

Environmental Laboratories

Proficiency test RAD 05/2017 – Radon in ground water

The Drinking Water Directive (2013/51/EURATOM) requires measurements of radon, ²²²Rn. Laboratories that provide these services may prove their competence by taking part in proficiency tests. Proftest SYKE provides proficiency test for ²²² Rn in May 2017.

Proftest SYKE and Radiation and Nuclear Safety Authority (STUK) will organize a proficiency test for analysis of radon in drinking water in May 2017. Measurements will be done using liquid scintillation counting or Radek technology. Totally, about 25 laboratories are expected to participate in this PT. We offer you a possibility to take part in the test.

Proftest SYKE is the Proficiency Testing Provider No. PT01 (EN ISO/IEC 17043:2010) accredited by FINAS (Finnish Accreditation Service (www.finas.fi). The organizing of this test is included in the accreditation scope.

1 General information

Katarina Björklöf, coordinator, mobile +358 295 251 086 Contact person:

Mirja Leivuori, substitute of coordinator, mobile +358 295

251 366

Organizing laboratory:

Proftest SYKE, Finnish Environment Institute (SYKE), Labora-

tory Centre, Hakuninmaantie 6, FI 00430 Helsinki, Finland

E-mail:

proftest@environment.fi (primarily this e-mail)

firstname.lastname@environment.fi

Co-operation partner

and analytical expert:

Reko Simola, Radiation and Nuclear Safety Authority (STUK)

E-mail

reko.simola@stuk.fi

2 Samples and analytes

In this proficiency test each participant will receive two ground water samples, of which one contains high radon concentration (1000–5000 Bq/l) and the other contains lower concentration of radon (<1000 Bq/l). Please choose in the registration form the correct sample:

- For liquid scintillation counting, the sample will be distributed in a 250 ml glass bottles (G1_L, G2_L).
- For measurements using RADEK technology, the sample will be in a one liter glass bottle, containing about 1.1 I of sample (G1_R, G2_R).

3 Registration

The registration is open until 21 April 2017.

The Proftest SYKE registration practices have changed!

Proftest SYKE has introduced the electronic client interface, ProftestWEB: https://wwwp5.ymparisto.fi/Labtest/en. ProftestWEB has replaced the electronic forms used earlier.

When using ProftestWEB for the first time: The client profile has been created for the clients who have earlier participated in Proftest SYKE's proficiency tests. The client profile is based on personal email account and email address is the user name. Login information is delivered via a separate email.

New clients are asked to contact proftest@environment.fi to request client profile.

If you have problems with ProftestWEB, please contact proftest@environment.fi.

4 Delivery of samples

The samples will be sent so that they should arrive latest on **Thursday 11 May 2017**. If samples have not arrived on time or samples are broken/missing, please contact to the provider by e-mail to *proftest@environment.fi* or by phone Katarina Björklöf, mobile +358 295 251 086.

The provider is not responsible of possible clearance or customs fee of the samples.

5 Measurements

The samples should be kept cool (4 °C) and analysis should be performed latest on **Friday 12 May 2017**. Analysis should be performed according to the normal procedures by the participant.

6 Results and reporting

The results for the proficiency test shall be reported latest on **Monday 15 May 2017**. The preliminary result lists will be distributed to the participants in May in week 21 (22 to 26 May 2017). The final report will be published in Proftest**WEB and** on Proftest website (www.syke.fi/proftest/en) latest in October 2017. The report will be in written in English, if more than 10 % of the participants are other than Finnish speaking.

7 Assigned values and the evaluation of the results

Performance evaluation will be based on z scores, where the mean radon concentration from multiple samples measured by STUK by scintillation counting will be used as the assigned value. The preliminary target value for the standard deviation for profi-



ciency assessment will be given in the sample letter.

8 Confidentiality

The results of the participants will be treated anonymously.

9 Participation fee

The participation fee for this proficiency test is 550 €, including both samples. The price is subjected to VAT (0 %). Extra samples cost 120 € each.

The participant is responsible for possible clearance or customs fees of the samples.

The invoice will be sent after reporting the preliminary results. If the invoice address or any other information related to invoicing is corrected after the invoicing, extra handling cost will be charged.

Do not hesitate to ask if you need further information!

Kind regards,

Katarina Björklöf Senior Researcher

Mirja Leivuori Head of Unit

