

# Practical Applications of DFIT's in Unconventional Reservoirs: A Bakken Case Study

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**Thursday March 17, 2022, 9 a.m. Central Time**



Bharath Rajappa, a Staff Completions Engineer with ConocoPhillips in the Gulf Coast and Rockies Business unit - with current focus on EagleFord completions - will speak on Thursday March 17, 2022. The seminar will be at 9:00 Central Time.

The topic is “Practical Applications of DFIT's in Unconventional Reservoirs: A Bakken Case Study”.

## **Abstract**

Diagnostic Fracture Injection Tests (DFIT) have become the standard method for evaluating closure stress and reservoir parameters in unconventional plays. ConocoPhillips alone has performed over 50 DFIT's in Bakken Three Forks (BTF) wells since 2010. In the process, it has been determined that DFIT's conducted in down-spaced wells in the BTF play yield estimates of reservoir pressure that are often far less than the initial reservoir pressure - and sometimes sub-hydrostatic in wells that offset the parent well. Are these DFIT results reliable enough to aid in the design of treatments for infill wells and to guide in well-spacing decisions, or should they be heavily discounted due to inadequacies in the testing conditions? This presentation will highlight perplexing DFIT results and is intended to generate a spirited discussion amongst the attendees on the merits of DFIT's in unconventional plays.

## **Biography**

Bharath Rajappa is a Staff Completions Engineer with ConocoPhillips in the Gulf Coast and Rockies Business unit with focus on EagleFord completions. He has a MS in Petroleum Engineering from the Colorado School of Mines and 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 prior to his current role.