



Case Study

Integrated Offshore Pipeline Abandonment and Re-direction Solution

Introduction

Intero supported Dana Petroleum Offshore with the abandonment, re-direction, testing, and dewatering of the P11-B Unity pipeline. The project involved safely disconnecting the existing pipeline from P12-SW and re-routing it to the P15-D platform, followed by full integrity verification of the new pipeline system.

Pipeline Details:

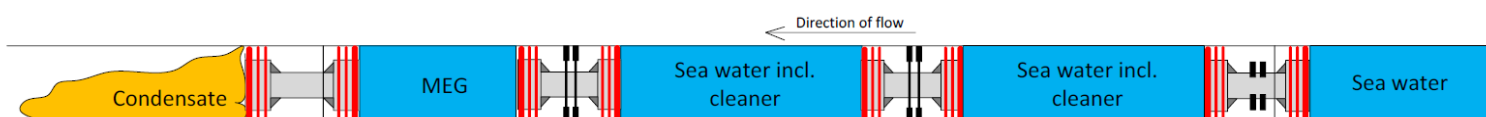
- Pipeline diameter: 8" pipeline with 10" riser
- Wall thickness: 12.7 mm and 15.9 mm
- Length (existing pipeline P11-B to P12-SW): 29 km
- Length (new pipeline P11-B to P15-D): 37.8 km
- Medium: Seawater / hydrocarbons
- Project period: June – July 2019 (three operational phases)

Scope of Work

We were responsible for the execution of the full offshore (de)commissioning scope for the P11-B Unity pipeline. This included the engineering, project management, and offshore execution of the cleaning, flooding, and abandonment of the existing pipeline between the P11-B and P12-SW platforms.

Following the re-direction of the pipeline to the P15-D platform, Intero performed a full integrity verification of the new pipeline system, including a 24-hour leak test at design pressure. Upon successful completion of the testing phase, the pipeline was dewatered using a multi-diameter pigging solution propelled by production gas.

Throughout the project, we provided all required equipment, in-house fabricated temporary installations, offshore personnel, and quality control, ensuring safe, efficient execution under challenging offshore conditions.



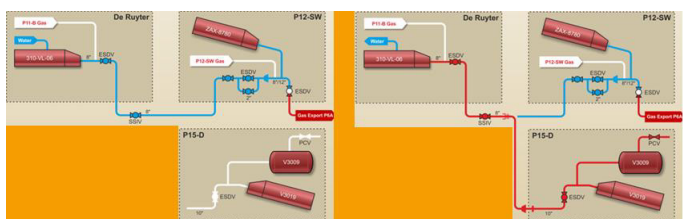
The Challenge

The project had to be executed under strict offshore constraints, including limited deck space on the unmanned P11-B platform and the absence of crane support during rig-up activities. Equipment handling therefore required lightweight, compact solutions.

At the same time, hydrocarbon discharge levels had to be tightly controlled during cleaning and flooding operations, while waste volumes and offshore handling were kept to a minimum. These challenges were compounded by the need to safely interface with multiple offshore assets within a limited operational window.

The Solution

To overcome these challenges, Intero Integrity engineered and delivered a tailored offshore solution. Lightweight temporary spool pieces and a compact pig trap were designed and fabricated in-house, allowing safe installation without crane support.



A dedicated water treatment and filtration system was deployed on P12-SW, enabling controlled discharge of flushing water while maintaining hydrocarbon levels below regulatory limits. Cleaning operations were executed using a carefully designed pig train, ensuring effective internal cleaning prior to flooding and abandonment.

Following re-direction to the P15-D platform, Intero performed a full pipeline leak test at 103 bar(g) with a 24-hour hold period, witnessed by the client and Bureau Veritas. After successful testing, the pipeline was dewatered using a multi-diameter BiDi pig propelled by production gas.

The cleaning sequence enabled the effective removal of hard scale deposits and resulted in a significant improvement in pipeline flow performance.

The Result

- Safe and compliant abandonment of the P11-B to P12-SW pipeline
- Successful leak testing and acceptance of the new 37.8 km pipeline
- Reduced offshore handling and waste volumes through smart filtration solutions
- Efficient execution despite limited space and lifting constraints

Advantages

- Dedicated in-house engineering expertise
- Flexible, solution-driven offshore execution
- Experienced, multi-skilled personnel
- In-house fabrication and certification capabilities
- Clear communication with all stakeholders throughout the project