

## Apache Energy Ltd Wonnich Field Development Platform Installation, North West Shelf

ICON Engineering was engaged by Apache Energy Limited to manage the installation phase of the Wonnich platform. The platform is installed in 30m water depth in an exposed location west of the Montebello Islands, NW Australia.

The ICON work scope included managing the development of the installation procedures and supervision of the offshore works as Client representative. The platform was installed using the jackup drilling rig EnSCO 56 which was on charter to Apache for its drilling programme.



The complete structure was loaded out and transported to site on a single barge



Some novel installation techniques were adopted for the Wonnich installation. The lower substructure was designed to be installed in 2 pieces with a grouted connection. Because of the size of the barge used, it was decided to lower the centre of gravity of the upper substructure by securing it to the stern of the barge with about 5m below water line.



Preparing to lift the upper substructure with sling through the topsides



The upper substructure was transported vertically attached to the stern of the barge

The dimensions of the upper substructure truss prevented the topsides from being lifted in the more conventional manner of reaching out past the substructure. The topsides was therefore lifted first and hung off the underside of the cantilever prior to lifting the upper substructure.