May 15, 2017

Providing Trusted
Health and Safety Solutions

Mr. Kain Smith
Shakopee Public Schools
1200 Town Square
Shakopee, MN 55379

RE: Shakopee Public Schools
Long-Term Radon Sample Results
IEA Project # 201610975

Dear Mr. Smith:

As requested by Shakopee Public Schools, IEA placed three hundred seventy-three (373) alpha track radon detectors for the purpose of evaluating radon levels in specific areas of the following eleven (11) buildings in the district:

- Central Family Center – 18 detectors
- District Office – 20 detectors
- Eagle Creek Elementary – 33 detectors
- Jackson Elementary – 33 detectors
- Pearson Middle School – 43 detectors
- Red Oak Elementary – 33 detectors
- Shakopee High School – 49 detectors
- Shakopee East Junior High School – 34 detectors
- Shakopee West Junior High School – 41 detectors
- Sun Path Elementary – 32 detectors
- Sweeney Elementary – 37 detectors

The purpose of the site sampling was to document radon levels in the sampled locations and compare them to the MDH and the EPA established recommended action level in frequently occupied areas of 4.0 picoCuries per liter (pCi/L).

INTRODUCTION

Radon is a colorless, odorless, radioactive gas that occurs naturally in soil, rocks, underground water supplies, and in the ambient air. According to the U.S. Environmental Protection Agency (EPA) and other scientific organizations, naturally-occurring radon gas has been associated with an increased risk of the development of lung cancer. The chances of developing lung cancer from radon exposure are dependent on several factors, including individual susceptibility and, perhaps more importantly, the dose and duration of exposure. Radon testing in schools is highly recommended by the Minnesota Department of Health (MDH) and EPA. MDH recommends retesting following any renovations to the building or HVAC system, and periodically (e.g. every five years).

IEA placed alpha track detectors in frequently occupied areas district-wide for the purpose of sampling for radon in accordance with the MDH's *Best Practices for Radon Measurement in Minnesota Schools and Commercial Buildings* (March 2013). A total of 373 detectors were put in place on November 9, 2016. A total of 317 detectors were retrieved on March 27, 2017, for a total long-term sampling period of 138 days. 56 detectors were missing at the end of the testing period. The EPA and MDH recommend radon testing of frequently-occupied school areas, areas identified by the district to place the detectors were expected to be frequently occupied and would typically be used for radon sampling. IEA followed MDH recommendations for quality assurance measurements by including duplicate detectors and control detectors (blanks). The detectors were analyzed by Landauer, Inc. The sampling and analysis methodologies are provided in Appendix A.

Per Minnesota Statutes, section 123B.571, school districts are now required to report radon test results at a school board meeting and report results to the MDH. IEA is able to assist with presenting results to the school board, and the MDH reporting. The MDH reporting form is provided in Appendix D.

EVALUATION CRITERIA

The MDH and the EPA have established a recommended action level in frequently occupied areas of 4.0 picoCuries per liter (pCi/L) for an annual average. Testing was conducted during the winter, as recommended by the MDH, when the ventilation system was operating normally, and windows and doors were closed. Consequently, sampling under these "closed" conditions should be considered "worst case." The MDH recommends follow-up testing for sampling results that are above the action level. Please refer to the following table for MDH guidelines:

RESULTS (pCi/L)	RECOMMENDED ACTION
LESS THAN 4	Consider re-testing after changes to foundation or HVAC and every 5 years
Equal to and GREATER THAN 4	Conduct CRM short-term testing during winter months
LESS THAN 4 (DURING OCCUPANCY) AFTER CRM TESTING	Repeat CRM testing if not conducted during winter or if conducted during abnormal ventilation. Otherwise consider re-testing after changes to foundation or HVAC and every 5 years
GREATER THAN 4 (DURING OCCUPANCY) AFTER CRM TESTING	Reduce radon in rooms to less than 4 through radon mitigation. Conduct CRM testing to verify radon reduction.

CRM: Continuous Radon Monitor

RESULTS & DISCUSSION

The laboratory report and maps of each building with sampling locations, is provided in Appendix B. The Chain of Custody is provided in Appendix C. Following are summary results for each building.

Central Family Center

A total of eighteen (18) detectors were placed at Central Family Center. Three (3) detectors, two in the East Gym and one in Room 107, were missing when the detectors were collected. The results for the other fifteen (15) indicated that radon levels were below the action level of 4 pCi/L. See Table 1 below for a summary of the results:

TABLE 1: Central Family Center Elementary RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	**2.0 – 2.9 pCi/L**	**3.0 – 3.9 pCi/L**	**≥ 4 pCi/L**
Number of Tests	10	3	2	0
All below action level				

pCi/L: picocuries per liter

District Office

A total of twenty (20) detectors were placed at the District Office. Two (2) detectors, both in Community Ed, were missing when the detectors were collected. The results for the other eighteen (18) detectors indicated that radon levels were below the action level of 4 pCi/L. See Table 2 below for a summary of the results:

TABLE 2: District Office RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	**2.0 – 2.9 pCi/L**	**3.0 – 3.9 pCi/L**	**≥ 4 pCi/L**
Number of Tests	17	1	0	0
All below action level				

pCi/L: picocuries per liter

Eagle Creek Elementary

A total of thirty-three (33) detectors were placed at Eagle Creek Elementary. Six (6) detectors, one each in Room 126, Sunfish Pod, Room 121, Room 123, Cafeteria, and Room 116, was missing when the detectors were collected. Thirteen (13) detectors resulted in levels higher than the action level. The results for the other fourteen (14) detectors indicated that radon levels were below the action level of 4 pCi/L. See Table 3 below for a summary of the results:

TABLE 3: Eagle Creek Elementary RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	**2.0 – 2.9 pCi/L**	**3.0 – 3.9 pCi/L**	**≥ 4 pCi/L**
Number of Tests	3	2	9	13
Rooms and measurements readings greater than 4 pCi/L: 129-14.4; 113-9.4; 110-6.6; 108-5.3; Admin Office-5.1; 119-5.0; 103-5.0; 104-5.0; 105-4.9; 111-4.8; 114-4.6; 101-4.1; & 130-4.1				

pCi/L: picocuries per liter

Jackson Elementary

A total of thirty-three (33) detectors were placed at Jackson Elementary. Four (4) detectors, one each in Cafeteria and Room 101, and two in the Gym, were missing when the detectors were collected. Two (2) detectors resulted in levels higher than the action level. The results for the other twenty-seven (27) detectors indicated that radon levels were below the action level of 4 pCi/L. See Table 4 below for a summary of the results:

TABLE 4: Jackson Elementary RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	**2.0 – 2.9 pCi/L**	**3.0 – 3.9 pCi/L**	**≥ 4 pCi/L**
Number of Tests	24	3	0	2
Rooms and measurements readings greater than 4 pCi/L: 127-4.9 & 4.2				

pCi/L: picocuries per liter

Pearson Middle School

A total of forty-three (43) detectors were placed at Pearson Middle School. Three (3) detectors, one each in the Lounge, Room 138, and the Media Office, were missing when the detectors were collected. One (1) detector resulted in level higher than the action level. The results for the other thirty-nine (39) detectors indicated that radon levels were below the action level of 4 pCi/L. See Table 5 below for a summary of the results:

TABLE 5: Pearson Middle School RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	**2.0 – 2.9 pCi/L**	**3.0 – 3.9 pCi/L**	**≥ 4 pCi/L**
Number of Tests	10	24	5	1
Room and measurement reading greater than 4 pCi/L: 108-4.1				

pCi/L: picocuries per liter

Red Oak Elementary

A total of thirty-three (33) detectors were placed at Red Oak Elementary. Seven (7) detectors, one each in the Oriole Pod, Room 142, Eagle Pod, Room 131, the Lounge, and two in the gym, were missing when the detectors were collected. The results for the other twenty-six (26) detectors indicated that radon levels were below the action level of 4 pCi/L. See Table 6 below for a summary of the results:

TABLE 6: Red Oak Elementary RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	**2.0 – 2.9 pCi/L**	**3.0 – 3.9 pCi/L**	**≥ 4 pCi/L**
Number of Tests	26	0	0	0
All below action level				

pCi/L: picocuries per liter

Shakopee High School

A total of forty-nine (49) detectors were placed at Shakopee High School. Twelve (12) detectors, one each in Rooms E116, S110, S111, S112, Large Gymnasium, Multipurpose Room, Auxiliary Gym 1, Auxiliary Gym 2, Band, Open Area Outside Main Office and two in Room E110, were missing when the detectors were collected. Two (2) detectors resulted in levels higher than the action level. The results for the other thirty-five (35) detectors indicated that radon levels were below the action level of 4 pCi/L. See Table 7 below for a summary of the results:

TABLE 7: Shakopee High School RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	**2.0 – 2.9 pCi/L**	**3.0 – 3.9 pCi/L**	**≥ 4 pCi/L**
Number of Tests	27	5	3	2
Rooms and measurements readings greater than 4 pCi/L: Kitchen-15.0 & E113A-4.2				

pCi/L: picocuries per liter

Shakopee East Junior High School

A total of thirty-four (34) detectors were placed at Shakopee East Junior High School. Four (4) detectors, one each in Room 202, Gym #1, Gym #2, and Chorus 110, were missing when the detectors were collected. The results for the other thirty (30) detectors indicated that radon levels were below the action level of 4 pCi/L. See Table 8 below for a summary of the results:

TABLE 8: Shakopee East Junior High School RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	**2.0 – 2.9 pCi/L**	**3.0 – 3.9 pCi/L**	**≥ 4 pCi/L**
Number of Tests	23	6	1	0
All below action level				

pCi/L: picocuries per liter

Shakopee West Junior High School

A total of forty-one (41) detectors were placed at Shakopee West Junior High School. Six (6) detectors, one each in Room 129, Room 113, Room 106, Gymnasium, and two in Room 104, were missing when the detectors were collected. The results for the other thirty-five (35) indicated that radon levels were below the action level of 4 pCi/L. See Table 9 below for a summary of the results:

TABLE 9: Shakopee West Junior High School RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	**2.0 – 2.9 pCi/L**	**3.0 – 3.9 pCi/L**	**≥ 4 pCi/L**
Number of Tests	27	7	1	0
All below action level				

pCi/L: picocuries per liter

Sun Path Elementary

A total of thirty-two (32) detectors were placed at Sun Path Elementary. Six (6) detectors, one each in the Office, Nurse's Office, Room 133, Gym, Room 146, and Room 121, were missing when the detectors were collected. The results for the other twenty-six (26) indicated that radon levels were below the action level of 4 pCi/L. See Table 10 below for a summary of the results:

TABLE 10: Sun Path Elementary RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	**2.0 – 2.9 pCi/L**	**3.0 – 3.9 pCi/L**	**≥ 4 pCi/L**
Number of Tests	14	9	3	0
All below action level				

pCi/L: picocuries per liter

Sweeney Elementary

A total of thirty-seven (37) detectors were placed at Sweeney Elementary. Three (3) detectors, one each in the Office, 100 Lounge, and Room 004, were missing when the detectors were collected. The results for the other thirty-four (34) indicated that radon levels were below the action level of 4 pCi/L. See Table 11 below for a summary of the results:

TABLE 11: Sweeney Elementary RANGE OF RESULTS				
	0.0 – 1.9 pCi/L	**2.0 – 2.9 pCi/L**	**3.0 – 3.9 pCi/L**	**≥ 4 pCi/L**
Number of Tests	25	9	0	0
All below action level				

pCi/L: picocuries per liter

CONCLUSIONS & RECOMMENDATIONS

The radon levels in a total of eighteen (18) sample locations, at Eagle Creek Elementary (13), Jackson Elementary (2), Pearson Middle School (1), and Shakopee High School (2), were above the EPA action level of 4 pCi/L. Follow-up testing should be conducted for all sampling results above the action level following MDH guidelines:

- If the initial test results are greater than 4 pCi/L, conduct Continuous Radon Monitoring (CRM) short-term testing during the winter months.
- If the average radon levels from the CRM are below 4 pCi/L during occupancy, then consider re-testing after changes to the building foundation or HVAC system and every 5 years.
- If the average radon levels from the CRM are above 4 pCi/L during occupancy, then the building HVAC system settings (e.g. start time, night set-back temperature) should be adjusted to allow for improved airflow (and thereby reduce radon infiltration into the building). Conduct follow-up CRM testing to verify radon reduction. Continue to operate HVAC system under adjusted settings to keep radon levels within an acceptable range. Documentation should be kept with HVAC operation instructions for head custodian & Buildings & Grounds Supervisor to ensure that settings are maintained in the future.
- If the follow-up average radon levels from the CRM are still above 4 pCi/L during occupancy (after the HVAC adjustments have been made), then the district should contact a professional radon mitigation contractor for assistance. IEA recommends using a contact with experience specific to schools.

Test results must be reported to the MDH and your school board per Minnesota Statutes, section 123B.571. The MDH reporting form is provided in Appendix D.

Notify staff of test results and steps being taken to reduce radon levels in locations above the action level.

GENERAL COMMENTS

The analysis and opinions expressed in this report are based upon data obtained from radon sampling district-wide and are representative of the locations and time period sampled. This report does not reflect variations in conditions that may occur across the site, property, or facility. Actual conditions may vary and may not become evident without further assessment.

The report is prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted environmental, health and safety practices. Other than as provided in the preceding sentence and in our Proposal #5583 dated October 20, 2016 regarding EHS radon sampling services at the district locations, including the General Conditions attached thereto, no warranties are extended or made.

IEA appreciates the opportunity to submit this analysis to Shakopee Public Schools. Should you require additional radon testing or have any questions regarding radon or any other environmental, health, or safety-related concerns, please do not hesitate to contact our office.

Sincerely,
IEA, INC.

Mary Ferrian
EHS Account Manager

Karen Weiblen
EHS/IEQ Consultant

MH/KW/ep 051517

Enc.

Appendix A

Methodology

Sampling Methodology

IEA placed alpha track radon detectors designed specifically for the detection of alpha particle activity caused by the decay of Radon-222 and its daughter products. The detector is made of an electrically conductive material and contains an alpha-particle sensitive registration material or foil. The detector has a cylindrical shape and completely encloses the foil. Air and radon gas can diffuse into the detector chamber through a cellulose filter. Individual detectors are uniquely identified with a number and corresponding bar code.

Upon receipt at the analytical laboratory, detectors are logged in and unique numbers assigned to each detector foil. Sample preparation is by an etching process. The foils are chemically etched after being loaded into a multi-cell etching chamber.

All foils are checked for both background and sensitivity before being used, with rejected material being discarded to prevent it from being used accidentally. During processing, a blank is included with each run. Monitors exposed to known concentration are processed weekly. Blind tests, with monitors exposed to an unknown level, are run twice each month with six replicates.

For each foil/monitor, the dose calculation program calculates the number of days the monitor was exposed in the field. The program calculates the average track density (tracks per square millimeter) subtracts a background track density and then multiplies by the calibration factor to give total integrated exposure. This number is divided by the number of days used to derive the average radon concentration. The minimum value reported is 0.1 pCi/L.

Any unusual conditions are noted on the processing form and shown on the exposure report. All exposure reports are reviewed by the QA vice-president before being mailed to IEA.

Results received by IEA are again reviewed for completeness by the Laboratory Quality Manager.

Appendix B

Analytical Results and Sampling Locations

LANDAUER NORDIC

RADON MONITORING REPORT

Issued by an Accredited Laboratory

Institute For Env Assessment
Jennifer Theis
9201 W. Broadway
Suite 600
Brooklyn Park MN 55445
United States

REPORT NUMBER
4728111:2

REPORT DATE
05/03/2017

PRINT DATE
05/03/2017

MEASUREMENT PERFORMED FOR

REPORT RECEIVER(S)
Institute For Env Assessment

The analysis results are located on page 2 of this document.

Description of the measurement

Building Id:

The measurement was performed with a closed alpha-track detector (Radtrak2) following the quality guidance in EPA 402-R-95-012.

Measurement method: closed alpha-track detector
The radon measurement was performed with a closed alpha-track detector following the quality assurance guidance given in EPA 402-R-95-012.
The detector container is manufactured from electrically conducting plastic. Through a small slit (filter), radon gas enters the detector. The track-detecting material (film) inside the detector is hit by alpha particles generated by the radon entering the container and the decay products formed from it. On the film, the alpha particles make small tracks which are enlarged through chemical etching and later counted in a microscope in order to determine the radon exposure.
LANDAUER NORDIC AB (P.O. Box 6522, SE-751 28 Uppsala, Sweden) is accredited (no. 1489) by SWEDAC to conduct radon-gas measurements using the closed alpha-track detector method. The analysis equipment is checked daily and the detectors are calibrated at regular intervals.
NRPP Licenses: 107831 AL, 107830 RT

Measured radon concentrations
For each detector, the measured value of the radon concentration is given. For each value an uncertainty associated with the measurement to a 95% confidence level is also given. For example a measurement result of 4.0 ± 0.5 pCi/l means that the radon concentration is most likely contained in the range 3.5-4.5 pCi/l .
If the start or end date of the measurement has not been provided, the radon concentration cannot be calculated. In such cases, the total exposure in pCi*days/l will be reported. The reported measured values are related to the detectors as received by Landauer Nordic. Detector deployment is not performed by Landauer Nordic. Measurement information such as monitoring period (dates) and placement location is provided to Landauer Nordic by the end user.

Radon measurements in Multifamily Buildings, Schools and Large Buildings
The United States Environmental Protection Agency (EPA) recommends remediation if the results of one long-term test or the average of two short-term tests conducted in an occupied room are 4.0 pCi/l or higher. The average yearly residential indoor radon level in the US is estimated to be around 1.3 pCi/l.
Long-term tests are conducted for more than 90 days. Short-term tests are conducted between 2 and 90 days and should be performed under closed building conditions.
If an initial short-term test result is less than 4 pCi/l, a follow-up measurement is probably not needed.
If an initial short-term test result is greater than 8 pCi/l, a short term follow-up measurement is recommended in order to get a fast result.
If an initial short-term test result is between 4 pCi/l and 8 pCi/l, a long-term or a short-term follow-up measurement is recommended.

More information about radon measurements and mitigation can be found in the AARST and EPA publications:
- ANSI/AARST Protocol for Conducting Measurements of Radon and Radon-Decay Products in Schools and Large Buildings
- ANSI/AARST Protocol for Conducting Radon and Radon Decay Product Measurements in Multifamily Buildings.
- ANSI/AARST Radon Mitigation Standards for Schools and Large Buildings.
- ANSI/AARST Radon Mitigation Standards for Multifamily Buildings.
- EPA Radon Measurements in Schools, EPA 402-R-92-014, July 1993.

For more information about the interpretation of your test results or about other radon related issues we suggest contacting your state radon office.

Signature on the report
With the signature on the report, the person responsible for the radon analysis at LANDAUER NORDIC hereby certifies that the measurement procedures follows the guidance in accordance with EPA 402-R-95-012 and that the demands from SWEDAC are fulfilled.

LANDAUER NORDIC

RADON MONITORING REPORT

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Test results

Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
213653-9	11/09/2016	03/27/2017	Shakopee High School	W117 Fitness Center	1.5 +/- 0.3	214 +/- 32
157311-2	11/09/2016	03/27/2017	Shakopee High School	Auditorium	1.5 +/- 0.3	202 +/- 32
108156-1	11/09/2016	03/27/2017	Shakopee High School	Stage Area	1.6 +/- 0.3	221 +/- 34
707074-1	11/09/2016	03/27/2017	Shakopee High School	Multi-Purpose Room near Band	1.9 +/- 0.3	260 +/- 36
785408-6	11/09/2016	03/27/2017	Shakopee High School	Practice Room	0.9 +/- 0.2	127 +/- 23
671223-6	11/09/2016	03/27/2017	Shakopee High School	Auditorium	1.5 1.5	204 +/- 32
747804-3	11/09/2016	03/27/2017	Pearson Middle School	Room 116	2.4 +/- 0.4	331 +/- 45
982346-9	11/09/2016	03/27/2017	Pearson Middle School	Cafeteria	1.4 +/- 0.2	195 +/- 29
172725-4	11/09/2016	03/27/2017	Pearson Middle School	Room 110	3.2 +/- 0.4	443 +/- 59
783823-8	11/09/2016	03/27/2017	Pearson Middle School	Room 111	2.5 +/- 0.4	340 +/- 47
268715-0	11/09/2016	03/27/2017	Pearson Middle School	Room 117	2.4 +/- 0.4	325 +/- 45
170417-0	11/09/2016	03/27/2017	Pearson Middle School	Main Office	2.0 +/- 0.3	278 +/- 38
774408-9	11/09/2016	03/27/2017	Pearson Middle School	Room 109	3.4 +/- 0.5	462 +/- 61
750852-6	11/09/2016	03/27/2017	Pearson Middle School	Room 108	4.1 +/- 0.5	560 +/- 70
702296-5	11/09/2016	03/27/2017	Pearson Middle School	Room 115	2.3 +/- 0.4	315 +/- 45
478750-3	11/09/2016	03/27/2017	Sweeney Elementary	ESL Room 111	1.7 +/- 0.3	233 +/- 36
210686-2	11/09/2016	03/27/2017	Shakopee High School	Main Hall	< 0.4	< 55
355014-2	11/09/2016	03/27/2017	Shakopee High School	Room S116	1.4 +/- 0.3	196 +/- 32
553288-2	11/09/2016	03/27/2017	Shakopee High School	Room E147	0.8 +/- 0.2	105 +/- 23
586861-7	11/09/2016	03/27/2017	Shakopee High School	Room E170	0.8 +/- 0.2	110 +/- 25

RT003LN - V1.20 / 2016-04-26 / J.O / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

Landauer Radon Inc.
900 Oakmont Lane Suite, Westmont IL 60559
Telephone: 331.814.2200 E-mail: help@landauerradon.com

LANDAUER NORDIC

RADON MONITORING REPORT

Issued by an Accredited Laboratory

Institute For Env Assessment
Jennifer Theis
9201 W. Broadway
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The detector container is manufactured from electrically conducting plastic. Through a small slit (filter), radon gas enters the detector. The track-detecting material (film) inside the detector is hit by alpha particles generated by the radon entering the container and the decay products formed from it. On the film, the alpha particles make small tracks which are enlarged through chemical etching and later counted in a microscope in order to determine the radon exposure.
LANDAUER NORDIC AB (P.O. Box 6522, SE-751 28 Uppsala, Sweden) is accredited (no. 1489) by SWEDAC to conduct radon-gas measurements using the closed alpha-track detector method. The analysis equipment is checked daily and the detectors are calibrated at regular intervals.
NRPP Licenses: 107831 AL, 107830 RT

Measured radon concentrations
For each detector, the measured value of the radon concentration is given. For each value an uncertainty associated with the measurement to a 95% confidence level is also given. For example a measurement result of 4.0 ± 0.5 pCi/l means that the radon concentration is most likely contained in the range 3.5-4.5 pCi/l .
If the start or end date of the measurement has not been provided, the radon concentration cannot be calculated. In such cases, the total exposure in pCi*days/l will be reported. The reported measured values are related to the detectors as received by Landauer Nordic. Detector deployment is not performed by Landauer Nordic. Measurement information such as monitoring period (dates) and placement location is provided to Landauer Nordic by the end user.

Radon measurements in Multifamily Buildings, Schools and Large Buildings
The United States Environmental Protection Agency (EPA) recommends remediation if the results of one long-term test or the average of two short-term tests conducted in an occupied room are 4.0 pCi/l or higher. The average yearly residential indoor radon level in the US is estimated to be around 1.3 pCi/l.
Long-term tests are conducted for more than 90 days. Short-term tests are conducted between 2 and 90 days and should be performed under closed building conditions.
If an initial short-term test result is less than 4 pCi/l, a follow-up measurement is probably not needed.
If an initial short-term test result is greater than 8 pCi/l, a short term follow-up measurement is recommended in order to get a fast result.
If an initial short-term test result is between 4 pCi/l and 8 pCi/l, a long-term or a short-term follow-up measurement is recommended.

More information about radon measurements and mitigation can be found in the AARST and EPA publications:
- ANSI/AARST Protocol for Conducting Measurements of Radon and Radon-Decay Products in Schools and Large Buildings
- ANSI/AARST Protocol for Conducting Radon and Radon Decay Product Measurements in Multifamily Buildings.
- ANSI/AARST Radon Mitigation Standards for Schools and Large Buildings.
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- EPA Radon Measurements in Schools, EPA 402-R-92-014, July 1993.

For more information about the interpretation of your test results or about other radon related issues we suggest contacting your state radon office.

Signature on the report
With the signature on the report, the person responsible for the radon analysis at LANDAUER NORDIC hereby certifies that the measurement procedures follows the guidance in accordance with EPA 402-R-95-012 and that the demands from SWEDAC are fulfilled.

RT003LN - V1.20 / 2016-04-26 / JO / LB

LANDAUER NORDIC

RADON MONITORING REPORT

Issued by an Accredited Laboratory

SWEDAC ACKREDITERING

REPORT NUMBER
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REPORT DATE
05/03/2017

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05/03/2017

Test results

Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
169417-3	11/09/2016	03/27/2017	Shakopee High School	Room E149	2.8 +/- 0.4	384 +/- 56
979220-1	11/09/2016	03/27/2017	Shakopee High School	Room S113	3.6 +/- 0.5	498 +/- 65
137873-6	11/09/2016	03/27/2017	Shakopee High School	Main Office	1.5 +/- 0.3	206 +/- 34
713987-6	11/09/2016	03/27/2017	Shakopee High School	Room E172	0.9 +/- 0.2	122 +/- 25
132991-1	11/09/2016	03/27/2017	Shakopee High School	Room E152	1.0 +/- 0.2	139 +/- 27
731079-0	11/09/2016	03/27/2017	Shakopee High School	Room E113A	4.2 4.2	582 +/- 74
525113-7	11/09/2016	03/27/2017	Shakopee High School	Room E151	0.6 +/- 0.2	79 +/- 20
628264-4	11/09/2016	03/27/2017	Shakopee High School	Room S114	2.6 +/- 0.4	355 +/- 50
697672-4	11/09/2016	03/27/2017	Shakopee High School	Room E141	1.3 +/- 0.3	184 +/- 34
720981-0	11/09/2016	03/27/2017	Shakopee High School	Room E115	3.2 +/- 0.5	446 +/- 61
211137-5	11/09/2016	03/27/2017	Pearson Middle School	Kitchen 1	1.3 +/- 0.3	181 +/- 32
745751-8	11/09/2016	03/27/2017	Shakopee High School	Room E145	1.4 +/- 0.3	190 +/- 36
160292-9	11/09/2016	03/27/2017	Shakopee High School	Main Office	1.5 +/- 0.3	214 +/- 32
656691-3	11/09/2016	03/27/2017	Shakopee High School	Staff	2.3 +/- 0.4	321 +/- 45
718974-9	11/09/2016	03/27/2017	Shakopee High School	Room E112	3.8 +/- 0.5	517 +/- 70
729174-3	11/09/2016	03/27/2017	Shakopee High School	Choir Office	1.1 +/- 0.2	157 +/- 27
752612-2	11/09/2016	03/27/2017	Shakopee High School	Room S115	1.6 +/- 0.3	224 +/- 36
191457-1	11/09/2016	03/27/2017	Shakopee High School	Room E173	0.8 +/- 0.2	106 +/- 29
557402-5	11/09/2016	03/27/2017	Shakopee High School	Room E142	1.3 +/- 0.2	178 +/- 29
583725-7	11/09/2016	03/27/2017	Shakopee High School	Room E148	0.6 +/- 0.2	90 +/- 23

RT003LN - V1.20 / 2016-04-26 / JO / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

Landauer Radon Inc.
900 Oakmont Lane Suite, Westmont IL 60559
Telephone: 331.814.2200 E-mail: help@landauerradon.com

LANDAUER NORDIC

RADON MONITORING REPORT

Issued by an Accredited Laboratory

SWEDAC ACKREDITERING

REPORT NUMBER
4728111:2

REPORT PAGE 5(32)

REPORT DATE
05/03/2017

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MEASUREMENT PERFORMED FOR

Institute For Env Assessment
Jennifer Theis
9201 W. Broadway
Suite 600
Brooklyn Park MN 55445
United States

REPORT RECEIVER(S)
Institute For Env Assessment

The analysis results are located on page 2 of this document.

Description of the measurement

Building Id:

The measurement was performed with a closed alpha-track detector (Radtrak2) following the quality guidance in EPA 402-R-95-012.

Measurement method: closed alpha-track detector
The radon measurement was performed with a closed alpha-track detector following the quality assurance guidance given in EPA 402-R-95-012.
The detector container is manufactured from electrically conducting plastic. Through a small slit (filter), radon gas enters the detector. The track-detecting material (film) inside the detector is hit by alpha particles generated by the radon entering the container and the decay products formed from it. On the film, the alpha particles make small tracks which are enlarged through chemical etching and later counted in a microscope in order to determine the radon exposure.
LANDAUER NORDIC AB (P.O. Box 6522, SE-751 28 Uppsala, Sweden) is accredited (no. 1489) by SWEDAC to conduct radon-gas measurements using the closed alpha-track detector method. The analysis equipment is checked daily and the detectors are calibrated at regular intervals.
NRPP Licenses: 107831 AL, 107830 RT

Measured radon concentrations
For each detector, the measured value of the radon concentration is given. For each value an uncertainty associated with the measurement to a 95% confidence level is also given. For example a measurement result of 4.0 ± 0.5 pCi/l means that the radon concentration is most likely contained in the range 3.5-4.5 pCi/l .
If the start or end date of the measurement has not been provided, the radon concentration cannot be calculated. In such cases, the total exposure in pCi*days/l will be reported. The reported measured values are related to the detectors as received by Landauer Nordic. Detector deployment is not performed by Landauer Nordic. Measurement information such as monitoring period (dates) and placement location is provided to Landauer Nordic by the end user.

Radon measurements in Multifamily Buildings, Schools and Large Buildings
The United States Environmental Protection Agency (EPA) recommends remediation if the results of one long-term test or the average of two short-term tests conducted in an occupied room are 4.0 pCi/l or higher. The average yearly residential indoor radon level in the US is estimated to be around 1.3 pCi/l.
Long-term tests are conducted for more than 90 days. Short-term tests are conducted between 2 and 90 days and should be performed under closed building conditions.
If an initial short-term test result is less than 4 pCi/l, a follow-up measurement is probably not needed.
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If an initial short-term test result is between 4 pCi/l and 8 pCi/l, a long-term or a short-term follow-up measurement is recommended.

More information about radon measurements and mitigation can be found in the AARST and EPA publications:
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- ANSI/AARST Radon Mitigation Standards for Multifamily Buildings.
- EPA Radon Measurements in Schools, EPA 402-R-92-014, July 1993.

For more information about the interpretation of your test results or about other radon related issues we suggest contacting your state radon office.

Signature on the report
With the signature on the report, the person responsible for the radon analysis at LANDAUER NORDIC hereby certifies that the measurement procedures follows the guidance in accordance with EPA 402-R-95-012 and that the demands from SWEDAC are fulfilled.

RT0031LN - V1.20 / 2016-04-26 / JO / LB

LANDAUER NORDIC

RADON MONITORING REPORT

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Test results

Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
996627-6	11/09/2016	03/27/2017	Shakopee High School	Career Center	1.7 +/- 0.3	231 +/- 36
143836-5	11/09/2016	03/27/2017	Shakopee High School	Room E144	1.1 +/- 0.2	145 +/- 27
485787-6	11/09/2016	03/27/2017	Shakopee High School	Room C 132 Staff	1.8 +/- 0.3	251 +/- 36
197532-5	11/09/2016	03/27/2017	Shakopee High School	Nurse's Office	2.2 +/- 0.3	298 +/- 43
233552-9	11/09/2016	03/27/2017	Shakopee High School	Staff Next to S131	0.9 +/- 0.2	124 +/- 23
683872-6	11/09/2016	03/27/2017	Shakopee High School	Staff Next to S110	2.2 2.2	309 +/- 43
676242-1	11/09/2016	03/27/2017	Shakopee High School	Choir	1.4 +/- 0.2	191 +/- 29
579162-9	11/09/2016	03/27/2017	Shakopee High School	Kitchen	15.0 +/- 2.3	2074 +/- 309
209446-4	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 200	1.1 +/- 0.2	155 +/- 25
389459-9	11/09/2016	03/27/2017	Pearson Middle School	Main Hall	< 0.4	< 55
783254-6	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 120	3.8 +/- 0.5	530 +/- 68
539697-3	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 102	2.5 +/- 0.4	348 +/- 47
684466-6	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 109	3.9 +/- 0.5	539 +/- 70
708240-7	11/09/2016	03/27/2017	Eagle Creek Elementary	Admin Office	5.1 +/- 0.7	705 +/- 90
153132-6	11/09/2016	03/27/2017	Sun Path Elementary	Room 120	2.0 +/- 0.3	278 +/- 38
932554-9	11/09/2016	03/27/2017	Shakopee East Junior High School	Office Room D	2.1 +/- 0.3	282 +/- 41
216418-4	11/09/2016	03/27/2017	Sun Path Elementary	Cafeteria	1.1 +/- 0.2	144 +/- 25
210362-0	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 101	3.9 +/- 0.5	542 +/- 68
785198-3	11/09/2016	03/27/2017	Shakopee East Junior High School	Office	1.7 +/- 0.3	240 +/- 36
207975-4	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 113	9.4 +/- 1.2	1294 +/- 160

RT003LN - V1.20 / 2016-04-26 / JO / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

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Telephone: 331.814.2200 E-mail: help@landauerradon.com

LANDAUER NORDIC

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MEASUREMENT PERFORMED FOR

Institute For Env Assessment
Jennifer Theis
9201 W. Broadway
Suite 600
Brooklyn Park MN 55445
United States

REPORT RECEIVER(S)
Institute For Env Assessment

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Description of the measurement

Building Id:

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Measurement method: closed alpha-track detector
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NRPP Licenses: 107831 AL, 107830 RT

Measured radon concentrations
For each detector, the measured value of the radon concentration is given. For each value an uncertainty associated with the measurement to a 95% confidence level is also given. For example a measurement result of 4.0 ± 0.5 pCi/l means that the radon concentration is most likely contained in the range 3.5-4.5 pCi/l .
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Radon measurements in Multifamily Buildings, Schools and Large Buildings
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Long-term tests are conducted for more than 90 days. Short-term tests are conducted between 2 and 90 days and should be performed under closed building conditions.
If an initial short-term test result is less than 4 pCi/l, a follow-up measurement is probably not needed.
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- ANSI/AARST Radon Mitigation Standards for Multifamily Buildings.
- EPA Radon Measurements in Schools, EPA 402-R-92-014, July 1993.

For more information about the interpretation of your test results or about other radon related issues we suggest contacting your state radon office.

Signature on the report
With the signature on the report, the person responsible for the radon analysis at LANDAUER NORDIC hereby certifies that the measurement procedures follows the guidance in accordance with EPA 402-R-95-012 and that the demands from SWEDAC are fulfilled.

RT003LN - V1.20 / 2016-04-26 / JO / LB

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Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
519596-1	11/09/2016	03/27/2017	Eagle Creek Elementary	Walleye Pod	3.2 +/- 0.4	443 +/- 59
160607-8	11/09/2016	03/27/2017	Eagle Creek Elementary	Cafeteria	2.0 +/- 0.3	276 +/- 38
989543-4	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 103	1.4 +/- 0.2	186 +/- 29
718332-0	11/09/2016	03/27/2017	Red Oak Elementary	Room 124	1.0 +/- 0.2	140 +/- 25
789552-7	11/09/2016	03/27/2017	Sun Path Elementary	Cafeteria	1.6 +/- 0.3	215 +/- 34
966802-1	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 119	5.0 5.0	688 +/- 88
421849-1	11/09/2016	03/27/2017	Sun Path Elementary	Kitchen	0.9 +/- 0.2	128 +/- 25
282936-4	11/09/2016	03/27/2017	Eagle Creek Elementary	Gym	3.3 +/- 0.5	454 +/- 61
107102-6	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 101	4.1 +/- 0.5	561 +/- 72
601428-6	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 226	1.4 +/- 0.2	185 +/- 29
928918-2	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 105	4.9 +/- 0.6	671 +/- 86
203730-7	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 103	5.0 +/- 0.6	690 +/- 88
945928-0	11/09/2016	03/27/2017	Red Oak Elementary	Room 122	0.9 +/- 0.2	123 +/- 23
208231-1	11/09/2016	03/27/2017	Sun Path Elementary	Room 122	1.9 +/- 0.3	259 +/- 36
212436-0	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 118	3.8 +/- 0.5	527 +/- 70
115629-8	11/09/2016	03/27/2017	Eagle Creek Elementary	Kitchen	1.7 +/- 0.3	239 +/- 36
157709-7	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 114	4.6 +/- 0.6	632 +/- 81
110476-9	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 104	5.0 +/- 0.6	687 +/- 88
109390-5	11/09/2016	03/27/2017	Eagle Creek Elementary	Health Office	2.5 +/- 0.4	350 +/- 47
561483-9	11/09/2016	03/27/2017	Red Oak Elementary	Room 103	0.8 +/- 0.2	110 +/- 23

RT003LN - V1.20 / 2016-04-26 / J.O / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

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Telephone: 331.814.2200 E-mail: help@landauerradon.com

LANDAUER NORDIC

RADON MONITORING REPORT

Issued by an Accredited Laboratory

Institute For Env Assessment
Jennifer Theis
9201 W. Broadway
Suite 600
Brooklyn Park MN 55445
United States

REPORT NUMBER
4728111:2

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MEASUREMENT PERFORMED FOR

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Description of the measurement

Building Id:

The measurement was performed with a closed alpha-track detector (Radtrak2) following the quality guidance in EPA 402-R-95-012.

Measurement method: closed alpha-track detector
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Measured radon concentrations
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More information about radon measurements and mitigation can be found in the AARST and EPA publications:
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For more information about the interpretation of your test results or about other radon related issues we suggest contacting your state radon office.

Signature on the report
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RT0031LN - V1.20 / 2016-04-26 / JO / LB

LANDAUER NORDIC

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Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
213933-5	11/09/2016	03/27/2017	Red Oak Elementary	Room 125	0.7 +/- 0.2	97 +/- 18
513668-4	11/09/2016	03/27/2017	Jackson Elementary	Main Hall	< 0.4	< 55
503647-0	11/09/2016	03/27/2017	Red Oak Elementary	Cafeteria	< 0.4	< 55
707263-0	11/09/2016	03/27/2017	Sun Path Elementary	Room 160	1.2 +/- 0.2	162 +/- 27
798057-6	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 112	3.1 +/- 0.4	426 +/- 56
756611-0	11/09/2016	03/27/2017	Sun Path Elementary	Room 124	1.6 1.6	226 +/- 34
693642-1	11/09/2016	03/27/2017	Sun Path Elementary	Room 105	2.1 +/- 0.3	296 +/- 41
160595-5	11/09/2016	03/27/2017	Pearson Middle School	Gym	1.6 +/- 0.3	225 +/- 34
972465-9	11/09/2016	03/27/2017	Sun Path Elementary	Room 150	2.1 +/- 0.3	282 +/- 41
214782-5	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 124	3.2 +/- 0.4	437 +/- 59
752385-5	11/09/2016	03/27/2017	Pearson Middle School	Room 100	2.9 +/- 0.4	401 +/- 54
757115-1	11/09/2016	03/27/2017	Pearson Middle School	Room 121	2.1 +/- 0.3	283 +/- 41
785227-0	11/09/2016	03/27/2017	Pearson Middle School	Room 138	2.3 +/- 0.4	318 +/- 45
542158-1	11/09/2016	03/27/2017	Pearson Middle School	Room 129	2.5 +/- 0.4	345 +/- 45
209254-2	11/09/2016	03/27/2017	Sun Path Elementary	Music 135	3.1 +/- 0.4	431 +/- 56
300030-4	11/09/2016	03/27/2017	Red Oak Elementary	Room 106	0.5 +/- 0.2	71 +/- 18
573263-1	11/09/2016	03/27/2017	Red Oak Elementary	Room 144	0.8 +/- 0.2	117 +/- 23
493044-2	11/09/2016	03/27/2017	Sun Path Elementary	Room 103	1.7 +/- 0.3	233 +/- 36
118436-5	11/09/2016	03/27/2017	Eagle Creek Elementary	Trout Pod	3.4 +/- 0.5	472 +/- 61
988765-4	11/09/2016	03/27/2017	Sun Path Elementary	Birch Cluster	1.5 +/- 0.3	203 +/- 32

RT003LN - V1.20 / 2016-04-26 / JO / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

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Telephone: 331.814.2200 E-mail: help@landauerradon.com

LANDAUER NORDIC

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Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
970117-8	11/09/2016	03/27/2017	Sweeney Elementary	Main Hall	< 0.4	< 55
126675-8	11/09/2016	03/27/2017	Red Oak Elementary	Room 101	0.8 +/- 0.2	106 +/- 23
789909-9	11/09/2016	03/27/2017	Eagle Creek Elementary	Gym	3.3 +/- 0.5	450 +/- 61
185916-4	11/09/2016	03/27/2017	Red Oak Elementary	Room 163	0.9 +/- 0.2	130 +/- 23
706130-2	11/09/2016	03/27/2017	Sun Path Elementary	Room 106	2.4 +/- 0.4	329 +/- 45
142759-0	11/09/2016	03/27/2017	Sun Path Elementary	Room 121	2.3 2.3	320 +/- 45
150886-0	11/09/2016	03/27/2017	Red Oak Elementary	Room 143	0.6 +/- 0.2	83 +/- 20
924497-1	11/09/2016	03/27/2017	Pearson Middle School	Gym	1.8 +/- 0.3	242 +/- 36
172900-3	11/09/2016	03/27/2017	Red Oak Elementary	Room 105	0.9 +/- 0.2	125 +/- 23
338185-2	11/09/2016	03/27/2017	Red Oak Elementary	Room 146	0.5 +/- 0.2	68 +/- 16
771664-0	11/09/2016	03/27/2017	Pearson Middle School	Room 131	2.4 +/- 0.4	336 +/- 45
214171-1	11/09/2016	03/27/2017	Pearson Middle School	Room 122	2.1 +/- 0.3	293 +/- 41
642692-8	11/09/2016	03/27/2017	Pearson Middle School	Room 114	2.6 +/- 0.4	367 +/- 50
354169-5	11/09/2016	03/27/2017	Pearson Middle School	Room 104	1.9 +/- 0.3	256 +/- 38
613376-3	11/09/2016	03/27/2017	Pearson Middle School	Room 101/102	1.5 +/- 0.3	211 +/- 32
109483-8	11/09/2016	03/27/2017	Sun Path Elementary	Room 154	2.5 +/- 0.4	350 +/- 47
371251-0	11/09/2016	03/27/2017	Red Oak Elementary	Room 166	0.6 +/- 0.2	79 +/- 18
215629-7	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 110	6.6 +/- 0.9	907 +/- 113
945266-5	11/09/2016	03/27/2017	Sun Path Elementary	Maple Cluster	1.6 +/- 0.3	218 +/- 34
160729-0	11/09/2016	03/27/2017	Pearson Middle School	Room 123	2.2 +/- 0.3	304 +/- 43

RT003LN - V1.20 / 2016-04-26 / JO / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

Landauer Radon Inc.
900 Oakmont Lane Suite, Westmont IL 60559
Telephone: 331.814.2200 E-mail: help@landauerradon.com

LANDAUER NORDIC

RADON MONITORING REPORT

Issued by an Accredited Laboratory

Institute For Env Assessment
Jennifer Theis
9201 W. Broadway
Suite 600
Brooklyn Park MN 55445
United States

REPORT NUMBER
4728111:2

REPORT DATE
05/03/2017

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05/03/2017

MEASUREMENT PERFORMED FOR

REPORT RECEIVER(S)
Institute For Env Assessment

The analysis results are located on page 2 of this document.

Description of the measurement

Building Id:

The measurement was performed with a closed alpha-track detector (Radtrak2) following the quality guidance in EPA 402-R-95-012.

Measurement method: closed alpha-track detector
The radon measurement was performed with a closed alpha-track detector following the quality assurance guidance given in EPA 402-R-95-012.
The detector container is manufactured from electrically conducting plastic. Through a small slit (filter), radon gas enters the detector. The track-detecting material (film) inside the detector is hit by alpha particles generated by the radon entering the container and the decay products formed from it. On the film, the alpha particles make small tracks which are enlarged through chemical etching and later counted in a microscope in order to determine the radon exposure.
LANDAUER NORDIC AB (P.O. Box 6522, SE-751 28 Uppsala, Sweden) is accredited (no. 1489) by SWEDAC to conduct radon-gas measurements using the closed alpha-track detector method. The analysis equipment is checked daily and the detectors are calibrated at regular intervals.
NRPP Licenses: 107831 AL, 107830 RT

Measured radon concentrations
For each detector, the measured value of the radon concentration is given. For each value an uncertainty associated with the measurement to a 95% confidence level is also given. For example a measurement result of 4.0 ± 0.5 pCi/l means that the radon concentration is most likely contained in the range 3.5-4.5 pCi/l .
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Radon measurements in Multifamily Buildings, Schools and Large Buildings
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For more information about the interpretation of your test results or about other radon related issues we suggest contacting your state radon office.

Signature on the report
With the signature on the report, the person responsible for the radon analysis at LANDAUER NORDIC hereby certifies that the measurement procedures follows the guidance in accordance with EPA 402-R-95-012 and that the demands from SWEDAC are fulfilled.

LANDAUER NORDIC

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Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
350881-9	11/09/2016	03/27/2017	Pearson Middle School	Room 103	1.7 +/- 0.3	231 +/- 34
785653-7	11/09/2016	03/27/2017	Red Oak Elementary	Room 122	0.9 +/- 0.2	122 +/- 23
781217-5	11/09/2016	03/27/2017	Sun Path Elementary	Room 123	1.5 +/- 0.3	212 +/- 32
121632-4	11/09/2016	03/27/2017	Red Oak Elementary	Cafeteria	< 0.4	< 55
538815-2	11/09/2016	03/27/2017	Sun Path Elementary	Room 151	2.2 +/- 0.3	303 +/- 43
766379-2	11/09/2016	03/27/2017	Red Oak Elementary	Room 202	0.4 0.4	56 +/- 18
120946-9	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 110	0.8 +/- 0.2	111 +/- 20
475095-6	11/09/2016	03/27/2017	Shakopee West Junior High School	Main Office	1.6 +/- 0.3	217 +/- 32
691078-0	11/09/2016	03/27/2017	Shakopee West Junior High School	Media Center 108	0.4 +/- 0.2	59 +/- 18
972879-1	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 201	1.4 +/- 0.3	199 +/- 32
562917-5	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 125	1.9 +/- 0.3	261 +/- 38
531332-5	11/09/2016	03/27/2017	Sun Path Elementary	Band 129	2.4 +/- 0.4	334 +/- 47
134728-5	11/09/2016	03/27/2017	Pearson Middle School	Room 107	2.8 +/- 0.4	381 +/- 52
474143-5	11/09/2016	03/27/2017	Pearson Middle School	Room 120	2.3 +/- 0.4	320 +/- 45
166633-8	11/09/2016	03/27/2017	Pearson Middle School	Room 105	3.9 +/- 0.5	544 +/- 70
719050-7	11/09/2016	03/27/2017	Red Oak Elementary	Room 164	1.0 +/- 0.2	136 +/- 25
220232-3	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 117	0.7 +/- 0.2	95 +/- 20
207618-0	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 111	0.7 +/- 0.2	98 +/- 20
776070-5	11/09/2016	03/27/2017	Pearson Middle School	Room 125	2.1 +/- 0.3	283 +/- 41
997312-4	11/09/2016	03/27/2017	Red Oak Elementary	Room 126	0.8 +/- 0.2	111 +/- 23

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Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

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LANDAUER NORDIC

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Institute For Env Assessment
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Description of the measurement

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Measured radon concentrations
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For more information about the interpretation of your test results or about other radon related issues we suggest contacting your state radon office.

Signature on the report
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Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
631852-1	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 123	1.8 +/- 0.3	242 +/- 36
341702-9	11/09/2016	03/27/2017	Shakopee West Junior High School	Student Services	0.9 +/- 0.2	126 +/- 25
989483-3	11/09/2016	03/27/2017	Sun Path Elementary	Room 152	2.8 +/- 0.4	389 +/- 54
634147-3	11/09/2016	03/27/2017	Pearson Middle School	Nurse	2.0 +/- 0.3	280 +/- 41
503283-4	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 101	2.5 +/- 0.4	345 +/- 50
764521-1	11/09/2016	03/27/2017	Shakopee West Junior High School	Band Room	2.1 2.1	288 +/- 43
722796-0	11/09/2016	03/27/2017	Sweeney Elementary	Room 009	2.6 +/- 0.4	352 +/- 50
490957-8	11/09/2016	03/27/2017	Pearson Middle School	Room 118	3.3 +/- 0.5	450 +/- 63
390693-0	11/09/2016	03/27/2017	Shakopee West Junior High School	Main Hall	< 0.4	< 55
940535-8	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 115	0.6 +/- 0.2	84 +/- 23
151310-0	11/09/2016	03/27/2017	Pearson Middle School	Room 105	3.9 +/- 0.5	543 +/- 72
214317-0	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 102	2.7 +/- 0.4	378 +/- 50
278879-2	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 105	0.6 +/- 0.2	89 +/- 27
686460-7	11/09/2016	03/27/2017	Sweeney Elementary	Art Room 104	1.2 +/- 0.2	168 +/- 29
661667-6	11/09/2016	03/27/2017	Pearson Middle School	Room 119	2.5 +/- 0.4	341 +/- 52
320674-5	11/09/2016	03/27/2017	Sweeney Elementary	Room 110	1.6 +/- 0.3	227 +/- 38
994593-2	11/09/2016	03/27/2017	Sweeney Elementary	Gym	1.6 +/- 0.3	216 +/- 34
667337-0	11/09/2016	03/27/2017	Sweeney Elementary	Work Room	2.2 +/- 0.4	305 +/- 45
730456-1	11/09/2016	03/27/2017	Central Family Center	Main Hall	< 0.4	< 55
608763-9	11/09/2016	03/27/2017	Red Oak Elementary	Office	0.5 +/- 0.2	66 +/- 25

RT003LN - V1.20 / 2016-04-26 / JO / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

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Telephone: 331.814.2200 E-mail: help@landauerradon.com

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Institute For Env Assessment
Jennifer Theis
9201 W. Broadway
Suite 600
Brooklyn Park MN 55445
United States

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Description of the measurement

Building Id:

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Measurement method: closed alpha-track detector
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Measured radon concentrations
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For more information about the interpretation of your test results or about other radon related issues we suggest contacting your state radon office.

Signature on the report
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RT0031LN - V1.20 / 2016-04-26 / JO / LB

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Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
337154-9	11/09/2016	03/27/2017	Sun Path Elementary	Room 107	1.6 +/- 0.3	215 +/- 38
968040-6	11/09/2016	03/27/2017	Sweeney Elementary	Room 109B	1.1 +/- 0.2	149 +/- 27
764732-4	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 112	0.7 +/- 0.2	93 +/- 20
992366-5	11/09/2016	03/27/2017	Sun Path Elementary	Spruce Cluster	1.4 +/- 0.3	186 +/- 34
778723-7	11/09/2016	03/27/2017	Sweeney Elementary	Room 107	2.1 +/- 0.3	291 +/- 43
507393-7	11/09/2016	03/27/2017	District Office	Teaching and Learning TASAs	1.3 1.3	176 +/- 27
719007-7	11/09/2016	03/27/2017	Pearson Middle School	Room 126	2.1 +/- 0.3	296 +/- 43
612789-8	11/09/2016	03/27/2017	Sweeney Elementary	Media Center	1.8 +/- 0.3	253 +/- 38
631999-0	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 111	4.8 +/- 0.6	667 +/- 86
523488-5	11/09/2016	03/27/2017	Sweeney Elementary	Room 108	1.6 +/- 0.3	227 +/- 36
771756-4	11/09/2016	03/27/2017	Pearson Middle School	Custodial	1.1 +/- 0.2	146 +/- 25
462629-7	11/09/2016	03/27/2017	Sun Path Elementary	Room 153	3.0 +/- 0.4	419 +/- 56
781283-7	11/09/2016	03/27/2017	Shakopee West Junior High School	Kitchen	1.8 +/- 0.3	250 +/- 38
133150-3	11/09/2016	03/27/2017	Pearson Middle School	Kitchen 2	1.2 +/- 0.3	162 +/- 34
946809-1	11/09/2016	03/27/2017	Shakopee West Junior High School	Multi-Purpose Room	1.5 +/- 0.3	213 +/- 38
243325-8	11/09/2016	03/27/2017	Sweeney Elementary	Media Center	2.0 +/- 0.3	275 +/- 41
968072-9	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 141	1.9 +/- 0.3	259 +/- 38
202274-7	11/09/2016	03/27/2017	Sweeney Elementary	Room 012	2.0 +/- 0.3	279 +/- 41
747886-0	11/09/2016	03/27/2017	District Office	Technology	1.2 +/- 0.2	169 +/- 29
112154-0	11/09/2016	03/27/2017	Shakopee West Junior High School	Weight Room	1.1 +/- 0.2	153 +/- 29

RT003LN - V1.20 / 2016-04-26 / JO / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

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Test results

Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
366921-5	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 130	4.1 +/- 0.5	568 +/- 74
707715-9	11/09/2016	03/27/2017	Sweeney Elementary	Room 010	1.9 +/- 0.3	266 +/- 36
757177-1	11/09/2016	03/27/2017	Shakopee West Junior High School	Cafeteria	1.8 +/- 0.3	248 +/- 41
561802-0	11/09/2016	03/27/2017	Sweeney Elementary	Room 007	1.5 +/- 0.3	206 +/- 32
554901-9	11/09/2016	03/27/2017	Pearson Middle School	Room 127	2.7 +/- 0.4	375 +/- 52
712207-0	11/09/2016	03/27/2017	Shakopee West Junior High School	Lounge 130	1.6 1.6	216 +/- 34
593056-5	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 143	1.1 +/- 0.2	157 +/- 27
563222-9	11/09/2016	03/27/2017	Eagle Creek Elementary	Main Hall	< 0.4	< 55
997248-0	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 142	1.5 +/- 0.3	206 +/- 34
243784-6	11/09/2016	03/27/2017	Shakopee West Junior High School	Auditorium	3.0 +/- 0.4	416 +/- 56
229222-5	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 213	0.6 +/- 0.2	88 +/- 23
780615-1	11/09/2016	03/27/2017	Shakopee West Junior High School	Custodial Office	1.1 +/- 0.2	144 +/- 27
696851-5	11/09/2016	03/27/2017	Sweeney Elementary	Room 006	1.6 +/- 0.3	220 +/- 34
676267-8	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 224	0.9 +/- 0.2	128 +/- 23
650934-3	11/09/2016	03/27/2017	Shakopee West Junior High School	Auditorium	2.9 +/- 0.4	403 +/- 59
997386-8	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 120	0.9 +/- 0.2	128 +/- 25
742941-8	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 216	0.6 +/- 0.2	91 +/- 23
577768-5	11/09/2016	03/27/2017	Red Oak Elementary	Room 132	0.4 +/- 0.2	59 +/- 18
994479-4	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 144	1.6 +/- 0.3	223 +/- 38
760120-6	11/09/2016	03/27/2017	Red Oak Elementary	Kitchen	0.6 +/- 0.2	82 +/- 20

RT003LN - V1.20 / 2016-04-26 / J.O / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

Landauer Radon Inc.
900 Oakmont Lane Suite, Westmont IL 60559
Telephone: 331.814.2200 E-mail: help@landauerradon.com

LANDAUER NORDIC

RADON MONITORING REPORT

Issued by an Accredited Laboratory

Institute For Env Assessment
Jennifer Theis
9201 W. Broadway
Suite 600
Brooklyn Park MN 55445
United States

REPORT NUMBER
4728111:2

REPORT PAGE 21(32)

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MEASUREMENT PERFORMED FOR

REPORT RECEIVER(S)
Institute For Env Assessment

The analysis results are located on page 2 of this document.

Description of the measurement

Building Id:

The measurement was performed with a closed alpha-track detector (Radtrak2) following the quality guidance in EPA 402-R-95-012.

Measurement method: closed alpha-track detector
The radon measurement was performed with a closed alpha-track detector following the quality assurance guidance given in EPA 402-R-95-012.
The detector container is manufactured from electrically conducting plastic. Through a small slit (filter), radon gas enters the detector. The track-detecting material (film) inside the detector is hit by alpha particles generated by the radon entering the container and the decay products formed from it. On the film, the alpha particles make small tracks which are enlarged through chemical etching and later counted in a microscope in order to determine the radon exposure.
LANDAUER NORDIC AB (P.O. Box 6522, SE-751 28 Uppsala, Sweden) is accredited (no. 1489) by SWEDAC to conduct radon-gas measurements using the closed alpha-track detector method. The analysis equipment is checked daily and the detectors are calibrated at regular intervals.
NRPP Licenses: 107831 AL, 107830 RT

Measured radon concentrations
For each detector, the measured value of the radon concentration is given. For each value an uncertainty associated with the measurement to a 95% confidence level is also given. For example a measurement result of 4.0 ± 0.5 pCi/l means that the radon concentration is most likely contained in the range 3.5-4.5 pCi/l .
If the start or end date of the measurement has not been provided, the radon concentration cannot be calculated. In such cases, the total exposure in pCi*days/l will be reported. The reported measured values are related to the detectors as received by Landauer Nordic. Detector deployment is not performed by Landauer Nordic. Measurement information such as monitoring period (dates) and placement location is provided to Landauer Nordic by the end user.

Radon measurements in Multifamily Buildings, Schools and Large Buildings
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More information about radon measurements and mitigation can be found in the AARST and EPA publications:
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- ANSI/AARST Protocol for Conducting Radon and Radon Decay Product Measurements in Multifamily Buildings.
- ANSI/AARST Radon Mitigation Standards for Schools and Large Buildings.
- ANSI/AARST Radon Mitigation Standards for Multifamily Buildings.
- EPA Radon Measurements in Schools, EPA 402-R-92-014, July 1993.

For more information about the interpretation of your test results or about other radon related issues we suggest contacting your state radon office.

Signature on the report
With the signature on the report, the person responsible for the radon analysis at LANDAUER NORDIC hereby certifies that the measurement procedures follows the guidance in accordance with EPA 402-R-95-012 and that the demands from SWEDAC are fulfilled.

LANDAUER NORDIC

RADON MONITORING REPORT

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Test results

Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
993202-1	11/09/2016	03/27/2017	Sun Path Elementary	Room 131	3.2 +/- 0.5	444 +/- 61
696161-9	11/09/2016	03/27/2017	Sweeney Elementary	Room 003	1.9 +/- 0.3	259 +/- 38
570161-0	11/09/2016	03/27/2017	Sweeney Elementary	Nurse's Office	1.9 +/- 0.3	258 +/- 38
653404-4	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 218	0.4 +/- 0.2	61 +/- 25
124765-9	11/09/2016	03/27/2017	Red Oak Elementary	Room 165	0.8 +/- 0.2	115 +/- 25
130837-8	11/09/2016	03/27/2017	Shakopee West Junior High School	Choir Room	2.3 2.3	313 +/- 45
667056-6	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 129	14.4 +/- 2.2	1991 +/- 300
748576-6	11/09/2016	03/27/2017	Pearson Middle School	Room 113	2.5 +/- 0.4	346 +/- 47
638982-9	11/09/2016	03/27/2017	Eagle Creek Elementary	Room 108	5.3 +/- 0.7	726 +/- 92
123415-2	11/09/2016	03/27/2017	Red Oak Elementary	Room 145	0.8 +/- 0.2	111 +/- 25
648874-6	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 212	0.8 +/- 0.2	107 +/- 27
756670-6	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 100	2.5 +/- 0.4	350 +/- 47
795718-6	11/09/2016	03/27/2017	Jackson Elementary	Thole Pod	1.8 +/- 0.3	248 +/- 38
744501-8	11/09/2016	03/27/2017	Jackson Elementary	Room 119	1.5 +/- 0.3	214 +/- 38
136666-5	11/09/2016	03/27/2017	Jackson Elementary	Kitchen	1.1 +/- 0.2	144 +/- 29
613616-2	11/09/2016	03/27/2017	Jackson Elementary	Room 113	1.4 +/- 0.3	195 +/- 32
723847-0	11/09/2016	03/27/2017	Sweeney Elementary	Room 001	2.1 +/- 0.3	287 +/- 41
577570-5	11/09/2016	03/27/2017	Sweeney Elementary	Kitchen	1.4 +/- 0.2	193 +/- 29
609587-1	11/09/2016	03/27/2017	Sweeney Elementary	Music Room 103	0.8 +/- 0.2	108 +/- 20
460329-6	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 107	2.3 +/- 0.4	315 +/- 45

RT003LN - V1.20 / 2016-04-26 / JO / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

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LANDAUER NORDIC

RADON MONITORING REPORT

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MEASUREMENT PERFORMED FOR

Institute For Env Assessment
Jennifer Theis
9201 W. Broadway
Suite 600
Brooklyn Park MN 55445
United States

REPORT RECEIVER(S)
Institute For Env Assessment

The analysis results are located on page 2 of this document.

Description of the measurement

Building Id:

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Measurement method: closed alpha-track detector
The radon measurement was performed with a closed alpha-track detector following the quality assurance guidance given in EPA 402-R-95-012.
The detector container is manufactured from electrically conducting plastic. Through a small slit (filter), radon gas enters the detector. The track-detecting material (film) inside the detector is hit by alpha particles generated by the radon entering the container and the decay products formed from it. On the film, the alpha particles make small tracks which are enlarged through chemical etching and later counted in a microscope in order to determine the radon exposure.
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NRPP Licenses: 107831 AL, 107830 RT

Measured radon concentrations
For each detector, the measured value of the radon concentration is given. For each value an uncertainty associated with the measurement to a 95% confidence level is also given. For example a measurement result of 4.0 ± 0.5 pCi/l means that the radon concentration is most likely contained in the range 3.5-4.5 pCi/l .
If the start or end date of the measurement has not been provided, the radon concentration cannot be calculated. In such cases, the total exposure in pCi*days/l will be reported. The reported measured values are related to the detectors as received by Landauer Nordic. Detector deployment is not performed by Landauer Nordic. Measurement information such as monitoring period (dates) and placement location is provided to Landauer Nordic by the end user.

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- ANSI/AARST Radon Mitigation Standards for Schools and Large Buildings.
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For more information about the interpretation of your test results or about other radon related issues we suggest contacting your state radon office.

Signature on the report
With the signature on the report, the person responsible for the radon analysis at LANDAUER NORDIC hereby certifies that the measurement procedures follows the guidance in accordance with EPA 402-R-95-012 and that the demands from SWEDAC are fulfilled.

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LANDAUER NORDIC

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REPORT PAGE 24 (32)

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Test results

Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
997198-7	11/09/2016	03/27/2017	Shakopee East Junior High School	Main Hall	< 0.4	< 55
103798-5	11/09/2016	03/27/2017	Sweeney Elementary	Room 008	2.6 +/- 0.4	361 +/- 52
999952-5	11/09/2016	03/27/2017	Jackson Elementary	Social Worker Office	1.0 +/- 0.2	139 +/- 25
684363-5	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 105	2.5 +/- 0.4	349 +/- 50
570704-7	11/09/2016	03/27/2017	Jackson Elementary	Room 104	1.9 +/- 0.3	268 +/- 38
714506-3	11/09/2016	03/27/2017	Jackson Elementary	Music 126	2.7 2.7	378 +/- 52
413050-6	11/09/2016	03/27/2017	Sweeney Elementary	Room 005	1.9 +/- 0.3	269 +/- 36
463832-6	11/09/2016	03/27/2017	Sweeney Elementary	Gym	1.4 +/- 0.3	194 +/- 32
610535-7	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 114	0.5 +/- 0.2	75 +/- 23
924327-0	11/09/2016	03/27/2017	Pearson Middle School	Room 124	2.3 +/- 0.4	316 +/- 45
996972-6	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 226	0.8 +/- 0.2	113 +/- 25
996983-3	11/09/2016	03/27/2017	Jackson Elementary	Pike Pod	1.4 +/- 0.2	189 +/- 29
970419-8	11/09/2016	03/27/2017	Pearson Middle School	Room 112	2.5 +/- 0.4	342 +/- 47
498976-0	11/09/2016	03/27/2017	Jackson Elementary	Room 116	1.4 +/- 0.3	199 +/- 34
906876-8	11/09/2016	03/27/2017	Shakopee East Junior High School	Cafeteria	0.5 +/- 0.2	69 +/- 25
971081-5	11/09/2016	03/27/2017	Jackson Elementary	Room 114	1.4 +/- 0.3	189 +/- 32
648968-6	11/09/2016	03/27/2017	Jackson Elementary	Office	1.1 +/- 0.2	149 +/- 27
415843-2	11/09/2016	03/27/2017	Sweeney Elementary	Band Room 102	0.8 +/- 0.2	110 +/- 27
741359-4	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 207	1.1 +/- 0.2	153 +/- 25
991983-8	11/09/2016	03/27/2017	Sweeney Elementary	Custodial Office	1.4 +/- 0.3	196 +/- 32

RT003LN - V1.20 / 2016-04-26 / JO / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

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LANDAUER NORDIC

RADON MONITORING REPORT

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Institute For Env Assessment
Jennifer Theis
9201 W. Broadway
Suite 600
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Description of the measurement

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Test results

Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
797510-5	11/09/2016	03/27/2017	Sweeney Elementary	Special Services	1.8 +/- 0.3	252 +/- 38
136409-0	11/09/2016	03/27/2017	Sweeney Elementary	Room 003	1.7 +/- 0.3	238 +/- 34
153834-7	11/09/2016	03/27/2017	Jackson Elementary	Performance Room 130	1.1 +/- 0.2	148 +/- 29
103773-8	11/09/2016	03/27/2017	Shakopee East Junior High School	Media Center	1.2 +/- 0.2	168 +/- 29
690607-7	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 119	0.9 +/- 0.2	122 +/- 25
484263-9	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 126	2.2 2.2	311 +/- 45
783908-7	11/09/2016	03/27/2017	Jackson Elementary	Staff Lounge	2.7 +/- 0.4	369 +/- 50
401026-0	11/09/2016	03/27/2017	Jackson Elementary	Lev Lib 129	2.6 +/- 0.4	367 +/- 52
111803-3	11/09/2016	03/27/2017	Sun Path Elementary	Room 119	1.5 +/- 0.3	205 +/- 36
164186-9	11/09/2016	03/27/2017	Jackson Elementary	Room 127	4.2 +/- 0.6	575 +/- 77
947064-2	11/09/2016	03/27/2017	Jackson Elementary	Nurse's Office	0.9 +/- 0.2	131 +/- 25
565679-8	11/09/2016	03/27/2017	Jackson Elementary	Room 127	4.9 +/- 0.6	670 +/- 86
192796-1	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 128	2.6 +/- 0.4	356 +/- 50
577713-1	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 116	0.6 +/- 0.2	78 +/- 27
913070-9	11/09/2016	03/27/2017	Jackson Elementary	Workroom	0.9 +/- 0.2	119 +/- 25
769488-8	11/09/2016	03/27/2017	Sweeney Elementary	Room 011	1.8 +/- 0.3	249 +/- 38
723664-9	11/09/2016	03/27/2017	Jackson Elementary	Room 105	1.4 +/- 0.3	193 +/- 36
601897-2	11/09/2016	03/27/2017	Jackson Elementary	Room 103	1.9 +/- 0.3	257 +/- 36
766833-8	11/09/2016	03/27/2017	Sweeney Elementary	101 Lit Resource	0.8 +/- 0.2	107 +/- 27
434654-0	11/09/2016	03/27/2017	Shakopee West Junior High School	Room 121	0.6 +/- 0.2	79 +/- 23

RT003LN - V1.20 / 2016-04-26 / JO / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

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LANDAUER NORDIC

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Measured radon concentrations

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For more information about the interpretation of your test results or about other radon related issues we suggest contacting your state radon office.

Signature on the report

With the signature on the report, the person responsible for the radon analysis at LANDAUER NORDIC hereby certifies that the measurement procedures follows the guidance in accordance with EPA 402-R-95-012 and that the demands from SWEDAC are fulfilled.

RT003LN - V1.20 / 2016-04-26 / JO / LB

LANDAUER NORDIC

RADON MONITORING REPORT

Issued by an Accredited Laboratory

REPORT NUMBER
4728111:2

REPORT DATE
05/03/2017

PRINT DATE
05/03/2017

Test results

Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
763935-4	11/09/2016	03/27/2017	Sweeney Elementary	Room 106	2.3 +/- 0.4	313 +/- 45
502008-6	11/09/2016	03/27/2017	Red Oak Elementary	Music	0.6 +/- 0.2	90 +/- 23
771908-1	11/09/2016	03/27/2017	Sweeney Elementary	Cafeteria	1.7 +/- 0.3	235 +/- 36
608948-6	11/09/2016	03/27/2017	Shakopee East Junior High School	Band 111	1.4 +/- 0.3	186 +/- 32
900428-4	11/09/2016	03/27/2017	Jackson Elementary	Room 118	1.9 +/- 0.3	261 +/- 41
746918-2	11/09/2016	03/27/2017	Jackson Elementary	Room 111	1.5 1.5	214 +/- 34
271119-0	11/09/2016	03/27/2017	Red Oak Elementary	Health	0.5 +/- 0.2	68 +/- 18
769262-7	11/09/2016	03/27/2017	Sweeney Elementary	Room 109A HP	0.7 +/- 0.2	98 +/- 27
716209-2	11/09/2016	03/27/2017	Jackson Elementary	Room 112	1.3 +/- 0.3	179 +/- 32
432397-8	11/09/2016	03/27/2017	Sweeney Elementary	Room 002	2.0 +/- 0.3	273 +/- 41
994999-1	11/09/2016	03/27/2017	Central Family Center	Cafeteria #2	3.1 +/- 0.4	425 +/- 59
680673-1	11/09/2016	03/27/2017	Central Family Center	West Gym	2.1 +/- 0.3	289 +/- 41
989883-4	11/09/2016	03/27/2017	Central Family Center	Office	0.5 +/- 0.2	62 +/- 20
999378-3	11/09/2016	03/27/2017	Central Family Center	Room 103	1.3 +/- 0.2	175 +/- 29
137444-6	11/09/2016	03/27/2017	Central Family Center	Room 110	1.2 +/- 0.2	164 +/- 29
319798-5	11/09/2016	03/27/2017	Central Family Center	Cafeteria #1	2.9 +/- 0.4	403 +/- 54
208276-6	11/09/2016	03/27/2017	Central Family Center	Room 108	2.0 +/- 0.3	278 +/- 38
985238-5	11/09/2016	03/27/2017	District Office	T& L Conference Room	1.0 +/- 0.2	141 +/- 25
220596-1	11/09/2016	03/27/2017	Central Family Center	Kitchen	3.8 +/- 0.5	524 +/- 68
156878-1	11/09/2016	03/27/2017	District Office	Rod's Office	1.5 +/- 0.3	213 +/- 32

RT003LN - V1.20 / 2016-04-26 / J.O / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

Landauer Radon Inc.
900 Oakmont Lane Suite, Westmont IL 60559
Telephone: 331.814.2200 E-mail: help@landauerradon.com

LANDAUER NORDIC

RADON MONITORING REPORT

Issued by an Accredited Laboratory

REPORT NUMBER
4728111:2

REPORT PAGE 29(32)

REPORT DATE
05/03/2017

PRINT DATE
05/03/2017

MEASUREMENT PERFORMED FOR

Institute For Env Assessment
Jennifer Theis
9201 W. Broadway
Suite 600
Brooklyn Park MN 55445
United States

REPORT RECEIVER(S)
Institute For Env Assessment

The analysis results are located on page 2 of this document.

Description of the measurement

Building Id:

The measurement was performed with a closed alpha-track detector (Radtrak2) following the quality guidance in EPA 402-R-95-012.

Measurement method: closed alpha-track detector
The radon measurement was performed with a closed alpha-track detector following the quality assurance guidance given in EPA 402-R-95-012.
The detector container is manufactured from electrically conducting plastic. Through a small slit (filter), radon gas enters the detector. The track-detecting material (film) inside the detector is hit by alpha particles generated by the radon entering the container and the decay products formed from it. On the film, the alpha particles make small tracks which are enlarged through chemical etching and later counted in a microscope in order to determine the radon exposure.
LANDAUER NORDIC AB (P.O. Box 6522, SE-751 28 Uppsala, Sweden) is accredited (no. 1489) by SWEDAC to conduct radon-gas measurements using the closed alpha-track detector method. The analysis equipment is checked daily and the detectors are calibrated at regular intervals.
NRPP Licenses: 107831 AL, 107830 RT

Measured radon concentrations
For each detector, the measured value of the radon concentration is given. For each value an uncertainty associated with the measurement to a 95% confidence level is also given. For example a measurement result of 4.0 ± 0.5 pCi/l means that the radon concentration is most likely contained in the range 3.5-4.5 pCi/l .
If the start or end date of the measurement has not been provided, the radon concentration cannot be calculated. In such cases, the total exposure in pCi*days/l will be reported. The reported measured values are related to the detectors as received by Landauer Nordic. Detector deployment is not performed by Landauer Nordic. Measurement information such as monitoring period (dates) and placement location is provided to Landauer Nordic by the end user.

Radon measurements in Multifamily Buildings, Schools and Large Buildings
The United States Environmental Protection Agency (EPA) recommends remediation if the results of one long-term test or the average of two short-term tests conducted in an occupied room are 4.0 pCi/l or higher. The average yearly residential indoor radon level in the US is estimated to be around 1.3 pCi/l.
Long-term tests are conducted for more than 90 days. Short-term tests are conducted between 2 and 90 days and should be performed under closed building conditions.
If an initial short-term test result is less than 4 pCi/l, a follow-up measurement is probably not needed.
If an initial short-term test result is greater than 8 pCi/l, a short term follow-up measurement is recommended in order to get a fast result.
If an initial short-term test result is between 4 pCi/l and 8 pCi/l, a long-term or a short-term follow-up measurement is recommended.

More information about radon measurements and mitigation can be found in the AARST and EPA publications:
- ANSI/AARST Protocol for Conducting Measurements of Radon and Radon-Decay Products in Schools and Large Buildings
- ANSI/AARST Protocol for Conducting Radon and Radon Decay Product Measurements in Multifamily Buildings.
- ANSI/AARST Radon Mitigation Standards for Schools and Large Buildings.
- ANSI/AARST Radon Mitigation Standards for Multifamily Buildings.
- EPA Radon Measurements in Schools, EPA 402-R-92-014, July 1993.

For more information about the interpretation of your test results or about other radon related issues we suggest contacting your state radon office.

Signature on the report
With the signature on the report, the person responsible for the radon analysis at LANDAUER NORDIC hereby certifies that the measurement procedures follows the guidance in accordance with EPA 402-R-95-012 and that the demands from SWEDAC are fulfilled.

LANDAUER NORDIC

RADON MONITORING REPORT

Issued by an Accredited Laboratory

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4728111:2

REPORT DATE
05/03/2017

PRINT DATE
05/03/2017

Test results

Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
422192-5	11/09/2016	03/27/2017	Central Family Center	Lounge	1.8 +/- 0.3	253 +/- 36
924193-6	11/09/2016	03/27/2017	District Office	Board Room	1.7 +/- 0.3	240 +/- 36
390500-7	11/09/2016	03/27/2017	Red Oak Elementary	Main Hall	< 0.4	< 55
332562-8	11/09/2016	03/27/2017	Central Family Center	Room 102	0.8 +/- 0.2	109 +/- 20
978461-2	11/09/2016	03/27/2017	Central Family Center	Room 101	0.9 +/- 0.2	123 +/- 23
457462-0	11/09/2016	03/27/2017	Central Family Center	Printing	< 0.4 < 0.4	< 55
697207-9	11/09/2016	03/27/2017	District Office	Welcome Center	1.2 +/- 0.2	167 +/- 29
160484-2	11/09/2016	03/27/2017	District Office	John's Office	1.1 +/- 0.2	144 +/- 25
659717-3	11/09/2016	03/27/2017	District Office	Staff Break Room	1.0 +/- 0.2	140 +/- 25
214819-5	11/09/2016	03/27/2017	District Office	Food Service	1.1 +/- 0.2	157 +/- 27
723469-3	11/09/2016	03/27/2017	District Office	Kain's Office	2.5 +/- 0.4	349 +/- 47
157468-0	11/09/2016	03/27/2017	District Office	HR/Fin Conference Room #1	1.2 +/- 0.2	170 +/- 27
754404-2	11/09/2016	03/27/2017	Central Family Center	Room 108	1.5 +/- 0.3	211 +/- 34
128470-2	11/09/2016	03/27/2017	Shakopee East Junior High School	Cafeteria	0.7 +/- 0.2	96 +/- 20
748325-8	11/09/2016	03/27/2017	District Office	HR/Fin	1.0 +/- 0.2	137 +/- 25
170020-2	11/09/2016	03/27/2017	Shakopee East Junior High School	Kitchen	0.5 +/- 0.2	68 +/- 18
693123-2	11/09/2016	03/27/2017	District Office	Dave's Office	1.2 +/- 0.2	172 +/- 25
901973-8	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 215	0.5 +/- 0.2	68 +/- 18
489590-0	11/09/2016	03/27/2017	District Office	Near Allison's Cubicle	1.5 +/- 0.3	208 +/- 32
383687-1	11/09/2016	03/27/2017	Central Family Center	Room 106	0.9 +/- 0.2	124 +/- 20

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Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

Landauer Radon Inc.
900 Oakmont Lane Suite, Westmont IL 60559
Telephone: 331.814.2200 E-mail: help@landauerradon.com

LANDAUER NORDIC

RADON MONITORING REPORT

Issued by an Accredited Laboratory

Institute For Env Assessment
Jennifer Theis
9201 W. Broadway
Suite 600
Brooklyn Park MN 55445
United States

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MEASUREMENT PERFORMED FOR

REPORT RECEIVER(S)
Institute For Env Assessment

The analysis results are located on page 2 of this document.

Description of the measurement

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LANDAUER NORDIC

RADON MONITORING REPORT

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4728111:2

REPORT PAGE 32 (32)

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05/03/2017

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05/03/2017

Test results

Detector	Start date	Stop date	Location	Detector comment	Avg Radon Conc. pCi/l	Total Radon Exp pCi-days/l
185964-4	11/09/2016	03/27/2017	District Office	Near Holley's Cubicle	1.1 +/- 0.2	149 +/- 25
157218-9	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 217	0.5 +/- 0.2	75 +/- 18
747987-6	11/09/2016	03/27/2017	District Office	Main Hall	< 0.4	< 55
597969-5	11/09/2016	03/27/2017	Sun Path Elementary	Main Hall	< 0.4	< 55
146449-4	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 206	1.5 +/- 0.2	206 +/- 29
122771-9	11/09/2016	03/27/2017	District Office	Near Cindy's Cubicle	1.2 1.2	159 +/- 27
707863-7	11/09/2016	03/27/2017	District Office	SPED Supervisors	0.9 +/- 0.2	131 +/- 27
206402-0	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 220	0.8 +/- 0.2	105 +/- 20
760380-6	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 221	0.9 +/- 0.2	127 +/- 23
351916-2	11/09/2016	03/27/2017	Jackson Elementary	Room 120	1.9 +/- 0.3	260 +/- 38
137609-4	11/09/2016	03/27/2017	Jackson Elementary	O'Dowd Pod	1.4 +/- 0.2	188 +/- 29
721167-5	11/09/2016	03/27/2017	Shakopee East Junior High School	Room 100	2.4 +/- 0.4	330 +/- 45
157886-3	11/09/2016	03/27/2017	Shakopee East Junior High School	Custodial Office	0.8 +/- 0.2	114 +/- 23
405555-4	11/09/2016	03/27/2017	Jackson Elementary	Room 108	1.5 +/- 0.3	213 +/- 32
157369-0	11/09/2016	03/27/2017	Pearson Middle School	Media Center	2.2 +/- 0.3	305 +/- 43
116503-4	11/09/2016	03/27/2017	Jackson Elementary	Room 123	1.9 +/- 0.3	269 +/- 38
728038-1	11/09/2016	03/27/2017	Jackson Elementary	Room 110	1.2 +/- 0.2	164 +/- 27

RT003LN - V1.20 / 2016-04-26 / JO / LB

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Landauer Nordic Laboratory Measurement Specialist

Landauer Radon Inc.
900 Oakmont Lane Suite, Westmont IL 60559
Telephone: 331.814.2200 E-mail: help@landauerradon.com

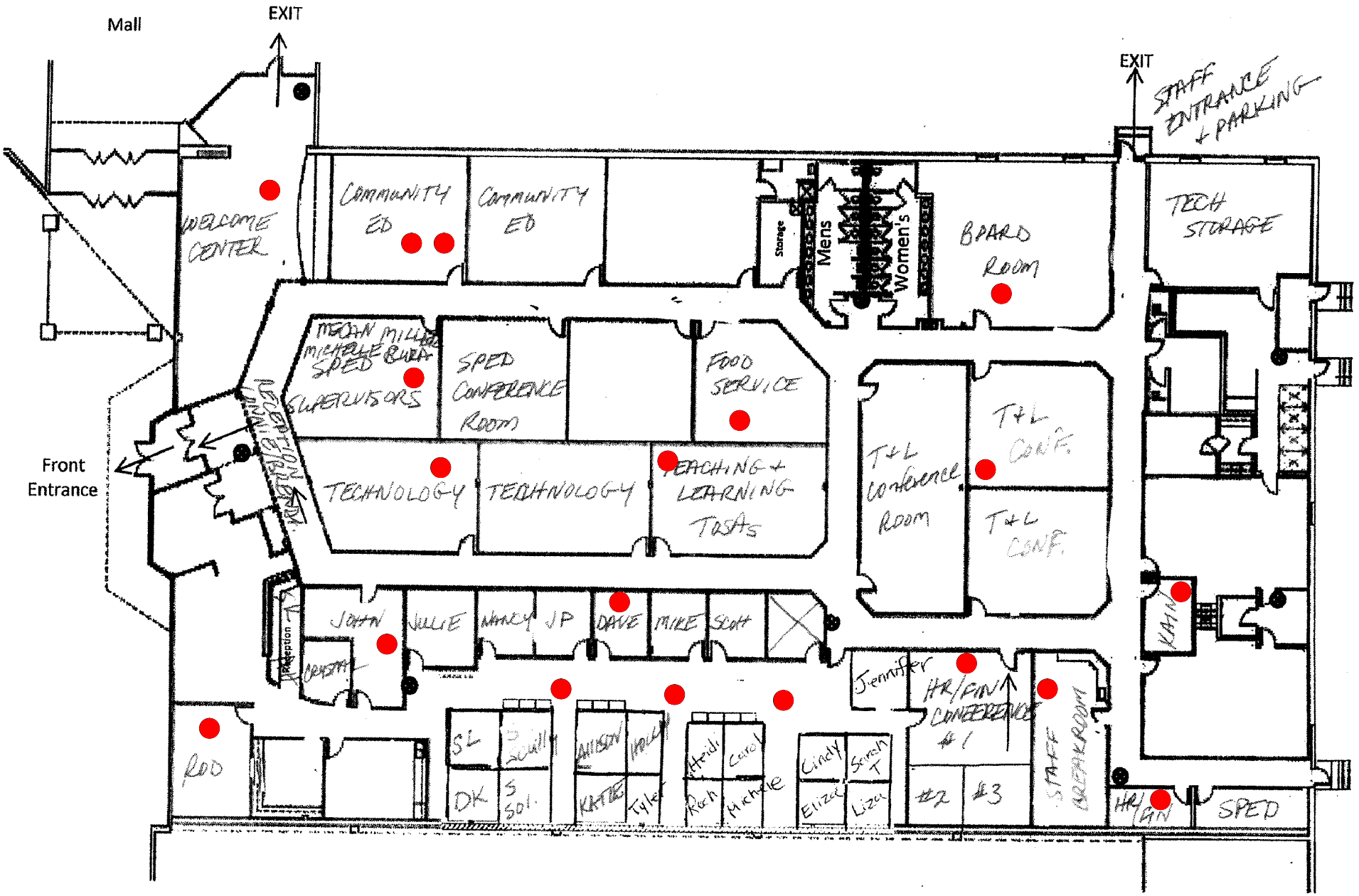
RADON DETECTOR LOCATION

INSTITUTE FOR ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.233.9513
Fax: 763.315.7920

CENTRAL FAMILY CENTER/DISTRICT OFFICE

MAIN LEVEL | NOV. 2016

RADON DETECTOR LOCATION



INSTITUTE FOR ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.233.9513
Fax: 763.315.7920

DISTRICT SERVICES

NOV. 2016

INSTITUTE FOR ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
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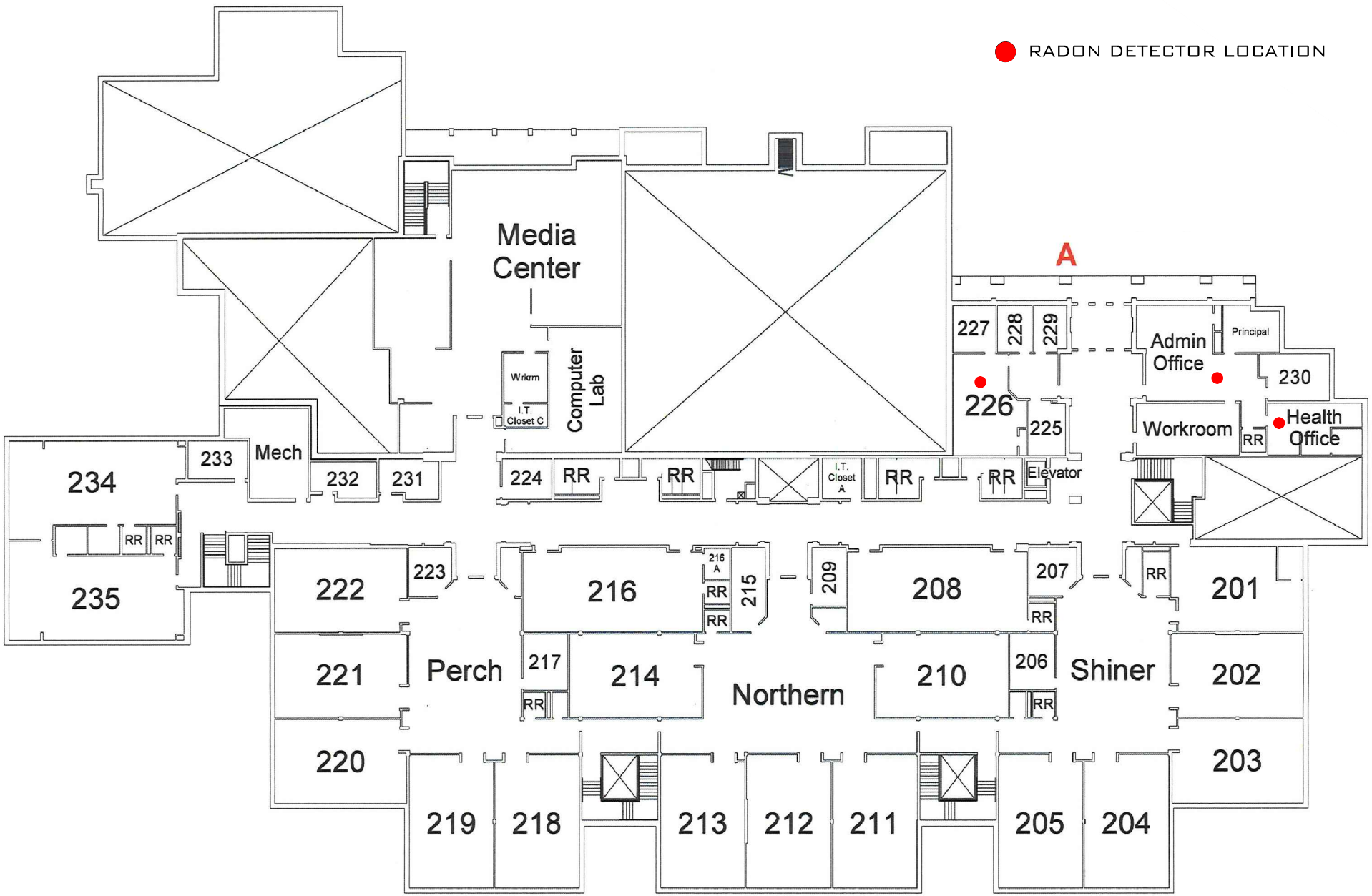
Fax: 763.315.7920

EAGLE CREEK ELEMENTARY

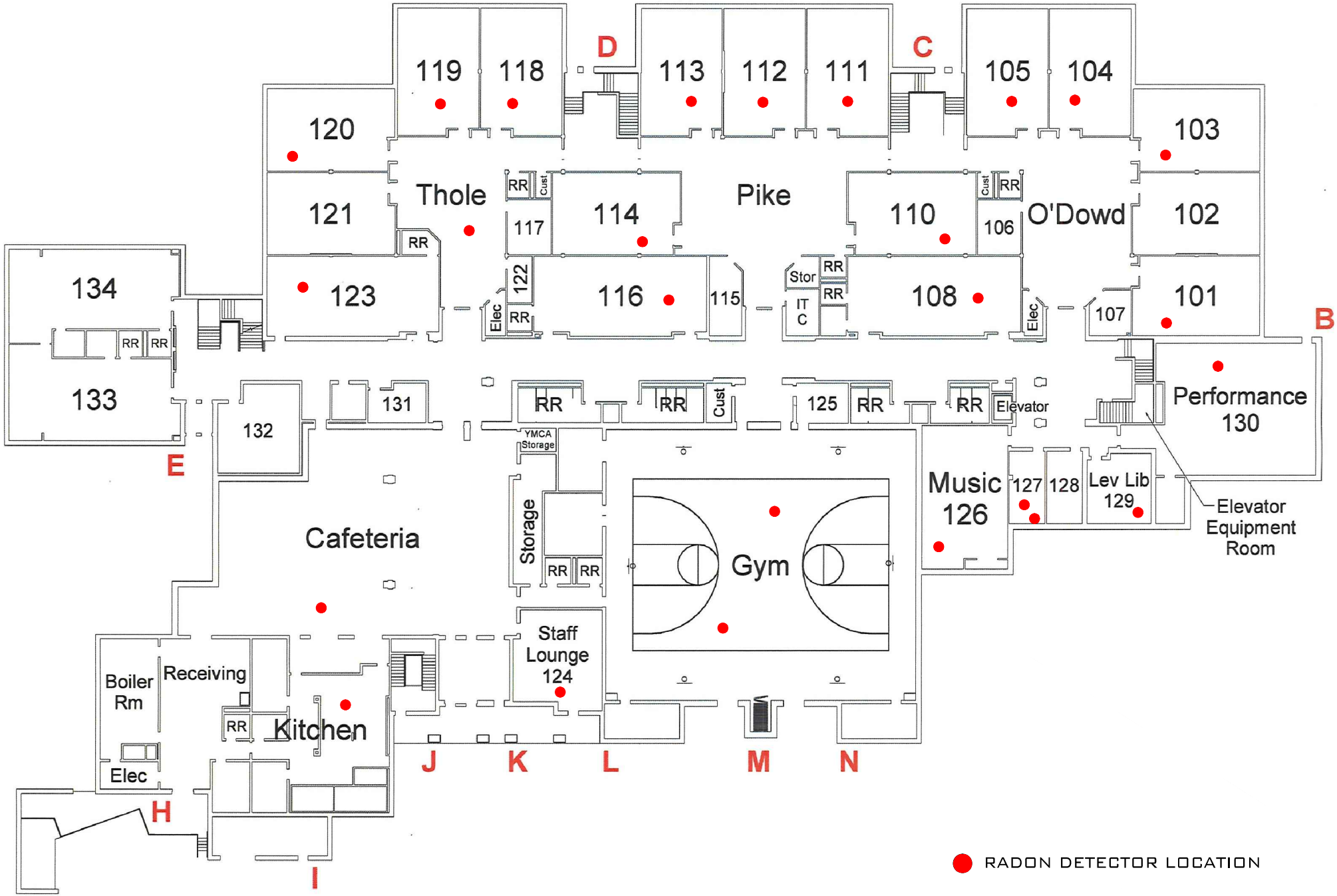
MAIN LEVEL | NOV. 2016



INSTITUTE FOR ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.233.9513
Fax: 763.315.7920

EAGLE CREEK ELEMENTARY

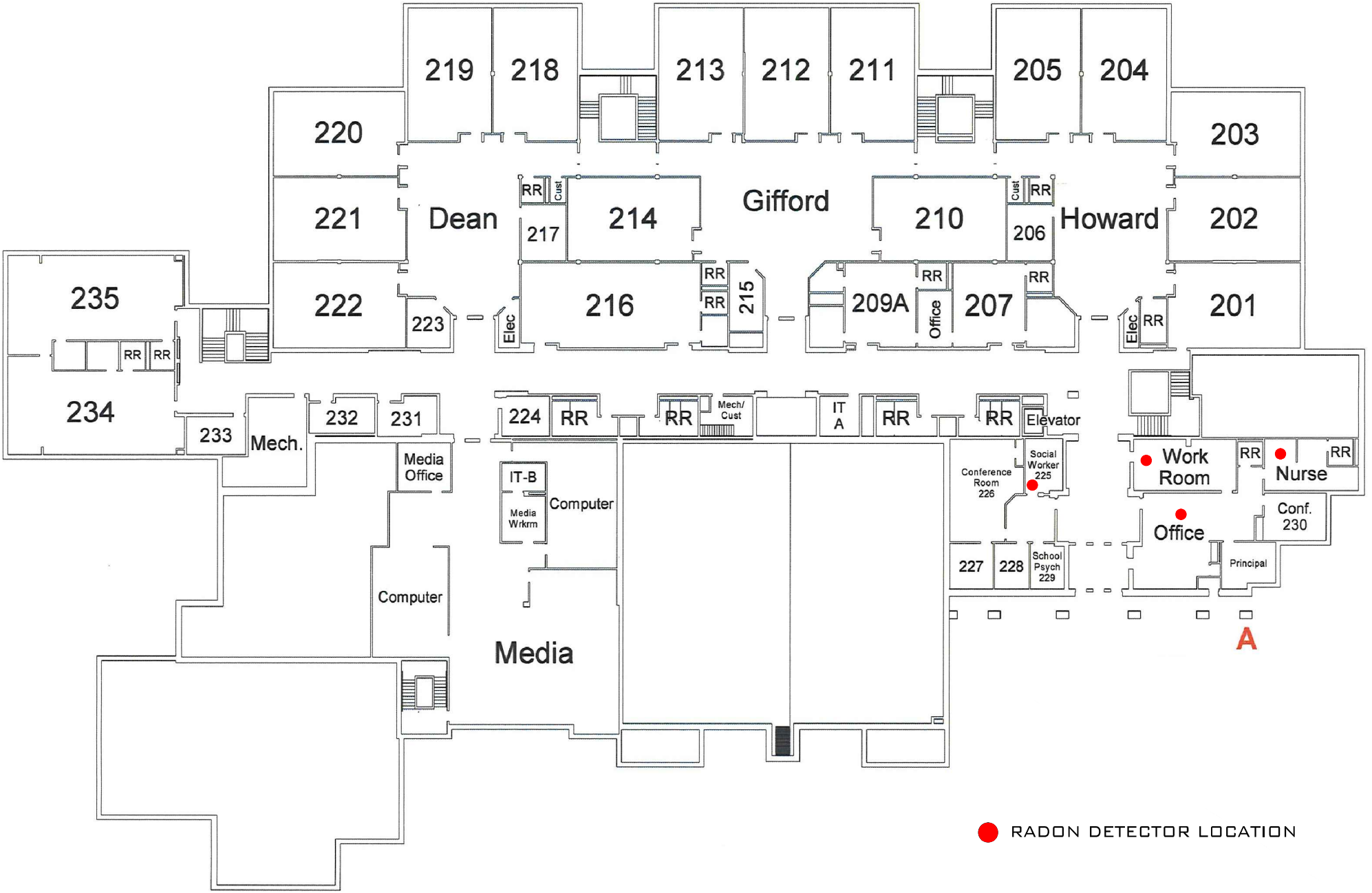
MAIN LEVEL | NOV. 2016



INSTITUTE FOR
ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.233.9513
Fax: 763.315.7920

JACKSON ELEMENTARY

MAIN LEVEL | NOV. 2016



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9201 West Broadway Brooklyn Park, MN 55445
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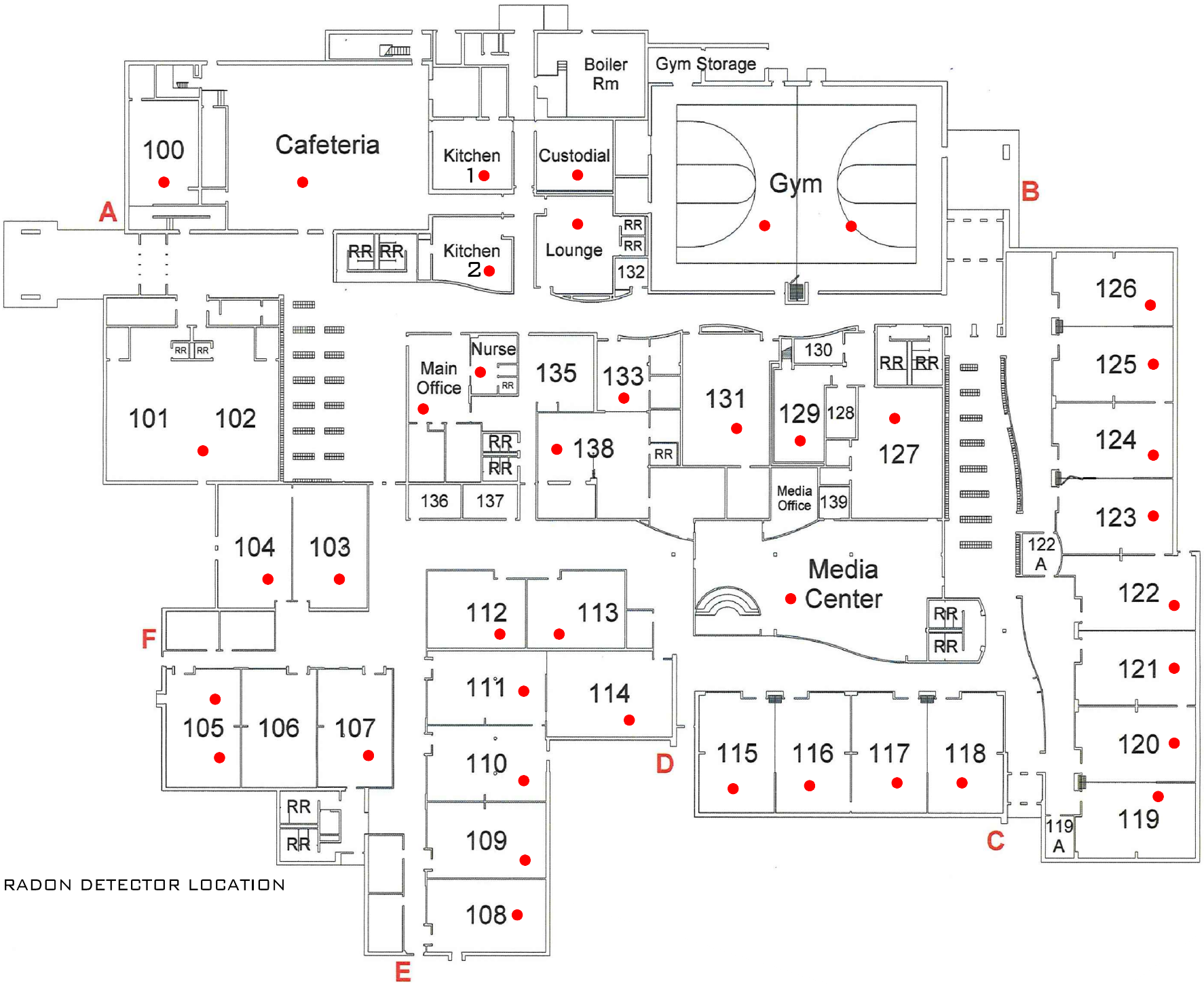
JACKSON ELEMENTARY

SECOND LEVEL | NOV. 2016



INSTITUTE FOR ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.233.9513
Fax: 763.315.7920

PEARSON MIDDLE SCHOOL

MAIN LEVEL | NOV. 2016

INSTITUTE FOR ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.233.9513
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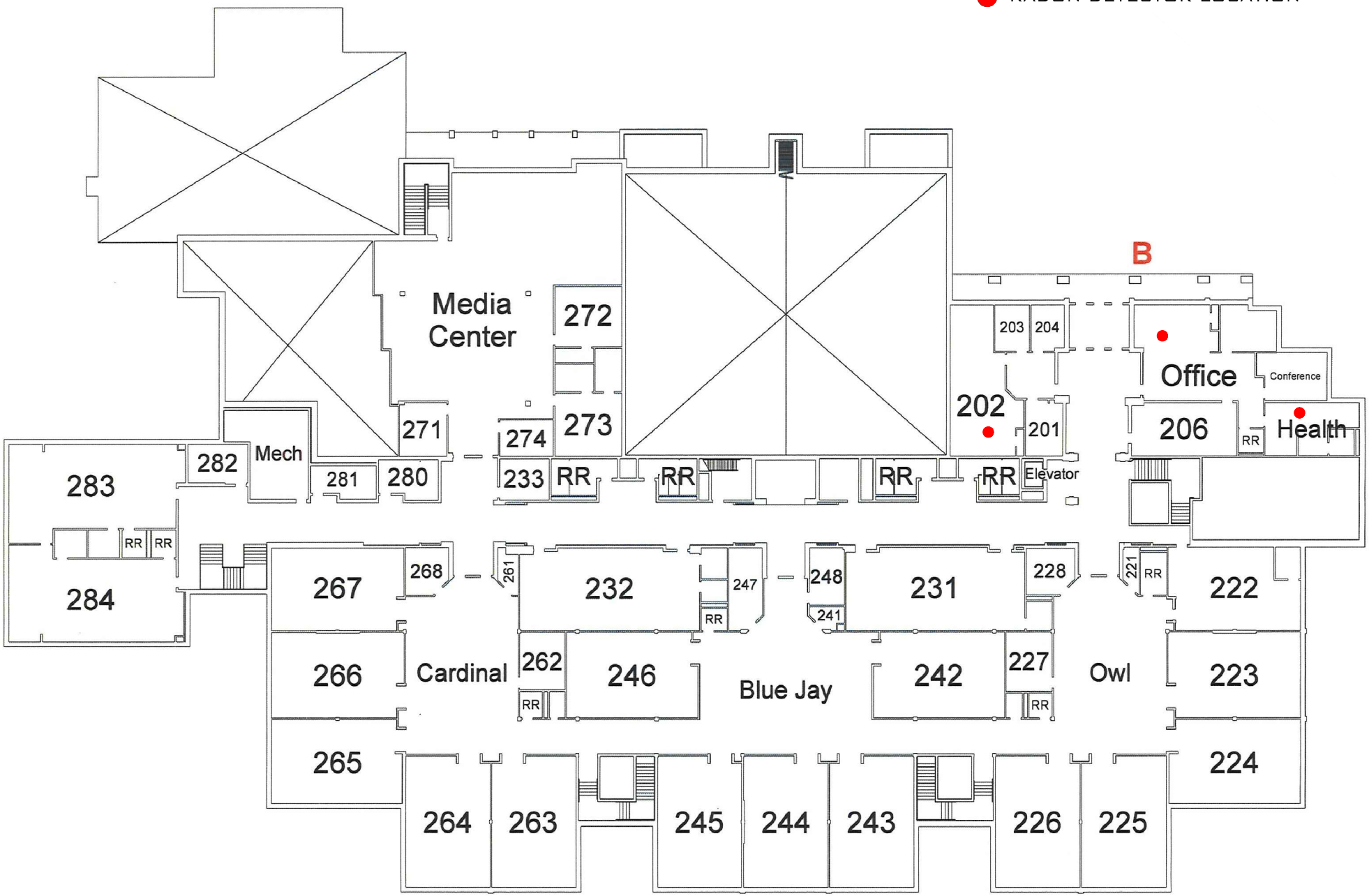
RED OAK ELEMENTARY

MAIN LEVEL FLOOR PLAN | NOV. 2016



INSTITUTE FOR ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.233.9513
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RED OAK ELEMENTARY

UPPER LEVEL FLOOR PLAN | NOV. 2016

RADON DETECTOR LOCATION

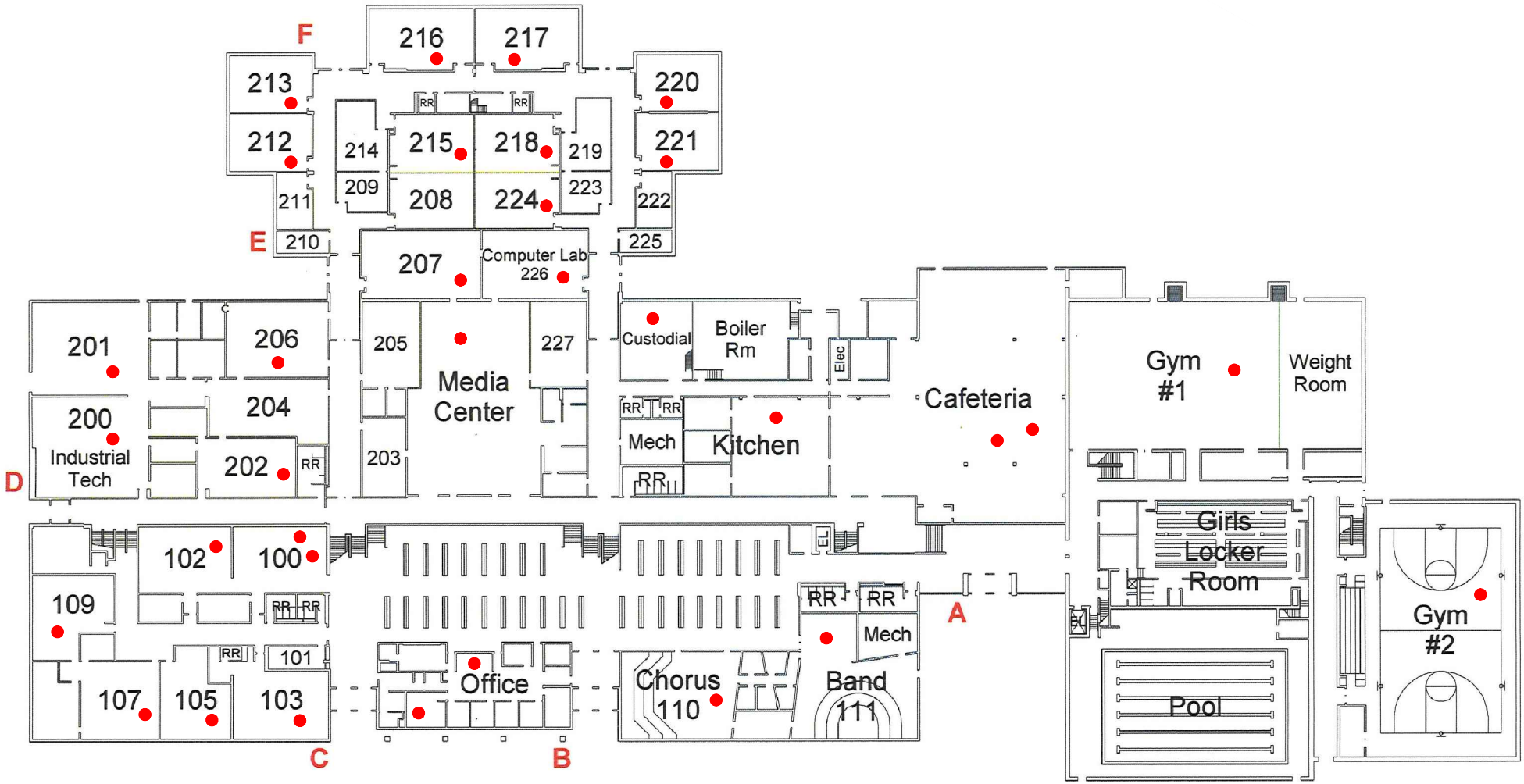
INSTITUTE FOR ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.233.9513
Fax: 763.315.7920

SHAKOPEE HIGH SCHOOL

FIRST LEVEL FLOOR PLAN | NOV. 2016

N

RADON DETECTOR LOCATION

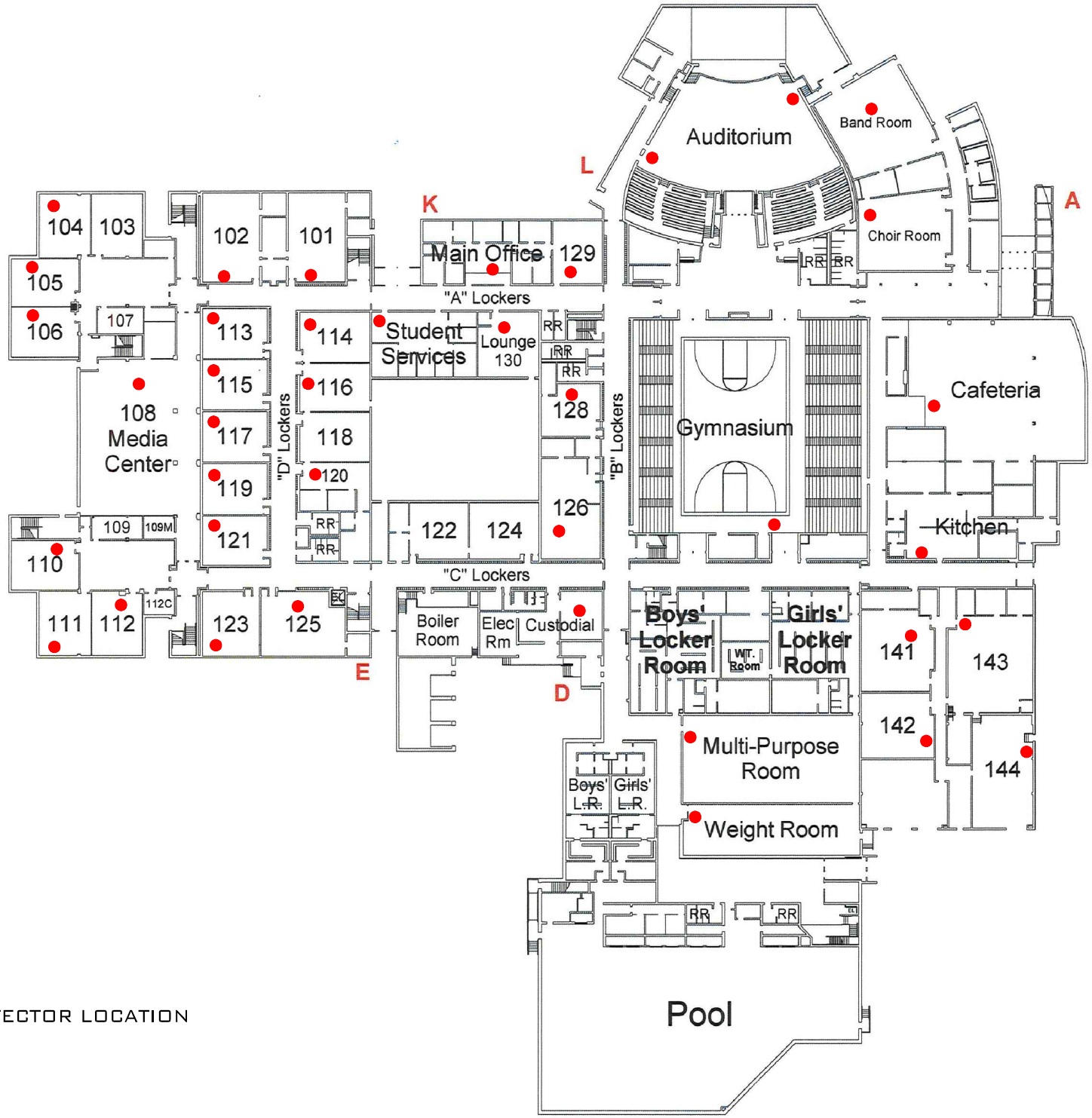


INSTITUTE FOR
ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.233.9513
Fax: 763.315.7920

EAST JUNIOR HIGH SCHOOL

MAIN LEVEL | NOV. 2016

N

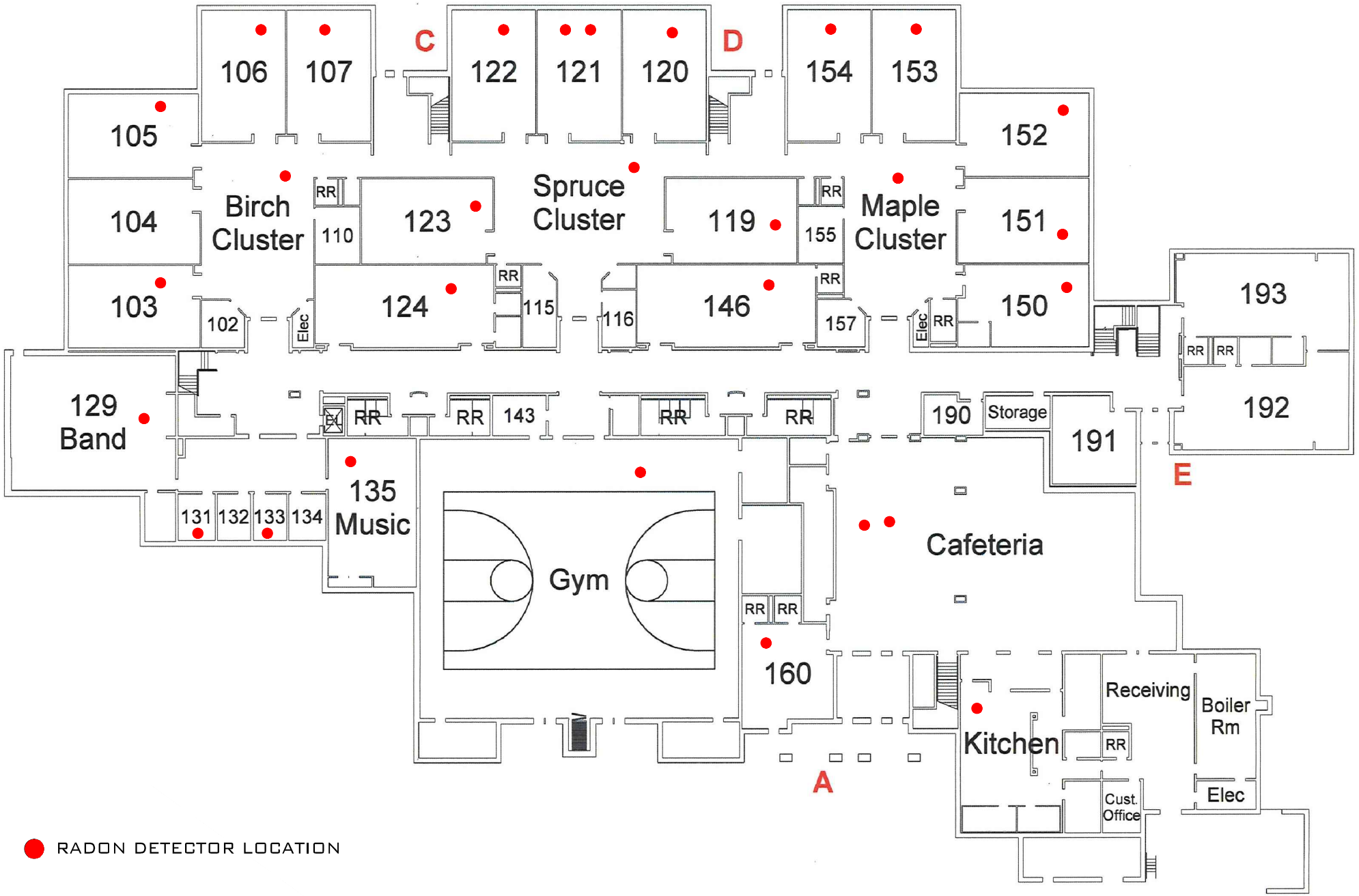


● RADON DETECTOR LOCATION

INSTITUTE FOR ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.233.9513
Fax: 763.315.7920

WEST JUNIOR HIGH SCHOOL

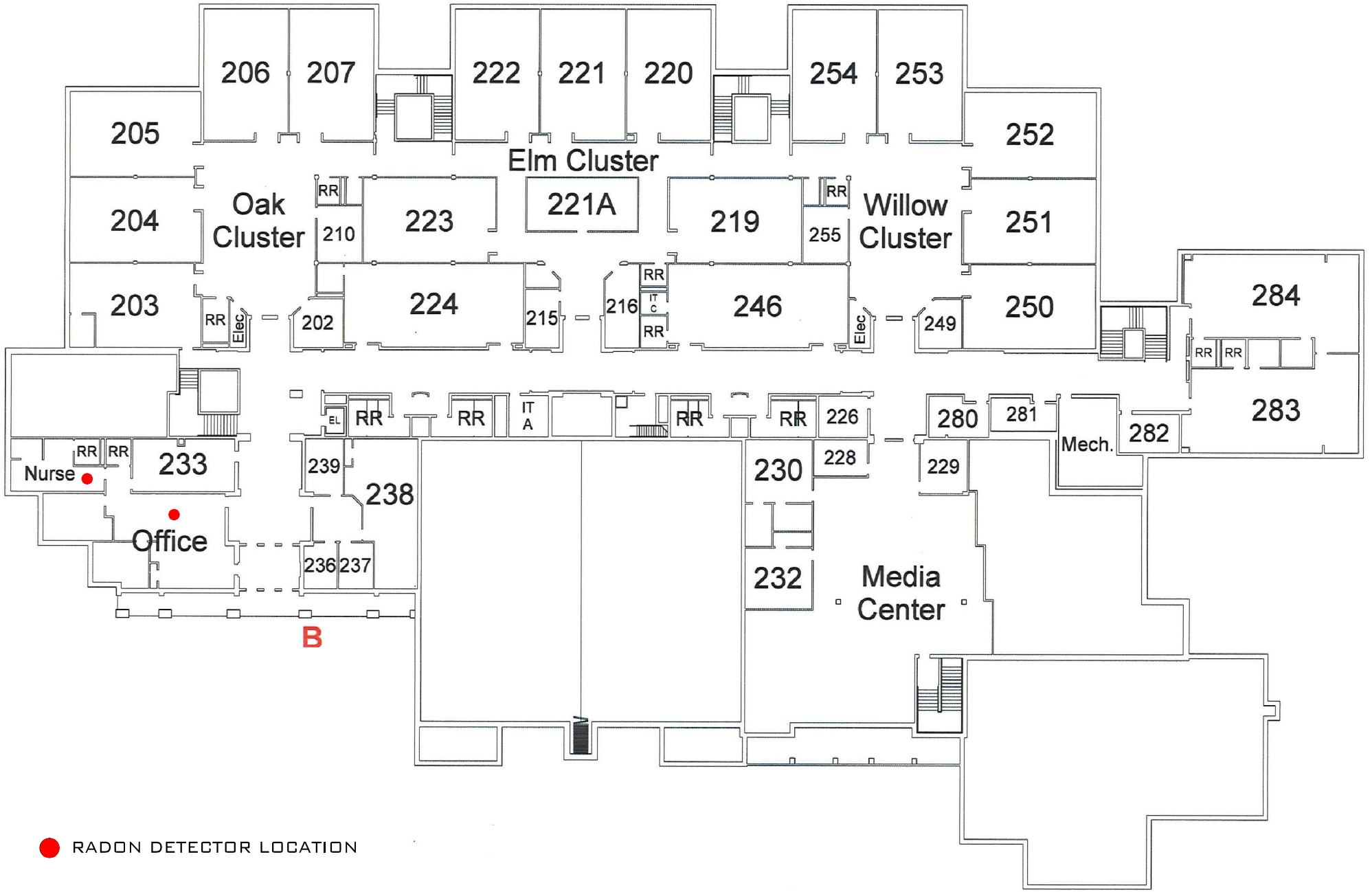
MAIN LEVEL | NOV. 2016



INSTITUTE FOR ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.233.9513
Fax: 763.315.7920

SUN PATH ELEMENTARY

MAIN LEVEL | NOV. 2016

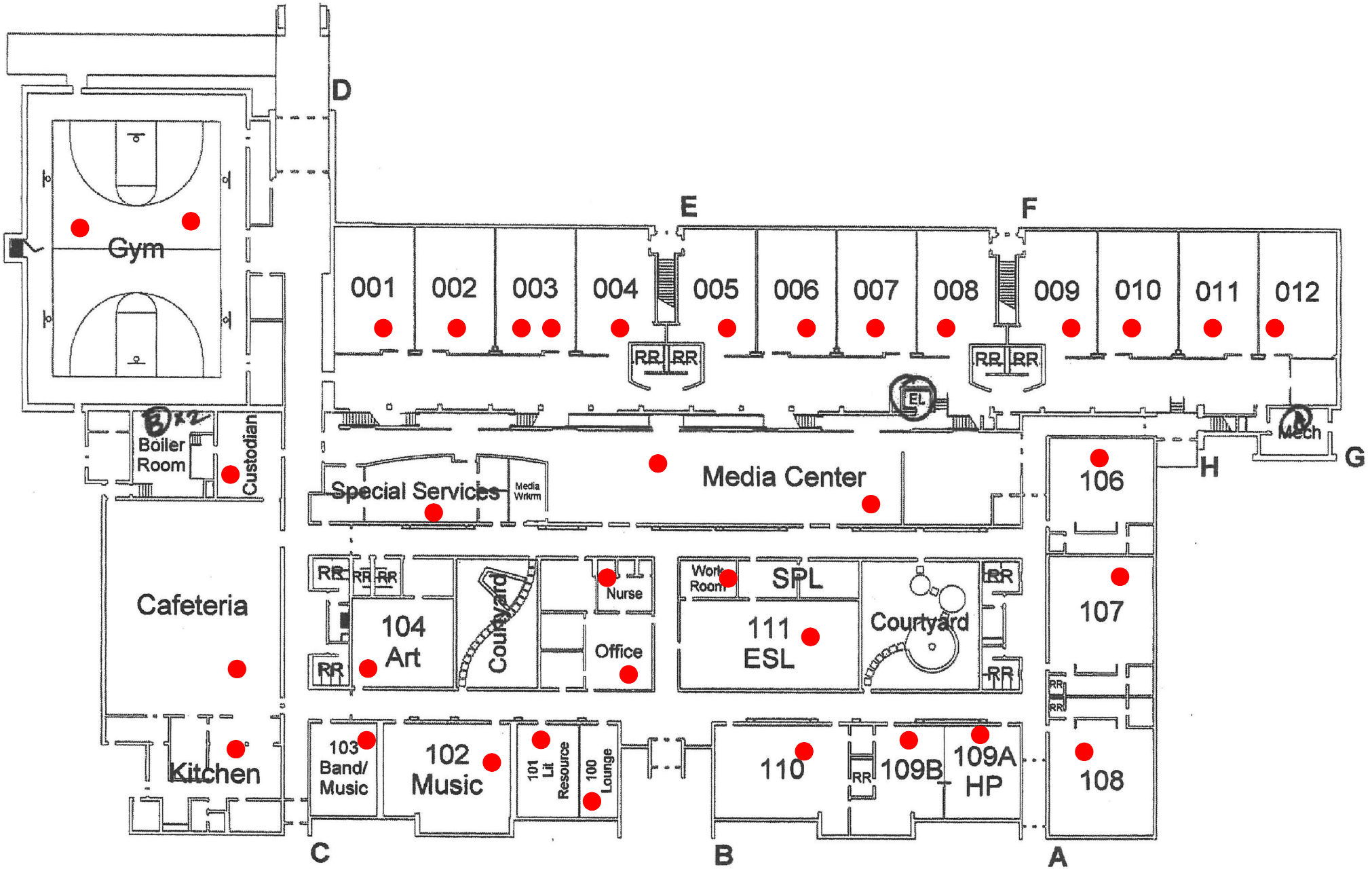


INSTITUTE FOR ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.233.9513
Fax: 763.315.7920

SUN PATH ELEMENTARY

SECOND LEVEL | NOV. 2016

RADON DETECTOR LOCATION



INSTITUTE FOR ENVIRONMENTAL ASSESSMENT
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Tel: 763.315.7900 Toll Free: 800.233.9513
Fax: 763.315.7920

SWEENEY ELEMENTARY

MAIN LEVEL | NOV. 2016

Appendix C

Chain of Custody

Radon Alpha Track Detector Log

IEA, Inc.
9201 West Broadway, Suite 600
Brooklyn Park, MN 55445
763-315-7900

District: Shakopee Public Schools
Project Number: 201610975
Shipped By: Carole Nelson
Date of Shipment to Lab: 3/31/17

Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
989883-4	11/9/16	3/27/17	Central Family Center	Office	Top of shelf straight in	
457962-0	11/9/16	3/27/17	Central Family Center	Printing	Top of fire alarm	
422192-5	11/9/16	3/27/17	Central Family Center	Lounge	Top of Fridge	
680673-1	11/9/16	3/27/17	Central Family Center	West Gym	Top of small electrical panel	
~~686554-7~~	~~11/9/16~~	-	~~Central Family Center~~	~~East Gym~~	~~Top of small electrical panel~~	
~~379869-1~~	~~11/9/16~~	-	~~Central Family Center~~	~~East Gym~~	~~Top of small electrical panel~~	~~Duplicate~~
319798-5	11/9/16	3/27/17	Central Family Center	Cafeteria #1	Top of shelf right of door	
994999-1	11/9/16	3/27/17	Central Family Center	Cafeteria #2	Top of Fridge	
220596-1	11/9/16	3/27/17	Central Family Center	Kitchen	Top of fan - Dishroom	
3322562-8	11/9/16	3/27/17	Central Family Center	Room 102	Top of panel in right side corner	
978461-2	11/9/16	3/27/17	Central Family Center	Room 101	Top of cabinet with plant	
999378-3	11/9/16	3/27/17	Central Family Center	Room 103	Top of projector mount	
383687-1	11/9/16	3/27/17	Central Family Center	Room 106	Top of teachers cabinet with plants	
208276-6	11/9/16	3/27/17	Central Family Center	Room 108	Top of fridge behind microwave	
754404-2	11/9/16	3/27/17	Central Family Center	Room 108	Top of fridge behind microwave	Duplicate
137444-6	11/9/16	3/27/17	Central Family Center	Room 110	Top of Speaker in corner	
~~338650-5~~	~~11/9/16~~	-	~~Central Family Center~~	~~Room 107~~	~~Near pipes on top - right side~~	
730456-1	11/9/16	3/27/17	Central Family Center	Main Hall	Blank	

Detector Installed by: Nick Umland
Detector Removed By: Ryan Rand

Radon Alpha Track Detector Log

IEA, Inc.
9201 West Broadway, Suite 600
Brooklyn Park, MN 55445
763-315-7900

District: Shakopee Public Schools
Project Number: 201610975
Shipped By: Carole Nelson Date of Shipment to Lab: 3/31/17

Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
697207-9	11/9/16	3/27/17	District Office	Welcome Center	Top of snack vending machine	
~~524573-3~~	~~11/9/16~~	-	~~District Office~~	~~Community Ed~~	~~Top of S cloth covered cabinets/shelves~~	
~~350826-4~~	~~11/9/16~~	-	~~District Office~~	~~Community Ed~~	~~Top of S cloth covered cabinets/shelves~~	~~Duplicate~~
707863-7	11/9/16	3/27/17	District Office	SPED Supervisors	Lower TV mount	
214819-5	11/9/16	3/27/17	District Office	Food Service	NE grey cabinet by plant	
924193-6	11/9/16	3/27/17	District Office	Board Room	By coffee pot	found on the ground
985238-6	11/9/16	3/27/17	District Office	T& L Conference Room	By coffee pot	
723469-3	11/9/16	3/27/17	District Office	Kain's Office	Top of wooden shelves	
748325-8	11/9/16	3/27/17	District Office	HR/Fin	Top wooden shelf, by microwave	
659717-3	11/9/16	3/27/17	District Office	Staff Break Room	Top of cabinet above shelf	
157468-0	11/9/16	3/27/17	District Office	HR/Fin Conference Room #1	E shelves, top	
122771-9	11/9/16	3/27/17	District Office	Near Cindy's Cubicle	Top of metal box in Cindy's cubicle (as marked on the map - Cindy no longer is in the same cubicle)	

Detector Installed by: Ben LaFond Detector Removed By: Ben LaFond

Radon Alpha Track Detector Log

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Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
185964-4	11/9/16	3/27/17	District Office	Near Holley's Cubicle	Top of wooden mail slots	
693123-2	11/9/16	3/27/17	District Office	Dave's Office	Top of grey cabinets	
489590-5	11/9/16	3/27/17	District Office	Near Allison's Cubicle	S white metal cabinet top	
160484-2	11/9/16	3/27/17	District Office	John's Office	Top of wall mounted shelves	
156878-1	11/9/16	3/27/17	District Office	Rod's Office	Behind door	
507393-7	11/9/16	3/27/17	District Office	Teaching and Learning TASAs	Top of N wood shelving	
747886-0	11/9/16	3/27/17	District Office	Technology	W wall small grey metal shelves	
747987-6	11/9/16	3/27/17	District Office	Main Hall	Blank	

Detector Installed by: Ben LaFond Detector Removed By: Ben LaFond

Radon Alpha Track Detector Log

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Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
708240-7	11/9/16	3/27/17	Eagle Creek Elementary	Admin Office	Behind Printer	
109390-5	11/9/16	3/27/17	Eagle Creek Elementary	Health Office	Top of cabinet behind main desk near	
601428-6	11/9/16	3/27/17	Eagle Creek Elementary	Room 226	Top of Fridge	
366921-5	11/9/16	3/27/17	Eagle Creek Elementary	Room 130	Behind printer under flag	
667056-6	11/9/16	3/27/17	Eagle Creek Elementary	Room 129	Behind baby pictures on cabinet	
~~658474-2~~	~~11/9/16~~	-	~~Eagle Creek Elementary~~	~~Room 126~~	~~Behind Board~~	
107102-6	11/9/16	3/27/17	Eagle Creek Elementary	Room 101	Top of white wooden shelf right of sink	
210362-0	11/9/16	3/27/17	Eagle Creek Elementary	Room 101	Top of white wooden shelf right of sink	Duplicate
203730-7	11/9/16	3/27/17	Eagle Creek Elementary	Room 103	Top of shelf near flag/globe	
110476-9	11/9/16	3/27/17	Eagle Creek Elementary	Room 104	Behind Board	
928918-2	11/9/16	3/27/17	Eagle Creek Elementary	Room 105	Behind globe near flag	
118436-5	11/9/16	3/27/17	Eagle Creek Elementary	Trout Pod	Top of glass wall under exit sign	
215629-7	11/9/16	3/27/17	Eagle Creek Elementary	Room 110	Top of shelf near flag	
~~413083-7~~	~~11/9/16~~	-	~~Eagle Creek Elementary~~	~~Sunfish Pod~~	~~Behind cabinet under exit sign~~	
631999-0	11/9/16	3/27/17	Eagle Creek Elementary	Room 111	Teachers desk	
798057-6	11/9/16	3/27/17	Eagle Creek Elementary	Room 112	Behind globe near corner	
207975-4	11/9/16	3/27/17	Eagle Creek Elementary	Room 113	Top of file cabinet near board behind	
157709-7	11/9/16	3/27/17	Eagle Creek Elementary	Room 114	Behind file cabinet on board ledge	
212436-0	11/9/16	3/27/17	Eagle Creek Elementary	Room 118	Top of cabinet near teachers desk	
966802-1	11/9/16	3/27/17	Eagle Creek Elementary	Room 119	Behind teachers desk on top of cabinet	
783254-6	11/9/16	3/27/17	Eagle Creek Elementary	Room 120	Cabinet near desk - behind globe	
519596-1	11/9/16	3/27/17	Eagle Creek Elementary	Walleye Pod	Top of cabinet near room 117	

Detector Installed by: Nick Umland
Detector Removed By: Ryan Rand

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Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
~~587637-0~~	~~11/9/16~~	-	~~Eagle Creek Elementary~~	~~Room 121~~	~~Behind Ipad station~~	
~~292638-4~~	~~11/9/16~~	-	~~Eagle Creek Elementary~~	~~Room 123~~	~~Top of filing cabinet near teachers desk~~	
~~659958-3~~	~~11/9/16~~	-	~~Eagle Creek Elementary~~	~~Cafeteria~~	~~Behind TV mount~~	
160607-8	11/9/16	3/27/17	Eagle Creek Elementary	Cafeteria	Behind TV mount	Duplicate
115629-8	11/9/16	3/27/17	Eagle Creek Elementary	Kitchen	Top of fan in dishroom	
2147782-5	11/9/16	3/27/17	Eagle Creek Elementary	Room 124	Top of Projector	
789909-9	11/9/16	3/27/17	Eagle Creek Elementary	Gym	Top of exit sign near cafeteria	
282936-1	11/9/16	3/27/17	Eagle Creek Elementary	Gym	Top of exit sign near cafeteria	Duplicate
~~955044-3~~	~~11/9/16~~	-	~~Eagle Creek Elementary~~	~~Room 116~~	~~Behind shelving near sink - next to door~~	
6389982-9	11/9/16	3/27/17	Eagle Creek Elementary	Room 108	Top of cabinet under clock	
563222-9	11/9/16	3/27/17	Eagle Creek Elementary	Main Hall	Blank	

Detector Installed by: Nick Umland
Detector Removed By: Ryan Rand

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Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
648968-6	11/9/16	3/27/17	Jackson Elementary	Office	By Printer	
999952-5	11/9/16	3/27/17	Jackson Elementary	Social Worker Office	Top of file cabinet	
947064-2	11/9/16	3/27/17	Jackson Elementary	Nurse's Office	Top of file cabinet	
913070-9	11/9/16	3/27/17	Jackson Elementary	Workroom	Behind Phone on desk	
153834-7	11/9/16	3/27/17	Jackson Elementary	Performance Room 130	top of microwave	
401026-0	11/9/16	3/27/17	Jackson Elementary	Lev Lib 129	top of drink vending machine	
164086-9	11/9/16	3/27/17	Jackson Elementary	Room 127	By computer	
565679-8	11/9/16	3/27/17	Jackson Elementary	Room 127	By computer	Duplicate
714506-3	11/9/16	3/27/17	Jackson Elementary	Music 126	North East corner cabinet	behind pictures
~~515994-2~~	~~11/9/16~~	-	~~Jackson Elementary~~	~~Gym~~	~~South corner clock cage~~	
~~989537-6~~	~~11/9/16~~	-	~~Jackson Elementary~~	~~Gym~~	~~South corner clock cage~~	~~Duplicate~~
783908-7	11/9/16	3/27/17	Jackson Elementary	Staff Lounge	South West wall, top of wooden cabinets	not a staff lounge any more - placed on exterior wall
~~704962-0~~	~~11/9/16~~	-	~~Jackson Elementary~~	~~Cafeteria~~	~~SE wall, top of wooden rolling cabinet~~	
136666-5	11/9/16	3/27/17	Jackson Elementary	Kitchen	top of the grey wall mounted box	South West corner of the kitchen
795718-6	11/9/16	3/27/17	Jackson Elementary	Thole Pod	Top of large wooden cabinet/shelf	by the clock
116503-4	11/9/16	3/27/17	Jackson Elementary	Room 123	left of door, on top of the cabinet	the hallway door
351916-2	11/9/16	3/27/17	Jackson Elementary	Room 120	right of door, on top of the cabinet	
744501-8	11/9/16	3/27/17	Jackson Elementary	Room 119	by photograph on teacher's desk	behind phone
900428-4	11/9/16	3/27/17	Jackson Elementary	Room 118	right of door, on top of the cabinet	
971081-5	11/9/16	3/27/17	Jackson Elementary	Room 114	on top of cabinet, North East wall	on the East side of the cabinet
498976-0	11/9/16	3/27/17	Jackson Elementary	Room 116	top of file cabinet by teacher's desk	

Detector Installed by: Ben LaFond
Detector Removed By: Ben LaFond

Radon Alpha Track Detector Log

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763-315-7900

District: Shakopee Public Schools
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Date of Shipment to Lab: 3/31/17

Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
996983-3	11/9/16	3/27/17	Jackson Elementary	Pike Pod	top of South corner file cabinet	
613616-2	11/9/16	3/27/17	Jackson Elementary	Room 113	Teacher's desk by phone	
716209-2	11/9/16	3/27/17	Jackson Elementary	Room 112	top of cainet to the left of the door	behind pictures
746918-2	11/9/16	3/27/17	Jackson Elementary	Room 111	top of counter, South corner	behind box
728038-1	11/9/16	3/27/17	Jackson Elementary	Room 110	Top of wooden cabinet	by teacher's desk
405555-4	11/9/16	3/27/17	Jackson Elementary	Room 108	Behind Phone on teacher's desk	
137609-4	11/9/16	3/27/17	Jackson Elementary	O'Dowd Pod	Top of file cabinet by desk in West corner	
723664-9	11/9/16	3/27/17	Jackson Elementary	Room 105	left of door, on top of the cabinet	
570704-7	11/9/16	3/27/17	Jackson Elementary	Room 104	top of counter, South East corner	behind the light
601897-2	11/9/16	3/27/17	Jackson Elementary	Room 103	top of wooden cabinet	by Teacher's desk, behind photo
~~718034-2~~	~~11/9/16~~	-	~~Jackson Elementary~~	~~Room 101~~	~~top of cabinet by teacher's desk~~	~~by globe~~
513668-4	11/9/16	3/27/17	Jackson Elementary	Main Hall	Blank	

Detector Installed by: Ben LaFond
Detector Removed By: Ben LaFond

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District: Shakopee Public Schools
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Date of Shipment to Lab: 3/30/17

Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
613376-3	11/9/16	3/27/17	Pearson Middle School	Room 101/102	Facing the front, above the sink cabinet	The rooms are connected
752385-5	11/9/16	3/27/17	Pearson Middle School	Room 100	Behind the teacher's desk on the cabinet	
982346-9	11/9/16	3/27/17	Pearson Middle School	Cafeteria	on top of the volume control box	
211137-5	11/9/16	3/27/17	Pearson Middle School	Kitchen 1	Behind the phone on the desk	
771756-4	11/9/16	3/27/17	Pearson Middle School	Custodial	on the file cabinet on the desk	
133150-3	11/9/16	3/27/17	Pearson Middle School	Kitchen 2	on top of the oven warmer	
~~255203-2~~	~~11/9/16~~	~~--~~	~~Pearson Middle School~~	~~Lounge~~	~~on top of the vending machine~~	
170417-0	11/9/16	3/27/17	Pearson Middle School	Main Office	Next to the phone on the main desk	
634147-3	11/9/16	3/27/17	Pearson Middle School	Nurse	above the main desk	
785227-0	11/9/16	3/27/17	Pearson Middle School	Room 133	on cabinet when you first walk in	
~~197333-8~~	~~11/9/16~~	~~--~~	~~Pearson Middle School~~	~~Room 138~~	~~on the cabinet next to the globe~~	
771664-0	11/9/16	3/27/17	Pearson Middle School	Room 131	Next to the teacher's phone	
160595-5	11/9/16	3/27/17	Pearson Middle School	Gym	on the exit light abve the South West door	
924497-1	11/9/16	3/27/17	Pearson Middle School	Gym	on the fire box, the North side	Duplicate
542158-1	11/9/16	3/27/17	Pearson Middle School	Room 129	to the right of the teacher's computer	
554901-9	11/9/16	3/27/17	Pearson Middle School	Room 127	on the shelf on the far end of the room	
719007-7	11/9/16	3/27/17	Pearson Middle School	Room 126	above and right of the teacher's desk	
776070-5	11/9/16	3/27/17	Pearson Middle School	Room 125	above and left of the teacher's desk	
924327-0	11/9/16	3/27/17	Pearson Middle School	Room 124	above and left of the teacher's desk	
160729-0	11/9/16	3/27/17	Pearson Middle School	Room 123	above and right of the teacher's desk	Next to the turtles
214171-1	11/9/16	3/27/17	Pearson Middle School	Room 122	above and right of the teacher's desk	nex to the lamp
757115-1	11/9/16	3/27/17	Pearson Middle School	Room 121	above and left of the teacher's desk	by the pictures

Detector Installed by: Ian Dickhausen
Detector Removed By: Parker Prose

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District: Shakopee Public Schools
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Date of Shipment to Lab: 3/30/17

Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
474143-5	11/9/16	3/27/17	Pearson Middle School	Room 120	above and right of the teacher's desk	next to the cleaning suplies
661667-6	11/9/16	3/27/17	Pearson Middle School	Room 119	on the book shelf next to the teacher's desk	
490957-8	11/9/16	3/27/17	Pearson Middle School	Room 118	above and right of the teacher's desk	in front of the map
268715-0	11/9/16	3/27/17	Pearson Middle School	Room 117	above and left of the teacher's desk	next to the award
747804-3	11/9/16	3/27/17	Pearson Middle School	Room 116	above and right of the teacher's desk	next to the globe
702296-5	11/9/16	3/27/17	Pearson Middle School	Room 115	above and left of the teacher's desk	next to the birdhouse
157369-0	11/9/16	3/27/17	Pearson Middle School	Media Center	on top of the utensil drawers	
~~772175-6~~	~~11/9/16~~	-	~~Pearson Middle School~~	~~Media Office~~	~~on the computer desk~~	
642692-8	11/9/16	3/27/17	Pearson Middle School	Room 114	above and left of the teacher's desk	Next to Snoopy
748576-6	11/9/16	3/27/17	Pearson Middle School	Room 113	Behind the projector screen	
970419-8	11/9/16	3/27/17	Pearson Middle School	Room 112	Behind the projector screen	
783823-8	11/9/16	3/27/17	Pearson Middle School	Room 111	Behind the projector screen	
172725-4	11/9/16	3/27/17	Pearson Middle School	Room 110	above and left of the teacher's desk	next to the falg
774408-9	11/9/16	3/27/17	Pearson Middle School	Room 109	above and right of the teacher's desk	next to the shells
750852-6	11/9/16	3/27/17	Pearson Middle School	Room 108	Above the teacher's desk on a shelf	next to the bear
134728-5	11/9/16	3/27/17	Pearson Middle School	Room 107	On a shelf next to the teacher's desk	next to the award
151310-0	11/9/16	3/27/17	Pearson Middle School	Room 105	above and right of the teacher's desk	next to the cupcake
166633-8	11/9/16	3/27/17	Pearson Middle School	Room 105	Behind the projector screen	Duplicate
350881-9	11/9/16	3/27/17	Pearson Middle School	Room 103	Behind the projector screen	
354169-5	11/9/16	3/27/17	Pearson Middle School	Room 104	Behind the projector screen	
389459-9	11/9/16	3/27/17	Pearson Middle School	Main Hall	Blank	

Detector Installed by: Ian Dickhausen
Detector Removed By: Parker Prose

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Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
608763-9	11/9/16	3/27/17	Red Oak Elementary	Office	Behind desk's in "cove"	
271119-0	11/9/16	3/27/17	Red Oak Elementary	Health	Top of Fridge	
766379-2	11/9/16	3/27/17	Red Oak Elementary	Room 202	Behind Printer	
300030-4	11/9/16	3/27/17	Red Oak Elementary	Room 106	Right side windows (indoor window)	
502008-6	11/9/16	3/27/17	Red Oak Elementary	Music	Top of cabinet left of door 101	
172900-3	11/9/16	3/27/17	Red Oak Elementary	Room 105	Near window	
561483-9	11/9/16	3/27/17	Red Oak Elementary	Room 103	Desk - Top Drawer	
126675-8	11/9/16	3/27/17	Red Oak Elementary	Room 101	Top of Cabinet right of door	
~~731676-3~~	~~11/9/16~~	~~--~~	~~Red Oak Elementary~~	~~Oriole Pod~~	~~Near 124 on top of cabinet near plant~~	
785653-7	11/9/16	3/27/17	Red Oak Elementary	Room 122	Behind board	
945928-0	11/9/16	3/27/17	Red Oak Elementary	Room 122	Behind board	Duplicate
718332-0	11/9/16	3/27/17	Red Oak Elementary	Room 124	Behind board	
213933-5	11/9/16	3/27/17	Red Oak Elementary	Room 125	Behind Ipad Station	
997312-4	11/9/16	3/27/17	Red Oak Elementary	Room 126	Behind board	
~~191755-8~~	~~11/9/16~~	-	~~Red Oak Elementary~~	~~Room 142~~	~~Top of blinds near flag~~	
150886-0	11/9/16	3/27/17	Red Oak Elementary	Room 143	Behind board	
573263-1	11/9/16	3/27/17	Red Oak Elementary	Room 144	Behind board	
123415-2	11/9/16	3/27/17	Red Oak Elementary	Room 145	Behind board	
338185-2	11/9/16	3/27/17	Red Oak Elementary	Room 146	Behind sink	
185916-4	11/9/16	3/27/17	Red Oak Elementary	Room 163	Behind Board	
719050-7	11/9/16	3/27/17	Red Oak Elementary	Room 164	Behind Ipad Station	
124765-9	11/9/16	3/27/17	Red Oak Elementary	Room 165	Behind board	

Detector Installed by: Nick Umland
Detector Removed By: Ryan Rand

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			Building	Room Number	Position in Room	
371251-0	11/9/16	3/27/17	Red Oak Elementary	Room 166	Behind board	
~~668932-7~~	~~11/9/16~~	~~--~~	~~Red Oak Elementary~~	~~Eagle Pod~~	~~Behind Printer~~	
577768-5	11/9/16	3/27/17	Red Oak Elementary	Room 132	Behind board	
~~972546-6~~	~~11/9/16~~	-	~~Red Oak Elementary~~	~~Room 131~~	~~Top of cabinet by teachers desk~~	
~~364218-4~~	~~11/9/16~~	-	~~Red Oak Elementary~~	~~Gym~~	~~Above exit sign near main entrance~~	
~~228204-4~~	~~11/9/16~~	-	~~Red Oak Elementary~~	~~Gym~~	~~Above exit sign near main entrance~~	
~~383060-1~~	~~11/9/16~~	-	~~Red Oak Elementary~~	~~Lounge~~	~~Top of Fridge~~	
503647-0	11/9/16	3/27/17	Red Oak Elementary	Cafeteria	Top of emergency phone	
121632-4	11/9/16	3/27/17	Red Oak Elementary	Cafeteria	Top of emergency phone	Duplicate
760120-6	11/9/16	3/27/17	Red Oak Elementary	Kitchen	Top of rack with silverware	
390500-7	11/9/16	3/27/17	Red Oak Elementary	Main Hall	Blank	

Detector Installed by: Nick Umland Detector Removed By: Ryan Rand

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Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
785198-3	11/9/16	3/27/17	Shakopee East Junior High School	Office	Behind speakers near door of Room D	
932554-9	11/9/16	3/27/17	Shakopee East Junior High School	Office Room D	Behind Printer	
989543-4	11/9/16	3/27/17	Shakopee East Junior High School	Room 103	On Tv stand	
684363-5	11/9/16	3/27/17	Shakopee East Junior High School	Room 105	Above Sink	
460329-6	11/9/16	3/27/17	Shakopee East Junior High School	Room 107	Shelf above sink to right of door	
684466-6	11/9/16	3/27/17	Shakopee East Junior High School	Room 109	Top of cabinet next to door	
53967-3	11/9/16	3/27/17	Shakopee East Junior High School	Room 102	Above cabinet #6	
721167-5	11/9/16	3/27/17	Shakopee East Junior High School	Room 100	Above cabinet #3	
756670-6	11/9/16	3/27/17	Shakopee East Junior High School	Room 100	Above Cabinet #3	Duplicate
~~994763-1~~	~~11/9/16~~	-	~~Shakopee East Junior High School~~	~~Room 202~~	~~Top of cabinet on left above computer~~	
209446-4	11/9/16	3/27/17	Shakopee East Junior High School	Room 200	Top of Tv stand	
972879-1	11/9/16	3/27/17	Shakopee East Junior High School	Room 201	Top of Electrical Panel	
146449-4	11/9/16	3/27/17	Shakopee East Junior High School	Room 206	Top of Shelf above sink	
103773-8	11/9/16	3/27/17	Shakopee East Junior High School	Media Center	Near printers behind main desk	
741359-4	11/9/16	3/27/17	Shakopee East Junior High School	Room 207	top of cabinet near clock	
648874-6	11/9/16	3/27/17	Shakopee East Junior High School	Room 212	top of cabinet next to door	

Detector Installed by: Nick Umland
Detector Removed By: Ryan Rand

Radon Alpha Track Detector Log

IEA, Inc.
9201 West Broadway, Suite 600
Brooklyn Park, MN 55445
763-315-7900

District: Shakopee Public Schools
Project Number: 201610975
Shipped By: Carole Nelson
Date of Shipment to Lab: 3/31/17

Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
229222-5	11/9/16	3/27/17	Shakopee East Junior High School	Room 213	Top of cabinet straight back	
742941-8	11/9/16	3/27/17	Shakopee East Junior High School	Room 216	Above goggle cabinet	
157218-9	11/9/16	3/27/17	Shakopee East Junior High School	Room 217	Top of cabinet behind teachers desk	
901973-8	11/9/16	3/27/17	Shakopee East Junior High School	Room 215	Top of wooden cabinet front of room	
676267-8	11/9/16	3/27/17	Shakopee East Junior High School	Room 224	Top of cabinet behind desk	
206402-0	11/9/16	3/27/17	Shakopee East Junior High School	Room 220	Top of teachers cabinet	
760380-6	11/9/16	3/27/17	Shakopee East Junior High School	Room 221	Top of cabinet near statue	
653404-4	11/9/16	3/27/17	Shakopee East Junior High School	Room 218	Top of cabinet behind teachers desk	
996972-6	11/9/16	3/27/17	Shakopee East Junior High School	Room 226	Top of Tv stand	
157886-3	11/9/16	3/27/17	Shakopee East Junior High School	Custodial Office	Top of fridge	
170020-2	11/9/16	3/27/17	Shakopee East Junior High School	Kitchen	Top of fan on left side	
128470-2	11/9/16	3/27/17	Shakopee East Junior High School	Cafeteria	Top of fire alarm near main door	
906876-8	11/9/16	3/27/17	Shakopee East Junior High School	Cafeteria	Top of fire alarm near main door	Duplicate
~~659927-8~~	~~11/9/16~~	-	~~Shakopee East Junior High School~~	~~Gym #1~~	~~Top of fire alarm near main door~~	
~~634803-1~~	~~11/9/16~~	-	~~Shakopee East Junior High School~~	~~Gym #2~~	~~Above motion detector in corner on left~~	
608948-6	11/9/16	3/27/17	Shakopee East Junior High School	Band 111	Top of instrument lockers next to door/pencil sharpner	
~~153941-0~~	~~11/9/16~~	-	~~Shakopee East Junior High School~~	~~Chorus 110~~	~~Top of Fire alarm near right corner~~	
997197-7	11/9/16	3/27/17	Shakopee East Junior High School	Main Hall	Blank	

Detector Installed by: Nick Umland
Detector Removed By: Ryan Rand

Radon Alpha Track Detector Log

IEA, Inc.
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763-315-7900

District: Shakopee Public Schools
Project Number: 201610975
Shipped By: Carole Nelson Date of Shipment to Lab: 3/31/17

Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
160292-9	11/9/16	3/27/17	Shakopee High School	Main Office	Office entryway, Behind badge maker on N wall	
137873-6	11/9/16	3/27/17	Shakopee High School	Main Office	Conference room, top of mounted white board	
~~710255-1~~	~~11/9/16~~	-	~~Shakopee High School~~	~~Room E110~~	~~Tan file cabinet, behind plant~~	
~~163101-9~~	~~11/9/16~~	-	~~Shakopee High School~~	~~Room E110~~	~~Tan file cabinet, behind plant~~	~~Duplicate~~
718974-9	11/9/16	3/27/17	Shakopee High School	Room E112	Top of desk, SE corner of room	
731079-0	11/9/16	3/27/17	Shakopee High School	Room E113A	NE Corner desk, by phone	
720981-0	11/9/16	3/27/17	Shakopee High School	Room E115	Top of E wall bookshelf, by plant	
~~252575-6~~	~~11/9/16~~	-	~~Shakopee High School~~	~~Room E116~~	~~Top of N wall file cabinet~~	
656691-3	11/9/16	3/27/17	Shakopee High School	Staff	Top of central file cabinet cluster	
697672-4	11/9/16	3/27/17	Shakopee High School	Room E141	Top of NW file cabinets	
557402-5	11/9/16	3/27/17	Shakopee High School	Room E142	Top of N wall file cabinet, by plant	
143836-5	11/9/16	3/27/17	Shakopee High School	Room E144	Top of S wall divider	
745751-8	11/9/16	3/27/17	Shakopee High School	Room E145	Top of E wall mounted cabinets	
553288-2	11/9/16	3/27/17	Shakopee High School	Room E147	Top of wall mounted cabinets, N corner	
583725-7	11/9/16	3/27/17	Shakopee High School	Room E148	Top of large cabinets immediately right after entering	
169417-3	11/9/16	3/27/17	Shakopee High School	Room E149	Top of wall mounted bookshelf, SE wall, E side	
132991-1	11/9/16	3/27/17	Shakopee High School	Room E152	Top of wood cabinet immediately left after entering	

Detector Installed by: Ben LaFond Detector Removed By: Ben LaFond

Radon Alpha Track Detector Log

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763-315-7900

District: Shakopee Public Schools
Project Number: 201610975
Shipped By: Carole Nelson Date of Shipment to Lab: 3/31/17

Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
525113-7	11/9/16	3/27/17	Shakopee High School	Room E151	Top of wall mounted cabinets, SW wall, W side	
586861-7	11/9/16	3/27/17	Shakopee High School	Room E170	Top of large metal wire cabinets immediately left of door after entering	
713987-6	11/9/16	3/27/17	Shakopee High School	Room E172	Top of large wooden cabinet left of door after entering	
191457-1	11/9/16	3/27/17	Shakopee High School	Room E173	Teacher's desk, by lamp	
996627-6	11/9/16	3/27/17	Shakopee High School	Career Center	On TV mount, left side	
485787-6	11/9/16	3/27/17	Shakopee High School	Room C 132 Staff	Top of fridge	
197532-5	11/9/16	3/27/17	Shakopee High School	Nurse's Office	Top of file cabinet by fridge	
683872-6	11/9/16	3/27/17	Shakopee High School	Staff Next to S110	Top of S wall file cabinets, E side	
~~969347-4~~	~~11/9/16~~	-	~~Shakopee High School~~	~~Room S110~~	~~Top of W wall file cabinet~~	
~~418936-1~~	~~11/9/16~~	-	~~Shakopee High School~~	~~Room S111~~	~~Top of S wall wood bookshelf~~	
~~173813-7~~	~~11/9/16~~	-	~~Shakopee High School~~	~~Room S112~~	~~Top of W wall file cabinet~~	
979220-1	11/9/16	3/27/17	Shakopee High School	Room S113	Top of E wall file cabinet	
628264-4	11/9/16	3/27/17	Shakopee High School	Room S114	Top of N wall large grey plastic cabinet	
752612-2	11/9/16	3/27/17	Shakopee High School	Room S115	Top of E wood desk	
355014-2	11/9/16	3/27/17	Shakopee High School	Room S116	Top of NE corner triangle desk, behind plant	Found on the floor
233552-9	11/9/16	3/27/17	Shakopee High School	Staff Next to S131	Top of central file cabinets	

Detector Installed by: Ben LaFond Detector Removed By: Ben LaFond

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District: Shakopee Public Schools
Project Number: 201610975
Shipped By: Carole Nelson
Date of Shipment to Lab: 3/31/17

Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
~~999753-7~~	~~11/9/16~~	~~-~~	~~Shakopee High School~~	~~Large Gymnasium~~	~~Top of NW exit sign~~	
~~988701-9~~	~~11/9/16~~	~~-~~	~~Shakopee High School~~	~~Multipurpose Room~~	~~NE speaker mount~~	~~Area under construction - unable to pick up.~~
~~146495-7~~	~~11/9/16~~	~~-~~	~~Shakopee High School~~	~~Auxiliary Gym 1~~	~~Top of E exit sign~~	
~~769120-7~~	~~11/9/16~~	~~-~~	~~Shakopee High School~~	~~Auxiliary Gym 2~~	~~Top of SW exit sign~~	
213653-9	11/9/16	3/27/17	Shakopee High School	W117 Fitness Center	Top of file cabinet in smaller office area	
579162-9	11/9/16	3/27/17	Shakopee High School	Kitchen	Top of very N wall fire alarm box under clock	
676242-1	11/9/16	3/27/17	Shakopee High School	Choir	Top of black wall mounted box, N wall	
729174-3	11/9/16	3/27/17	Shakopee High School	Choir Office	Top of W wall wooden bookshelf	
~~423976-0~~	~~11/9/16~~	~~--~~	~~Shakopee High School~~	~~Band~~	~~Top of NE wall cabinets~~	
707074-1	11/9/16	3/27/17	Shakopee High School	Multi-Purpose Room near Band	Top of projector mount	
785408-6	11/9/16	3/27/17	Shakopee High School	Practice Room	Practice Room B, behind left speaker	
108156-1	11/9/16	3/27/17	Shakopee High School	Stage Area	Side of W pillar	
157311-2	11/9/16	3/27/17	Shakopee High School	Auditorium	W wall near NW door, wall crevice	
671223-6	11/9/16	3/27/17	Shakopee High School	Auditorium	W wall near NW door, wall crevice	Duplicate
~~569373-4~~	~~11/9/16~~	~~-~~	~~Shakopee High School~~	~~Open Area Outside Main office~~	~~Top of fire alarm by door to auditorium~~	
210686-2	11/9/16	3/27/17	Shakopee High School	Main Hall	Blank	

Detector Installed by: Ben LaFond
Detector Removed By: Ben LaFond

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District: Shakopee Public Schools
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Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
475095-6	11/9/16	3/27/17	Shakopee West Junior High School	Main Office	Behind the Office Assistant's Computer	
712207-0	11/9/16	3/27/17	Shakopee West Junior High School	Lounge 130	On top of the office mail boxes	
~~116678-4~~	~~11/9/16~~	-	~~Shakopee West Junior High School~~	~~Room 129~~	~~Behind the projector screen~~	
243784-6	11/9/16	3/27/17	Shakopee West Junior High School	Auditorium	On top of the Exit sign for the west door	
650934-3	11/9/16	3/27/17	Shakopee West Junior High School	Auditorium	On top of the Exit sign for the North East door	Duplicate
764521-1	11/9/16	3/27/17	Shakopee West Junior High School	Band Room	On top of the sound panel	
130837-8	11/9/16	3/27/17	Shakopee West Junior High School	Choir Room	On the Teacher's brown cabinet behind desk	
~~999857-6~~	~~11/9/16~~	--	~~Shakopee West Junior High School~~	~~Gymnasium~~	~~On the exit sign above the south entrance~~	
757177-1	11/9/16	3/27/17	Shakopee West Junior High School	Cafeteria	On top of the Fire Alarm box	
781283-7	11/9/16	3/27/17	Shakopee West Junior High School	Kitchen	Behind the coffee maker.	
968072-9	11/9/16	3/27/17	Shakopee West Junior High School	Room 141	On the File cabinets	
997248-0	11/9/16	3/27/17	Shakopee West Junior High School	Room 142	Behind the teacher's desk on the JVC (sound box)	
593056-5	11/9/16	3/27/17	Shakopee West Junior High School	Room 143	On the shelf above the first entrance	Next to the Chess board
994479-4	11/9/16	3/27/17	Shakopee West Junior High School	Room 144	On the white shelf next to the teachers desk	
112154-0	11/9/16	3/27/17	Shakopee West Junior High School	Weight Room	On top of the West side exit sign	
948609-1	11/9/16	3/27/17	Shakopee West Junior High School	Multi-Purpose Room	on the West side clock	

Detector Installed by: Ian Dickhausen
Detector Removed By: Parker Prose

Radon Alpha Track Detector Log

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Brooklyn Park, MN 55445
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District: Shakopee Public Schools
Project Number: 201610975
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Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
780615-1	11/9/16	3/27/17	Shakopee West Junior High School	Custodial Office	Behind the Main computer	
484263-9	11/9/16	3/27/17	Shakopee West Junior High School	Room 126	Above the paper towel dispenser in the teachers work station	
192796-1	11/9/16	3/27/17	Shakopee West Junior High School	Room 128	Next to the Teachers sewing machine	
562917-5	11/9/16	3/27/17	Shakopee West Junior High School	Room 125	On teacher's desk	By the Green Lamp
631852-1	11/9/16	3/27/17	Shakopee West Junior High School	Room 123	By the speakers on the Teacher's file cabinet	
764732-4	11/9/16	3/27/17	Shakopee West Junior High School	Room 112	Next to the Phone on the teacher's desk	
207618-0	11/9/16	3/27/17	Shakopee West Junior High School	Room 111	on the file cabinet behind the teacher's desk	
120946-9	11/9/16	3/27/17	Shakopee West Junior High School	Room 110	Metal cabinet behind the teacher's desk	
434654-0	11/9/16	3/27/17	Shakopee West Junior High School	Room 121	On the teacher's desk under their lamp	
690607-7	11/9/16	3/27/17	Shakopee West Junior High School	Room 119	By the speakers next to the teacher's desk	
997386-8	11/9/16	3/27/17	Shakopee West Junior High School	Room 120	On top of the projector	
220232-3	11/9/16	3/27/17	Shakopee West Junior High School	Room 117	Behind the teacher's desk on the wooden shelves	next to the soccer ball
940535-8	11/9/16	3/27/17	Shakopee West Junior High School	Room 115	On the file cainet, behind the phone	
577713-1	11/9/16	3/27/17	Shakopee West Junior High School	Room 116	Behind the teacher's computer	
610535-7	11/9/16	3/27/17	Shakopee West Junior High School	Room 114	In front of the Teacher's phone	
~~534813-1~~	~~11/9/16~~	-	~~Shakopee West Junior High School~~	~~Room 113~~	~~Behind the teacher's computer~~	

Detector Installed by: Ian Dickhausen
Detector Removed By: Parker Prose

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			Building	Room Number	Position in Room	
691078-0	11/9/16	3/27/17	Shakopee West Junior High School	Media Center 108	At the main desk behind the phone	
~~588671-8~~	~~11/9/16~~	-	~~Shakopee West Junior High School~~	~~Room 106~~	~~On the teacher's desk behind the picture~~	
278879-2	11/9/16	3/27/17	Shakopee West Junior High School	Room 105	On the book shelf behind the teacher's desk next to speakers.	
~~531236-8~~	~~11/9/16~~	-	~~Shakopee West Junior High School~~	~~Room 104~~	~~on top of the book shelf, next to the teachers desk~~	
~~181900-2~~	~~11/9/16~~	-	~~Shakopee West Junior High School~~	~~Room 104~~	~~under the flag in the corner on a cabinet~~	~~Duplicate~~
214317-0	11/9/16	3/27/17	Shakopee West Junior High School	Room 102	Behind the emergancy shower head on shelf	
503283-4	11/9/16	3/27/17	Shakopee West Junior High School	Room 101	Behind the emergancy shower head on shelf	
341702-9	11/9/16	3/27/17	Shakopee West Junior High School	Student Services	On the registers desk	
390693-0	11/9/16	3/27/17	Shakopee West Junior High School	Main Hall	Blank	

Detector Installed by: Ian Dickhausen
Detector Removed By: Parker Prose

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			Building	Room Number	Position in Room	
~~714954-5~~	~~11/9/16~~	~~--~~	~~Sun Path Elementary~~	~~Office~~	~~Behind the main desk~~	~~in front of the picture~~
~~971116-9~~	~~11/9/16~~	~~--~~	~~Sun Path Elementary~~	~~Nurse's Office~~	~~On their main desk~~	
531332-5	11/9/16	3/27/17	Sun Path Elementary	Band 129	Next to the piano on the cabinet	
993202-1	11/9/16	3/27/17	Sun Path Elementary	Room 131	on the shelf in the back of the room	
~~777627-1~~	~~11/9/16~~	-	~~Sun Path Elementary~~	~~Room 133~~	~~on first bookshelf to the right~~	
209254-2	11/9/16	3/27/17	Sun Path Elementary	Music 135	On the Teacher's desk	
~~226789-6~~	~~11/9/16~~	-	~~Sun Path Elementary~~	~~Gym~~	~~in the Fire alarm cage~~	
707263-0	11/9/16	3/27/17	Sun Path Elementary	Room 160	next to the coffee maker	
789552-7	11/9/16	3/27/17	Sun Path Elementary	Cafeteria	On top of the exit sign for door A	
216418-4	11/9/16	3/27/17	Sun Path Elementary	Cafeteria	hanging on the wire under the clock	Duplicate
421849-1	11/9/16	3/27/17	Sun Path Elementary	Kitchen	behind the radio	
~~103496-6~~	~~11/9/16~~	-	~~Sun Path Elementary~~	~~Room 146~~	~~Next to the teacher's lamp~~	
945266-5	11/9/16	3/27/17	Sun Path Elementary	Maple Cluster	outside of 153 on top of the mail boxes	
972465-9	11/9/16	3/27/17	Sun Path Elementary	Room 150	Behind the teacher's phone	
538815-2	11/9/16	3/27/17	Sun Path Elementary	Room 151	Behind the teacher's phone	
989483-3	11/9/16	3/27/17	Sun Path Elementary	Room 152	Behind the teacher's phone	
462629-7	11/9/16	3/27/17	Sun Path Elementary	Room 153	Behind the teacher's phone	
109483-8	11/9/16	3/27/17	Sun Path Elementary	Room 154	in the corner of the teacher's desk	
111803-3	11/9/16	3/27/17	Sun Path Elementary	Room 119	Behind the teacher's phone	
153132-6	11/9/16	3/27/17	Sun Path Elementary	Room 120	Behind the teacher's phone	
992366-5	11/9/16	3/27/17	Sun Path Elementary	Spruce Cluster	Outside of 121 on the bookshelf	
~~605691-5~~	~~11/9/16~~	-	~~Sun Path Elementary~~	~~Room 121~~	~~on the book shelf to the right of the door~~	

Detector Installed by: Ian Dickhausen
Detector Removed By: Parker Prose

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Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
142759-0	11/9/16	3/27/17	Sun Path Elementary	Room 121	Behind the teacher's phone	Duplicate
208231-1	11/9/16	3/27/17	Sun Path Elementary	Room 122	Behind the teacher's phone	
781217-5	11/9/16	3/27/17	Sun Path Elementary	Room 123	In the top mail box on the left wall	
337154-9	11/9/16	3/27/17	Sun Path Elementary	Room 107	Behind the teacher's phone	
706130-2	11/9/16	3/27/17	Sun Path Elementary	Room 106	On the Teacher's desk	next to the yellow buckets
988765-4	11/9/16	3/27/17	Sun Path Elementary	Birch Cluster	outside of 104 on the book shelf	
693642-1	11/9/16	3/27/17	Sun Path Elementary	Room 105	Behind the teacher's phone	
493044-2	11/9/16	3/27/17	Sun Path Elementary	Room 103	under the staplers on the teacher's desk	
756611-0	11/9/16	3/27/17	Sun Path Elementary	Room 124	Behind the teacher's phone	
597969-5	11/9/16	3/27/17	Sun Path Elementary	Main Hall	Blank	

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Detector Removed By: Parker Prose

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			Building	Room Number	Position in Room	
~~538679-2~~	~~11/9/16~~	-	~~Sweeney Elementary~~	~~Office~~	~~On top of the Grey file cabinets by plant~~	
570161-0	11/9/16	3/27/17	Sweeney Elementary	Nurse's Office	On top of the cabinet above sink	
667337-0	11/9/16	3/27/17	Sweeney Elementary	Work Room	Immediately right of door on cabinet	
978750-3	11/9/16	3/27/17	Sweeney Elementary	ESL Room 111	Top of snack vending machine	This is the staff lounge
320674-5	11/9/16	3/27/17	Sweeney Elementary	Room 110	left of door on the brown cabinet	
968040-6	11/9/16	3/27/17	Sweeney Elementary	Room 109B	top of cabinet along East wall	
769262-7	11/9/16	3/27/17	Sweeney Elementary	Room 109A HP	Top of black cabinet along East wall	
523488-5	11/9/16	3/27/17	Sweeney Elementary	Room 108	Top of grey file cabinet by door	behind the pictures
778723-7	11/9/16	3/27/17	Sweeney Elementary	Room 107	Top of cabinets along the North wall	Center of cabinets
763935-4	11/9/16	3/27/17	Sweeney Elementary	Room 106	Top of cabinet above sink	
202274-7	11/9/16	3/27/17	Sweeney Elementary	Room 012	Top of South West corner file cabinet	
769488-8	11/9/16	3/27/17	Sweeney Elementary	Room 011	Top of black cabinet by teacher's desk	
707715-9	11/9/16	3/27/17	Sweeney Elementary	Room 010	behind lamp by sink	
722796-0	11/9/16	3/27/17	Sweeney Elementary	Room 009	Top of South West corner file cabinet	
103798-5	11/9/16	3/27/17	Sweeney Elementary	Room 008	Behind Phone on Teacher's desk	
561802-0	11/9/16	3/27/17	Sweeney Elementary	Room 007	Top of shelf above teacher's desk	
696851-5	11/9/16	3/27/17	Sweeney Elementary	Room 006	Top of black cabinet by teacher's desk	
413050-6	11/9/16	3/27/17	Sweeney Elementary	Room 005	Top of shelf above teacher's desk	
~~699831-4~~	~~11/9/16~~	-	~~Sweeney Elementary~~	~~Room 004~~	~~Top of South East corner cabinet/shelf~~	
243325-8	11/9/16	3/27/17	Sweeney Elementary	Media Center	Top of E wall lounge wooden cabinet	Under the clock
612789-8	11/9/16	3/27/17	Sweeney Elementary	Media Center	Top of E wall lounge wooden cabinet	Duplicate
136409-0	11/9/16	3/27/17	Sweeney Elementary	Room 003	Top of small wooden shelves	North West corner

Detector Installed by: Ben LaFond
Detector Removed By: Ben LaFond

Radon Alpha Track Detector Log

IEA, Inc.
9201 West Broadway, Suite 600
Brooklyn Park, MN 55445
763-315-7900

District: Shakopee Public Schools
Project Number: 201610975
Shipped By: Carole Nelson
Date of Shipment to Lab: 3/31/17

Detector Number	Installation Date	Collection Date	Sampling Location			Notes (e.g. construction, maintenance)
			Building	Room Number	Position in Room	
696161-9	11/9/16	3/27/17	Sweeney Elementary	Room 003	Top of small wooden shelves	Duplicate
432397-8	11/9/16	3/27/17	Sweeney Elementary	Room 002	Top of cabinet by teacher's desk	behind the pictures
723847-0	11/9/16	3/27/17	Sweeney Elementary	Room 001	Top of shelf above teacher's desk	
797510-5	11/9/16	3/27/17	Sweeney Elementary	Special Services	Top of tan/beige tall metal cabinet	along the East wall
994593-2	11/9/16	3/27/17	Sweeney Elementary	Gym	Top of light cage along West wall	
463832-6	11/9/16	3/27/17	Sweeney Elementary	Gym	Top of light cage along West wall	Duplicate
991983-8	11/9/16	3/27/17	Sweeney Elementary	Custodial Office	Top of South wall mounted cabinet	
771908-1	11/9/16	3/27/17	Sweeney Elementary	Cafeteria	Top of East wall on a mounted box	the box is wooden
577570-5	11/9/16	3/27/17	Sweeney Elementary	Kitchen	South East corner, metal wire shelving	by desk
686460-7	11/9/16	3/27/17	Sweeney Elementary	Art Room 104	top of North wall green metal shelf	Towards the left side
415843-2	11/9/16	3/27/17	Sweeney Elementary	Band Room 102	Top of Wooden cabinet	South East corner
609587-1	11/9/16	3/27/17	Sweeney Elementary	Music Room 103	Top of Wooden cabinet	South East corner
766833-8	11/9/16	3/27/17	Sweeney Elementary	101 Lit Resource	Top of North East corner file cabinet	
~~975204-9~~	~~11/9/16~~	~~--~~	~~Sweeney Elementary~~	~~100 Lounge~~	~~Top of wall mounted cabinets~~	~~North West corner~~
970117-8	11/9/16	3/27/17	Sweeney Elementary	Main Hall	Blank	

Detector Installed by: Ben LaFond
Detector Removed By: Ben LaFond

Appendix D

MDH Reporting Form

School Radon Testing Reporting Form

General Instructions

According to MS 123B.571, radon testing conducted in public school buildings eligible for health and safety (i.e., not charter schools) must be reported to the Minnesota Department of Health.

For the purpose of this form, a building is defined as an occupied facility that has a unique address, including administrative buildings. A building could be a single structure or a complex of structures. For reference, all district owned buildings entered on the Minnesota Department of Education "Facilities Age and Square Footage Report" should be utilized.

Please submit information about the most recent round or cycle of testing conducted for each building, unless this was already reported to MDH in the 4/4/11 survey. We do not need details of prior rounds of testing.

1. Submit summary information and raw data if either of the following apply:
    a. Radon testing has been completed in a building since the MDH 'School Radon Testing Survey' dated April 4, 2011, or
    b. Radon testing was completed at some time previously and your district did not report radon testing in the MDH 'School Radon Testing Survey' dated April 4, 2011.
2. Complete one survey for each building tested
3. Submit the survey, raw data (e.g., laboratory analysis report) and a building map to MDH by email, to health.indoorair@state.mn.us
4. If follow-up testing, mitigation, and/or post-mitigation testing is not yet completed, please submit a completed form and raw data when the work is completed.

Contact Person for this Form

Name:_____

Phone:_____

Email: _____

Mailing Address: _____

Radon Results for Each School Building

1. District Name & Number:_____

2. School Building Name: _____

3. School Building Address:_____

4. What type of test kit was used? Manufacturer:_____ Device name:_____

Comments_____

5. When were the test kits retrieved? _____(month/year)
More than one date can be entered if parts of buildings were tested at different times

Comments_____

6. How long were the test kits deployed in the rooms? _____(days)
More than one number can be noted if durations varied

Comments:_____

7. Was testing conducted over:
   a. Weekends? Yes ____ No____ b. Holidays or Breaks? Yes ____ No ____

Comments:_____

8. Were all frequently-occupied rooms in contact with the ground tested? Yes ____ No ____
This includes: 1) rooms on grade and; 2) rooms above unoccupied spaces that are in contact with the ground, such as rooms above storage rooms, crawl spaces, tunnels, and boiler rooms. If only a sample or portion of rooms were tested, then respond with 'no'.

Comments:_____

9. How many frequently-occupied rooms were tested? _____

Comments:_____

10. How many frequently-occupied rooms were at or above four picocuries per liter (≥ 4 pCi/L)? _____

Comments:_____

11. Were test results reported at a school board meeting? Yes ____ No ____
If results will be reported at the next meeting, note in comments the month and year of the scheduled meeting in the comments section.

Comments:_____

If one or more rooms ≥4 pCi/L, complete Questions 12-14.

12. How many of the rooms ≥ 4 pC/L had follow-up testing results that were:
    a. ≥ 4 pCi/L _____ b. < 4 pCi/L _____ c. not tested _____

'Follow-up' testing means testing done, prior to any radon mitigation, to confirm or verify initial test results in those rooms ≥ 4 pCi/L are, in fact, ≥ 4 pCi/L. If a continuous radon monitor (CRM) was used, indicate concentration during occupied times. If no follow-up testing was done, write the number of rooms not tested. If follow-up testing will be done in the future, note in comments the planned month and year in the comments section.

Comments:_____

13. How many of the rooms ≥ 4 pCi/L:
    a. were mitigated? _____ b. had other corrective measures? _____

'Mitigated' means building changes such as adjusting the existing HVAC system, increasing fresh air ventilation rate, balancing air flow to rooms, or other such modifications. 'Other corrective measures' could include moving staff out of a room and making a room unoccupied or trying to seal radon entry points. If mitigation or other corrective measure(s) will be completed in the future, note in comments the planned month and year in the comments section.

Comments:_____

14. How many rooms re-tested after mitigation were:
    a. ≥ 4 pCi/L _____ b. < 4 pCi/L _____ c. not tested _____

If post-mitigation re-testing will be completed in the future, note the planned month and year in the comments section.

Comments:_____