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TITLE: Observations in the Assessment of Microbiologically Influenced Corrosion

By Stephen Loftus

ABSTRACT

The presence of microorganisms and their associated activity is increasingly recognised as a major concern in the oil and gas industry. Microbiological activity can adversely affect pipeline systems in a number of ways from biofouling causing operational problems to microbiologically influenced corrosion (MIC). MIC is the process by which corrosion is initiated and/or accelerated by the activities of microorganisms. Detecting microbiological activity from pipeline system samples (in deposits, scales, biofilms and fluids) is a critical initial step in evaluating the system risk of MIC. But how do we predict, assess and evaluate the risk of MIC in a pipeline system? This paper gives a review of different MIC modelling approaches and an overview of how we can successfully assess and evaluate the risk of MIC for pipeline systems.