Reservoir Fluid Properties – 2 Day Course

This two-day course addresses common problems encountered in sampling and characterizing reservoir fluids. A thorough presentation of methods to achieve the best characterization for bubble-point fluids and retrograde gases, with emphasis on common errors made, is included; recent developments (2017) are also elucidated. The roles of confinement and fracture intensity on apparent phase behavior are also discussed along with the impact on measured fluid properties. QA/QC techniques of lab data sets are presented. Finally, the science of Lean-Gas cycling for EOR in tight porous media is introduced and analyzed.

Course Outline:

1. Definitions of Fluid Types and Parameters Used to Describe Fluid Quality
2. Sampling Reservoir Fluids – oils, gas condensates and gases
3. Common errors in sampling and characterization
4. Tests Used to Describe Reservoir Fluid Parameters
5. Equation of State Constructs
6. Impact of sampling and characterization errors on PVT properties
7. Computation of fluid properties in confined conditions
8. Quality Control Checks for Lab experiments (Oils and Retrograde Gases)
9. Introduction to Gas-Cycling EOR in Liquid-Rich-Shales:
    i. Phase Behavior
    ii. IFT Effects
    iii. Mobility Ratio
    iv. Geological Properties
    v. Wettability
    vi. Gravity
10. Lab Tour to view relevant equipment and techniques for characterization and optimization

Instructor

Dr. F. Brent Thomas, P. Eng. was with Hycal Energy Research from 1981 until 2004 and has world-wide experience in reservoir performance and EOR. From 2004 until 2014 Brent was employed with Weatherford Laboratories as Director of Phase Behavior and EOR Research. Brent has taught courses on a variety of EOR topics, world-wide, over the last thirty years. He was a distinguished lecturer for SPE International (2003-2004) on the topic of Retrograde Reservoir Optimization. He has authored co-authored one hundred papers, two of which received the JCPT Best Paper Award. Brent was also a Distinguished Author for the JCPT. Currently, Brent is a consultant, working in the field of reservoir optimization including significant emphasis on LRS reservoir optimization.

The cost is $1,650.00 plus tax for the two-day course. Included are speaker notes, refreshments and lunches for the two days. The location will be the Weatherford Labs facility, 1620, 27th Ave., NE, Calgary. The course will start at 8:30 a.m. and finish at 4:00 p.m. daily with 30 minutes for lunch. The dates for this course are Wednesday and Thursday, January 17 and 18, 2018.

Please register at www.resopstrategies.com or contact Dr. Thomas at fbt@resopstrategies.com.