

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

**Plainville High School  
47 Robert Holcomb Way  
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)  
Plainville High School  
47 Robert Holcomb Way  
Plainville, Connecticut  
Eagle Project No. 22-057.13T5**

Dear Mr. Smith:

Enclosed is the report for the 5-year re-evaluation testing for airborne radon conducted at Plainville High School at 47 Robert Holcomb Way 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 Plainville High School located at 47 Robert Holcomb Way 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 27<sup>th</sup> through March 1<sup>st</sup>, 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 Plainville High School, sixty-seven (67) samples were collected and no room had radon concentration in excess of 4.0pCi/L.

Eagle representative Melinda Rhode performed the last round of re-test sampling from November 13 through 16, 2017. Passive radon detection canisters were placed at nine (9) locations within the school building. In addition, one (1) "duplicate" sample and one (1) "blank" were placed. One (1) canister deployed in Room 122 had to be discarded because the canister was moved. The concentrations of radon in the samples ranged from 0.2 pCi/L to 1.0 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 of Mr. Jason Eberhard Certified Radon Professional (Certification No. NRRP 111005 RMP), placed passive radon detection canisters at eight (8) 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 2017 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 <sup>st</sup> Floor	--	Room 103-C	3034320	0.2	--
1 <sup>st</sup> Floor	--	Room 115	3034274	0.1	--
1 <sup>st</sup> Floor	--	Room 128	3034359	0.1	--
1 <sup>st</sup> Floor	--	Room 102	3034269	0.1	--
1 <sup>st</sup> Floor	--	Room 318	3034356	0.2	--
1 <sup>st</sup> Floor	--	Room 311	3034299	0.4	0.25
1 <sup>st</sup> Floor	Room 324	Room 311 (Duplicate)	3034852	0.1	
1 <sup>st</sup> Floor	--	Room 328	3034340	0.5	--
1 <sup>st</sup> Floor	--	Room 333	3034343	0.8	--
1 <sup>st</sup> Floor	Room 323	NA (Blank)	3023976	0.1	--

The concentrations of radon in the samples ranged from 0.1 pCi/L to 0.8 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 Plainville High School, ten (10) 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 Plainville High 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](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](mailto:DPH.RadonReports@ct.gov)

Name of School:

Plainville High School

Address:

(Street, town, zip code)

47 Robert Holcomb Way

Plainville

06062

Measurement Company:

Eagle Environmental, Inc.

Please provide the following summary information:

Testing Dates:

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

December 6, 2022 - December 8, 2022

Total # of Rooms Tested:

8

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 Eberhard*  
Signature

2/15/2023

Date

Michael Smith

School Designee / Title

*Michael Smith*  
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: 12/15/22 Date Stop: 12/17/22 Date Start: \_\_\_\_\_ Date Stop: \_\_\_\_\_

Time Start: 11:24 Time Stop: 11:24 Time Start: \_\_\_\_\_ Time Stop: \_\_\_\_\_

Device No.'s: 3033173, Device No.'s: \_\_\_\_\_

3033212, 3033217 \_\_\_\_\_

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

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

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

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

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

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

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



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](http://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](http://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

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**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, V farkas@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: Plainville High School

Address: 47 Robert Holcomb Way

City: Plainville State: CT Zip: \_\_\_\_\_

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

Start Date: 12/6/2022 Stop Date: 12/8/2022

Time zone: \_\_\_\_\_ Total # of detectors for this building: 10

**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 3034320

Start Time: <sup>12/6/22</sup> 14:25 Stop Time: <sup>12/8/22</sup> 15:13

Room # or other identifier: 103 C Floor: 1

Please circle if QA Measurement: Blank Duplicate

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3034274

Start Time: <sup>12/6/22</sup> 14:31 Stop Time: <sup>12/8/22</sup> 15:18

Room # or other identifier: 115 Floor: 1

Please circle if QA Measurement: Blank Duplicate

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3034359

Start Time: <sup>12/6/22</sup> 14:35 Stop Time: <sup>EIC 12/8/22</sup> ~~15:16~~ 15:19

Room # or other identifier: 128 Floor: 1

Please circle if QA Measurement: Blank Duplicate

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3034269

Start Time: <sup>12/6/22</sup> 14:40 Stop Time: <sup>12/8/22</sup> 15:16

Room # or other identifier: 102 Floor: 1

Please circle if QA Measurement: Blank Duplicate

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3034356

Start Time: <sup>12/6/22</sup> 14:45 Stop Time: <sup>12/8/22</sup> 15:27

Room # or other identifier: 318 Floor: 1

Please circle if QA Measurement: Blank Duplicate

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM 3034299

Start Time: <sup>12/6/22</sup> 14:50 Stop Time: <sup>12/8/22</sup> 15:25

Room # or other identifier: 311 Floor: 1

Please circle if QA Measurement: Blank Duplicate

**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  
3034852



Start Time: 12/6/22 14:52 Stop Time: 12/8/22 15:25

Room # or other identifier: 324 Floor: 1

Please circle if QA Measurement: Blank Duplicate

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM  
3034340



Start Time: 12/6/22 14:55 Stop Time: 12/8/22 15:29

Room # or other identifier: 328 Floor: 1

Please circle if QA Measurement: Blank Duplicate

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM  
3034343



Start Time: 12/6/22 14:58 Stop Time: 12/8/22 15:31

Room # or other identifier: 333 Floor: 1

Please circle if QA Measurement: Blank Duplicate

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM  
3023976



Start Time: 12/6/22 15:03 Stop Time: 12/6/22 15:08

Room # or other identifier: 323 Floor: 1

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

Site Radon Inspection Report

Date : 12/12/2022

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

Client: Plainville H.S.  
Test Location: 47 Robert Holcomb Way  
Plainville, CT 06062-

Individual Canister Results

Canister ID# : 3034320                      Test Start : 12/06/2022 @ 14:25  
Canister Type : Charcoal Canister 3 inch      Test Stop : 12/08/2022 @ 15:13  
Location : 1st FL=Rm 103-C              Received: 12/12/2022 @ 14:31  
Radon Level : 0.2 pCi/L                      Analyzed: 12/12/2022 @ 16:37  
Error for Measurement is:  $\pm$  0.3 pCi/L

Canister ID# : 3034274                      Test Start : 12/06/2022 @ 14:31  
Canister Type : Charcoal Canister 3 inch      Test Stop : 12/08/2022 @ 15:18  
Location : 1st FL=Rm 115                      Received: 12/12/2022 @ 14:31  
Radon Level : 0.1 pCi/L                      Analyzed: 12/12/2022 @ 16:37  
Error for Measurement is:  $\pm$  0.2 pCi/L

Canister ID# : 3034359                      Test Start : 12/06/2022 @ 14:35  
Canister Type : Charcoal Canister 3 inch      Test Stop : 12/08/2022 @ 15:19  
Location : 1st FL=Rm 128                      Received: 12/12/2022 @ 14:31  
Radon Level : 0.1 pCi/L                      Analyzed: 12/12/2022 @ 16:44  
Error for Measurement is:  $\pm$  0.7 pCi/L

Canister ID# : 3034269                      Test Start : 12/06/2022 @ 14:40  
Canister Type : Charcoal Canister 3 inch      Test Stop : 12/08/2022 @ 15:16  
Location : 1st FL=Rm 102                      Received: 12/12/2022 @ 14:31  
Radon Level : 0.1 pCi/L                      Analyzed: 12/12/2022 @ 16:19  
Error for Measurement is:  $\pm$  0.5 pCi/L

Canister ID# : 3034356                      Test Start : 12/06/2022 @ 14:45  
Canister Type : Charcoal Canister 3 inch      Test Stop : 12/08/2022 @ 15:27  
Location : 1st FL=Rm 318                      Received: 12/12/2022 @ 14:31  
Radon Level : 0.2 pCi/L                      Analyzed: 12/12/2022 @ 16:37  
Error for Measurement is:  $\pm$  0.4 pCi/L

Canister ID# : 3034299                      Test Start : 12/06/2022 @ 14:50  
Canister Type : Charcoal Canister 3 inch      Test Stop : 12/08/2022 @ 15:25  
Location : 1st FL=Rm 311                      Received: 12/12/2022 @ 14:31  
Radon Level : 0.4 pCi/L                      Analyzed: 12/12/2022 @ 16:37  
Error for Measurement is:  $\pm$  0.4 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 : 12/12/2022

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

Client: Plainville H.S.  
Test Location: 47 Robert Holcomb Way  
Plainville, CT 06062-

Individual Canister Results

Canister ID# : 3034852                      Test Start : 12/06/2022 @ 14:52  
Canister Type : Charcoal Canister 3 inch      Test Stop : 12/08/2022 @ 15:25  
Location : 1st FL=Rm 324                      Received: 12/12/2022 @ 14:31  
Radon Level : 0.1 pCi/L                      Analyzed: 12/12/2022 @ 16:19  
Error for Measurement is:  $\pm$  0.3 pCi/L

Canister ID# : 3034340                      Test Start : 12/06/2022 @ 14:55  
Canister Type : Charcoal Canister 3 inch      Test Stop : 12/08/2022 @ 15:29  
Location : 1st FL=Rm 328                      Received: 12/12/2022 @ 14:31  
Radon Level : 0.5 pCi/L                      Analyzed: 12/12/2022 @ 16:44  
Error for Measurement is:  $\pm$  0.3 pCi/L

Canister ID# : 3034343                      Test Start : 12/06/2022 @ 14:58  
Canister Type : Charcoal Canister 3 inch      Test Stop : 12/08/2022 @ 15:31  
Location : 1st FL=Rm 333                      Received: 12/12/2022 @ 14:31  
Radon Level : 0.8 pCi/L                      Analyzed: 12/12/2022 @ 16:39  
Error for Measurement is:  $\pm$  0.4 pCi/L

Canister ID# : 3023976                      Test Start : 12/06/2022 @ 15:03  
Canister Type : Charcoal Canister 3 inch      Test Stop : 12/08/2022 @ 15:08  
Location : 1st FL=Rm 323                      Received: 12/12/2022 @ 14:31  
Radon Level : 0.1 pCi/L                      Analyzed: 12/12/2022 @ 15:59  
Error for Measurement is:  $\pm$  0.5 pCi/L



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Site Radon Inspection Report

Date : 12/12/2022

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Client: Plainville H.S.  
Test Location: 47 Robert Holcomb Way  
Plainville, CT 06062-

**Individual Canister Results**

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](http://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](http://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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**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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IL RNL2000201

**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