

Public Page
A New Approach to Control Running Fracture in Pipelines #141
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During the second quarter, the investigation of empirical functions that can be quantified using data from full-scale running fracture test results continued. The form of the function currently being investigated gives the crack velocity as a function of the pipe size, the dynamic wall stress, the fracture toughness, flow stress, and the distance the crack has traveled. The function has been used with the pressure-velocity response of the gas used to pressurize the pipe, to estimate the propagation distance of a running crack. Sensitivity studies are being conducted to establish the influence of the various pipeline design and operating variables.