

Hughes Christensen PDC bits set field record in Mexico's challenging southeast marine region

HUGHES CHRISTENSEN has set a field record using its Genesis XT PDC bits in Mexico's southeast marine region. Historically, the Ixtal field's Cretaceous formation, consisting of fractured mudstone and wackstone and 5% to 10% interlays of bentonite and chert, had been drilled with 8 1/2-in. TCI bits and a seal reliability limit of 350,000 revolutions, resulting in multiple runs at low rates of penetration.

For Ixtal-34, a competitor ran a new impregnated bit design for increasing ROP. The performance was poor, so the operator pulled it out of hole and asked Hughes Christensen for a bit proposal to solve the problem. The team recommended a 13-blade Genesis XT 513Z with 16-mm Zenith cutters for increasing ROP and durability. The HC513Z reached TD at a total of 682 ft (208 m) at a ROP of 11 ft/hr (3.28 m/hr).

The ROP was 46% faster, with 14% more footage compared with the same formation's best offset. The bit came out of hole in excellent condition. The run broke the paradigm of using impregnated bits as the only answer for this tough application.

Separately, Hughes Christensen's Genesis motor steerable technology has drilled an 8 1/2-in. hole section in the McCully field in eastern Canada. The objective was to reduce cost/ft by maximizing penetration rates and to finish the section in one run. To meet the challenge, Hughes Christensen recommended an 8 1/2-in. Genesis bit with EZSteer depth-of-cut control technology to limit the cutter's "bite" for improved tool face control. The bit was run and set a single run footage record of 7,006 ft (2,135 m) in 175.6 hrs of drilling at an average ROP of 40 ft/hr.

Talisman completes 1st TTRD project on Claymore

IN TALISMAN ENERGY'S first through tubing rotary drilling (TTRD) project, **Red Spider Technology** supplied its new 5 1/2-in. TTRD protection system for operations in three wells in the Claymore field.

TTRD aims to optimize production levels by providing a cost-effective means of accessing stranded pockets of oil from existing wells without having to drill new wells.

In the Claymore operation, Red Spider's protection sleeve was run as a shield positioned inside the existing tubing retrievable sub-surface safety valve (TRSSSV), defending it from the effects

of additional drilling activity carried out through the device, while the liner drop-off system was used as a disconnect point during the liner deployment stage of the operation.

The deployment marked the first application of Red Spider's TTRD tools in the UK sector, said business development manager **Andy Skinner**, and more deployments for Talisman are possible. This follows successful campaigns in the North Sea for **Statoil** and **Hydro**.

The Claymore field is operated by Talisman on behalf of partners **ENI UK** and **Dana Petroleum**.

Fluid technology helps Statoil well become Staffjord field's biggest producer

THE STAFFJORD ERD Well C-33 AT4, drilled with **M-I SWACO's** oil-based WARP Fluid Technology, overcame several technical challenges to evolve as the highest-producing well in the entire field.

Categorized as one of the most difficult wells to drill and complete on the Staffjord field, the well was part of the "**Statoil** Late-Life Project." The objec-

tive was to compensate for the loss of reserves with the declining formation pressures. The well is being put on production from the lower Ness formation with a daily production rate of 12,600-bbl/day, making it the highest producer in the entire Staffjord field.

Elsewhere, another operator used the WARP system to drill five wells in the

New spherical-shaped floating vessel designed for stability, flexibility

OPE HAS LAUNCHED the Satellite Services Platform (SSP), a spherical-shaped floating vessel with a center column that the company says provides distinct advantages over ship-shaped vessels and traditional platforms.

According to **Gary Quenan**, OPE president, the SSP is extremely stable, mainly due to the design's height-adjustable center column. Tests performed on SSP-320 in the Netherlands resulted in

less than 4° significant pitch/roll in Katrina-type storm conditions and less than 0.07g heave acceleration in a one-year Gulf of Mexico winter storm.



The column also provides stor-

age room for chemicals, diesel, potable water or multiple risers/umbilicals.

The SSP can be fabricated in virtually any construction port and fully equipped before being towed to the site. It is suitable for water depths up to 13,000 ft, which OPE says is limited only by current mooring systems. It can function as an FPSO with workover or drilling, floating drilling/production platform, LNG unloading terminal, early production platform, and more.

Angola subsea system uses world's longest single riser tower system

PRODUCTION FROM THE Greater Plutonio development area in Block 18 offshore Angola started on 1 October 2007. It consists of five fields discovered in 1999-2001 in water depths of up to 1,450 m and is the first BP-operated asset in Angola.

The Greater Plutonio offshore development area is located 160 km northwest of Luanda and is comprised of the Galio, Cromio, Paladio, Plutonio and Cobalto fields in water depths from 1,200 m to 1,450 m. It will contain 43 wells: 20 producers, 20 water injectors and 3 gas injectors. The development uses a floating, production, storage and offloading

vessel (FPSO) to process produced fluids and export crude. The FPSO is connected to the wells by a large subsea system.

The heart of the Greater Plutonio subsea system is the longest single riser tower system of its kind in the world. At 1,258 m, it connects the FPSO to a network of subsea flowline and control systems that include 150 km of flowlines, nine manifolds and 110 km of instrument and control umbilicals. Many components of the subsea systems, including the riser tower, were constructed and assembled in Angola, including six of the subsea manifolds, along with the world's largest CALM (Catenary Anchor Leg Mooring) offload-

ing buoy and the first-ever Angolan assembled and tested subsea trees.

Many Angolan technicians and engineers, whose numbers will continually increase over the next several years, have been trained to operate and support the Greater Plutonio development area in an ongoing five-year development program.

Commenting on the news, BP chief executive **Tony Hayward** described the start of production from the first BP operated development offshore Angola as "a further significant step in the steady build-up of oil and gas output from new projects due on stream this year and next."

Helmets create safety milestone



Ng Eng Hen (third from left), minister for manpower and second minister for defense, and Choo Chiau Beng (fourth from left), chairman and CEO of Keppel Offshore & Marine, top off the last two helmets of the "World's Longest Chain of Safety Helmets" on 21 October 2007. Keppel O&M is attempting to attain a Guinness World Record by creating the longest unbroken chain of safety helmets. Eighteen thousand safety helmets were used to form a chain spanning 5.8 km.

In 2006, Keppel O&M invested nearly \$10 million on safety equipment, education and promotion.

Breakthrough Performance Center offers forum to test newest innovations

SCHLUMBERGER HAS OPENED the Breakthrough Performance Center, Innovation Lab and Executive Briefing Center in Houston to showcase, create and test the latest digital technology innovations in the oil and gas industry.

Schlumberger Information Solutions (SIS) is collaborating with technology leaders — **Barco, Dell, HP, IBM, Intel, Microsoft, NetApp, NVIDIA, Panoram Technologies and The Whitlock Group** — to make the Breakthrough Performance Center the industry leader in next-generation E&P technologies. It offers the industry's first Innovation Lab, a collaborative environment to create and test solutions integrating technologies and services.

"The Innovation Lab is a venue where we can work collaboratively with our customers and industry experts to pioneer ground-breaking solutions to solve the tough challenges of exploring and producing increasingly complex reservoirs," said **Olivier Le Peuch**, SIS president.

The variety of advanced technologies available for solution development in the center highlights its open and collaborative approach. Regularly scheduled briefings are planned in the coming months. Clients will learn from industry and company experts how they can use the latest SIS solutions to solve the problems associated with complex reservoirs, challenging operational environments and increasingly sophisticated geoscience and engineering workflows.

GE compression trains to help extend life of Staffjord field in Norway

FOUR GAS TURBINE-DRIVEN compression trains to be upgraded by **GE Oil & Gas** will help **Statoil** extend the life of the Staffjord oil field in the North Sea.

Under a wide contract, GE will provide new compressor internals for four compression trains, each for Statoil's existing B and C platforms in the Staffjord field, which straddles the border between

the Norwegian and British sectors in the Tampen area in the northern part of the North Sea. The trains will be dedicated to recompression and gas lift services.

"The wellhead pressure is dropping gradually over time, as reservoir pressure maintenance is stopped," said **Jeff Nagel**, vice president GE Oil & Gas Global Services. "Extensive modifica-

tion of the equipment on the platforms is required to adapt to the continuing decline in wellhead pressure and to maintain production from the oil field."

GE Oil & Gas will supply 13 BLC centrifugal compressor internals, 4 BCL flange to flange compressors, gearbox and couplings for the project. The equipment will be installed during summer 2009.