



Radon Inspection Report

Document Generated

10 / 19 / 2022

Document Number

RP22004010013_23Sep22_1144

Measurement Information

Client Name

John Doe

Inspection Duration

48 hour (Data No: 48)

Measurement Started

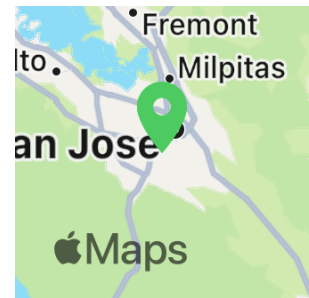
09/23/2022 11:44

Measurement Location

123 Radon Street
Herndon, Virginia 22071

Measurement Ended

09/25/2022 11:44



Measurement Details

Building Type

House

Floor

Basement

Room Type

Basement

Building Year

1999

Device Information

Device S/N

RP22004010013

Device Calibrated

03/31/2020

Tester Information

Tester Name

Jason Wood

Tester Email

jason@radoninspection.com

Tester Address

123 Radon Ave
Springfield,
Arizona 76222

Certification # (State-License #)

#000000-RMP

Tester Phone

1234567890

Test-Company Information

Measurement Professional (Certified or State-Licensed)

Jason Wood

Certification # (State-License #)

#000000-RMP

Email Address

jason@radoninspection.com

Phone Number

1234567890

Test-Placement Field Technician

Mike Abraham

Test-Placement Field Technician Certification #
(State-License #)

#000000-RMP

Test-Retrieval Field Technician

Mike Abraham

Test-Retrieval Technician Certification #
(State-License #)

#000000-RMP

Device Information for Measurement

Manufacturer & Model

FTLab & RadonEye Pro

Test Location

In Basement

Test device placed simultaneously at this property

Duplicate for QA

Manufacturer & Model

FTLab & RadonEye Pro

Test Location

In Basement

Measurement Started

09/23/2022 10:00 AM

Measurement Ended

09/25/2022 10:00 AM

Overall Average Radon Concentration

2.0 pCi/ℓ

Inspection Information

Delay Time
0 hours

Inspection Duration
48 hours

Measurement Started
09/23/2022 11:44

Measurement Ended
09/25/2022 11:44

Measured Radon Concentration Max
0.8 pCi/ℓ

Measured Radon Concentration Min
0.0 pCi/ℓ

Overall Average Radon Concentration
0.3 pCi/ℓ

Historical Radon Trend

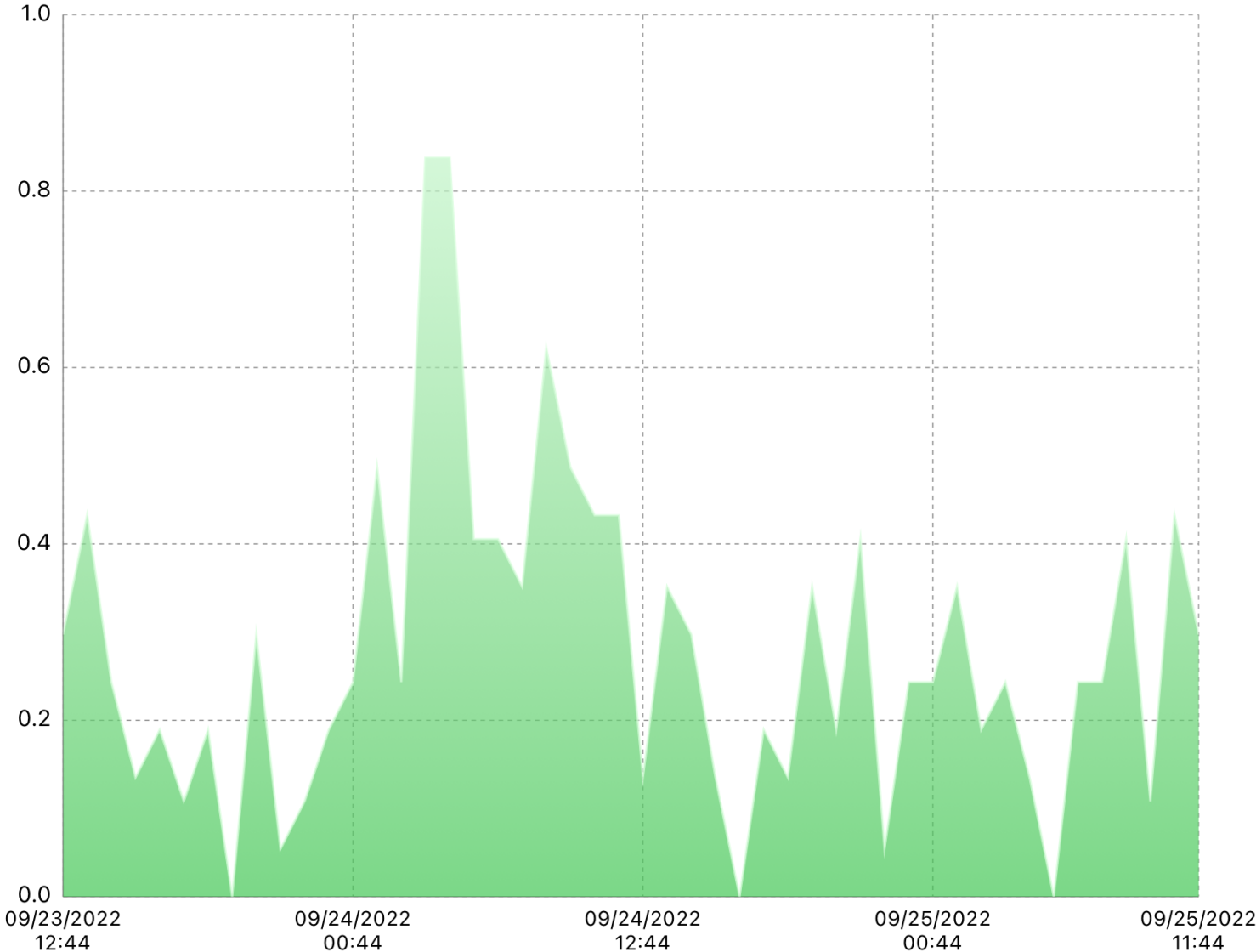


Table of Hourly Radon Measurements

Radon Concentration Average: 0.3 pCi/L

Timestamp	Radon Value	Temp(F)	RH(%)	Timestamp	Radon Value	Temp(F)	RH(%)
09/23/22 12:44	0.3	75	37	09/24/22 12:44	0.1	76	40
09/23/22 13:44	0.4	74	38	09/24/22 13:44	0.4	77	39
09/23/22 14:44	0.2	75	38	09/24/22 14:44	0.3	78	39
09/23/22 15:44	0.1	75	36	09/24/22 15:44	0.1	80	39
09/23/22 16:44	0.2	74	35	09/24/22 16:44	0.0	81	38
09/23/22 17:44	0.1	75	35	09/24/22 17:44	0.2	82	38
09/23/22 18:44	0.2	75	38	09/24/22 18:44	0.1	82	39
09/23/22 19:44	0.0	77	38	09/24/22 19:44	0.4	82	39
09/23/22 20:44	0.3	77	39	09/24/22 20:44	0.2	82	39
09/23/22 21:44	0.1	78	39	09/24/22 21:44	0.4	82	40
09/23/22 22:44	0.1	78	39	09/24/22 22:44	0.1	82	40
09/23/22 23:44	0.2	78	40	09/24/22 23:44	0.2	82	39
09/24/22 00:44	0.2	78	40	09/25/22 00:44	0.2	81	40
09/24/22 01:44	0.5	78	40	09/25/22 01:44	0.4	80	40
09/24/22 02:44	0.2	77	40	09/25/22 02:44	0.2	80	40
09/24/22 03:44	0.8	77	40	09/25/22 03:44	0.2	79	40
09/24/22 04:44	0.8	76	40	09/25/22 04:44	0.1	78	40
09/24/22 05:44	0.4	75	40	09/25/22 05:44	0.0	78	40
09/24/22 06:44	0.4	75	40	09/25/22 06:44	0.2	77	40
09/24/22 07:44	0.4	74	40	09/25/22 07:44	0.2	76	40
09/24/22 08:44	0.6	74	40	09/25/22 08:44	0.4	76	41
09/24/22 09:44	0.5	74	40	09/25/22 09:44	0.1	76	42
09/24/22 10:44	0.4	75	40	09/25/22 10:44	0.4	76	42
09/24/22 11:44	0.4	75	40	09/25/22 11:44	0.3	76	42

* Temperature and humidity can vary depending on environmental conditions.

* The test data was taken from a testing device approved by the National Radon Proficiency Program.

Table of Hourly Radon Measurements

Radon Concentration Average: 0.3 pCi/L

Timestamp	Radon Value	Temp(F)	RH(%)	Timestamp	Radon Value	Temp(F)	RH(%)
Event							
Movement	09/23/2022 12:44						
Movement	09/23/2022 13:06						

* Temperature and humidity can vary depending on environmental conditions.

* The test data was taken from a testing device approved by the National Radon Proficiency Program.

Conditions Observed During the Test

ANSI-AARST Compliances

1. The property was vacant during the test period	No
2. Passive crawlspace vents to the outside	Yes
2-1. Vents	Closed
2-1-1. Are they always open?	No
3. Window ac	No
4. ERV/HRV	No
5. Evaporating cooling system	No
6. Sub-slab return ducts	No
6-1. HVAC fan setting	Auto
7. Closed-building conditions at time of placement	No
7-1. Closed-building conditions at time of retrieval	No
8. Devices placed in location as standards require	Yes
9. Indoor temperature at time of placement	70 F
10. Signs of interference with test (Optional)	No
11. Any data anomalies that may indicate a protocol deviation? (Optional)	No
12. Noninterference controls used	No
13. Noninterference agreement given to responsible individual	No
13-1. Noninterference agreement signed by responsible individual	No
14. Mitigation system present	Yes
14-1. Method	Passive
15. Mitigation system appears to be running	Yes
16. Unusually severe storms or high winds. (Optional)	No
17. Any temporary mitigation strategies present	No
18. Limits of the mitigation inspection Unless the client ordered a complete ANSI/AARST Soil Gas Mitigation Compliance Inspection, the radon tester offers no findings as to the proper installation and operation of the mitigation system installed	

Measurement Environment



Comment

Recommendations: (as per ANSI-AARST MAH)

Test result is 4.0 pCi/L or greater:

- Fix the building if test results indicate occupants may be exposed to radon concentrations that meet or exceed the EPA action level of 4.0 pCi/L.
- Efforts to reduce radon concentrations are not complete until a retest provides evidence of effectiveness.
 - Complete a short-term radon test between 24 hours and 30 days after the installation of a mitigation system.
 - **Retest every 2 years** to ensure the system remains effective.

Test results between 2.0 and 4.0 pCi/L

- Consider fixing the building if the test results indicate radon levels greater than half the action level.
- Tests conducted when heating systems are active both day and night are more likely to provide a clear characterization of potential radon hazards.

When to Retest

- Retest every 5 years if NO mitigation system is installed.
- Retest in conjunction with the sale of any new or existing buildings.
- Be certain to test again if and when any of the following circumstances occur:
 - A new addition is constructed or alterations for building rehab or reconfiguration occur.
 - A ground contact area not previously tested is occupied, or a home is newly occupied.
 - Heating and cooling systems are significantly altered.
 - Ventilation is significantly altered by extensive weatherization, changes to mechanical systems or comparable procedures.
 - Significant openings to the soil occur due to:
 - Groundwater or slab surface water control systems that are altered or added (ex. sumps, perimeter drain tile, shower/tub retrofits) or,
 - Natural settlement causing major cracks to develop
 - Earthquakes, construction blasting, or formation of sink holes nearby; or
 - A mitigation system is altered, modified or repairs.

Comments

Both short term and long term tests measure your radon levels, but the accuracy differs due to the length.

A short term test is good at measuring your current radon levels, but these levels can fluctuate due to a number of factors, including:


- * Barometric pressure
- * Temperature/Season
- * House construction
- * Rain soaked ground
- * HVAC system
- * Improper placement of the device

This all means that it is possible for radon levels to increase or decrease after your testing period. A long term test helps to account for these fluctuations by testing your radon levels longer. In other words, short term radon tests are sufficient for most homes, but if you are really concerned about accuracy, then a long term radon test will be more reliable. The problem with long term tests is that you have to wait over 90 days for the results.



2.70
Action Level
recommended by
the World Health
Organization

4.00
Action Level
recommended by the
U.S. Environmental
Protection Agency


A family whose home has radon levels of 4 pCi/L is exposed to approximately 35 times as much radiation as the Nuclear Regulatory Commission would allow if that family was standing next to the fence of a radioactive waste site.



Recommended Radon Action Levels

State Radon Information

ANSI-AARST Compliances

More information about radon is available by contacting the Department of Health at:

Colorado

• Phone: (303) 692-3442 • Website: <http://www.coloradoradon.info/> • Email: chrys.kelley@state.co.us