SPE Training Courses

Sunday, 25 September 2011

0800-1630 hours

TRANSIENT WELL TESTING

Bahrain International Exhibition and Convention Centre

Room 3

Course Description

This course is designed to teach the state-of-art for design and interpretation of pressure transient testing through hands-on examples and exercises from oil and gas fields. The course describes:

1. The detailed process from well testing selection and design to data acquisition, validation and interpretations for different types of reservoirs.

2. Information about the latest developments in Pressure Transient Analysis like testing under multiphase flow conditions, layered reservoirs, and numerical analysis.

Problems will be solved using Saphir software. Participants should bring their laptop computers with them. For those who don't already have the software, a temporary free download of the software and license will be provided.

Who Should Attend

Production and reservoir engineers and earth scientists involved in well and formation characterisation and reservoir surveillance.

Instructor

Medhat Kamal

Chevron Energy Technology Company

Medhat (Med) M. Kamal is a Senior Research Consultant and leader of the dynamic reservoir characterisation group with Chevron Energy Technology Company in San Ramon, California. Kamal has more than 35 years of industry experience in well testing, reservoir description, and production and reservoir engineering. He is the author of multiple technical articles in SPE journals and has served as a technical editor, review chairman and executive editor of SPE reservoir engineering and evaluation. Kamal is the editor and lead author of SPE Monograph 23 Transient Well Testing. He is a past SPE distinguished lecturer and winner of many society awards, including the Cedric K. Ferguson Medal, the SPE Distinguished Service award, and the Texas Petroleum Engineer of the year award. He has served on and chaired multiple SPE committees, including the text book and monograph committees, the first SPE board committee on R&D and the first SPE R&D conference. Kamal holds a BS degree from Cairo University and MS and PhD degrees from Stanford University all in petroleum engineering. He has served on the SPE board of directors as the regional director of the Western North America region.

SPE Training Courses *continued*

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Room 4

WATERFLOODING CONCEPTS, DESIGN PREDICTION AND OPTIMISATION

Course Description

The art and science of waterflood management is an optimisation process. There are opportunities for the field engineer to improve well placement, well completion, and voidage/replacement management and the use of additives for stretching ultimate recovery. As such, critical factors and diagnostic procedures are discussed before initiation and during the flood.

The course includes an overview of critical characteristics of petroleum reservoirs and injection fluids affecting the success of waterfloods. Then various sources of data and measurement techniques and their cost effectiveness are scrutinised. Simple procedures for the analysis of waterflood performance data using specific diagnostic plots are examined with examples from actual waterfloods. Short cut prediction techniques are reviewed. Chemical methods for enhancement of waterfloods are discussed. Hands-on class exercises focusing on trouble shooting methods related to causes originating from reservoir, wellbore and/ or surface facilities are included.

Who Should Attend

Reservoir engineers, geologists, production engineers. Asset managers can benefit from this course.

Instructor

Iraj Ershaghi

Univeristy of Southern California

Dr. Ershaghi is the Omar B. Milligan Professor and Director of the Petroleum Engineering Programme at USC. He is also serving as the USC Executive Director of the centre for Smart Oilfield Technologies at USC. He has a B.S. degree in petroleum engineering from University of Tehran and an M.S. and a Ph.D. in petroleum engineering from USC. Prior to joining the faculty at USC in 1972, he worked for AGIP-SIRIP, Signal oil and gas company and California State Lands Commission. His areas of research and publications are reservoir characterisation, well testing and improved recovery processes. As a registered engineer, he has also served as a consultant on projects with Texaco, Aera, Unocal, Tenneco, Venoco, McFarland Energy, National Bureau of Standards, Pall Well Technology, Tidelands Oil Production Company, Santa Fe Energy, Southern California Gas Company, Pacific Offshore Operators, Minerals Management Service of the U.S. Department of Interior and the U.S. Department of Justice. He has also served as a consultant to Petrovietnam and Indonesia PERTAMINA and State of California. During 1996-2006, he served as Director of the U. S. Department of Energy West Coast Petroleum Technology Transfer Council mentoring small independent producers in California. He has been the recipient of SPE's Distinguished Faculty award, Distinguished Member award, Western North America Distinguished Service award, Technology Transfer Award for Development of the Smart Oilfield Technology Curriculum and Western Regional North America Reservoir Description and Dynamics award. As a fellow of Institute for Advancement of Engineering, he received the Outstanding Educator award of American Association for Advancement of Engineering and the Outstanding Educator award of Orange County Council of Engineers and Scientists. He served as SPE's Distinguished Lecturer during 2006-2007.