

Remotely Operated Survey

Oceanengineering solution helps Anadarko reduce costs for rig move

Project Overview

In 2016, Anadarko approached Oceanengineering looking for a long-term, cost-effective positioning solution for offshore drilling rig moves.

Issues

Anadarko was looking for any way to improve safety while reducing costs for drilling operations in a challenging economic environment. Conventional rig positioning requires costly equipment and personnel mobilizations offshore, and can potentially increase exposure to health, safety and environmental (HSE) risks. Additionally, the timing of the mobilization can substantially increase the customer's standby costs.

The Oceanengineering Solution

Oceanengineering proposed a one-time mobilization of our Remotely Operated Survey (ROS) solution. The Oceanengineering® ROS offered the customer multiple benefits, including a lower-cost single-day rate and a one-stop-shop solution that was inclusive of all equipment and deliverables. Further advantages also

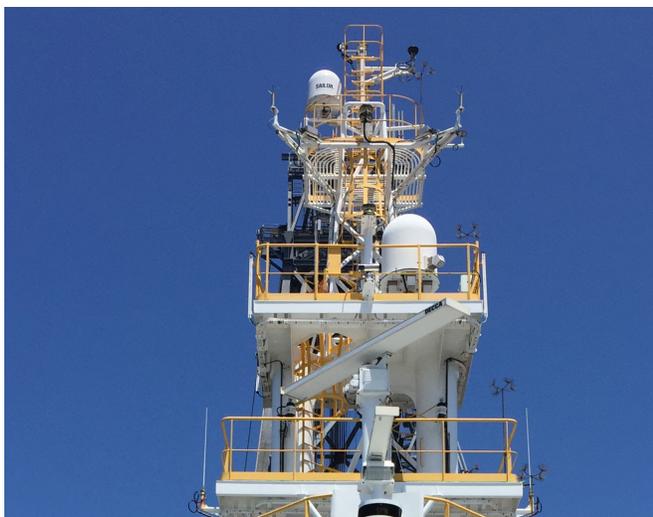


Photo courtesy of Diamond Offshore

included reducing HSE risk and eliminating the mobilization of personnel and equipment. Additionally, the proposed solution provided the customer with 24/7 remote access from shore to the rig.

Execution Plan

In June 2016, the Oceaneering team performed a one-day survey of the customer's rig. Equipment was mobilized and installed on the rig in a three-day period one week after the initial survey. The rig move occurred over a two-day period at the end of August and a preliminary field report was delivered within two hours of spud-in. The final report and certified well location plat were delivered in 48 hours, allowing the client to identify the final well position, close out drilling permits, and continue planning the development of the field. The equipment used for this rig move remains operational on the rig for all future moves.



Challenges

The project saw delays from the scheduled spud-in date in June to the actual spud-in date in August. These delays could have resulted in substantial equipment standby charges for the customer, if the customer had opted for a conventional rig move service. The flexibility of the ROS eliminated this possible unexpected expense.

Two unplanned re-spuds required the rig to move to new drilling locations, which would have incurred additional unplanned costs on a conventional rig move as the surveyor and equipment would have already started the demobilization process. The re-spuds would have required a costly mobilization from scratch.

Equipment Highlights

- » The ROS package includes the following dual redundant items:
- » Two Oceaneering® C-Nav3050 GNSS Receivers with PPP correction service
- » One gyrocompass
- » One GNSS heading sensor
- » One survey navigation system supplemented with in-house software applications
- » One survey remote access and communications package with internet security
- » Two onshore remote control and monitoring stations (one in Lafayette, Louisiana, and one in Houston)



Results

Oceaneering supported the customer and successfully completed the rig move in the time frame expected, within the survey tolerances identified, and without any HSE incidents. Based on six rig moves per year, the client can expect an annual cost savings of 250,000 USD per rig.

Based on the success of the rig move, Anadarko has decided to leave the ROS on the rig for a one-year term. Oceaneering has also mobilized the ROS system on its sister ship and there is potential to incorporate the system on two additional Anadarko rigs.