Operations for Layflat Hose in Oilfield Water Applications

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Operations for Layflat Hose in Oilfield Water Applications

1 Scope

This document provides guidelines and establishes recommended practices for the operation of layflat hose used for the transportation of water associated with onshore upstream oil and gas operations, to prevent damage of layflat hose and damage of layflat hose assemblies. This document covers the transportation of formation water, injection water, brackish water, fresh water, and saline. The scope of this document excludes the initial and final connections of the layflat hose to the source and receiving points.

2 Normative References

There are no normative references in this document.

3 Terms and Definitions

For the purposes of this document, the following terms and definitions apply.

3.1
abnormal pressure
Pressure observed within the hose assembly system that falls outside the normal operating pressure ranges.

3.2
bend radius
The minimum bend radius one can bend a hose without kinking it, damaging it, or shortening its life.

NOTE At maximum allowable working pressure, a hose can be bent in a smaller radius without kinking than at lower pressures.

3.3
brackish water
Water classified as brackish by local jurisdiction based on its dissolved solids concentration.

3.4
catch point
A designated location where a pig will lodge or be caught after it has traveled its course and removed water from the hose assembly system.

NOTE This is also known as a “pig catcher.”

3.5
design pressure
The maximum expected pressure the hose assembly system will be exposed to along a route.

NOTE This pressure is based on the flow rate, fluid being transported, topography, hose diameter, equipment specifications, and other factors as determined by the hydraulic analysis.

3.6
fresh water
Water classified as fresh by local jurisdiction based on its dissolved solids concentration.

3.7
hose assembly
A length of layflat hose with attached couplers on both ends of the hose.