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|  | INSTRUKSTION I-S-02 | | |
| | Topic : | SAMPLING | |
| Edition: 1 | Valid from: 07.05.2019 | Page / pages 1 / 2 | |
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The laboratory is not responsible for the sampling, cleanliness of the containers, method of sampling and sample transport by the customer.

1. Aim and scope

The purpose of this manual is to provide a concise overview of the requirements for sampling water and/or scale.

The subject of the instructions are rules for handling water and/or scale samples during collection, storage and transport.

2. Samples test containers

The sample should be delivered to the laboratory in a suitable bottle (PE or PTFE bottle) to avoid contamination.

Samples should be forward to laboratory as soon as possible.

3. Sampling

3.1. Water parameters

- Samples should be collected on the date of planned shipment
- Carefully fill the container with water until a small volume of water runs over the edge of the container.
- Pay attention to reduce the risk of contamination during collected samples
- Collect 2x 500 ml water samples
- Labels should contain all pertinent information including, but not limited, to the following:
 - Place of sampling,
 - Sample identification,
 - Date, time of sampling
 - Sampler taker


The hydrogen ion (pH) content should be determined first.

3.2. Determination of elemental/TOC content in water and water with scale

- Samples should be collected on the date of planned shipment
- Collect 2 x 100 ml water samples
- Chill the sample if required,
- Filter each sample (disposable syringe filter 0.45um) – 50/100ml
- Acidify the sample with nitric acid 6.5% (pH<6 – 5 drops; pH 6 – 9 – 10 drops; pH>11 – 15 drops) – for ICP - OES tests,
- Acidify the sample 0,5 mol phosphoric acid if biological changes are suspected – for TOC tests
- Labels should contain all pertinent information including, but not limited, to the following:
 - Place of sampling,
 - Sample identification,
 - Date, time of sampling
 - Sampler taker
- Samples should be forward to laboratory as soon as possible.

3.3. Determination of elemental content in scale

- Samples should be collected on the date of planned shipment
- Collect from system 10 grams boiler scale
- Labels should contain all pertinent information including, but not limited, to the following:
 - Place of sampling,

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- Sample identification,
- Date, time of sampling
- Sampler taker

Samples should be forward to laboratory as soon as possible

NOTE: Attach completed order form to samples

NOTE: Samples should be collected on the date of planned shipment to the laboratory. If the sample cannot be delivered to the laboratory within 24 hours the sample should be delivered refrigerated at 5°C (±3°C). If transport over long distances is necessary, the samples shall be transported in a container with chilled liners.