



Operations Geology - OG

COURSE

About the Course

At the end of this integrated course, participants will be able to contribute effectively to the preparation of planned wells and their concurrent operations during the exploration, appraisal, and development phases. As geoscientists, petroleum engineers, well engineers, and production technologists are increasingly assembled in asset, project, or operational teams they must not only understand each other in technical matters, but should also contribute to each other's efforts in these aspects: a driller should know why it is important to cut a core or log a particular interval despite potential drilling problems, and geoscientists should understand drilling operations and their inherent hazards and problems. All should be able to understand and prepare daily drilling reports with a full appreciation of the various subjects. Cuttings, cores, logs, and well tests should be analyzed, cross-correlated, and compiled to mesh with prognoses and existing data to effectively manage the impact on the field development plan. Correct procedures in tendering and contracting should be followed to minimize the duration of the operations and to maximize the quality of the operations services provided. Understanding of all operations should greatly improve the effectiveness of the Operations Geologist.

Note: A basic knowledge of geology and/or petroleum geology is advisable if not required to fully appreciate the course contents.

Target Audience

All geoscientists, petroleum engineers, well engineers, and technical personnel, who in the course of their career will attend or direct subsurface and wellsite operations.

You Will Learn

Participants will learn how to:

- Plan and prepare for a drilling location and for geological services
- Identify drilling operations and geological drilling hazards
- Understand and apply logging services
- Understand well testing services
- Evaluate drilling reports
- Describe drilling cuttings and cores
- Evaluate the impact on the field development plan
- Prepare and compile operations reports

Course Content

- Petroleum geology and its systems
- Operations geology: prospect to well planning, provision of geological services
- Wellsite geology: geological sampling, sample analysis, and well stratigraphy, cutting, and core description
- Structural geology: fractures, faults, borehole geology
- Drilling Operations: bits, fluids, casing and cement, drilling problems and well control, directional drilling, geosteering
- Logging operations: acquisition, tools, quick look interpretation, MWD/LWD, geosteering
- Well testing & fluids: reservoir properties, rock and fluid interaction, permeability, averaging, data gathering and interpretation
- Impact on FDP: case histories
- Tendering and contracting
- Reporting: geological data, petrophysical data, pressure data
- Exercises: cores, cuttings, quick look, pressures, daily drilling report

Product Details

Categories: [Upstream](#)

Disciplines: [Geology](#) [Petrophysics](#)

Levels: [Intermediate](#)

Product Type: [Course](#)

Formats Available: [In-Classroom](#)

Instructors: [Jeff Webber](#) [PetroSkills Specialist](#)