

# Deviating Samples

## What is a deviating sample?

A deviating sample has not been correctly cared for, or the information received is not sufficient in order to ascertain if it has been correctly cared for. Examples are:

- No date sampled – samples deviate automatically
- Received in the incorrect container for the testing required
- Received outside of the recommended holding time
- Sample contains significant headspace

All of these factors may affect the quality of the sample and therefore in turn the quality of the analytical data produced. The analysis completed maintains its accreditation; however the results may be considered to be deviating and should be interpreted with caution.

At i2 Analytical we have worked hard to establish sample receipt and preservation methods which cause minimal fuss to our customers.

## Soil Samples

For chemical analysis, soil samples should be preserved by cooling, using frozen ice packs in the cool boxes or enviro sample kits. The sample environment should be kept below 12 °C where possible **or** received in the lab within 24 hours of sampling with frozen ice packs.

In order to preserve integrity of the samples and avoid deviation, your instructions should also be sent without delay to allow scheduling and analysis within holding times. Information on Holding Times [click here](#)

### Soil containers:

- VOC and TPH bands below C10 require a **30g VOC Soil Jar** filled with **zero 'headspace'** (no air gap) and have PTFE liners for a gas-tight seal
- Samples for Organics require a **60g Soil Jar**
- Other testing comes from the 60g Jar or **500g plastic tub**



**Water Samples** Water samples should be preserved by cooling, using frozen ice packs in the cool boxes or enviro sample kits. The sample environment should be kept below 8 °C **or** received in the lab within 24 hours of sampling with frozen ice packs.

In order to preserve integrity of the samples and avoid deviation, your instructions should also be sent without delay to allow scheduling and analysis within holding times. Our most time critical tests with the shortest holding times are listed below:

BOD	24 hours
pH/ EC /TDS(by EC)	72 hours
Ammonia	72 hours (Preserved on receipt)

Sampling/collection Day	Collection Method	Sample Received Day	Holding time OK?
Thursday	Next day courier	Friday before 1pm	YES to all
Friday	i2 same day courier	Friday after 1pm	NO to BOD & DO
Friday	Next day courier	Monday am	NO to BOD & DO
Friday	Client drop off	Friday before 1pm	YES to all

### Water containers:

- VOC and TPH bands below C10 require a **40 ml amber glass vial**, filled with **zero 'headspace'** (no air gap) and have PTFE liners for a gas-tight seal.
- Samples for **BOD** require a separate **300 ml amber glass bottle**, with **zero 'headspace'**.
- Samples for general chemical testing, including organics must be received in **300 ml amber glass bottles**



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