

Environmental samples

small samples series and low sample volumes

- ➔ IVL Swedish Environmental Research Institute in short
- ➔ Environmental samples.
- ➔ Iron Maiden.
- ➔ Small sample volumes.
- ➔ Small sample series.
- ➔ Examples of method development.



About IVL

- Independent status, owned by a foundation
- Jointly established by the Swedish State and the business sector 1966
- Operations span the whole field of sustainability
- Both research and commission services
- Alliances and networks
- Laboratories and pilot plants
- Offices in Stockholm, Gothenburg, Malmö and China
- Subsidiaries: EPD International, BASTA and IVL China



Environmental samples



Iron Maiden

ICAP 7000 series



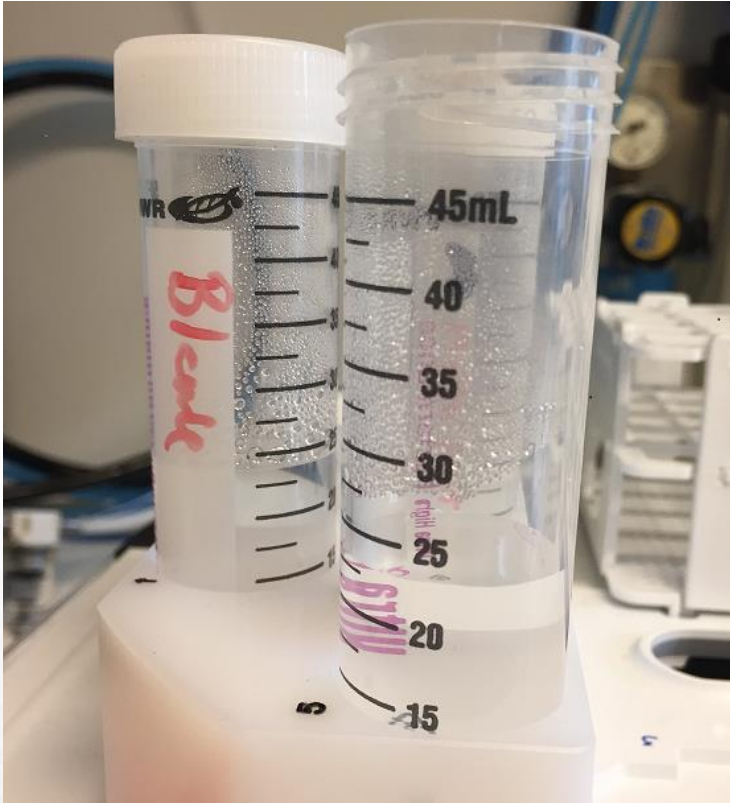
Low sample volumes



Low sample volumes

- ➔ Filter that have been leached in water
 - Many different analyses on the same leachate
 - LOD
 - 4-5 ml sample volume.
- ➔ Percipitation samples
 - Many different analyses on the same rain sample
 - 5-10 ml sample volume

Small sample series



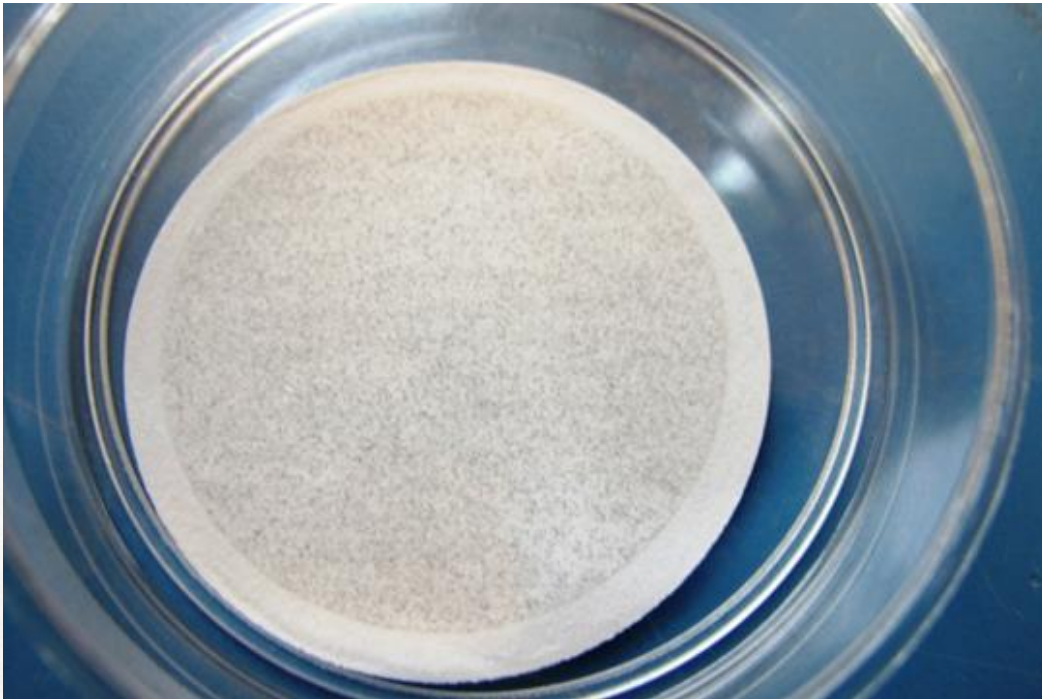
- Few samples.
 - 10-20 samples in one series
 - Research projects often have strained budgets
- Experimental.
- Economy.
- Practice makes perfect.
 - Learn from experiences

Diffusive Particle Samplers



- Developed at IVL
- Worldwide
- Sulfur
- Digestion
- Blanks

Filter from airsampling



- Method change
- Ion chromatograph to ICP-OES
- Kations

Thank You for your attention!

➔ Questions?