Introduction to Heavy-Oil Recovery Processes

Duration
Two classroom days providing 1.6 CEU (Continuing Education Credits) or 16 PDH (Professional Development Hours)

Summary
This two-day course provides technical professionals with an overview of current upstream heavy-oil production technologies and introduces new upstream production technologies that have been developed in the last several years. Technology screening guidelines will be outlined and informative assessments of the various approaches will be provided.

Who Should Attend
Anyone involved in heavy oil and bitumen recovery would find this course educational and instructional, but it is of particular interest to:
- reservoir engineers, geologists, geophysicists
- site personnel, engineering managers, facilities engineers
- environmentalists, regulators

This course presents “upstream” aspects of heavy-oil recovery processes, i.e. everything underground, and does not address “downstream” aspects such as facilities design, piping, distribution, and upgrading/refining.

Course Agenda

Day One
1. Introduction - Outline
2. Our World and Heavy Oil
3. Geomechanics Basics
4. Overview of Processes
5. Cold Production (no sand)
6. Sand Control and Sand Management
7. CHOPS (Cold Heavy-Oil Production with Sand)
8. Massive Sand Production Mechanics
9. Implementation and Workovers
10. Horizontal or Vertical Cold Wells?

Day Two
1. Flooding
2. Steam-Assisted Gravity Drainage (SAGD)
3. Cyclic Steam Stimulation (CSS)
4. Solvents
5. In Situ Combustion (ISC)
6. Pressure Pulsing
7. ElectroMagnetics (EM)
Instructor
Patrick Collins is the president of Petroleum Geomechanics Inc. based in Calgary, Alberta, with engineering degrees from the University of Toronto and the University of Alberta. He has 35 years' experience in heavy oil, oil sands, SAGD, CSS, CHOPS, and in geomechanics related to drilling and completions, wellbore stability, cap rock integrity, minifrac analysis, rock stress analysis, formation overpressures, hydraulic fracturing, and sanding. Patrick consults internationally in heavy oil recovery and geomechanics, and is an expert witness in thermal recovery and geomechanics. He is a member of SPE, AAPG, CWLS, CSPG, CHOA, and APEGA.

Course Dates
Please visit the course details webpage for currently scheduled course dates.

Available for In-House Group Delivery
This course is available for In-House Training and the content can be customized to suit the needs of your organization. For more information or to request a proposal, please email inhouserequests@peice.com or call 713-482-3858 (USA), 403-284-1250 (Canada) or 011 44 20 7280 3333 (International).