

New skiddable CTD tower offers safety, flexibility

A DEDICATED COILED Tubing Drilling (CTD) tower has been designed and built by BJ Services for Phillips Petroleum Company Norway to use for coiled tubing drilling and traditional well servicing. Constructed at the BJ Services base in Stavanger, Norway, the new CTD tower was custom-built for PPCoN to provide the maximum flexibility demanded by CTD operations. It will accommodate a range of larger equipment sizes on a variety of platforms.

ULTIMATE FLEXIBILITY

“The new BJ Services CT tower design sets a new standard because it is so flexible. It will operate on virtually any platform, can handle extraordinarily large equipment, and is even capable of performing limited pipe handling of jointed tubulars,” said **Alasdair Buchanan**, Region Manager-Europe and Africa for BJ Services.

“This CT tower is not limited to CTD operations. It can also be used in standard well servicing work, which further illustrates its operational flexibility.”

LOWER COST, RISK

The BJ Services' CT tower makes it possible for a fully free standing, self supporting CT operation to be carried out in



Coiled tubing drilling tower, shown installed on platform, is designed for safety and flexibility.

a safe working environment, while using the injector at a considerable height.

Even when drilling while fully overbalanced, having a lubricator which is long enough to accommodate the drilling tools offers an extremely high degree of operational maneuverability and improved well control.

The new CTD tower design incorporates two separate skidding systems—one for the main structure and one for the injector. The injector can also be turned on a swivel plate up to 60 degrees in either direction.

The incorporation of multiple skidding functions permits the new CTD tower to be rigged up wherever convenient. When used with the new swivel system for the reel, it is possible to set equipment down once and to perform service work on multiple wells, eliminating costly rig-up, rig-down procedures. It also eliminates the risk of injury that may be associated with these procedures and frees up cranes for other tasks.

Limited pipe handling of jointed tubulars is made possible by the winch and traveling tong system, which can also be used for stack, riser rig-up and tool deployment, further reducing the need for cranes following the initial set-up.

Set-up of the tower is safe, simple and quick, with large landing and locking pins in each module. The internal stair system allows for safe, easy access to each level as the tower is stacked up.

BJ Services began the design and testing of the new CTD tower after receiving a contract from PPCoN earlier this year. The contract provides for a comprehensive package of coiled tubing drilling and well services in the Ekofisk Region offshore Norway.

To ensure safe and effective operation, BJ Services carried out testing of the new CTD tower by installing it on an Ekofisk platform.

It is expected that wells drilled with the system will be located mainly in the



BJ Services' CTD tower has two separate skidding systems. One is for the main structure, shown here, and one for the injector.

Ekofisk Field, but CTD technology may also be used in Eldfisk and Tor Fields.

The dedicated CTD spread, which utilizes state-of-the-art remotely operated NORSOK V16 pump units, features a pressurized A 60-rated control cabin, complete solids control unit, free-standing tower system, two HR 5100 injectors, soundproofed 5000-psi operating pressure power pack and 75-tonne capacity swivel base for the reel. ■