MPC InCision successfully performs 37 slot cuts in deepwater

A major operator in the Gulf of Mexico was faced with debris build-up behind a concentric gravel pack string. In order to remove the debris using a chemical wash, multiple slots or holes in the concentric string were needed. Due to the close proximity of the gravel pack screens, the conventional method of using explosive perforating charges was not a reliable option due to the risk of damage.

Baker Hughes, a GE company (BHGE), recommended the MPC™ InCision slot cutter to provide the precise cuts needed to allow the operator access to the debris without causing any damage to the outer screens.

The MPC InCision delivers fast, precise downhole slot cutting without ballistics or hazardous chemicals, reducing non-productive time (NPT), risk and intervention costs.

Capable of performing cuts as precise as 1/8 in. and up to 15 cuts in a single trip, the MPC InCision is controlled and monitored on the surface, in real time. It also features the versatility to cut any material in any environment, and is deployed on wireline, tractor, or by BHGE’s TeleCoil™ intelligent coiled tubing service.

In order for the operator to effectively apply a chemical wash over the area, the MPC InCision performed a series of 37 cuts across a 150 ft (46 m) of tubing. Each cut was monitored and controlled on the surface to ensure the depth of each penetration to confirm slot completion, without any damage to the outer string. This allowed for circulation of a chemical treatment without compromising the integrity of a delicate sand screen.

Challenges
- Deepwater well
- Reduced flow rates from concentric gravel pack due to asphaltine build-up
- Risk to damage of gravel pack screens behind pipe

Results
- 37 precise slot cuts made over 150 ft (46 m) section, allowing access to the debris blocking the screens
- Reduced NPT, risk, and overall intervention costs
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