

APACHE ENERGY LTD LINDA FIELD DEVELOPMENT

Linda Platform Development, Western Australia

Apache Energy Ltd engaged ICON Engineering to undertake the installation of the Linda Platform near Varanus Island, on the North West Shelf of Western Australia. Installation of the 50m long jacket and topsides took place in February 2004.

The jacket and topsides were fabricated in Kwinana and then assembled at the newly built Australian Marine Complex (AMC) facility at Jervoise Bay, Perth. The three overhead cranes available allowed the lift rigging to be pre-installed on the jacket before loadout.



Lifting of Linda Jacket onto HLV for Transport to Dampier

The jacket and topsides were then transported to Dampier by HLV (topside located within the hull) and then loaded onto a flat top barge ready for tow to site.

The 355 tonne jacket was lifted horizontally using the F&G L780 Mod II Jackup rig "Ensco 56" in approximately 34m of water.

The jacket was upended and lowered to the seabed using ICON's proprietary lifting sub arrangement.

A theodolite was used to ensure the jacket was correctly orientated and within the drillable area for piling.

The installation of drilled and grouted piles then followed. A 1380mm diameter reverse circulation drilling assembly was used to drill the battered holes. Piles were mechanically connected and run through ICON's custom designed rotary table. Grout then secured the piles firmly into the seabed and prepared the jacket for the impact of Cyclone Monty that occurred soon after installation.

The installation of topsides was done by extending the rig cantilever beyond the jacket, picking up the topsides and

skidding back under load to set the topsides onto the jacket for weld out.



Jacket Immediately after Lift



Installation of Linda Topsides

The Linda Platform Installation is yet another successful project utilising a jackup rig to install the structure.

Platform Data

Water depth	34 m
Jacket Lift Weight	355 t
Topsides Weight	135 t
Legs/ Wells	3 vertical/ 6 wells
Piles	3 x 1219mm diam. battered