

TECHNOLOGY APPLICATIONS

15°/100 ft. Tolerant of lost-circulation material in the mud system, this rotary-steerable system does not require a special pressure drop between the pipe inside diameter and the annulus to operate. Additionally, a gamma ray detector is integrated into the tool, close to the bit, to enable precise geosteering. Using the system, the entire 8¾-in. section of an Eagle Ford well was drilled in one run. A total of 9,735 ft was drilled in 83 drilling hours.

► For additional information, visit www.bakerhughes.com.

Mud Cleanup

The Janus OilTec Ultra Mud Vacuum can mitigate oil spills that occur at production installations and on rigs. Grease and oil used in drilling operations can sometimes be dispersed into the sea or onto the ground around land wells, causing environmental pollution. Today, spreading mud on the drill floor, in the mud room, around mixing tanks, and at other places around the rig is considered a serious problem in the drilling industry with regard to the con-

trol of pollution and protection of the environment. This system is for use in extreme conditions, such as on the rig floor, around the substructure of drilling rigs, and at shore-based facilities for transferring liquids from a shipping container to a storage tank, or for cleaning floors or work surfaces. The compressed-air-operated Venturi-type vacuum (Fig. 3) uses a 25-gal transfer tank to provide an intense uninterrupted vacuum at the suction nozzle to pick up mud, other liquids, and solid debris. The accumulated liquid in the transfer tank can be sent to a cistern or, in the case of oil-based mud, directly into the mud-circulation system.

► For additional information, email gloizzi@janusoiltec.com.

Subsea Pile Guiding

The first offshore pile-installation operation with the StabFrame, a subsea pile-stabilizing template (Fig. 4), was completed in the Waimea field in the Campos basin offshore Brazil. Jointly developed by Large Diameter Drilling Ltd. and Menck GmbH, the template stabilizes

piles in all depths required for underwater pile driving. The operation used a hydraulic hammer to drive ten 84-in. mooring piles in water depths to 140 m. The piles were required for installation of a mooring system for a floating production, storage, and offloading vessel. Steered by a work-class remotely operated vehicle, the template stabilized vertical piles in varying soil conditions. Rather than relying on a release mechanism attached to the pile, the hydraulic release mechanism allowed the pile to be driven farther into the seabed, when required, before opening the frame. In this way, the template can adjust to unpredictable and challenging seabed conditions. Despite strong currents, estimated at times to be more than 2.5 knots, deployment was continuous and the project finished without incident.

► For additional information, visit www.menck.com/partnership/stabframe.

Multifracturing System

The Packers Plus StackFRAC HD Multi-Stage Fracturing System can provide

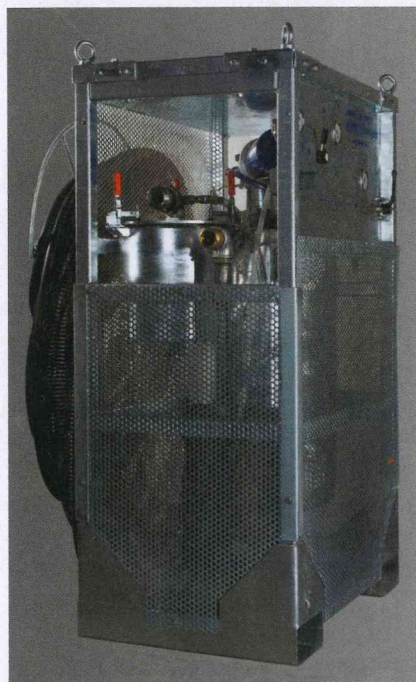


Fig. 3—Janus OilTec Ultra Mud Vacuum unit.



Fig. 4—Large Diameter Drilling Ltd. and Menck GmbH's StabFrame subsea pile-stabilizing template.