



SPE International Symposium & Exhibition on Formation Damage Control SHORT COURSES

ONE-DAY COURSES

Completion Design Monday, 11 February 2008

Description:

This course has a goal of starting with a blank sheet of paper and generating an initial well design by the end of the day. Well hardware including casing, cement, tubing, packer, profiles, wellheads, and chokes are introduced and brought into the design with explanations of how each functions in the performance of the well. References are provided for more complete explanation.

George King, BP

Oilfield Metallurgy and Corrosion Monday, 11 February 2008

Description:

This course will cover the wide range of alloys used for various equipment in oil and gas production. Historically, steels and some stainless steels have been adequate to meet the demands for petroleum equipment but with the higher temperatures and pressures from which oil and gas are increasingly produced coupled with higher concentrations of H₂S and CO₂, more corrosion resistant alloys (CRAs) are required. The seminar will begin with an introduction to metallurgy followed by the fundamentals of corrosion in order to provide a foundation for discussions during the remainder of the day on corrosion from CO₂ and H₂S, the general requirements of MR0175/ISO 15156 and the primary reasons for selecting many of the alloys that are used in upstream environments. Finally, a brief discussion of environments other than producing environments (ie, acidizing and completion fluids) will be presented and how these environments affect alloys.

Bruce Craig, MetCorr

Perforating for Productivity Monday, 11 February 2008

Description:

This course covers the basics of how shaped charges work and are designed, explosives safety, time temperature considerations, perforating for sand control, dynamic underbalance, wireline perforating and depth correlations, tubing conveyed systems, novel gun

systems, API RP19B (it's uses and its limitations), perforating for flow, and good questions to ask.

Phil Snider, Marathon Oil Company

Horizontal Completions Tuesday, 12 February 2008

Description:

This course starts with a blank sheet of paper and builds the horizontal well design on reservoir candidate selection, placement options, construction principles, damage and cleanup, production operations, repair and expectations from a horizontal. Successful and failed horizontal wells and entire projects are used for examples. The student should complete the course with a clear idea of the elements of horizontal well design and the expectations of horizontal well performance.

George King, BP

Sand Control using FracPack Completion Technology Tuesday, 12 February 2008

Description:

This course is for both the novice and the experienced practitioner. It will start with demonstrating why fracpack technology has become so popular as a sand control method. This will include defining some basic terminology associated with the technology. Then cover basic information needed for designing and planning the execution of a fracpack sand control completion. It will also cover some selected topics regarding the technology regarding the execution issues and evaluation of the installed completion. These include the definition of an execution scorecard and using this scorecard to define operating limits.

David Norman, Chevron

Monday and Tuesday short course breakfast and lunch meals and Nodal Course sponsored by Altec.





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TWO-DAY COURSES

Completion Fluids – Technology and Application Monday and Tuesday, 11-12 February 2008

Description:

This course is intended for those who select or employ clear brine fluids for completion or workover operations. It instructs the participant in the selection of completion fluids and emphasizes their proper application on the rig, including displacements, fluid-loss control pills, additives, filtration and corrosion. Current technologies and practices are discussed in detail in addition to environmental, health and safety, formation damage, and drill-in fluids.

William “Bill” Foxenberg, M-I Swaco

Hydraulic Fracturing / Pressure Analysis Monday and Tuesday, 11-12 February 2008

Description:

This course presents the fundamentals of fracturing pressure analysis. This includes design parameters that can be determined, uses and limitations of such analysis for on-site design, and field examples. Some of the topics include in situ stresses, fracture geometry, closure pressure determination, bottomhole treating pressure interpretation, pressure decline analysis, fluid efficiency, fluid loss coefficient, pressure vs. fracture height growth - stress profile, proppant/fluid scheduling from pressure decline data. Practical sessions include real world examples from a variety of environments, from “tight” gas to high permeability, offshore, “frac-pack” treatments. **Students are requested to bring a laptop to compliment the course material with associated course software.**

Mike Smith, NSI Technologies

A Background to Inorganic Scaling - Mechanisms, Formation and Control Monday and Tuesday, 11-12 February 2008

Description:

This course, designed as an overview to inorganic scaling, summarizes the different types of oilfield scales encountered and the various methods used for their control. The basic mechanisms involved in scale formation, its prediction and inhibition will be introduced. The influence of varying production conditions on its successful mitigation will then be described. Scale

management in both conventional and complex production scenarios including deepwater, subsea and HPHT production environments will be examined in detail with respect to the economic impact of various treatment options and the potential for formation damage. Field examples will be included throughout the course.

Gordon Graham, Scaled Solutions Ltd., UK

An Overview of Well Stimulation Monday and Tuesday, 11-12 February 2008

Description:

This course explores the various reasons for improving well productivity and provides information concerning the strengths and limitations of current methods of well stimulation. Guidelines as to when to consider matrix acidizing compared to hydraulic fracturing (proppant fracturing or acid fracturing) will be provided, and several stimulation techniques (waterfracs, frac packing, acid fracturing, e.g.) will be discussed in detail.

Alfred Jennings, Jr., PE, Enhanced Well Stimulation, Inc.

Formation Damage Prevention Monday and Tuesday, 11-12 February 2008

Description:

This course broadly defines formation damage, its causes, effects and when it occurs, in petroleum engineering and practical field terms, and discusses measuring the magnitude and extent of formation damage around a wellbore. Then it concentrates on various ways formation damage occurs, and means of preventing or bypassing damage during drilling, cementing, perforating and operations where completion, workover or drill-in fluids are used in vertical, high angle or horizontal wellbores.

Derry Sparlin, Consultant, ICCI

Sand Control Monday and Tuesday, 11-12 February 2008

Description:

This course will present an overview of the parameters that must be considered in selecting the best sand control completion method. The course will specifically cover available sand control techniques, factors affecting sand



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control method selection, factors affecting production losses in sand control treatments, cased hole gravel packs, open hole gravel packs, expandable screens applications, and fracpacking. The course will also summarize the necessary quality control checks during the sand control completion to help insure successful wells.

Howard McKinzie, Consultant

Nodal Analysis

Monday and Tuesday, 11-12 February 2008

Description:

This course will cover the producing well system, how nodal analysis works, inflow performance, multiphase flow overview, completion models (perforations, gravel packs), perforated well examples (oil and gas), gravel packed well examples (oil and gas), fractured well examples (oil and gas), general review and summary, and questions and answers. **Students are requested to bring a laptop to compliment the course material with associated course software.**

Carl Granger, Consultant



Monday and Tuesday short course breakfast and lunch meals and Nodal Course sponsored by Altec.

