

Radon Sampling Report

Sampling Period: November 15-17, 2022, and December 12-14, 2022
Riverfield Elementary School
1625 Mill Plain Road
Fairfield, Connecticut

Fairfield Public Schools

Fairfield, Connecticut

June 2023



FUSS & O'NEILL

59 Elm Street – Suite 500
New Haven, CT



FUSS & O'NEILL

June 23, 2023

Mr. Angelus Papageorge
Executive Director of Operations
Fairfield Public Schools
501 Kings Highway East, Suite 210
Fairfield, CT 06824
apapageorge@fairfieldschools.org

RE: **Radon Sampling**
Sampling Period: November 15-17, 2022, and December 12-14, 2022
Riverfield Elementary School
1625 Mill Plain Road
Fairfield, Connecticut
Fuss & O'Neill Project No. 20220801.A10

Dear Mr. Papageorge:

Enclosed is the report for the radon sampling conducted in Riverfield Elementary School located at 1625 Mill Plain Road, Fairfield, Connecticut. The initial sampling event was performed from November 15-17, 2022, with follow-up sampling conducted December 12-14, 2022. This work was performed for the Fairfield Public Schools in accordance with our written agreement dated August 29, 2022.

The Riverfield Elementary School was last evaluated for radon during the 2017 testing season. This sampling period represents the five-year cycle evaluation for this school building.

If you have any questions regarding the contents of this report, please do not hesitate to contact me at (860) 783-4751. Thank you for this opportunity to have served your environmental needs.

Sincerely,

Eduardo Miguel Marques
Senior Environmental Analyst

EMM/nw

Enclosure

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Suite 500
New Haven, CT
06510
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800.286.2469
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www.fando.com

Connecticut
Maine
Massachusetts
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Rhode Island
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1 Introduction

Fuss & O'Neill, Inc. (Fuss & O'Neill) performed a radon measurement event utilizing passive radon collection devices in Riverfield Elementary School located at 1625 Mill Plain Road, Fairfield, Connecticut. The work was conducted for Fairfield Public Schools (the "Client") in accordance with our written agreement dated August 29, 2022, and is subject to the limitations included in *Appendix A*

Fuss & O'Neill performed the sampling from November 15-17, 2022 and conducted follow-up sampling in Room CC – 29 Gym Office and Room 32 (identified with radon concentrations above EPA Action Level) and adjacent surrounding rooms on December 12-14, 2022. This sampling event was performed under the supervision of Mr. Jared D. Smith. Mr. Smith has completed the requirements for listing under the United States Environmental Protection Agency (EPA) sanctioned National Environmental Health Association National Radon Proficiency Program (NEHA NRPP). Mr. Smith's NEHA NRPP number is 108247RT. Mr. Robert L. May, Jr. serves as Principal-in-Charge of the radon program (NEHA NRPP number 105366 RT)

Sampling at the Riverfield Elementary School was performed in response to the Connecticut General Statute Section 10-220 (d) requirement (also known as the Indoor Air Quality (IAQ) in Schools Law). This law required radon sampling prior to January 1, 2008 in at least at every school building that is constructed, extended, renovated, or replaced on or after January 1, 2003.

The Riverfield Elementary School building was last evaluated for radon during the 2017 testing season. This sampling period represent the five-year cycle evaluation for this school building.

2 Radon Facts and Health Effects

Radon is a naturally occurring radioactive gas produced by the natural breakdown (decay) of uranium which is in soil and rock throughout the US. Radon travels through soil and enters buildings through cracks and other penetrations in building foundations. Eventually the gas itself decays into radioactive particles (decay products) that can become trapped in the lungs during human respiration. As these particles in turn decay, they release small bursts of radiation which can damage lung tissue and lead to lung cancer over the course of a person's lifespan.

EPA studies have determined that radon concentrations in outdoor air average approximately 0.4 picoCuries per liter of air (pCi/L). However, radon and its decay products can accumulate to a much higher concentrations inside a building. The EPA has adopted an action level of 4.0 pCi/L, equal to or above which the EPA recommends action be conducted to reduce the level of airborne radon gas within a building.

Radon is a colorless, odorless, and tasteless gas; the only way to know whether or not an elevated level of radon gas is present in a building is to perform radon air sampling and analysis.

Prolonged exposure to elevated radon concentrations causes an increased risk of lung cancer. Like other environmental pollutants, there is some uncertainty about the magnitude of radon health risks. However, scientists are more certain about radon risks than risks from most other cancer-causing

environmental pollutants as estimates of radon risk are based on studies of cancer in humans (underground miners). Additional studies on more typical, non-occupationally exposed populations are underway.

The EPA estimates that radon gas may cause about 14,000 lung cancer deaths in the US each year, with a range of from 7,000 to 30,000. The US Surgeon General has warned that radon is the second leading cause of lung cancer deaths after smoking and is the leading cause among non-smokers.

3 Radon Sampling

On November 15, 2022, Fuss & O'Neill deployed passive radon detection canisters in representative areas at the Site. Following receipt of laboratory data from the November sampling period, Fuss & O'Neill deployed passive radon detection canisters on December 12, 2022, in Room CC - 29 Gym Office, Room 32, and adjacent surrounding rooms as part of follow-up radon sampling. Fuss & O'Neill retrieved the canisters at least 48 hours, but not later than 96 hours later.

The sampling followed EPA protocols in the EPA "Radon Measurement in Schools, EPA 402-R-92-014, July 1993" document, the American Association of Radon Scientists and Technologists (AARST) Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings (ANSI/AARST MALB 2014 with January 2021 revisions), and the CTDPH School Radon Testing Guidance document.

Samples are deployed during the coldest months of the year (between November and March) and during normal school days (Monday through Friday, excluding holidays and planned full-day closures). Samples are collected individually in every frequently occupied room that it is either located on ground level, or that it is located over a room or space that touches the ground but is not sampled because it does not meet the criteria of "frequently occupied".

It is recommended that such canisters be placed at least 20 inches from the floor and 12 inches away from exterior walls. Also, it is recommended that the canisters not be placed near drafts resulting from Heating, Ventilating and Air Conditioning (HVAC) air intakes and returns, doors, and at least 36 inches from windows. Canisters should also not be exposed to direct sunlight, be covered, or otherwise disturbed during the testing period. A closed building condition is also utilized for 12 hours prior to testing.

The canisters were supplied by and analysis was performed by Radon Testing Corporation of America (RTCA). RTCA is certified by the National Radiation Safety Board (NRSB) (Certification ARLOO01) as well as the CTDPH (Certification PH-0327). The radon laboratory analytical report and chain of custody form are included in *Appendix B*.

4 Radon Sampling Quality Assurance Procedures

The EPA recommends and the AARST and CTDPH require that quality assurance measurements are included in radon measurement studies. Quality assurance measurements are summarized below:

Duplicate Samples are pairs of canisters deployed in the same location, side by side, for the same measurement period. Duplicate samples are placed in at least ten percent of all sampling locations. These duplicate canisters are stored, deployed, removed, and shipped to the laboratory for analysis in the same manner as the other canisters. If either or both of the analysis in a duplicate pairing is above the EPA recommended action level of 4.0 pCi/L, the relative percent difference (RPD) between the two tests must be determined. If the allowable difference is exceeded, the test is determined to be invalid and a new duplicate test must be conducted. If both canister results are below the EPA standard, then the RPD is not calculated since both results are below the EPA standard.

Blank Samples are utilized to determine whether the manufacturing, shipping, storage, and processing of the canisters has affected the accuracy of radon sampling procedures. Blank samples are unopened, unexposed canisters that are deployed with and shipped with the exposed canisters, so the processing laboratory treats them without bias. The number of blank samples is at least five percent of the total number of canisters deployed, up to a maximum of 25 canisters.

Spike Samples are used to determine the accuracy of the normal measurement process. For each month of active radon sampling, a batch of canisters equal to three percent of the monthly sample total or a maximum of six are provided by Fuss & O'Neill to a secondary laboratory separate from the primary laboratory used for analysis of the school samples. These canisters are then exposed to a known and elevated concentration of radon (i.e., "spiked"). The spiked samples are then sent as normal school samples to the primary laboratory. The results of analysis at the primary laboratory should have an average error of no more than ten percent from the target value set by the secondary laboratory.

In the below table, we have listed the results of quality control spike samples. Spike samples were prepared at Bowser-Morner, Inc. (Bowser-Morner) of Dayton, Ohio from October 29-31, 2022, and shipped/submitted to RTCA on November 5, 2022. The target concentration as reported by Bowser-Morner (secondary laboratory) and the measured concentration as reported by RTCA (primary laboratory) are listed below in *Table 1*:

Table 1: Spike Samples – October 29-31, 2022

Canister Number	Target Value (pCi/Liter)	Measured Value (pCi/Liter)	Error (%)
2985590	26.1	26.5	1.53
2985644		28.7	9.96
2985651		29.1	11.49
2985656		29.0	11.11
2985664		28.8	10.34
2985671		28.8	10.34
Average Error Percentage			9.12

The average error percentage for November 2022 spike sample analysis was 9.12% and was within the +/- 10% acceptable limit.

5 Radon Analytical Results

A total of six (6) canisters, including one duplicate sample and one blank sample, were placed in qualifying rooms at the Site. During the follow-up sampling period, a total of nine (9) canisters, including one duplicate sample and one blank sample, were placed in Room CC – 29 Gym Office, Room 32, and adjacent surrounding rooms as part of follow-up radon sampling. The radon concentrations in the samples ranged from 0.1 pCi/L to 7.2 pCi/L. The EPA Action Level for radon is 4.0 pCi/L.

In *Table 2A* below, the testing locations, canister numbers, and radon concentrations are listed for the radon sampling conducted from November 15-17, 2022.

Table 2A
Radon Sampling Results

Location	Canister Numbers	Radon Gas Concentration (pCi/Liter)
Room 04	2990424	1.1
Room 15	2991442	1.7
Room CC – 29 Gym Office	2991439	7.2
Room 32	2996113	4.3

In *Table 2B* below, the testing locations, canister numbers, and radon concentrations are listed for the follow-up radon sampling conducted from December 12-14, 2022.

Table 2B
Radon Sampling Results

Location	Canister Numbers	Radon Gas Concentration (pCi/Liter)
Room 29	3042884	2.6
Room 30	2995863	5.1
Room 31	3042901	2.7
Room 32	3042898	4.1
Room 33	3042888	2.8
Room 34	2996176	6.8
Room CC – 29 Gym Office	3042264	5.5

All results were below the EPA Action Level of 4.0 pCi/L with exception to Room CC – 29 Gym Office, Room 32, Room 30, and Room 34. Installation of a radon mitigation system is required for these rooms followed by confirmatory radon sampling to verify that the radon concentration has been lowered to levels below the EPA Action Level.

Refer to *Appendix C* for a sample location diagram.

In *Table 3A* below, the testing locations, canister numbers, and radon concentrations of quality control duplicate tests are listed for the radon sampling conducted from November 15-17, 2022.

Table 3A: Duplicate Samples

Location	Canister Numbers	Radon Concentration (pCi/Liter)			Relative Percent Difference (RPD, %)
		Sample	Sample Duplicate	Sample Average	
Room 15	2991442 2990433	1.7	1.9	1.8	Percent Difference Not Needed (No Concentrations Above 4.0 pCi/Liter)

Note: Duplicate sample results were satisfactory.

In *Table 3B* below, the testing locations, canister numbers, and radon concentrations of quality control duplicate tests are listed for the radon sampling conducted from December 12-14, 2022.

Table 3B: Duplicate Samples

Location	Canister Numbers	Radon Concentration (pCi/Liter)			Relative Percent Difference (RPD, %)
		Sample	Sample Duplicate	Sample Average	
Room 33	3042888 2998905	2.8	2.6	2.7	Percent Difference Not Needed (No Concentrations Above 4.0 pCi/Liter)

Note: Duplicate sample results were satisfactory.

In *Table 4A* below, the testing location, canister number, and radon concentration of the quality control blank test is listed for the radon sampling conducted from November 15-17, 2022.

**Table 4A
Blank Sample Results**

Location	Canister Number	Radon Concentration (pCi/Liter)
Room 32 B	2996131	0.1

Note: Blank sample results were satisfactory

In *Table 4B* below, the testing location, canister number, and radon concentration of the quality control blank test is listed for the radon sampling conducted from December 12-14, 2022.

**Table 4B
Blank Sample Results**

Location	Canister Number	Radon Concentration (pCi/Liter)
Room 31	3042885	0.1

Note: Blank sample results were satisfactory

6 Conclusions

During the course of this radon sampling event at the Site, a total of six (6) canisters, including one duplicate sample and one blank sample, were placed in 10% of qualifying at the Site. A total of nine (9) canisters, including one duplicate sample and one blank sample, were placed in Room CC – 29 Gym Office, Room 32, and adjacent surrounding rooms as part of follow-up radon sampling.

The canisters were found in place and undisturbed when Fuss & O'Neill retrieved the canisters. The RPD was not calculated, since in each duplicate pair, both results were below the 4.0 pCi/L Action Level, as adjusted for the sample error rate. The 'blank' and 'spike' sample results did not exceed a concentration that would question the validity of the laboratory results.

The average outdoor radon concentration as studied by the EPA is 0.4 pCi/L and the average indoor concentration is 1.4 pCi/L. The EPA has identified an Action Level of 4.0 pCi/L and recommends taking further action (fixing the problem) if your results are over 4.0 pCi/L.

Installation of a radon mitigation system is required for Room CC – 29 Gym Office, Room 32, Room 30, and Room 34 followed by confirmatory radon sampling to verify that the radon concentration have been lowered to levels below the EPA Action Level.

Per CTDPH requirements, the facility must be continually evaluated on a five-year cycle. In addition, Room CC – 29 Gym Office, Room 32, Room 30, and Room 34 will require a mid-cycle evaluation every 2-3 years to verify the effectiveness of the radon mitigation system.

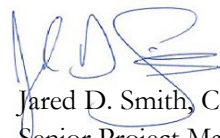
The State of Connecticut Department of Public Health Re-evaluation Report Form for this Site is located in *Appendix D*.

Prepared by:



Eduardo Miguel Marques
Senior Environmental Analyst

Reviewed by:



Jared D. Smith, CSP
Senior Project Manager
(NEHA NRPP # 108247RT)

Appendix A

Limitations

APPENDIX A - LIMITATIONS

**Site: Riverfield Elementary School
1625 Mill Plain Road, Fairfield, Connecticut**

1. This environmental report has been prepared for the exclusive use of Fairfield Public Schools (the “Client”), and is subject to, and is issued in connection with the terms and conditions of the agreement dated August 29, 2022, and all of its provisions. Any use or reliance upon information provided in this report, without the specific written authorization of the Client and Fuss & O’Neill, Inc. (Fuss & O’Neill) shall be at the User's individual risk. This report should not be used as an abatement specification.
2. Fuss & O’Neill has obtained and relied upon information from sources to form certain conclusions regarding likely environmental issues at and in the vicinity of the subject properties in conducting this inspection. Except as otherwise noted, no attempt has been made to verify the accuracy or completeness of such information, or verify compliance by any party with federal, state or local laws or regulations.
3. Fuss & O’Neill has obtained and relied upon laboratory analytical results in conducting the sampling. This information was used to form conclusions regarding radon concentrations at the subject property. Fuss & O’Neill has not performed an independent review of the reliability of this laboratory data.
4. The findings, observations and conclusions presented in this report are limited by the scope of services outlined in our agreement. Furthermore, the sampling has been conducted in accordance with generally accepted environmental practices. No other warranty, expressed or implied, is made.
5. The conclusions presented in this report are based solely upon information gathered by Fuss & O’Neill to date. Should further environmental or other relevant information be discovered at a later date, the Client should immediately bring the information to Fuss & O’Neill’s attention. Based upon an evaluation and assessment of relevant information, Fuss & O’Neill may modify the letter report and its conclusions.

Appendix B

Radon Laboratory Analytical Report and Chain of Custody Form

DE 11-21-22
-31 ✓

*RTCA: These items must be included on our results pages. Email Results and this/these sheet(s) to LabResults@fando.com.

Radon Testing Summary Sheet

Page 1 of 1

*Project Number: 20220801.A10
 *Site Name: Fairfield Public Schools
 *Building: Riverfield ES
 *Site Address: 1625 mill plain Rd.

 *City/State: Fairfield, CT
 Project Manager: EMM

Placed by: Vincent Sawarese
 Retrieved by: Vincent Sawarese
 Start Date: 11/15/2022
 Stop Date: 11/17/2022
 Weather at Placement: Partially cloudy

Instructions: Tear off center bar coded label from canister and affix to sheet in spaces provided. Please make sure top bar coded label is left on detector. Identify test location for each detector in space provided for that detector (room #, location in room, etc.). Use additional sheets as necessary. Please mark clearly if any detector is missing or damaged at retrieval.

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 2996131



Start Time: 12:52 pm
 Stop Time: 1:12 pm
 Identifier: 32

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 2996113



Start Time: 12:52 pm
 Stop Time: 1:12 pm
 Identifier: 32 Blk

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 2991442



Start Time: 12:58 pm
 Stop Time: 1:15 pm
 Identifier: 15

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 2990433



Start Time: 12:58 pm
 Stop Time: 1:15 pm
 Identifier: 15 Dup

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 2990424



Start Time: 12:55 pm
 Stop Time: 1:16 pm
 Identifier: 4

Start Time: _____
 Stop Time: _____
 Identifier: _____

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 2991439



Start Time: 12:50 pm
 Stop Time: 1:10 pm
 Identifier: gym office
CC29

Start Time: _____
 Stop Time: _____
 Identifier: _____

Start Time: _____
 Stop Time: _____
 Identifier: _____

Start Time: _____
 Stop Time: _____
 Identifier: _____

Site Radon Inspection Report

Date : 11/21/2022

Ms. Karron Redfield
Fuss & O'Neill Inc.
146 Hartford Road
Manchester, CT 06040-

Client: Riverfield E.S. / 20220801.A10
Test Location: 1625 Mill Plain Road
Fairfield, CT 06824-

Individual Canister Results

Canister ID# : 2990424 Test Start : 11/15/2022 @ 12:55
Canister Type : Charcoal Canister 3 inch Test Stop : 11/17/2022 @ 13:16
Location : Rm 04 Received: 11/21/2022 @ 10:17
Radon Level : 1.1 pCi/L Analyzed: 11/21/2022 @ 14:47
Error for Measurement is: \pm 0.4 pCi/L

Canister ID# : 2990433 Test Start : 11/15/2022 @ 12:58
Canister Type : Charcoal Canister 3 inch Test Stop : 11/17/2022 @ 13:15
Location : Rm 15 DP Received: 11/21/2022 @ 10:17
Radon Level : 1.9 pCi/L Analyzed: 11/22/2022 @ 12:29
Error for Measurement is: \pm 0.5 pCi/L

Canister ID# : 2991439 Test Start : 11/15/2022 @ 12:50
Canister Type : Charcoal Canister 3 inch Test Stop : 11/17/2022 @ 13:10
Location : Rm CC-29 Gym Off. Received: 11/21/2022 @ 10:17
Radon Level : 7.2 pCi/L Analyzed: 11/21/2022 @ 15:12
Error for Measurement is: \pm 0.5 pCi/L

Canister ID# : 2991442 Test Start : 11/15/2022 @ 12:58
Canister Type : Charcoal Canister 3 inch Test Stop : 11/17/2022 @ 13:15
Location : Rm 15 DP Received: 11/21/2022 @ 10:17
Radon Level : 1.7 pCi/L Analyzed: 11/21/2022 @ 14:47
Error for Measurement is: \pm 0.4 pCi/L

Canister ID# : 2996113 Test Start : 11/15/2022 @ 12:52
Canister Type : Charcoal Canister 3 inch Test Stop : 11/17/2022 @ 13:12
Location : Rm 32 Received: 11/21/2022 @ 10:17
Radon Level : 4.3 pCi/L Analyzed: 11/22/2022 @ 12:29
Error for Measurement is: \pm 0.5 pCi/L

Canister ID# : 2996131 Test Start : 11/15/2022 @ 12:52
Canister Type : Charcoal Canister 3 inch Test Stop : 11/17/2022 @ 13:12
Location : Rm 32 Blank Received: 11/21/2022 @ 10:17
Radon Level : 0.1 pCi/L Analyzed: 11/21/2022 @ 15:12
Error for Measurement is: \pm 0.7 pCi/L



Andreas C. George

Andreas C. George
Radon Measurement Specialist
NJ MES 11089

Dante Galan

Dante Galan
Laboratory Director

NRSB ARL0001
NYS ELAP ID: 10806
PADEP ID: 0346
NJDEP ID: NY933
NJ MEB 90036
FL DOH RB1609
IL RNL2000201

Site Radon Inspection Report

Date : 11/21/2022

Ms. Karron Redfield
Fuss & O'Neill Inc.
146 Hartford Road
Manchester, CT 06040-

Client: Riverfield E.S. / 20220801.A10
Test Location: 1625 Mill Plain Road
Fairfield, CT 06824-

Individual Canister Results

The results indicate that at least one testing device registered at or above the United States Environmental Protection Agency (EPA) action level of 4.0 picoCuries per liter of air (pCi/L). The EPA recommends mitigation if the average of two short-term tests taken in the lowest level of the building suitable for occupancy show radon levels that are equal to or greater than 4.0 pCi/L.

For information on how to reduce radon levels in your home, please review the EPA booklet: Consumer's Guide to Radon Reduction (www.epa.gov/radon/pdfs/consguid.pdf) and contact your state health department. The EPA maintains a radon information website, including copies of its publications, at www.epa.gov/iaq/radon.

For New Jersey clients: Please see the attached guidance document entitled Radon Testing and Mitigation: The Basics for further information.

For New York clients: If the radon level of one or more testing devices is equal to or exceeds 20 pCi/L please contact the New York State Department of Health, Bureau of Environmental Radiation Protection, for technical advice and assistance at 518-402-7556 or toll free 1-800-458-1158.

PLEDGE OF ASSURED QUALITY

All procedures used for generating this report are in complete accordance with the current EPA protocols for the analysis of radon in air (EPA 402-R-92-004). The analytical results relate only to the samples tested, in the condition received by the lab, and that calculations were based upon the information supplied by client. RTCA and its personnel do not assume responsibility or liability, collectively and individually, for analysis results when detectors have been improperly handled or placed by the consumer, nor does RTCA and its personnel accept responsibility for any financial or health consequences of subsequent action or lack of action, taken by the customer or its consultants based on RTCA-provided results.



Andreas C. George

Andreas C. George
Radon Measurement Specialist
NJ MES 11089

Dante Galan

Dante Galan
Laboratory Director

NRSB ARL0001
NYS ELAP ID: 10806
PADEP ID: 0346
NJDEP ID: NY933
NJ MEB 90036
FL DOH RB1609
IL RNL2000201

DE

12-16-22
-19

*RTCA: These items must be included on our results pages. Email Results and this/these sheet(s) to LabResults@fando.com.

Radon Testing Summary Sheet

Page 1 of 1

*Project Number: 20770801, A10
 *Site Name: Fairfield Public Schools
 *Building: Riverfield ES
 *Site Address: 1625 Mill Plain Rd.
 *City/State: Fairfield, CT
 Project Manager: EMM

Placed by: Vincent Savarese
 Retrieved by: Vincent Savarese
 Start Date: 12/12/2022
 Stop Date: 12/14/2022
 Weather at Placement: cloudy

Instructions: Tear off center bar coded label from canister and affix to sheet in spaces provided. Please make sure top bar coded label is left on detector. Identify test location for each detector in space provided for that detector (room #, location in room, etc.). Use additional sheets as necessary. Please mark clearly if any detector is missing or damaged at retrieval.

<p>REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3042884</p> 	<p>Start Time: <u>2:03 pm</u> Stop Time: <u>2:29 pm</u> Identifier: <u>29</u></p>	<p>REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 2996176</p> 	<p>Start Time: <u>2:09 pm</u> Stop Time: <u>2:34 pm</u> Identifier: <u>34</u></p>
<p>REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 2995863</p> 	<p>Start Time: <u>2:04 pm</u> Stop Time: <u>2:30 pm</u> Identifier: <u>30</u></p>	<p>REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3042264</p> 	<p>Start Time: <u>2:01 pm</u> Stop Time: <u>2:27 pm</u> Identifier: <u>CL29</u></p>
<p>REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3042901</p> 	<p>Start Time: <u>2:06 pm</u> Stop Time: <u>2:31 pm</u> Identifier: <u>31</u></p>	<p>REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3042885</p> 	<p>Start Time: <u>2:06 pm</u> Stop Time: <u>2:31 pm</u> Identifier: <u>31 Blk</u></p>
<p>REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3042898</p> 	<p>Start Time: <u>2:06 pm</u> Stop Time: <u>2:32 pm</u> Identifier: <u>32</u></p>		<p>Start Time: _____ Stop Time: _____ Identifier: _____</p>
<p>REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3042888</p> 	<p>Start Time: <u>2:09 pm</u> Stop Time: <u>2:33 pm</u> Identifier: <u>33</u></p>	<p>REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 2998905</p> 	<p>Start Time: <u>2:09 pm</u> Stop Time: <u>2:33 pm</u> Identifier: <u>33 Dup</u></p>

V

For Official Use Only

1st Floor Plan

Side C

Side D

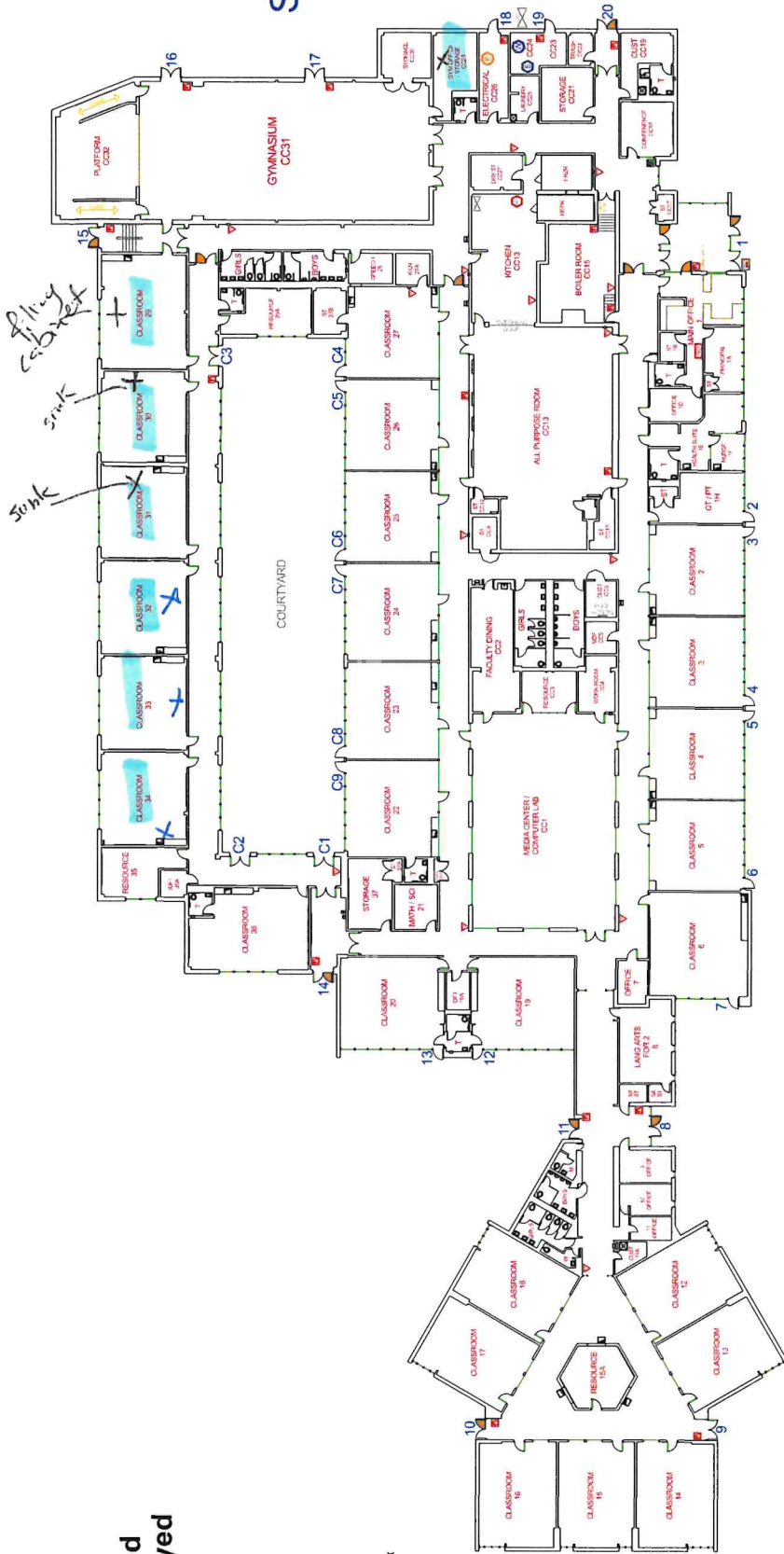
1st Floor

Access Controlled
Doors are displayed
in **ORANGE**

Side B

Side A

District Name:	FAIRFIELD PUBLIC SCHOOLS
Building Name:	Riverfield Elementary School
Address:	1625 Mill Plain Road Fairfield, CT 06824



- Legend**
- Chair/Lift
 - Bathrooms: Mens, Womens, Unisex
 - Storage
 - Overhead Door
 - Elevator
 - Emergency Phone
 - Knox Box
 - Water Shutoff
 - Sprinkler Shutoff
 - Electrical Shutoff
 - Gas Shutoff
 - Ramp
 - Emergency Generator
 - Fire Alarm Control Panel
 - Fire Dept. Connection
 - Fire Extinguisher



Site Radon Inspection Report

Date : 12/16/2022

Ms. Karron Redfield
Fuss & O'Neill Inc.
146 Hartford Road
Manchester, CT 06040-

Client: Riverfield E.S. / 20220801.A10
Test Location: 1625 Mill Plain Road
Fairfield, CT 06824-

Individual Canister Results

Canister ID# : 3042264 Test Start : 12/13/2022 @ 14:01
Canister Type : Charcoal Canister 3 inch Test Stop : 12/15/2022 @ 14:27
Location : Rm CL29 Received: 12/16/2022 @ 11:07
Radon Level : 5.5 pCi/L Analyzed: 12/16/2022 @ 11:34
Error for Measurement is: \pm 0.3 pCi/L

Canister ID# : 3042884 Test Start : 12/13/2022 @ 14:03
Canister Type : Charcoal Canister 3 inch Test Stop : 12/15/2022 @ 14:29
Location : Rm 29 Received: 12/16/2022 @ 11:07
Radon Level : 2.6 pCi/L Analyzed: 12/16/2022 @ 11:18
Error for Measurement is: \pm 0.3 pCi/L

Canister ID# : 2995863 Test Start : 12/13/2022 @ 14:04
Canister Type : Charcoal Canister 3 inch Test Stop : 12/15/2022 @ 14:30
Location : Rm 30 Received: 12/16/2022 @ 11:07
Radon Level : 5.1 pCi/L Analyzed: 12/16/2022 @ 11:19
Error for Measurement is: \pm 0.3 pCi/L

Canister ID# : 3042901 Test Start : 12/13/2022 @ 14:06
Canister Type : Charcoal Canister 3 inch Test Stop : 12/15/2022 @ 14:31
Location : Rm 31 Received: 12/16/2022 @ 11:07
Radon Level : 2.7 pCi/L Analyzed: 12/16/2022 @ 11:18
Error for Measurement is: \pm 0.3 pCi/L

Canister ID# : 3042885 Test Start : 12/13/2022 @ 14:06
Canister Type : Charcoal Canister 3 inch Test Stop : 12/15/2022 @ 14:31
Location : Rm 31 BLANK Received: 12/16/2022 @ 11:07
Radon Level : 0.1 pCi/L Analyzed: 12/16/2022 @ 11:18
Error for Measurement is: \pm 0.1 pCi/L

Canister ID# : 3042898 Test Start : 12/13/2022 @ 14:06
Canister Type : Charcoal Canister 3 inch Test Stop : 12/15/2022 @ 14:32
Location : Rm 32 Received: 12/16/2022 @ 11:07
Radon Level : 4.1 pCi/L Analyzed: 12/16/2022 @ 11:19
Error for Measurement is: \pm 0.3 pCi/L



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Radon Measurement Specialist
NJ MES 11089

Dante Galan

Dante Galan
Laboratory Director

NRSB ARL0001
NYS ELAP ID: 10806
PADEP ID: 0346
NJDEP ID: NY933
NJ MEB 90036
FL DOH RB1609
IL RNL2000201

Site Radon Inspection Report

Date : 12/16/2022

Ms. Karron Redfield
Fuss & O'Neill Inc.
146 Hartford Road
Manchester, CT 06040-

Client: Riverfield E.S. / 20220801.A10
Test Location: 1625 Mill Plain Road
Fairfield, CT 06824-

Individual Canister Results

Canister ID# :	2998905	Test Start :	12/13/2022 @ 14:09
Canister Type :	Charcoal Canister 3 inch	Test Stop :	12/15/2022 @ 14:33
Location :	Rm 33 DP	Received:	12/16/2022 @ 11:07
Radon Level :	2.6 pCi/L	Analyzed:	12/16/2022 @ 10:54
Error for Measurement is: ±	0.2 pCi/L		

Canister ID# :	3042888	Test Start :	12/13/2022 @ 14:09
Canister Type :	Charcoal Canister 3 inch	Test Stop :	12/15/2022 @ 14:33
Location :	Rm 33 DP	Received:	12/16/2022 @ 11:07
Radon Level :	2.8 pCi/L	Analyzed:	12/16/2022 @ 11:13

Average of Side by Side Canisters 2.7 pCi/L

Error for Measurement is: ± 0.2 pCi/L

Canister ID# :	2996176	Test Start :	12/13/2022 @ 14:09
Canister Type :	Charcoal Canister 3 inch	Test Stop :	12/15/2022 @ 14:34
Location :	Rm 34	Received:	12/16/2022 @ 11:07
Radon Level :	6.8 pCi/L	Analyzed:	12/16/2022 @ 11:13
Error for Measurement is: ±	0.3 pCi/L		

The results indicate that at least one testing device registered at or above the United States Environmental Protection Agency (EPA) action level of 4.0 picoCuries per liter of air (pCi/L). The EPA recommends mitigation if the average of two short-term tests taken in the lowest level of the building suitable for occupancy show radon levels that are equal to or greater than 4.0 pCi/L.

For information on how to reduce radon levels in your home, please review the EPA booklet: Consumer's Guide to Radon Reduction (www.epa.gov/radon/pdfs/consguid.pdf) and contact your state health department. The EPA maintains a radon information website, including copies of its publications, at www.epa.gov/iaq/radon.

For New Jersey clients: Please see the attached guidance document entitled Radon Testing and Mitigation: The Basics for further information.

For New York clients: If the radon level of one or more testing devices is equal to or exceeds 20 pCi/L please contact the New York State Department of Health, Bureau of Environmental Radiation Protection, for technical advice and assistance at 518-402-7556 or toll free 1-800-458-1158.



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Site Radon Inspection Report

Date : 12/16/2022

Ms. Karron Redfield
Fuss & O'Neill Inc.
146 Hartford Road
Manchester, CT 06040-

Client: Riverfield E.S. / 20220801.A10
Test Location: 1625 Mill Plain Road
Fairfield, CT 06824-
Individual Canister Results

PLEDGE OF ASSURED QUALITY

All procedures used for generating this report are in complete accordance with the current EPA protocols for the analysis of radon in air (EPA 402-R-92-004). The analytical results relate only to the samples tested, in the condition received by the lab, and that calculations were based upon the information supplied by client. RTCA and its personnel do not assume responsibility or liability, collectively and individually, for analysis results when detectors have been improperly handled or placed by the consumer, nor does RTCA and its personnel accept responsibility for any financial or health consequences of subsequent action or lack of action, taken by the customer or its consultants based on RTCA-provided results.



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EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT Fuss & O'Neill Enviro Science Job Number 207644

NOMINAL Conditions: Radon Conc 26.1 pCi/L Rel. Hum 50.0 % Temp. 79.2 F

Date Start: 10/29/22 Date Stop: 10/31/22 Date Start: _____ Date Stop: _____

Time Start: 0821 Time Stop: 0821 Time Start: _____ Time Stop: _____

Device No.'s: (6) Chan. Cans - Device No.'s: _____

2985671, 2985664, 2985590,
2985651, 2985656, 2985644
Project # 20071837, B10

S2 Right

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

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

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

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

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

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

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

Site Radon Inspection Report

Date : 11/04/2022

Ms. Karron Redfield
Fuss & O'Neill Inc.
146 Hartford Road
Manchester, CT 06040-

Client:
Test Location:

Individual Canister Results

Canister ID# : 2985590 Test Start : 10/29/2022 @ 08:21
Canister Type : Charcoal Canister 3 inch Test Stop : 10/31/2022 @ 08:21
Location : Client Withheld Received: 11/04/2022 @ 10:23
Radon Level : 26.5 pCi/L Analyzed: 11/04/2022 @ 09:55
Error for Measurement is: \pm 0.8 pCi/L

Canister ID# : 2985644 Test Start : 10/29/2022 @ 08:21
Canister Type : Charcoal Canister 3 inch Test Stop : 10/31/2022 @ 08:21
Location : Client Withheld Received: 11/04/2022 @ 10:23
Radon Level : 28.7 pCi/L Analyzed: 11/04/2022 @ 09:55
Error for Measurement is: \pm 0.8 pCi/L

Canister ID# : 2985651 Test Start : 10/29/2022 @ 08:21
Canister Type : Charcoal Canister 3 inch Test Stop : 10/31/2022 @ 08:21
Location : Client Withheld Received: 11/04/2022 @ 10:23
Radon Level : 29.1 pCi/L Analyzed: 11/04/2022 @ 10:20
Error for Measurement is: \pm 0.8 pCi/L

Canister ID# : 2985656 Test Start : 10/29/2022 @ 08:21
Canister Type : Charcoal Canister 3 inch Test Stop : 10/31/2022 @ 08:21
Location : Client Withheld Received: 11/04/2022 @ 10:23
Radon Level : 29.0 pCi/L Analyzed: 11/04/2022 @ 10:20
Error for Measurement is: \pm 0.8 pCi/L

Canister ID# : 2985664 Test Start : 10/29/2022 @ 08:21
Canister Type : Charcoal Canister 3 inch Test Stop : 10/31/2022 @ 08:21
Location : Client Withheld Received: 11/04/2022 @ 10:23
Radon Level : 28.8 pCi/L Analyzed: 11/04/2022 @ 10:20
Error for Measurement is: \pm 0.8 pCi/L

Canister ID# : 2985671 Test Start : 10/29/2022 @ 08:21
Canister Type : Charcoal Canister 3 inch Test Stop : 10/31/2022 @ 08:21
Location : Client Withheld Received: 11/04/2022 @ 10:23
Radon Level : 28.8 pCi/L Analyzed: 11/04/2022 @ 10:14
Error for Measurement is: \pm 0.8 pCi/L



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FL DOH RB1609
IL RNL2000201

Site Radon Inspection Report

Date : 11/04/2022

Ms. Karron Redfield
Fuss & O'Neill Inc.
146 Hartford Road
Manchester, CT 06040-

The results indicate that at least one testing device registered at or above the United States Environmental Protection Agency (EPA) action level of 4.0 picoCuries per liter of air (pCi/L). The EPA recommends mitigation if the average of two short-term tests taken in the lowest level of the building suitable for occupancy show radon levels that are equal to or greater than 4.0 pCi/L.

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PLEDGE OF ASSURED QUALITY

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Appendix C

Sample Location Diagram

District Name:	FAIRFIELD PUBLIC SCHOOLS
Building Name:	Riverfield Elementary School
Address:	1625 Mill Plain Road Fairfield, CT 06824

Side C

For Official Use Only

















1st Floor

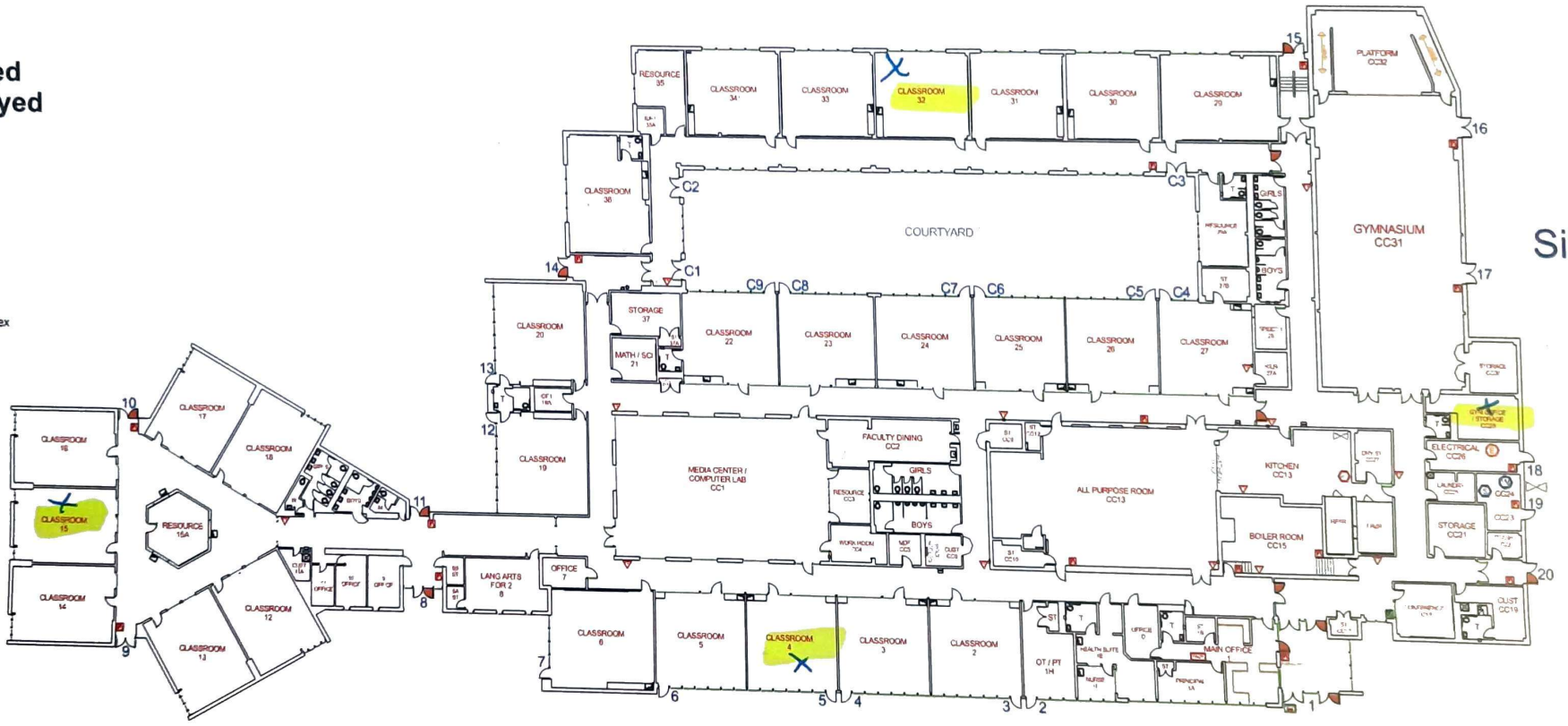
1st Floor Plan

Access Controlled
Doors are displayed
in **ORANGE**

Side B

Legend

-  Chair Lift
-  Bathrooms: Mens, Womens, Unisex
-  Storage
-  Overhead Door
-  Elevator
-  Emergency Phone
-  Knox Box
-  Water Shutoff
-  Sprinkler Shutoff
-  Electrical Shutoff
-  Gas Shutoff
-  Ramp
-  Emergency Generator
-  Fire Alarm Control Panel
-  Fire Dept. Connection
-  Fire Extinguisher



Side C

Side A



Appendix D

State of Connecticut Department of Public Health Re-evaluation Report Form



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH RADON PROGRAM SCHOOL RADON RE-EVALUATION REPORT FORM

January 2021

The following form must be submitted to the Connecticut Department of Public Health Radon Program within ten (10) business days of providing a final written report of radon measurement activities to school personnel. **Do not send test results or other documents.** Submit only one signed form by **mail, fax OR email (preferred)** to the Radon Program at:

CT Department of Public Health Radon Program
410 Capitol Avenue MS#12RAD
Hartford, CT 06134-0308
Fax: 860-509-7295
Email: DPH.RadonReports@ct.gov

Name of School:

Riverfield Elementary School

Address:

(Street, town, zip code)

1625 Mill Plain Road

Fairfield, CT

Measurement Company:

Fuss & O'Neill, Inc.

Please provide the following summary information:

Testing Dates:

(deployment & retrieval. Include confirmatory testing dates if necessary)

November 15-17, 2022 and December 12-14, 2022

Total # of Rooms Tested:

9

Total # of Rooms Requiring Re-Testing:

2

Total # of Rooms Where Average Results were at or above 4.0 pCi/L:

4

Note: Retest included adjacent rooms which identified additional locations

Radon measurement activities were performed at the location above in accordance with United States Environmental Protection Agency protocols and the Connecticut Department of Public Health Radon Program's *School Radon Testing Guidance*.

Jared D. Smith, CSP (NRPP #108247RT)

Measurement Professional / NRPP/NRSB #

Signature

2/24/2023

Date

Exec. Director of Operations

School Designee / Title

Signature

Date

5-13-23



Phone: (860) 509-7300
Telephone Device for the Deaf (860) 509-7191
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P.O. Box 340308 Hartford, CT 06134
An Equal Opportunity Employer