



EOR POTENTIAL EVALUATION USING SelectTEOR™

COURSE OUTLINE

1. PRIMARY RECOVERY

- Mechanism of oil recovery - solution gas drive, natural water drive and gas cap
- Estimation of current oil saturation
- Solution and producing GOR. Producing GOR equation
- Predicting solution gas drive. Discussion
- Performance of gas drive regime in different conditions. Heavy oil reservoirs, fractured reservoirs, etc

2. FUNDAMENTALS OF EOR

- Mechanisms of EOR methods; mobility ratio importance
- Waterflooding; Buckley-Leverett method
- Effect of heterogeneity
- Effect of gravity segregation

3. EOR SCREENING CRITERIA

- Goal of the screening criteria
- Limitations
- Discussion regarding different sets of screening criteria
- screening criteria
- Software for screening reservoirs for EOR application

4. LABORATORY TESTING OF EOR METHODS

- Polymer injection: resistance factor, residual resistance factor, screen factor, etc
- Gas miscible displacement: MMP, MMC, corefloodings, etc.
- Steam injection: oil viscosity reduction with temperature, residual oil saturation for steam flooding
- In-situ combustion: fuel deposition, air requirement, oxydability of oil, etc.

5. SelectEOR SOFTWARE FOR EOR PERFORMANCE PREDICTIONS

- Detailed presentation of SelectEOR
- The main points of technical documentation (prediction methods): polymer, gas miscible and immiscible, steam injection and in-situ combustion
- Demonstration for selected reservoirs

6. Hands-on with students

- Application for 2-3 reservoirs - light and heavy oil cases