

Work Session

Tuesday, March 19, 2024 6:30 PM

Fridley Community Center, 6085 7th Street NE, Fridley, MN 55432

A. Signing Required Documents	Presenter: Board Chair / Board Clerk
B. <u>OVERSIGHT OF OPERATIONS</u>	
B.1. Special Education Presentation	Presenter: Laura Seifert-Hertling
B.2. One Reading Needed - Policy 606.5 Library Materials	Presenter: Dr. Jason Bodey
B.3. Radon Testing Results	Presenter: Superintendent Brenda Lewis
C. <u>INFORMATIONAL ITEMS</u>	
C.1. At the Next Work Session - April 2, 2024 5:30-7:30pm: Strategic Roadmap with Teamworks	Presenter: Superintendent Brenda Lewis
C.2. School Board Scholarship	Presenter: Board Chair
C.3. Important School Board Dates	Presenter: Board Chair
C.3.a. NWSISD Joint Powers Board Meeting - Meisner March 20, 2024, 6:15 PM NWSISD District Office	
C.3.b. NE Metro 916 Board Meeting - Jones April 3, 2024 6:00 PM Bellaire School	
C.3.c. AMSD Board of Directors Meeting - Karnopp April 5, 2024 7:00 AM Quora Education Center	
C.3.d. Schools for Equity in Education - Auna April 26, 2024 9:30 AM DoubleTree Hotel - Roseville	
D. <u>PUBLIC FORUM</u>	Presenter: Board Chair

606.5 LIBRARY MATERIALS

I. PURPOSE

The purpose of this policy is to provide direction and to delegate responsibility for selection and reconsideration of library materials.

II. GENERAL STATEMENT OF PURPOSE

The school board recognizes that library materials serve as a vital component of a student's education by enriching the breadth of the curriculum as a whole and meeting the needs and interests of individual students. The purpose of library materials is to meet the needs of all students. Therefore, questions regarding selection and reconsideration of library materials should be handled differently than those concerning textbooks and instructional materials.

To ensure that library materials fulfill this role, the school board delegates to the superintendent or the superintendent's designee responsibility for administering a process for selection of library materials. Responsibility for selection shall rest with professionally trained school district staff, with recognition that the school board has the final authority on selection of library materials. Parents and guardians have the right and the responsibility to determine their children's access to library materials.

III. DEFINITIONS

A. "Library" is the school district resource that holds the library collection that serves the information and independent reading needs of students and supports the curriculum needs of teachers and staff. The term "library" includes a school library media center. The term also includes access to electronic materials.

For school districts with multiple school buildings, the term "library" refers to the resource within a specific school building.

Minnesota Statutes, section 124D.901, states that a school district or charter school library or school library media center provides equitable and free access to students, teachers, and administrators and that a school library or school library media center must have the following characteristics:

1. ensures every student has equitable access to resources and is able to locate, access, and use resources that are organized and cataloged;
2. has a collection development plan that includes but is not limited to materials selection and deselection, a challenged materials procedure, and an intellectual and academic freedom statement;
3. is housed in a central location that provides an environment for expanded learning and supports a variety of student interests;

4. has technology and Internet access; and
 5. is served by a licensed school library media specialist or licensed school librarian.
- B. “Library collection” consists of the library materials made available to students.
- C. “Library materials” are the books, periodicals, newspapers, manuscripts, films, prints, documents, videotapes, subscription content, electronic and digital materials (including e-books, audiobooks, and databases), and related items made available to students in a school building or through access to electronic materials. This term does not include materials made available to students as part of the curriculum.
- D. “Library media specialist” is a teacher holding a Library Media Specialist teaching license issued by the Professional Educator Licensing and Standards Boards and who is trained to deliver library services to students and staff in a library. A library media specialist is authorized under Minnesota Rules to provide to students in kindergarten through grade 12 instruction that is designed to provide information and technology literacy skills instruction, to lead, collaborate, and consult with other classroom teachers for the purpose of integrating information and technology literacy skills with content teaching, and to administer media center operations, programming, and resources.

IV. RESPONSIBILITY FOR SELECTION OF LIBRARY MATERIALS

- A. The school board recognizes the expertise of the school district’s professional staff and the vital need of such staff to be responsible for selection of library materials.
- B. While recommendations by faculty members, students, parents, and other community members may be considered, the final responsibility for selection of library materials shall rest with the library media specialist. Any questions or concerns shall be directed to the building administrator for further consideration.

IV. SELECTION OF LIBRARY MATERIALS

- A. Selection Criteria: The library materials selection process should result in a library collection that, when considered as a whole, is consistent with the following criteria:
 1. Library materials shall support and be consistent with the general educational goals of the state and the district and the aims and objectives of individual schools and specific courses;
 2. Library materials shall be chosen to enrich and support the curriculum as well as to promote reading for pleasure by responding to the personal needs

and interests of student users;

3. Library materials shall not be excluded because of the race, nationality, religion, sex, gender, or political views of the writer;
 4. Library materials shall be appropriate to and reflect the needs, ages, maturity level, emotional development, ability levels, learning styles, social development, background, diversity, and needs and interests of the students for whom the materials were selected;
 5. Library materials shall meet high standards of quality in one or more of these categories (presented alphabetically):
 - a. Artistic quality and/or literary style;
 - b. Authenticity;
 - c. Critical thinking;
 - d. Educational significance;
 - e. Factual content;
 - f. High interest for intended audience; and
 - g. Readability.
 6. The selection of library materials shall conform to the constraints of the school district budget.
- B. The library media specialist shall consult sources and specialists experienced in library materials collections appropriate for the building's students and that are reputable, experienced, unbiased, and professionally trained in school library materials.
- C. The superintendent or the superintendent's designee shall be responsible for keeping the school board informed of progress on review and selection of each building's library materials.
- D. Library materials that are outdated, inaccurate, no longer useful for curricular support or reading enrichment, or have not been utilized for an extended period of time may be removed. Library materials that are in poor physical condition may be removed or replaced as determined by the library media specialist or the principal.
- E. Gifts and Donations of Library Materials

Materials offered for donation or gifted to a school library may be accepted if they comply with the library collection selection criteria and approved by the library media specialist. The school district's libraries welcome donations of books and other resource materials from individuals and organizations, but also reserve the right to decline to accept library materials that do not meet the criteria for selection. In addition, financial donations to benefit school district's libraries will be accepted with the understanding that funds will be used to purchase materials that are needed for libraries based on the needs of the individual schools.

V. INDIVIDUAL STUDENT ACCESS TO SPECIFIC LIBRARY MATERIAL

A parent or guardian may request that access to specific material in the library materials collection be restricted from their student. The school shall take reasonable steps to fulfill this request. This type of request will not result in removal of specific library collection material from the library or restrictions upon any other student accessing specific library materials.

VI. RECONSIDERATION OF SPECIFIC LIBRARY MATERIAL

- A. The school board seeks to uphold students' access to library materials that meet the educational goals and selection criteria set forth in this policy.
- B. A school district employee, student, or a parent or guardian of a school district student may request reconsideration of specific library material on the basis of appropriateness. Access to the material in question shall not be restricted until the procedures listed below have been fully completed and a decision to remove or restrict the materials has been made.
- C. Informal Request for Reconsideration of Specific Library Material
 1. Requests for reconsideration of specific library material shall be directed to the library media specialist and the building principal. The building principal and the library media specialist shall assume responsibility for processing the request on an informal basis.
 2. The building principal and/or the library media specialist shall provide an explanation to the individual who submitted the request. The explanation shall include the particular selection criteria that the material in question met in order to be included in the library as curriculum support or as an independent reading choice for students in the building.
 3. If the request is not resolved informally, the principal shall submit a report on the matter to the superintendent or the superintendent's designee. The requestor will have an option to initiate a Formal Request for Reconsideration.

D. Formal Request for Reconsideration of Specific Library Collection Material

1. A Formal Request for Reconsideration of specific library material is initiated upon submission of a completed *Formal Request for Reconsideration of Specific Library Collection Material* form. The form must be completed in its entirety for each work that is subject to a request for reconsideration. The principal shall notify the superintendent or the superintendent's designee and the library media specialist of receipt of a completed Formal Request form.

If specific library material is the subject of a Formal Request for Reconsideration and a final decision is made to retain the specific library material, then the specific library material shall not be subject to additional requests for reconsideration for three years following the date of final resolution of the initial Formal Request for Reconsideration.

2. On an annual basis, the Superintendent or the superintendent's designee shall appoint a Library Materials Review Committee (Review Committee). This committee shall include:
 - a. One member of the school district administration
 - b. One principal
 - c. Two teachers
 - d. One library media specialist
 - e. Two members of the school district community with no direct connection with the request for reconsideration
 - f. Two student representatives (as appropriate to the specific request).
3. The Review Committee shall establish a date upon which it will discuss the request and whether the specific library collection material conforms to the selection criteria set forth in this policy.
4. The Review Committee
 - a. may consult individuals, organizations, and other resources with relevant professional knowledge on school library material;
 - b. shall examine the specific library material as a whole;

- c. shall examine the specific library material as to its conformance with the criteria for selection of library materials; and
 - d. shall submit a written report to the superintendent or the superintendent's designee containing the Review Committee's decision on whether to retain, to remove, or to take other action regarding the specific library material.
5. The superintendent or the superintendent's designee shall inform the requestor and the school board of the Review Committee's decision. The requestor may appeal the Review Committee's decision to the superintendent or the superintendent's designee by submitting a written appeal to the superintendent or the superintendent's designee within fourteen (14) days of submission of the Review Committee's decision to the requestor. The superintendent or the superintendent's designee shall provide a written decision on a requestor's appeal within a reasonable time period.
 6. The requestor shall have the right to appeal the decision of the superintendent or the superintendent's designee to the school board.

Legal References: Minn. Stat. § 120A.22, Subd. 9 (Compulsory Instruction)
Minn. Stat. § 123B.02 (General Powers of Independent School Districts)
Minn. Stat. § 123B.09 (School Board Responsibilities)
Minn. Stat. § 124D.901 (Public School Libraries and Media Centers)
Minn. Rules Part 8710.4550 (Library Media Specialists)
Bd. of Educ., Island Trees Union Free Sch. Dist. No. 26 v. Pico, 457 U.S. 853 (1982)
Virginia State Bd. of Educ. v. Barnette, 319 U.S. 624, 642 (1943)

Cross References: MSBA/MASA Model Policy 524 (Internet Acceptable Use and Safety Policy)
MSBA/MASA Model Policy 606 (Textbooks and Instructional Materials)

Formal Request for Reconsideration of Specific Library Collection Material

The Fridley Public Schools school board adopted Policy 606.5 (Library Materials), under which the school board delegated responsibility for selection and evaluation of library materials to school district staff. This policy establishes procedures for formal reconsideration of specific library collection material.

A Fridley Public Schools' district employee, student, or a parent or guardian of a school district student may request reconsideration of specific library material on the basis of appropriateness.

A requestor has the option to request Formal Reconsideration if the informal process set forth in Policy 606.5 has not resolved the matter.

The first step in the Formal Reconsideration process is submission of a fully completed Formal Request for Reconsideration form. A separate form must be completed in full for each library material item for which formal reconsideration is requested.

If you wish to request formal reconsideration of specific library collection material, please return a completed form to:

The Director of Teaching & Learning at 6000 West Moore Lake Drive, Fridley, MN 55432

Date

Name of Requestor

Address

Phone

Email

Type of Library Material (please check)

Book (e-book)	<input type="checkbox"/>
Movie	<input type="checkbox"/>
Magazine	<input type="checkbox"/>
Database	<input type="checkbox"/>
Newspaper	<input type="checkbox"/>

Audio Recording	<input type="checkbox"/>
Digital Resource	<input type="checkbox"/>
App	<input type="checkbox"/>
Streaming Media	<input type="checkbox"/>
Other	<input type="checkbox"/>

Title: _____

Author/Producer: _____

Please explain the concern you have concerning this Library Material.

Please explain the circumstances that brought this Library Material to your attention.

Have you examined the entire Library Material? If not, please identify the sections you reviewed.

Please identify resources that may provide additional information and/or other viewpoints regarding this Library Material.

Please explain why you believe this Library Material does not comply with the selection objectives and criteria set forth in Policy 606.5

Please explain the resolution that you seek.



FRIDLEY PUBLIC SCHOOLS

Brenda Lewis, Ph.D. | Superintendent | brenda.lewis@fridley.k12.mn.us | 763-502-5001

March 4, 2024

To: Dr. Brenda Lewis, Superintendent of Schools
From: Dr. Robert McDowell, SVP - Center for Effective School Operations
Re: Radon Testing Results

Radon is a colorless, odorless, radioactive gas that occurs naturally in soil, rocks, 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.

Radon gas typically moves up through the ground into the air in buildings through subsurface walls and/or floor cracks, floor drains, and construction joints and pipes. The water supply may also be a source of radon exposure.

All frequently occupied rooms with ground contact or rooms immediately above unoccupied spaces that are in contact with the ground, such as crawl spaces, and tunnels are tested at each building within the district.

Per Minnesota Statute, section 123B.571, school districts are required to report radon test results at a school board meeting and report results to the Minnesota Department of Health (MDH), and conduct follow-up testing in rooms that have radon greater than 4 picocuries per liter.

The following information represents the last round of Radon testing. A total of 513 radon kits were analyzed during the Radon testing that occurred on the dates below:

2/28/2022-3/3/2022 (Fridley Community Center/Middle School)

12/6/2022 - 12/9/2022 (Fridley High School)

12/4/2023-12/7/2023 (Hayes Elementary/RL Stevenson Elementary)

School	# of Kits	# of Rooms above 4 pCi/L
Hayes Elementary	74	
RL Stevenson Elementary	76	
Fridley Middle School	142	
Fridley High School	164	
Fridley Community Center	57	





FRIDLEY PUBLIC SCHOOLS

A continuous radon monitor (CRM) was used for follow-up sampling in the copier room, room 121, and room 142 at RL Stevenson Elementary between February 12-14, 2024. A CRM is recommended when greater than half the results of radon concentrations are between 2-4 pCi/L 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 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. The average radon levels for room 121 was 1.4 pCi/L on the first day of testing and 1.3 pCi/L on the second day of testing. The average radon levels for room 142 was 0.8 pCi/L on the first day of testing and 0.9 pCi/L on the second day of testing. The levels, for each room, were below 4 pCi/L action level during the workdays, requiring no further follow up.

February 9, 2023

Mr. Bryan Brown
Director of Buildings & Grounds
Fridley Public Schools
6000 West Moore Lake Drive
Fridley, MN 55432



**RE: Fridley High School
Short-Term Radon Testing Results
IEA Project #20211121**

Dear Mr. Brown:

IEA placed 168 Air Chek Pro short-term radon test kits in the following buildings for the purpose of evaluating radon levels:

- Fridley High School – 168 Samples

The radon samples were placed by the following Minnesota Department of Health (MDH) licensed Radon Measurement Professionals:

Measurement Professional	License Number	Signature
Jack Skluzacek	RMEA-00475	

The air intakes were good and the ventilation system was operating in good condition at the time of placement and retrieval.

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.

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

IEA placed Air Chek Pro Chek short-term radon test kits in frequently occupied areas in the buildings listed above at Fridley Public Schools for the purpose of sampling for radon in accordance with the MDH’s *Guidance for Radon Testing in Minnesota Schools* (2021) and ANSI/AARST ‘*Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*’ (ANSI/AARST MALB 2014 with 1/21 revisions). A total of 168 radon test kits were placed from December 6, 2022, to December 9, 2022, for a total short-term sampling period of 3 days; including three (3) test kits that were missing at the time of pick-up. The radon test kits were analyzed by AirChek, Inc., MDH license #RL-00003, located at 1936 Butler Bridge Road, Mills River, NC 28759. The sampling and analysis methodologies are provided in Appendix A.

IEA followed ANSI/AARST MALB 2014 with 1/21 revisions for quality assurance measurements by including duplicate kits, control kits (blanks), and spiked kits.

The following radon kits were missing at pickup:

- Small Wrestling Room- Kit Missing
- Auxiliary Gym 3- Kit Missing
- 134 Office- Kit Missing

Client communications and commitments were delivered to the client on the following dates:

- Client Advisories and Authorizations – October 22, 2021
- Facilitating Staff Commitments – November 22, 2022
- Occupant notices – November 21, 2022

EVALUATION CRITERIA

The MDH and the EPA have established a recommended action level in intended to be 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 as it normally is during school days. 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.

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.

CRM: Continuous Radon Monitor

RESULTS & DISCUSSION

The laboratory report, which includes maps of the building with sampling locations, is provided in Appendix B. Following are summary results for each building.

Fridley High School

6000 West Moore Lake Drive NE
Fridley, MN 55432

A total of 168 test kits were placed at Fridley High School. The four (4) kits in the Small Wrestling Room, Auxiliary Gym 3, and 134 Office were missing or damaged when the test kits were collected. The number of missing test kits did not exceed allowance in the ANSI/AARST MALB 2014 with 1/21 revisions standard. The results indicated that radon levels in all locations were below the action level of 4 pCi/L. See Table 1 below for a summary of the results:

TABLE 1: Fridley High School - RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	2.0 – 2.9 pCi/L	3.0 – 3.9 pCi/L	≥ 4 pCi/L
Number of Tests	163	1	0	0 ¹

¹ All below action level.

pCi/L: picocuries per liter

CONCLUSIONS & RECOMMENDATIONS

Low Levels: The radon levels in the sampled locations were below the EPA action level of 4 pCi/L.

If results between 2-4: It is recommended to take action and address results of radon concentrations greater than half the action level (2-4 pCi/L).

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.
- Test locations that were intended to be tested but did not result in valid measurements (missing test kits).

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 radon sampling district-wide and are representative of the locations 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 environmental, health and safety practices. Other than as provided in the preceding sentence and in our Proposal #11036 dated October 22, 2021, regarding radon sampling services at the district locations, including the General Conditions attached thereto, no warranties are extended or made.

IEA appreciates the opportunity to submit this analysis to Fridley Public Schools.

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

Sincerely,

Reviewed by,

IEA, Inc.


Allison Eischens
EHS Account Manager


Amanda Edberg, CSP
Senior Account Manager

ARE/khb 02092023

Enc.

Appendix A

Methodology and Quality Control Measurements

Sampling Methodology

IEA placed Air Chek, Inc. Pro Chek activated charcoal radon test kits designed specifically for the detection of gamma emissions caused by the decay of Radon-222 and its daughter products. The kit is made of a padded envelope which contains activated charcoal. The kit is placed during normal occupancy HVAC operations and sealed with vinyl tape after 72 to 96 hours of indoor exposure. Individual kits are uniquely identified with a number and corresponding bar code.

Upon receipt at the analytical laboratory, the kits are logged in using the unique numbers assigned to each kit. The kits are placed on a gamma detector to count the gamma emissions from the decay of radon adsorbed by the charcoal. A calibration factor determined in part by the exposure time and decay time is used to calculate the radon concentration. A correction factor is also applied for weight gain from any moisture absorbed by the charcoal during the sampling period.

Any unusual conditions are noted on the processing form and shown on the exposure report.

MDH and ANSI/AARST MALB 2014 Quality Control Measurements

IEA followed ANSI/AARST MALB 2014 with 1/21 revisions and MDH recommendations for quality assurance measurements to ensure the accuracy of test results. Quality assurance measurements include side-by-side test kits (duplicates) and unexposed control test kits (blanks).

Duplicates are pairs of test kits placed 4-8 inches apart for the same test period. Duplicates are stored, placed, retrieved, and shipped to the laboratory for analysis in the same manner as the other test kits so that the laboratory cannot distinguish them. Since duplicates are placed side-by-side, the measured values for radon should be the same. The average of all duplicates' 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. Duplicate averages are listed in Table 1 below.

Table 1: Duplicate Device Measurements and Averages				
Location		Test 1 (pCi/L)	Test 2 (pCi/L)	Average (pCi/L)
Building	Room/Area			
Fridley High School	103A	0.8	< 0.3	0.6
Fridley High School	108	< 0.3	< 0.3	< 0.3
Fridley High School	109	< 0.3	0.7	0.5
Fridley High School	114	0.6	1.1	0.9
Fridley High School	124	0.5	0.6	0.6
Fridley High School	125 OFFICE	0.7	0.5	0.6
Fridley High School	136	0.9	0.8	0.9
Fridley High School	140	0.6	< 0.3	0.5
Fridley High School	141	0.6	< 0.3	0.5
Fridley High School	143A	0.6	0.7	0.7
Fridley High School	152	0.8	0.8	0.8
Fridley High School	155	1.3	0.9	1.1
Fridley High School	156	0.8	0.8	0.8
Fridley High School	165	< 0.3	0.5	0.4
Fridley High School	OFFICE ACROSS OF COPIER ROOM	0.6	0.6	0.6
Fridley High School	SOCIAL WORKER	0.5	0.9	0.7

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	Device ID	Type of Blank	Description	Radon Concentration
11/8/2022	11623115	Lab-Transit	LTBP-74	< 0.3
11/8/2022	11623110	Lab-Transit	LTBP-75	< 0.3
11/8/2022	11605431	Lab-Transit	LTBP-76	< 0.3
12/6/2022	11621968	Field	FStorage Room A	< 0.3
12/6/2022	11621967	Field	FStorage Room B	< 0.3
12/6/2022	11621966	Field	FStorage Room C	< 0.3
12/6/2022	11019439	Office	OSTORAGE ROOM A	< 0.3
12/6/2022	11019433	Office	OSTORAGE ROOM B	< 0.3
12/6/2022	11019441	Office	OSTORAGE ROOM C	< 0.3
1/21/2022	11094804	Lab-Transit	LTBP-4	< 0.3
1/21/2022	11094805	Lab-Transit	LTBP-5	< 0.3
1/21/2022	11094806	Lab-Transit	LTBP-6	< 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	Device ID	Measured Value (pCi/L)	Reference Value (pCi/L)
11/4/2022	11130300	26.8	27.6
11/4/2022	11130298	26.5	27.6
11/4/2022	11019440	27	27.6
11/4/2022	11019482	25.3	27.6
11/4/2022	11128517	24.5	27.6
11/4/2022	11128803	24.2	27.6

Appendix B

Laboratory Report and Maps

Radon test result report for:**FRIDLEY PUBLIC SCHOOLS**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11623044	101	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12
11623043	102	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12
11623041	103	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12
11623042	103A OFFICE	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12
11623038	104	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12
11623037	105	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12
11623036	106	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12
11623035	107	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.6 ± 0.3	2022-12-12
11623083	109A OFFICE	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	< 0.3	2022-12-12
11623084	109B	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.6 ± 0.3	2022-12-12
11623080	110 FINANCES MAIN	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.6 ± 0.3	2022-12-12
11623075	111 NUTRITIONAL SERVICE	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	< 0.3	2022-12-12
11623077	111 OFFICE	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	< 0.3	2022-12-12
11623076	112 BUILDING GROUNDS OFFICE	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.5 ± 0.3	2022-12-12
11623074	113	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.7 ± 0.3	2022-12-12
11623071	115	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.8 ± 0.3	2022-12-12
11623070	116	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.8 ± 0.3	2022-12-12
11623068	117	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.6 ± 0.3	2022-12-12
11623069	118	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.7 ± 0.3	2022-12-12
11623067	119	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.7 ± 0.3	2022-12-12
11623066	120	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	1.1 ± 0.3	2022-12-12
11623065	121	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	1.0 ± 0.3	2022-12-12
11623064	122	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.8 ± 0.3	2022-12-12
11623047	123 BAND EAST	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	< 0.3	2022-12-12
11623048	123 BAND NORTH	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.8 ± 0.3	2022-12-12
11623062	126 PRATICE	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	< 0.3	2022-12-12
11623059	127 PRACTICE	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.7 ± 0.3	2022-12-12
11623061	128	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	< 0.3	2022-12-12
11623058	129 PRACTICE	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.7 ± 0.3	2022-12-12
11623057	130 PRACTICE	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	< 0.3	2022-12-12
11623056	131 PRACTICE	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	< 0.3	2022-12-12
11623053	133 OFFICE	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.8 ± 0.3	2022-12-12
11621914	134	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	1.4 ± 0.3	2022-12-12
11621909	135	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.8 ± 0.3	2022-12-12
11621915	136 OFFICE E	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.9 ± 0.3	2022-12-12
11621913	136 OFFICE W	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.9 ± 0.3	2022-12-12
11621912	137	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.9 ± 0.3	2022-12-12

Radon test result report for:**FRIDLEY PUBLIC SCHOOLS**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11621916	138	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.7 ± 0.3	2022-12-12
11621917	138A OFFICE	2022-12-06 @ 2:00 pm	2022-12-09 @ 2:00 pm	0.8 ± 0.3	2022-12-12
11621918	139	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.5 ± 0.3	2022-12-12
11621923	140A CUSTODIAL WORKSHOP	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	1.0 ± 0.3	2022-12-12
11621919	140A CUSTODIAL WORKSHOP OFFICE	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.7 ± 0.3	2022-12-12
11621926	142	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.7 ± 0.3	2022-12-12
11621925	143	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.7 ± 0.3	2022-12-12
11621933	143A OFFICE	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.6 ± 0.3	2022-12-12
11621931	143B	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	< 0.3	2022-12-12
11621930	144	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	< 0.3	2022-12-12
11621934	145	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	1.1 ± 0.3	2022-12-12
11621932	146	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	< 0.3	2022-12-12
11621935	147	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.8 ± 0.3	2022-12-12
11621929	148	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.8 ± 0.3	2022-12-12
11621936	149	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.7 ± 0.3	2022-12-12
11621937	150	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.9 ± 0.3	2022-12-12
11621941	152 ACTIVIES ROOM	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.6 ± 0.3	2022-12-12
11621940	153	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	1.0 ± 0.3	2022-12-12
11621942	154	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.9 ± 0.3	2022-12-12
11621948	157	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.7 ± 0.3	2022-12-12
11621944	158	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.9 ± 0.3	2022-12-12
11621949	159	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.6 ± 0.3	2022-12-12
11621950	160	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	1.0 ± 0.3	2022-12-12
11621951	161	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.9 ± 0.3	2022-12-12
11621952	162	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.7 ± 0.3	2022-12-12
11621953	163	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	< 0.3	2022-12-12
11621954	164	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.8 ± 0.3	2022-12-12
11621957	166	2022-12-06 @ 3:00 pm	2022-12-09 @ 1:00 pm	0.7 ± 0.3	2022-12-12
11621958	167	2022-12-06 @ 3:00 pm	2022-12-09 @ 1:00 pm	0.6 ± 0.3	2022-12-12
11621959	168	2022-12-06 @ 3:00 pm	2022-12-09 @ 1:00 pm	0.5 ± 0.3	2022-12-12
11621961	169	2022-12-06 @ 3:00 pm	2022-12-09 @ 1:00 pm	0.9 ± 0.3	2022-12-12
11621962	170	2022-12-06 @ 3:00 pm	2022-12-09 @ 1:00 pm	0.9 ± 0.3	2022-12-12
11621960	171	2022-12-06 @ 3:00 pm	2022-12-09 @ 1:00 pm	0.7 ± 0.3	2022-12-12
11623014	ACTIVITIES ASSISTANT	2022-12-06 @ 10:00 am	2022-12-09 @ 9:00 am	0.5 ± 0.3	2022-12-12
11623013	ACTIVITIES DIRECTOR	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12
11623005	AMIN. ASSISTANT TO PRINCIPAL	2022-12-06 @ 9:00 am	2022-12-09 @ 10:00 am	0.6 ± 0.3	2022-12-12
11623007	ASSISTANT DIRECTOR OF HUMAN RESOURC	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12

Radon test result report for:**FRIDLEY PUBLIC SCHOOLS**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11623003	ASSISTANT PRINCIPAL	2022-12-06 @ 9:00 am	2022-12-09 @ 9:00 am	< 0.3	2022-12-12
11623095	AUDITORIUM 1	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	1.6 ± 0.3	2022-12-12
11623094	AUDITORIUM 2	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	1.4 ± 0.3	2022-12-12
11623093	AUDITORIUM 3	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	1.7 ± 0.3	2022-12-12
11623092	AUDITORIUM 4	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	1.7 ± 0.3	2022-12-12
11623097	AUDITORIUM SOUND BOOTH	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	1.3 ± 0.3	2022-12-12
11621902	AUXILIARY GYM 1	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	1.1 ± 0.3	2022-12-12
11621904	AUXILIARY GYM 2	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	1.1 ± 0.3	2022-12-12
11623019	BOARD ROOM	2022-12-06 @ 10:00 am	2022-12-09 @ 9:00 am	1.0 ± 0.3	2022-12-12
11623049	BOYS LOCKER ROOM	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	1.2 ± 0.3	2022-12-12
11623091	CAFETERIA 1	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	0.7 ± 0.3	2022-12-12
11623088	CAFETERIA 2	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	0.6 ± 0.3	2022-12-12
11623090	CAFETERIA 3	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	0.6 ± 0.3	2022-12-12
11623089	CAFETERIA 4	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	0.6 ± 0.3	2022-12-12
11623087	CAFETERIA 5	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	0.7 ± 0.3	2022-12-12
11621963	COMPUTER LAB	2022-12-06 @ 3:00 pm	2022-12-09 @ 1:00 pm	< 0.3	2022-12-12
11623016	CONFERENCE ROOM	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.8 ± 0.3	2022-12-12
11623079	COPY ROOM BY NUTRITIONAL SERVICES	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.6 ± 0.3	2022-12-12
11623081	CUBICLES BY FINANCES MAIN	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.6 ± 0.3	2022-12-12
11623039	D103A - 1	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.8 ± 0.3	2022-12-12
11623040	D103A - 2	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12
11623034	D108 - 1	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12
11623029	D108 - 2	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12
11623085	D109 - 1	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	< 0.3	2022-12-12
11623086	D109 - 2	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.7 ± 0.3	2022-12-12
11623072	D114 - 1	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.6 ± 0.3	2022-12-12
11623073	D114 - 2	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	1.1 ± 0.3	2022-12-12
11623054	D124 - 1	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.5 ± 0.3	2022-12-12
11623055	D124 - 2	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.6 ± 0.3	2022-12-12
11623060	D125 OFFICE - 1	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.7 ± 0.3	2022-12-12
11623063	D125 OFFICE - 2	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.5 ± 0.3	2022-12-12
11621905	D136 - 1	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.9 ± 0.3	2022-12-12
11621911	D136 - 2	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.8 ± 0.3	2022-12-12
11621921	D140 - 1	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.6 ± 0.3	2022-12-12
11621922	D140 - 2	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	< 0.3	2022-12-12
11621920	D141 - 1	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.6 ± 0.3	2022-12-12
11621924	D141 - 2	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	< 0.3	2022-12-12

Radon test result report for:**FRIDLEY PUBLIC SCHOOLS**

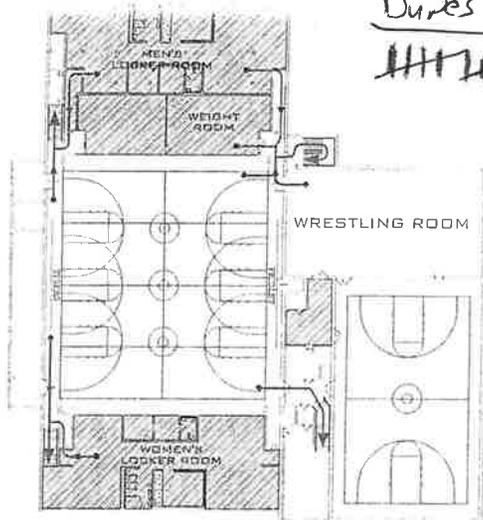
Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11621927	D143A - 1	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.6 ± 0.3	2022-12-12
11621928	D143A - 2	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.7 ± 0.3	2022-12-12
11621938	D152 - 1	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.8 ± 0.3	2022-12-12
11621939	D152 - 2	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.8 ± 0.3	2022-12-12
11621943	D155 - 1	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	1.3 ± 0.3	2022-12-12
11621945	D155 - 2	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.9 ± 0.3	2022-12-12
11621946	D156 - 1	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.8 ± 0.3	2022-12-12
11621947	D156 - 2	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.8 ± 0.3	2022-12-12
11621955	D165 - 1	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	< 0.3	2022-12-12
11621956	D165 - 2	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.5 ± 0.3	2022-12-12
11623023	DEAN OF STUDENTS ACROSS CONFERENCE	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.8 ± 0.3	2022-12-12
11623008	DIRECTOR OF HUMAN RESOURCES	2022-12-06 @ 9:00 am	2022-12-09 @ 9:00 am	0.7 ± 0.3	2022-12-12
11623006	DIRECTOR OF TEACHING AND LEARNING	2022-12-06 @ 9:00 am	2022-12-09 @ 10:00 am	0.8 ± 0.3	2022-12-12
11623010	DOFFICE ACROSS OF COPIER ROOM - 1	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.6 ± 0.3	2022-12-12
11623012	DOFFICE ACROSS OF COPIER ROOM - 2	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.6 ± 0.3	2022-12-12
11623031	DSOCIAL WORKER - 1	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.5 ± 0.3	2022-12-12
11623030	DSOCIAL WORKER - 2	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.9 ± 0.3	2022-12-12
11623015	EXECUTIVE ASSISTANT	2022-12-06 @ 10:00 am	2022-12-09 @ 9:00 am	0.6 ± 0.3	2022-12-12
11621968	FSTORAGE ROOM A	2022-12-06 @ 3:00 pm	2022-12-09 @ 2:00 pm	< 0.3	2022-12-12
11621967	FSTORAGE ROOM B	2022-12-06 @ 3:00 pm	2022-12-09 @ 2:00 pm	< 0.3	2022-12-12
11621966	FSTORAGE ROOM C	2022-12-06 @ 3:00 pm	2022-12-09 @ 2:00 pm	< 0.3	2022-12-12
11623045	GIRLS LOCKER ROOM OFFICE	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.9 ± 0.3	2022-12-12
11621908	KITCHEN 1	2022-12-06 @ 1:00 pm	2022-12-09 @ 1:00 pm	0.9 ± 0.3	2022-12-12
11621907	KITCHEN 2	2022-12-06 @ 2:00 pm	2022-12-09 @ 1:00 pm	0.7 ± 0.3	2022-12-12
11623022	LIASON	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.7 ± 0.3	2022-12-12
11623011	MAIL ROOM	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.6 ± 0.3	2022-12-12
11623100	MAIN GYM 1	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	0.7 ± 0.3	2022-12-12
11623099	MAIN GYM 2	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	0.7 ± 0.3	2022-12-12
11623098	MAIN GYM 3	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	0.7 ± 0.3	2022-12-12
11621906	MAIN GYM 4	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	0.8 ± 0.3	2022-12-12
11621901	MAIN GYM 5	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	< 0.3	2022-12-12
11623052	MAIN WRESTLING ROOM EAST	2022-12-06 @ 11:00 am	2022-12-09 @ 10:00 am	0.8 ± 0.3	2022-12-12
11623051	MAIN WRESTLING ROOM SOUTH	2022-12-06 @ 11:00 am	2022-12-09 @ 10:00 am	0.9 ± 0.3	2022-12-12
11623017	NUTRITIONAL/ED SERVICES SECRETARY	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12
11623026	OFFICE ACROSS SOCIAL WORKER	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.9 ± 0.3	2022-12-12
11623082	OFFICE BY FINANCES MAIN	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.8 ± 0.3	2022-12-12
11623024	OFFICE RIGHT TO DEAN OF STUDENTS	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.8 ± 0.3	2022-12-12

Radon test result report for:**FRIDLEY PUBLIC SCHOOLS**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11621965	OSTORAGE ROOM A	2022-12-06 @ 3:00 pm	2022-12-09 @ 2:00 pm	< 0.3	2022-12-12
11621969	OSTORAGE ROOM B	2022-12-06 @ 3:00 pm	2022-12-09 @ 2:00 pm	< 0.3	2022-12-12
11621964	OSTORAGE ROOM C	2022-12-06 @ 3:00 pm	2022-12-09 @ 2:00 pm	< 0.3	2022-12-12
11623004	PRINCIPAL	2022-12-06 @ 9:00 am	2022-12-09 @ 9:00 am	0.8 ± 0.3	2022-12-12
11623002	RECEPTION	2022-12-06 @ 9:00 am	2022-12-09 @ 9:00 am	0.7 ± 0.3	2022-12-12
11623028	ROOM A LSN	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.8 ± 0.3	2022-12-12
11623027	ROOM B MAIN NURSE OFFICE	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.7 ± 0.3	2022-12-12
11623021	ROOM BY LIASON	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.8 ± 0.3	2022-12-12
11623078	ROOM BY NUTRITIONAL SERVICES MAIN	2022-12-06 @ 11:00 am	2022-12-09 @ 11:00 am	0.8 ± 0.3	2022-12-12
11623033	ROOM C COT	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	< 0.3	2022-12-12
11623032	ROOM D NURSE	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.7 ± 0.3	2022-12-12
11623025	SCHOOL PSYCHOLOGIST	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.7 ± 0.3	2022-12-12
11623096	STAGE	2022-12-06 @ 1:00 pm	2022-12-09 @ 12:00 pm	2.1 ± 0.3	2022-12-12
11623020	STUDENT SUPPORT SERVICE OFFICE	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	0.8 ± 0.3	2022-12-12
11623018	SUPERINTENDENT	2022-12-06 @ 10:00 am	2022-12-09 @ 9:00 am	0.6 ± 0.3	2022-12-12
11623046	WEIGHT ROOM	2022-12-06 @ 10:00 am	2022-12-09 @ 10:00 am	1.0 ± 0.3	2022-12-12

Dunes
|||||

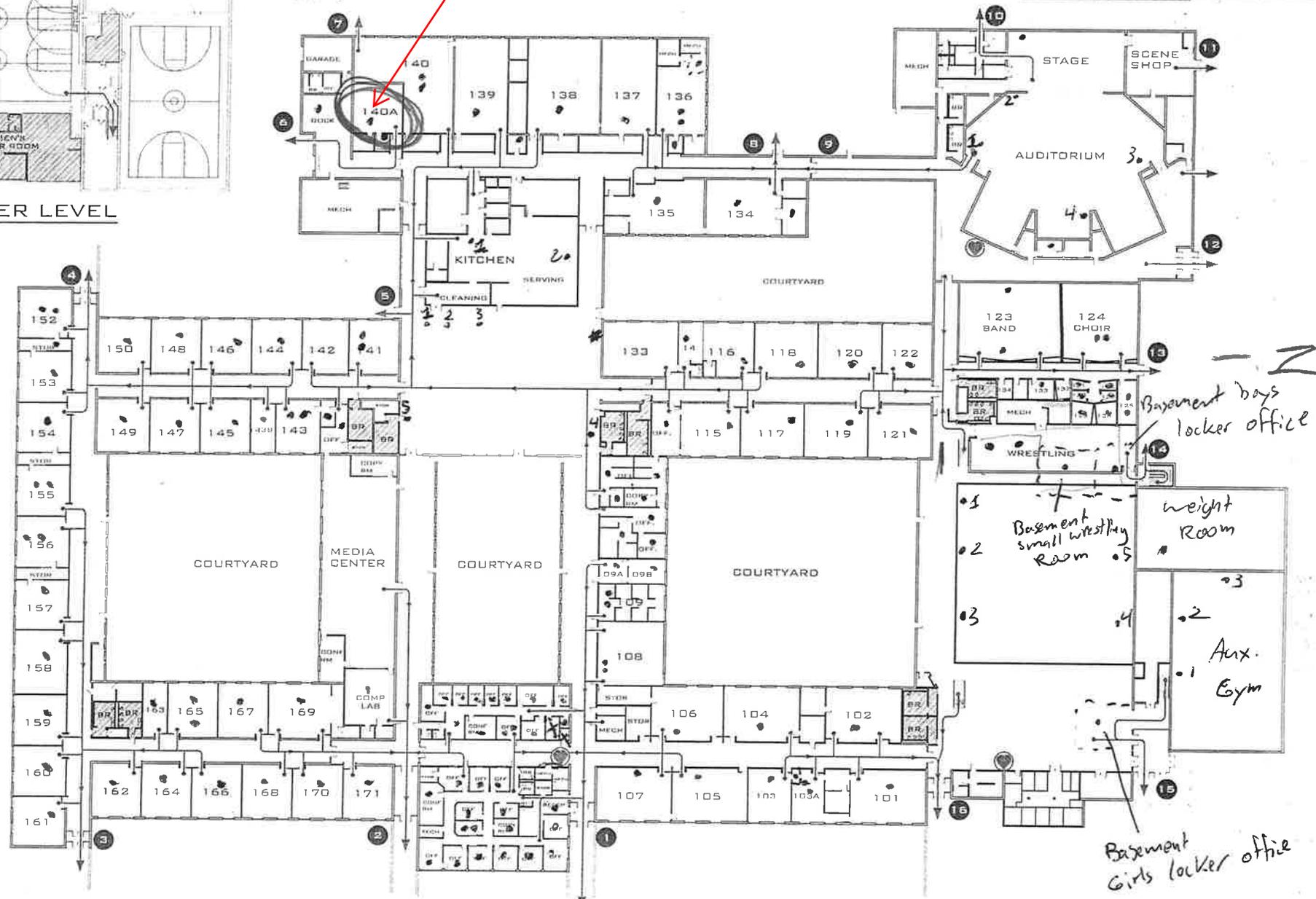
AED LOCATION



LOWER LEVEL

X = not needed

Field blanks



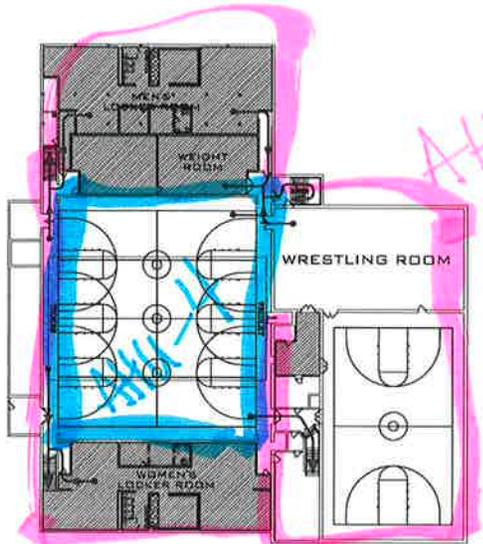
FIRE EXIT ROUTE



SEVERE WEATHER SHELTER AREA



AED LOCATION



Appendix C

Signed Non-Interference Agreement



Radon Compliance Form - Sign by Building Operator (or use hard copy)

Overview

Client	Fridley Public Schools
Building	Fridley High School
Measurement Professional - NOTE: Any employee placing detectors must be certified.	Other
Other:	Jack Skluzacek RMEA-00475
Test Start Date	12-06-2022
Test End Date	12-09-2022

Declaration of Observed Compliance

<p>Notice of Inspection for Facilitating Staff</p>	<p>Please help to maintain the required test conditions throughout the building</p> <ol style="list-style-type: none"> 1. All windows and exterior doors must be kept closed (aside from momentary entry or exit) for 12 hours before and during the test. 2. Heating and cooling systems must be set to normal occupied operating temperatures. 3. Test devices are not to be disturbed. <p>Further guidance on required building conditions are located on the next page. Test devices are not dangerous in anyway. The type of devices used for this testing will include:</p> <p>Short-term test kits. It is important that these devices are fully open and not covered. They will be analyzed by a laboratory.</p> <p>Continuous radon monitors. These are electronic devices that record hourly radon readings.</p> <p>Long-term test kits. It is important that these devices are not covered. They will be analyzed by a laboratory.</p> <p>Declaration of Observed Compliance Failure to reasonably maintain test conditions can lead to unnecessary expense, disruptions and unreliable data. Disturbing test devices can also cause unreliable or invalid test results.</p> <ul style="list-style-type: none"> • Please report in a timely manner if required test conditions are not maintained. • Please sign and return this form once the test is complete.
<p>To the best of my knowledge, the required conditions were maintained during the test.</p>	<p>Yes</p>
<p>Printed Name</p>	<p>Tim Buttweiler</p>
<p>Signature</p>	

Section 3



Radon Compliance Form - Sign by Building Operator (or use hard copy)

Embedded Photo

More Detailed Guidance for Staff

Required Closed-Building Conditions	
Windows	Keep Closed, Seal broken windows closed
External doors (except for normal entry or exit)	Keep Closed
Heating & Cooling Systems	Set to normal operating conditions
Bathroom fans	Operate normally
Fireplaces (including gas)	Do not operate
Auxiliary or temporary systems that bring air into the building	Do not operate (unless an integral part of HVAC or supplies make-up air for combustion appliances)
Exhaust systems (ex. from shops, laundries, kitchens)	Avoid excessive operation
Interior doors, Stairwells, Fire Doors	Operate Normally
Garage doors	Operate normally
Ceiling Fans, Portable Fans	Do not blow directly on the test device
Window AC Units	Operate in recirculation mode only
Window Fans	Do not operate. Seal shut or remove.
Humidifiers, Dehumidifiers, Portable Air Cleaners	Operate Normally
Central Vacuum Cleaner Systems	Operate Normally
Passive crawl space vents	Operate normally
Crawlspace exhaust systems for humidity control	Operate normally
Passive Vents for Combustion Make-Up Air	Leave Open
Combustion Appliance Vents	Operate Normally
Passive Solar Systems	Operate Normally
Attic Vent Fans	Operate Normally
Evaporative Cooling Systems	Do not operate



Embedded Photo

More Detailed Guidance for Staff

Requirements for Test Locations Within a Room	
Place detectors within the general breathing zone	3 feet from exterior doors, windows or other openings to the outdoors
	20 inches above the floor
Locate detectors no less than:	4 inches from other test devices and objects
	1 foot below the ceiling
Place detectors where they are not easily disturbed:	Select a place in an occupied area where the detectors are unlikely to be moved
Place detectors where they are not influenced by other factors:	Do not place devices in closets, crawlspaces, cupboards, sumps or nooks within building foundations
	Do not place devices in area with high air movement (ex. mechanical areas, furnace closets)
	Do not place devices in areas of high humidity (ex. kitchens, bathrooms, laundry rooms)
	Do not place devices near drafts from HVAC systems or fans
	Do not place test devices near heat sources (ex. appliances, radiators, fireplaces, direct sunlight)
	Do not place detectors on devices that produce radiation (ex. natural stone counters, pool tables, rock collections)



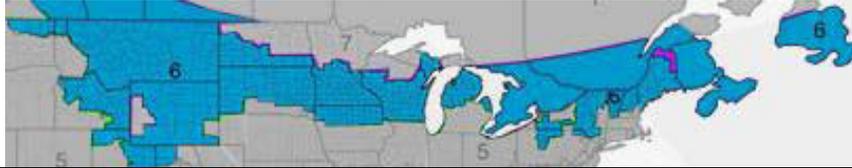
8.50 x 11.00 in

Appendix D

Average Building Operating Conditions Comparison

Southern MN

Climate Zone 6 (includes Southern MN)



		Averages			During the Test
		24 Hour	Daytime	Daytime 9-Month	Prevailing During the Test
Operating Condition	Outdoor Temperature	45 °F	50 °F	N/A	30 °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
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? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the test period include school breaks or holidays? <input type="checkbox"/> Yes <input type="checkbox"/> No	

SCHOOL RADON TESTING REPORTING FORM

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

December 22, 2023

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



**RE: RL Stevenson Elementary School and Hayes Elementary School
Short-Term Radon Testing Results
IEA Project #202111221 (Round 3)**

Dear Mr. Spitzer:

IEA placed 151 Air Chek Pro Chek short-term radon test kits in 124 locations in the following buildings for the purpose of evaluating radon levels:

- Hayes Elementary School – 65 locations
- RL Stevenson Elementary School– 59 locations

The number of kits placed includes those used for quality control purposes. See Appendix A for Quality Control information.

The radon test kits were placed by the following Minnesota Department of Health (MDH) licensed Radon Measurement Professional(s):

Measurement Professional	License Number	Signature
Erin Bengtson	RMEA-00533	
Nate Murphy	RMEA-00483	

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.

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

METHODOLOGY

IEA placed Air Chek Pro Chek short-term radon test kits in frequently occupied areas in the buildings listed above at Fridley Public Schools for the purpose of sampling for radon in accordance with the MDH’s *Guidance for Radon Testing in Minnesota Schools* (2021) and ANSI/AARST ‘*Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*’ (ANSI/AARST MALB 2014 with 1/21 revisions).

A total of 151 radon test kits were placed from December 4, 2023 to December 7, 2023 for a total short-term sampling period of 3 days including 1 test kit that was missing at the time of pick-up. The radon test kits were analyzed by AirChek, Inc., MDH license #RL-00003, located at 1936 Butler Bridge Road, Mills River, NC 28759. The Analysis Methodologies are provided in Appendix A.

Air intakes and ventilation systems were operating in normal 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 MALB 2014 with 1/21 revisions for quality assurance measurements by including duplicate kits, 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 October 17, 2023.

EVALUATION CRITERIA

The MDH and the EPA have established a recommended action level in intended to be 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

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 (<u>DURING OCCUPANCY</u>) 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 (<u>DURING OCCUPANCY</u>) AFTER CRM TESTING	Reduce radon in rooms to less than 4 through radon mitigation. Conduct CRM testing to verify radon reduction.

CRM: Continuous Radon Monitor

RESULTS & DISCUSSION

The laboratory report, maps of each building with sampling locations, and chain of custody are provided in Appendix B. The following includes summary results for each building.

Hayes Elementary School

615 Mississippi St NE
Fridley, MN 55432

A total of 75 test kits were placed in 65 locations at Hayes Elementary School. One test kit in Room 131 was missing when the test kits were collected. The number of missing test kits did not exceed allowance in the ANSI/AARST MALB 2014 with 1/21 revisions standard.

The results indicated that radon levels in Hayes Elementary School were below the action level of 4 pCi/L. See Table 1 below for a summary of the results:

TABLE 1: HAYES ELEMENTARY SCHOOL RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	2.0 – 2.9 pCi/L	3.0 – 3.9 pCi/L	≥ 4 pCi/L
Number of Tests	74	0	0	0

pCi/L: picocuries per liter

RL Stevenson Elementary School

6080 E River Rd
Fridley, MN 55432

A total of 76 test kits were placed in 59 locations at RL Stevenson Elementary School. No test kits were missing or damaged when the test kits were collected.

The results indicated that radon levels in RL Stevenson Elementary School were below the action level of 4 pCi/L. See Table 2 below for a summary of the results:

TABLE 2: RL STEVENSON ELEMENTARY SCHOOL RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	2.0 – 2.9 pCi/L	3.0 – 3.9 pCi/L	≥ 4 pCi/L
Number of Tests	34	39	3	0

pCi/L: picocuries per liter

CONCLUSIONS AND RECOMMENDATIONS

It is recommended by ANSI/AARST MALB 2014 with 1/21 revisions to consider taking action and address results of radon concentrations greater than half the action level (2-4 pCi/L).

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.
- Ground contact 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
- 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 radon sampling district-wide and are representative of the locations 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 environmental, health and safety practices. Other than as provided in the preceding sentence and in our Proposal #10036 dated October 22, 2021, regarding radon sampling services at the district locations, 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 environmental, health, or safety-related concerns, please do not hesitate to contact our office.

Sincerely,

IEA, Inc.

Reviewed by:


Aly Rockwell
Account Manager


Emma Squires-Sperling
Laboratory Director

AR/khb 12222023

Enc.

Appendix A

*Analysis Methodology and
Quality Control Measurements*

Analysis Methodology

IEA placed Air Chek, Inc. Pro Chek activated charcoal radon test kits designed specifically for the detection of gamma emissions caused by the decay of Radon-222 and its daughter products. The kit is made of a padded envelope which contains activated charcoal. Upon pick-up, the kit is sealed with vinyl tape after 72 to 96 hours of indoor exposure. Individual kits are uniquely identified with a number and corresponding bar code.

Upon receipt at the analytical laboratory, the kits are logged in using the unique numbers assigned to each kit. The kits are placed on a gamma detector to count the gamma emissions from the decay of radon adsorbed by the charcoal. A calibration factor determined in part by the exposure time and decay time is used to calculate the radon concentration. A correction factor is also applied for weight gain from any moisture absorbed by the charcoal during the sampling period.

Any unusual conditions are noted on the processing form and shown on the exposure report.

MDH and ANSI/AARST MALB 2014 Quality Control Measurements

IEA followed ANSI/AARST MALB 2014 with 1/21 revisions and MDH recommendations for quality assurance measurements to ensure the accuracy of test results. Quality assurance measurements include side-by-side test kits (duplicates) and unexposed control test kits (blanks).

Duplicates are pairs of test kits placed 4-8 inches apart for the same test period. Duplicates are stored, placed, retrieved, and shipped to the laboratory for analysis in the same manner as the other test kits so that the laboratory cannot distinguish them. Since duplicates are placed side-by-side, the measured values for radon should be the same. The average of all duplicates' 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. Duplicate averages are listed in Table 1 below.

Table 1: Duplicate Device Measurements and Averages			
Location	Test 1 (pCi/L)	Test 2 (pCi/L)	Average (pCi/L)
Stevenson 103	2.7	2.7	2.7
Stevenson 108	2.1	2.0	2.05
Stevenson 125	2.6	2.4	2.5
Stevenson 129	2.7	2.5	2.6
Stevenson 144	1.9	1.6	1.75
Stevenson 148	1.5	1.8	1.65
Stevenson P.E. Office	1.3	1.5	1.4
Hayes 101	0.7	0.6	0.65
Hayes 121	< 0.3	0.6	0.45
Hayes 133	0.9	0.6	0.75
Hayes 149	< 0.3	0.5	0.4
Hayes Main Office Conference Room	0.6	0.9	0.75
Hayes Occ Therapy	0.7	< 0.3	0.5

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)
12/4/2023	11:00 AM	12:00 PM	11625290	Field	FStorage Room A	< 0.3
12/4/2023	11:00 AM	12:00 PM	11625275	Field	FStorage Room B	< 0.3
12/4/2023	11:00 AM	12:00 PM	11625284	Field	FStorage Room C	< 0.3
12/4/2023	11:00 AM	1:00 PM	11625274	Office	OStorage Room A	< 0.3
12/4/2023	11:00 AM	1:00 PM	11625265	Office	OStorage Room B	< 0.3
12/4/2023	11:00 AM	1:00 PM	11625266	Office	OStorage Room C	< 0.3
10/6/2023	8:00 AM	8:00 AM	11610507	Lab-Transit	LTBP-1	<0.3
11/10/2023	9:00 AM	9:00 AM	11620313	Lab-Transit	LTBP-2	< 0.3
12/1/2023	8:19 AM	8:19 AM	11610519	Lab-Transit	LTBP-3	<0.3
12/5/2023	1:00 PM	1:00 PM	11376311	Lab-Transit	LTBP-4	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376312	Lab-Transit	LTBP-5	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376313	Lab-Transit	LTBP-6	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376314	Lab-Transit	LTBP-7	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376315	Lab-Transit	LTBP-8	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376316	Lab-Transit	LTBP-9	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376317	Lab-Transit	LTBP-10	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376318	Lab-Transit	LTBP-11	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376319	Lab-Transit	LTBP-12	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376320	Lab-Transit	LTBP-13	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376321	Lab-Transit	LTBP-14	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376322	Lab-Transit	LTBP-15	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376323	Lab-Transit	LTBP-16	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376324	Lab-Transit	LTBP-17	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376325	Lab-Transit	LTBP-18	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376326	Lab-Transit	LTBP-19	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376327	Lab-Transit	LTBP-20	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376328	Lab-Transit	LTBP-21	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376329	Lab-Transit	LTBP-22	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376330	Lab-Transit	LTBP-23	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376331	Lab-Transit	LTBP-24	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376332	Lab-Transit	LTBP-25	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376333	Lab-Transit	LTBP-26	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376334	Lab-Transit	LTBP-27	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376335	Lab-Transit	LTBP-28	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376336	Lab-Transit	LTBP-29	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376337	Lab-Transit	LTBP-30	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376338	Lab-Transit	LTBP-31	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376339	Lab-Transit	LTBP-32	< 0.3

Table 2: Blanks

Date	Start Time	End Time	Device ID	Type of Blank	Description	Radon Concentration (pCi/L)
12/5/2023	1:00 PM	1:00 PM	11376340	Lab-Transit	LTBP-33	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376341	Lab-Transit	LTBP-34	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376342	Lab-Transit	LTBP-35	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376343	Lab-Transit	LTBP-36	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376344	Lab-Transit	LTBP-37	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376345	Lab-Transit	LTBP-38	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376346	Lab-Transit	LTBP-39	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376347	Lab-Transit	LTBP-40	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376348	Lab-Transit	LTBP-41	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376349	Lab-Transit	LTBP-42	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376350	Lab-Transit	LTBP-43	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376351	Lab-Transit	LTBP-44	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376352	Lab-Transit	LTBP-45	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376353	Lab-Transit	LTBP-46	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376354	Lab-Transit	LTBP-47	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376355	Lab-Transit	LTBP-48	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376356	Lab-Transit	LTBP-49	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376357	Lab-Transit	LTBP-50	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376358	Lab-Transit	LTBP-51	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376359	Lab-Transit	LTBP-52	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376360	Lab-Transit	LTBP-53	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376361	Lab-Transit	LTBP-54	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376362	Lab-Transit	LTBP-55	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376363	Lab-Transit	LTBP-56	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376364	Lab-Transit	LTBP-57	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376365	Lab-Transit	LTBP-58	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376366	Lab-Transit	LTBP-59	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376367	Lab-Transit	LTBP-60	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376368	Lab-Transit	LTBP-61	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376369	Lab-Transit	LTBP-62	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376370	Lab-Transit	LTBP-63	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376371	Lab-Transit	LTBP-64	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376372	Lab-Transit	LTBP-65	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376373	Lab-Transit	LTBP-66	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376374	Lab-Transit	LTBP-67	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376375	Lab-Transit	LTBP-68	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376376	Lab-Transit	LTBP-69	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376377	Lab-Transit	LTBP-70	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376378	Lab-Transit	LTBP-71	< 0.3

Table 2: Blanks

Date	Start Time	End Time	Device ID	Type of Blank	Description	Radon Concentration (pCi/L)
12/5/2023	1:00 PM	1:00 PM	11376379	Lab-Transit	LTBP-72	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376380	Lab-Transit	LTBP-73	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376381	Lab-Transit	LTBP-74	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376382	Lab-Transit	LTBP-75	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376383	Lab-Transit	LTBP-76	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376384	Lab-Transit	LTBP-77	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376385	Lab-Transit	LTBP-78	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376386	Lab-Transit	LTBP-79	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376387	Lab-Transit	LTBP-80	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376388	Lab-Transit	LTBP-81	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376389	Lab-Transit	LTBP-82	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376390	Lab-Transit	LTBP-83	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376391	Lab-Transit	LTBP-84	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376392	Lab-Transit	LTBP-85	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376393	Lab-Transit	LTBP-86	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376394	Lab-Transit	LTBP-87	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376395	Lab-Transit	LTBP-88	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376396	Lab-Transit	LTBP-89	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376397	Lab-Transit	LTBP-90	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376398	Lab-Transit	LTBP-91	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376399	Lab-Transit	LTBP-92	< 0.3
12/5/2023	1:00 PM	1:00 PM	11376400	Lab-Transit	LTBP-93	< 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)
12/1/2023	8:19 AM	8:19 AM	11610520	43.5	47.0
12/1/2023	8:19 AM	8:19 AM	11610521	50.2	47.0
12/1/2023	8:19 AM	8:19 AM	11610522	45.6	47.0
12/1/2023	8:19 AM	8:19 AM	11610523	46.5	47.0
12/1/2023	8:19 AM	8:19 AM	11610524	47.5	47.0
12/1/2023	8:19 AM	8:19 AM	11610525	40.1	47.0

Appendix B

Laboratory Reports and Maps

Radon test result report for:

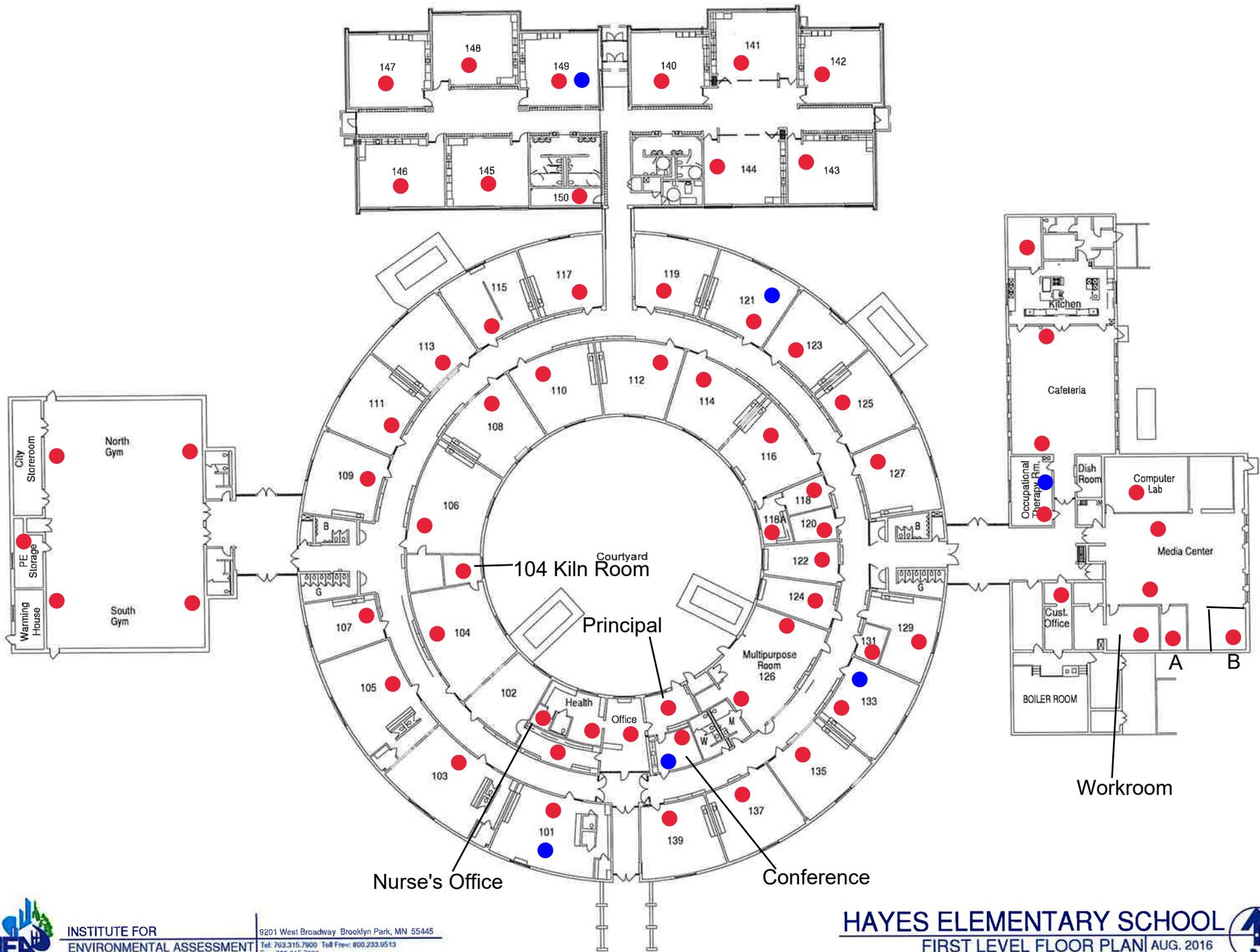
**FRIDLEY PUBLIC SCHOOLS
HAYES ELEMENTARY SCHOOL**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11624594	102	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.6 ± 0.4	2023-12-12
11624595	103	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.6 ± 0.4	2023-12-12
11624548	104	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.6 ± 0.4	2023-12-12
11624551	104 KILN ROOM	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.9 ± 0.4	2023-12-12
11624593	105	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.6 ± 0.4	2023-12-12
11624584	106	2023-12-04 @ 9:00 am	2023-12-07 @ 9:00 am	0.6 ± 0.4	2023-12-12
11624592	107	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.8 ± 0.4	2023-12-12
11624589	108	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.7 ± 0.4	2023-12-12
11624590	109	2023-12-04 @ 9:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624599	110	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.8 ± 0.4	2023-12-12
11624598	111	2023-12-04 @ 9:00 am	2023-12-07 @ 9:00 am	0.9 ± 0.4	2023-12-12
11624573	112	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624597	113	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624553	114	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624596	115	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.8 ± 0.4	2023-12-12
11624557	116	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.5 ± 0.4	2023-12-12
11624600	117	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.7 ± 0.4	2023-12-12
11624564	118	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.9 ± 0.4	2023-12-12
11624558	118A	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.8 ± 0.4	2023-12-12
11624566	119	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624541	120	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.6 ± 0.4	2023-12-12
11625215	122	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.8 ± 0.4	2023-12-12
11624546	123	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	1.0 ± 0.4	2023-12-12
11625221	124	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.7 ± 0.4	2023-12-12
11624545	125	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.9 ± 0.4	2023-12-12
11625212	126 NORTHEAST	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	< 0.3	2023-12-12
11625211	126 SOUTHWEST	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	1.0 ± 0.4	2023-12-12
11624550	127	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.6 ± 0.4	2023-12-12
11625220	129	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.6 ± 0.4	2023-12-12
11625214	135	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.7 ± 0.4	2023-12-12
11625204	137	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.9 ± 0.4	2023-12-12
11625203	139	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.6 ± 0.4	2023-12-12
11624578	140	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.8 ± 0.4	2023-12-12
11624554	141	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.8 ± 0.4	2023-12-12
11624538	142	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	1.0 ± 0.4	2023-12-12
11624536	143	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	1.0 ± 0.4	2023-12-12
11624539	144	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.6 ± 0.4	2023-12-12

Radon test result report for:

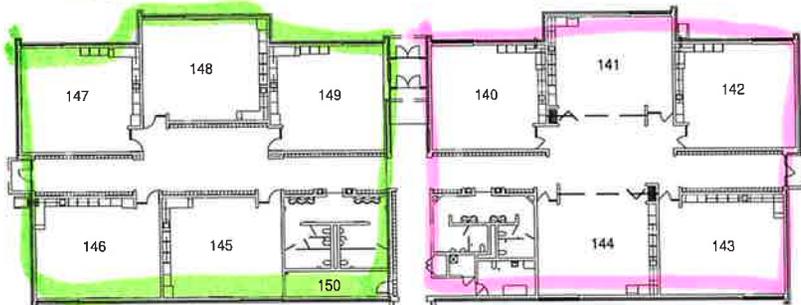
**FRIDLEY PUBLIC SCHOOLS
HAYES ELEMENTARY SCHOOL**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11624572	145	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.8 ± 0.4	2023-12-12
11624577	146	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.7 ± 0.4	2023-12-12
11624580	147	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.8 ± 0.4	2023-12-12
11624570	148	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	1.0 ± 0.4	2023-12-12
11624543	150	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.9 ± 0.4	2023-12-12
11624567	CAFETERIA NORTH	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624574	CAFETERIA SOUTH	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624542	COMPUTER LAB	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624575	CUSTODIAL OFFICE	2023-12-04 @ 8:00 am	2023-12-07 @ 10:00 am	0.6 ± 0.4	2023-12-12
11624555	D101-1	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.7 ± 0.4	2023-12-12
11624547	D101-2	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.6 ± 0.3	2023-12-12
11624576	D121-1	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624540	D121-2	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.6 ± 0.4	2023-12-12
11625205	D133-1	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.9 ± 0.4	2023-12-12
11625213	D133-2	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.6 ± 0.4	2023-12-12
11624544	D149-1	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624569	D149-2	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.5 ± 0.4	2023-12-12
11624563	DMAIN OFFICE CONFERENCE-1	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.6 ± 0.4	2023-12-12
11624561	DMAIN OFFICE CONFERENCE-2	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.9 ± 0.4	2023-12-12
11624537	DOCCUPATIONAL THERAPY ROOM-1	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.7 ± 0.4	2023-12-12
11624549	DOCCUPATIONAL THERAPY ROOM-2	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624591	GYM OFFICE	2023-12-04 @ 9:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624552	HEALTH OFFICE	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.8 ± 0.4	2023-12-12
11624568	KITCHEN OFFICE	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624556	MAIN OFFICE	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.8 ± 0.4	2023-12-12
11624562	MAIN OFFICE COPY ROOM	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.9 ± 0.4	2023-12-12
11624582	MEDIA CENTER NORTH	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624571	MEDIA CENTER OFFICE A	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.8 ± 0.4	2023-12-12
11624581	MEDIA CENTER OFFICE B	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624588	MEDIA CENTER SOUTH	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	0.6 ± 0.4	2023-12-12
11624579	MEDIA CENTER WORKROOM	2023-12-04 @ 8:00 am	2023-12-07 @ 9:00 am	< 0.3	2023-12-12
11624585	NORTH GYM EAST	2023-12-04 @ 9:00 am	2023-12-07 @ 9:00 am	0.7 ± 0.4	2023-12-12
11624587	NORTH GYM WEST	2023-12-04 @ 9:00 am	2023-12-07 @ 9:00 am	0.8 ± 0.4	2023-12-12
11624559	NURSES OFFICE	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.9 ± 0.4	2023-12-12
11624560	PRINCIPAL OFFICE	2023-12-04 @ 9:00 am	2023-12-07 @ 10:00 am	0.8 ± 0.4	2023-12-12
11624586	SOUTH GYM EAST	2023-12-04 @ 9:00 am	2023-12-07 @ 9:00 am	0.7 ± 0.4	2023-12-12
11624583	SOUTH GYM WEST	2023-12-04 @ 9:00 am	2023-12-07 @ 9:00 am	0.6 ± 0.4	2023-12-12



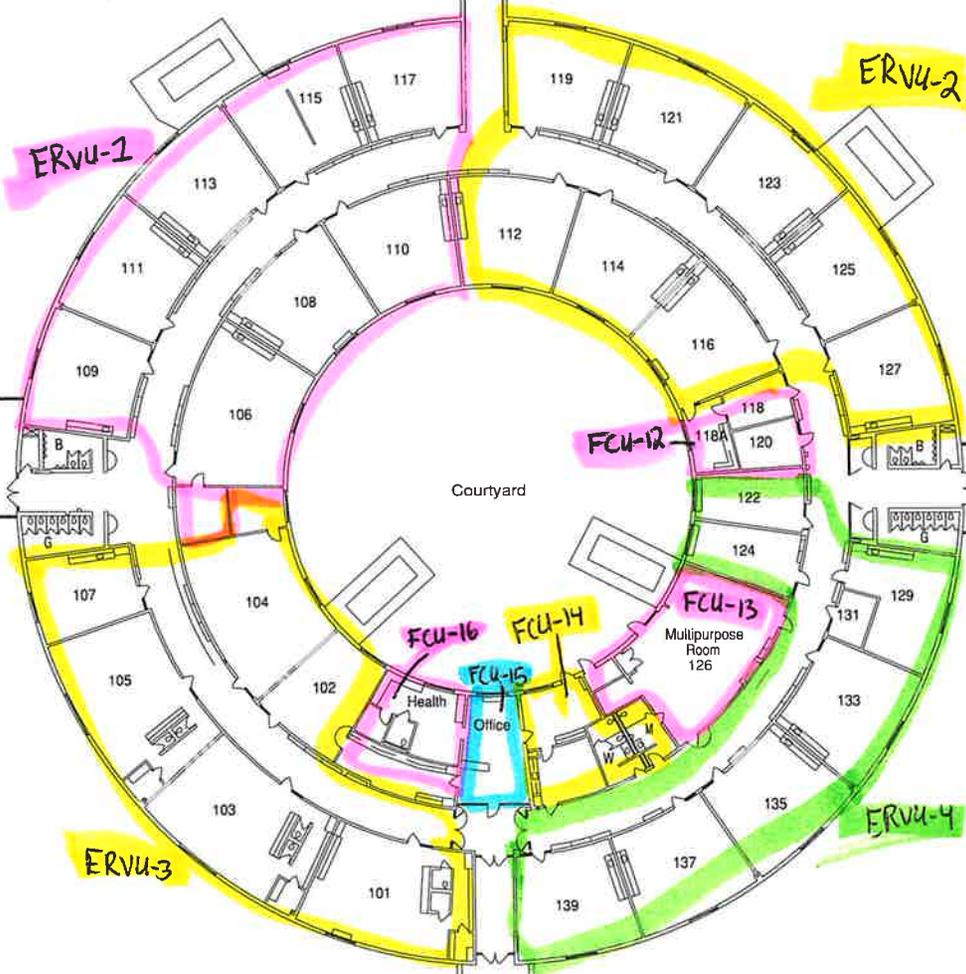
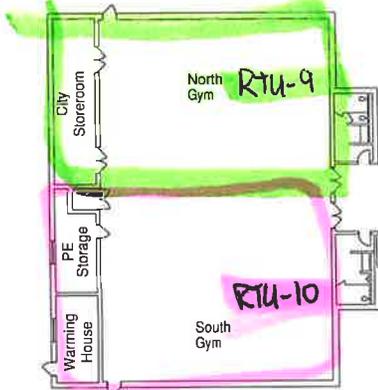
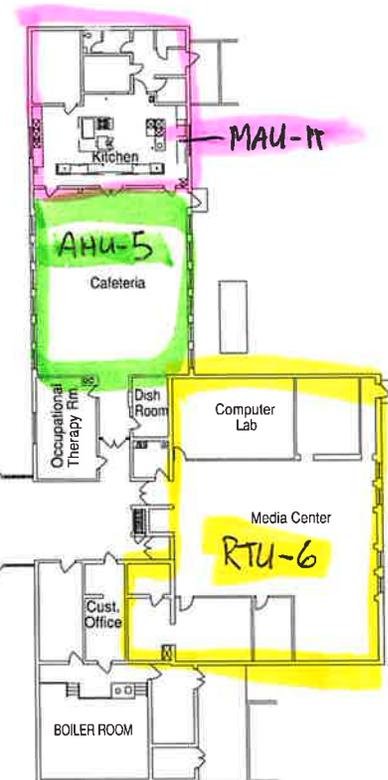
RTU-8

RTU-7



ERVU-2

ERVU-1



Radon test result report for:

**FRIDLEY PUBLIC SCHOOLS
STEVENSON ELEMENTARY SCHOOL**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11625264	101	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.5 ± 0.4	2023-12-12
11625287	102	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.4 ± 0.4	2023-12-12
11625291	104	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.4 ± 0.4	2023-12-12
11625293	105	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.1 ± 0.4	2023-12-12
11625208	106	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.0 ± 0.5	2023-12-12
11625295	107	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.3 ± 0.4	2023-12-12
11625229	109	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.5 ± 0.4	2023-12-12
11625234	110	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.0 ± 0.4	2023-12-12
11625218	111	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.8 ± 0.4	2023-12-12
11625242	112	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.5 ± 0.4	2023-12-12
11625241	113	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.2 ± 0.4	2023-12-12
11625259	114	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.6 ± 0.5	2023-12-12
11625250	115	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.0 ± 0.4	2023-12-12
11625249	116	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.9 ± 0.5	2023-12-12
11625237	117	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.3 ± 0.5	2023-12-12
11625260	118	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.9 ± 0.5	2023-12-12
11625261	119	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.9 ± 0.5	2023-12-12
11625252	120	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.1 ± 0.4	2023-12-12
11625248	121	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	3.1 ± 0.5	2023-12-12
11625258	122	2023-12-04 @ 11:00 am	2023-12-07 @ 12:00 pm	2.0 ± 0.4	2023-12-12
11625247	123	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.5 ± 0.5	2023-12-12
11625270	124	2023-12-04 @ 10:00 am	2023-12-07 @ 12:00 pm	2.1 ± 0.5	2023-12-12
11625289	126	2023-12-04 @ 10:00 am	2023-12-07 @ 12:00 pm	1.4 ± 0.4	2023-12-12
11625278	131	2023-12-04 @ 10:00 am	2023-12-07 @ 12:00 pm	2.1 ± 0.4	2023-12-12
11625282	133	2023-12-04 @ 10:00 am	2023-12-07 @ 12:00 pm	2.9 ± 0.4	2023-12-12
11625272	135	2023-12-04 @ 10:00 am	2023-12-07 @ 12:00 pm	2.5 ± 0.5	2023-12-12
11625279	137	2023-12-04 @ 10:00 am	2023-12-07 @ 12:00 pm	1.7 ± 0.4	2023-12-12
11625256	140	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.0 ± 0.4	2023-12-12
11625238	141	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.7 ± 0.5	2023-12-12
11625255	142	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	3.2 ± 0.5	2023-12-12
11625251	143	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.9 ± 0.4	2023-12-12
11625243	145	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.3 ± 0.5	2023-12-12
11625210	146	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.1 ± 0.4	2023-12-12
11625216	147	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.6 ± 0.4	2023-12-12
11625233	149	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.8 ± 0.4	2023-12-12
11625262	150	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.4 ± 0.5	2023-12-12
11625244	CAFETERIA N	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.7 ± 0.5	2023-12-12

Radon test result report for:

**FRIDLEY PUBLIC SCHOOLS
STEVENSON ELEMENTARY SCHOOL**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11625245	CAFETERIA S	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.6 ± 0.4	2023-12-12
11625285	CONFERENCE ROOM	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.2 ± 0.4	2023-12-12
11625280	COPIER ROOM	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	3.4 ± 0.5	2023-12-12
11625226	CUSTODIAL OFFICE	2023-12-04 @ 9:00 am	2023-12-07 @ 12:00 pm	1.4 ± 0.4	2023-12-12
11625294	D103 - 1	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.7 ± 0.5	2023-12-12
11625288	D103 - 2	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.7 ± 0.5	2023-12-12
11625209	D108 - 1	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.1 ± 0.4	2023-12-12
11625219	D108 - 2	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.0 ± 0.4	2023-12-12
11625253	D125 - 1	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.6 ± 0.5	2023-12-12
11625254	D125 - 2	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.4 ± 0.5	2023-12-12
11625283	D129 - 1	2023-12-04 @ 10:00 am	2023-12-07 @ 12:00 pm	2.7 ± 0.5	2023-12-12
11625281	D129 - 2	2023-12-04 @ 10:00 am	2023-12-07 @ 12:00 pm	2.5 ± 0.5	2023-12-12
11625239	D144 - 1	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.9 ± 0.4	2023-12-12
11625202	D144 - 2	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.6 ± 0.4	2023-12-12
11625201	D148 - 1	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.5 ± 0.4	2023-12-12
11625217	D148 - 2	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.8 ± 0.4	2023-12-12
11625246	DP.E. OFFICE - 1	2023-12-04 @ 9:00 am	2023-12-07 @ 11:00 am	1.3 ± 0.4	2023-12-12
11625240	DP.E. OFFICE - 2	2023-12-04 @ 9:00 am	2023-12-07 @ 11:00 am	1.5 ± 0.4	2023-12-12
11625290	FSTORAGE ROOM A	2023-12-04 @ 11:00 am	2023-12-07 @ 12:00 pm	< 0.3	2023-12-12
11625275	FSTORAGE ROOM B	2023-12-04 @ 11:00 am	2023-12-07 @ 12:00 pm	< 0.3	2023-12-12
11625284	FSTORAGE ROOM C	2023-12-04 @ 11:00 am	2023-12-07 @ 12:00 pm	< 0.3	2023-12-12
11625277	HEALTH OFFICE	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.6 ± 0.5	2023-12-12
11625236	KITCHEN	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.0 ± 0.5	2023-12-12
11625276	MAIN OFFICE	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.8 ± 0.5	2023-12-12
11625224	MEDIA CENTER 1	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.0 ± 0.4	2023-12-12
11625230	MEDIA CENTER 2	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	0.9 ± 0.4	2023-12-12
11625222	MEDIA CENTER 3	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.4 ± 0.4	2023-12-12
11625223	MEDIA CENTER 4	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.2 ± 0.4	2023-12-12
11625207	MEDIA CENTER EAST	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	0.7 ± 0.4	2023-12-12
11624565	MEDIA CENTER SOUTH	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	0.5 ± 0.4	2023-12-12
11625227	NORTH GYM S	2023-12-04 @ 9:00 am	2023-12-07 @ 11:00 am	0.7 ± 0.4	2023-12-12
11625235	NORTH GYM SW	2023-12-04 @ 9:00 am	2023-12-07 @ 11:00 am	0.5 ± 0.4	2023-12-12
11625267	NURSES OFFICE	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	2.3 ± 0.5	2023-12-12
11625274	OSTORAGE ROOM A	2023-12-04 @ 11:00 am	2023-12-07 @ 1:00 pm	< 0.3	2023-12-12
11625265	OSTORAGE ROOM B	2023-12-04 @ 11:00 am	2023-12-07 @ 1:00 pm	< 0.3	2023-12-12
11625266	OSTORAGE ROOM C	2023-12-04 @ 11:00 am	2023-12-07 @ 1:00 pm	< 0.3	2023-12-12
11625286	PRINCIPALS OFFICE	2023-12-04 @ 10:00 am	2023-12-07 @ 11:00 am	1.8 ± 0.4	2023-12-12

December 12, 2023

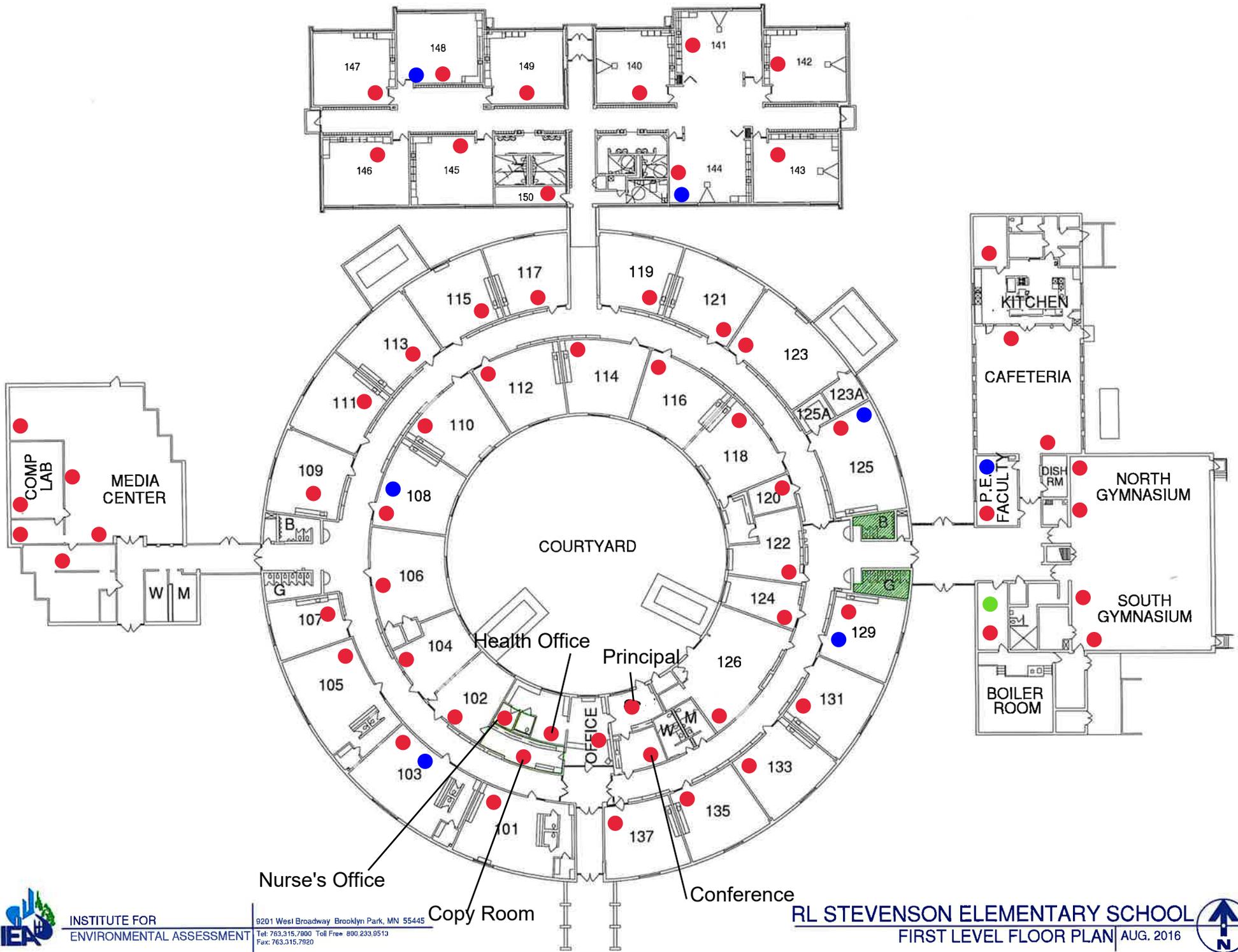
**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**FRIDLEY PUBLIC SCHOOLS
STEVENSON ELEMENTARY SCHOOL**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11625232	SOUTH GYM S	2023-12-04 @ 9:00 am	2023-12-07 @ 11:00 am	0.8 ± 0.4	2023-12-12
11625231	SOUTH GYM SE	2023-12-04 @ 9:00 am	2023-12-07 @ 11:00 am	0.6 ± 0.4	2023-12-12

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



Vent Assessment

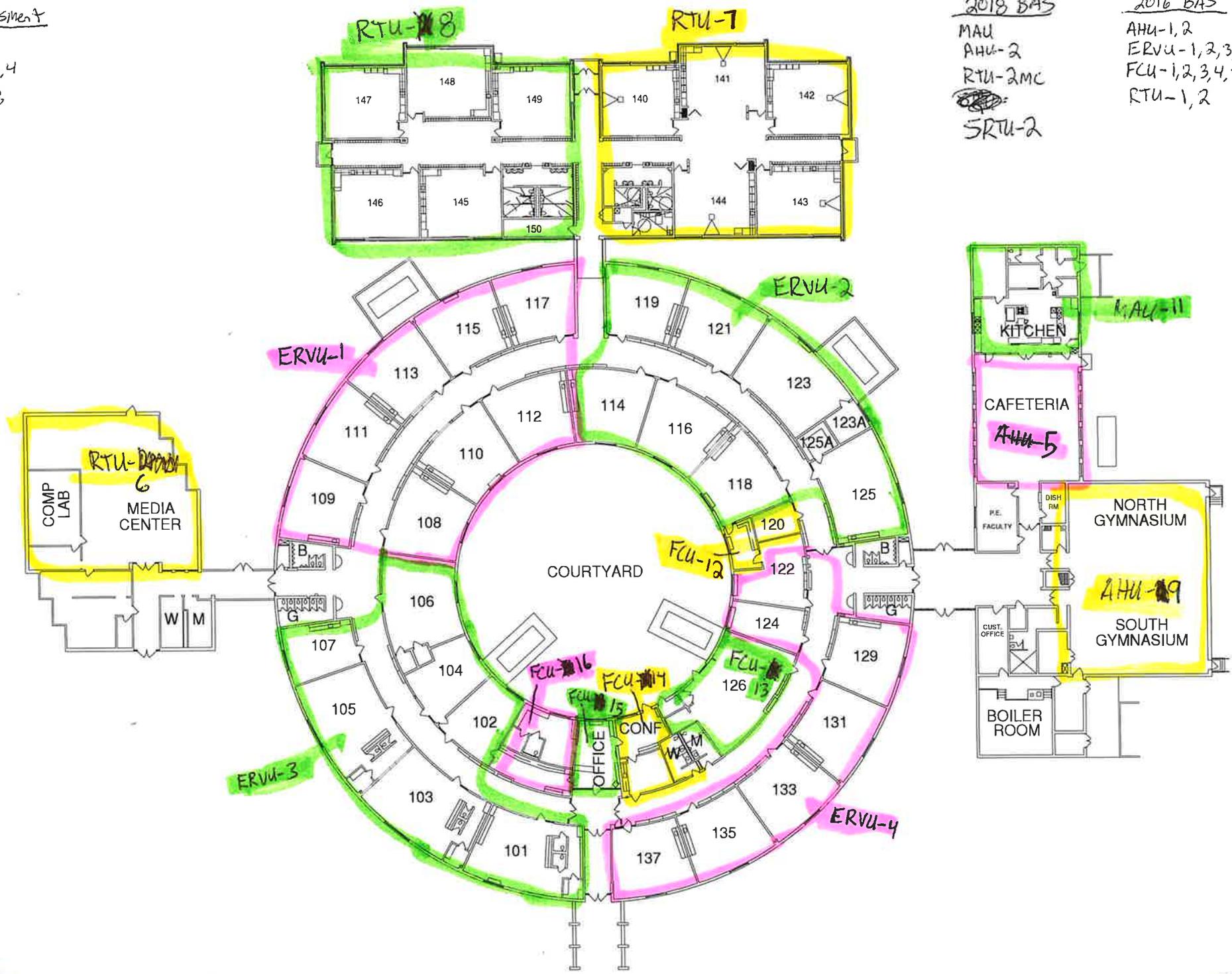
- AHU-1,2
- ERVU-1,2,3,4
- RTU-1,2,8
- MAU-1

2018 BAS

- MAU
- AHU-2
- RTU-2MC
- ~~ERVU-1~~
- SRTU-2

2016 BAS

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



Appendix C

*Signed Non-Interference Agreement
Client Commitments, Advisories, and Authorizations*

NOTICE OF INSPECTION FOR ALL FACILITATING STAFF

Kelly

A radon test is scheduled for:

Building: Hoyes Elementary

Test Start Date: 12-4-23 Test End Date: 12-7-23

Please help to maintain the required test conditions throughout the building

1. All windows and exterior doors must be kept closed (aside from momentary entry or exit) for 12 hours before and during the test.
2. Heating and cooling systems must be set to normal occupied operating temperatures.
3. Test devices are not to be disturbed.

Further guidance on required building conditions are located on the next page.

Test devices are not dangerous in anyway. The type of devices used for this testing will include:

Short-term test kits. It is important that these devices are fully open and not covered. They will be analyzed by a laboratory.

Continuous radon monitors. These are electronic devices that record hourly radon readings.

Long-term test kits. It is important that these devices are not covered. They will be analyzed by a laboratory.

Declaration of Observed Compliance

Failure to reasonably maintain test conditions can lead to unnecessary expense, disruptions and unreliable data. Disturbing test devices can also cause unreliable or invalid test results.

- Please report in a timely manner if required test conditions are not maintained.
- Please sign and return this form once the test is complete.

To the best of my knowledge, the required conditions were maintained during the test.

Yes No

Name: Kelly Nelson

Signature: Kelly Nelson

For more information regarding on-site activities, contact:

Licensed Measurement Professional:

NOTICE OF INSPECTION FOR ALL FACILITATING STAFF

A radon test is scheduled for:

Building: Hayes Elementary

Test Start Date: 12-7-23

Test End Date: 12-7-23

Please help to maintain the required test conditions throughout the building

1. All windows and exterior doors must be kept closed (aside from momentary entry or exit) for 12 hours before and during the test.
2. Heating and cooling systems must be set to normal occupied operating temperatures.
3. Test devices are not to be disturbed.

Further guidance on required building conditions are located on the next page.

Test devices are not dangerous in anyway. The type of devices used for this testing will include:

Short-term test kits. It is important that these devices are fully open and not covered. They will be analyzed by a laboratory.

Continuous radon monitors. These are electronic devices that record hourly radon readings.

Long-term test kits. It is important that these devices are not covered. They will be analyzed by a laboratory.

Declaration of Observed Compliance

Failure to reasonably maintain test conditions can lead to unnecessary expense, disruptions and unreliable data. Disturbing test devices can also cause unreliable or invalid test results.

- Please report in a timely manner if required test conditions are not maintained.
- Please sign and return this form once the test is complete.

To the best of my knowledge, the required conditions were maintained during the test.

Yes No

Name: Nadine Toff

Signature: Nadine Toff

For more information regarding on-site activities, contact:

Licensed Measurement Professional:

NOTICE OF INSPECTION FOR ALL FACILITATING STAFF

Lance

A radon test is scheduled for:

Building: Stevenson Elementary

Test Start Date: 12-4-23 Test End Date: 12-7-23

Please help to maintain the required test conditions throughout the building

1. All windows and exterior doors must be kept closed (aside from momentary entry or exit) for 12 hours before and during the test.
2. Heating and cooling systems must be set to normal occupied operating temperatures.
3. Test devices are not to be disturbed.

Further guidance on required building conditions are located on the next page.

Test devices are not dangerous in anyway. The type of devices used for this testing will include:

Short-term test kits. It is important that these devices are fully open and not covered. They will be analyzed by a laboratory.

Continuous radon monitors. These are electronic devices that record hourly radon readings.

Long-term test kits. It is important that these devices are not covered. They will be analyzed by a laboratory.

Declaration of Observed Compliance

Failure to reasonably maintain test conditions can lead to unnecessary expense, disruptions and unreliable data. Disturbing test devices can also cause unreliable or invalid test results.

- Please report in a timely manner if required test conditions are not maintained.
- Please sign and return this form once the test is complete.

To the best of my knowledge, the required conditions were maintained during the test.

Yes No

Name: Lance Koller

Signature: [Signature]

For more information regarding on-site activities, contact:

Licensed Measurement Professional:

NOTICE OF INSPECTION FOR ALL FACILITATING STAFF

A radon test is scheduled for:

Building: Stevenson Elementary Kitchen

Test Start Date: 12-4-23 Test End Date: 12-7-23

Please help to maintain the required test conditions throughout the building

1. All windows and exterior doors must be kept closed (aside from momentary entry or exit) for 12 hours before and during the test.
2. Heating and cooling systems must be set to normal occupied operating temperatures.
3. Test devices are not to be disturbed.

Further guidance on required building conditions are located on the next page.

Test devices are not dangerous in anyway. The type of devices used for this testing will include:

Short-term test kits. It is important that these devices are fully open and not covered. They will be analyzed by a laboratory.

Continuous radon monitors. These are electronic devices that record hourly radon readings.

Long-term test kits. It is important that these devices are not covered. They will be analyzed by a laboratory.

Declaration of Observed Compliance

Failure to reasonably maintain test conditions can lead to unnecessary expense, disruptions and unreliable data. Disturbing test devices can also cause unreliable or invalid test results.

- Please report in a timely manner if required test conditions are not maintained.
- Please sign and return this form once the test is complete.

To the best of my knowledge, the required conditions were maintained during the test.

Yes No

Name: Renee Arbogast

Signature: Renee Arbogast

For more information regarding on-site activities, contact:

Licensed Measurement Professional:

COMMITMENTS, ADVISORIES, AND AUTHORIZATIONS

I have been informed of test plan options that comply with ANSI/AARST MALB 2014 with 1/2021 Revisions.

To the extent reasonably possible, I commit to helping ensure that building conditions required to achieve reliable radon tests are met, as portrayed herein, by accepting the following responsibilities:

1. **BUILDING PREPARATION:** I accept responsibility that, no later than 12 hours prior to testing, each building scheduled for testing will be reviewed for compliance with closed-building requirements.
2. **COMPLIANCE VERIFICATION:** I accept responsibility for taking actions that could include adjustments to HVAC units and repairs, such as for broken windows, where completion is required no later than 12 hours prior to testing. Verification will be provided as signed/initialed below or initialed on a log sheet, to be provided.
3. **PRIOR NOTIFICATIONS:** Notices will be distributed to all tested, non-tested dwellings and posted in publicly accessible areas such as in corridors, elevators and offices in a timely manner, no later than required by local law for gaining access to a dwelling or not later than the day before testing.
4. **ACCESS:** Access will be provided to each location being tested within a building, with intent to access all locations within a building on the same day for both the event of placing test devices, and a second event for retrieving test devices.

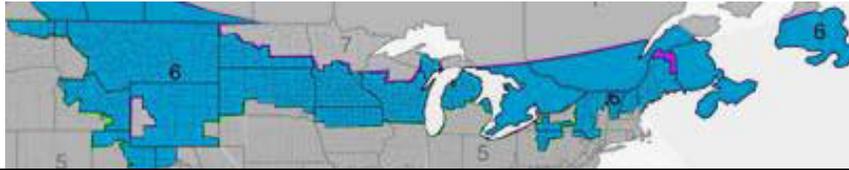
A valid measurement at all test locations in each building is required. There is a possibility of delays and additional expense when test locations are not readily accessible or where requirements for *closed-building conditions* are not observed.

Client: Fridley Public Schools / ISD 14
Building: Stevenson + Hayes Elementary School
Name: Jonathan Spitzer
Signature: [Signature]
Date: 11-2-23

Appendix D

Average Building Operating Conditions Comparison

Climate Zone 6 (includes Southern MN)



		Annual 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: 34.94 Minimum: 22.00 Maximum: 50.00
	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
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 Forms

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? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the test period include school breaks or holidays? <input type="checkbox"/> Yes <input type="checkbox"/> No	

SCHOOL RADON TESTING REPORTING FORM

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

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? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the test period include school breaks or holidays? <input type="checkbox"/> Yes <input type="checkbox"/> No	

SCHOOL RADON TESTING REPORTING FORM

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



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)
	¹	²	¹	²	¹	²	
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	OSTORAGEEA	< 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

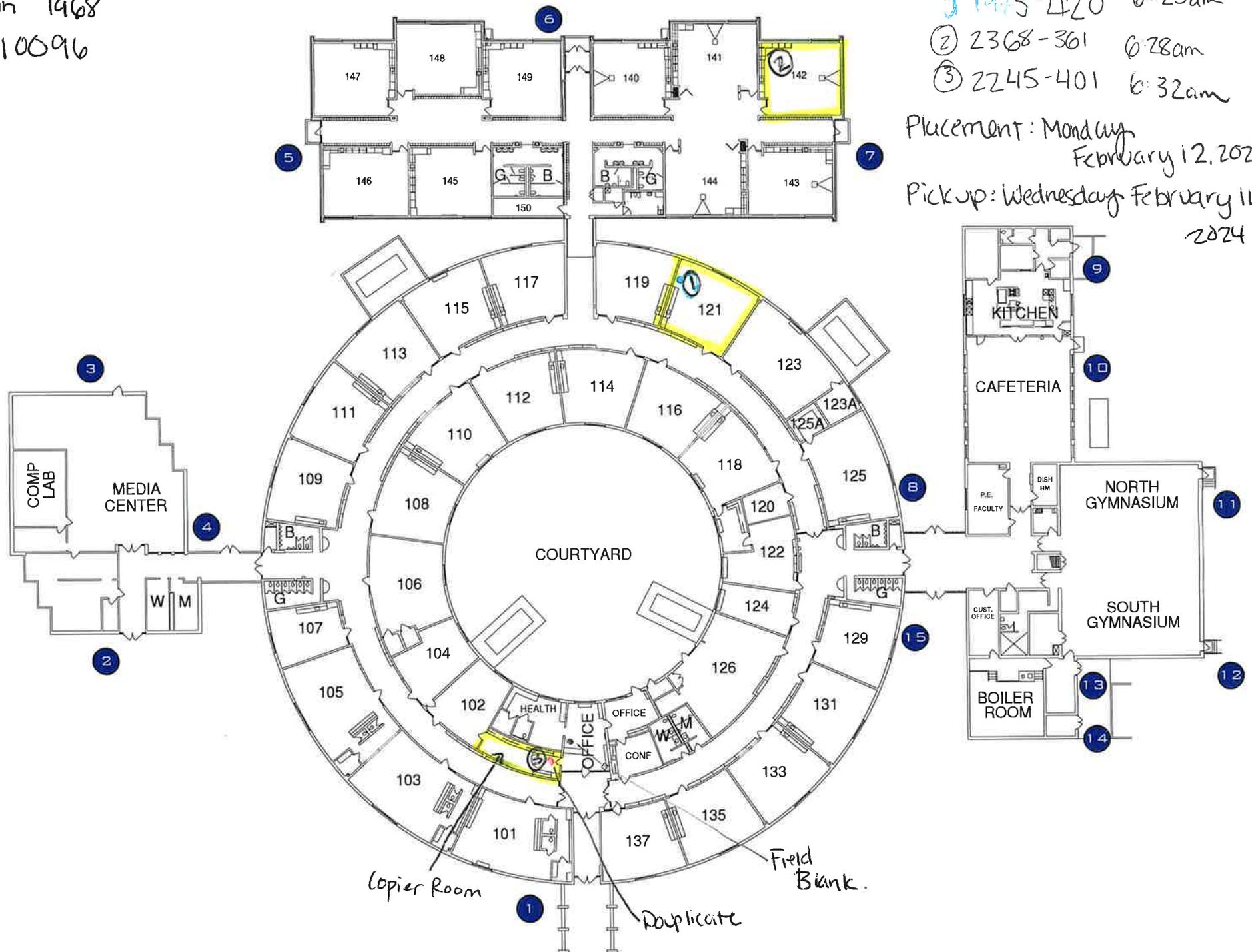
Maps

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

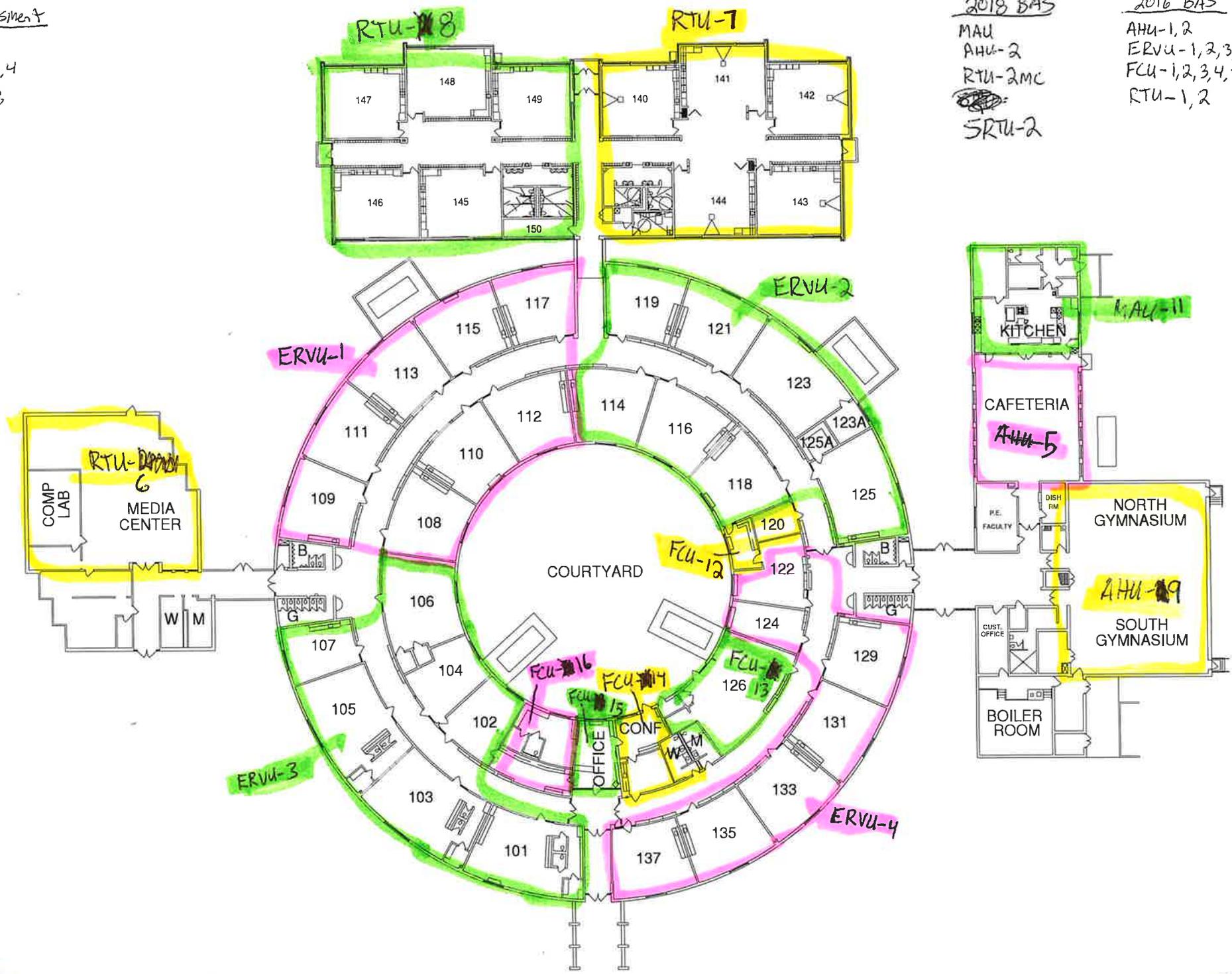


Vent Assessment

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

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

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



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: ± 1.66%

Time	02/12/2024		02/13/2024		02/14/2024	
	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**

Time	02/12/2024			02/13/2024			02/14/2024		
	Temp	InHg	RH	Temp	InHg	RH	Temp	InHg	RH
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, Quality Assurance Mgr.
Radalink, Inc. NRPP 135791T

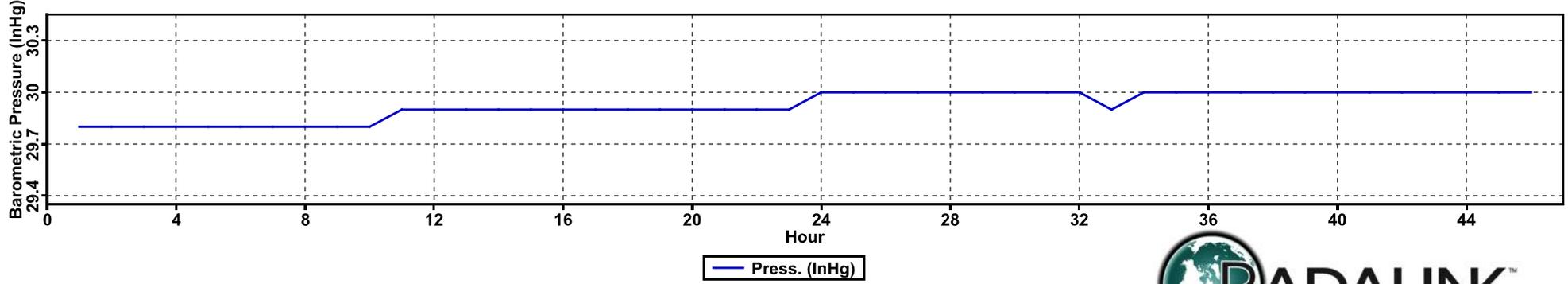
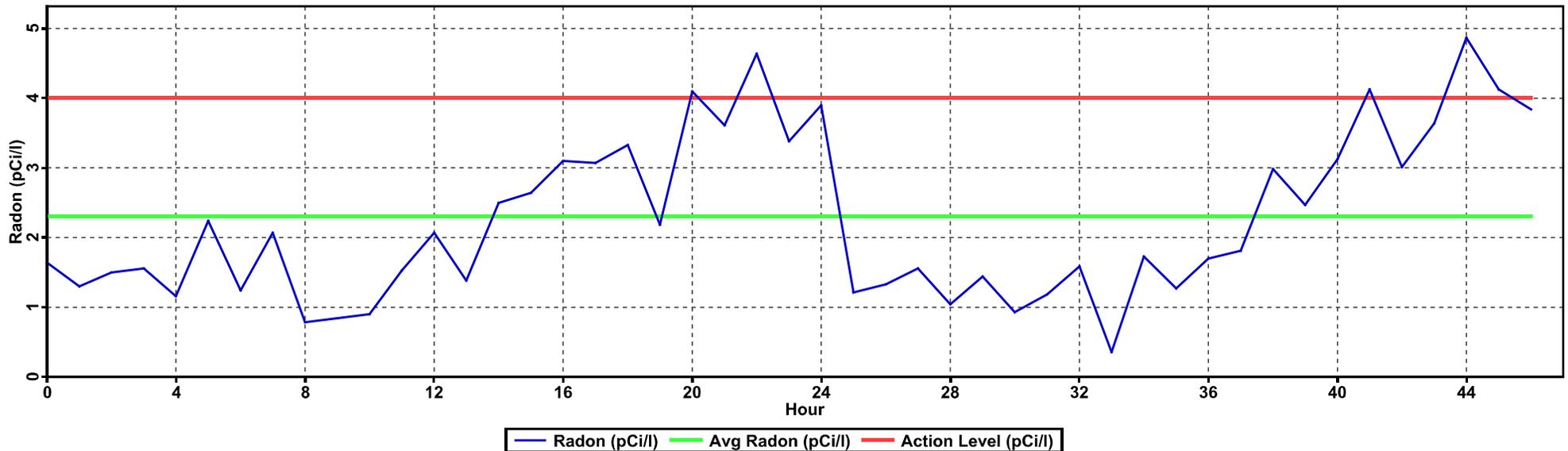
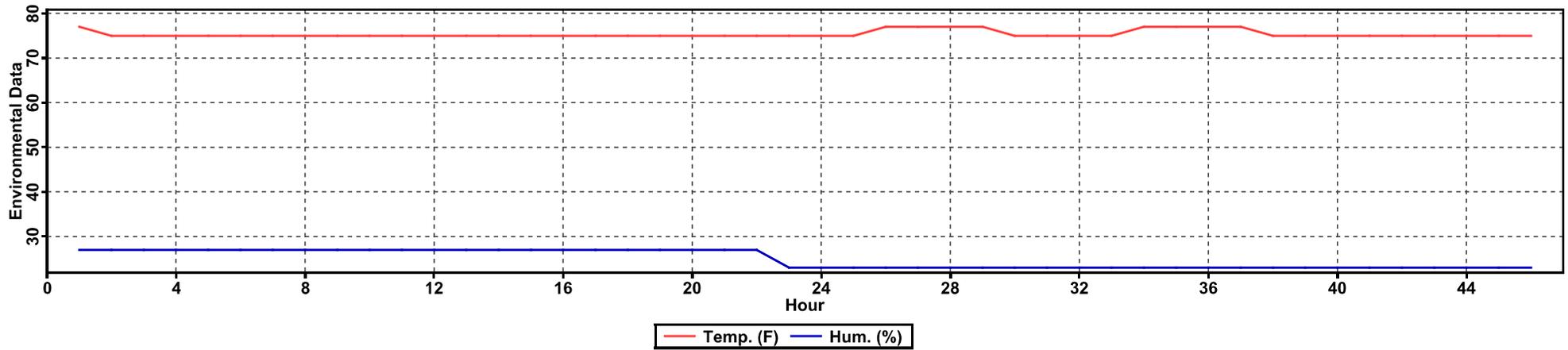
	Minimum	Average	Maximum	Variance
Temperature:	75.0	75.4	77.0	0.63
Barometric Pressure:	29.8	29.9	30.0	0.01
Relative Humidity:	23	25	27	3.99

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: ± 2.03%

Time	02/12/2024		02/13/2024		02/14/2024	
	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**

Time	02/12/2024			02/13/2024			02/14/2024		
	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

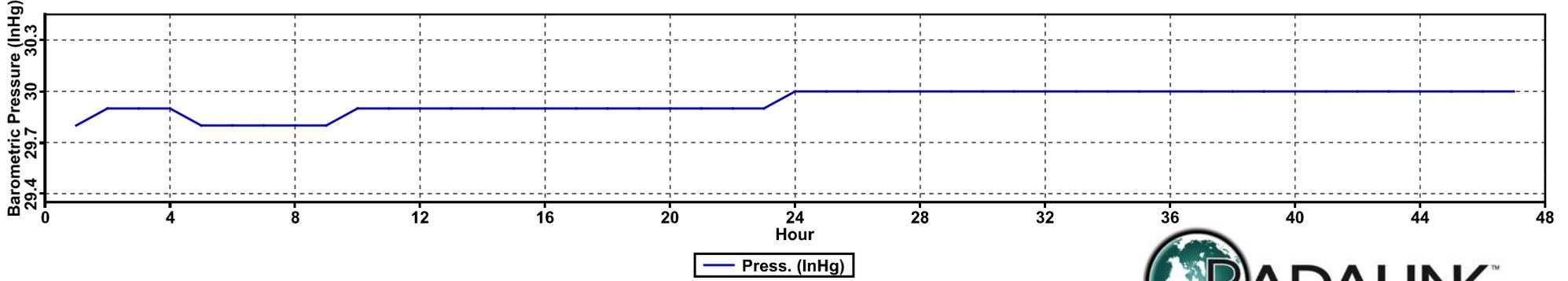
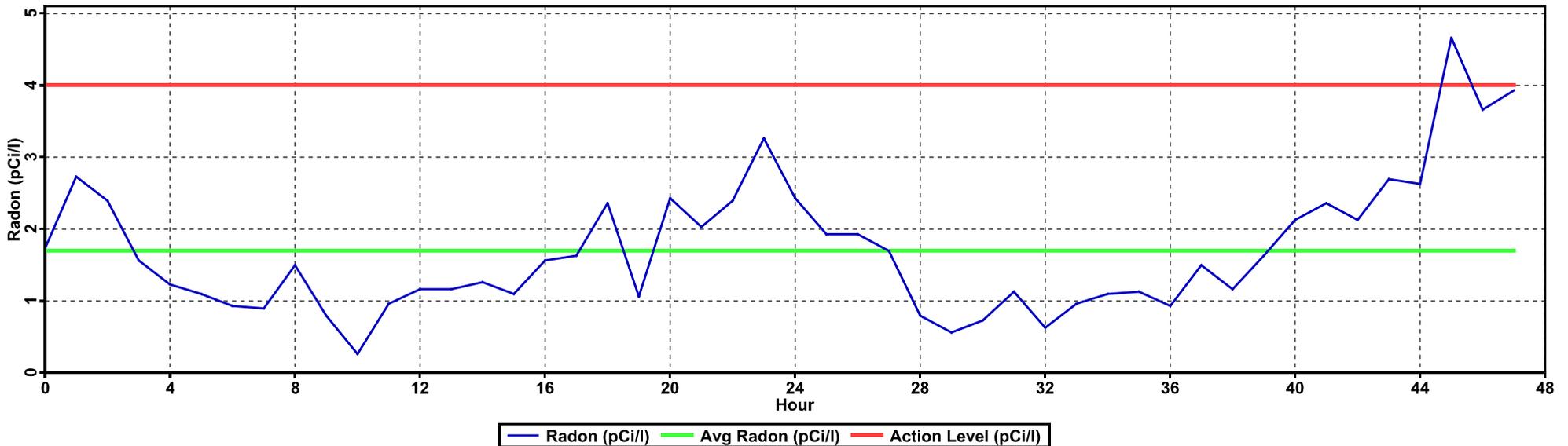
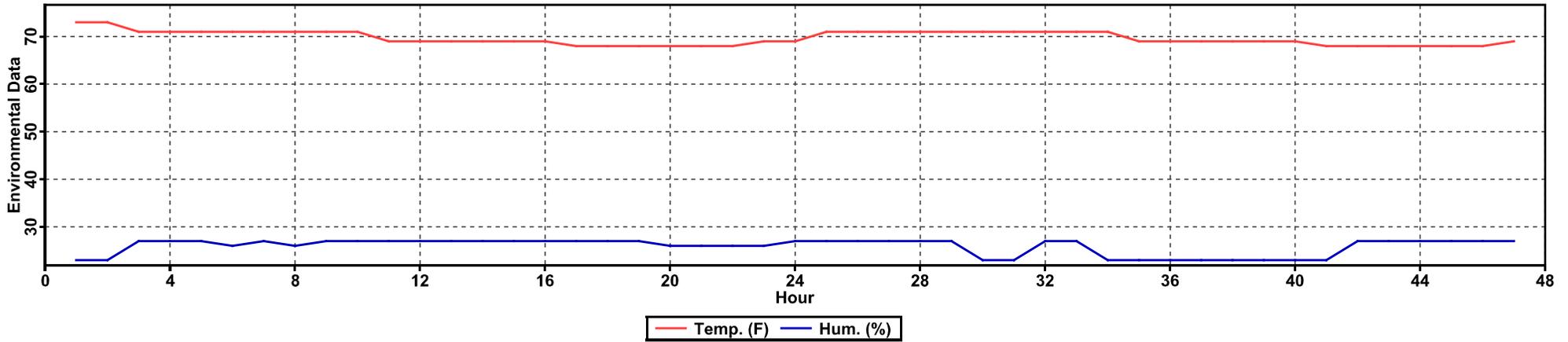
	Minimum	Average	Maximum	Variance
Temperature:	68.0	69.7	73.0	2.0
Barometric Pressure:	29.8	29.9	30.0	0.01
Relative Humidity:	23	26	27	2.9

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: ± 2.10%

Time	02/12/2024		02/13/2024		02/14/2024	
	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**

Time	02/12/2024			02/13/2024			02/14/2024		
	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, Quality Assurance Mgr.
Radalink, Inc. NRPP 135791T

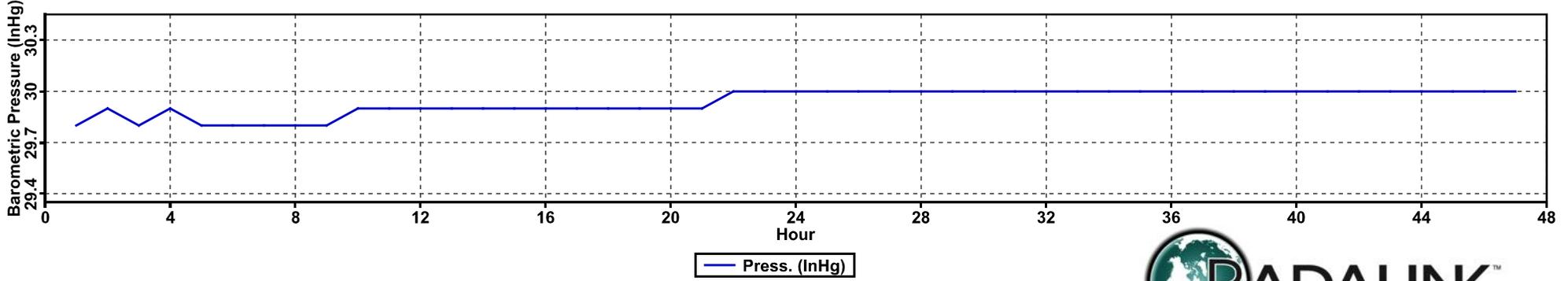
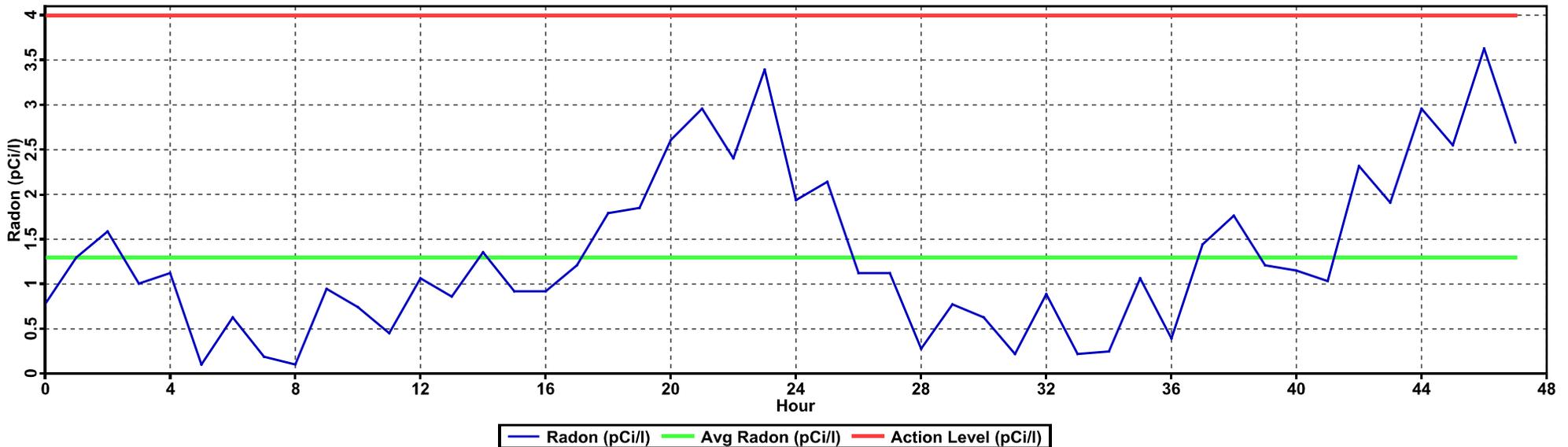
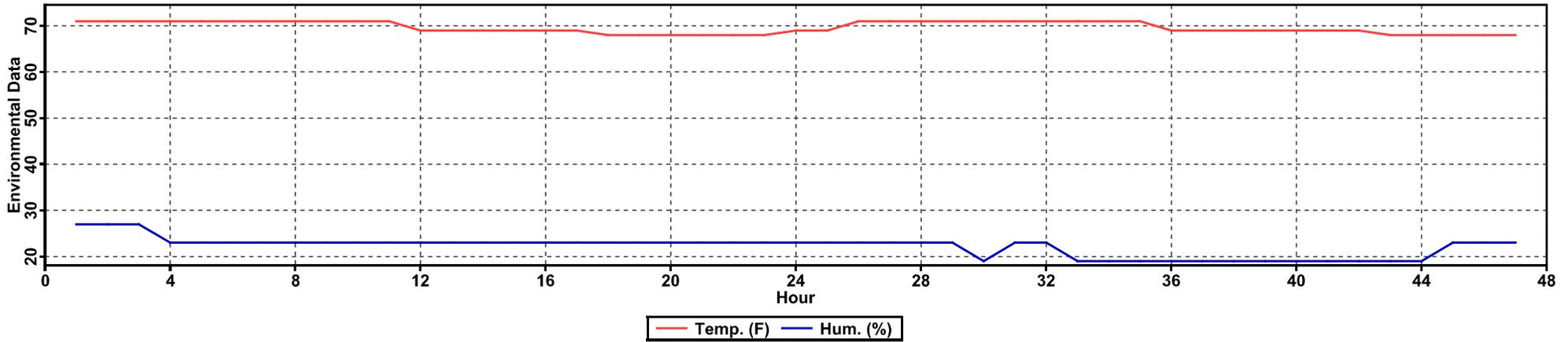
	Minimum	Average	Maximum	Variance
Temperature:	68.0	69.7	71.0	1.59
Barometric Pressure:	29.8	29.9	30.0	0.01
Relative Humidity:	19	22	27	4.72

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 M.R.S.A., 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

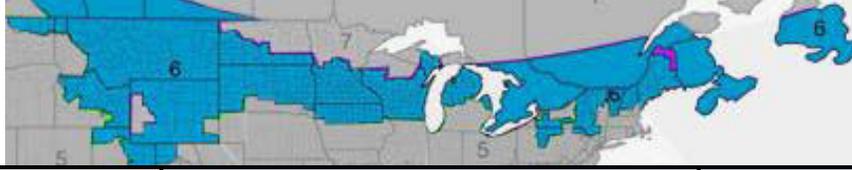
RHODE ISLAND NOTICE TO CLIENTS: This notice is provided to you by an organization or individual licenses and/or certified by the Rhode Island Dept. of Health to perform radon measurements. Any questions, comments, or complaints regarding the person performing these measurements may be directed to the 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? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the test period include school breaks or holidays? <input type="checkbox"/> Yes <input type="checkbox"/> No	

SCHOOL RADON TESTING REPORTING FORM

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

April 1, 2022

Mr. Bryan Brown
Fridley Public Schools
6000 West Moore Lake Drive
Fridley, MN 55432



**RE: Fridley Community Center & Fridley Middle School
Short-Term Radon Testing Results
IEA Project #202111221**

Dear Mr. Brown:

IEA placed 202 Air Chek Pro Chek short-term radon test kits in the following two (2) district buildings for the purpose of evaluating radon levels:

- Fridley Community Center – 57 samples
- Fridley Middle School – 145 samples

The radon samples were placed and retrieved by the following Minnesota Department of Health (MDH) licensed Radon Measurement Professionals:

Measurement Professional	License Number	Signature
Nate Wiklund	RMEA-00439	
Amanda Edberg	RMEA-00041	
Robert Watson	RMEA-00385	

Conditions of air intakes were good and the ventilation system was operating in good condition at the time of placement and retrieval.

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.

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

IEA placed 202 Air Chek Pro Chek short-term radon test kits in frequently occupied areas in the two district buildings for the purpose of sampling for radon in accordance with the MDH’s *Guidance for Radon Testing in Minnesota Schools* (2021) and ANSI/AARST ‘*Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*’ (ANSI/AARST MALB 2014 with 1/21 revisions).

A total of 202 radon test kits were placed from February 28, 2022, to March 3, 2022, for a total short-term sampling period of three (3) days. Two (2) test kits were found to be damaged at the time of pick-up. The radon test kits were analyzed by AirChek, Inc., MDH license #RL-00003, located at 1936 Butler Bridge Road, Mills River, NC 28759. The sampling and analysis methodologies are provided in Appendix A.

IEA followed ANSI/AARST MALB 2014 with 1/21 revisions for quality assurance measurements by including duplicate kits, control kits (blanks), and spiked kits.

Client communications and commitments were delivered to the client on the following dates:

- October 22, 2021, for Client Advisories and Authorizations
- February 28, 2022, for Facilitating Staff Commitments
- February 28, 2022, for Occupant notices

EVALUATION CRITERIA

The MDH and the EPA have established a recommended action level in intended to be 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 as it normally is during school days. 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.

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.

CRM: Continuous Radon Monitor

RESULTS & DISCUSSION

The laboratory reports, which include maps of each building with sampling locations marked, are provided in Appendix B. Following are summary results for each building.

Fridley Community Center

6085 Seventh Street NE
 Fridley MN 55432

A total of 57 test kits were placed at Fridley Community Center. The results indicated that radon levels were below the action level of 4 pCi/L. See Table 1 for a summary of the results:

TABLE 1: Fridley Community Center RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	2.0 – 2.9 pCi/L	3.0 – 3.9 pCi/L	≥ 4 pCi/L
Number of Tests	57	0	0	0
All below action level				

pCi/L: picocuries per liter

Fridley Middle School

6100 West Moore Lake Drive
 Fridley MN 55432

A total of 145 test kits were placed at Fridley Middle School. Two (2) test kits, one each in rooms 140 (a duplicate) and 166B, were found to be damaged when the test kits were collected. One (1) test kit, for Room 160F, was deemed not able to be tested by the lab. The number of damaged test kits did not exceed allowance in the ANSI/AARST MALB 2014 with 1/21 revisions standard. The results for the remaining 142 test kits indicated that radon levels were below the action level of 4 pCi/L. See Table 2 for a summary of the results:

TABLE 2: Fridley Middle School RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	2.0 – 2.9 pCi/L	3.0 – 3.9 pCi/L	≥ 4 pCi/L
Number of Tests	142	0	0	0
All below action level				

pCi/L: picocuries per liter

CONCLUSIONS & RECOMMENDATIONS

The radon levels in the sampled locations were below the EPA action level of 4 pCi/L.

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 radon sampling in the district and are representative of the locations 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 environmental, health and safety practices. Other than as provided in the preceding sentence and in our Proposal #10036 dated October 22, 2021, regarding radon sampling services at the district locations, including the General Conditions attached thereto, no warranties are extended or made.

IEA appreciates the opportunity to submit this analysis to the district. Should you require additional radon testing or have any questions regarding radon or any other environmental, health, or safety-related concerns, please do not hesitate to contact our office.

Sincerely,

IEA, Inc.



Amanda Edberg, ASP
Sr Account Manager

AE/wb 040122

Enc.

Appendix A

Methodology and Quality Control Measurements

Sampling Methodology

IEA placed Air Chek, Inc. Pro Chek activated charcoal radon test kits designed specifically for the detection of gamma emissions caused by the decay of Radon-222 and its daughter products. The kit is made of a padded envelope which contains activated charcoal. The kit is placed during normal occupancy HVAC operations and sealed with vinyl tape after 72 to 96 hours of indoor exposure. Individual kits are uniquely identified with a number and corresponding bar code.

Upon receipt at the analytical laboratory, the kits are logged in using the unique numbers assigned to each kit. The kits are placed on a gamma detector to count the gamma emissions from the decay of radon adsorbed by the charcoal. A calibration factor determined in part by the exposure time and decay time is used to calculate the radon concentration. A correction factor is also applied for weight gain from any moisture absorbed by the charcoal during the sampling period.

Any unusual conditions are noted on the processing form and shown on the exposure report.

MDH and ANSI/AARST MALB 2014 Quality Control Measurements

IEA followed ANSI/AARST MALB 2014 with 1/21 revisions and MDH recommendations for quality assurance measurements to ensure the accuracy of test results. Quality assurance measurements include side-by-side test kits (duplicates) and unexposed control test kits (blanks).

Duplicates are pairs of test kits placed 4-8 inches apart for the same test period. Duplicates are stored, placed, retrieved, and shipped to the laboratory for analysis in the same manner as the other test kits so that the laboratory cannot distinguish them. Since duplicates are placed side-by-side, the measured values for radon should be the same. The average of all duplicates' 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. Duplicate averages are listed in Table 1.

Location		Test 1 (pCi/L)	Test 2 (pCi/L)	Average (pCi/L)
Building	Room/Area			
Fridley Community Center	110	1.0	1.1	1.1
Fridley Community Center	114	< 0.3	< 0.3	< 0.3
Fridley Community Center	121	< 0.3	< 0.3	< 0.3
Fridley Community Center	129	1.1	< 0.3	0.7
Fridley Community Center	Main 5	< 0.3	0.7	0.5
Fridley Middle School	100	< 0.3	< 0.3	< 0.3
Fridley Middle School	106	0.7	0.8	0.8
Fridley Middle School	107	< 0.3	< 0.3	< 0.3
Fridley Middle School	116	0.6	0.7	0.7
Fridley Middle School	126	1.1	0.8	1.0
Fridley Middle School	152	< 0.3	0.6	0.4
Fridley Middle School	160	1.1	1.2	1.2
Fridley Middle School	162	1.0	0.7	0.9
Fridley Middle School	178	< 0.3	0.8	0.5
Fridley Middle School	185	< 0.3	< 0.3	< 0.3
Fridley Middle School	188	0.6	0.8	0.7
Fridley Middle School	192	1.0	0.8	0.9
Fridley Middle School	194	0.6	1.0	0.8
Fridley Middle School	200	< 0.3	0.7	0.5

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, Office blanks, and Lab-Transit Blanks are listed in Table 2.

Table 2: Blanks				
Date	Device ID	Type of Blank	Description	Radon Concentration
3/7/2022	11129189	Field	FStorage Room A	< 0.3
3/8/2022	11129190	Field	FStorage Room B	< 0.3
3/8/2022	11129192	Field	FStorage Room C	< 0.3
3/7/2022	11129191	Field	FStorage Room D	< 0.3
3/7/2022	11129197	Field	FStorage Room E	< 0.3
3/8/2022	11129198	Field	FStorage Room F	< 0.3
1/18/2022	11019439	Office	Office 1	0.8
1/18/2022	11019433	Office	Office 2	< 0.3
1/18/2022	11019441	Office	Office 3	< 0.3
1/21/2022	11094804	Lab-Transit	LTBP-4	< 0.3
1/21/2022	11094805	Lab-Transit	LTBP-5	< 0.3
1/21/2022	11094806	Lab-Transit	LTBP-6	< 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.

Table 3: Spiked Detectors			
Date	Device ID	Measured Value (pCi/L)	Reference Value (pCi/L)
11/11/2021	11019101	30.4	36.0
11/11/2021	11019102	32.6	36.0
11/11/2021	11019103	32.8	36.0
11/11/2021	11019104	31.2	36.0
11/11/2021	11019105	32.0	36.0
11/11/2021	11019106	31.2	36.0
12/28/2021	11021538	27.1	32.3
12/28/2021	11021537	28.9	32.3
12/28/2021	11021509	28.8	32.3
12/28/2021	11021514	27.1	32.3
12/28/2021	11021516	25.1	32.3
12/28/2021	11021520	28.1	32.3
1/27/2022	11019414	27.1	30.3
1/27/2022	11019415	28.2	30.3
1/27/2022	11019416	28.6	30.3
1/27/2022	11019417	27.1	30.3
1/27/2022	11019418	26.9	30.3
1/27/2022	11019419	29.0	30.3

Appendix B

Laboratory Reports and Maps

Radon test result report for:

**FRIDLEY PUBLIC SCHOOLS
FRIDLEY COMMUNITY CENTER**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11130131	103	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.6 ± 0.3	2022-03-07
11130147	105	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	0.7 ± 0.3	2022-03-07
11130142	106	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	0.7 ± 0.4	2022-03-08
11130149	107	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	0.8 ± 0.3	2022-03-08
11130143	108	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-07
11130139	109	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	0.7 ± 0.3	2022-03-07
11130145	111	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-07
11130141	112	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-08
11130133	116	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	0.7 ± 0.3	2022-03-07
11130138	122	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-08
11130101	123	2022-02-28 @ 9:00 am	2022-03-03 @ 9:00 am	0.7 ± 0.3	2022-03-07
11130105	124	2022-02-28 @ 9:00 am	2022-03-03 @ 9:00 am	< 0.3	2022-03-08
11130104	125	2022-02-28 @ 9:00 am	2022-03-03 @ 9:00 am	0.7 ± 0.3	2022-03-08
11130102	126A	2022-02-28 @ 9:00 am	2022-03-03 @ 9:00 am	1.2 ± 0.4	2022-03-08
11130110	126B	2022-02-28 @ 9:00 am	2022-03-03 @ 9:00 am	1.0 ± 0.4	2022-03-08
11130106	127	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.7 ± 0.3	2022-03-08
11130111	128	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.9 ± 0.4	2022-03-08
11130114	130	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.8 ± 0.3	2022-03-08
11130109	131	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-08
11130107	132	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-07
11130117	134	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.8 ± 0.3	2022-03-07
11130119	135	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.8 ± 0.3	2022-03-07
11130118	136	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.8 ± 0.3	2022-03-07
11130103	CUSTODIAL OFFICE	2022-02-28 @ 9:00 am	2022-03-03 @ 9:00 am	0.6 ± 0.3	2022-03-07
11130144	D110 - 1	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	1.0 ± 0.4	2022-03-08
11130146	D110 - 2	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	1.1 ± 0.3	2022-03-07
11130140	D114 - 1	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-07
11130134	D114 - 2	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-08
11130136	D121 - 1	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-07
11130137	D121 - 2	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-07
11130112	D129 - 1	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	1.1 ± 0.4	2022-03-08
11130113	D129 - 2	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-08
11130148	DANCE ROOM	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	1.2 ± 0.3	2022-03-07
11130116	DMAIN 5 - 1	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-08
11130122	DMAIN 5 - 2	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.7 ± 0.3	2022-03-07
11130132	DOOR 10 RECEPTION	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.6 ± 0.3	2022-03-07
11129189	FSTORAGE ROOM A	2022-02-28 @ 1:00 pm	2022-03-03 @ 12:00 pm	< 0.3	2022-03-07

Radon test result report for:

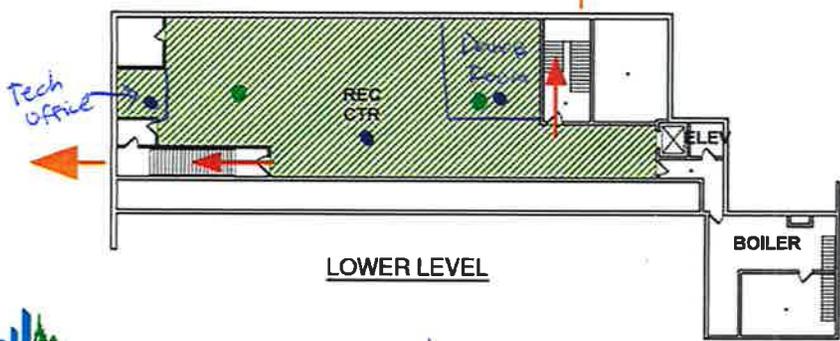
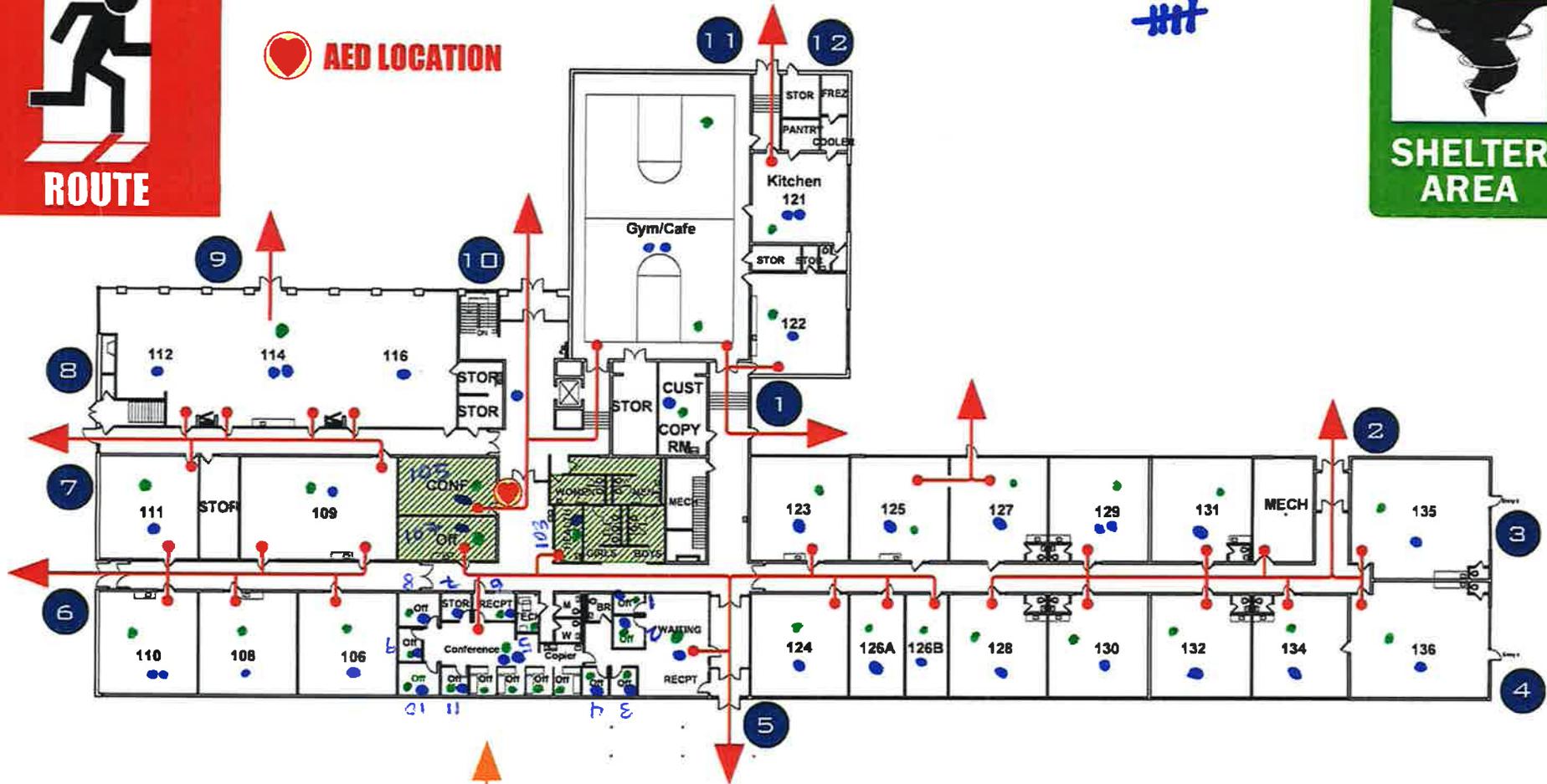
**FRIDLEY PUBLIC SCHOOLS
FRIDLEY COMMUNITY CENTER**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11129190	FSTORAGE ROOM B	2022-02-28 @ 1:00 pm	2022-03-03 @ 12:00 pm	< 0.3	2022-03-08
11129192	FSTORAGE ROOM C	2022-02-28 @ 1:00 pm	2022-03-03 @ 12:00 pm	< 0.3	2022-03-08
11129191	FSTORAGE ROOM D	2022-02-28 @ 1:00 pm	2022-03-03 @ 12:00 pm	< 0.3	2022-03-07
11129197	FSTORAGE ROOM E	2022-02-28 @ 1:00 pm	2022-03-03 @ 12:00 pm	< 0.3	2022-03-07
11129198	FSTORAGE ROOM F	2022-02-28 @ 1:00 pm	2022-03-03 @ 12:00 pm	< 0.3	2022-03-08
11130130	GYM N	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-07
11130135	GYM S	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.9 ± 0.4	2022-03-08
11130120	MAIN	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.9 ± 0.4	2022-03-08
11130108	MAIN 1	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-07
11130124	MAIN 10	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-07
11130123	MAIN 11	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.6 ± 0.3	2022-03-08
11130115	MAIN 2	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-08
11130121	MAIN 3	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-08
11130127	MAIN 4	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.7 ± 0.3	2022-03-07
11130128	MAIN 6	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-07
11130129	MAIN 7	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	< 0.3	2022-03-07
11130125	MAIN 8	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	1.1 ± 0.4	2022-03-07
11130126	MAIN 9	2022-02-28 @ 9:00 am	2022-03-03 @ 10:00 am	0.8 ± 0.3	2022-03-07
11130150	REC CENTER	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	1.4 ± 0.3	2022-03-07
11130151	TECH OFFICE	2022-02-28 @ 10:00 am	2022-03-03 @ 10:00 am	1.8 ± 0.4	2022-03-07



 **AED LOCATION**

● Radon Detectors (46) 



PLEASE NOTE!

THIS MAP INDICATES PRIMARY EXIT ROUTES ONLY. BE AWARE THAT YOUR EXIT ROUTE MAY BE BLOCKED IN THE EVENT OF A FIRE OR OTHER EMERGENCY. STUDY THIS MAP CAREFULLY AND HAVE A BACK UP PLAN READY.



INSTITUTE FOR ENVIRONMENTAL ASSESSMENT

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

COMMUNITY EDUCATION CENTER

MAIN LEVEL FLOOR PLAN | Fridley ISD #14
SEPT 2016



Radon test result report for:

**FRIDLEY PUBLIC SCHOOLS
FRIDLEY MIDDLE SCHOOL**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11129101	100	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	1.1 ± 0.4	2022-03-08
11129107	100A	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	0.9 ± 0.3	2022-03-08
11129102	100B	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	0.9 ± 0.3	2022-03-08
11129108	100D	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.7 ± 0.3	2022-03-08
11129104	101	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.9 ± 0.3	2022-03-08
11129110	101A	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.6 ± 0.4	2022-03-08
11129111	101B	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.6 ± 0.3	2022-03-08
11129115	103	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.7 ± 0.3	2022-03-08
11129112	104B	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.7 ± 0.3	2022-03-07
11129116	105	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.6 ± 0.3	2022-03-08
11129119	106	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	< 0.3	2022-03-08
11129114	106A	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	< 0.3	2022-03-08
11129123	112	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	< 0.3	2022-03-08
11129124	114	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	< 0.3	2022-03-08
11129126	115	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.8 ± 0.3	2022-03-08
11129122	117	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.7 ± 0.3	2022-03-07
11129131	118	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.5 ± 0.3	2022-03-08
11129132	120	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.7 ± 0.3	2022-03-08
11129130	121	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.6 ± 0.3	2022-03-07
11129133	122	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.9 ± 0.3	2022-03-08
11129134	123	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.0 ± 0.3	2022-03-07
11129129	124	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.2 ± 0.4	2022-03-08
11129135	125	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.9 ± 0.3	2022-03-07
11129140	125A	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.9 ± 0.3	2022-03-07
11129139	127	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.2 ± 0.4	2022-03-08
11129138	128	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.8 ± 0.3	2022-03-08
11129143	129	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.0 ± 0.4	2022-03-08
11129141	130	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.8 ± 0.3	2022-03-07
11129142	130A	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.8 ± 0.3	2022-03-07
11129144	132	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.1 ± 0.3	2022-03-07
11129146	133/139	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.4 ± 0.3	2022-03-07
11129145	134	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.6 ± 0.3	2022-03-07
11129148	136	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.5 ± 0.4	2022-03-07
11129149	138	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.9 ± 0.4	2022-03-08
11129153	141	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.2 ± 0.4	2022-03-08
11129152	142	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.1 ± 0.3	2022-03-08
11129158	144	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.0 ± 0.3	2022-03-07

Radon test result report for:

**FRIDLEY PUBLIC SCHOOLS
FRIDLEY MIDDLE SCHOOL**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11129154	146	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.6 ± 0.3	2022-03-07
11129155	147	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	< 0.3	2022-03-07
11129159	148A	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.0 ± 0.3	2022-03-07
11129160	148A	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.8 ± 0.3	2022-03-07
11129156	149	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.9 ± 0.3	2022-03-07
11129157	150	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.7 ± 0.3	2022-03-07
11129163	151	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.8 ± 0.3	2022-03-08
11129164	154	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.7 ± 0.3	2022-03-07
11129165	154A	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.8 ± 0.3	2022-03-08
11129166	156	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	< 0.3	2022-03-07
11130184	158	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	1.1 ± 0.3	2022-03-07
11130177	160A	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	1.0 ± 0.4	2022-03-08
11129106	160A E	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	< 0.3	2022-03-07
11129105	160A N	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	< 0.3	2022-03-07
11129117	160A S	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	< 0.3	2022-03-08
11130183	160C	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	1.1 ± 0.4	2022-03-08
11130179	160D	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	1.1 ± 0.3	2022-03-08
11130178	160F	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	???? IF1	2022-03-07
11130187	161	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	0.9 ± 0.3	2022-03-08
11130188	163	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.7 ± 0.3	2022-03-07
11130185	164	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	< 0.3	2022-03-08
11130186	164A	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	0.7 ± 0.3	2022-03-08
11130193	165	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.7 ± 0.4	2022-03-08
11130200	165A	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	< 0.3	2022-03-08
11130191	166	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	0.7 ± 0.3	2022-03-08
11130199	167	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	0.8 ± 0.3	2022-03-07
11130195	169	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	1.0 ± 0.4	2022-03-07
11130189	170	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	0.9 ± 0.3	2022-03-07
11130194	170A	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	1.0 ± 0.4	2022-03-08
11130190	171	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	< 0.3	2022-03-08
11130197	172	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.7 ± 0.4	2022-03-08
11130196	172A	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	1.1 ± 0.3	2022-03-08
11130206	173	2022-02-28 @ 10:00 am	2022-03-03 @ 12:00 pm	0.8 ± 0.3	2022-03-07
11130210	173A	2022-02-28 @ 10:00 am	2022-03-03 @ 12:00 pm	0.9 ± 0.3	2022-03-07
11130213	173B	2022-02-28 @ 10:00 am	2022-03-03 @ 12:00 pm	1.1 ± 0.4	2022-03-08
11130211	173C	2022-02-28 @ 10:00 am	2022-03-03 @ 12:00 pm	< 0.3	2022-03-07
11130209	173D	2022-02-28 @ 10:00 am	2022-03-03 @ 12:00 pm	0.7 ± 0.3	2022-03-07

Radon test result report for:

**FRIDLEY PUBLIC SCHOOLS
FRIDLEY MIDDLE SCHOOL**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11130212	173E	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	1.0 ± 0.3	2022-03-08
11130156	173F	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	< 0.3	2022-03-07
11130152	173G	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.9 ± 0.4	2022-03-08
11130153	173H	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.8 ± 0.3	2022-03-07
11130154	175	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.7 ± 0.3	2022-03-07
11130155	175A	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.6 ± 0.3	2022-03-07
11130161	177	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.8 ± 0.3	2022-03-07
11130158	179	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.5 ± 0.3	2022-03-07
11130202	180 E	2022-02-28 @ 10:00 am	2022-03-03 @ 12:00 pm	0.9 ± 0.3	2022-03-08
11130208	180 N	2022-02-28 @ 10:00 am	2022-03-03 @ 12:00 pm	0.9 ± 0.3	2022-03-08
11130204	180 S	2022-02-28 @ 10:00 am	2022-03-03 @ 12:00 pm	1.4 ± 0.4	2022-03-08
11130205	180A	2022-02-28 @ 10:00 am	2022-03-03 @ 12:00 pm	0.7 ± 0.3	2022-03-07
11130198	180B	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	< 0.3	2022-03-08
11130159	180C	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.9 ± 0.3	2022-03-08
11130163	180D	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	1.1 ± 0.4	2022-03-07
11130160	180E	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.7 ± 0.4	2022-03-08
11130166	184 E	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	< 0.3	2022-03-08
11130170	184 MIDDLE	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.6 ± 0.3	2022-03-08
11130171	184 W	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	< 0.3	2022-03-08
11130164	184A	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.8 ± 0.3	2022-03-07
11130165	184B	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	1.4 ± 0.4	2022-03-08
11130174	186	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	1.1 ± 0.4	2022-03-08
11129186	190	2022-02-28 @ 1:00 pm	2022-03-03 @ 2:00 pm	< 0.3	2022-03-07
11129178	195	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.7 ± 0.3	2022-03-08
11129175	195B	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.8 ± 0.3	2022-03-07
11129183	195C	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	< 0.3	2022-03-07
11129179	196	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	< 0.3	2022-03-07
11129177	196B	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.2 ± 0.4	2022-03-07
11129176	198	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.6 ± 0.3	2022-03-07
11129171	198A	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.7 ± 0.3	2022-03-08
11129172	198B	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.8 ± 0.3	2022-03-08
11129170	202	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	< 0.3	2022-03-07
11129168	204	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.8 ± 0.4	2022-03-08
11129169	204A	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.9 ± 0.3	2022-03-07
11129109	D100E - 1	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	< 0.3	2022-03-08
11129103	D100E - 2	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	< 0.3	2022-03-08
11129118	D106B - 1	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.7 ± 0.3	2022-03-08

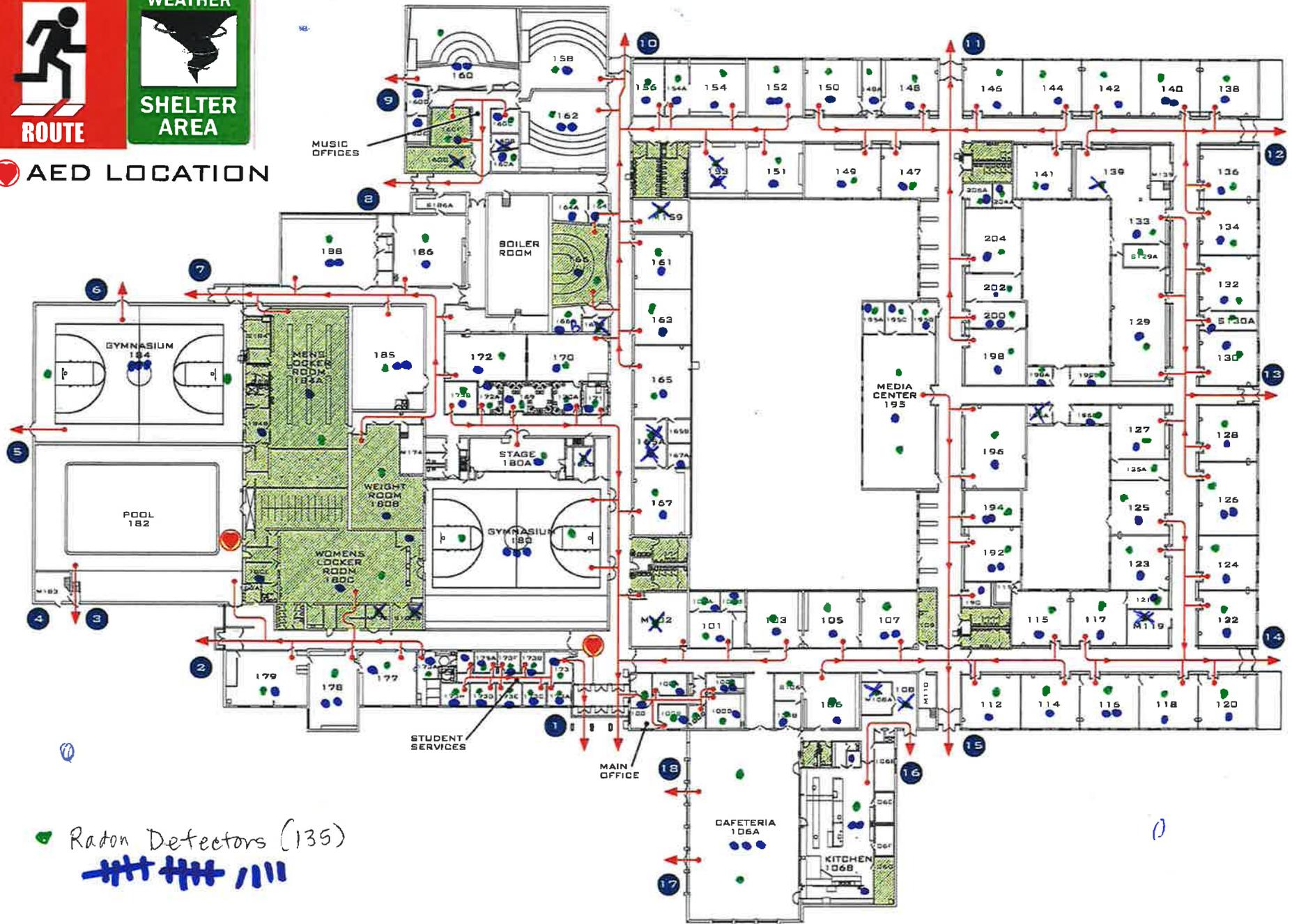
Radon test result report for:

**FRIDLEY PUBLIC SCHOOLS
FRIDLEY MIDDLE SCHOOL**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11129113	D106B - 2	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.8 ± 0.3	2022-03-07
11129121	D107 - 1	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	< 0.3	2022-03-08
11129125	D107 - 2	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	< 0.3	2022-03-07
11129127	D116 - 1	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.6 ± 0.3	2022-03-08
11129128	D116 - 2	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.7 ± 0.3	2022-03-07
11129136	D126 - 1	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.1 ± 0.3	2022-03-07
11129137	D126 - 2	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.8 ± 0.3	2022-03-07
11129150	D140 - 1	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.4 ± 0.4	2022-03-08
11129161	D152 - 1	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	< 0.3	2022-03-07
11129162	D152 - 2	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.6 ± 0.3	2022-03-07
11130175	D160 - 1	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	1.1 ± 0.4	2022-03-08
11130176	D160 - 2	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	1.2 ± 0.3	2022-03-08
11130181	D162 - 1	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	1.0 ± 0.4	2022-03-08
11130182	D162 - 2	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	0.7 ± 0.3	2022-03-08
11130157	D178 - 1	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	< 0.3	2022-03-07
11130169	D178 - 2	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.8 ± 0.3	2022-03-07
11130172	D185 - 1	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	< 0.3	2022-03-07
11130173	D185 - 2	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	< 0.3	2022-03-08
11130167	D188 - 1	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.6 ± 0.3	2022-03-08
11130168	D188 - 2	2022-02-28 @ 11:00 am	2022-03-03 @ 12:00 pm	0.8 ± 0.3	2022-03-08
11129184	D192 - 1	2022-02-28 @ 1:00 pm	2022-03-03 @ 2:00 pm	1.0 ± 0.4	2022-03-08
11129185	D192 - 2	2022-02-28 @ 1:00 pm	2022-03-03 @ 2:00 pm	0.8 ± 0.3	2022-03-07
11129180	D194 - 1	2022-02-28 @ 1:00 pm	2022-03-03 @ 2:00 pm	0.6 ± 0.3	2022-03-07
11129181	D194 - 2	2022-02-28 @ 1:00 pm	2022-03-03 @ 2:00 pm	1.0 ± 0.3	2022-03-07
11129173	D200 - 1	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	< 0.3	2022-03-07
11129174	D200 - 2	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.7 ± 0.3	2022-03-07
11129120	DISHROOM	2022-02-28 @ 12:00 pm	2022-03-03 @ 1:00 pm	0.7 ± 0.3	2022-03-08
11129147	S129A	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.5 ± 0.3	2022-03-07
11130180	S160E	2022-02-28 @ 11:00 am	2022-03-03 @ 1:00 pm	1.0 ± 0.3	2022-03-07
11130203	S172B	2022-02-28 @ 10:00 am	2022-03-03 @ 11:00 am	0.9 ± 0.3	2022-03-07
11129182	S195A	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	0.8 ± 0.3	2022-03-07
11129167	S206A	2022-02-28 @ 12:00 pm	2022-03-03 @ 2:00 pm	1.1 ± 0.3	2022-03-07



AED LOCATION



Radon Detectors (135)
###



INSTITUTE FOR ENVIRONMENTAL ASSESSMENT

9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.283.9513
Fax: 763.315.7926

FRIDLEY MIDDLE SCHOOL

FIRST LEVEL FLOOR PLAN | AUGUST 2018



Appendix C

Signed Non-Interference Agreements

NOTICE OF INSPECTION FOR ALL FACILITATING STAFF

A radon test is scheduled for:

Building: Fridley Community Center

Test Start Date: 02-28-2022

Test End Date: 03-03-2022

Please help to maintain the required test conditions throughout the building

1. All windows and exterior doors must be kept closed (aside from momentary entry or exit) for 12 hours before and during the test.
2. Heating and cooling systems must be set to normal occupied operating temperatures.
3. Test devices are not to be disturbed.

Further guidance on required building conditions are located on the next page.

Test devices are not dangerous in anyway. The type of devices used for this testing will include:

Short-term test kits. It is important that these devices are fully open and not covered. They will be analyzed by a laboratory.

Continuous radon monitors. These are electronic devices that record hourly radon readings.

Long-term test kits. It is important that these devices are not covered. They will be analyzed by a laboratory.

Declaration of Observed Compliance

Failure to reasonably maintain test conditions can lead to unnecessary expense, disruptions and unreliable data.

Disturbing test devices can also cause unreliable or invalid test results.

- Please report in a timely manner if required test conditions are not maintained.
- Please sign and return this form once the test is complete.

To the best of my knowledge, the required conditions were maintained during the test.

Yes

Name:

Rodney Petron

Signature:



Licensed Measurement Professional:

Nate Wiklund RMEA-00439

More Detailed Guidance for Staff

Required Closed-Building Conditions	
Windows	Keep Closed, Seal broken windows closed
External doors (except for normal entry or exit)	Keep Closed
Heating & Cooling Systems	Set to normal operating conditions
Bathroom fans	Operate normally
Fireplaces (including gas)	Do not operate
Auxiliary or temporary systems that bring air into the building	Do not operate (unless an integral part of HVAC or supplies make-up air for combustion appliances)
Exhaust systems (ex. from shops, laundries, kitchens)	Avoid excessive operation
Interior doors, Stairwells, Fire Doors	Operate Normally
Garage doors	Operate normally
Ceiling Fans, Portable Fans	Do not blow directly on the test device
Window AC Units	Operate in recirculation mode only
Window Fans	Do not operate. Seal shut or remove.
Humidifiers, Dehumidifiers, Portable Air Cleaners	Operate Normally
Central Vacuum Cleaner Systems	Operate Normally
Passive crawl space vents	Operate normally
Crawlspace exhaust systems for humidity control	Operate normally
Passive Vents for Combustion Make-Up Air	Leave Open
Combustion Appliance Vents	Operate Normally
Passive Solar Systems	Operate Normally
Attic Vent Fans	Operate Normally
Evaporative Cooling Systems	Do not operate
Required for Test Locations Within a Room	
Place detectors within the general breathing zone Locate detectors no less than:	3 feet from exterior doors, windows or other openings to the outdoors
	20 inches above the floor
	4 inches from other test devices and objects
	1 foot below the ceiling
Place detectors where they are not easily disturbed:	Select a place in an occupied area where the detectors are unlikely to be moved
Place detectors where they are not influenced by other factors:	Do not place devices in closets, crawlspaces, cupboards, sumps or nooks within building foundations
	Do not place devices in area with high air movement (ex. mechanical areas, furnace closets)
	Do not place devices in areas of high humidity (ex. kitchens, bathrooms, laundry rooms)
	Do not place devices near drafts from HVAC systems or fans
	Do not place test devices near heat sources (ex. appliances, radiators, fireplaces, direct sunlight)
	Do not place detectors on devices that produce radiation (ex. natural stone counters, pool tables, rock collections)

NOTICE OF INSPECTION FOR ALL FACILITATING STAFF

A radon test is scheduled for:

Building: Fridley Middle School

Test Start Date: 02-28-2022

Test End Date: 03-03-2022

Please help to maintain the required test conditions throughout the building

1. All windows and exterior doors must be kept closed (aside from momentary entry or exit) for 12 hours before and during the test.
2. Heating and cooling systems must be set to normal occupied operating temperatures.
3. Test devices are not to be disturbed.

Further guidance on required building conditions are located on the next page.

Test devices are not dangerous in anyway. The type of devices used for this testing will include:

Short-term test kits. It is important that these devices are fully open and not covered. They will be analyzed by a laboratory.

Continuous radon monitors. These are electronic devices that record hourly radon readings.

Long-term test kits. It is important that these devices are not covered. They will be analyzed by a laboratory.

Declaration of Observed Compliance

Failure to reasonably maintain test conditions can lead to unnecessary expense, disruptions and unreliable data.

Disturbing test devices can also cause unreliable or invalid test results.

- Please report in a timely manner if required test conditions are not maintained.
- Please sign and return this form once the test is complete.

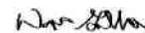
To the best of my knowledge, the required conditions were maintained during the test.

Yes

Name:

Dave Gillan

Signature:



Licensed Measurement Professional:

Nate Wiklund RMEA-00439

More Detailed Guidance for Staff

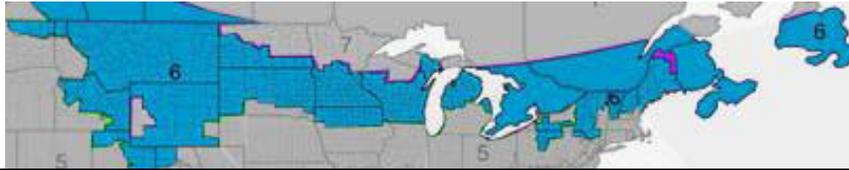
Required Closed-Building Conditions	
Windows	Keep Closed, Seal broken windows closed
External doors (except for normal entry or exit)	Keep Closed
Heating & Cooling Systems	Set to normal operating conditions
Bathroom fans	Operate normally
Fireplaces (including gas)	Do not operate
Auxiliary or temporary systems that bring air into the building	Do not operate (unless an integral part of HVAC or supplies make-up air for combustion appliances)
Exhaust systems (ex. from shops, laundries, kitchens)	Avoid excessive operation
Interior doors, Stairwells, Fire Doors	Operate Normally
Garage doors	Operate normally
Ceiling Fans, Portable Fans	Do not blow directly on the test device
Window AC Units	Operate in recirculation mode only
Window Fans	Do not operate. Seal shut or remove.
Humidifiers, Dehumidifiers, Portable Air Cleaners	Operate Normally
Central Vacuum Cleaner Systems	Operate Normally
Passive crawl space vents	Operate normally
Crawlspace exhaust systems for humidity control	Operate normally
Passive Vents for Combustion Make-Up Air	Leave Open
Combustion Appliance Vents	Operate Normally
Passive Solar Systems	Operate Normally
Attic Vent Fans	Operate Normally
Evaporative Cooling Systems	Do not operate
Required for Test Locations Within a Room	
Place detectors within the general breathing zone Locate detectors no less than :	3 feet from exterior doors, windows or other openings to the outdoors
	20 inches above the floor
	4 inches from other test devices and objects
	1 foot below the ceiling
Place detectors where they are not easily disturbed:	Select a place in an occupied area where the detectors are unlikely to be moved
Place detectors where they are not influenced by other factors:	Do not place devices in closets, crawlspaces, cupboards, sumps or nooks within building foundations
	Do not place devices in area with high air movement (ex. mechanical areas, furnace closets)
	Do not place devices in areas of high humidity (ex. kitchens, bathrooms, laundry rooms)
	Do not place devices near drafts from HVAC systems or fans
	Do not place test devices near heat sources (ex. appliances, radiators, fireplaces, direct sunlight)
	Do not place detectors on devices that produce radiation (ex. natural stone counters, pool tables, rock collections)

Appendix D

Average Building Operating Conditions Comparison

Southern MN

Climate Zone 6 (includes Southern MN)



		Averages			During the Test
		24 Hour	Daytime	Daytime 9-Month	Prevailing During the Test
Operating Condition	Outdoor Temperature	45 °F	50 °F	N/A	33 °F
	Heating Conditions	75%	66%	88%	70 °F
	Cooling Conditions	-	16%	11%	N/A
	Mixed Conditions	25%	16%	-	N/A
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
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? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the test period include school breaks or holidays? <input type="checkbox"/> Yes <input type="checkbox"/> No	

SCHOOL RADON TESTING REPORTING FORM

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



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)
	¹	²	¹	²	¹	²	
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	OSTORAGEEA	< 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

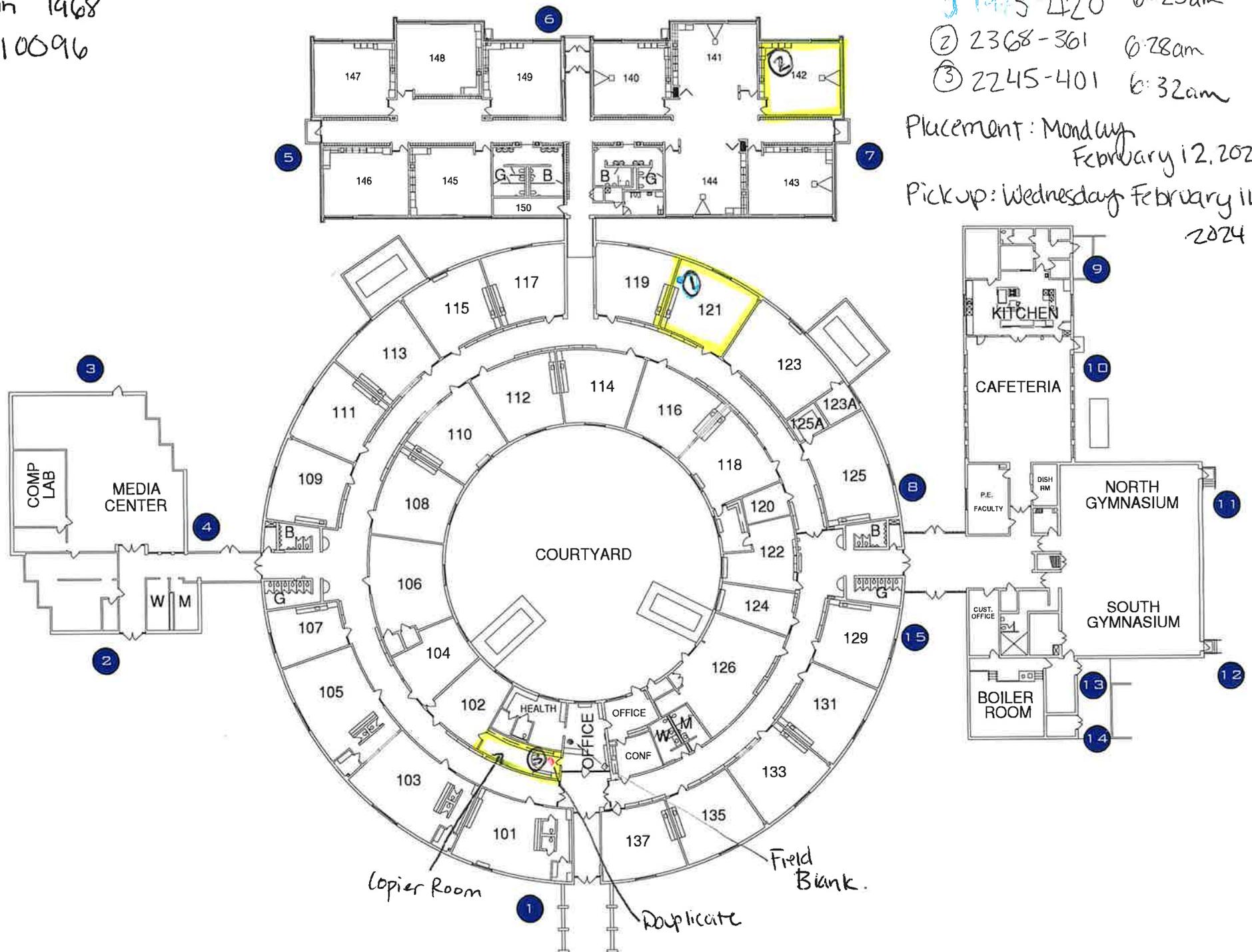
Appendix B

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

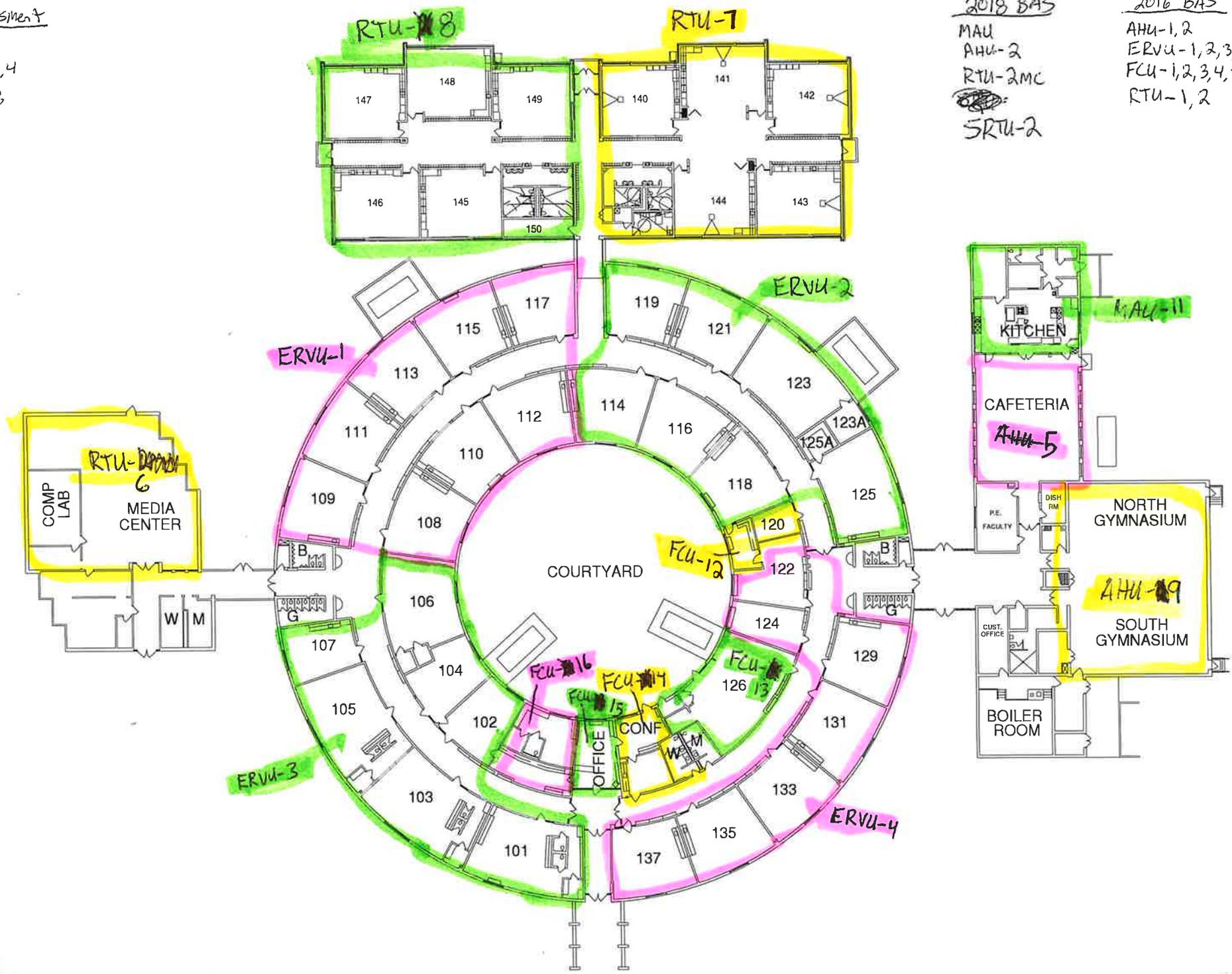


Vent Assessment

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

- 2018 BAS
- MAU
 - AHU-2
 - RTU-2MC
 - ~~ERVU-1~~
 - SRTU-2

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



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: ± 1.66%

Time	02/12/2024		02/13/2024		02/14/2024	
	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**

Time	02/12/2024			02/13/2024			02/14/2024		
	Temp	InHg	RH	Temp	InHg	RH	Temp	InHg	RH
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, Quality Assurance Mgr.
Radalink, Inc. NRPP 135791T

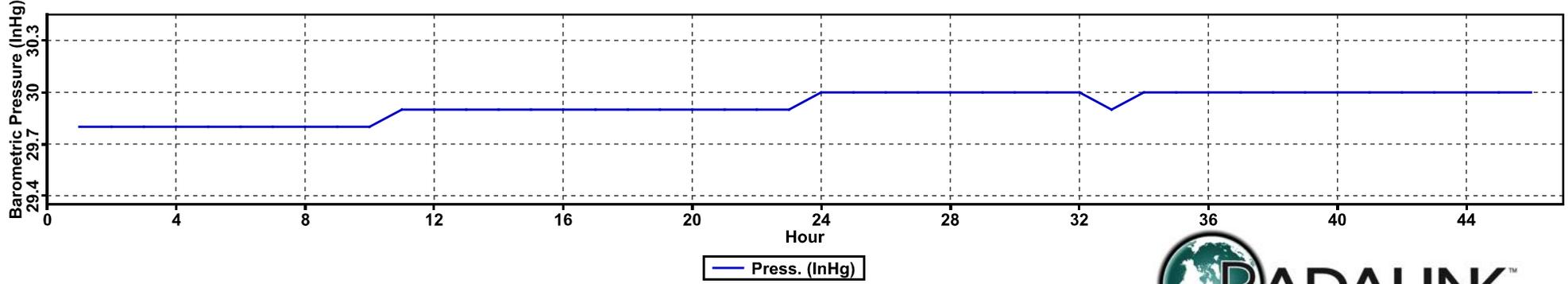
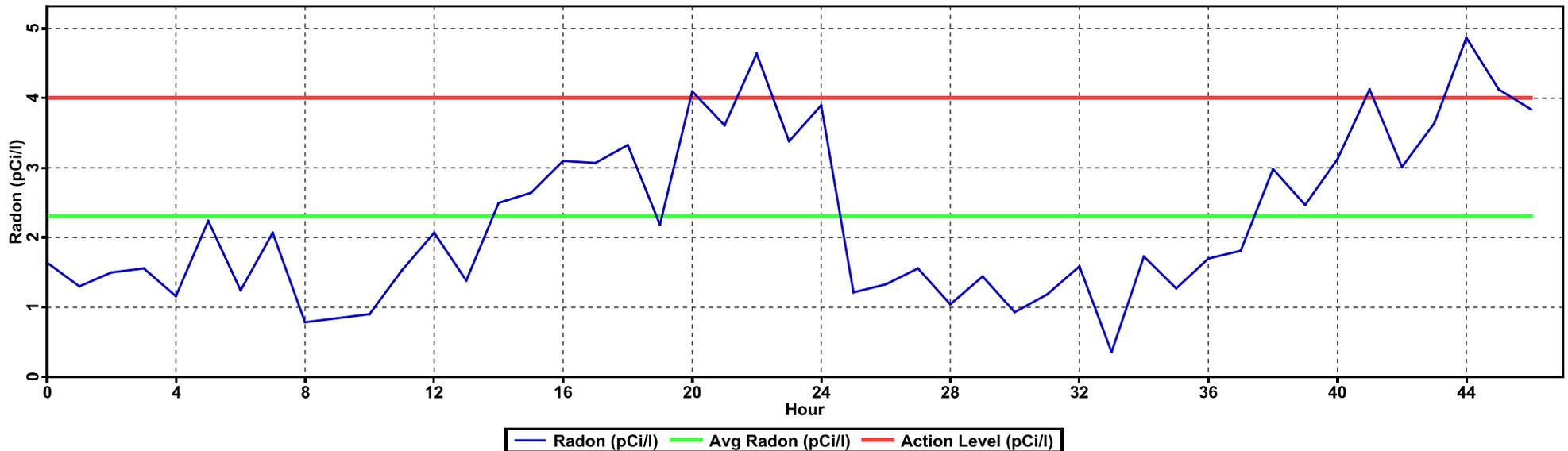
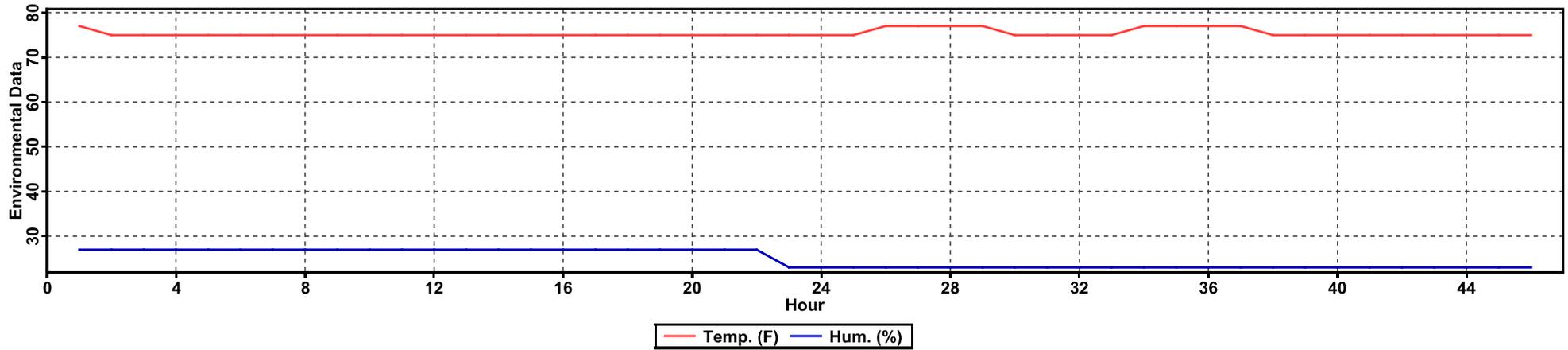
	Minimum	Average	Maximum	Variance
Temperature:	75.0	75.4	77.0	0.63
Barometric Pressure:	29.8	29.9	30.0	0.01
Relative Humidity:	23	25	27	3.99

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: ± 2.03%

Time	02/12/2024		02/13/2024		02/14/2024	
	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**

Time	02/12/2024			02/13/2024			02/14/2024		
	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, Quality Assurance Mgr.
Radalink, Inc. NRPP 135791T

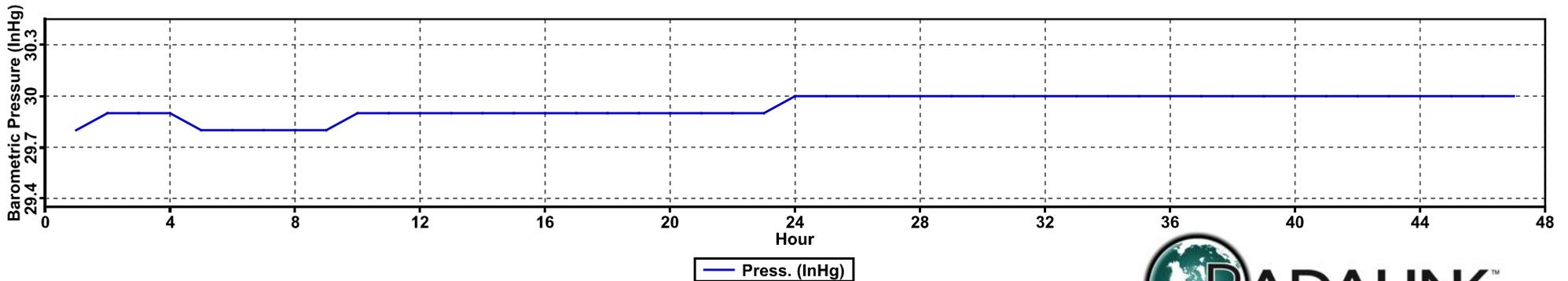
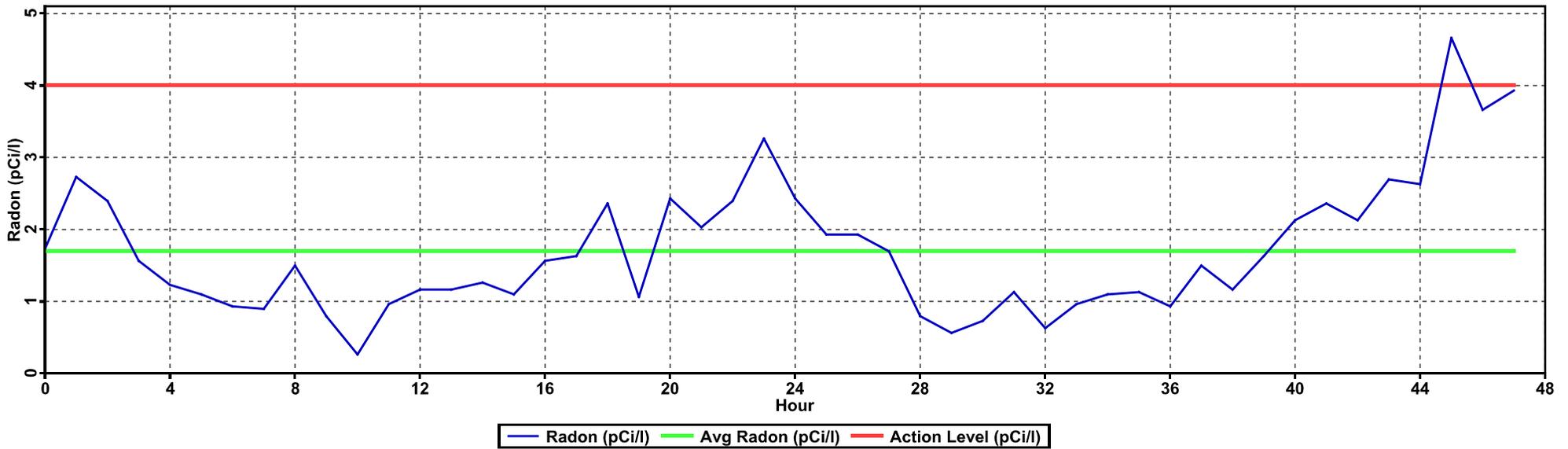
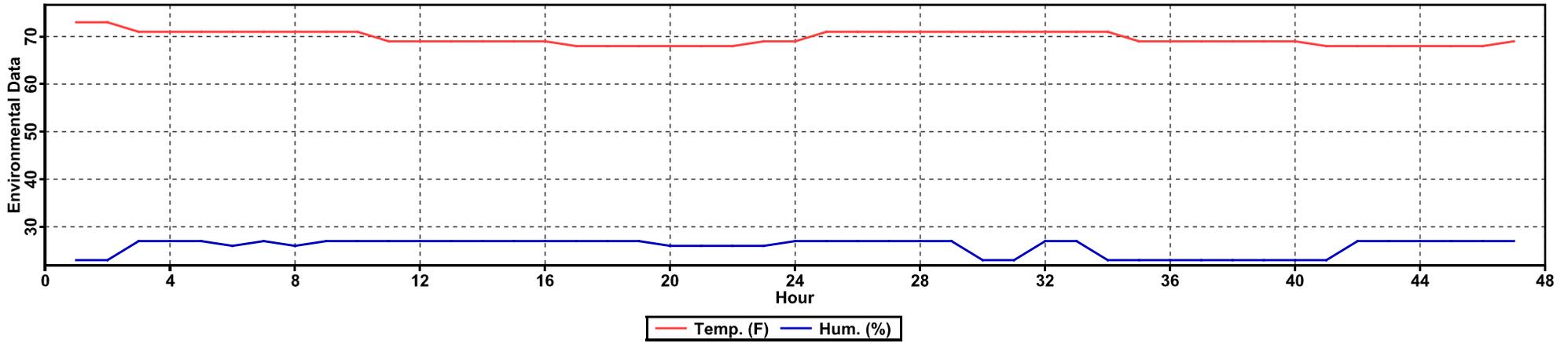
	Minimum	Average	Maximum	Variance
Temperature:	68.0	69.7	73.0	2.0
Barometric Pressure:	29.8	29.9	30.0	0.01
Relative Humidity:	23	26	27	2.9

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: ± 2.10%

Time	02/12/2024		02/13/2024		02/14/2024	
	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**

Time	02/12/2024			02/13/2024			02/14/2024		
	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, Quality Assurance Mgr.
Radalink, Inc. NRPP 135791T

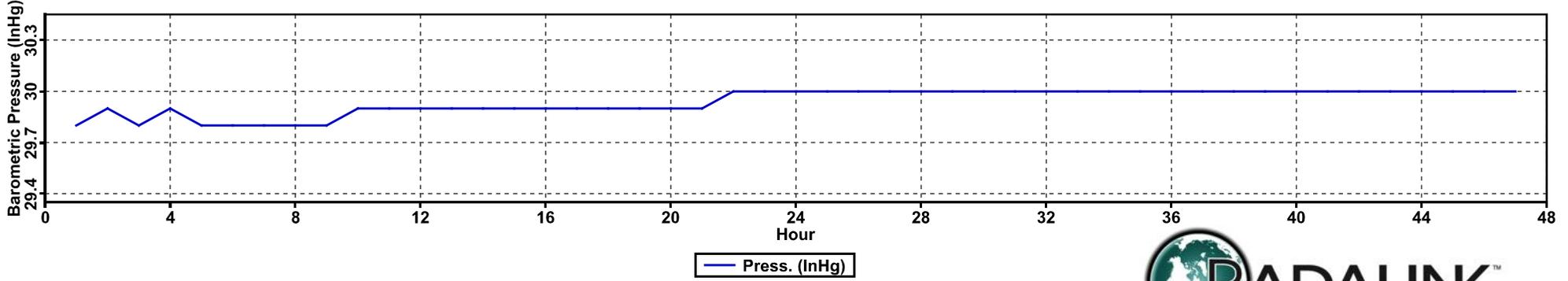
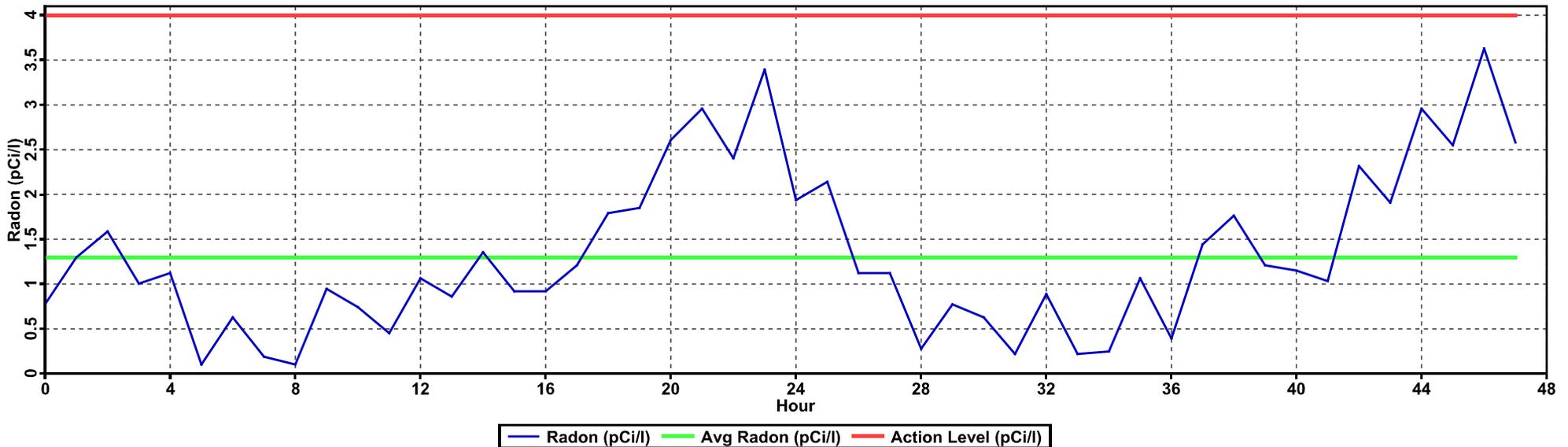
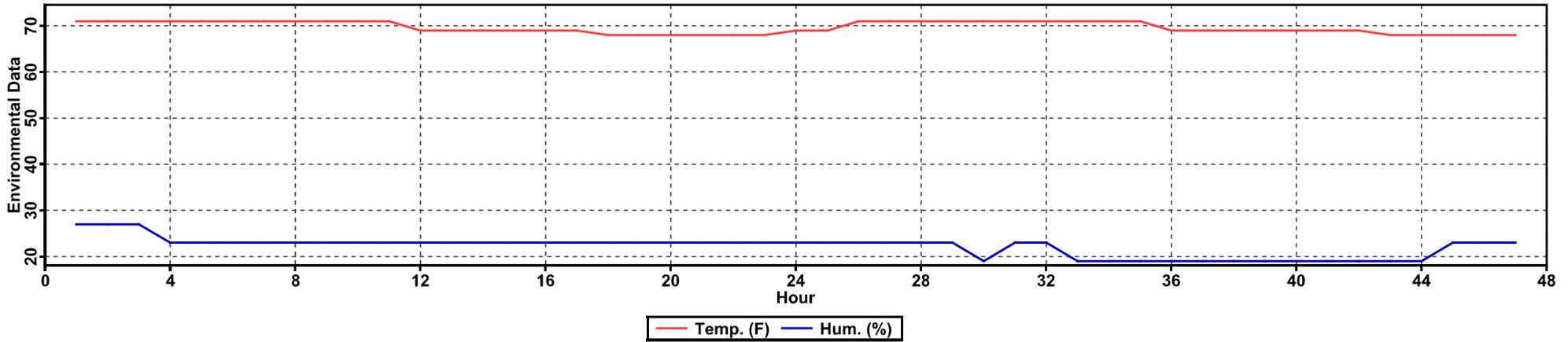
	Minimum	Average	Maximum	Variance
Temperature:	68.0	69.7	71.0	1.59
Barometric Pressure:	29.8	29.9	30.0	0.01
Relative Humidity:	19	22	27	4.72

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 M.R.S.A., 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

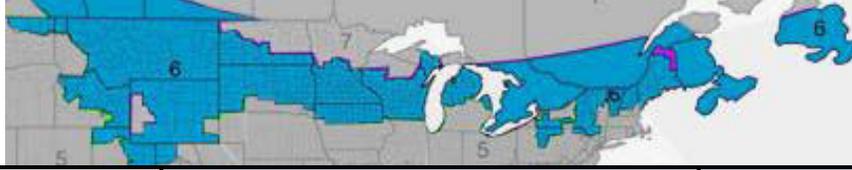
RHODE ISLAND NOTICE TO CLIENTS: This notice is provided to you by an organization or individual licenses and/or certified by the Rhode Island Dept. of Health to perform radon measurements. Any questions, comments, or complaints regarding the person performing these measurements may be directed to the 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? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the test period include school breaks or holidays? <input type="checkbox"/> Yes <input type="checkbox"/> No	

SCHOOL RADON TESTING REPORTING FORM

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