Diagnostic Fracture Injection Tests (DFIT’s) are pre-treatment pump-in tests commonly used to determine hydraulic fracturing and completion parameters such as closure pressure, fluid efficiency, fracture extension pressures, and fracture gradients. However, the additional data that such tests can acquire, including effective permeability, the presence of natural fractures, and reservoir pressure, can help in field development and reservoir characterization long after the completion stage is finished. Multiple DFIT’s taken in a field can help with determining various aspects about the reservoir in three dimensions and can be coupled with other data sources to further the understanding of the producing and surrounding intervals. These tests are only useful, though, if conducted correctly and analyzed with actual field conditions taken into consideration. This presentation will discuss the pumping of these tests and outline concerns that need to be considered during data acquisition and analysis. A focus will also be placed on how the results of DFIT’s can then be used for integrated, reservoir characterization settings.

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