

Stress Tests in Unconventional Reservoirs - Value of Information or \$'s down the drain?

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Thursday, May 29, 2025, 9 a.m. Central Time



Bharath Rajappa is a Staff Completions Engineer for ConocoPhillips in the Gulf Coast and Rockies Business unit. The topic is "*Stress Tests in Unconventional Reservoirs - Value of Information or \$'s down the drain?*". His seminar will be at 9:00 a.m. Central time on Thursday, May 29, 2025

Abstract

As unconventional reservoirs in L48 (USA) have reached a point of saturation, stress tests in multiple layers covering the pay zone and bounding layers in a vertical monitor well are rarely performed these days. From a hydraulic fracturing perspective, these stress tests provide key reservoir-related parameters that aid in stimulation design. At the onset of early development in a shale play, exploration companies typically spend a lot of time, money, and effort in understanding critical reservoir parameters prior to full field development. How many monitor wells with stress tests are needed? or can results from just 1 well be taken as gospel and be applied in that field?

With many stakeholders involved, what form the criteria to accept/reject results and what process do we use to calibrate the analysis?

The presentation will review actual examples of stress tests performed in a few monitor wells taken from the unconventional portfolio spanning different shale plays. We will look at the challenges from an operational standpoint and rationalize if these tests provide any value or lead to more confusion. The aim of this talk is to engage in a healthy discussion with the audience on merits of these tests and pitfalls to watch out for.

Biography

Bharath Rajappa is a Staff Completions Engineer for ConocoPhillips in the Gulf Coast and Rockies Business unit. He has an MS in petroleum engineering from the Colorado School of Mines, and he has been in the industry since 2000, with the first 11 years at Baker Hughes Pressure Pumping in the Rockies and the remainder at ConocoPhillips with experience in the Global Completions Group, Bakken, and Permian assets.