



CHEVRON TAHITI RISER MONITORING

Chevron Tahiti's riser and flowline monitoring system was designed and supplied by 2H Offshore.

THE PROJECT

Chevron Tahiti's riser project was the first fully operational real time SCR monitoring system with both hang-off and touch-down zone measurements.

The system was configured with careful consideration to the analytically predicted riser response and was optimised to require the least number of monitoring devices whilst capturing the riser response at key locations along the riser length for Chevron's integrity management and R&D programs.

The monitoring system comprises of 10 INTEGRIPod motion measurement devices and 12 INTEGRISTICK dynamic curvature sensors divided between the riser hang-off and touch down zone.

Due to the challenges in successfully executing such a monitoring system, sufficient redundancy in the number of sensors and their locations was a key system design consideration.

2H is currently responsible for providing ongoing data processing support to meet Chevron's integrity management and research and development objectives.

Monitoring data is continuing to provide critical information on riser response, whilst confirming riser structural integrity and facilitating riser integrity management.

The data is also proving valuable for general understanding of riser behaviour and enhancement of design practices.

Since this system was installed, 2H Offshore's monitoring division has become its own Acteon operating company, Pulse Structural Monitoring.

Although both companies provide independent services, 2H and Pulse continue to work together on a project by project basis to supply complete monitoring solutions. 2H maintains responsibility for monitoring system design and data processing following installation.

Pulse is responsible for sensor integration, installation aid design, material procurement and fabrication, system installation and software supply.

They also provide ongoing hardware and troubleshooting support on an as-needed basis.



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