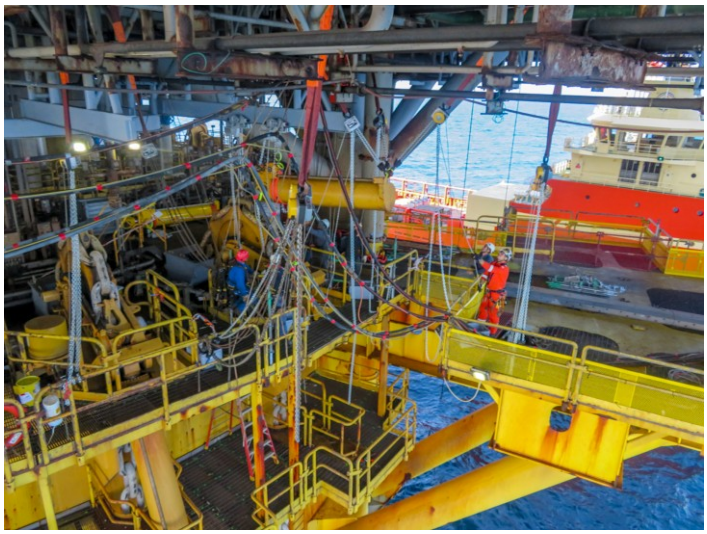
PERDIDO HYDRAULIC CYLINDER REPLACEMENT

Conbit was approached by Shell to carry out the replacement of eight hydraulic stabilization cylinders located on the spar deck of the Perdido SPAR platform. These cylinders play a critical role in stabilizing the platform in the water and ensuring safe offshore oil production operations. In this case, the cylinders were due for maintenance. The overall project was divided into two execution campaigns, with four cylinders replaced during the first campaign and the remaining four planned for a later phase.

Each hydraulic cylinder weighed approximately five tons and was installed in locations that were not accessible by the platform crane. Due to this access limitation, Shell turned to Conbit for specialized lifting and rigging expertise. The restricted working environment and offshore conditions demanded a carefully engineered approach to ensure both safety and operational efficiency.



Rigging equipment lifting cylinder into position

PROJECT

- ✓ ENGINEERING
- ✗ PROCUREMENT
- ✓ CONSTRUCTION

Client
SHELL

Project Number
31470

Project Name
Perdido Hydraulic Cylinder Replacement

Worley
energy | chemicals | resources

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PERDIDO HYDRAULIC CYLINDER REPLACEMENT

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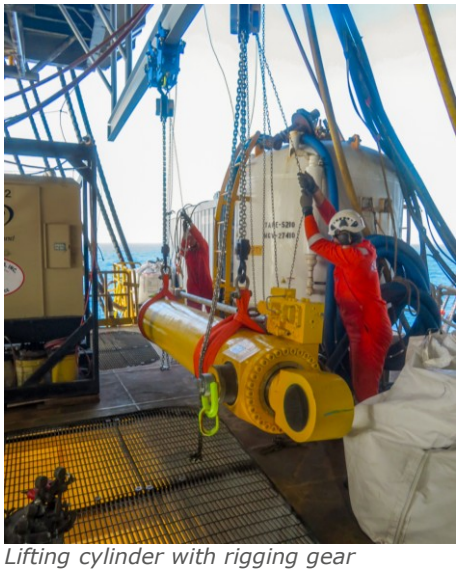
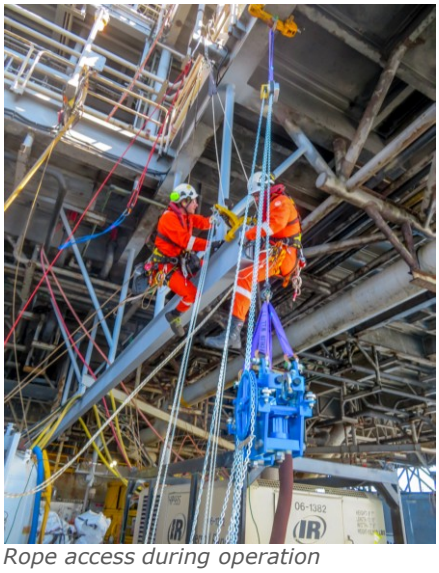


Lifting cylinder with rigging gear



Rope access during operation

Rope access technicians installing cylinder into final position

ENGINEERING AND PREPARATION

Before heading offshore, Conbit conducted a site visit to assess the installation areas and working conditions. Afterward, detailed engineering and preparation work was carried out at the Conbit office. An integrated engineering plan was developed for all eight cylinders to make sure both campaigns would run smoothly. This advance planning minimized time spent offshore and helped improve overall project efficiency.

INSTALLATION

To move the cylinders to their installation points, an existing trolley lane on the platform was used. Conbit developed a rigging solution that allowed the cylinders to be safely transported along the trolley system and then lifted into their final positions. Using specialized rigging equipment, the installation process was carried out with precision and control.

OPERATIONAL CHALLENGES

During the work, several other activities were happening on the platform at the same time, which limited the available windows for our operations. By carefully planning, staying closely coordinated with everyone involved, and adjusting the schedule when needed, Conbit was able to handle these challenges effectively.

EQUIPMENT

The main equipment used included beam trolleys, chain hoists, beam clamps, and other specialized rigging tools selected to meet the project's load and space requirements.

OUTCOME

The first campaign was completed safely, efficiently, and ahead of schedule. The success of this work demonstrated Conbit's ability to deliver complex offshore lifting solutions in challenging conditions. The engineering preparations for both campaigns ensured full readiness for the upcoming second campaign, allowing for a smooth continuation of the project.

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