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Model Modules to Assist Assessing and Controlling Stress Corrosion Cracking #126
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This project has developed results that reflect a much different understanding for high-pH SCC as compared to NN-pH SCC. For the high-pH scenario, the level of model development facilitates pipeline simulation, representing as needed the variability of conditions along a pipeline's RoW. The benefit of understanding developed and then modeled for high-pH SCC facilitates simulation of trends observed in the field, which in turn can be used in day to day integrity-management decisions. In contrast, the modeling for NN-pH situations is at the level of understanding the mechanisms that underlie the evolution of hydrogen that tends to drive this form of SCC, and the spectrum of environments plausible on pipelines such that one can infer from above ground the nature of the cracking processes affecting the serviceability of a pipeline.