

Tweedsmuir Development Subsea FEED

OIL

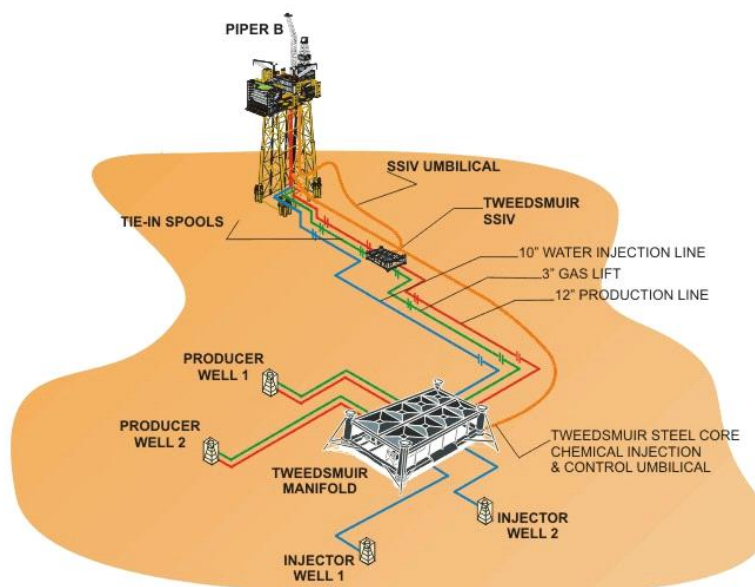
Talisman Energy

The Tweedsmuir (J1) field is located approximately 53km south of Piper and in a water depth of 134m. A single integrated production/ water injection manifold shall be installed at the drill centre location designed to accommodate up to 2 production wells and 3 water injection wells. Additionally, the manifold will support the tie-in of production from Tweedsmuir South plus a future field development. Each producing well will be supported by gas lift facilities in order to facilitate start-up operations, especially during the later stage of field life when water cuts are expected to be high. Currently, only one production and two water injection wells are planned to be drilled, with the second injector being located some 5.6km from the manifold and used to provide pressure support to the Tweedsmuir South reservoir.

Single 12" production, 10" water injection and 4" gas lift pipelines (plus a steel tube umbilical) will connect the Tweedsmuir manifold to the Piper 'B' platform. The production pipeline will be internally lined (or clad) with a suitable Corrosion Resistant Alloy (CRA) and will comprise a pipe-in-pipe arrangement. Provision of a subsea High Integrity Pressure Protection System (HIPPS) within the manifold shall also allow the production line to be rated to a design pressure lower than the maximum Closed In Tubing Head Pressure (CITHP). The carbon steel water injection pipelines shall be plastic lined to protect against internal corrosion.

The Tweedsmuir South (J5) field is located some 5km due south of Tweedsmuir. For this development, a single production manifold shall be installed at the drill centre location designed to accommodate up to 2 production wells (one initial plus one spare) and allow for the tie-in for a future field development. Tieback shall be directly to the Tweedsmuir manifold via a single 8" production pipeline, again comprising of a pipe-in-pipe arrangement. However, in this instance, the inner line will be constructed from solid super duplex and will be fully rated to the maximum CITHP. A 4" gas lift line (plus a steel tube umbilical) will also connect between the two manifolds.

Andrew Palmer & Associates have been awarded the Subsea Front End Engineering Design (FEED) for the Tweedsmuir Development.



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