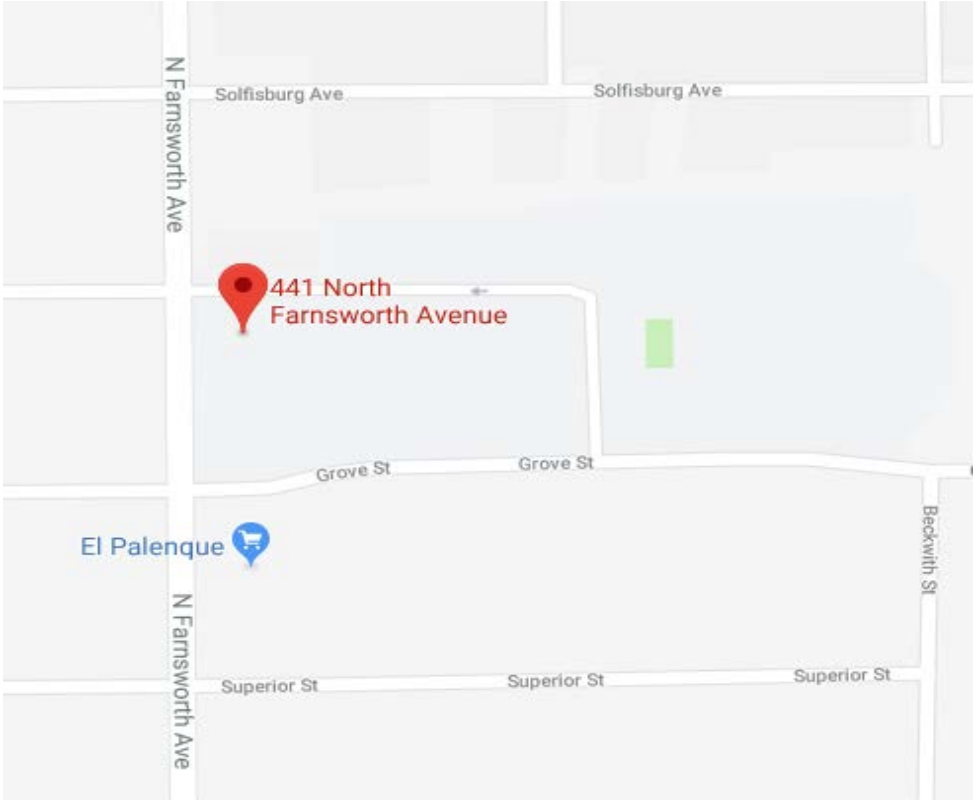
Carnow, Conibear & Assoc., Ltd.
Environmental Consulting Services
600 W. Van Buren St., Suite 500, Chicago, IL 60607
t: 312.782.4486 f: 312.782.5145
www.ccaltd.com

Radon Measurement Survey Report

Site:

Cowherd Middle School
441 North Farnsworth Avenue
Aurora, Illinois 60505

Survey Dates: May 16, 2018 thru May 18, 2018



Prepared For:

East Aurora School District 131
417 Fifth Street
Aurora, Illinois 60505

Carnow Conibear Project No. A146000137

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Surveyed by: Nicole Bennett
Nicole Bennett
Radon Measurement Professional

Report by: Nicole Bennett
Nicole Bennett
Radon Measurement Professional

Reviewed by:
Derek Lantry
Director, Technical Services

Report Issued: July 3, 2018

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APPENDICES

1.0 EXECUTIVE SUMMARY

Carnow, Conibear, & Assoc., Ltd. (Carnow Conibear) was contracted by East Aurora School District 131 to perform a radon measurement survey at the Cowherd Middle School located at 441 North Farnsworth Avenue in Aurora, Illinois. The survey was initiated on May 16, 2018 and completed on May 18, 2018 by Nicole Bennett, an Illinois Emergency Management Agency (IEMA) licensed Radon Measurement Professional (License No. RNI2016213). The scope of work included short term (two to four day) radon measurements in frequently occupied rooms with substantial ground contact. The radon sampling was performed following IEMA and the United States Environmental Protection Agency (USEPA) testing protocols for commercial and school radon measurements, the radon device manufacturer's recommendations, and Carnow Conibear's Quality Assurance Plan.

A total of one hundred twenty-two (122) radon test devices were deployed including one hundred seven (107) single devices, nine (9) duplicates, and six (6) blanks. Activated radon charcoal devices manufactured by Air Chek Inc. were utilized during the radon survey. The activated charcoal devices are passive devices containing activated carbon to measure radon. Testing was initiated on May 16, 2018 and completed on May 18, 2018.

Radon measurement results ranged from less than (<) 0.3 to 2.2 PicoCuries per liter (pCi/L). The radon measurement results indicate areas tested were below the EPA and IEMA recommended action level of 4.0 pCi/L during the time of the test. The average indoor radon concentrations are 1.3 pCi/L nationwide. The average outdoor radon concentration is 0.4 pCi/L.

Based on the radon measurement results Carnow Conibear recommends routine follow-up radon measurement survey every three (3) years, preferably at different seasonal times of the year. Additional radon testing is recommended if significant changes are made to the building's structural or mechanical components.

2.0 BACKGROUND

Radon is a naturally occurring, radioactive, colorless, odorless, tasteless gas produced from the decay of uranium and radium found in most soil and rock. Natural soils and rock such as granites, shales, and corals, contaminated soils from uranium processing mills, contaminated building materials, and groundwater water supplies directly from wells are a few common sources of radon. Radon can be found at some level in all indoor and outdoor air. Unlike most airborne contaminants radon is chemically inert, or chemically inactive. As a result, it is not chemically bound or attached to other materials and can move easily through porous materials or void space.

Typically, most radon gas is generated from the surrounding soil or bedrock, pulled through the soil or rock by air pressure differentials and enters the structure. However, radon gas can come from water, outside air, or contaminated building materials. The strength of the radon source has the biggest impact on indoor radon concentrations. The route of entry (i.e. through holes in the foundation), the building's ventilation rate, foundation type and differences in soils beneath the building can affect the indoor radon concentrations.

The primary health effect attributed to radon exposure is lung cancer. The World Health Organization (WHO), the National Academy of Sciences, the US Department of Health and Human Services, and the EPA classify radon as known human carcinogen. The EPA states radon is the largest source of radiation exposure and risk to the general public. When radon and products of radon decay are inhaled, decay can occur while in contact with the lung prior to being expelled. Because radon is chemically inert, most inhaled radon is rapidly exhaled. However, the inhaled decay products are readily deposited in the lungs, release energy in the form of radiation causing lung tissue damage and consequently increase the risk of lung cancer.

Radon concentrations in air are commonly expressed in picoCuries per liter (pCi/L) in the United States. An EPA national residential radon survey completed in 1991, determined the average indoor radon level is 1.3 pCi/L and the average outdoor level is about 0.4 pCi/L. The National Academy of Sciences' (NAS) latest report on radon, the Biological Effects of Ionizing Radiation (BEIR) VI Report (1999) estimates radon in indoor air causes about 21,000 lung cancer deaths each year in the United States. The EPA states that any level of radon carries some risk, there are no safe levels, and has established an action level of 4.0 pCi/L.

3.0 SCOPE OF WORK

Carnow, Conibear was contracted by East Aurora School District 131 to perform a radon survey at the Cowherd Middle School located at 441 North Farnsworth Avenue in Aurora, Illinois.

The scope of work included short term radon measurements in frequently occupied rooms with substantial ground contact. The duration of short term measurements can range from two (2) to four (4) days. Prior to placement of the radon measurement devices a Quality Assurance Project Plan (QAPP) was developed and general observations were performed to verify test conditions, identify device placement locations, and determine structural and mechanical building components. The QAPP was created to document and describe the necessary quality assurance procedures, quality control activities, and provide a clear, concise, and complete plan for the radon measurement operations. Observations of test conditions verified closed building conditions were maintained at a minimum of twelve (12) hours prior to testing and throughout the measurement period. Closed building conditions are necessary for short term radon measurements in order to stabilize the radon and radon decay product concentrations and increase the reproducibility of the measurement. Closed building conditions require windows and exterior doors on all levels be kept closed (except for normal entry and exit) during the measurement period. Closed building conditions also require the normal operation of heating, ventilating, and air conditions systems.

Radon test devices were deployed in one hundred seven (107) locations. In addition, nine (9) duplicates, and six (6) blanks, were utilized to measure precision and bias, and ensure quality data. Radon test devices were documented in a permanent log noting the address of the building measured, a diagram of the test area noting the exact locations of all measurement devices deployed, exact start and stop times of the measurement period, a description of the device used and serial number, and the name and IEMA license number of the Radon Measurement Professional. At the end of the measurement period the radon test devices were retrieved, resealed, and mailed to the laboratory for analysis.

The radon measurement results are reported in picoCurie per liter. A picoCurie per liter is 2.22 atomic radon disintegrations per minute for each liter of air. The results of the radon measurements are interpreted to determine the need for additional testing and assess the quality and confidence of the measurement data. Typically, follow-up measurements will be recommended in every room with results greater than 4.0 pCi/L. The recommendation to mitigate elevated levels of radon shall not be based on the initial measurement results.

4.0 METHODOLOGY

The radon testing was performed following requirements set forth by the IEMA, USEPA, and Carnow Conibear's Quality Assurance Plan. The radon measurement survey consisted of several phases. The initial phase consisted of preliminary testing protocol, including an explanation of services, instructions to comply with closed building conditions, the development of the Quality Assurance Project Plan, and determination of the testing period. Next, general observations of the building were performed to verify test conditions, identify device placement locations, and determine structural and mechanical building components.

The measurement phase included the radon testing device placement and retrieval. Activated radon charcoal devices manufactured by Air Chek Inc. were utilized during this radon survey. The activated charcoal devices are passive devices containing activated carbon to measure radon. Radon test devices were placed in such a way to limit unintentional interference from building occupants. The measurement devices were placed at least three feet from doors, windows to the outside, at least one foot from exterior walls, at least four feet from heat sources, out of the direct flow of ventilation ducts and sunlight, and suspended in the general breathing zone. Duplicate tests were conducted for a minimum of 10% of the total radon test devices deployed to measure precision. Field blanks were submitted for a minimum of 5% of the total number of radon test devices deployed to measure background gamma radiation. Spike tests were not submitted for this survey but are submitted for a minimum of three per 100 radon test devices or a minimum of three per year to measure laboratory accuracy. A total of one hundred twenty-two (122) radon test devices were deployed including one hundred seven (107) single devices, nine (9) duplicates, and six (6) blanks. At the end of the measurement period the radon measurement devices were retrieved, resealed, and shipped overnight to Air Chek Inc. for analysis. Air Chek Inc. calculates the radon concentration after measuring the gamma activity by the radon decay products produced from the random decay of the collected radon. The final phase consisted of interpreting the results and an assessment of the quality and confidence of the measurement data.

5.0 SUMMARY OF RESULTS

Table 1.0 Radon Measurement Device Results identify all the radon measurement devices deployed and the reported radon results. The radon measurement results are reported in picoCurie per liter (pCi/L).

Radon measurement results were below 4.0pCi/L. The radon measurement results indicate areas tested were below the EPA and IEMA recommended action level of 4.0 pCi/L during the time of the test. No radon mitigation systems were observed in the building. Additionally, the following testing abnormalities were noted during the radon measurement interval.

- The device (serial #9045207) placed in Girls Locker Room 915 was missing at the time of retrieval
- The device (serial #9051202) placed in Classroom 710 was missing at the time of retrieval
- The device (serial #9051203) placed in Classroom 708 was missing at the time of retrieval
- The device (serial #9051227) placed in Cafeteria 917 was missing at the time of retrieval
- The device (serial #9051268) placed in Band Room Office 912A was missing at the time of retrieval

Table 1.0 Radon Measurement Device Results

Cowherd Middle School -
441 North Farnsworth Avenue
Aurora, Illinois 60505

Device Location	Device Serial #	Start Date	Start Time	Stop Date	Stop Time	Result (pCi/L)	Comments
Gymnasium 918	9045215	5/16/2018	3:10 PM	5/18/2018	3:44 PM	< 0.3	
Gymnasium 918	9045216	5/16/2018	3:11 PM	5/18/2018	3:43 PM	< 0.3	
Stage 918C Storage	9045214	5/16/2018	3:13 PM	5/18/2018	3:44 PM	< 0.3	
Stage 918C	9045213	5/16/2018	3:14 PM	5/18/2018	3:43 PM	< 0.3	
Electrical Room 918B	9045212	5/16/2018	3:16 PM	5/18/2018	3:43 PM	< 0.3	
Gymnasium 914D	9035211	5/16/2018	3:18 PM	5/18/2018	3:45 PM	< 0.3	
Gymnasium 914D	9045210	5/16/2018	3:18 PM	5/18/2018	3:45 PM	< 0.3	
Girl's Locker Room Office 915B	9045209	5/16/2018	3:21 PM	5/18/2018	3:50 PM	< 0.3	
Girl's Locker Room Office 915A	9045208	5/16/2018	3:23 PM	5/18/2018	3:40 PM	< 0.3	
Girl's Locker Room 915	9045207	5/16/2018	3:24 PM	5/18/2018	---	---	Missing
Girl's Locker Room 915D	9045206	5/16/2018	3:26 PM	5/18/2018	3:46 PM	< 0.3	
Storage 914C	9045205	5/16/2018	3:30 PM	5/18/2018	3:48 PM	1.0	
Storage 914C	9045204	5/16/2018	3:30 PM	5/18/2018	3:48 PM	1.1	Duplicate RPD = 9.5%
Boy's Locker Room 914	9045203	5/16/2018	3:32 PM	5/18/2018	3:49 PM	< 0.3	
Boy's Locker Room Office 914P	9045202	5/16/2018	3:33 PM	5/18/2018	3:51 PM	< 0.3	
Elevator Equipment Room 914A	9045201	5/16/2018	3:38 PM	5/18/2018	3:51 PM	< 0.3	
Classroom 709	9051201	5/16/2018	3:46 PM	5/18/2018	4:01 PM	< 0.3	
Classroom 710	9051202	5/16/2018	3:47 PM	5/18/2018	---	---	Missing
Classroom 708	9051203	5/16/2018	3:48 PM	5/18/2018	---	---	Missing
Classroom 706	9051204	5/16/2018	3:48 PM	5/18/2018	4:01 PM	< 0.3	
Classroom 707	9051205	5/16/2018	3:49 PM	5/18/2018	4:01 PM	< 0.3	
Classroom 705	9051206	5/16/2018	3:50 PM	5/18/2018	4:02 PM	< 0.3	
Classroom 705	9051207	5/16/2018	3:50 PM	5/18/2018	4:02 PM	< 0.3	
Classroom 704	9051208	5/16/2018	3:51 PM	5/18/2018	3:59 PM	< 0.3	
Classroom Closet 704A	9051209	5/16/2018	3:52 PM	5/18/2018	4:01 PM	< 0.3	

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Device Location	Device Serial #	Start Date	Start Time	Stop Date	Stop Time	Result (pCi/L)	Comments
Server in Classroom 704	9051210	5/16/2018	3:53 PM	5/18/2018	4:00 PM	< 0.3	
Classroom 702	9051211	5/16/2018	3:55 PM	5/18/2018	4:00 PM	< 0.3	
Classroom 703	9051212	5/16/2018	3:56 PM	5/18/2018	4:02 PM	< 0.3	
Classroom 701	9051213	5/16/2018	3:57 PM	5/18/2018	4:00 PM	< 0.3	
Janitor's Closet 700C	9051214	5/16/2018	3:58 PM	5/18/2018	4:00 PM	< 0.3	
Counselor Office 403	9051215	5/16/2018	3:59 PM	5/18/2018	4:07 PM	< 0.3	
Counselor Office 402	9051216	5/16/2018	4:00 PM	5/18/2018	4:07 PM	< 0.3	
Counselor Office 401	9051217	5/16/2018	4:00 PM	5/18/2018	4:08 PM	< 0.3	
Classroom 614	9051218	5/16/2018	4:01 PM	5/18/2018	4:11 PM	< 0.3	
Classroom 610	9051219	5/16/2018	4:03 PM	5/18/2018	4:11 PM	< 0.3	
Classroom 610	9051220	5/16/2018	4:03 PM	5/18/2018	4:12 PM	< 0.3	Duplicate RPD = 0.0%
Classroom 612	9051221	5/16/2018	4:04 PM	5/18/2018	4:12 PM	< 0.3	
Classroom 606	9051222	5/16/2018	4:05 PM	5/18/2018	4:12 PM	< 0.3	
Classroom 608	9051223	5/16/2018	4:06 PM	5/18/2018	4:12 PM	< 0.3	
Classroom 604	9051224	5/16/2018	4:07 PM	5/18/2018	4:13 PM	< 0.3	
Classroom Closet 604A	9051225	5/16/2018	4:08 PM	5/18/2018	4:12 PM	< 0.3	
Classroom 602	9051226	5/16/2018	4:09 PM	5/18/2018	4:12 PM	< 0.3	
Cafeteria 917	9051227	5/16/2018	4:13 PM	5/18/2018	---	---	Missing
Engineer's Office 916	9051228	5/16/2018	4:15 PM	5/18/2018	4:15 PM	1.2	
Classroom 609	9051229	5/16/2018	4:17 PM	5/18/2018	4:18 PM	< 0.3	
Classroom 611	9051230	5/16/2018	4:18 PM	5/18/2018	4:19 PM	< 0.3	
Classroom 607	9051231	5/16/2018	4:20 PM	5/18/2018	4:20 PM	< 0.3	
Classroom 607	9051232	5/16/2018	4:20 PM	5/18/2018	4:20 PM	< 0.3	Duplicate RPD = 0.0%
Classroom 605	9051233	5/16/2018	4:23 PM	5/18/2018	4:23 PM	< 0.3	
Classroom Closet 605A	9051234	5/16/2018	4:24 PM	5/18/2018	4:24 PM	< 0.3	

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Device Location	Device Serial #	Start Date	Start Time	Stop Date	Stop Time	Result (pCi/L)	Comments
Server Room 605B	9051235	5/16/2018	4:25 PM	5/18/2018	4:25 PM	< 0.3	
Storage 601B	9051236	5/16/2018	4:26 PM	5/18/2018	4:26 PM	< 0.3	
Classroom 601	9051237	5/16/2018	4:27 PM	5/18/2018	4:27 PM	< 0.3	
Classroom Closet 601A	9051238	5/16/2018	4:28 PM	5/18/2018	4:28 PM	< 0.3	
Classroom 603	9051239	5/16/2018	4:28 PM	5/18/2018	4:28 PM	< 0.3	
Janitor's Closet near 600F	9051240	5/16/2018	4:29 PM	5/18/2018	4:30 PM	< 0.3	
Classroom 502	9051241	5/16/2018	4:30 PM	5/18/2018	4:31 PM	< 0.3	
Classroom 504	9051242	5/16/2018	4:31 PM	5/18/2018	4:32 PM	< 0.3	
Classroom 505	9051243	5/16/2018	4:32 PM	5/18/2018	4:33 PM	< 0.3	
Classroom 505	9051244	5/16/2018	4:32 PM	5/18/2018	4:33 PM	< 0.3	Duplicate RPD = 0.0%
Classroom 503	9051245	5/16/2018	4:34 PM	5/18/2018	4:35 PM	< 0.3	
Classroom 501	9051246	5/16/2018	4:35 PM	5/18/2018	4:35 PM	< 0.3	
Main Office 101A	9051247	5/16/2018	4:37 PM	5/18/2018	4:38 PM	< 0.3	
Nurse's Office 102	9051248	5/16/2018	4:38 PM	5/18/2018	4:39 PM	< 0.3	
Office 104	9051249	5/16/2018	4:42 PM	5/18/2018	4:43 PM	< 0.3	
Principal's Office 101	9051250	5/16/2018	4:43 PM	5/18/2018	4:44 PM	< 0.3	
Assistant Principal's Office 103	9051251	5/16/2018	4:44 PM	5/18/2018	4:44 PM	0.6	
Office 106	9051252	5/16/2018	4:44 PM	5/18/2018	4:45 PM	< 0.3	
Office 105	9051253	5/16/2018	4:45 PM	5/18/2018	4:45 PM	< 0.3	
Office 108	9051254	5/16/2018	4:46 PM	5/18/2018	4:46 PM	< 0.3	
Office 108	9051255	5/16/2018	4:46 PM	5/18/2018	4:46 PM	< 0.3	Duplicate RPD = 0.0%
Office 107	9051256	5/16/2018	4:47 PM	5/18/2018	4:47 PM	< 0.3	
Office 110	9051257	5/16/2018	4:47 PM	5/18/2018	4:48 PM	< 0.3	
Office 109	9051258	5/16/2018	4:48 PM	5/18/2018	4:50 PM	< 0.3	
Records Room 111	9051259	5/16/2018	4:48 PM	5/18/2018	4:50 PM	< 0.3	

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Device Location	Device Serial #	Start Date	Start Time	Stop Date	Stop Time	Result (pCi/L)	Comments
Office 114	9051260	5/16/2018	4:49 PM	5/18/2018	4:51 PM	< 0.3	
Kitchen/Lounge 101D	9051261	5/16/2018	4:50 PM	5/18/2018	4:51 PM	< 0.3	
Classroom 901	9051262	5/16/2018	4:53 PM	5/18/2018	5:05 PM	< 0.3	
Classroom 903	9051263	5/16/2018	4:55 PM	5/18/2018	5:04 PM	< 0.3	
Classroom 904	9051264	5/16/2018	4:57 PM	5/18/2018	5:04 PM	< 0.3	
Music Room 906	9051265	5/16/2018	5:00 PM	5/18/2018	5:03 PM	< 0.3	
Band Room 912	9051266	5/16/2018	5:02 PM	5/18/2018	5:04 PM	< 0.3	
Band Room 912	9051267	5/16/2018	5:02 PM	5/18/2018	5:04 PM	< 0.3	Duplicate RPD = 0.0%
Band Room Office 912A	9051268	5/16/2018	5:03 PM	5/18/2018	---	---	Missing
Classroom 811	9051269	5/16/2018	5:05 PM	5/18/2018	5:13 PM	< 0.3	
Classroom 810	9051270	5/16/2018	5:06 PM	5/18/2018	5:13 PM	< 0.3	
Classroom 809	9051271	5/16/2018	5:07 PM	5/18/2018	5:13 PM	< 0.3	
Classroom 807	9051272	5/16/2018	5:08 PM	5/18/2018	5:14 PM	< 0.3	
Classroom 808	9051273	5/16/2018	5:09 PM	5/18/2018	5:12 PM	< 0.3	
Classroom 806	9051274	5/16/2018	5:10 PM	5/18/2018	5:12 PM	< 0.3	
Classroom 805	9051275	5/16/2018	5:11 PM	5/18/2018	5:14 PM	< 0.3	
Classroom 804	9051276	5/16/2018	5:12 PM	5/18/2018	5:15 PM	< 0.3	
Classroom 802	9051277	5/16/2018	5:12 PM	5/18/2018	5:14 PM	< 0.3	
Classroom 803	9051278	5/16/2018	5:13 PM	5/18/2018	5:14 PM	< 0.3	
Classroom 803	9051279	5/16/2018	5:13 PM	5/18/2018	5:14 PM	< 0.3	Duplicate RDP = 0.0%
Janitor's Closet 800C	9051280	5/16/2018	5:14 PM	5/18/2018	5:14 PM	< 0.3	
Electrical Room 101A	9051281	5/16/2018	5:16 PM	5/18/2018	5:25 PM	1.0	
Classroom 1011	9051282	5/16/2018	5:17 PM	5/18/2018	5:31 PM	1.1	
Classroom 1012	9051283	5/16/2018	5:18 PM	5/18/2018	5:29 PM	0.9	
Classroom Closet 1012A	9051284	5/16/2018	5:18 PM	5/18/2018	5:34 PM	0.8	

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Device Location	Device Serial #	Start Date	Start Time	Stop Date	Stop Time	Result (pCi/L)	Comments
Custodial Closet 1010G	9051285	5/16/2018	5:19 PM	5/18/2018	5:30 PM	1.9	
Classroom 1009	9051286	5/16/2018	5:20 PM	5/18/2018	5:26 PM	0.8	
Classroom 1010	9051287	5/16/2018	5:22 PM	5/18/2018	5:27 PM	2.2	
Classroom 1008	9051288	5/16/2018	5:23 PM	5/18/2018	5:30 PM	0.7	
Classroom 1007	9051289	5/16/2018	5:24 PM	5/18/2018	5:29 PM	1.0	
Classroom 1007	9051290	5/16/2018	5:24 PM	5/18/2018	5:29 PM	1.2	Duplicate RPD = 18.2%
Classroom 1005	9051291	5/16/2018	5:25 PM	5/18/2018	5:28 PM	0.8	
Classroom 1006	9051292	5/16/2018	5:26 PM	5/18/2018	5:28 PM	1.1	
Classroom 1003	9051293	5/16/2018	5:27 PM	5/18/2018	5:38 PM	1.1	
Classroom 1001	9051294	5/16/2018	5:28 PM	5/18/2018	5:39 PM	0.6	
Classroom 1002	9051295	5/16/2018	5:30 PM	5/18/2018	5:37 PM	0.8	
Classroom 1004	9051296	5/16/2018	5:31 PM	5/18/2018	5:40 PM	0.8	
Classroom 902	9051297	5/16/2018	5:34 PM	5/18/2018	5:35 PM	1.7	
Classroom 902A	9051298	5/16/2018	5:35 PM	5/18/2018	5:36 PM	1.0	
Classroom 905	9051299	5/16/2018	5:38 PM	5/18/2018	5:38 PM	< 0.3	
Classroom 907	9051300	5/16/2018	5:39 PM	5/18/2018	5:40 PM	< 0.3	
Library Office 908A	9051101	5/16/2018	5:41 PM	5/18/2018	5:42 PM	< 0.3	
Library Office 908A	9051102	5/16/2018	5:41 PM	5/18/2018	5:41 PM	< 0.3	Duplicate RPD = 0.0%
Computer Lab 911	9051103	5/16/2018	5:43 PM	5/18/2018	5:46 PM	< 0.3	
Learning Resource Center 908	9051104	5/16/2018	5:45 PM	5/18/2018	5:46 PM	< 0.3	
Learning Resource Center 908	9051105	5/16/2018	5:46 PM	5/18/2018	5:46 PM	< 0.3	
Hallway	9051106	5/16/2018	5:47 PM	5/18/2018	5:50 PM	< 0.3	Blank
Hallway	9051107	5/16/2018	5:47 PM	5/18/2018	5:50 PM	< 0.3	Blank
Hallway	9051108	5/16/2018	5:48 PM	5/18/2018	5:51 PM	< 0.3	Blank
Hallway	9051109	5/16/2018	5:48 PM	5/18/2018	5:52 PM	< 0.3	Blank

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Cowherd Middle School -
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Device Location	Device Serial #	Start Date	Start Time	Stop Date	Stop Time	Result (pCi/L)	Comments
Hallway	9051110	5/16/2018	5:49 PM	5/18/2018	5:52 PM	< 0.3	Blank
Hallway	9051111	5/16/2018	5:49 PM	5/18/2018	5:53 PM	< 0.3	Blank

RPD - Relative Percent Difference = difference divided by the average of simultaneous results times 100. Results less than 4.0 pCi/L shall agree with a RPD of less than 67 percent. Results greater than 4.0 pCi/l shall agree with a RDP of less than 36 percent.
The EPA and IEMA recommended radon action level is 4.0 pCi/L.

6.0 CONCLUSIONS

Carnow, Conibear, & Assoc., Ltd. (Carnow Conibear) was contracted by East Aurora School District 131 to perform a radon survey at the Cowherd Middle School located at 441 North Farnsworth Avenue in Aurora, Illinois. The survey was initiated on May 16, 2018 and completed on May 18, 2018 by Nicole Bennett, an Illinois Emergency Management Agency (IEMA) licensed Radon Measurement Professional (License No. RNI2016213). The scope of work included short term (two to four day) radon measurements in frequently occupied rooms with substantial ground contact. The radon survey was performed in following the IEMA and the USEPA testing protocols for commercial and school radon measurements, the radon device manufacturer's recommendations, and the Carnow Conibear Quality Assurance Plan.

Radon measurement results ranged from less than (<) 0.3 to 2.2 pCi/L. The radon measurement results indicate radon concentrations for areas tested were below the EPA and IEMA recommended action level of 4.0 pCi/L during the time of the test. The average indoor radon concentrations are 1.3 pCi/L nationwide. The average outdoor radon concentration is 0.4 pCi/L.

Based on the radon measurement results Carnow Conibear recommends the following:

- A routine follow-up radon measurement survey every three (3) years, preferably at different seasonal times of the year. Follow-up radon testing is also recommended in locations with invalid test results.

- Additional radon testing if significant changes are made to the building's structural or mechanical components.

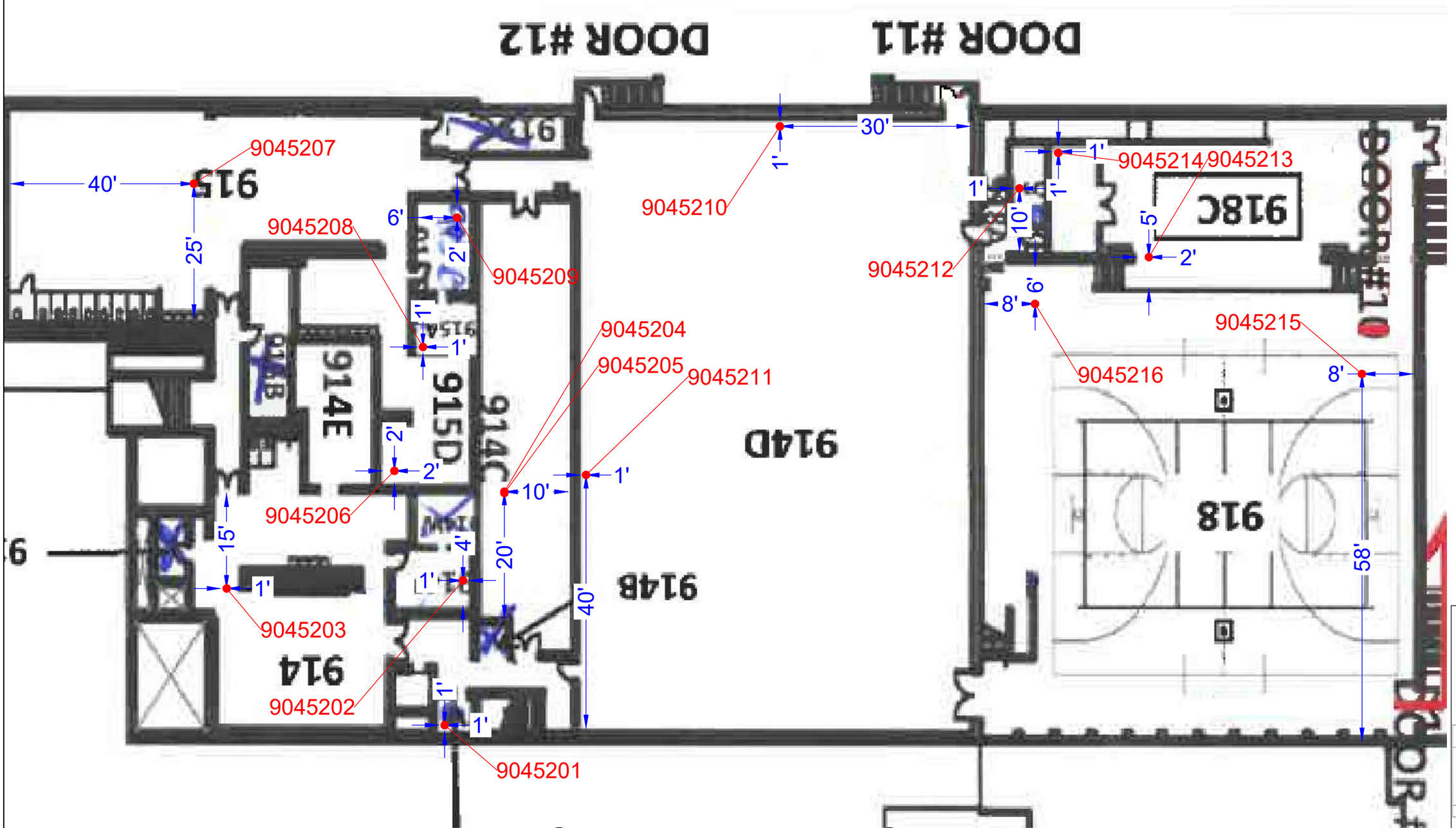
7.0 LIMITATIONS AND CONDITIONS

The information contained in this report was prepared for the exclusive use and reliance of East Aurora School District 131 and Carnow Conibear. This information is based on the specific parameters of the scope of work for this project and the regulations in force at the time of the report.

Carnow Conibear has applied prevailing industry standards and reasonable judgment and effort within the scope of work, while conducting the radon measurement survey. The standards, judgment, and effort used by Carnow Conibear personnel to investigate, assess, and determine the presence of potential environmental hazards and liabilities associated with the radon survey at the Cowherd Middle School, Aurora, Illinois are consistent with requirements outlined in federal and state guidelines. Carnow Conibear makes no warranty, express or implied, that the findings and interpretations in this report are a complete representation of the environmental hazards and liabilities, associated with the Cowherd Middle School, Aurora, Illinois.

APPENDIX A

Floor Plans – Radon Sampling Locations

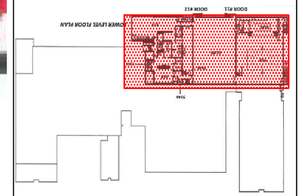


1 RADON SAMPLE LOCATIONS
LOWER LEVEL PARTIAL PLAN

NOT TO SCALE

N
TRUE NORTH

KEY PLAN



TESTED BY:
Derek Lantry
IEMA License #: RNI2004213

DRAWN BY:
J. Kalingasan

CHECKED BY:
D. Lantry

CLIENT:
East Aurora School District 131
417 Fifth Street
Aurora, Illinois 60505

LEGEND:
Approximate location of activated charcoal radon measurement device
4482418 Radon measurement device serial number
0 10' 20'

SHEET TITLE:
Radon Testing Locations at
Cowherd Middle School
441 North Farnsworth Avenue
Aurora, Illinois 60505

Carnow, Conibear & Assoc., Ltd.
Environmental Consulting Services
600 W. Van Buren St., Suite 500, Chicago, IL 60607
t: 312.782.4486 f: 312.782.5145
www.ccaltd.com

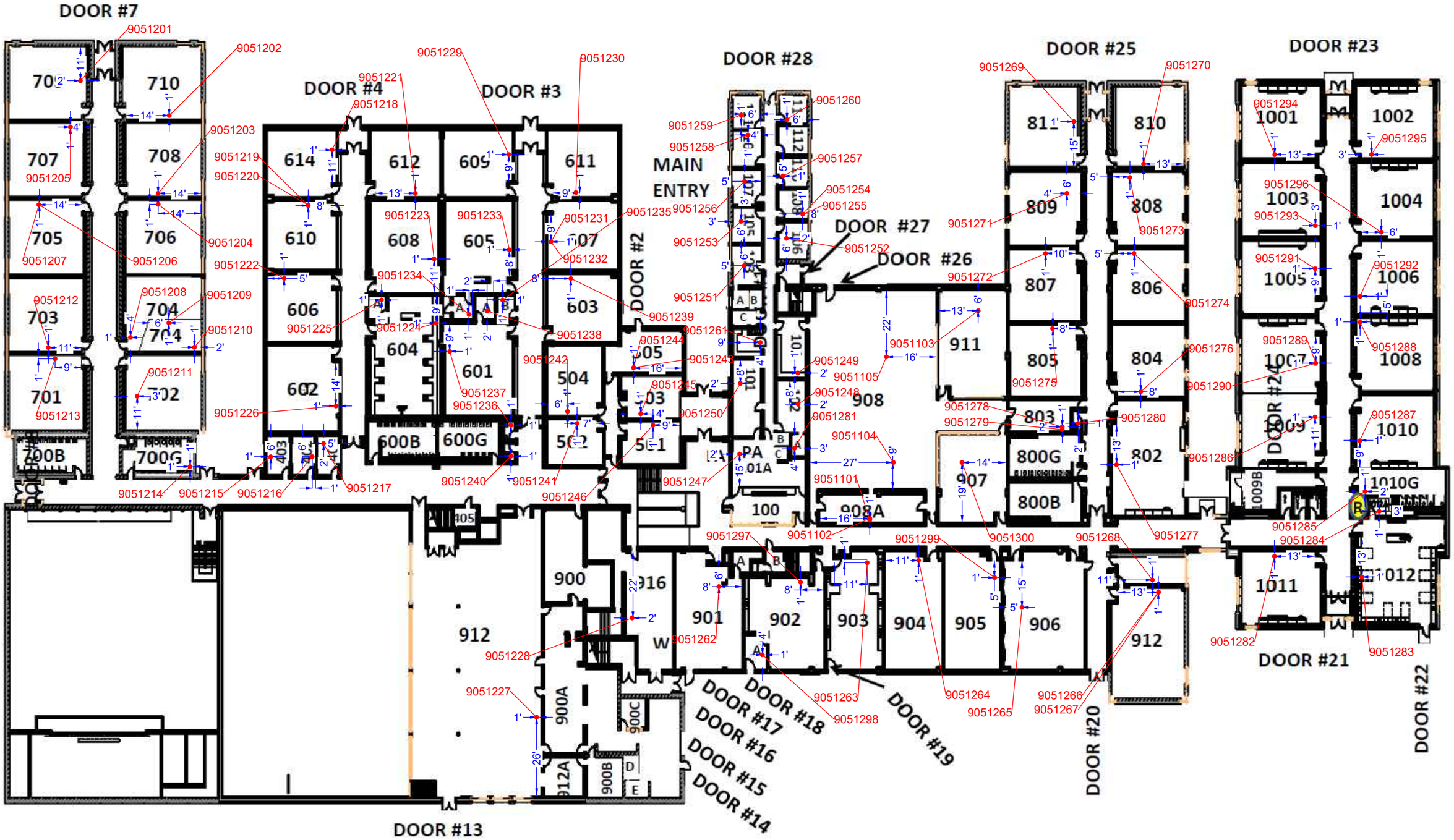
CARNOW CONIBEAR

CCA PROJECT NO:
A146000137

SURVEY DATE:
5/16/2018 to 5/18/2018

SHEET NO.
Rn-1

K:_comwpd\Projects\Radon Program\2018 Projects\2018 East Aurora District Radon Testing\Cowherd\Cowherd Radon.dwg



2 RADON SAMPLE LOCATIONS
UPPER LEVEL PARTIAL PLAN

NOT TO SCALE

N
TRUE NORTH

TESTED BY:
Derek Lantry
IEMA License #: RNI2004213

DRAWN BY:
J. Kalingasan

CHECKED BY:
D. Lantry

CLIENT:
East Aurora School District 131
417 Fifth Street
Aurora, Illinois 60505

LEGEND:
Approximate location of activated charcoal radon measurement device
4482418 Radon measurement device serial number
0 10′ 20′

SHEET TITLE:
Radon Testing Locations at
Cowherd Middle School
441 North Farnsworth Avenue
Aurora, Illinois 60505

Carnow, Conibear & Assoc., Ltd.
Environmental Consulting Services
600 W. Van Buren St., Suite 500, Chicago, IL 60607
t: 312.782.4486 f: 312.782.5145
www.ccaltd.com

CARNOW CONIBEAR

CCA PROJECT NO:
A146000137

SURVEY DATE:
5/16/2018 to 5/18/2018

SHEET NO:
Rn-2

K:_comwpd\Projects\Radon Program\2018 Projects\2018 East Aurora District Radon Testing\Cowherd\Cowherd Radon.dwg

APPENDIX B

Laboratory Analysis Report

May 24, 2018 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

COWHERD MIDDLE SCHOOL
441 NORTH FARNSWORTH AVENUE, AURORA

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9051251	ASSISTANT PRINCIPAL&APOS;S OFFICE 1	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	0.6 ± 0.3	2018-05-21
9051267	BAND ROOM 912	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051266	BAND ROOM 912	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9045203	BOY&APOS;S LOCKER ROOM 914	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9045202	BOY&APOS;S LOCKER ROOM OFFICE 914P	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051294	CLASSROOM 1001	2018-05-16 @ 5:00 pm	2018-05-18 @ 6:00 pm	0.6 ± 0.3	2018-05-21
9051295	CLASSROOM 1002	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	0.8 ± 0.3	2018-05-21
9051293	CLASSROOM 1003	2018-05-16 @ 5:00 pm	2018-05-18 @ 6:00 pm	1.1 ± 0.3	2018-05-21
9051296	CLASSROOM 1004	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	0.8 ± 0.3	2018-05-21
9051291	CLASSROOM 1005	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	0.8 ± 0.3	2018-05-21
9051292	CLASSROOM 1006	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	1.1 ± 0.3	2018-05-21
9051290	CLASSROOM 1007	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	1.2 ± 0.3	2018-05-21
9051289	CLASSROOM 1007	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	1.0 ± 0.3	2018-05-21
9051288	CLASSROOM 1008	2018-05-16 @ 5:00 pm	2018-05-18 @ 6:00 pm	0.7 ± 0.3	2018-05-21
9051286	CLASSROOM 1009	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	0.8 ± 0.3	2018-05-21
9051287	CLASSROOM 1010	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	2.2 ± 0.3	2018-05-21
9051282	CLASSROOM 1011	2018-05-16 @ 5:00 pm	2018-05-18 @ 6:00 pm	1.1 ± 0.3	2018-05-21
9051283	CLASSROOM 1012	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	0.9 ± 0.3	2018-05-21
9051246	CLASSROOM 501	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051241	CLASSROOM 502	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051245	CLASSROOM 503	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051242	CLASSROOM 504	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051243	CLASSROOM 505	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051244	CLASSROOM 505	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051237	CLASSROOM 601	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051226	CLASSROOM 602	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051239	CLASSROOM 603	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051224	CLASSROOM 604	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051233	CLASSROOM 605	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051222	CLASSROOM 606	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051232	CLASSROOM 607	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051231	CLASSROOM 607	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051223	CLASSROOM 608	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051229	CLASSROOM 609	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051219	CLASSROOM 610	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051220	CLASSROOM 610	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051230	CLASSROOM 611	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21

Air Chek, Inc. 1936 Butler Bridge Rd, Mills River, NC 28759-3892 Phone: (828) 684-0893 Fax: (828) 684-8498

May 24, 2018 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

COWHERD MIDDLE SCHOOL
441 NORTH FARNSWORTH AVENUE, AURORA

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9051221	CLASSROOM 612	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051218	CLASSROOM 614	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051213	CLASSROOM 701	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051211	CLASSROOM 702	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051212	CLASSROOM 703	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051208	CLASSROOM 704	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051206	CLASSROOM 705	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051207	CLASSROOM 705	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051204	CLASSROOM 706	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051205	CLASSROOM 707	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051201	CLASSROOM 709	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051277	CLASSROOM 802	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051278	CLASSROOM 803	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051279	CLASSROOM 803	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051276	CLASSROOM 804	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051275	CLASSROOM 805	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051274	CLASSROOM 806	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051272	CLASSROOM 807	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051273	CLASSROOM 808	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051271	CLASSROOM 809	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051270	CLASSROOM 810	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051269	CLASSROOM 811	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051262	CLASSROOM 901	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051297	CLASSROOM 902	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	1.7 ± 0.3	2018-05-21
9051298	CLASSROOM 902A	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	1.0 ± 0.3	2018-05-21
9051263	CLASSROOM 903	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051264	CLASSROOM 904	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051299	CLASSROOM 905	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	< 0.3	2018-05-21
9051300	CLASSROOM 907	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	< 0.3	2018-05-21
9051284	CLASSROOM CLOSET 1012A	2018-05-16 @ 5:00 pm	2018-05-18 @ 6:00 pm	0.8 ± 0.3	2018-05-21
9051238	CLASSROOM CLOSET 601A	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051225	CLASSROOM CLOSET 604A	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051234	CLASSROOM CLOSET 605A	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051209	CLASSROOM CLOSET 704A	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051103	COMPUTER LAB 911	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	< 0.3	2018-05-21
9051217	COUNSELOR OFFICE 401	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051216	COUNSELOR OFFICE 402	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21

Air Chek, Inc. 1936 Butler Bridge Rd, Mills River, NC 28759-3892 Phone: (828) 684-0893 Fax: (828) 684-8498

May 24, 2018

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

COWHERD MIDDLE SCHOOL
441 NORTH FARNSWORTH AVENUE, AURORA

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9051215	COUNSELOR OFFICE 403	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051285	CUSTODIAL CLOSET 1010G	2018-05-16 @ 5:00 pm	2018-05-18 @ 6:00 pm	1.9 ± 0.3	2018-05-21
9051281	ELECTRICAL ROOM 101A	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	1.0 ± 0.3	2018-05-21
9045212	ELECTRICAL ROOM 918B	2018-05-16 @ 3:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9045201	ELEVATOR EQUIPMENT ROOM 914A	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051228	ENGINEER&APOS;S OFFICE 916	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	1.2 ± 0.3	2018-05-21
9045206	GIRL&APOS;S LOCKER ROOM 915D	2018-05-16 @ 3:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9045208	GIRL&APOS;S LOCKER ROOM OFFICE 915A	2018-05-16 @ 3:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9045209	GIRL&APOS;S LOCKER ROOM OFFICE 915B	2018-05-16 @ 3:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9045211	GYMNASIUM 914D	2018-05-16 @ 3:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9045210	GYMNASIUM 914D	2018-05-16 @ 3:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9045215	GYMNASIUM 918	2018-05-16 @ 3:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9045216	GYMNASIUM 918	2018-05-16 @ 3:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051111	HALLWAY	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	< 0.3	2018-05-21
9051108	HALLWAY	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	< 0.3	2018-05-21
9051109	HALLWAY	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	< 0.3	2018-05-21
9051106	HALLWAY	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	< 0.3	2018-05-21
9051110	HALLWAY	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	< 0.3	2018-05-21
9051107	HALLWAY	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	< 0.3	2018-05-21
9051214	JANITOR&APOS;S CLOSET 700C	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051280	JANITOR&APOS;S CLOSET 800C	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051240	JANITOR&APOS;S CLOSET NEAR 600F	2018-05-16 @ 4:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051261	KITCHEN/LOUNGE 101D	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051105	LEARNING RESOURCE CENTER 908	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	< 0.3	2018-05-21
9051104	LEARNING RESOURCE CENTER 908	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	< 0.3	2018-05-21
9051101	LIBRARY OFFICE 908A	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	< 0.3	2018-05-21
9051102	LIBRARY OFFICE 908A	2018-05-16 @ 6:00 pm	2018-05-18 @ 6:00 pm	< 0.3	2018-05-21
9051247	MAIN OFFICE 101A	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051265	MUSIC ROOM 906	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051248	NURSE&APOS;S OFFICE 102	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051249	OFFICE 104	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051253	OFFICE 105	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051252	OFFICE 106	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051256	OFFICE 107	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051254	OFFICE 108	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051255	OFFICE 108	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051258	OFFICE 109	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21

Air Chek, Inc. 1936 Butler Bridge Rd, Mills River, NC 28759-3892 Phone: (828) 684-0893 Fax: (828) 684-8498

May 24, 2018 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

COWHERD MIDDLE SCHOOL
441 NORTH FARNSWORTH AVENUE, AURORA

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9051257	OFFICE 110	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051260	OFFICE 114	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051250	PRINCIPAL&APOS;S OFFICE 101	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051259	RECORDS ROOM 111	2018-05-16 @ 5:00 pm	2018-05-18 @ 5:00 pm	< 0.3	2018-05-21
9051210	SERVER IN CLASSROOM 704	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051235	SERVER ROOM 605B	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9045213	STAGE 918C	2018-05-16 @ 3:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9045214	STAGE 918C STORAGE	2018-05-16 @ 3:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9051236	STORAGE 601B	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	< 0.3	2018-05-21
9045204	STORAGE 914C	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	1.1 ± 0.3	2018-05-21
9045205	STORAGE 914C	2018-05-16 @ 4:00 pm	2018-05-18 @ 4:00 pm	1.0 ± 0.3	2018-05-21

Air Chek, Inc. 1936 Butler Bridge Rd, Mills River, NC 28759-3892 Phone: (828) 684-0893 Fax: (828) 684-8498

APPENDIX C

Radon Measurement Professional License

Bruce Rauner
Governor

State of Illinois

James K. Joseph
Director

IEMA Division of Nuclear Safety

Pursuant to the Radon Industry Licensing Act, 420 ILCS 44 et seq. and 32 Illinois Adminstrative Code 422, Licensing of Radon Detection and Mitigation Services, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued.

This is to certify that **Nicole Bennett**

License Number **RNI2016213**

has met the requirements for **Radon Measurement Professional**

Issued - Expires **05/18/2016 - 05/31/2021**

Limited to Radon measurements of residential real estate, home environment, school and commercial buildings only.

SEAL OF THE STATE OF ILLINOIS
AUG. 26TH 1818

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Patrick I. Daniels, Radon Program