Overall Average (pCi/L)		Results from the Previous Testing (pCi/L)
Copier Room	¹ 1.4	² 2.9	¹ 1.5	² 3.0	¹ 1.4	² 2.8	3.4 +/- 0.5
Room 121	¹ 1.4	² 1.7	¹ 1.3	² 2.3	¹ 1.3	² 2.0	3.1 +/- 0.5
Room 142	¹ 0.8	² 1.7	¹ 0.9	² 1.8	¹ 0.8	² 1.8	3.2 +/- 0.5
¹ Readings during occupied times: 7:30 a.m. to 5:30 p.m.							
² Readings during unoccupied times: 12 a.m. to 7:30 a.m. and 5:30 p.m. to 11:59 p.m.							

pCi/L – picoCuries per liter of air

CRM calibrated: October 12, 2023

Discussion of Results:

- Average radon levels over the workday in the Copier Room was 1.4 pCi/L on the first day of testing, and 1.5 pCi/L on the second day of testing.
- Average radon levels over the workday in Room 121 was 1.4 pCi/L on the first day of testing, and 1.3 pCi/L on the second day of testing.
- Average radon levels over the workday in Room 142 was 0.8 pCi/L on the first day of testing, and 0.9 pCi/L on the second day of testing.
- Average radon levels in the Copier Room, Room 121, and Room 142 were below the Action Level during the workdays.

CONCLUSIONS AND RECOMMENDATIONS

The results of the CRM indicate that radon levels in the Copier Room, Room 121, and Room 142 are below the action level during the workday. The testing was performed during the winter and heating season so the testing may be representative of “worst case” conditions.

The EPA has established recommended guidelines for permissible radon concentrations in schools. The following are general recommendations for frequently occupied areas of schools:

- The building should be retested at least every 5 years and in conjunction with any sale of the building.
- Rooms that were not tested because they were not occupied should be tested if they become occupied in the future.

In addition, retesting should be conducted when any of the following circumstances occur:

- A new addition is constructed, or a significant renovation occurs
- A ground contact area not previously tested is occupied
- Heating or cooling systems are significantly altered, resulting in changes to air pressures or distribution
- Ventilation is significantly altered by extensive weatherization, changes to mechanical systems, or comparable procedures
- Significant openings to soil occur due to:
 - Ground water or slab surface water control systems (e.g., sumps, perimeter drain tile, shower/tub retrofits, etc.)
 - Natural settlement causing major cracks to develop
 - Earthquakes, construction blasting, or formation of sink holes nearby
 - A mitigation system is altered, modified or repaired
- Rooms should be retested during the winter heating season (i.e., under “closed” conditions) which is typically “worst case” conditions.

Per Minnesota Statutes, section 123B.571, school districts are required to report radon test results at a school board meeting and report results to the MDH. IEA is able to assist with presenting results to the school board, and the MDH reporting. The MDH ‘School Radon Testing Form’ is located in Appendix E.

For more information regarding radon, see the EPA’s A Citizen’s Guide to Radon at <http://www.epa.gov/radon>. MDH can be contacted at health.indoorair@state.mn.us or 651-201-4601.

GENERAL COMMENTS

The analysis and opinions expressed in this report are based upon data obtained from continuous radon monitoring at Fridley Public Schools and are representative of the location and time period sampled. This report does not reflect variations in conditions that may occur across the site, property, or facility. Actual conditions may vary and may not become evident without further assessment.

The report is prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted radon testing practices. Other than as provided in the preceding sentence and in our Proposal #11806 dated December 29, 2023, regarding radon testing services at RL Stevenson Elementary School, including the General Conditions attached thereto, no warranties are extended or made.

Should you require additional radon testing or have any questions regarding radon or any other health- or safety-related concerns, please do not hesitate to contact our office.

Sincerely,

IEA, Inc.



Aly Rockwell
Account Manager
EHS Division

Reviewed by:



Emma Squires-Sperling
Lab Director

ASR/khb 02292024

Enc.

Appendix A

*Quality Control Measurements
and
Comparison and Blanks Test Results*

MDH and ANSI/AARST MA-MFLB 2023 Quality Control Measurements

IEA followed ANSI/AARST MA-MFLB 2023 and MDH recommendations for quality assurance measurements to ensure the accuracy of test results. Quality assurance measurements include side-by-side (comparison or duplicate) measurements.

Duplicates/comparison measurement devices are placed 4-8 inches apart for the same test period. Duplicates/comparison measurement devices are stored, placed and retrieved, in the same manner as the other measurements. Since duplicates/comparison measurements are placed side-by-side, the measured values for radon should be the same. The average of all duplicates/comparison measurements' relative percent difference (RPD) should not exceed 25%. If they do, an investigation to identify the cause may be warranted and could include repeating the measurements. Duplicates/comparison measurement averages are listed in Table 1 below.

Table 1: Comparison Device Measurements and Averages			
Location	Test 1 (pCi/L)	Test 2 (pCi/L)	Average (pCi/L)
Copier Room	2.3	2.2	2.2

Blanks can be used to determine whether the manufacturing, shipping, storage, or processing of the detector has "contaminated" your measurements. Blanks are opened and immediately re-sealed to keep room air from infiltrating the test kit. Blanks are labeled and shipped in the same manner as the exposed test kits so that the laboratory cannot distinguish them. Since blanks are not exposed to radon, their measurement value should be below the lower limit of detection. Field blanks are listed in the laboratory report as FStorage Room A, FStorage Room B, etc. Office blanks are listed in the laboratory report as OStorage Room A, OStorage Room B, etc. Lab-Transit Blanks are listed in Table 2 below.

Table 2: Blanks						
Date	Start Time	End Time	Device ID	Type of Blank	Description	Radon Concentration (pCi/L)
2/12/2024	7:00 AM	8:00 AM	11460935	Office	OSTORAGEA	< 0.3
2/12/2024	7:00 AM	8:00 AM	11460920	Field	FMAIN OFFICE-1	< 0.3
1/6/2024	12:00 pm	12:00 pm	11460934	Lab-Transit	LTBP-1	< 0.3

Spikes are test kits that have been exposed in a chamber to a known concentration of radon. Using spiked measurements can help evaluate the accuracy of a laboratory analysis and/or how accurately test kits supplied by a laboratory measure radon. Spiked test kits are labeled and shipped in the same manner as the exposed test kits so that the laboratory cannot distinguish them. Spiked results completed for our laboratory are included in the following pages. Spiked test kits are listed in Table 3 below.

Table 3: Spiked Detectors					
Date	Start Time	End Time	Device ID	Measured Value (pCi/L)	Reference Value (pCi/L)
2/5/2024	10:00 AM	10:00 AM	11375077	47.4	50.0
2/5/2024	10:00 AM	10:00 AM	11375083	44.4	50.0
2/5/2024	10:00 AM	10:00 AM	11375084	49.5	50.0
2/5/2024	10:00 AM	10:00 AM	11375090	47.1	50.0
2/5/2024	10:00 AM	10:00 AM	11375098	43.5	50.0
2/5/2024	10:00 AM	10:00 AM	11375099	47.3	50.0

February 22, 2024

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11460919	COPIER ROOM	2024-02-12 @ 7:00 am	2024-02-14 @ 8:00 am	2.2 ± 0.3	2024-02-16
11460920	FMAIN OFFICE -1	2024-02-12 @ 7:00 am	2024-02-14 @ 8:00 am	< 0.3	2024-02-16
11460935	OSTORAGE A	2024-02-12 @ 7:00 am	2024-02-14 @ 8:00 am	< 0.3	2024-02-16

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

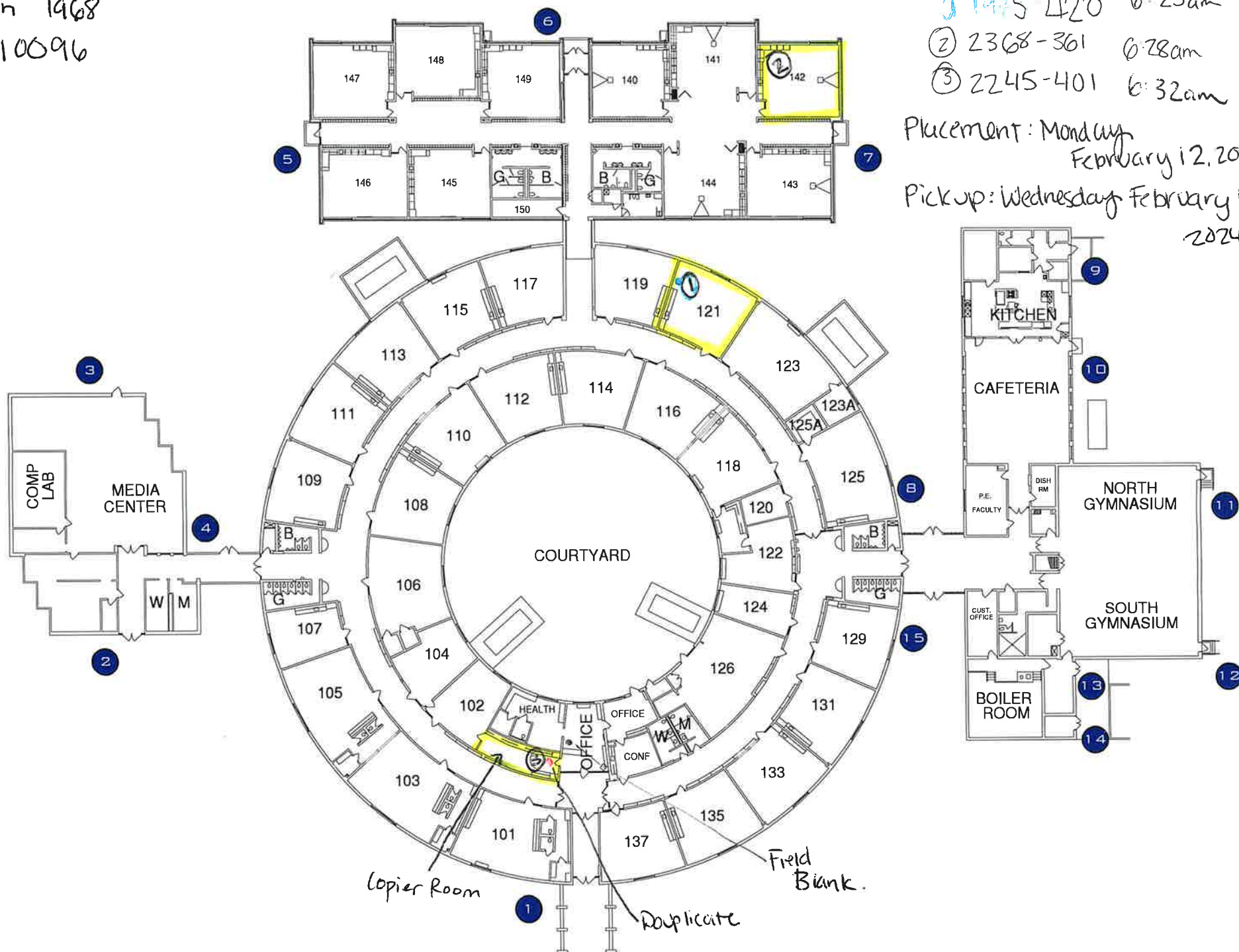
Appendix B

Maps

Built in 1968
202410096

① 1425-420 6:25am
② 2368-361 6:28am
③ 2245-401 6:32am

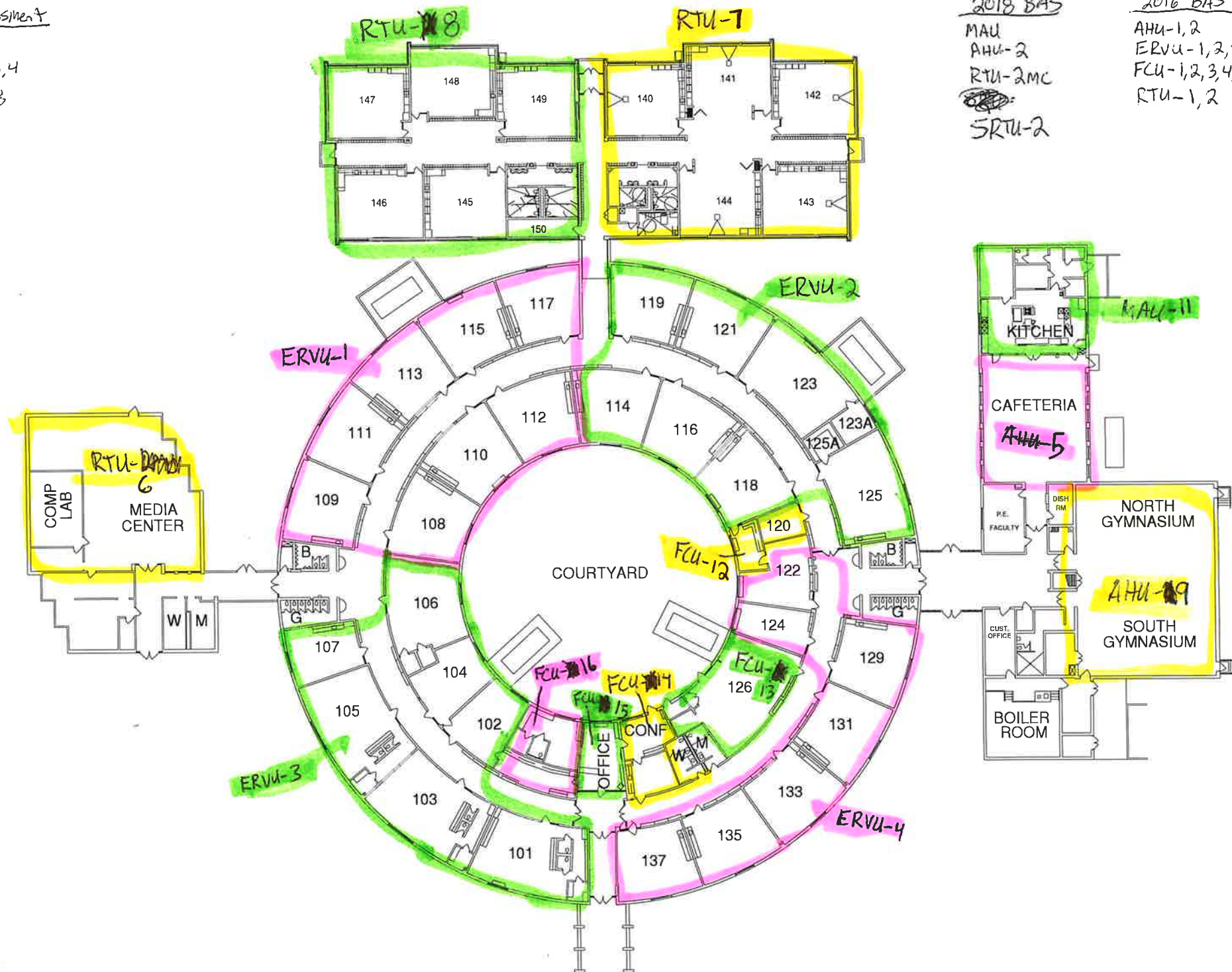
Placement: Monday
February 12, 2024
Pickup: Wednesday February 14,
2024



Vent Assessment
 AHU-1,2
 ERVU-1,2,3,4
 RTU-1,2,8
 MAU-1

2018 BAS
 MAU
 AHU-2
 RTU-2MC
~~RTU-2~~
 SRTU-2

2016 BAS
 AHU-1,2
 ERVU-1,2,3,4
 FCU-1,2,3,4,5
 RTU-1,2



INSTITUTE FOR
 ENVIRONMENTAL ASSESSMENT

9201 West Broadway Brooklyn Park, MN 55445
 Tel: 763.315.7900 Toll Free: 800.233.9513
 Fax: 763.315.7920

RL STEVENSON ELEMENTARY SCHOOL
 FIRST LEVEL FLOOR PLAN OCT. 2018



Appendix C

Certified Radon Reports:

Continuous Radon Monitor Hourly Data

Interpreting Test Results

and

Client Commitments, Advisories, and Authorizations

Signed Non-Interference Agreement



CERTIFIED RADON REPORT

February 14, 2024

Test Number: 2245-401

Property Inspected: 6080 East River Road, Fridley, MN 55432

Licensed Radalink Radon Inspector:
Institute for Environmental Assessment
Jeffrey Athmann
9201 West Broadway
#600
Brooklyn Park, MN 55445
Phone: 763-315-7900

Test performed for:
Fridley Public Schools

Fax:		Placed By:	Anastasia Shimkus (MN RMEA-00482)	Temp.	Pressure	R.H.
Calibrated:	10/12/2023 - 10/11/2024	Retrieved By:	Faith Breeden (MN RMEA-00538)	Min:	75.0 29.8	23
Test Started:	02/12/2024 6:33 AM	Test Site:	Copier Room	Avg:	75.4 29.9	25
Test Ended:	02/14/2024 6:28 AM	Test Duration:	47 hours	Max:	77.0 30.0	27

AVERAGE RADON CONCENTRATION: 2.3 pCi/l

Test has met minimum EPA sampling duration.

Uncertainty: $\pm 1.66\%$

	02/12/2024		02/13/2024		02/14/2024	
Time	pCi/l	Flags	pCi/l	Flags	pCi/l	Flags
00:33 am			3.1		4.1	
01:33			3.3		3.0	
02:33			2.2		3.6	
03:33			4.1		4.9	
04:33			3.6		4.1	
05:33			4.6		3.8	
06:33			3.4			
07:33	1.6		3.9			
08:33	1.3		1.2			
09:33	1.5		1.3			
10:33	1.6		1.6			
11:33	1.2		1.0			
12:33 pm	2.2		1.4			
01:33	1.2		0.9			
02:33	2.1		1.2			
03:33	0.8		1.6			
04:33	0.8		0.4			
05:33	0.9		1.7			
06:33	1.5		1.3			
07:33	2.1		1.7			
08:33	1.4		1.8			
09:33	2.5		3.0			
10:33	2.6		2.5			
11:33	3.1		3.1			

Flags: P= AC Power Disruption; T=Tilt
Eq. = Equilization Period

While every effort was made to maintain optimum quality control and EPA Protocol during the testing period, neither Radalink, Inc. or its licensed agents provide any warranty, expressed or implied, for the consequences of erroneous test results. There can be some uncertainty with any measurement due to statistical variations, extreme weather changes, operation of the building, and other factors, Radalink, Inc. and its licensed operators shall not be liable under any charge or claim for losses, claims, charges, fees, demands, expenses, or damages resulting from a radon test. This report is subject to the terms on the last page of the document.

ENVIRONMENTAL DATA

MONITOR-TEST NUMBER: 2245-401

Property Inspected: 6080 East River Road
Fridley, MN 55432

	02/12/2024			02/13/2024			02/14/2024		
<u>Time</u>	<u>Temp</u>	<u>InHg</u>	<u>RH</u>	<u>Temp</u>	<u>InHg</u>	<u>RH</u>	<u>Temp</u>	<u>InHg</u>	<u>RH</u>
00:33 am				75.0	29.9	27	75.0	30.0	23
01:33				75.0	29.9	27	75.0	30.0	23
02:33				75.0	29.9	27	75.0	30.0	23
03:33				75.0	29.9	27	75.0	30.0	23
04:33				75.0	29.9	27	75.0	30.0	23
05:33				75.0	29.9	27	75.0	30.0	23
06:33				75.0	29.9	23			
07:33	75.0	29.8	30	75.0	30.0	23			
08:33	77.0	29.8	27	75.0	30.0	23			
09:33	75.0	29.8	27	77.0	30.0	23			
10:33	75.0	29.8	27	77.0	30.0	23			
11:33	75.0	29.8	27	77.0	30.0	23			
12:33 pm	75.0	29.8	27	77.0	30.0	23			
01:33	75.0	29.8	27	75.0	30.0	23			
02:33	75.0	29.8	27	75.0	30.0	23			
03:33	75.0	29.8	27	75.0	30.0	23			
04:33	75.0	29.8	27	75.0	29.9	23			
05:33	75.0	29.8	27	77.0	30.0	23			
06:33	75.0	29.9	27	77.0	30.0	23			
07:33	75.0	29.9	27	77.0	30.0	23			
08:33	75.0	29.9	27	77.0	30.0	23			
09:33	75.0	29.9	27	75.0	30.0	23			
10:33	75.0	29.9	27	75.0	30.0	23			
11:33	75.0	29.9	27	75.0	30.0	23			

AVERAGE RADON CONCENTRATION:

2.3 pCi/l



Reviewed and certified by

Terry Howell

Terry Howell, Quality Assurance Mgr.
Radalink, Inc. NRPP 135791T

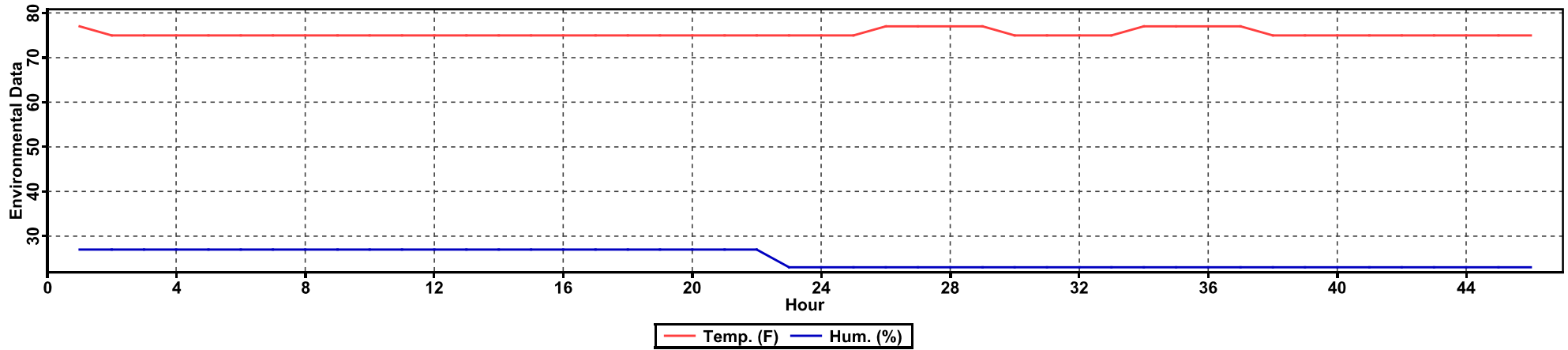
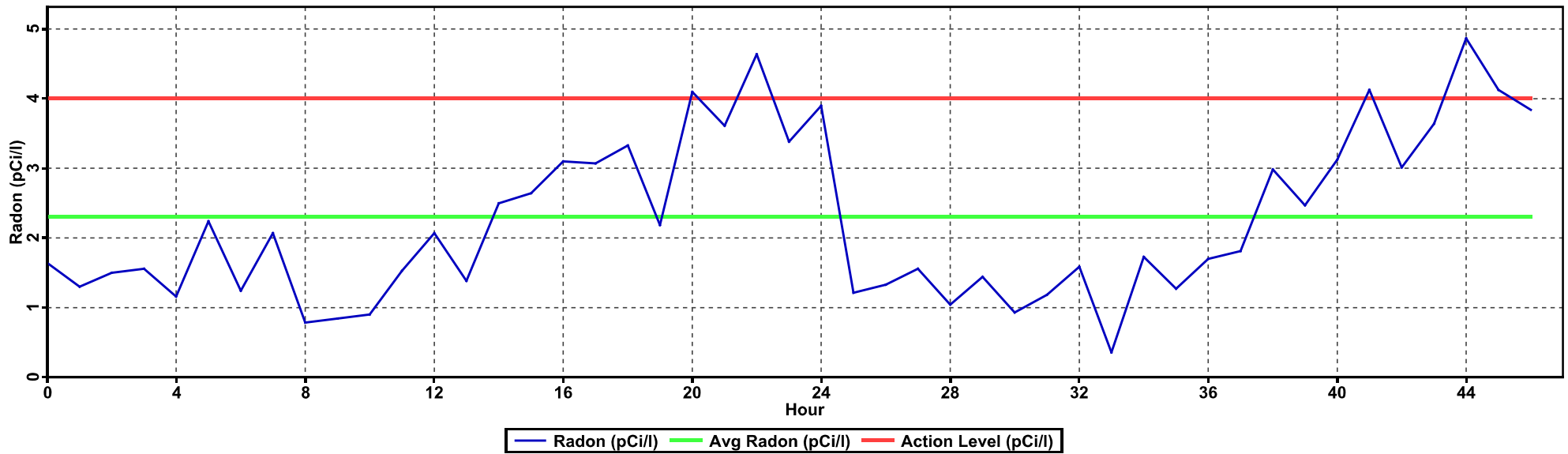
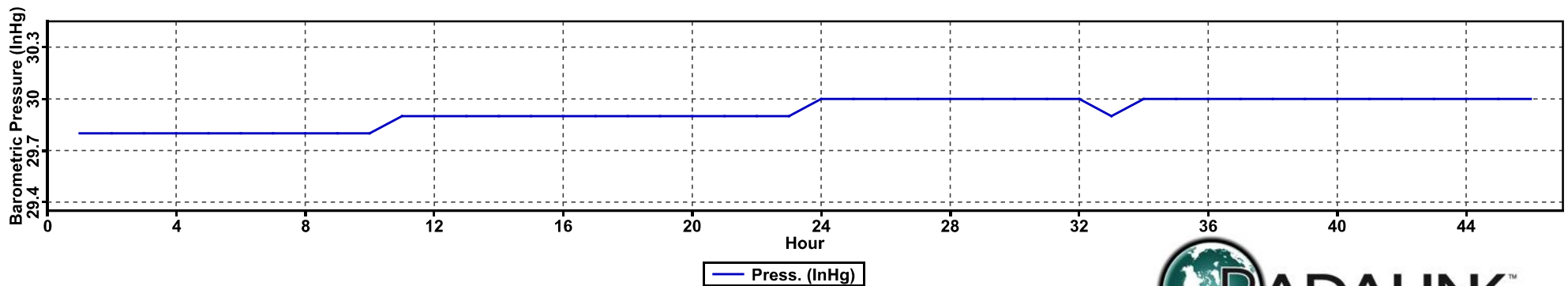
	Minimum	Average	Maximum	Variance
Temperature:	75.0	75.4	77.0	0.63
Barometric Pressure:	29.8	29.9	30.0	0.01
Relative Humidity:	23	25	27	3.99

NOTE: The first hour's environmental data is excluded from the table above.

Radalink, Inc. 5599 Peachtree Road Atlanta, GA 30341 Phone: (800)295-4655

GRAPHICAL DATA VIEW

MONITOR-TEST NUMBER: 2245-401



Property Inspected: 6080 East River Road, Fridley, MN 55432

AVERAGE RADON CONCENTRATION: 2.3 pCi/l



RL Stevenson Elementary School Continuous Radon Monitor (CRM) Results		
Location:		Copier Room
CRM Serial:		2245-401
Date	Time	Result (pCi/L)
2/12/2024	7:33 AM	1.6
2/12/2024	8:33 AM	1.3
2/12/2024	9:33 AM	1.5
2/12/2024	10:33 AM	1.6
2/12/2024	11:33 AM	1.2
2/12/2024	12:33 PM	2.2
2/12/2024	1:33 PM	1.2
2/12/2024	2:33 PM	2.1
2/12/2024	3:33 PM	0.8
2/12/2024	4:33 PM	0.8
2/12/2024	5:33 PM	0.9
2/12/2024	6:33 PM	1.5
2/12/2024	7:33 PM	2.1
2/12/2024	8:33 PM	1.4
2/12/2024	9:33 PM	2.5
2/12/2024	10:33 PM	2.6
2/12/2024	11:33 PM	3.1
2/13/2024	12:33 AM	3.1
2/13/2024	1:33 AM	3.3
2/13/2024	2:33 AM	2.2
2/13/2024	3:33 AM	4.1
2/13/2024	4:33 AM	3.6
2/13/2024	5:33 AM	4.6
2/13/2024	6:33 AM	3.4
2/13/2024	7:33 AM	3.9
2/13/2024	8:33 AM	1.2
2/13/2024	9:33 AM	1.3
2/13/2024	10:33 AM	1.6
2/13/2024	11:33 AM	1.0
2/13/2024	12:33 PM	1.4
2/13/2024	1:33 PM	0.9
2/13/2024	2:33 PM	1.2
2/13/2024	3:33 PM	1.6
2/13/2024	4:33 PM	0.4
2/13/2024	5:33 PM	1.7
2/13/2024	6:33 PM	1.3
2/13/2024	7:33 PM	1.7
2/13/2024	8:33 PM	1.8
2/13/2024	9:33 PM	3.0
2/13/2024	10:33 PM	2.5
2/13/2024	11:33 PM	3.1
2/14/2024	12:33 AM	4.1
2/14/2024	1:33 AM	3.0
2/14/2024	2:33 AM	3.6
2/14/2024	3:33 AM	4.9
2/14/2024	4:33 AM	4.1
2/14/2024	5:33 AM	3.8
Total Average:		2.3
Average Day 1:	Occupied:	1.4
	Unoccupied:	2.9
Average Day 2:	Occupied:	1.5
	Unoccupied:	3.0
Total Occupied Average:		1.4
Total Unoccupied Average:		2.8



CERTIFIED RADON REPORT

February 14, 2024

Test Number: 1975-420

Property Inspected: 6080 East River Road, Fridley, MN 55432

Licensed Radalink Radon Inspector:
Institute for Environmental Assessment
Jeffrey Athmann
9201 West Broadway
#600
Brooklyn Park, MN 55445
Phone: 763-315-7900

Test performed for:
Fridley Public Schools

Fax:		Placed By:	Anastasia Shimkus (MN RMEA-00482)	Temp.	Pressure	R.H.
Calibrated:	10/12/2023 - 10/11/2024	Retrieved By:	Faith Breeden (MN RMEA-00538)	Min:	68.0 29.8	23
Test Started:	02/12/2024 6:21 AM	Test Site:	Room 121	Avg:	69.7 29.9	26
Test Ended:	02/14/2024 6:40 AM	Test Duration:	48 hours	Max:	73.0 30.0	27

AVERAGE RADON CONCENTRATION:

1.7 pCi/l

Test has met minimum EPA sampling duration.

Uncertainty: $\pm 2.03\%$

	02/12/2024		02/13/2024		02/14/2024	
Time	pCi/l	Flags	pCi/l	Flags	pCi/l	Flags
00:21 am			1.6		2.4	
01:21			2.4		2.1	
02:21			1.1		2.7	
03:21			2.4		2.6	
04:21			2.0		4.7	
05:21			2.4		3.7	
06:21			3.3		3.9	
07:21	1.7		2.4			
08:21	2.7		1.9			
09:21	2.4		1.9			
10:21	1.6		1.7			
11:21	1.2		0.8			
12:21 pm	1.1		0.6			
01:21	0.9		0.7			
02:21	0.9		1.1			
03:21	1.5		0.6			
04:21	0.8		1.0			
05:21	0.3		1.1			
06:21	1.0		1.1			
07:21	1.2		0.9			
08:21	1.2		1.5			
09:21	1.3		1.2			
10:21	1.1		1.6			
11:21	1.6		2.1			

Flags: P= AC Power Disruption; T=Tilt
Eq. = Equilization Period

While every effort was made to maintain optimum quality control and EPA Protocol during the testing period, neither Radalink, Inc. or its licensed agents provide any warranty, expressed or implied, for the consequences of erroneous test results. There can be some uncertainty with any measurement due to statistical variations, extreme weather changes, operation of the building, and other factors, Radalink, Inc. and its licensed operators shall not be liable under any charge or claim for losses, claims, charges, fees, demands, expenses, or damages resulting from a radon test. This report is subject to the terms on the last page of the document.

ENVIRONMENTAL DATA

MONITOR-TEST NUMBER: 1975-420

Property Inspected: 6080 East River Road
Fridley, MN 55432

	02/12/2024			02/13/2024			02/14/2024		
Time	Temp	InHg	RH	Temp	InHg	RH	Temp	InHg	RH
00:21 am				68.0	29.9	27	68.0	30.0	23
01:21				68.0	29.9	27	68.0	30.0	27
02:21				68.0	29.9	27	68.0	30.0	27
03:21				68.0	29.9	26	68.0	30.0	27
04:21				68.0	29.9	26	68.0	30.0	27
05:21				68.0	29.9	26	68.0	30.0	27
06:21				69.0	29.9	26	69.0	30.0	27
07:21	73.0	29.9	27	69.0	30.0	27			
08:21	73.0	29.8	23	71.0	30.0	27			
09:21	73.0	29.9	23	71.0	30.0	27			
10:21	71.0	29.9	27	71.0	30.0	27			
11:21	71.0	29.9	27	71.0	30.0	27			
12:21 pm	71.0	29.8	27	71.0	30.0	27			
01:21	71.0	29.8	26	71.0	30.0	23			
02:21	71.0	29.8	27	71.0	30.0	23			
03:21	71.0	29.8	26	71.0	30.0	27			
04:21	71.0	29.8	27	71.0	30.0	27			
05:21	71.0	29.9	27	71.0	30.0	23			
06:21	69.0	29.9	27	69.0	30.0	23			
07:21	69.0	29.9	27	69.0	30.0	23			
08:21	69.0	29.9	27	69.0	30.0	23			
09:21	69.0	29.9	27	69.0	30.0	23			
10:21	69.0	29.9	27	69.0	30.0	23			
11:21	69.0	29.9	27	69.0	30.0	23			

AVERAGE RADON CONCENTRATION:

1.7 pCi/l



Reviewed and certified by

Terry Howell

Terry Howell, Quality Assurance Mgr.
Radalink, Inc. NRPP 135791T

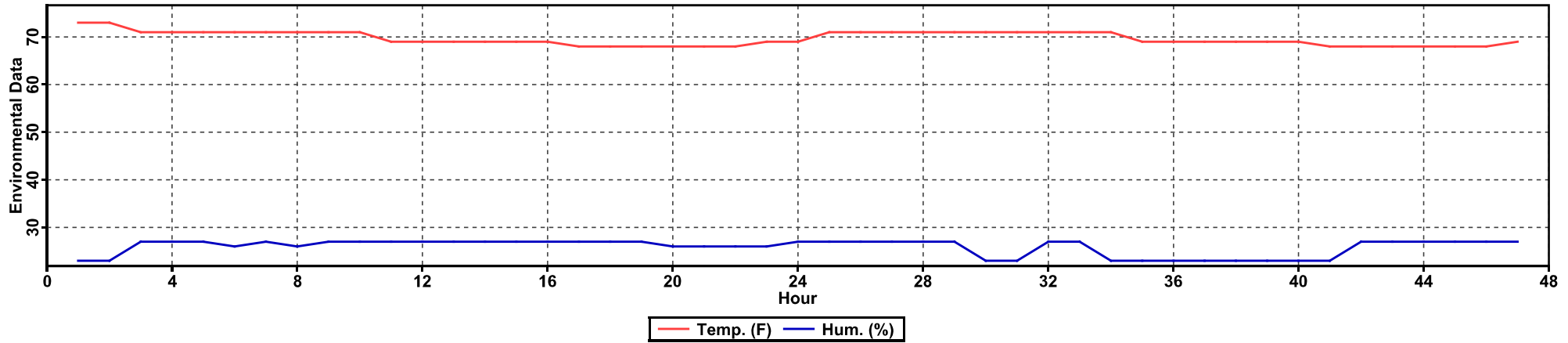
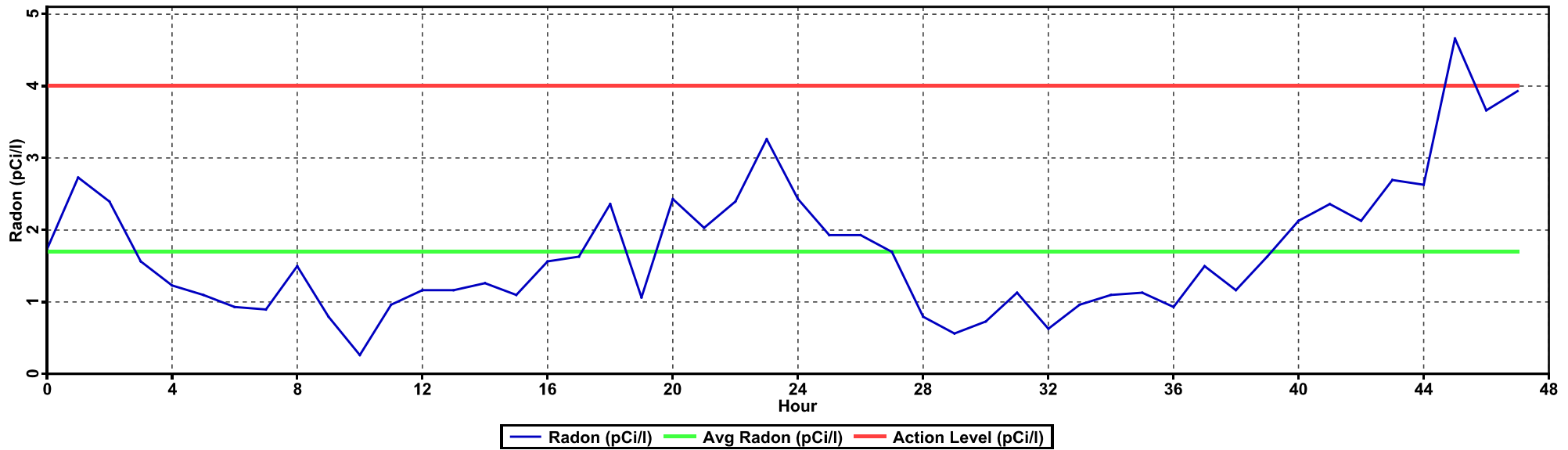
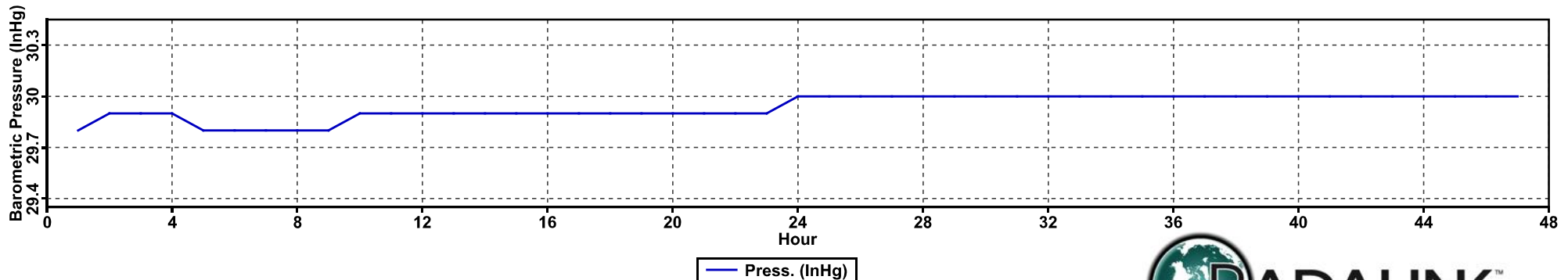
	Minimum	Average	Maximum	Variance
Temperature:	68.0	69.7	73.0	2.0
Barometric Pressure:	29.8	29.9	30.0	0.01
Relative Humidity:	23	26	27	2.9

NOTE: The first hour's environmental data is excluded from the table above.

Radalink, Inc. 5599 Peachtree Road Atlanta, GA 30341 Phone: (800)295-4655

GRAPHICAL DATA VIEW

MONITOR-TEST NUMBER: 1975-420



Property Inspected: 6080 East River Road, Fridley, MN 55432

AVERAGE RADON CONCENTRATION: 1.7 pCi/l



RL Stevenson Elementary School Continuous Radon Monitor (CRM) Results		
Location:		Room 121
CRM Serial:		1975-420
Date	Time	Result (pCi/L)
2/12/2024	7:21 AM	1.7
2/12/2024	8:21 AM	2.7
2/12/2024	9:21 AM	2.4
2/12/2024	10:21 AM	1.6
2/12/2024	11:21 AM	1.2
2/12/2024	12:21 PM	1.1
2/12/2024	1:21 PM	0.9
2/12/2024	2:21 PM	0.9
2/12/2024	3:21 PM	1.5
2/12/2024	4:21 PM	0.8
2/12/2024	5:21 PM	0.3
2/12/2024	6:21 PM	1.0
2/12/2024	7:21 PM	1.2
2/12/2024	8:21 PM	1.2
2/12/2024	9:21 PM	1.3
2/12/2024	10:21 PM	1.1
2/12/2024	11:21 PM	1.6
2/13/2024	12:21 AM	1.6
2/13/2024	1:21 AM	2.4
2/13/2024	2:21 AM	1.1
2/13/2024	3:21 AM	2.4
2/13/2024	4:21 AM	2.0
2/13/2024	5:21 AM	2.4
2/13/2024	6:21 AM	3.3
2/13/2024	7:21 AM	2.4
2/13/2024	8:21 AM	1.9
2/13/2024	9:21 AM	1.9
2/13/2024	10:21 AM	1.7
2/13/2024	11:21 AM	0.8
2/13/2024	12:21 PM	0.6
2/13/2024	1:21 PM	0.7
2/13/2024	2:21 PM	1.1
2/13/2024	3:21 PM	0.6
2/13/2024	4:21 PM	1.0
2/13/2024	5:21 PM	1.1
2/13/2024	6:21 PM	1.1
2/13/2024	7:21 PM	0.9
2/13/2024	8:21 PM	1.5
2/13/2024	9:21 PM	1.2
2/13/2024	10:21 PM	1.6
2/13/2024	11:21 PM	2.1
2/14/2024	12:21 AM	2.4
2/14/2024	1:21 AM	2.1
2/14/2024	2:21 AM	2.7
2/14/2024	3:21 AM	2.6
2/14/2024	4:21 AM	4.7
2/14/2024	5:21 AM	3.7
2/14/2024	6:21 AM	3.9
Total Average:		1.7
Average Day 1:	Occupied:	1.4
	Unoccupied:	1.7
Average Day 2:	Occupied:	1.3
	Unoccupied:	2.3
Total Occupied Average:		1.3
Total Unoccupied Average:		2.0



CERTIFIED RADON REPORT

February 14, 2024

Test Number: 2368-361

Property Inspected: 6080 East River Road, Fridley, MN 55432

Licensed Radalink Radon Inspector:
Institute for Environmental Assessment
Jeffrey Athmann
9201 West Broadway
#600
Brooklyn Park, MN 55445
Phone: 763-315-7900

Test performed for:
Fridley Public Schools

Fax:		Placed By:	Anastasia Shimkus (MN RMEA-00482)	Temp.	Pressure	R.H.
Calibrated:	10/12/2023 - 10/11/2024	Retrieved By:	Faith Breeden (MN RMEA-00538)	Min:	68.0 29.8	19
Test Started:	02/12/2024 6:28 AM	Test Site:	Room 142	Avg:	69.7 29.9	22
Test Ended:	02/14/2024 6:49 AM	Test Duration:	48 hours	Max:	71.0 30.0	27

AVERAGE RADON CONCENTRATION:

1.3 pCi/l

Test has met minimum EPA sampling duration.

Uncertainty: $\pm 2.10\%$

	02/12/2024		02/13/2024		02/14/2024	
Time	pCi/l	Flags	pCi/l	Flags	pCi/l	Flags
00:28 am			1.2		1.0	
01:28			1.8		2.3	
02:28			1.9		1.9	
03:28			2.6		3.0	
04:28			3.0		2.5	
05:28			2.4		3.6	
06:28			3.4		2.6	
07:28	0.8		1.9			
08:28	1.3		2.1			
09:28	1.6		1.1			
10:28	1.0		1.1			
11:28	1.1		0.3			
12:28 pm	0.1		0.8			
01:28	0.6		0.6			
02:28	0.2		0.2			
03:28	0.1		0.9			
04:28	0.9		0.2			
05:28	0.7		0.2			
06:28	0.5		1.1			
07:28	1.1		0.4			
08:28	0.9		1.4			
09:28	1.4		1.8			
10:28	0.9		1.2			
11:28	0.9		1.2			

Flags: P= AC Power Disruption; T=Tilt
Eq. = Equilization Period

While every effort was made to maintain optimum quality control and EPA Protocol during the testing period, neither Radalink, Inc. or its licensed agents provide any warranty, expressed or implied, for the consequences of erroneous test results. There can be some uncertainty with any measurement due to statistical variations, extreme weather changes, operation of the building, and other factors, Radalink, Inc. and its licensed operators shall not be liable under any charge or claim for losses, claims, charges, fees, demands, expenses, or damages resulting from a radon test. This report is subject to the terms on the last page of the document.

ENVIRONMENTAL DATA

MONITOR-TEST NUMBER: 2368-361

Property Inspected: 6080 East River Road
Fridley, MN 55432

	02/12/2024			02/13/2024			02/14/2024		
Time	Temp	InHg	RH	Temp	InHg	RH	Temp	InHg	RH
00:28 am				69.0	29.9	23	69.0	30.0	19
01:28				68.0	29.9	23	69.0	30.0	19
02:28				68.0	29.9	23	68.0	30.0	19
03:28				68.0	29.9	23	68.0	30.0	19
04:28				68.0	29.9	23	68.0	30.0	23
05:28				68.0	30.0	23	68.0	30.0	23
06:28				68.0	30.0	23	68.0	30.0	23
07:28	69.0	29.8	26	69.0	30.0	23			
08:28	71.0	29.8	27	69.0	30.0	23			
09:28	71.0	29.9	27	71.0	30.0	23			
10:28	71.0	29.8	27	71.0	30.0	23			
11:28	71.0	29.9	23	71.0	30.0	23			
12:28 pm	71.0	29.8	23	71.0	30.0	23			
01:28	71.0	29.8	23	71.0	30.0	19			
02:28	71.0	29.8	23	71.0	30.0	23			
03:28	71.0	29.8	23	71.0	30.0	23			
04:28	71.0	29.8	23	71.0	30.0	19			
05:28	71.0	29.9	23	71.0	30.0	19			
06:28	71.0	29.9	23	71.0	30.0	19			
07:28	69.0	29.9	23	69.0	30.0	19			
08:28	69.0	29.9	23	69.0	30.0	19			
09:28	69.0	29.9	23	69.0	30.0	19			
10:28	69.0	29.9	23	69.0	30.0	19			
11:28	69.0	29.9	23	69.0	30.0	19			

AVERAGE RADON CONCENTRATION:

1.3 pCi/l



Reviewed and certified by

Terry Howell

Terry Howell, Quality Assurance Mgr.
Radalink, Inc. NRPP 135791T

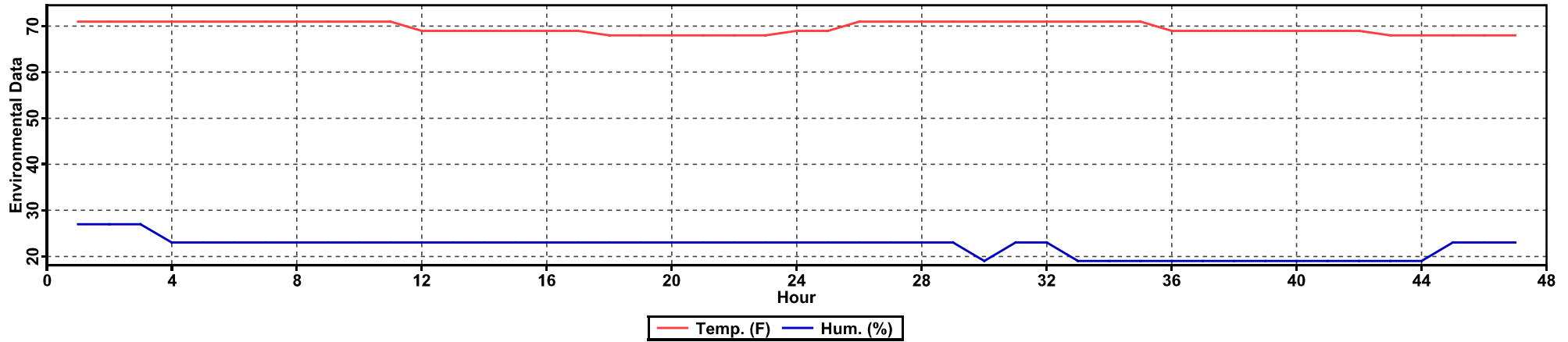
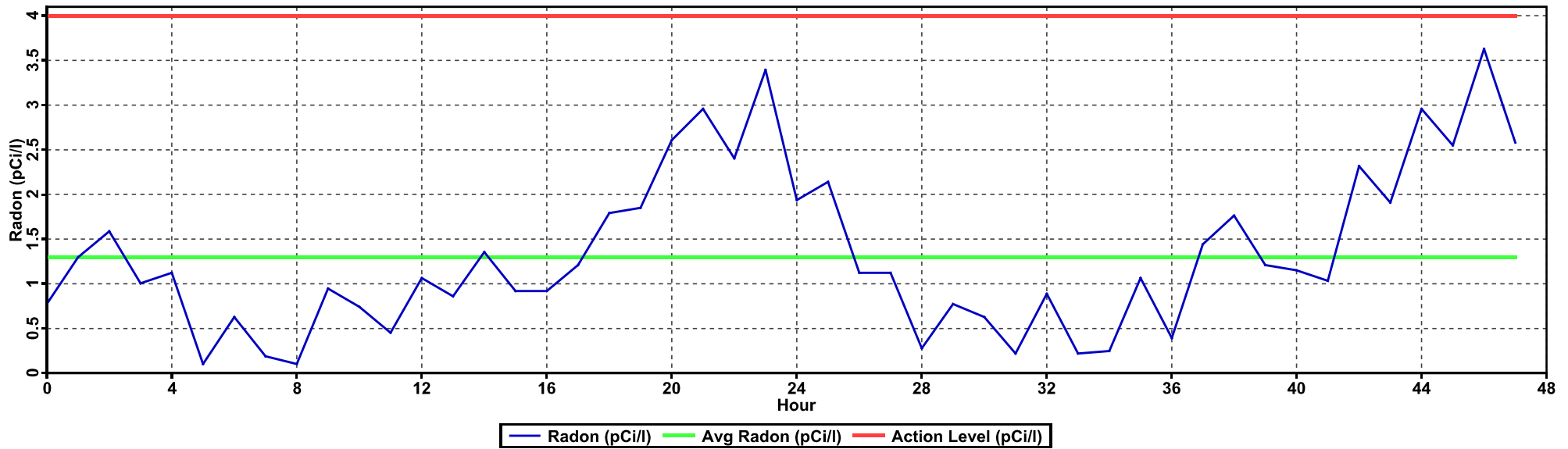
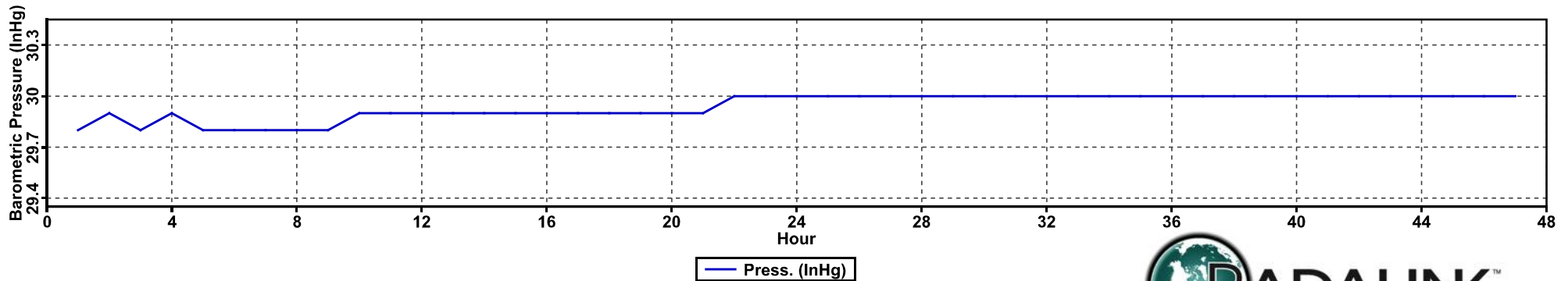
	Minimum	Average	Maximum	Variance
Temperature:	68.0	69.7	71.0	1.59
Barometric Pressure:	29.8	29.9	30.0	0.01
Relative Humidity:	19	22	27	4.72

NOTE: The first hour's environmental data is excluded from the table above.

Radalink, Inc. 5599 Peachtree Road Atlanta, GA 30341 Phone: (800)295-4655

GRAPHICAL DATA VIEW

MONITOR-TEST NUMBER: 2368-361



Property Inspected: 6080 East River Road, Fridley, MN 55432

AVERAGE RADON CONCENTRATION: 1.3 pCi/l



RL Stevenson Elementary School Continuous Radon Monitor (CRM) Results		
Location:		Room 142
CRM Serial:		2368-361
Date	Time	Result (pCi/L)
2/12/2024	7:28 AM	0.8
2/12/2024	8:28 AM	1.3
2/12/2024	9:28 AM	1.6
2/12/2024	10:28 AM	1.0
2/12/2024	11:28 AM	1.1
2/12/2024	12:28 PM	0.1
2/12/2024	1:28 PM	0.6
2/12/2024	2:28 PM	0.2
2/12/2024	3:28 PM	0.1
2/12/2024	4:28 PM	0.9
2/12/2024	5:28 PM	0.7
2/12/2024	6:28 PM	0.5
2/12/2024	7:28 PM	1.1
2/12/2024	8:28 PM	0.9
2/12/2024	9:28 PM	1.4
2/12/2024	10:28 PM	0.9
2/12/2024	11:28 PM	0.9
2/13/2024	12:28 AM	1.2
2/13/2024	1:28 AM	1.8
2/13/2024	2:28 AM	1.9
2/13/2024	3:28 AM	2.6
2/13/2024	4:28 AM	3.0
2/13/2024	5:28 AM	2.4
2/13/2024	6:28 AM	3.4
2/13/2024	7:28 AM	1.9
2/13/2024	8:28 AM	2.1
2/13/2024	9:28 AM	1.1
2/13/2024	10:28 AM	1.1
2/13/2024	11:28 AM	0.3
2/13/2024	12:28 PM	0.8
2/13/2024	1:28 PM	0.6
2/13/2024	2:28 PM	0.2
2/13/2024	3:28 PM	0.9
2/13/2024	4:28 PM	0.2
2/13/2024	5:28 PM	0.2
2/13/2024	6:28 PM	1.1
2/13/2024	7:28 PM	0.4
2/13/2024	8:28 PM	1.4
2/13/2024	9:28 PM	1.8
2/13/2024	10:28 PM	1.2
2/13/2024	11:28 PM	1.2
2/14/2024	12:28 AM	1.0
2/14/2024	1:28 AM	2.3
2/14/2024	2:28 AM	1.9
2/14/2024	3:28 AM	3.0
2/14/2024	4:28 AM	2.5
2/14/2024	5:28 AM	3.6
2/14/2024	6:28 AM	2.6
Total Average:		1.3
Average Day 1:	Occupied:	0.8
	Unoccupied:	1.7
Average Day 2:	Occupied:	0.9
	Unoccupied:	1.8
Total Occupied Average:		0.8
Total Unoccupied Average:		1.8

HOW TO INTERPRET YOUR TEST RESULTS

THIS REPORT RELATES ONLY TO THE LOCATION(S) TESTED DURING THE MEASUREMENT PERIOD

These results should be interpreted in accordance with the EPA's guidance as published in EPA Publication No. 402-K-008 "Home Buyer's and Seller's Guide to Radon" and EPA Publication No. 402-K92-001, "Citizen's Guide to Radon".

Because radon is the second leading cause of lung cancer, the World Health Organization (WHO) and the U.S. Surgeon General recommend testing all homes for radon and mitigating those with an average concentration above the U.S. EPA action level of 4 picocuries per Liter (4 pCi/L) or higher. Even if your test result is below 4 pCi/L, mitigation may provide additional reduction of the risk of lung cancer. Find more information at Radalink.com/results.

The Radalink Radon TeleMonitor (NRPP Device # 00472, NRSB Device # 31814) or **The Radalink AirCat® Monitor** (NRPP Device # 00477, NRSB Device # 31815) used to perform this test is EPA, NRSB and/or NRPP approved and meets the Single Test Option requirements (EPA 402-R-93-003, Section 3.2.3) for conducting radon measurements in the context of a real estate transaction and may be used for determining the necessity for radon mitigation.

Radon reduction systems work! Professionally installed radon mitigation systems can reduce the radon levels in your home by up to 99%. Thousands of people have reduced radon levels in their homes. Maintaining a radon reduction system takes little effort to keep the system working properly and the radon levels low. EPA recommends that you have a qualified contractor (NRPP certified or state licensed) fix your home if radon levels are confirmed to be 4 pCi/L or higher. Find a licensed mitigator at Radalink.com/mitigators. For more information on how to reduce your radon health risk, contact your state radon office:

Alabama	800-582-1866	Illinois	217-782-1325	Montana	800-546-0483	Rhode Island	401-222-7796
Alaska	907-269-8000	Indiana	800-272-9723	Nebraska	402-471-1005	South Carolina	800-768-0362
Arizona	602-255-4845	Iowa	800-383-5992	Nevada	888-723-6610	South Dakota	800-438-3367
Arkansas	501-661-2301	Kansas	800-693-5343	New Hampshire	603-271-4052	Tennessee	800-232-1139
California	800-745-7236	Kentucky	502-564-4856	New Jersey	800-648-0394	Texas	800-293-0753
Colorado	800-846-3986	Louisiana	225-765-0160	New Mexico	505-476-8608	Utah	800-458-0145
Connecticut	860-509-7367	Maine	207-287-5743	New York	800-458-1158	Vermont	800-439-8550
Delaware	302-744-4546	Maryland	866-703-3266	North Carolina	828-712-0972	Virginia	804-864-8150
Washington DC	202-535-2999	Massachusetts	800-723-6695	North Dakota	701-328-5188	Washington	360-236-3253
Florida	800-543-8279	Michigan	517-284-1837	Ohio	800-523-4439	West Virginia	800-922-1255
Georgia	706-542-9165	Minnesota	800-798-9050	Oklahoma	405-702-5162	Wisconsin	888-569-7236
Hawaii	808-586-4700	Mississippi	800-626-7739	Oregon	971-673-0490	Wyoming	307-777-6015
Idaho	800-445-8647	Missouri	573-751-6160	Pennsylvania	800-237-2366		

USEPA Radon Program website: www.epa.gov/radon and radon hotline 800-767-7236

SURGEON GENERAL HEALTH ADVISORY: "Indoor radon is the second-leading cause of lung cancer in the U.S. and breathing it over prolonged periods can present a significant health risk to families all over the country. More than 20,000 Americans die of radon-related lung cancer every year. It's important to know that this threat is completely preventable. Radon can be detected with a simple test and fixed through well-established venting techniques."

CONSUMER FEDERATION OF AMERICA: "Consumers need to know about the health of a house they are considering purchasing, including whether there is a radon problem, and if so, how to fix it." *The EPA Home Buyer's and Sellers Guide to Radon* provides practical consumer information that every homebuyer needs to know.

FLORIDA NOTICE TO CLIENTS: An organization or individual certified by the Florida Dept. of Health to perform radon or radon progeny measurements or radon mitigation services provides this Notice to you. Any questions, comments, or complaints regarding the persons performing these measurement or mitigation services may be directed to the Florida Dept. of Health, Bureau of Facility Programs, Radon Indoor Air Quality, 4052 Bald Cypress Way, Bin #A08, Tallahassee, Florida 32399-1710.

Florida Dept. of Health contact: 800-543-8279

MAINE NOTICE TO CLIENTS: As per 22 MRSA, Sec. 771, results of this test will be reported to the Maine Dept. of Health and Human Services. Any questions, comments, or complaints concerning individuals or firms providing radon related services in Maine should be directed to: Radiation Control Program 11 State House Station Augusta, ME 04333-0010

Maine Dept. of Health contact: 207-287-5743

PENNSYLVANIA NOTICE TO CLIENTS: The Radon Certification Act requires that anyone who provides radon-related service or product to the general public must be certified by the Pennsylvania Department of Environmental Protection. You are entitled to evidence of certification from any person who provides such services or products. You are also entitled to a price list for services or products offered. All radon measurement data will be sent to the Department as required in the Act and will be kept confidential. If you have any questions, comments or complaints concerning persons who provide radon-related services, please contact the Department at the Bureau of Radiation Protection, Dept. Of Environmental Protection, P.O. Box 8469, Harrisburg, PA 17105-8469.

Department at the Bureau of Radiation Protection: 717-783-3594

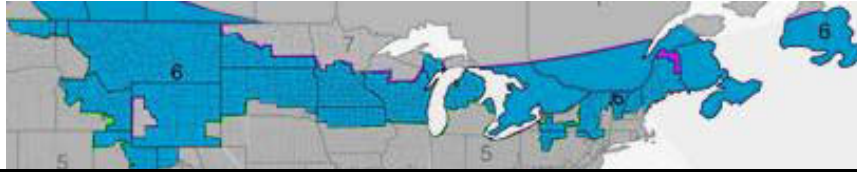
RHODE ISLAND NOTICE TO CLIENTS: This notice is provided to you by an organization or individual licenses and/or certified by the Rhode Island Dept. of Health to perform radon measurements. Any questions, comments, or complaints regarding the person performing these measurements may be directed to the RI Dept. of Health, Radon Control Program, 3 Capitol Hill Room 206, Providence RI 02908-5097

Rhode Island Dept. of Health contact: 401-222-7796

Appendix D

Average Building Operating Conditions Comparison

Climate Zone 6 (includes Southern MN)



		Averages			During the Test
		24 Hour	Daytime	Daytime 9-Month	Prevailing During the Test
Operating Condition	Outdoor Temperature and Weather Conditions	45 °F	50 °F	N/A	Average: 33.53 °F Minimum: 28 °F Maximum: 42 °F
	Heating Conditions	75%	66%	88%	100%
	Cooling Conditions	-	16%	11%	0%
	Mixed Conditions	25%	16%	-	0%
Normal Operating Condition		<ul style="list-style-type: none"> Heating conditions No variance in outdoor air ventilation 			<ul style="list-style-type: none"> Heating conditions No variance in outdoor air ventilation Snow or ice present outdoors
Condition less likely to inhibit characterization of a radon hazard		<ul style="list-style-type: none"> Heating and air distribution systems active 			<ul style="list-style-type: none"> Heating and air distribution systems active

Appendix E

MDH Reporting Form

School Radon Testing Reporting Form

According to Minnesota Statute 123B.571 subd. 3, a school district that has tested its school buildings for the presence of radon shall report the results of its tests to the Department of Health. Please use this form to submit information about the most recent round or cycle of testing conducted for each building.

Instructions

1. Complete one form for each building tested. In this case, a building is defined as an occupied facility with a unique address. This includes administrative buildings.
2. Include this form, raw data (e.g. laboratory report) and a building map.
3. Submit this form when all work is completed for a round of testing. This includes reporting to the school board, and follow-up testing and post-mitigation testing, if applicable.
4. Email information to health.indoorair@state.mn.us.

Contact Information

Name:	
Mailing Address:	
Phone:	Email:

Initial Radon Testing Information

School Building Name:	
School District & District Number:	
Building Address:	
Test Kit Manufacturer:	Device Name:
Date of Kit Retrieval (DD/MM/YY):	Length of Test (days):
How many rooms were tested?	
Does the test period include weekends? ☐ Yes ☐ No	
Does the test period include school breaks or holidays? ☐ Yes ☐ No	

SCHOOL RADON TESTING REPORTING FORM

Were all frequently-occupied ground contact rooms tested? ¹ ☐ Yes ☐ No If no, did you attempt to test all frequently occupied ground contact rooms, meaning test kits were placed in all these rooms? ☐ Yes ☐ No
How many rooms had results ≥ 4 pCi/L?:
Were the results reported at a school board meeting? ☐ Yes ☐ No

Follow-up Testing, Mitigation, & Post-Mitigation Testing

If one or more rooms tested ≥ 4 pCi/L, please answer the questions below:

How many rooms had follow-up testing?:		
Number of rooms with follow-up results	≥ 4 pCi/L:	< 4 pCi/L:
Of the rooms that had test results ≥ 4 pCi/L, how many rooms were:		
mitigated by HVAC balancing or operational changes? :		
mitigated by installation of active soil depressurization?:		
addressed through other corrective measures? ² :		
What was the cost of the installation and/or HVAC service work, to mitigate radon? \$		
What is the known or anticipated annual operating cost of mitigation (estimate)? \$		
After radon mitigation, how many rooms were retested?:		
Post mitigation results (# of rooms)	≥ 4 pCi/L:	< 4 pCi/L:

¹ This includes classrooms, offices, break rooms, laboratories, cafeterias, libraries, auditoriums, gymnasiums, etc. It includes rooms on grade and rooms above unoccupied spaces that are in contact with the ground, such as rooms above storage rooms, crawl spaces, tunnels, and boiler rooms. If only a sample or portion of rooms were tested, then respond with 'no'.

² 'Other corrective measures' could include moving staff out of a room and making a room unoccupied or trying to seal radon entry points.