







2nd Leg Station: 13 Site: USGS 16th operation

Day: 09/07/02 GMT time: 22:17 Latitude: 27°46.99 N Longitude: 91°29.35 W Water depth: 636 m Location: Bush Hill Basin

Core number: MD02-2555 Corer type: Calypso cores

Corer length: 44.85 m Core length: 35.68 m

Observations

Corer condition:

Broken traction belt on the winch, core stuck at bottom back to extraction. Slightly bent

Core condition:

Sections and Sampling

Number of sections recovered and conditions:

24 sections of 1.5m were recovered; the last section measures 118 cm; a section of 10 cm was taken at the base of every 1.5 m section

Onboard sampling and post cruise processing:

- X-ray microtomography will be processed post cruise from 1370 cm to the end of the core
- Both the working and archive halves will be stored at Texas A&M University.
- Several bags were recovered: 1 core catcher, one core top
- the 10 cm sections were taken for pore water analysis, (microbiology, and SO₄-, Cl⁻, CH₄, ¹⁴C, DIC) (MBARI, Univ.Tokyo)
- MST magnetic susceptibility, gamma ray attenuation and p-wave measurements were made downcore, at a resolution of 2 cm. Colour measurements were taken every 2 cm.
- USGS core measurements and activities: Elec. Resist; Vane Shear, water content, (USGS-WH), Headspace Gas (USGS-Menlo Park), Thermal conductivity (Univ. Victoria), structure (ODM, PNNL)

Summary of physical and sedimentological observations

Dominant lithologies: 0-900 cm greenish gray bioturbated clay with common foraminifers. 900-3568 cm light to dark greenis gray layered clay with bioturbation.

Minor lithologies: Silty, organic-rich layers at 1963-1965 and 2160-2163 cm