

**Sampling for Radon in Air
Re-evaluation Testing for
Compliance with Connecticut General
Statute 10-220 (d)**

**Louis Toffolon Elementary School
145 Northwest Drive
Plainville, Connecticut
December 6, 2022 – December 8, 2022**

**Plainville Community Schools
Plainville, Connecticut**

March 28, 2023

**Eagle Environmental, Inc.
8 South Main Street
Terryville, Connecticut
(860) 589-8257**



March 28, 2023

Mr. Michael Smith
Facilities Director
Plainville Community Schools
47 Robert Holcomb Way
Plainville, Connecticut 06062

**RE: Plainville Community Schools Radon Study:
5-Year Re-evaluation (December 6-8, 2022)
Louis Toffolon Elementary School
145 Northwest Drive
Plainville, Connecticut
Eagle Project No. 22-057.13T2**

Dear Mr. Smith:

Enclosed is the report for the 5-year re-evaluation testing for airborne radon conducted at Louis Toffolon Elementary School at 145 Northwest Drive in Plainville, Connecticut in compliance with Connecticut General Statute 10-220 (d). The sampling for this school was performed from December 6, 2022, to December 8, 2022. Notification of the results has been made to the State of Connecticut Department of Public Health and a copy of the State Notification Form is attached in Appendix B of this report.

If you have any questions regarding the contents of this report, please do not hesitate to contact us at (860) 589-8257. Thank you for this opportunity to serve your environmental needs.

Sincerely,
Eagle Environmental, Inc.

Report Written by:
Evan Kulig
Environmental Consultant I

Report Reviewed by:
Jason Eberhard
Senior Project Manager
Certified Radon Professional (Certification No. NRRP 111005 RMP)

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1.0 INTRODUCTION

Plainville Community Schools retained Eagle Environmental, Inc. (Eagle) to perform a radon measurement study utilizing passive airborne radon canisters at the Louis Toffolon Elementary School located at 145 Northwest Drive in Plainville, Connecticut. Eagle representative Evan Kulig performed the sampling from December 6, 2022, to December 8, 2022.

The sampling was performed under the supervision of Mr. Jason Eberhard. Mr. Eberhard received his initial radon training through CERTI's EPA-approved "Radon and Radon Decay Product Measurement Course" and received his accreditation in the National Radon Proficiency Program (NRPP) (Certificate #111005 RMP). He also completed the State of CTDPH Course "Radon Measurement in Connecticut Schools" on June 15, 2020. Copies of Mr. Eberhard's certificates are enclosed within Appendix E.

Plainville Community Schools performed initial radon testing in all existing schools from February 27th through March 1st, 2006 in response to the requirement of Connecticut General Statute Section 10-220 (d), also known as Indoor Air Quality (IAQ) in School Law. The sampling followed the protocols in the USEPA document: Radon Measurement in Schools, EPA 402-R-92-014, July 1993, and satisfied the requirements of the CTDPH as outlined in its "School Radon Testing Guidance" document.

This testing was a follow up study that is required every five (5) years after the initial test. CTDPH requires retesting of 10% of the rooms that were tested initially in a randomized fashion every five (5) years. In addition, all rooms that had radon concentrations in excess of 4.0 pCi/L requiring radon mitigation are required to be re-tested. Each successive five (5) year re-test must include a new set of 10% of rooms that were not tested earlier and each room with initial elevated radon level. Each round must include analysis of 10% "duplicate," 5% "blanks" and 3% "spike" samples, as required.

During the initial testing of Louis Toffolon Elementary School, fifty-four (54) samples were collected and no room had an average radon concentration in excess of 4.0 pCi/L. Therefore five (5) samples were planned during this retesting along with one (1) "duplicate" and one (1) "blank" were placed.

Eagle representative Michelle Rudy performed the last round of re-test sampling from November 23, 2015 through November 25, 2015. Passive radon detection canisters were placed at five (5) locations within the school building. In addition, one (1) "duplicate" sample and one (1) "blank". The concentrations of radon in the samples ranged from 0.5 pCi/L to 1.4 pCi/L. All concentrations were below the USEPA action level of 4.0 pCi/L. Therefore, none of the previously tested locations were required for retesting.

2.0 RADON INFORMATION AND SAMPLING PROCEDURES

2.1 Radon Facts and Health Effects

Radon is a naturally-occurring radioactive gas produced by the natural breakdown (decay) of uranium which is found in soil and rock strata throughout the United States. 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.

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). USEPA estimates that radon may cause about 14,000 lung cancer deaths in the U.S. each year. The U.S. Surgeon General has warned that radon is the second-leading cause of lung cancer deaths after smoking, and is the leading cause of lung cancer among non-smokers.

USEPA studies have found that the radon concentration in outdoor air averages approximately 0.4 picoCuries per liter of air (pCi/L). However, radon and its decay products may accumulate within a building, generating much higher concentrations. The USEPA has adopted an Action Level of 4.0 pCi/L. USEPA recommends that school systems take measures to reduce the level of airborne radon in the areas where the concentration is equal to or greater than the Action Level.

Again, radon is a known human carcinogen. Prolonged exposure to elevated radon concentrations causes an increased risk of lung cancer. Radon is a colorless, odourless and tasteless gas. Thus, the only way to know whether or not an elevated level of radon is present in a building is to test.

2.2 Airborne Radon Sampling

On December 6, 2022, Eagle Representative Evan Kulig, under the supervision under the supervision of Mr. Jason Eberhard Certified Radon Professional (Certification No. NRRP 111005 RMP)), placed passive radon detection canisters at five (5) locations within the school building. In addition, one (1) “duplicate” sample and one (1) “blank” sample were deployed. Eagle representative Evan Kulig then retrieved the canisters on December 8, 2022. To preserve the integrity of the sampling process, the identities of the “duplicate” and the “blank” samples were intentionally masked so the analytical laboratory could not distinguish them.

The canisters were supplied and analyzed by Radon Testing Corporation of America (RTCA). As recommended, canisters were placed in frequently occupied rooms within the lowest level of the school that is in contact with the ground. Canisters were not placed in hallways or rooms with high levels of moisture or heat, such as boiler rooms, bathrooms and locker rooms. In such cases, it is recommended that a canister be placed in a room directly above the area in order to assess the radon level. Also, the rooms that were tested in the 2015 retesting round were not tested again. Where possible, canisters were placed at least twenty (20) inches from the floor and three (3) feet away from exterior and interior walls and windows. Also, canisters were not placed near drafts resulting from HVAC intakes and returns or frequently opened doors. When possible, canisters were not exposed to direct sunlight, covered up, or otherwise disturbed during the testing period. A closed building condition was utilized for twelve (12) hours prior to testing being conducted. To comply with the regulatory requirements, canisters were deployed during the coldest months of the year (November through March) and during normal school days (Monday through Friday, excluding holidays and planned full-day closures).

The School Administration notified the parents and staff informing them of the radon testing program. Copies of the Notifications are attached as Appendix A.

2.3 Airborne Radon Quality Assurance Procedures

USEPA strongly recommends that quality assurance measurements are included in radon measurement studies. Quality assurance measurements include “spikes” (laboratory authentication), side by side canisters (“duplicates”), and unexposed control canisters (“blanks”).

Spike Samples are used to determine the accuracy of the normal measurement process. For each

month of active radon sampling, a batch of canisters provided by Eagle Environmental, Inc. is exposed to a known and elevated concentration of radon gas (i.e., “spiked”) at a secondary laboratory, separate from the primary laboratory used for analysis of the school samples. The “spike” samples thus exposed are sent as normal school samples to the primary laboratory. Upon receipt of the spike sample results from the primary laboratory, relative percent error (RPE) is calculated as follows:

$$\text{RPE} = \frac{\text{Target Value}-\text{Measured Value}}{\text{Target Value}} \times 100\%$$

The results of analysis at the primary laboratory should have an average error of approximately + or -10% of the target value set by the secondary laboratory. The expectation is that the values of RPE fall between +10% and -10%, but the entire range of +20% to -20% is considered “in control.” Outside of +/- 20% but inside of +/- 30% is the warning level and outside of +/- 30% is the control limit. Any RPE outside of 20% should be investigated and documented. The number of spikes should be 3% of the detectors deployed during a month with a maximum of six (6) spikes per month.

Spike samples were prepared at Bowser-Morner, Inc., in Dayton, Ohio from December 5, 2022 through December 7, 2022 and submitted to RTCA on December 12, 2022. A fictitious site address and chain-of-custody form was created to hide the identity of the samples. Copies of chain-of-custodies and results are enclosed in Appendix C.

Duplicates are pairs of canisters deployed in the same location, side by side for the same measurement period. “Duplicates” are placed in at least 10% of all sampling locations up to a maximum of fifty (50) 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 of the tests in a “duplicate” pairing is above the EPA standard of 4.0 pCi/L, as adjusted for canister error rate (see below), then the relative percent difference (RPD) between the two (2) tests must be determined as follows:

$$\text{RPD} = \frac{\text{Initial Result}-\text{Duplicate Result}}{\text{Average of Both Results}} \times 100\%$$

If results that are over 4.0 pCi/L differ by 25% or more, the data quality should be questioned. If both canisters’ results are below 4.0 pCi/L then the RPD is not calculated since, despite any disparity, both results are below the EPA standard.

Blanks are utilized to determine whether the manufacturing, shipping, storage, and processing of the canisters has affected the accuracy of airborne radon sampling procedures. “Blanks” are unexposed canisters which are shipped with the exposed canisters so that the processing laboratory cannot distinguish them. The number of “blanks” is at least 5% of the number of canisters deployed, up to a maximum of twenty-five (25) canisters.

3.0 RADON ANALYTICAL RESULTS

3.1 Spike Samples

In the summary table below are the results of the quality control spike tests.

TABLE 1: SPIKE SAMPLE RESULTS

CANISTER NUMBER	TARGET VALUE (pCi/Liter)	MEASURED VALUE (pCi/Liter)	ERROR (%)
3033173	37.3	31.3	16
3033217		36.5	2
3033212		42.9	15

The “spike” analysis was acceptable with an average error of 11%. The primary laboratory was confirmed suitable for analysis of the school re-evaluation samples. “Spike” sample chain-of-custodies and laboratory reports are attached as Appendix C.

3.2 School Re-Evaluation Samples

In the summary table below are the results of all samples placed in the school with their respective “blank” canisters, as described in the previous section. In addition, the results of all quality control “duplicate” tests, average radon level, and relative percent difference, if applicable, between the two (2) canisters are listed. Because Eagle created fictitious rooms, in order to satisfy requirements to disguise “blanks” and “duplicates,” the table lists both the names designated on the chain-of-custody, as well as the actual sample identity.

TABLE 2: SCHOOL RE-EVALUATION SAMPLE RESULTS

FLOOR	FICTITIOUS ROOM NAME ON CHAIN OF CUSTODY	SAMPLE LOCATION	CANISTER NUMBER	RADON LEVEL (pCi/Liter)	
				Sample	Duplicate Average
1 st Floor	--	Principles Office	3023971	0.5	--
1 st Floor	--	Room 2	3027623	0.6	--
1 st Floor	--	Room 26	3023897	0.4	--
1 st Floor	--	Room 5	3027609	0.6	--
1 st Floor	--	Room 15	3034346	0.7	0.8
1 st Floor	Room 14	Room 15 (Duplicate)	3027625	0.9	
1 st Floor	Room 21	NA (Blank)	3023930	0.1	--

The concentrations of radon in the samples ranged from 0.4 pCi/L to 0.9 pCi/L. All samples were below the USEPA action level of 4.0 pCi/L. The “blank” and “duplicate” analyses were acceptable. The RPD was not calculated, since in the “duplicate” pair, both results were below the 4.0 pCi/L standard, as adjusted for the canister error rate. Sampling chain-of-custodies and laboratory reports are attached as Appendix D.

4.0 CONCLUSION

During the course of the radon re-evaluation in the Louis Toffolon Elementary School, seven (7) sampling canisters, including “duplicates” and “blanks,” were placed at random locations distributed throughout the school. Sampling complied with all Connecticut Department of Public Health and USEPA requirements. The RPD was not calculated since in the “duplicate” pair, both results were below the 4.0 pCi/L standard, as adjusted for the canister error rate. The “blank” sampling canister did not exceed a level that would question the validity of the radon measurement study.

The average outdoor radon concentration as studied by the USEPA is 0.4 pCi/L and the average indoor concentration is 1.3 pCi/L. The USEPA has a recommended action guideline of 4.0 pCi/L and recommends taking further action (fixing the problem) if the results are over 4.0 pCi/L. The results for Louis Toffolon Elementary School were all below the USEPA action level.

Notification of the results has been made to the State of Connecticut Department of Public Health and a copy of the State Notification Form is attached in Appendix B of this report.

APPENDIX A

NOTIFICATION LETTER TO PARENTS AND STAFF

Date: 11/4/2022

School: Plainville Community School District

Address: 47 Robert Holcomb Way Plainville CT 06062

Dear Parents and Staff:

The administration of Plainville Community Schools would like to notify you that radon testing will be conducted at all schools in the district. According to Connecticut General Statute Sec. 10-220(d), all public schools must inspect and evaluate the indoor air quality in school buildings every five years. This required inspection and re-evaluation of indoor air quality includes evaluation of radon gas.

The purpose of the re-evaluation of indoor air quality is to determine if air quality has changed in the past five years.

Eagle Environmental, Inc. will conduct the five-year radon re-evaluation of the school buildings. To re-evaluate buildings for radon in air, a limited number of locations are selected. Small test devices containing charcoal will be placed in ten percent of the occupied rooms that are in contact with the ground. (In addition, devices will be placed in all previously mitigated rooms. That is, rooms where radon was reduced by the installation of a radon mitigation system.) Radon test devices are safe and do not cause any adverse health effects. These devices will be left in place for two to three school days.

The school administration will keep radon test reports on file and inform you of test results and interpretations when all testing has been completed. If elevated levels of radon are found, steps will be taken to reduce radon levels below the United States Environmental Protection Agency action level of 4.0 pCi/L.

If you have any concerns regarding radon testing, please feel free to contact your school's radon testing professional or the State of Connecticut Department of Public Health Radon Program at (860) 509-7367 or visit the website:

https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/environmental_health/radon/2021/EPA_School-Pamphlet.pdf

Sincerely,

Superintendent of Schools

APPENDIX B

**STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH
SCHOOL RADON 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: Louis Toffolon School
Address: 145 Northwest Drive
(Street, town, zip code) Plainville
06062
Measurement Company: Eagle Environmental, Inc.

Please provide the following summary information:
Testing Dates: December 6, 2022 - December 8, 2022
(deployment & retrieval. Include confirmatory testing dates if necessary)
Total # of Rooms Tested: 5
Total # of Rooms Requiring Re-Testing: 0
Total # of Rooms Where Average Results were at or above 4.0 pCi/L: 0

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*.

Jason Eberhard/NRPP # 111005
Measurement Professional / NRPP/NRSB #

Jason Cleveland
Signature

2/15/2023
Date

Michael Smith
School Designee / Title

Mark SA
Signature

2/14/23
Date



Phone: (860) 509-7300
Telephone Device for the Deaf (860) 509-7191
450 Capitol Avenue - MS # 51RAD
P.O. Box 340308 Hartford, CT 06134
An Equal Opportunity Employer

APPENDIX C

SPIKE SAMPLE RESULTS AND CHAIN-OF-CUSTODY FORMS

Radon Testing Corp. of America
2 Hayes Street, Elmsford, NY 10523, Phone: (914)345-3380

Radon Testing Summary Sheet
Please fill out all pertinent information legibly

Send Results Report to:

Contact: bleblanc@eagleenviro.com, vfarukas@eagleenviro.com

Company/Agency/Board of Ed: Eagle Environmental

Address: 8 South Main Street, Suite 3

City: Tarryville State: CT Zip: _____

Phone: 860-509-8257 Fax: _____

Email: _____

Test Location Information:

School District: First Class Realty School Code #: _____

County: _____ Municipality: _____

Building/School Name: The Front Street Building

Address: 21 Front Street

City: Bristol State: CT Zip: _____

Placed by ID#: JE Retrieved by ID#: JE

Start Date: 12/5/22 Stop Date: 12/7/22

Time zone: _____ Total # of detectors for this building: 3

PLEASE CIRCLE APPROPRIATE CONDITIONS

Building Type: Day Care-(D) Residential-(R) Non-Residential-(N)
School-(S) Public School-(P) Unknown-(U)

Structural Type of Building: Basement-(B) CrawlSpace-(C) Slab-on-grade-(S)
Other-(O) Unknown-(U)

Purpose of Test: Screening-(S) Real Estate-(R) Post Mitigation-(POM)

Test Conditions: Open House-(OH) Closed House-(CH) Rainy-(RA)
Windy-(WY) Unknown-(NO)

Instructions: Tear off center bar coded label from detector and affix to sheet in spaces provided. Please make sure top bar code label is left on detector. Record start & stop time, identify test location and indicate if QA measurement for each detector. Use additional sheets as necessary. Please mark clearly if any detector is missing or damaged at retrieval.

Bar Code Label

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3033217



Start Time: 12/5/22 11:24 Stop Time: 12/7/22 11:24

Room # or other identifier: Basement Room 1 Left Floor: B

Please circle if QA Measurement: Blank Duplicate

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3033173



Start Time: JE 12/5/22 11:24 Stop Time: 12/7/22 11:24

Room # or other identifier: Basement Room 1 - Center Floor: B

Please circle if QA Measurement: Blank Duplicate

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3033212



Start Time: 12/5/22 11:24 Stop Time: 12/7/22 11:24 JE

Room # or other identifier: Basement Room 1 - Right Floor: B

Please circle if QA Measurement: Blank Duplicate

Start Time: _____ Stop Time: _____

Room # or other identifier: _____ Floor: _____

Please circle if QA Measurement: Blank Duplicate

Start Time: _____ Stop Time: _____

Room # or other identifier: _____ Floor: _____

Please circle if QA Measurement: Blank Duplicate

Start Time: _____ Stop Time: _____

Room # or other identifier: _____ Floor: _____

Please circle if QA Measurement: Blank Duplicate

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT Eagle Environmental, Inc. Job Number 208079

NOMINAL Conditions: Radon Conc 37.3 pCi/L Rel. Hum 49.7 % Temp. 69.6 F

Date Start: <u>12/5/22</u> Date Stop: <u>12/7/22</u>	Date Start: _____ Date Stop: _____
Time Start: <u>11:24</u> Time Stop: <u>11:24</u>	Time Start: _____ Time Stop: _____
Device No.'s: <u>3033173,</u> <u>3033212, 3033217</u>	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: _____

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 : 12/12/2022

Ms. Brandy LeBlanc-Christen
EAGLE ENVIRONMENTAL
8 South Main Street
Suite 3
Terryville, CT 06786-

Client: The Front Street Bldg.
Test Location: 21 Front Street
Bristol, CT

Individual Canister Results

Canister ID# :	3033173	Test Start :	12/05/2022 @ 11:24
Canister Type :	Charcoal Canister 3 inch	Test Stop :	12/07/2022 @ 11:24
Location :	Bsmt=Ctr Rm 1	Received:	12/12/2022 @ 14:29
Radon Level :	31.3 pCi/L	Analyzed:	12/12/2022 @ 16:18
Error for Measurement is: ±	0.9 pCi/L		

Canister ID# :	3033217	Test Start :	12/05/2022 @ 11:24
Canister Type :	Charcoal Canister 3 inch	Test Stop :	12/07/2022 @ 11:24
Location :	Bsmt=Left Rm 1	Received:	12/12/2022 @ 14:29
Radon Level :	36.5 pCi/L	Analyzed:	12/12/2022 @ 16:18
Error for Measurement is: ±	1.0 pCi/L		

Canister ID# :	3033212	Test Start :	12/05/2022 @ 11:24
Canister Type :	Charcoal Canister 3 inch	Test Stop :	12/07/2022 @ 11:24
Location :	Bsmt=Right Rm 1	Received:	12/12/2022 @ 14:29
Radon Level :	42.9 pCi/L	Analyzed:	12/12/2022 @ 16:18
Error for Measurement is: ±	1.1 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.



Andreas C. George
Radon Measurement Specialist
NJ MES 11089

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 : 12/12/2022

Ms. Brandy LeBlanc-Christen
EAGLE ENVIRONMENTAL
8 South Main Street
Suite 3
Terryville, CT 06786-

Client: The Front Street Bldg.
Test Location: 21 Front Street
Bristol, CT

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.



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

APPENDIX D

LABORATORY RESULTS AND CHAIN-OF-CUSTODY FORMS

Radon Testing Corp. of America
2 Hayes Street, Elmsford, NY 10523, Phone: (914)345-3380

Radon Testing Summary Sheet
Please fill out all pertinent information legibly

Send Results Report to:

Contact: Bleblanc @ eagleenviro.com , Jfarkas @ eagleenviro.com

Company/Agency/Board of Ed: Eagle Environmental Inc.

Address: 8 South Main Street, Suite 3

City: Terryville State: CT Zip: 06789

Phone: _____ Fax: _____

Email: _____

Test Location Information:

School District: Plainville Community Schools School Code #: _____

County: _____ Municipality: _____

Building/School Name: Louis Toffolon Elementary School

Address: 145 North West Drive

City: Bristol Plainville State: CT Zip: _____

Placed by ID#: EK Retrieved by ID#: EK

Start Date: 12/6/22 Stop Date: 12/8/22

Time zone: _____ Total # of detectors for this building: _____

PLEASE CIRCLE APPROPRIATE CONDITIONS

Building Type: Day Care-(D) Residential-(R) Non-Residential-(N)
School-(S) Public School-(P) Unknown-(U)

Structural Type of Building: Basement-(B) Crawlspace-(C) Slab-on-grade-(S)
Other-(O) Unknown-(U)

Purpose of Test: Screening-(S) Real Estate-(R) Post Mitigation-(POM)

Test Conditions: Open House-(OH) Closed House-(CH) Rainy-(RA)
Windy-(WY) Unknown-(NO)

Instructions: Tear off center bar coded label from detector and affix to sheet in spaces provided. Please make sure top bar code label is left on detector. Record start & stop time, identify test location and indicate if QA measurement for each detector. Use additional sheets as necessary. Please mark clearly if any detector is missing or damaged at retrieval.

Bar Code Label

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3023971 ✓



Start Time: 12/6/22 17:10 Stop Time: 12/8/22 17:22

Room # or other identifier: Principals Office Floor: 1

Please circle if QA Measurement: Blank Duplicate

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3027623 ✓



Start Time: 12/6/22 17:15 Stop Time: 12/8/22 17:26

Room # or other identifier: Room 2 Floor: 1

Please circle if QA Measurement: Blank Duplicate

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3023897 ✓



Time: 12/6/22 17:17 Stop Time: 12/8/22 17:29 Duplicate?

or other identifier 26

blank? Floor: 1

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3027609 ✓



Start Time: 12/6/22 17:20 Stop Time: 12/8/22 17:32 Duplicate?

or other identifier 5

blank? Floor: 1

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3034346 ✓



Start Time: 12/6/22 17:26 Stop Time: 12/8/22 17:34 Duplicate?

or other identifier 15

blank? Floor: 1

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3027625 ✓



Start Time: 12/6/22 17:29 Stop Time: 12/8/22 17:35 Duplicate?

or other identifier 14

blank? Floor: 1

Site Radon Inspection Report

Date : 12/12/2022

Ms. Brandy LeBlanc-Christen
EAGLE ENVIRONMENTAL
8 South Main Street
Suite 3
Terryville, CT 06786-

Client: Louis Toffolon E.S.
Test Location: 145 Northwest Drive
Plainville, CT 06062-

Individual Canister Results

Canister ID# : 3023971 Test Start : 12/06/2022 @ 17:10
Canister Type : Charcoal Canister 3 inch Test Stop : 12/08/2022 @ 17:22
Location : 1st FL=Principals Off. Received: 12/12/2022 @ 14:30
Radon Level : 0.5 pCi/L Analyzed: 12/12/2022 @ 15:34
Error for Measurement is: \pm 0.3 pCi/L

Canister ID# : 3027623 Test Start : 12/06/2022 @ 17:15
Canister Type : Charcoal Canister 3 inch Test Stop : 12/08/2022 @ 17:26
Location : 1st FL=Rm 02 Received: 12/12/2022 @ 14:30
Radon Level : 0.6 pCi/L Analyzed: 12/12/2022 @ 15:34
Error for Measurement is: \pm 0.4 pCi/L

Canister ID# : 3023897 Test Start : 12/06/2022 @ 17:17
Canister Type : Charcoal Canister 3 inch Test Stop : 12/08/2022 @ 17:29
Location : 1st FL=Rm 26 Received: 12/12/2022 @ 14:30
Radon Level : 0.4 pCi/L Analyzed: 12/12/2022 @ 15:00
Error for Measurement is: \pm 0.4 pCi/L

Canister ID# : 3027609 Test Start : 12/06/2022 @ 17:20
Canister Type : Charcoal Canister 3 inch Test Stop : 12/08/2022 @ 17:32
Location : 1st FL=Rm 05 Received: 12/12/2022 @ 14:30
Radon Level : 0.6 pCi/L Analyzed: 12/12/2022 @ 16:39
Error for Measurement is: \pm 0.4 pCi/L

Canister ID# : 3034346 Test Start : 12/06/2022 @ 17:26
Canister Type : Charcoal Canister 3 inch Test Stop : 12/08/2022 @ 17:34
Location : 1st FL=Rm 15 Received: 12/12/2022 @ 14:30
Radon Level : 0.7 pCi/L Analyzed: 12/12/2022 @ 15:34
Error for Measurement is: \pm 0.4 pCi/L

Canister ID# : 3027625 Test Start : 12/06/2022 @ 17:29
Canister Type : Charcoal Canister 3 inch Test Stop : 12/08/2022 @ 17:35
Location : 1st FL=Rm 14 Received: 12/12/2022 @ 14:30
Radon Level : 0.9 pCi/L Analyzed: 12/12/2022 @ 15:34
Error for Measurement is: \pm 0.4 pCi/L



Andreas C. George

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Radon Measurement Specialist
NJ MES 11089

Dante Galan

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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 : 12/12/2022

Ms. Brandy LeBlanc-Christen
EAGLE ENVIRONMENTAL
8 South Main Street
Suite 3
Terryville, CT 06786-

Client: Louis Toffolon E.S.
Test Location: 145 Northwest Drive
Plainville, CT 06062-

Individual Canister Results

Canister ID# :	3023930	Test Start :	12/06/2022 @ 17:33
Canister Type :	Charcoal Canister 3 inch	Test Stop :	12/08/2022 @ 17:36
Location :	1st FL=Rm 21	Received:	12/12/2022 @ 14:30
Radon Level :	0.1 pCi/L	Analyzed:	12/12/2022 @ 16:39
Error for Measurement is: ±	0.3 pCi/L		

The reported results indicate that radon levels in the building tested are below the United States Environmental Protection Agency (EPA) action level of 4.0 picoCuries per liter of air (pCi/L). The EPA recommends retesting if your living patterns change and you begin occupying a lower level of the building, such as a basement or if major remodeling is done.

General radon information may be obtained by consulting the EPA booklet: A Citizen's Guide to Radon (www.epa.gov/radon/pubs/citguide.html). To request a copy or for further information, please 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
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APPENDIX E

EAGLE ENVIRONMENTAL, INC. CERTIFICATES



Jason Eberhard



Has satisfactorily fulfilled the requirements set forth by the
National Radon Proficiency Program and is therefore certified as a:

Radon Measurement Professional

with Standard Services

NRPP ID 111005-RMP

Issued On: 2021-12-08 Expires: 2023-12-31

Valid for specific activities or
measurement devices, which can be
verified with NRPP. State and local
agencies may have additional
requirements.



In witness Whereof,
I have subscribed my name as a
Representative of NRPP

Christina Johnson

Christina Johnson
NRPP Credentialing Manager

APPENDIX F
LABORATORY CERTIFICATES

THE NATIONAL RADON SAFETY BOARD

Certified Radon Professionals

Certifies that

Radon testing Corporation of America, Inc. (RTCA)

2 Hayes Street, Elmsford, NY 10523

Has Successfully Met The Established & Published Requirements for Accreditation
by The National Radon Safety Board as an

Accredited Radon Laboratory

ARL0001

Certification Number

11/30/2023

Expiration Date



Kehaulani Kekoa
Certification Coordinator

National Radon Safety Board
NRSB
Certified Radon Professionals

This certificate is the property of The National Radon Safety Board