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On-board Calibration and Adjustment of Mooring System of AmirKabir Semi-Submersible Drilling Unit in the Caspian Sea

The mooring system of the AmirKabir semi-submersible drilling unit, which is located in the Caspian Sea, was calibrated. Therefore the cable (chain) forces of a total of 8 winches were measured for different loads and compared against the winch load monitoring system. In case of unacceptable deviations the winch system was adjusted to match the cable (chain) force readings.

The services were carried out by the VCE from 26 April to 08 May 2014.

The cable (chain) forces were determined by the BRIMOS® 12.1 based method developed by applying the BRIMOS® Recorder with an external 3D-accelerometer. This equipment has been applied worldwide for measurement of cable forces at more than 7,500 cables since 2001. The recorder captured the vibration behavior of cables with an accuracy better than 0.1 %. The cable force was determined from the geometry of the cable, the cable properties and the fundamental frequencies.

- Client: The North Drilling Company
- Location: Caspian Sea, Azeri Continental Shelf
- Service Period: 2014



BRIMOS® Services conducted:

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|------------------------------|--|---|---|--|
| Lifecycle Management: | <input checked="" type="checkbox"/> Condition Assessment | <input type="checkbox"/> Condition Monitoring | <input type="checkbox"/> Rehabilitation Planning | <input type="checkbox"/> Quality Control |
| | <input type="checkbox"/> Lifetime Assessment | <input type="checkbox"/> Traffic Analysis | <input type="checkbox"/> Environmental Influences | <input type="checkbox"/> Risk Assessment |
| Special Measurements: | <input type="checkbox"/> Attendant Monitoring | <input type="checkbox"/> Noise and Vibrancy | <input type="checkbox"/> Deflection Measurements | <input type="checkbox"/> Seismics |