



MONITORING ACCUMULATED CONDUCTOR FATIGUE DAMAGE IN THE GULF OF MEXICO

An operator was embarking on a drilling campaign in the Gulf of Mexico using a semi-submersible vessel in 6000ft water depth.

THE PROJECT

Analysis carried out before the project had given the conductor a fatigue life of just eight days, identifying the conductor top weld as the fatigue critical location.

This led the client to install a standalone monitoring system to measure BOP and conductor movements as well as the overall global response of the riser.

THE RESULT

- Monitoring data was used to determine actual conductor and wellhead fatigue incurred during the drilling operation
- The data showed that the acceleration threshold for the conductor top weld was not exceeded during the campaign
- For the riser it was shown that none of the screened VIV events had resulted in above-threshold fatigue damage
- This resulted in the client not having to undertake a detailed fatigue analysis of the drilling campaign.



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