

**CUSTOMER** 

CONTACT INFORMATION REPORT NUMBER ### REPORT PAGE

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**REPORT DATE** 2020-05-14

**PRINT DATE** 2020-05-14

OWN ID

N/A BY

NAME

REPORT RECEIVER(S) NAME

# RADON MONITORING REPORT

## **Description of the measurement**

The measurement was performed with a closed alpha-track detector (Radtrak<sup>2®</sup>) following the quality guidance in CNRPP-AL-DF-v6.

The detector(s) arrived to Radonova Laboratories AB Arrival Date.

Test data have been given by Customer

## Property data and address

MEASURE SITE ADDRESS Address Details

**BUILDING ID** 

TYPE OF BUILDING: Other	<b>BUILDING YEAR:</b> YEAR	HVAC: Other	FOUNDATION TYPE: Basement	PURPOSE OF TEST: Primary Screening
Test results				
DETECTOR	MEASUREMENT PERIOD	DESCRIPTION / LOCATION	FLOOR	RADON RESULT
962093-1	DATE - DATE	General, General	Basement	158 ± 20 Bq/m³
185497-5	DATE - DATE	General, General	Basement	190 ± 26 Bq/m³

## **Comment to the results**

This report replaces 5566678:1. Reason: new or corrected measurement information has been received. Detector 185497-5 has been remeasured.

#### Tryggve Rönnqvist (Electronically signed)

Signature Radonova Laboratories AB Laboratory Measurement Specialist This report may only be reproduced in full, unless issuing laboratory has given prior written approval.

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## Measurement method: Closed alpha-track detector (Radtrak<sup>2®</sup>)

The radon measurement was performed with a closed alpha-track detector following the quality assurance guidance given in CNRPP-AL-DF-v6. 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 analyzed via our proprietary Track-Etch(R) methodology to determine the radon exposure. Radonova Laboratories AB (P.O. Box 6522, SE-751 38 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. CNRPP License CRT 201475.

#### Measured radon concentrations

For each detector, the measured value of the radon concentration is provided. For each value an uncertainty associated with the measurement to a 95% confidence level is also provided. For example a measurement result of 200 ± 30 Bq/m<sup>3</sup> means that the radon concentration is most likely contained in the range 170 - 230 Bq/m<sup>3</sup>. 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 kBqh/m<sup>3</sup> will be reported. The average radon concentration can be calculated by dividing the total exposure with the number of measured hours and multiplying that result with 1000. The reported measured values are related to the detectors as received by Radonova Laboratories AB. Detector deployment is not performed by Radonova Laboratories AB. Measurement information such as monitoring period (dates) and placement location is provided to Radonova Laboratories AB by the end user.

#### Codes on non-reportable detectors

- DNR Not Reported - Detector Not Returned VTW Not Reported – Visibly Tampered With FBD Not Reported - Film Broken or Damaged LIL Not Reported – Lost in Lab DTO
- Not Reported Detector Too Old

#### Radon measurements in Schools and Public Buildings

Health Canada recommends that the radon test performed in a home or public building be a long-term measurement. Health Canada does not recommend a test of duration less than one month. A minimum of 3 months is recommended and 12 months is optimum. If the long-term measurement results are below 200 Bq/m<sup>3</sup>, the average annual concentration in the home or building is probably below 200 Bq/m<sup>3</sup> and further measurements are not necessary and remedial action is not recommended. If the measured concentration is above 200 Bg/m<sup>3</sup> in schools, a follow-up short-term measurement is recommended in order to estimate the radon concentration during school hours:

Schools\_hours\_concentration = Long\_term\_concentration \* (Short\_term\_schools\_hours / Short\_term\_average).

If the long term average radon concentration during school hours is above 200 Bq/m<sup>3</sup>, remedial action is recommended (see the Health Canada Publication Guide for Radon Measurements in Public Buildings for more information)

#### Workplaces

Radon in workplaces should be handled according to the Canadian Guidelines for the Management of Naturally Occuring Radioactive Materials (NORM).

Average Annual Concentrations	NORM Program Classification
800 - 3000 Bq/m <sup>3</sup>	Radiation Protection Management
200 - 800 Bq/m³	NORM Management
< 200 Bq/m³	Unrestricted

### Signature on the report

With the signature on the report, the person responsible for the radon analysis at Radonova Laboratories AB hereby certifies that the measurement procedures follows the guidance in accordance with CNRPP-AL-DF-v6 and that the demands from SWEDAC are fulfilled.



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