BOWSER MORNER®
COMMITTED TO EXCELLENCE SINCE 1911

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Report No. 13734301

November 22, 2006

Mr. Rick Stieff
Rad Elec, Inc.
5714-C Industry Lane
Frederick, Maryland 21704

Dear Mr. Stieff:

Enclosed are data summarizing the four test periods in the Bowser-Morner radon chamber in which five Radon Scout continuous radon monitors (#040, 042, 042, 044 and 045) were exposed for the purpose of preliminary evaluation. The table on the next page summarizes the results of the test periods. Three tests were conducted at a nominal radon concentration of 25 pCi/liter, but with three different average values of relative humidity; 22.1%, 49.9% and 75.4%. The values of relative percent error (RPE) in comparison with the chamber values ranged from a high of 4.3% at low humidity to a low of -3.9% at a high humidity. The fourth test was conducted at a radon concentration of 6 pCi/liter and a medium value of humidity (50.1%) for comparison with the medium humidity (49.9%) test at 25.3 pCi/liter. The values of RPE for the 6-pCi/liter test varied from -5.6% to 1.1%; whereas, the values of RPE for the 25.3-pCi/liter test ranged from -2.3% to 1.4%. All of these results indicate that the five continuous monitors were in good agreement with the chamber over the range of parameters that were tested.

Included here are tables of the of the hourly average measurements of radon concentration, relative humidity and temperature from the chamber and hourly average radon concentration values from the five continuous monitors, as well as the overall averages, standard deviations and coefficients of variations of these data. Also enclosed are plots of the individual hourly average measurements of the chamber parameters.

The calibration of Bowser-Morner's continuous Radon Monitoring System is maintained through comparisons with the USEPA radon laboratory in Las Vegas. An estimate of our uncertainty based on these comparisons is ± 6% (1σ). If you have any questions, or need any further information, please call me at (937) 236-8805, Ext. 248.

Very truly yours,

Phillip H. Jenkins

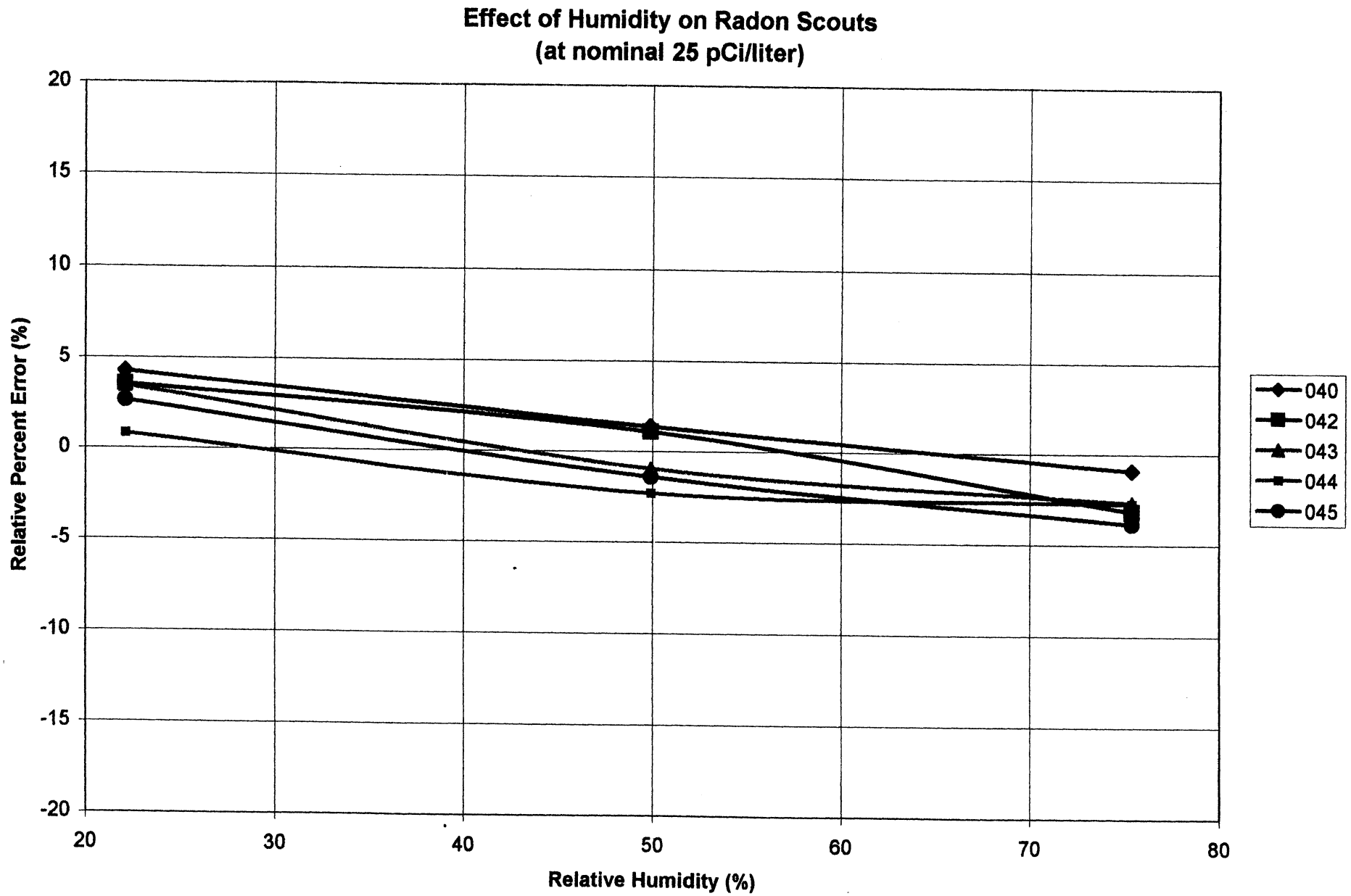
Phillip H. Jenkins, PhD, CHP
Senior Health Physicist

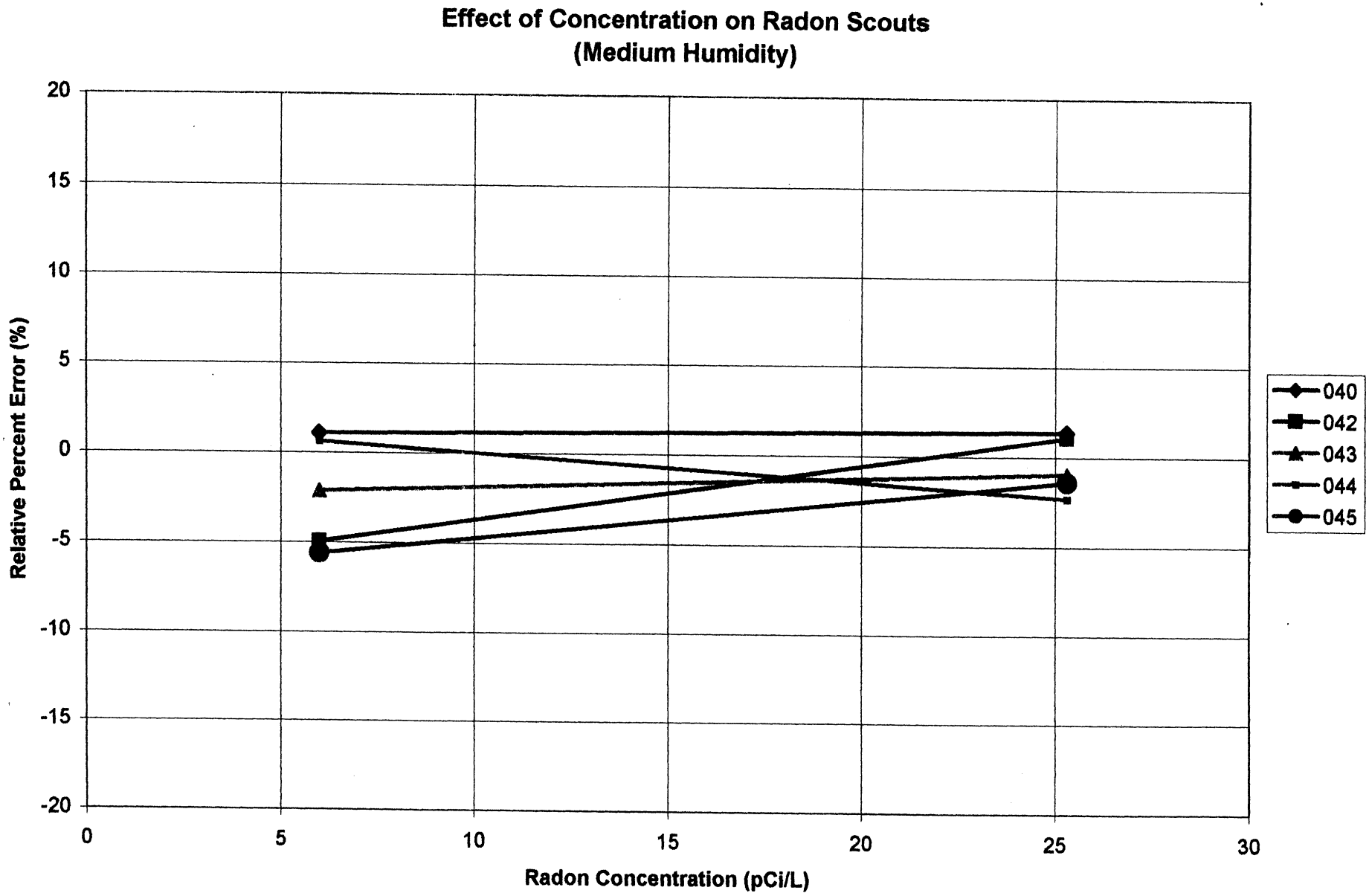
**Summary of Results for Effect of Humidity (Relative Percent Error)**

| | | | Radon Scout Serial Number | | | | |
|---|---|---|---|---|---|---|---|
| Start Date | End Date | RH (%) | 040 | 042 | 043 | 044 | 045 |
| 05/26/06 | 05/31/06 | 22.1 | 4.3 | 3.5 | 3.4 | 0.8 | 2.6 |
| 04/15/06 | 04/20/06 | 49.9 | 1.4 | 1.1 | -1.0 | -2.3 | -1.4 |
| 06/04/06 | 06/09/06 | 75.4 | -0.9 | -3.2 | -2.7 | -2.7 | -3.9 |

**Summary of Results for Effect of Concentration (Relative Percent Error)**

| | | | Radon Scout Serial Number | | | | |
|---|---|---|---|---|---|---|---|
| Start Date | End Date | Conc (pCi/l) | 040 | 042 | 043 | 044 | 045 |
| 03/25/06 | 03/30/06 | 6.0 | 1.1 | -5.0 | -2.1 | 0.6 | -5.6 |
| 04/15/06 | 04/20/06 | 25.3 | 1.4 | 1.1 | -1.0 | -2.3 | -1.4 |


Effect of Humidity on Radon Scouts
(at nominal 25 pCi/liter)
Relative Percent Error (%)
20
15
10
5
0
-5
-10
-15
-20
20
30
40
50
60
70
80
Relative Humidity (%)
040
042
043
044
045


Effect of Concentration on Radon Scouts
(Medium Humidity)
Relative Percent Error (%)
20
15
10
5
0
-5
-10
-15
-20
0
5
10
15
20
25
30
Radon Concentration (pCi/L)
040
042
043
044
045