



March 6, 2020

Mr. Terry Zerwas  
St. Michael-Albertville Schools, ISD #885  
11343 50<sup>th</sup> Street NE  
Albertville, MN 55301


**RE: St. Michael-Albertville ISD #885  
Short-Term Radon Testing Results (Round 2)  
IEA Project #201911211**

Dear Mr. Zerwas:

IEA placed six (6) Air Chek Pro Chek short-term radon test kits in the following buildings for the purpose of evaluating radon levels:

- St. Michael-Albertville High School – 3 test kits
- St. Michael Elementary – 3 test kits

The radon samples were placed and retrieved by the following certified radon measurement professional:

Kennedy Peterson	Certification Number: RMEA-00046	
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Conditions of air intakes were good and the ventilation system was operating in good condition at the time of placement and retrieval. The purpose for the 2<sup>nd</sup> round of testing is due to the short-term radon kits that were missing in these locations, during the initial testing.

## INTRODUCTION

Radon is a colorless, odorless, tasteless, radioactive gas that occurs naturally in soil, rocks, and 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 developing 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.

INSTITUTE FOR ENVIRONMENTAL ASSESSMENT, INC.  
[www.ieasafety.com](http://www.ieasafety.com)

BROOKLYN PARK  
9201 West Broadway, #600  
Brooklyn Park, MN 55445  
763-315-7900 / FAX 763-315-7920  
800-233-9513

MANKATO  
610 North Riverfront Drive  
Mankato, MN 56001  
507-345-8818 / FAX 507-345-5301  
800-233-9513

ROCHESTER  
210 Woodlake Drive SE  
Rochester, MN 55904  
507-281-6664 / FAX 507-281-6695  
800-233-9513

BRAINERD  
601 NW 5<sup>th</sup> Street, Ste. #4  
Brainerd, MN 56401  
218-454-0703 / FAX 218-454-0703  
800-233-9513

MARSHALL  
1420 East College Drive  
Marshall, MN 56258  
507-476-3599 / FAX 507-537-6985  
800-233-9513

VIRGINIA  
5525 Emerald Avenue  
Mountain Iron, MN 55768  
218-410-9521  
800-233-9513

IEA placed six (6) Air Chek Pro Chek short-term radon test kits in frequently occupied areas in the buildings listed above at St. Michael-Albertville ISD #885 for the purpose of sampling for radon in accordance with the MDH's *Guidance for Radon Testing in Minnesota Schools* (2018) and ANSI/AARST 'Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings' (ANSI/AARST MALB 2014). A total of six radon test kits were placed from February 25, 2020 to February 28, 2020 for a total short-term sampling period of three days. The radon test kits were analyzed by AirChek, Inc., MDH license #RL-00003, located at 1936 Butler Bridge Road, Mills River, NC 28759. The sampling and analysis methodologies are provided in Appendix A. IEA followed ANSI/AARST MALB 2014 for quality assurance measurements by including duplicate kits, control kits (blanks), and spiked kits.

## 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 school days when the building is significantly occupied. The HVAC system was set as it normally is during school days. Testing was conducted during the heating season when the average outdoor temperature is less than 65°F, as recommended by the MDH, when the ventilation system was operating normally, and windows and doors were closed. Consequently, sampling under these "closed" conditions is when the radon risk is most likely to occur.

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	Re-test after changes to foundation or HVAC and every 5 years
GREATER THAN 4	Conduct CRM short-term testing during winter months
LESS THAN 4 ( <u>DURING OCCUPANCY</u> ) 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 ( <u>DURING OCCUPANCY</u> ) 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 reports, including maps of each building with sampling locations marked, are provided in Appendix B. The chain of custody cover pages are also provided in Appendix B. Following are summary results for each building.

### ***St. Michael-Albertville High School***

5800 Jamison Avenue NE  
St. Michael, MN 55376

A total of three (3) test kits were placed at St. Michael-Albertville High School. The results 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: ST. MICHAEL-ALBERTVILLE 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	3	0	0	0
All below action level				

pCi/L: picocuries per liter

**St. Michael Elementary**  
101 Central Avenue W  
St. Michael, MN 55376

A total of three (3) test kits were placed at St. Michael Elementary. The results 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: ST. MICHAEL 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	0	0	0
All below action level				

pCi/L: picocuries per liter

## CONCLUSIONS & RECOMMENDATIONS

The radon levels in the sampled locations were below the EPA action level of 4 pCi/L.

The EPA has established recommended guidelines for permissible radon concentrations in schools. The following are general recommendations for frequently occupied areas of schools:

- Retest the building at least every 5 years and in conjunction with any sale of a building.
- In addition, be certain to test again when any of the following circumstances occur:
  - A new addition is constructed, or a significant renovation occurs
  - A ground contact area not previously tested is occupied
  - Heating or cooling systems are significantly altered resulting in changes to air pressures or distribution
  - Ventilation is significantly altered by extensive weatherization, changes to mechanical systems, or comparable procedures
  - Significant openings to soil occur due to:
    - Ground water or slab surface water control systems (e.g., sumps, perimeter drain tile, shower/tub retrofits, etc.) or
    - Natural settlement causing major cracks to develop
  - Earthquakes, construction blasting, or formation of sink holes nearby or
  - A mitigation system is altered, modified or repaired
- Rooms should be retested during the winter heating season (i.e. under “closed” conditions) which is typically “worst case” conditions.
- Per Minnesota Statutes, section 123B.571, school districts are 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 ‘School Radon Testing Form’ is located in Appendix E.

For more information regarding radon, see the EPA’s A Citizen’s Guide to Radon at <http://www.epa.gov/radon>. MDH can be contacted at [health.indoorair@state.mn.us](mailto:health.indoorair@state.mn.us) or 651-201-4601.

## 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 #8573 dated November 5, 2019 regarding 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 St. Michael-Albertville ISD #885. 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.

A handwritten signature in blue ink, appearing to read "Dan Holcomb", is positioned above the printed name.

Daniel Holcomb  
EHS Account Manager

DH/khb 03062020

Enc.

# **Appendix A**

*Methodology and Quality Control Measurements*

## **Sampling Methodology**

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IEA placed Air Chek, Inc. Pro Chek activated charcoal radon test kits designed specifically for the detection of gamma emissions caused by the decay of Radon-222 and its daughter products. The kit is made of a padded envelope which contains activated charcoal. The kit is placed during normal occupancy HVAC operations and sealed with vinyl tape after 72 to 96 hours of indoor exposure. Individual kits are uniquely identified with a number and corresponding bar code.

Upon receipt at the analytical laboratory, the kits are logged in using the unique numbers assigned to each kit. The kits are placed on a gamma detector to count the gamma emissions from the decay of radon adsorbed by the charcoal. A calibration factor determined in part by the exposure time and decay time is used to calculate the radon concentration. A correction factor is also applied for weight gain from any moisture absorbed by the charcoal during the sampling period.

Any unusual conditions are noted on the processing form and shown on the exposure report.

## MDH and ANSI/AARST MALB 2014 Quality Control Measurements

IEA followed ANSI/AARST MALB 2014 and MDH recommendations for quality assurance measurements to ensure the accuracy of test results. Quality assurance measurements include side-by-side test kits (duplicates) and unexposed control test kits (blanks).

Duplicates are pairs of test kits placed 4-8 inches apart for the same test period. Duplicates are stored, placed, retrieved, and shipped to the laboratory for analysis in the same manner as the other test kits so that the laboratory cannot distinguish them. Since duplicates are placed side-by-side, the measured values for radon should be the same. The average of all duplicates' relative percent difference (RPD) should not exceed 25%. If they do, an investigation to identify the cause may be warranted and could include repeating the measurements. Duplicate averages are listed in Table 1.

Table 1: Duplicate Device Measurements and Averages				
Building	Location	Test 1 (pCi/L)	Test 2 (pCi/L)	Average (pCi/L)
St. Michael Elementary	Room 133	1.2	1.6	1.4

Blanks can be used to determine whether the manufacturing, shipping, storage, or processing of the detector has “contaminated” your measurements. Blanks are opened and immediately re-sealed to keep room air from infiltrating the test kit. Blanks are labeled and shipped in the same manner as the exposed test kits so that the laboratory cannot distinguish them. Since blanks are not exposed to radon, their measurement value should be below the lower limit of detection. Field blanks are listed in the laboratory report as F2767. Lab-Transit Blanks are listed in Table 2.

Table 2: Lab-Transit Blanks		
Date	Device ID	Radon Concentration
4/17/2019	9169251	< 0.3
4/17/2019	9169252	< 0.3
4/17/2019	9169253	< 0.3
4/17/2019	9169254	< 0.3
4/17/2019	9169255	< 0.3
11/9/2019	9184108	< 0.3

Spikes are test kits that have been exposed in a chamber to a known concentration of radon. Using spiked measurements can help evaluate the accuracy of a laboratory analysis and/or how accurately test kits supplied by a laboratory measure radon. Spiked test kits are labeled and shipped in the same manner as the exposed test kits so that the laboratory cannot distinguish them. Spiked results completed for our laboratory are included in the following pages. Spiked test kits are listed in Table 3.

Table 3: Spiked Detectors			
Date	Device ID	Measured Value (pCi/L)	Reference Value (pCi/L)
11/11/2019	0001	22.9	24.0
11/11/2019	0002	26.9	24.0
11/11/2019	0003	24.3	24.0

ANSI/AARST MALB 2014 requires the reporting of duplicate measurements and their average. These are located on the following pages.

## **Appendix B**

*Laboratory Reports, Maps, and  
Chain-of-Custody Cover Pages*

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March 3, 2020

**\*\* LABORATORY ANALYSIS REPORT \*\***

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Radon test result report for:

**ST MICHAEL ALBERTVILLE PUBLIC SCHOO**  
**ST MICHAEL ALBERTVILLE HIGH SCHOOL**

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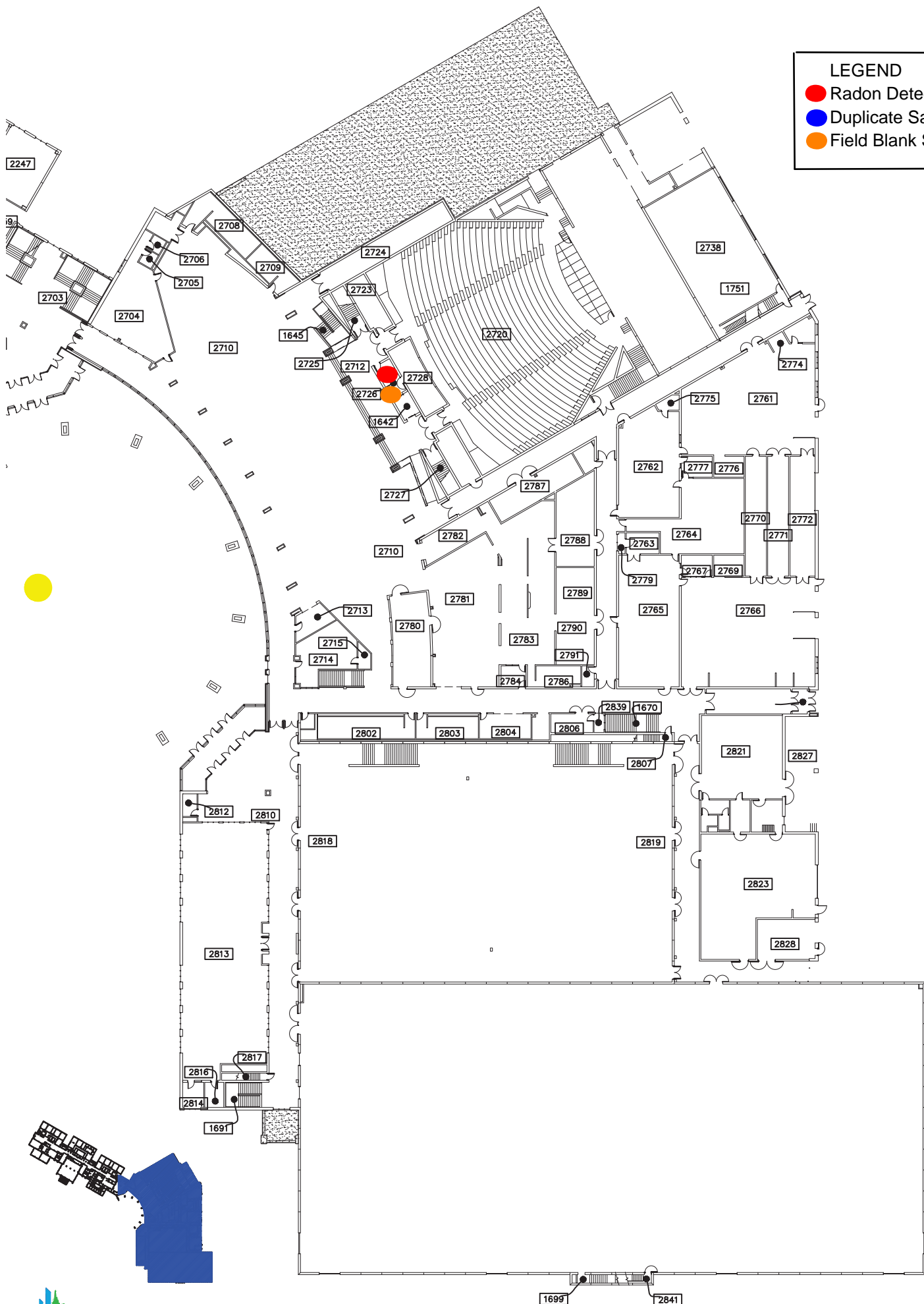
<b>Kit #</b>	<b>Room Id</b>	<b>Started</b>	<b>Ended</b>	<b>pCi/L</b>	<b>Analyzed</b>
9363099	2767	2020-02-25 @ 9:00 am	2020-02-28 @ 9:00 am	< 0.3	2020-03-03
9363092	3346	2020-02-25 @ 9:00 am	2020-02-28 @ 9:00 am	< 0.3	2020-03-03
9363100	F2767	2020-02-25 @ 9:00 am	2020-02-28 @ 9:00 am	< 0.3	2020-03-03

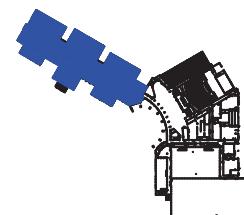
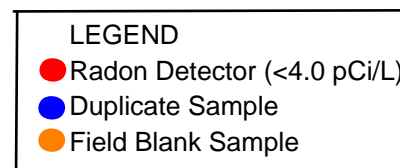
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Air Chek 1936 Butler Bridge Rd, Mills River, NC 28759-3892 Phone: (828) 684-0893 Fax: (828) 684-8498

# LEGEND

- Radon Detector (<4.0 pCi/L)
- Duplicate Sample
- Field Blank Sample





## Chain-of-Custody Cover Page



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

Device Type (circle) Radtrak<sup>2</sup> Pro Chex CRM

Project Number 201911211

District: ST MICHAEL -

Building: ALBERTVILLE PUBLIC SCHOOLS Address: 5800 Jamison Avenue  
ST MICHAEL ALBERTVILLE State, City, Zip ST. MICHAEL SS 376  
HIGH SCHOOL

Project Manager: D. HOLCOMB

Date Disbursed: 2/25/20 Time: 8:45 AM

Disbursing  
Measurement  
Professional Name: K. Peterson Signature: KEUPR

Date Retrieved: 2/20/20 Time Retrieved: 8:45 AM

Retrieving  
Measurement  
Professional Name: K. Peterson Signature: KEUPR

Date sent to Analytical  
Lab: 2/20/20 Time: 11:00 AM

Tracking Number: \_\_\_\_\_ Date Lab  
Received: \_\_\_\_\_  
Received  
by: \_\_\_\_\_

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March 3, 2020

**\*\* LABORATORY ANALYSIS REPORT \*\***

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Radon test result report for:

**ST MICHAEL ALBERTVILLE PUBLIC SCHOO**  
**ST MICHAEL ELEMENTARY SCHOOL**

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<b>Kit #</b>	<b>Room Id</b>	<b>Started</b>	<b>Ended</b>	<b>pCi/L</b>	<b>Analyzed</b>
9362649	209	2020-02-25 @ 8:00 am	2020-02-28 @ 9:00 am	1.3 ± 0.4	2020-03-03
9363090	D133 - 1	2020-02-25 @ 8:00 am	2020-02-28 @ 9:00 am	1.2 ± 0.4	2020-03-03
9362650	D133-2	2020-02-25 @ 8:00 am	2020-02-28 @ 9:00 am	1.6 ± 0.4	2020-03-03

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



## Chain-of-Custody Cover Page



IEA, Inc.

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

Device Type (circle)

Radtrak<sup>2</sup>

Pro Chek

CRM

Project Number

201911211

District:

ST MICHAEL

Address:

ALBERTVILLE PUBLIC SCHOOLS

101 CENTRAL AVE W

Building:

State, City, Zip

ST MICHAEL ELEMENTARY

ST MICHAEL, MN 55376

Project Manager:

D. HOLCOMB

Date Disbursed:

2/25/20

Time:

8:00 AM

Disbursing  
Measurement

Professional Name:

K. Peterson

Signature:

KEUPR

Date Retrieved:

2/28/20

Time Retrieved:

8:50 AM

Retrieving

Measurement

Professional Name:

K. Peterson

Signature:

KEUPR

Date sent to Analytical  
Lab:

2/28/20

Time:

11:00 AM

Tracking Number:

Date Lab

Received:

Received

by:

# **Appendix C**

*Signed Non-Interference Agreement*

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## Voluntary Compliance Form

### RADON TESTING DECLARATION OF VOLUNTARY COMPLIANCE

As the responsible party for the test location, I hereby acknowledge that to the best of my knowledge:

- 1) I agree to keep and/or have kept the building(s) closed (except for normal entry and exit) for a minimum of 12 hours prior to the start of the test.
- 2) I agree to keep and/or have kept windows shut during the entire test period as well as all exterior doors except for normal entry and exit.
- 3) I agree to keep and/or have kept the heating and cooling system set to operate normally with the thermostat(s) set between 65 and 80° F.
- 4) I will and/or have not operated fans unless they are the primary and normal heating sources.
- 5) I will and/or have not excessively operated any clothes dryers, kitchen exhaust fans, and bathroom fans.
- 6) I will and/or have not tamper(ed) with, remove(d) or change(d) the location of the test device(s).

### TEST SITE(S) INFORMATION

Responsible Party's Name (printed):

TERRY L. Zerwas

Responsible Party's Signature:

[Signature]

Date:

1-8-19

### IN THE EVENT OF NONSIGNATURE

In the event that either the responsible party or occupant will not sign this form, provide an explanation of the reason for lack of signature:

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# **Appendix D**

*Weather Report for Testing Days*



## CUSTOMIZED WEATHER HISTORY FOR SAINT MICHAEL, MINNESOTA

You're signed in as a  
subscriber to our  
Customized Weather

History; if you're on a shared computer, [please logout when you're done](#).

You can search for weather history in two ways:

- **Range of Dates** search allows you to search for a *consecutive range of dates* and is good if you want to know day by day history for a certain period of time, like "January 1 to January 15, 2008".
- **Same Dates Over a Range of Years** is good when you have a specific time of year—perhaps your wedding day, or a summer vacation, or harvest time—and you want to search for the weather over multiple years *for just those dates*. For example, "August 1 to 5 every year from 1970 to 1980."

### Location \*

ZIP/Postal Code or City,State

### [Range of Dates](#)

To search a consecutive range of dates, select a start and end date.

Month Day Year

Feb 25 2020

to

Month Day Year

Feb 28 2020

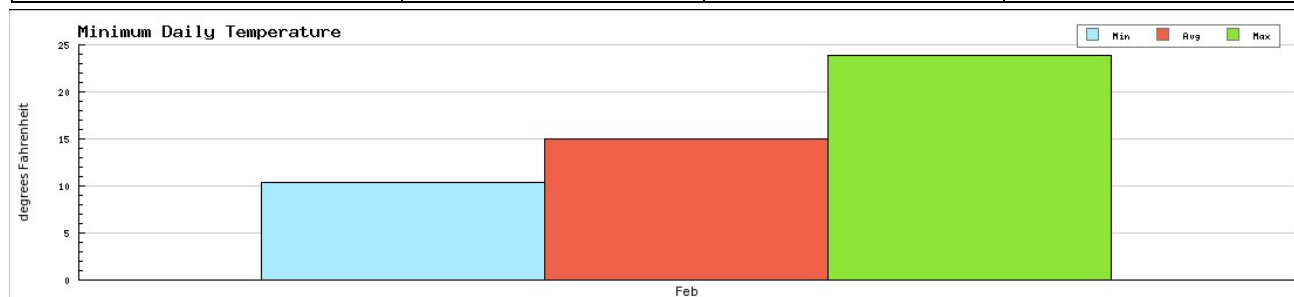
Latest data available: March 1, 2020.

[GO: Search by Range of Dates](#)

### [Same Dates Over a Range of Years](#)

### WEATHER FROM FEBRUARY 25, 2020 TO FEBRUARY 28, 2020

TEMPERATURE	LOW	AVERAGE	HIGH
<b>Minimum Daily</b> Data for 4 days. <a href="#">Download raw data</a>	10.4 °F (Feb 27, 2020)	<b>15.0 °F</b>	23.9 °F (Feb 25, 2020)



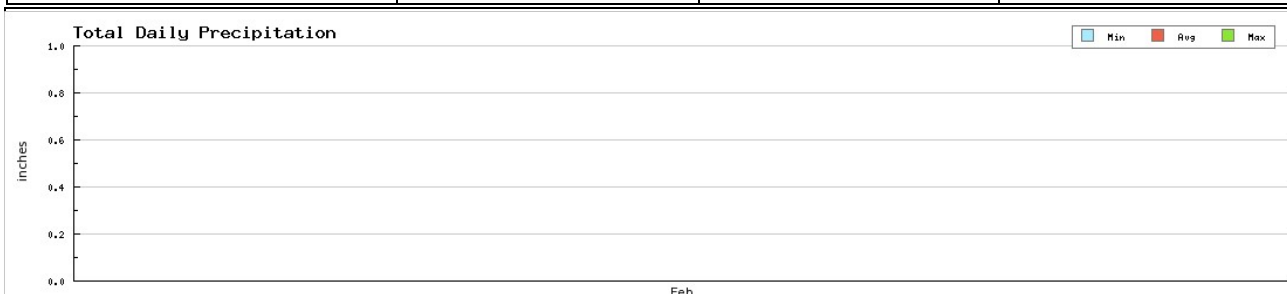
<b>Average Daily</b> Data for 4 days. <a href="#">Download raw data</a>	17.7 °F (Feb 27, 2020)	<b>22.6 °F</b>	30.6 °F (Feb 25, 2020)
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<b>Maximum Daily</b> Data for 4 days. <a href="#">Download raw data</a>	23.0°F (Feb 27, 2020)	<b>29.8°F</b>	38.1°F (Feb 25, 2020)
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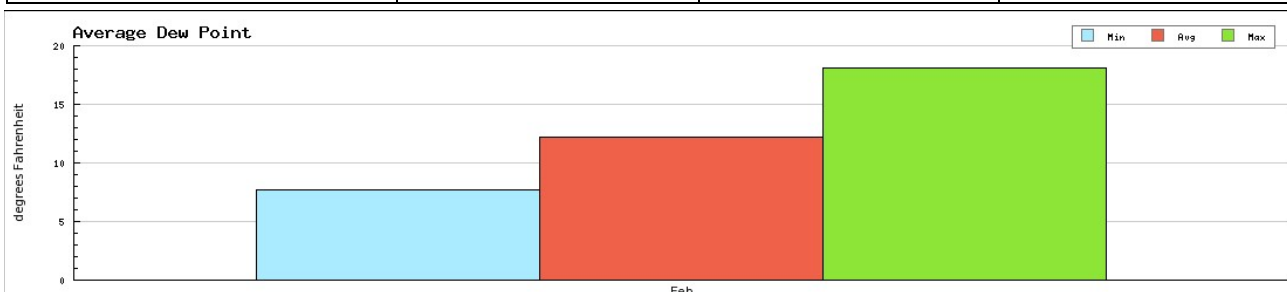


PRECIPITATION	LOW	AVERAGE	HIGH
<b>Total Daily</b> Data for 1 days. <a href="#">Download raw data</a>	0.00 IN (Feb 25, 2020)	<b>0.00 IN</b>	0.00 IN (Feb 25, 2020)

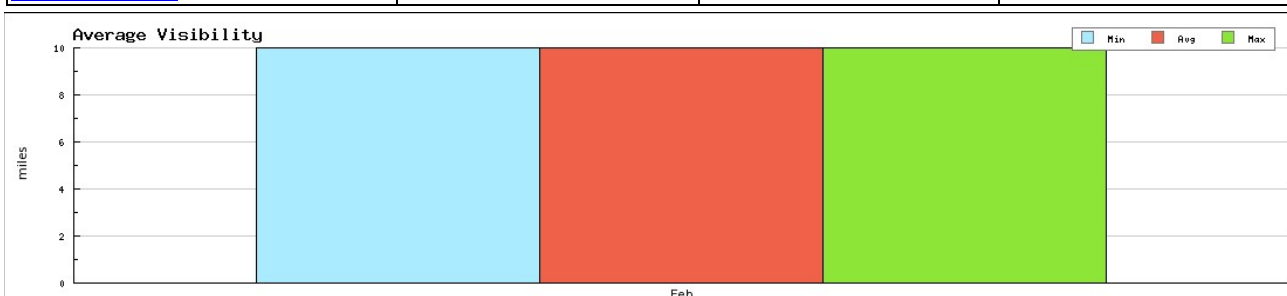


**Note:** Total Daily Precipitation is not reported by all stations on all days and there are situations where a value is not reported here, but an **Occurrence** of rain or snow is noted below, or vice versa.

<b>Average Dew Point</b> Data for 4 days. <a href="#">Download raw data</a>	7.7°F (Feb 28, 2020)	<b>12.2°F</b>	18.1°F (Feb 25, 2020)
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<b>Average Visibility</b> Data for 4 days. <a href="#">Download raw data</a>	10.0 MI (Feb 25, 2020)	<b>10.0 MI</b>	10.0 MI (Feb 25, 2020)
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<b>Snow Depth</b> Data not available.	n/a	n/a	n/a
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**Note:** Snow Depth is not reported by all stations on all days and there are situations where there was actually snow on the ground, but this value is not reported. Note carefully the number of days for which this value is reported.

WIND	LOW	AVERAGE	HIGH
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<b>Average Daily</b> Data not available.	n/a	n/a	n/a
<b>Maximum Daily</b> Data not available.	n/a	n/a	n/a
<b>Maximum Daily Gust</b> Data not available.	n/a	n/a	n/a
<b>PRESSURE</b>	LOW	AVERAGE	HIGH
<b>Sea Level Pressure</b> Data not available.	n/a	n/a	n/a
<b>OCCURRENCES</b>	DAYS		PERCENTAGE
<b>Fog</b>	0 of 4		0%
<b>Rain</b>	0 of 4		0%
<b>Snow</b>	3 of 4		75%
<b>Hail</b>	0 of 4		0%
<b>Thunder</b>	0 of 4		0%
<b>Tornado</b>	0 of 4		0%
<b>Note:</b> Not all occurrence of all weather events are reported for all stations. There are situations, for example, where an <b>Occurrence</b> of rain will be reported, but no <b>Total Daily Precipitation</b> logged.			

# **Appendix E**

*MDH Reporting Form*

# School Radon Testing Reporting Form

According to Minnesota Statute 123B.571 subd. 3, a school district that has tested its school buildings for the presence of radon shall report the results of its tests to the Department of Health. Please use this form to submit information about the most recent round or cycle of testing conducted for each building.

## Instructions

1. Complete one form for each building tested. In this case, a building is defined as an occupied facility with a unique address. This includes administrative buildings.
2. Include this form, raw data (e.g. laboratory report) and a building map.
3. Submit this form when all work is completed for a round of testing. This includes reporting to the school board, and follow-up testing and post-mitigation testing, if applicable.
4. Email information to [health.indoorair@state.mn.us](mailto:health.indoorair@state.mn.us).

## Contact Information

Name:	<b>Terry Zerwas</b>
Mailing Address:	<b>11343 50th Street NE, Albertville, MN 55301</b>
Phone:	<b>612-221-6601</b>
Email:	<b>terryz@mystma.org</b>

## Initial Radon Testing Information

School Building Name: <b>St. Michael-Albertville High School</b>	
School District & District Number: <b>St. Michael-Albertville ISD #885</b>	
Building Address: <b>5800 Jamison Ave St. Michael, MN 55376</b>	
Test Kit Manufacturer: <b>Air chek</b>	Device Name: <b>Pro chek</b>
Date of Kit Retrieval (DD/MM/YY): <b>1/17/20</b>	Length of Test (days): <b>3</b>
How many rooms were tested? <b>203</b>	
Does the test period include weekends? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Does the test period include school breaks or holidays? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

## SCHOOL RADON TESTING REPORTING FORM

Were all frequently-occupied ground contact rooms tested? <sup>1</sup> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, did you attempt to test all frequently occupied ground contact rooms, meaning test kits were placed in all these rooms? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
How many rooms had results $\geq 4$ pCi/L?:    0
Were the results reported at a school board meeting? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

### Follow-up Testing, Mitigation, & Post-Mitigation Testing

If one or more rooms tested  $\geq 4$  pCi/L, please answer the questions below:

How many rooms had follow-up testing?:		
Number of rooms with follow-up results	$\geq 4$ pCi/L:	$< 4$ pCi/L:
Of the rooms that had test results $\geq 4$ pCi/L, how many rooms were:		
mitigated by HVAC balancing or operational changes? :		
mitigated by installation of active soil depressurization?:		
addressed through other corrective measures? <sup>2</sup> :		
What was the cost of the installation and/or HVAC service work, to mitigate radon? \$		
What is the known or anticipated annual operating cost of mitigation (estimate)? \$		
After radon mitigation, how many rooms were retested?:		
Post mitigation results (# of rooms)	$\geq 4$ pCi/L:	$< 4$ pCi/L:

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<sup>1</sup> This includes classrooms, offices, break rooms, laboratories, cafeterias, libraries, auditoriums, gymnasiums, etc. It includes rooms on grade and 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'.

<sup>2</sup> 'Other corrective measures' could include moving staff out of a room and making a room unoccupied or trying to seal radon entry points.

# School Radon Testing Reporting Form

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## Instructions

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4. Email information to [health.indoorair@state.mn.us](mailto:health.indoorair@state.mn.us).

## Contact Information

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## Initial Radon Testing Information

School Building Name: <b>St. Michael Elementary</b>	
School District & District Number: <b>St. Michael-Albertville ISD #885</b>	
Building Address: <b>101 Central Ave W St. Michael 55376</b>	
Test Kit Manufacturer: <b>Air chek</b>	Device Name: <b>Pro chek</b>
Date of Kit Retrieval (DD/MM/YY): <b>1/17/20</b>	Length of Test (days): <b>3</b>
How many rooms were tested? <b>118</b>	
Does the test period include weekends? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Does the test period include school breaks or holidays? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

## SCHOOL RADON TESTING REPORTING FORM

Were all frequently-occupied ground contact rooms tested? <sup>1</sup> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, did you attempt to test all frequently occupied ground contact rooms, meaning test kits were placed in all these rooms? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
How many rooms had results $\geq 4$ pCi/L?:    0
Were the results reported at a school board meeting? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

### Follow-up Testing, Mitigation, & Post-Mitigation Testing

If one or more rooms tested  $\geq 4$  pCi/L, please answer the questions below:

How many rooms had follow-up testing?:		
Number of rooms with follow-up results	$\geq 4$ pCi/L:	$< 4$ pCi/L:
Of the rooms that had test results $\geq 4$ pCi/L, how many rooms were:		
mitigated by HVAC balancing or operational changes? :		
mitigated by installation of active soil depressurization?:		
addressed through other corrective measures? <sup>2</sup> :		
What was the cost of the installation and/or HVAC service work, to mitigate radon? \$		
What is the known or anticipated annual operating cost of mitigation (estimate)? \$		
After radon mitigation, how many rooms were retested?:		
Post mitigation results (# of rooms)	$\geq 4$ pCi/L:	$< 4$ pCi/L:

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<sup>1</sup> This includes classrooms, offices, break rooms, laboratories, cafeterias, libraries, auditoriums, gymnasiums, etc. It includes rooms on grade and 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'.

<sup>2</sup> 'Other corrective measures' could include moving staff out of a room and making a room unoccupied or trying to seal radon entry points.