

True Successes

PureCorr™ Halts Pipeline Corrosion

Challenge

Results from an initial ILI on the client's 10" natural gas transmission pipeline in January 2018 showed internal corrosion scattered pitting, caused by corrosion. The pitting in the pipeline occurred at the 4,000 10,000 meter mark, mostly at the 4 to 8 o'clock position of the pipeline. A treatment plan was required to protect the existing pits from further growth and to prevent premature replacement/failure.

Solution

PureCorr was batched on a quarterly basis commencing in February 2018. PureCorr is a unique binary corrosion inhibitor designed for use in producing oil and gas wells, surface vessels and pipelines.

Formulated to work in both sweet and sour environments, PureCorr's micro-filming characteristics last up to four times as long as traditional amine inhibitors, resulting in reduced treatments while providing significant cost savings. It provides protection against atmospheric corrosion, oxygen, carbon dioxide, hydrogen sulfide gas, and organic acids. PureCorr's micro-film binds with the metals, becoming part of its matrix and eventually breaks down into erosion by products, therefore eliminating worries about deleterious effects on the formation or process equipment. It is resistant to chemicals, fines, and fluid velocities.

PureCorr Part B has a very high affinity for metal surfaces, and PureCorr Part A has a high affinity for Part B, which allows the product to penetrate through fluid and solids to film the surface area within the pits as well as the entire internal surface area of the pipeline.

A follow-up ILI was conducted in June 2018, in which results indicated a total of 296 metal loss features that were correlated to the January findings. The average metal loss change was -1.2% with the maximum change reported as 7.0%.

Benefit

The operation of this pipeline is now safer due to the corrosion being arrested, and the likelihood of a failure has been significantly reduced.

Area
Grande Prairie

Formation
Montney

Form of Lift
Sucker Rod Tubing Pump

PureChem Products
PureCorr

