DRILLING SERVICES



Petrobras will be using Impact Solutions' Secure Drilling system on 4 wells in Brazil. It will first be tested on 2 land wells, then on 2 wells off jackup rigs, beginning later this year.

Petrobras to test out Secure Drilling

IMPACT SOLUTIONS Group Limited (UK) recently announced that it has entered into a contract with **Petroleo Brasileiro S.A.** ("Petrobras") for the first field application of Impact's Secure Drilling managed pressure drilling system.

Petrobras will use the system on 4 wells in Brazil. It is expected that the system will be first deployed and tested on 2 wells onshore and then on 2 wells offshore on a jack-up rig.

The system specifically allows the well to be drilled overbalanced, near balanced, or underbalanced, enabling each section of the well to be optimized based on specific downhole conditions. The early kick detection and automatic kick control components of the system also provide increased safety compared with conventional drilling. The system is designed to incorporate existing drilling and pressure control equipment, such as rotating control heads, power chokes, pressure sensors and flow meters, with minimal upgrades and equipment additions. Dr Helio Santos, president of Impact, commented, "We are excited about working with Petrobras on the introduction of the Secure Drilling technology to the field. The system is also expected to provide the industry with a safer and more efficient method of drilling wells offshore and in other challenging drilling environments. The system is expected to both reduce cost and increase efficiency while offering a safer drilling operation."

Emmanuel Nogueira, program coordinator from Petrobras, said, "Our agreement with Impact is designed to validate the Secure Drilling system first onshore and then on jack-ups before deploying this innovative drilling method in our deepwater activities. It is exactly in the challenging deepwater scenario where the Secure Drilling method can significantly change the economics of finding and producing hydrocarbon reserves."

The system is based on the Micro-Flux Control approach and allows for automatic kick detection and control, as well as full bottomhole pressure control.

INTEQ launches TruTrak automated directional drilling service

INTEQ HAS introduced the new TruTrak automated directional drilling service, which combines X-treme drilling motor technology with closed loop automated rib steering. The non-rotating TruTrak system provides superior hole quality, high rate of penetration (ROP) and minimum wear-and-tear on the drill string and downhole tools.

"The TruTrak service is based on INTEQ's experience with our AutoTrak rotary steerable service and the VertiTrak service designed for vertical drilling," explained INTEQ president **Martin Craighead**. "The TruTrak service brings a step change to the drilling efficiency and precision of typical directional wells in low spread-cost environments such as North America. This type of automated integrated steerable system is expected to be the technology of the future."

The TruTrak drilling system combines the automated steering control from INTEQ's AutoTrak rotary steerable system, integrated directional measurement-while-drilling (MWD) and X-treme motor technology to provide improved wellpath control and drilling efficiency vs traditional drilling technology. The system's modular design permits the addition of additional MWD sensors.

The TruTrak service has already delivered superior wellbores and cost savings under challenging drilling conditions in western Canada and the mid-continent US region.

"For a recent well in Canada, the TruTrak service saved the operator over US \$1 million in drilling costs," reported Matthias Reich, INTEQ product line manager for VertiTrak and TruTrak services.

More than \$4.5 million worth of oil recovered with VERTI-G drill cuttings dryer system

SINCE ITS installation 5 years ago, a M-I SWACO drill cuttings dryer system has recovered more than \$4.5 million worth of commercial grade oil in the Sahara Desert of Algeria.

The VERTI-G cuttings dryer incorporates a high-speed vertical centrifuge designed to achieve maximum liquid/solid separation in large-volume processing. The drilling waste management package also includes a SWACO 414 centrifuge, a screw conveying system and fluid flushing and recovery tanks.

To date, the operation has been used on more than 147 wells, where it has recovered more than 84,000 bbl of oil-based drilling fluid.



The VERTI-G cuttings dryer has been used on more than 147 wells.

2¹/₂-mile casing string run offshore Brazil

RIO DE JANEIRO, Brazil — BG Group E&P Brasil Ltda set a 2½-mile string of 95%-in. casing at 15,811 ft (4,819 m) MDBRT (Measured Depth Below Rotary Table), 15,801 ft (4,816 m) TVDBRT (True Vertical Depth Below Rotary Table) on well 1-BG-1-SPS in Santos Basin Block BM-S-13, offshore Brazil, using Vetco Gray's MS-700 Subsea Wellhead System. This is believed to be a record string length in Brazil waters.

The 95%-in. casing string, hanger and MS-1 metal-to-metal seal were run with Vetco Gray's single trip High Capacity Pressure Assisted Drillpipe Running Tool and landed on V150 /NC-50 5-in. drillpipe using the semisubmersible Pride South Atlantic in 130m water depth. The 95%-in. string incorporated a mixed P-110/Q-125 grade, 53.50 lbs/ft casing. Landing weight was 695kips (buoyed). The casing and MS-1 seal assembly were successfully tested to 7,500 psi.

BG's ongoing drilling operations also required a sidetrack phase that involved cutting and recovering a major portion of this initial, long 9⁵/8-in. casing string, along with the Vetco hanger and MS-1 seal.

The 12¹/₄-in. sidetrack section then required installation of a second 9⁵/₈-in. casing string, with the new 9⁵/₈-in. hanger and MS-E seal successfully landed, set and tested in the original sealing area in the 18³/₄-in. High Pressure Wellhead.

Vetco Gray Brazil was awarded this contract by BG E&P Brazil Ltda, a subsidiary of BG Group, in mid-2005, to provide wellhead and tubular systems including rental tools and offshore services.

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