



## 1<sup>st</sup> Offshore Deepwater Gulf of Mexico project for Newpark Completion Fluids Product Line

A decompletion subsea intervention for a major operator in the GOM allows Newpark to replace an incumbent completion fluids provider

CHALLENGE	SOLUTIONS	RESULT
<ul style="list-style-type: none"> <li>• 1st completion fluids project with operator &amp; replace incumbent completion fluids service provider for operator</li> <li>• Multiple fluid systems movements involved including weather shut-down</li> </ul>	<ul style="list-style-type: none"> <li>• Engineered systematic displacement program recommendation for each stage of decompletion operations</li> <li>• Use of Archer WBCU tool service provider</li> </ul>	<ul style="list-style-type: none"> <li>• Timely delivery of completion fluid &amp; associated products at shorebase facility</li> <li>• No associated NPT with job performance during decompletion</li> </ul>

GULF OF MEXICO

### OVERVIEW

An operator in deepwater Gulf of Mexico awarded Newpark Fluids Systems its first offshore completion fluids project in the form of a Decomplete – Subsea Intervention. Newpark was given the opportunity to replace the incumbent completion fluids service provider for this initial work. The project well was in a working depth of 4,496 feet (1,371 meters). A high-level description of the operator's objectives involved displacing to brine, recovering tubing, and then displacing to synthetic based mud.

The selected rig for the operation was the Transocean Deepwater Pontus. The drillship was commissioned in 2017 and is classified as an ultra-deepwater, dual-activity drillship. The Pontus is capable of operating in water depths approaching 12,000 feet (3,658 meters) and achieving maximum drilling depths of 40,000 feet (12,192 meters).



### CHALLENGE

This was Newpark's first offshore GOM completion fluids project since the commissioning of the deepwater completion fluids storage and blend plant located in Port Fourchon, Louisiana. The well required a 13.5 lb/gal CaBr<sub>2</sub>/CaCl<sub>2</sub>, 30° F TCT 15k psi completion brine. Subsequently, Newpark was replacing an incumbent completion fluids service provider for this operator. The initial decompletion procedure accounted only for required volumes in the upper portion of the well. Management of change was used after the planned decompletion operation evolved and additional fluid volume was built and delivered to location to accommodate the change. Due to weather, the rig was shut down during the project for seven days. Multiple fluid systems were required for operational sequences including the capture, isolation, and return of a competitor's packer fluid recovered during intervention operations.



## SOLUTION

The rig surface fluid handling system was thoroughly cleaned of residual WBM while in transit from a previous well in preparation to receive completion fluid once on the new location. Archer was contracted to provide riser cleaning tools. A comprehensive fluid management plan was outlined to handle the multiple fluid interactions throughout the operation, which included six different fluid transitions. Berms were utilized to control tubing debris from washing and thread cleaning activities to prevent discharge into the GOM. Solids accumulation in the fluid were minimized using increasingly finer screen mesh sizes on shakers.

## RESULTS

Newpark was able to effectively prepare and build all brine, spike fluid, and associated additives with no delays at the Fourchon stock point. The completion fluids team reacted quickly to weather related issues and changes in the scope of work related to additional volume requirements on short notice in less than 12 hours. Fluid cleanliness was maintained throughout the intervention.



21" Riser Cleaner Magnet/Brush



21" Riser BOP Cleaner

Personnel on board the rig successfully recovered the competitor's packer fluid with little to no density change or volume loss and all logistics involved in the management of fluid during the decompletion occurred with no associated non-productive time (NPT). Overall, this was a successful first project for the Newpark reservoir and completion fluids product line in the GOM.