

# Myths and Misunderstandings of Reservoir Engineering

Presented by:

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## ABSTRACT

Armed with a better fundamental understanding of reservoir dynamics, engineers and the geologists who work with them are better able to interpret and predict future behaviors.

This presentation takes aim at some of the most common and intransigent engineering fallacies - even among reservoir engineers. The wide-ranging discussion addresses concepts like drainage area maps, the concepts of depletion and interference and how they differ between millidarcy and nanodarcy reservoirs. It detours into tilted oil-water contacts before returning to the concepts of transient and boundary-dominated flow, the use of a constant b-factor, the utility of daily production data and how those relate to reserves categories.

## BIOGRAPHY



**Dwayne Purvis, P.E.** has spent over two decades in reservoir engineering and executive leadership as a consultant and operator. He has led or participated in hundreds of field studies and reserve analyses over dozens of basins in the United States and abroad. He has also participated in the sale or acquisition of projects valued from tens of thousands to billions of dollars. Before starting his own consulting practice in 2015, he served Jetta Operating Company as Reservoir Engineering Manager and Reserves Manager. Prior roles include founder and Executive Vice President of the consulting firm The Strickland Group, and partner at Cawley, Gillespie & Associates. Mr. Purvis has published on issues of reserves, risk analysis and shale reservoirs. He is a registered professional engineer in the state of Texas, member of SPEE, AAPG, SEG and a 25-year member of SPE.