

To: Laboratories participating in Proftest Syke proficiency tests

## Proficiency test OIL 10/2025 – Oil hydrocarbons in water and soil

Proftest Syke will organize a proficiency test (PT) for the analysis of oil hydrocarbons in water and soil. The purpose of this proficiency test is to ensure the comparability and accuracy of the results of the participants. About 12 laboratories are expected to participate in this proficiency test. The measurands and samples of this proficiency test are included in the Organic chemistry scheme of the Proftest Syke accreditation scope (finas.fi/sites/en).

## Sample matrices

Synthetic sample, surface water, and soil.

#### **Timetable**

Registration 9 September – 3 October 2025

Sample dispatch date 4 November 2025 (see Chapter 4 Sample delivery)

Analysis of the samples C5–C10 samples (A2B, M4B) at the latest on 11 November 2025

>C10-C40 (A10, M30, N50) at the latest on 20 November 2025

Reporting of the results 5 – 20 November 2025

#### Participation fee

The participation fee is **1100 €** (+ VAT) including all measurements and samples. See detailed information in Chapter 9 *Participation fee*.

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Coordinator

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Proftest Syke is proficiency testing provider PT01 (EN ISO/IEC 17043:2010) accredited by FINAS (Finnish Accreditation Service, finas.fi/sites/en).





Proftest Syke guide for participants is available on Proftest Syke website (syke.fi/proftest/en).

ProftestWEB is the electronic client interface for Proftest Syke proficiency tests <a href="wwwp5.ymparisto.fi/Labtest/en">wwwp5.ymparisto.fi/Labtest/en</a>. Within the pages, instructions are available on every page. A short Getting started manual is available on ProftestWEB front page.

# Organizing the proficiency test

### 1 Organizer

Proftest Syke, Finnish Environment Institute Syke, Research infrastructure

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Email: proftest@syke.fi

#### Contact

Coordinator: Riitta Koivikko, tel. +358 295 251 750

Substitute for coordinator: Päivi Grönroos, tel. +358 295 252 174

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#### **Analytical expert**

Jari Nuutinen (Syke), tel. +358 295 251 467

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### **Subcontracting**

In this proficiency test, the pre-analyses as well as homogeneity and stability analyses will be conducted by a subcontracting laboratory. More information about the subcontracting will be given in the sample letter.

### 2 Sample and measurands

The sample matrices in this proficiency test are: synthetic sample, surface water and soil.

Samples, measurands, concentration ranges and sample preservations are presented in Appendix 1.

Note! Check the samples volumes and, in case needed, order additional samples.

### 3 Registration

The registration for this proficiency test is open until **3 October 2025**.

Registration is done via the electronic client interface, ProftestWEB: <a href="wwwp5.ymparisto.fi/Labtest/en">wwwp5.ymparisto.fi/Labtest/en</a>. If there are problems when using ProftestWEB or you need username and password, please contact proftest@syke.fi.

#### 4 Sample delivery

The sample dispatch day for national participants is **4 November 2025**. To ensure timely arrival, the samples are dispatched earlier for participants abroad.

The initial weight of the synthetic sample A1O, A2B, M4B, and L5O are delivered with the samples, together with the criterion for the accepted change of the weight. Additionally, the transportation temperature of the package will be controlled with the "Temperature" sample. The participants shall reweight the samples and measure the temperature of the "Temperature" sample immediately after receiving the samples.

If the sample package does not arrive at the latest on 5 November 2025, or there are missing and/or broken sample containers, please contact the provider immediately (<a href="mailto:proftest@syke.fi">proftest@syke.fi</a>). More contact details in Chapter 1 Organizer.



### 5 Sample storage and analysis

Soil sample M3O is kept in room temperature, other samples should be kept cool (4 °C). The samples stored at 4 °C are stabilized at room temperature before measurements. Samples are analysed within the laboratory where they are delivered to, and analyses are conducted according to the participant's normal procedures.

The analyses are performed as replicate determinations and two results are reported except for the sample N5O (and the addition solution L5O) replicate determinations are not done and only one result is reported.

Timetable for sample analysis is on the first page of this letter.

## 6 Reporting the results

The participant results are reported to Proftest Syke at the latest on 20 November 2025.

Proftest Syke delivers the preliminary result report to the participants latest in the week 49 (1 – 5 December 2025). The final report will be published at the latest in March 2026 and it is then available on ProftestWEB and on Proftest Syke website (<a href="syke.fi/proftest/en">syke.fi/proftest/en</a>). The availability of the report will be informed to the participants.

### 7 Assigned values and evaluation of the results

Either the calculated concentration (synthetic samples) or the robust mean, the median, or the mean of the results reported by the participants will be used as the assigned value for the measurand. The calculation of the assigned value is based on the results reported according to the given guidelines. The evaluation of the results will be based on z scores. The preliminary standard deviation for proficiency assessment will be given in the cover letter of the sample. In special cases also  $E_n$  or D% scores can be used for the performance evaluation.

#### 8 Confidentiality

The results of participants are treated anonymously. The participants' results and the preliminary results report of the round are confidential and should not be shared with third parties during the implementation of the round.



## 9 Participation fee

The participation fee is **1100** € (+ VAT) including all measurements and samples. The basic fee is **460** € (+ VAT) and the fees for each sample and measurand are as follows:

Sample	Price, € (+ VAT)
Synthetic sample <b>A10</b> , oil hydrocarbons in water (>C10–C40)	120
Synthetic sample <b>A2B</b> , volatile oil hydrocarbons in water (C5–C10)	120
Soil sample M3O, oil hydrocarbons in soil (>C10–C40)	135
Soil sample <b>M4B</b> , volatile oil hydrocarbons in soil (C5–C10)	
Surface water sample <b>N5O</b> , oil hydrocarbons in natural water (>C10–C40), including addition solution L5O	130

The invoice will be sent after the delivery of the preliminary result report. If the participant orders additional samples, they are charged according to the prices listed above.

Note! In Finland VAT is 25,5 %. Further, if the invoicing address or any other additional information has to be corrected after the invoicing, the extra handling cost will be charged. The participant is also responsible for possible custom clearance or customs fee of the sample.

# 10 Appendices

**Appendix 1** Samples, measurands, concentration ranges and preservations.



Appendix 1. Samples, measurands, concentration ranges and preservations.

Sample matrix/	Measurands	Sample code	Sample volume/
preservation			concentration range
Synthetic sample,	Oil hydrocarbons, mg/ml	A10	3 ml /
hexane solution	>C10-C21, >C21-C40, >C10-C40		1 – 10 mg/ml
Synthetic sample,	Oil hydrocarbons, μg/ml	A2B	3 ml /
methanol solution	C5-C10		< 200 μg/ml
Soil	Oil hydrocarbons, mg/kg	M30	40 g /
	>C10-C21, >C21-C40, >C10-C40		
			200 – 3000 mg/kg
Soil, includes 4 ml water and	Oil hydrocarbons, mg/kg	M4B	20 g /
preserved with 20 ml methanol	C5-C10		< 20 mg/kg
	Cil barrela a carle a cara de	NEO	
Surface water	Oil hydrocarbons, mg/ml	N5O	1000 ml /
	>C10-C40		0,3 – 1 mg/l
	The participants prepare the		
	final sample by adding 100 µl of		
	the addition solution L50 into		
Addition solution for sample	the sample.		
N50: Oil hydrocarbons in	>C10-C40	L50	2 ml
isopropanol			2 1111