Assessment and Mitigation of Reservoir Formation Damage

1.6 CEUs (Continuing Education Units) awarded for this 2-day course.

Instructor

Civan Faruk, University of Oklahoma

Intended Audience

This is an interdisciplinary course. Various professionals interested or involved in formation damage detection and control, including geologists, geochemists, geophysicists, chemists, biologists, engineers, laboratory technicians, and field operators may benefit from this course. Several years of experience with petroleum production and/or subsurface water and fluid handling would be helpful.

Description

This course presents the fundamentals of integrated reservoir management involving goal setting, planning, implementing, monitoring, evaluating, and revising unworkable plans. Requirements for successful operation of a reservoir throughout its life will be emphasized through integration (merging people, technology, tools and data), synergy (multidisciplinary professionals working as a well-coordinated team), and support (company culture and organization removing barriers and fostering teamwork and integration).

Topics Covered

- Overview of formation damage problems
- Depositional environment and mineral sensitivity
- Alteration of formation characteristics by formation damage
- Fines migration and kinetics
- Single-phase formation damage
- Multi-phase formation damage
- Inorganic scaling
- Organic scaling
- Laboratory core testing and interpretation
- Simulation fundamentals
- Reservoir formation damage
- Field case studies
- Exercise problems

About the Instructor

Civan Faruk is an Alumni Chair Professor and Brian and Sandra O'Brien Presidential Professor, and the Liaison of the Natural Gas Engineering and Management program in the Melbourne School of Petroleum and Geological Engineering at the U. of Oklahoma. He is the author of *Reservoir Formation Damage - Fundamentals, Modeling, Assessment, and Mitigation*, has published more than 170 technical articles in journals and conference proceedings, and has presented 74 seminars and lectures at various technical meetings, companies and universities. He holds an advanced degree from the Technical U. of Istanbul, an MS degree from the U. of Texas, and a PhD degree from the U. of Oklahoma, all in chemical engineering. Faruk has received 17 honors and awards, including five distinguished lectureship awards and the 2003 SPE Distinguished Achievement Award for Petroleum Engineering Faculty.