

# **CARBO develops FUSION**

CARBO has introduced FUSION, a proppant pack consolidation technology for deepwater injection and production wells,

**Halliburton launches** LWD density service

Sperry Drilling, a Halliburton business, introduced the 9.5in Azimuthal Lithodensity (ALD) service, providing real-time density measurements and images in boreholes up to 17.5in.

ALD is designed to provide downhole density measurements, including high-quality borehole image logs, to help optimize wellbore placement through geosteering and to reduce geological uncertainties. The measurements, delivered via LWD (logging-while-drilling), can eliminate wireline conveyance runs and capture data immediately after drilling when the borehole is in the best condition.

The 9.5in ALD provides the same functionality as its smaller counterparts, including azimuthal density, and photoelectric and acoustic stand-off measurements. This information has a

wide range of applications that can help determine a formation's porosity, rock strength, pore pressure and borehole geometry.

In the Gulf of Mexico, as an alternative to wireline runs, an operator used the density measurement to identify shallow hydrocarbon deposits in a 17.5-in borehole. In another case, an operator used borehole density images in real-time to determine the formation dip and reservoir structure immediately below a

which is designed to create a bonded proppant pack with or without

FUSION technology has been developed to allow increased injection and production rates in deepwater fields, enabling pressure maintenance and increased ultimate recovery and ROI (return on investment), FUSION aims to improve well productivity by enabling operators to create a high-integrity, high-permeability annular pack in the low compressive strength environment of the annulus that retains its integrity under high water injection rates.

The technology features durable, ultra-high conductivity ceramic proppant with a proprietary resin coating, which enables controlled bonding of the proppant pack by using a unique chemical-activator. The chemical-activated bonding process forms a strong, flexible bond without compression, even in low temperature environments, to create a high integrity pack meant to withstand stress cycling to sustain long-term proppant pack integrity.

Permanently detectable CARBONRT inert tracer technology is manufactured into the substrate of every proppant grain, enabling proppant in the annulus to be detected (with a standard neutron logging tool) to evaluate pack placement and quality at any time during the life of the well. www.carboceramics.com 

> massive salt interval in a 16.5in borehole, where surface seismic data was poor.

www.halliburton.com

### **James Fisher** unveils excavation tool



James Fisher Subsea Excavation, part of James Fisher and Sons, has brought the SP12000 mass flow excavation (MFE) tool to market to support clients with large scale excavations.

The SP12000 produces more than 6-tonne of thrust at full power and a volume output of 12,000 L/sec (3170 gal/sec) of water, which can be used for large seabed preparation projects, sandwave clearances, freespan rectifications and large diameter pipeline trenching.

James Fisher Subsea Excavation's team completed an extensive re-engineering project on the SP12000. Advanced hydrodynamics and improved efficiency have been combined to improve the flow regime for a mass or controlled flow excavator to cut trench. Despite its size, the fully-controllable SP12000 is also capable of smaller-scale, precision excavation. www.jfsubseaexcavation.com

## Damen eyes decommissioning

Dutch firm Damen Shipyards Group's latest concept design, the Damen

Decommissioning Series, will specialize in three core areas for oil and gas decommissioning: topside decommissioning, offshore platform removal, and subsea cleaning and removal.

A monohull vessel designed with a split stern will be used for platform removal operations.

"This ship will be able to reverse up to a jacket, where it will be ballasted to sink below the platform. Upon deballasting, the vessel will rise up to pick up the platform," said Justin Rietveld, who carried out the in-house research at Damen.

Preliminary estimates show the vessel will be capable of decommissioning fixed platforms up to 1600-tonne, covering over half of the fixed platforms in the North Sea, says Damen.

The concept design includes modular add-ons, including a (temporary) crane or helideck installation, opening markets outside of decommissioning. Functionality can be boosted with the addition of accommodation modules to increase personnel capacity. Another option will be the addition of a temporary platform to create a solid stern, increasing the deck capacity, allowing monopiles and foundations to be transported and installed for the offshore wind industry.

#### www.damen.com



