

U-channel Sample Preparation

U-channels are used to provide a continuous subsample of split cores for analyses such as ITRAX scanning and magnetic analysis. It is important to take the sample not too close to the edge to avoid deformed or contaminated material from the outside of the core. This will result in the most representative sample of the sedimentary sequence.

Steps for taking a U-channel sample:

- Push the uncapped U-channel container (cut to the length of the sediment) open side down, into the split core section until it is full of sediment.
- At this point it is important to write the core ID and section number on the U-channel along with an arrow pointing to the 'top' of the core.
- Insert a thin wire beneath the sample, running under the open side and up each side of the U-channel.
- Pull the wire along the length of the channel so the sample sediment is separated cleanly from the sediment remaining in the core section as it is extracted.
- The open ends of the U-channel should be sealed with tape and the cap replaced when storing to avoid the sample drying out.

Note: This method of sampling is not appropriate for highly unconsolidated sediments. In these cases, small discrete samples should be taken using a spatula or cookie cutter.

U-channel sampling uses a large amount of sediment and therefore, where possible, subsample the U-channel for other analyses subsequent to all non-destructive analyses have been carried out (e.g. ITRAX core scanning) or return the remaining sample to BOSCORF.

Important: Once the U-channel sample has been removed from the core section, backer rod should be used to fill the resulting void space in the sediment to prevent core collapse. The section must then be wrapped securely with cling film and refrigerated in order to preserve the remaining sediment.