

Subsurface Technical Fundamentals

Designed for:

The course is aimed at technical professionals in petroleum engineering, well engineering and geoscience early in their careers, and is intended as a grounding in the fundamentals of their disciplines, either as an introduction to a graduate induction programme, or as a consolidation event at programme close.

Duration (days)



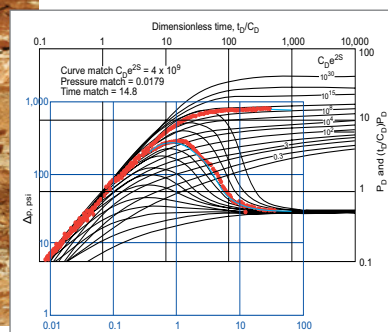
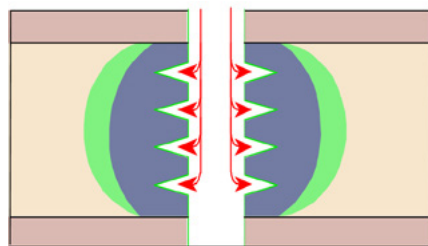
Learning Level:

Skills		
Knowledge		
Awareness		

What should every technical professional working in the subsurface disciplines really know?

New entrants to E&P are exposed to a large amount of technical information, some for awareness, some for deeper knowledge and some for the development of specialist skills. From this wealth of information, this event distils the technical fundamentals everyone should know in order to perform effectively in an integrated as set team. The material is intentionally compiled under the cross-discipline themes of resource, rate and recovery to avoid the event simply repeating information from 'Intro to ...' courses; instead the event specifically emphasises the linkage between disciplines – how the specific technical pieces fit together to deliver an end result for the business.

The event is run 'Open Air', combining field and class sessions, and can optionally be prefaced by a generic team-based e-Learning module designed to identify knowledge gaps in the delegate group. To date the event has been mapped onto analogue field areas in the UK, Oman and Argentina, in each case incorporating client data from the subsurface to reflect the working environment of the group. The event is portable, in principle, to any client geography, and the case material can be re-tailored to any client dataset, or can make use of generic TRACS case material.



Early Development Business & Risk
E&P Overview Open Air
Reservoir Coaching
Wells Master Class



Subsurface Technical Fundamentals continued



Course Content:

Resource

- defining the resource container
- defining contacts
- understanding pressures and fluids
- reservoir and fluid properties
- volumes and uncertainty

Rate

- reservoir and well performance
- evaluating depletion
- understanding displacement
- well testing

Recovery

- the impact of heterogeneity
- analytical solutions to reservoir performance
- using models and simulations
- the forecast
- flow assurance
- well integrity
- surveillance and intervention

Course Duration:

Duration is 5 or 10 days depending on desired extent of content.

Courses available from this series:

Graduate Foundation Training
Subsurface Technical Fundamentals
Production and Operations Training

Course Tutors



Mark Bentley PhD

Main Series tutoring: Reservoir, E&P Overview, Open Air and Master Class

Industry experience: over 30 years, geoscience

Career background: Shell, AGR and TRACS

Personal: Author 'Reservoir Model Design', SPE and EAGE distinguished lecturer, AGR (Training Director), TRACS Training Director, Associate Professor Heriot-Watt University



Mark Bramwell BSc, PhD

Main Series tutoring: Reservoir, Early Development, E&P Overview, Open Air

Industry experience: over 35 years, geoscience

Career background: Shell, KUFPEC, AGR and TRACS

Personal: Programme manager for the Early Development Series



Mark Cook BSc, MBA

Main Series tutoring: Early Development, Business & Risk, Reservoir Engineering

Industry experience: over 40 years, reservoir engineering, economics and risk analysis

Career background: Shell, TRACS (Director) and AGR (VP)

Personal: Author, 'Author, 'Petroleum Economics and Risk Analysis' (2021) 'Hydrocarbon Exploration and Production' (2008) SPE distinguished lecturer on Risk Analysis, Guest lecturer at Heriot Watt University



Richard Oxlade MEng, CEng, BSc

Main Series tutoring: Reservoir, Early Development, Master Class (business)

Industry experience: over 40 years, commercial, reservoir engineering

Career background: BP, AGR and TRACS

Personal: Global advisor, business planning & economic analysis