



Capability Statement

Impact Assessment of Deep Sea Environment

Client: ARC Consulting and Statoil



REQUIREMENTS

- Assessment of the relatively understudied deep sea environment (2000 m depth) in terms of biodiversity and sediment characteristics.
- Environmental assessment of the impacts of exploration on diversity and sediment properties during and after drilling.

WORK DONE

Baseline assessment of biodiversity and sediment characteristics:

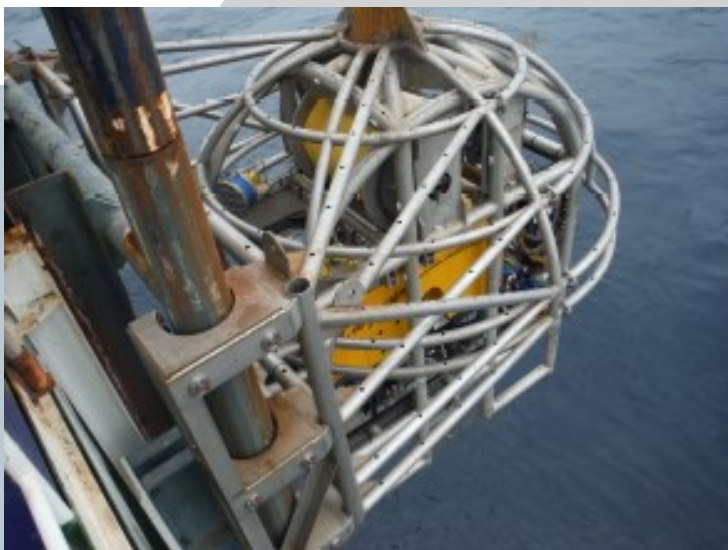
- The collection of sediment samples, at predetermined sites, with the use of Van Veen grabs.
- The collection and analysis of ROV footage of the benthic environment to obtain data on macrofaunal distribution.
- Analysis of sediment samples for particle size distribution (PSA) and heavy metal distribution.

Environmental assessment of the impacts on biodiversity and sediment properties during and after exploratory drilling activities:

- Sediment push core/scoop sampling to measure sediment properties within a 200 m radius around two well sites.
- The collection and analysis of ROV footage of the surrounding environment around each well site to obtain data on macrofaunal distribution and physical disturbance (by drilling) on the seafloor.
- Analysis of sediment samples for PSA and heavy metal distribution.
- The use of Geographical Information System (GIS) software to generate simultaneous plots of heavy metal distributions and physical disturbance.

OUTCOMES:

Lwandle provided a detailed, thorough and resourceful assessment of the potential effects of exploratory drilling on the deep sea environment.



“Environmental assessment of the deep sea environment and the potential impacts related to exploratory drilling activities offshore of Angola”