

Production Enhancement Velocity String

Overview

Paradigm Flow Services a production & asset integrity solutions provider, has successfully completed installation of an in-riser velocity string using its Flexi-Coil® technology. Flexi-Coil's ability to navigate multiple bends from the platform down to the production riser via the pontoon allowed the velocity string to be hung-off at surface. Conventional techniques generally require direct vertical access, often below the water line, Flexi-Coil® eliminates the need for this subsea construction activity in the splash zone.

Challenges

- Production slugging
- High boarding pressure
- Platform weight limitations
- No direct vertical access
- Eight 5D bends to pass to gain access to production riser

Solution

Reduce the cross-sectional area in the riser by deploying a Flexi-Coil velocity string into the riser that has the capability to navigate multiple bends. Flexi-Coil Velocity is light weight having a multi-layer composite construction and even neutrally buoyant in seawater. This Flexi-Coil velocity string would be hung off at surface in a Paradigm design surface hanger.

Result

- Uplift to production due to reduced boarding pressure
- Slugging severity and frequency reduced
- Cost Reduction avoiding subsea construction
- Successful deployment of Velocity string
- Flexi-Coil velocity string deployment took 8 days

Value to Client

- Re-establish improved production rates
- Reduce production slugging
- Eliminate risk and cost associated with subsea/waterline construction
- No footprint impact to platform on completion (only hanger)
- Minimal weight increase to platform global loading



Flexi-Coil® Velocity string can be deployed through multiple surface pipework bends allowing access to the production riser without direct vertical access and hung off in a surface hanger.

Main Features / Benefits

- Navigating multiple bends / No Direct Access Required
- Production Uplift
- No Direct access Required / No subsea construction required
- Lightweight / Minimal additional weight to platform infrastructure

