

## **140m Depth Underwater Operation with the ICE 1412 Vibratory Hammer and the 780 Power pack**

The underwater operation at 140m depth involved the installation of 06 nos of steel tabular pipe of Dia 30" x 50m length with the wall thickness of 1".

The pipes were driven to peg the steel structure that was used to protect the underwater oil pipe off the Sarawak's coast.

Extensive preparation of the ICE 1412 vibratory hammer and its accessories for underwater operation were carried out in-house weeks prior to the delivery to ensure a smooth and trouble free operation at the job site.

Over at the site, the ICE 1412 vibratory hammer was lifted of the barge's platform in stages due to the bundle of 250m length hoses connected to the power pack. As the vibratory hammer was lowered into the sea, pressurizing the gearbox commenced.

With the descending of the vibratory hammer towards the 140m depth underwater, pressurized air continued to increase progressively. This was monitoring through manometers onboard the barge to ensure that the pressure within the gearbox was always at 0.1 bar above the atmospheric pressure which will prevent any seawater seepage into the gearbox.

The operation was carried out efficiently in view of the absence of a backup vibratory hammer. Thus we recognized this successful operation mainly contributed by our proper preparation and our ability to exercise utmost knowledge to fulfill the required results.

