DIVERSIFIED PROJECT SERVICES INTERNATIONAL

6” and 10” Intrafield Pipelines “Smart Pig” Engineering Evaluation and Change of Service

Beta Offshore Production Complex, Long Beach, California

Client: Beta Offshore

The Beta Offshore Complex was constructed with three subsea pipelines connecting Platform Eureka with Platform Elly. A 12” and a 6” pipeline delivers produced fluids and produced natural gas from Eureka to Elly, and a 10” line delivers treated water from Elly back to Eureka.

In 1999, the 12” gross fluids line developed a leak and Platform Eureka’s production was shut down. After successful inspection of the 16” SPBPL which delivers dry crude from the Beta complex to shore, focus increased on determining the condition of the remaining 6” and 10” intrafield lines. After being idle on the sea floor for over eight years, the lines were inspected, repaired, and deemed fit-for-service allowing production from Platform Eureka to be brought back online. The 6” line was inspected with a magnetic flux leakage (MFL) smart pig and the 10” line was inspected with an Ultrasonic Thickness measurement (UT) tool. DPSI was the overall project manager for this project.

DPSI’s scope of work included:

- Design and management of improvements to platforms to enable launching and receiving the smart pigs and handling the gas and fluids
- Coordination of approvals from the BOEMRE for technical plans
- Development and management of the construction schedule
- Coordination with platform operations
- Line flushing, chemical cleaning, and launching of the smart pigs
- Review of technical data from both the UT and MFL tools
- Preparation and submittal of formal change of service applications, including MAOP calculations, leak detection, and corrosion inhibition and monitoring programs

The change of service applications were approved by the BOEMRE and both lines are currently delivering hydrocarbons from Eureka to Elly.