

Applied Production Geology

Designed for:

The course is aimed at petroleum engineers early in their industry careers who require a firm grounding in the technical fundamentals of production geoscience as they apply to operations.

Duration
(days)



Learning Level:

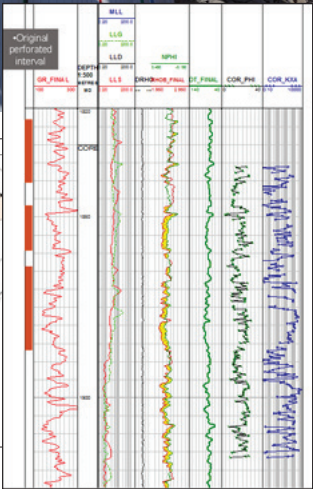
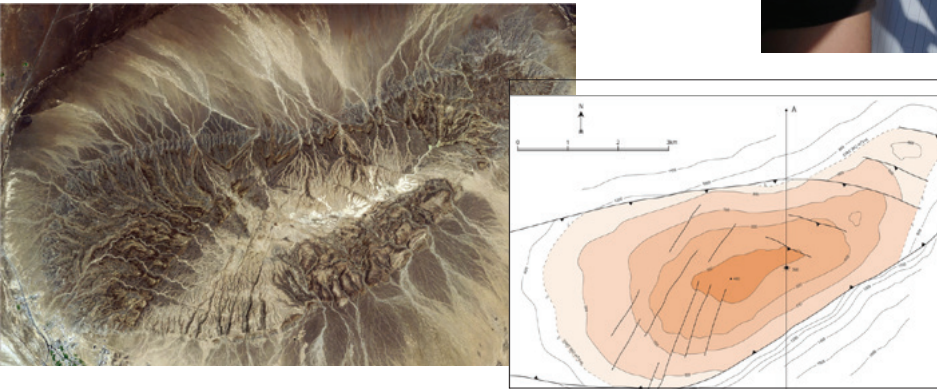


This course has been built specifically for the Middle East and uses field data from Natih and Gharif reservoirs, mapped on to analogue outcrops around Nizwa and core material at Muscat.

The course illustrates the linkage between geological interpretations and the petroleum engineering end-products they feed into. The standard production geological tasks of mapping, reservoir characterisation (both matrix and fractures), correlation, log interpretation, hydrocarbon distribution and volumetrics are combined with an analysis of risk and uncertainty. Running the event partly 'Open Air™' allows the crucial aspect of scale to be incorporated.

The course makes use of the 'Madmar Field' case study as a red thread. Madmar is a synthetic oil and gas field case scaled to the outcrops near Nizwa and populated with data from Natih and Gharif producing reservoirs.

The objective is for petroleum engineers who have had basic training in geoscience to take that knowledge out in to the field, consolidate what they know and build on it. Attendees should come out of the event with a clear view of the component parts of production geoscience work, and first-hand experience of how geoscience work impacts on the other petroleum engineering disciplines.



Early Development
E&P Overview
Reservoir
Wells

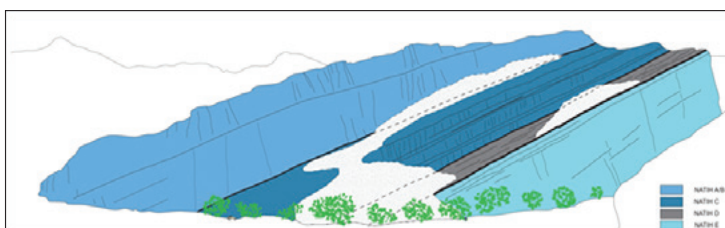
Business & Risk
Open Air
Coaching
Master Class



Applied Production Geology continued

Course Content:

- Carbonate reservoir characterisation
- Clastic reservoir characterisation
- Framework mapping
- Reservoir heterogeneity
- Interpreting core
- Interpreting logs
- Rock properties, data and scale
- Properties of fracture systems
- Understanding saturation-height
- Volumetrics
- Handling uncertainty
- Production geoscience deliverables



Logistics

Golden Tulip Hotel, Nizwa (3 days) and
Intercontinental Hotel, Muscat (2 days)

Course Duration:

Duration is 5 days.

Courses available from this series:

Basic Geoscience
Introduction to Geophysics
Geological Application of Well Logs
Openhole Petrophysical Interpretation
Core Description
Production Geology
Applied Production Geology
Reservoir Model Design
Fractured Reservoir Characterisation
Geology for Drilling Engineers
Reservoir Engineering
Applied Reservoir Engineering
Well Test Design & Analysis
Logging While Drilling
Basin Analysis
Geomechanics

Course Tutors



Mark Bentley PhD

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

Industry experience: over 25 years, geoscience

Career background: Shell, AGR and TRACS

Personal: Author 'Reservoir Model Design', SPE and EAGE distinguished lecturer, AGR & TRACS Training director, associate professor Heriot-Watt University



John Howell PhD

Main Series tutoring: Reservoir, Open Air

Industry experience: over 25 years, geoscience

Career background: Gaps, University of Liverpool, University of Bergen, Rocksource ASA

Personal: Published over 100 scientific articles and edited three books