

# Radon Measurement Report License: HI-4568

Kerlin Home Inspections, LLC (205) 259-6020 Contact@KerlinHomes.com 6117 Amy Ln Trussville Alabama 35173

#### **Test Location Information**

Location: Basement

6117 Amy Ln

Trussville AL 35173 Jefferson

### **Device Information**

Serial: LP00005011 Model: CRM-510LP

Calibrated: 06/08/2022

Cal. Factor: 0.341 CPM/pCi/l

Bkg. Level: 0.2 pCi/l

## Final Result(s)

Test Length: 48 Hours

Average Radon: 2.6 pCi/l

Radon is near EPA action level.

## PURPOSE OF THIS INSPECTION REPORT

To provide a professional opinion of a structure's radon level at the time of the test period, limited to the conditions identified in this report.

#### **EPA EXPLANATION OF TEST RESULTS**

Radon is the second leading cause of lung cancer, after smoking. The U.S. Environmental Protection Agency (EPA) and the Surgeon General strongly recommend taking further action when the home's radon test results are 4.0 pCi/l (picocuries per liter of air) or greater. Radon levels less than 4.0 pCi/l still pose some risk and in many cases may be reduced. The national average indoor radon level is about 1.3 pCi/l while outdoor radon levels average 0.4 pCi/l. The higher a home's radon level, the greater the health risk to you and your family. Smokers and former smokers are at especially high risk. You can call your state radon office to obtain information, including a list of EPA or State approved radon contractors who can correct or help you develop a plan for correcting the radon problem. Many questions you may have can be found in the EPA's publication "Home Buyer's and Seller's Guide to Radon".

### LIMITATIONS OF LIABILITY

Kerlin Home Inspections, LLC cannot guarantee the necessary conditions were maintained during the test period. There can be uncertainty with any radon measurement due to statistical variations and other factors such as changes in the weather and operation of the dwelling. We make NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, for the consequences of erroneous test results.

Kerlin Home Inspections, LLC and its employees or agents shall not be liable under any claim, charge or demand, whether in contract, tort, or otherwise, for any and all loss, cost, charge, claim, demand, fee, or expense of any nature or kind arising out of, connected with, resulting from, or sustained as a result of any radon test.

## RADON TEST DATA

This test was conducted with a *femto* -TECH CRM-510LP, an EPA and Industry approved testing device. This test was performed in accordance with the current Standards and Guidelines accepted for radon testing.

Mitigation/Ventilation Present: No active mitigation or ventilation system observed.

### **Technician Information**

Placed by: Austin Kerlin Retrieved by: Austin Kerlin

ID: ID:

Signature:

### **Client Information**

jane doe 6117 Amy Ln

(205) 259-6020 Trussville AL 35173

Signature:

N	O	te	S

**Start Time Stop Time Test Length** Average Radon 2022-06-12 8:21:00 PM 6/14/2022 8:21:00 PM 48 Hours 2.6 pCi/l **Air Quality Graphing**  $\Delta$  = tilt occurred Radon (pCi/l) 9.1 8.0 6.0 Radon 4.0 2.0 Sun Jun 12, 09:21 PM Mon Jun 13, 08:21 AM Mon Jun 13, 08:21 PM Tue Jun 14, 08:21 AM Tue Jun 14, 08:21 PM Time (hours) Temperature (F) 77.0 76.0 74.0 72.0 70.0 68.0 66.0 64.0 Sun Jun 12, 09:21 PM Mon Jun 13, 08:21 AM Mon Jun 13, 08:21 PM Tue Jun 14, 08:21 AM Tue Jun 14, 08:21 PM Time (hours) Relative Humidity (%) 84.0 80.0 75.0 70.0 65.0 60.0 55.0 Sun Jun 12, 09:21 PM Mon Jun 13, 08:21 AM Mon Jun 13, 08:21 PM Tue Jun 14, 08:21 AM Tue Jun 14, 08:21 PM Time (hours) ■ Barometric Pressure (inHG) 29.5 29.0 Barometric Pressure 28.5 28.0

Mon Jun 13, 08:21 PM

Time (hours)

Tue Jun 14, 08:21 AM

Tue Jun 14, 08:21 PM

27.5 27.3 Sun Jun 12, 09:21 PM

Mon Jun 13, 08:21 AM

TIME	HOUR	RADON (PCI/L)	COUNTS	TEMP (F)	BP (INHG)	RH (%)	TILTS
6/12/2022, 9:21:00 PM	1	2.4	54	72	28.3	60	
6/12/2022, 10:21:00 PM	2	3.1	68	70	28.3	69	
6/12/2022, 11:21:00 PM	3	2.9	63	70	28.3	72	
6/13/2022, 12:21:00 AM	4	2.9	63	70	28.3	74	
6/13/2022, 1:21:00 AM	5	3.1	68	69	28.3	74	
6/13/2022, 2:21:00 AM	6	2.9	64	69	28.3	75	
6/13/2022, 3:21:00 AM	7	3.3	72	69	28.3	75	
6/13/2022, 4:21:00 AM	8	4.1	87	69	28.3	76	
6/13/2022, 5:21:00 AM	9	4.0	85	69	28.3	76	
6/13/2022, 6:21:00 AM	10	3.7	79	69	28.3	77	
6/13/2022, 7:21:00 AM	11	3.5	76	69	28.3	77	
6/13/2022, 8:21:00 AM	12	3.6	77	69	28.5	77	
6/13/2022, 9:21:00 AM	13	3.8	82	69	28.3	77	
6/13/2022, 10:21:00 AM	14	3.2	70	69	28.5	77	
6/13/2022, 11:21:00 AM	15	2.9	64	69	28.5	77	
6/13/2022, 12:21:00 PM	16	2.5	56	69	28.5	78	
6/13/2022, 1:21:00 PM	17	2.3	52	69	28.3	78	
6/13/2022, 2:21:00 PM	18	2.0	45	69	28.3	78	
6/13/2022, 3:21:00 PM	19	1.5	35	69	28.3	78	
6/13/2022, 4:21:00 PM	20	1.9	42	69	28.3	78	
6/13/2022, 5:21:00 PM	21	2.0	44	69	28.3	78	
6/13/2022, 6:21:00 PM	22	1.9	42	69	28.3	78	
6/13/2022, 7:21:00 PM	23	1.9	43	69	28.3	79	
6/13/2022, 8:21:00 PM	24	1.1	26	70	28.3	78	
6/13/2022, 9:21:00 PM	25	1.8	41	70	28.5	78	
6/13/2022, 10:21:00 PM	26	1.9	42	70	28.5	78	
6/13/2022, 11:21:00 PM	27	2.8	61	70	28.3	77	
6/14/2022, 12:21:00 AM	28	3.1	67	70	28.5	77	
6/14/2022, 1:21:00 AM	29	2.7	60	70	28.3	77	
6/14/2022, 2:21:00 AM	30	3.1	68	70	28.3	78	
6/14/2022, 3:21:00 AM	31	2.3	51	70	28.3	78	
6/14/2022, 4:21:00 AM	32	2.7	60	70	28.3	78	
6/14/2022, 5:21:00 AM	33	3.0	65	70	28.5	78	

TIME	HOUR	RADON (PCI/L)	COUNTS	TEMP (F)	BP (INHG)	RH (%)	TILTS
6/14/2022, 6:21:00 AM	34	3.6	77	70	28.5	78	
6/14/2022, 7:21:00 AM	35	3.6	78	70	28.5	79	
6/14/2022, 8:21:00 AM	36	3.5	76	70	28.5	79	
6/14/2022, 9:21:00 AM	37	2.8	61	70	28.5	78	
6/14/2022, 10:21:00 AM	38	3.4	74	69	28.5	78	
6/14/2022, 11:21:00 AM	39	2.3	51	69	28.5	78	
6/14/2022, 12:21:00 PM	40	2.4	53	69	28.5	78	
6/14/2022, 1:21:00 PM	41	1.9	42	69	28.5	78	
6/14/2022, 2:21:00 PM	42	2.1	47	69	28.5	79	
6/14/2022, 3:21:00 PM	43	1.8	40	70	28.5	79	
6/14/2022, 4:21:00 PM	44	1.6	36	70	28.3	79	
6/14/2022, 5:21:00 PM	45	2.2	49	70	28.3	79	
6/14/2022, 6:21:00 PM	46	1.6	36	70	28.3	79	
6/14/2022, 7:21:00 PM	47	1.3	30	70	28.3	79	
6/14/2022, 8:21:00 PM	48	2.0	45	70	28.5	79	

## femto-TECH Laboratories

# CERTIFICATION OF CALIBRATION

Instrument Type Continuous Radon Monitor Instrument Model CRM510

Unit Serial Number CRM5105011

Background Radiation

BACKGROUND LEVEL: \_0.07 (+/- 10%) CPM

Calibration Results

Chamber Radon Level:

17.8 pCi/I

Duration of Exposure:

1440 Minutes

CALIBRATION FACTOR: \_0.341 +/- 0.01(σ) CPM per pCi//

CPM = counts per minute. pCi/l = picoCuries per liter of air.

### Instrument Calibration Description

Although a nominal instrument calibration factor is established by the electronic and physical design, an individual factor is determined for each production unit referenced to the calibration of a femto-TECH, Inc. "master" unit. femto-TECH "master" units are calibrated in the Bowser-Morner Radon Calibration Laboratory, which maintains intercomparison traceabilities to U.S. Environmental Protection Agency and U.S. Department of Energy (EML) radon laboratories.

06/08/22

Donald W. Riepenhoff Service Manager

femto-TECH, Inc.® P.O. Box 8257, 25 Eagle Court. Carlisle, OH 45005

# Post-Test Recommendations

# 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).
    - Natural settlement causing major cracks to develop.
  - o Earthquakes, construction blasting, or formation of sink holes nearby.
  - A mitigation system is altered, modified, or repaired.

# **State Radon Information**

StatePhoneE-MailAlabama(334) 290-6244john.swindall@adph.state.al.usWebsite

https://www.alabamapublichealth.gov/radiation/radon.html

#### Information

More information about radon is available by contacting the Alabama Department of Public Health.