

LiquiGel Delivers Subsea Multi-diameter Solution

A GoM upstream operator engineered a pre-existing 22" gas pipeline and a pre-existing 8" oil pipeline for common use. This re-engineered scope eliminated CAPEX costs on installing a new pipeline and decommissioning costs on removing the in-service assets by utilizing in-place assets to achieve the new production requirements.

CHALLENGE

1. In-service pipelines required product evacuation and safe pigging solutions that mitigated all risks to internal pipeline integrity or mechanical pig failure.
2. Dewatering procedure for the new multi-diameter pipeline must not exceed a MAOP of 260 psi.
3. Water treatment solutions must comply with Department of Interior (DOI) regulatory standards.
4. Specified flowrate required a minimum 90% efficiency of seawater removal for the commissioning of gas product.
5. Commission the reconfigured multi-diameter pipeline using nitrogen while mitigating additional costs for mechanical pig launchers and receivers.

TECHNICAL ACHIEVEMENTS & BENEFITS

- LiquiGel Pig System transversed a multi-diameter pipeline surface while maintaining a proper seal and 100% dewatering efficiency in a single pass.
- Received the 22" LiquiGel Pig System through 2" ports, enabling the operator to forego the installation of traditional pig launcher and receiver types.
- Successfully mitigated the pipelines structural integrity limitations, never exceeding a system pressure of 160 psi.
- LiquiGel Pig System maintained a 100% seal during the dewatering phase for a 24-hour unplanned shutdown process.

LOCATION

Gulf of Mexico

SPECIFICATIONS

1. 8" x 6,228' Liquid Pipeline
2. 22" x 37,000' Gas Pipeline

SOLUTION

- **Phase 1: High volume/ low pressure seawater flush and water treatment solutions to evacuate pipeline product in preparation of subsea reconfiguration.**
- **Phase 2: Dewater the reconfigured multi-diameter pipeline with nitrogen and LiquiGel® Pig System for proper commissioning.**