

Training Course:

Horizontal and Extended-Reach Drilling Engineering & Operations Course

Class Size: limited to 10 participants

Duration: 5 days (40 training hours)



Course Overview:

This course provides a comprehensive overview of the principles and best practices for planning and executing challenging wells, including extended-reach (ERD), complex 3D and horizontal wells, as well as J-shape and S-shape well profiles.

The program is designed for drilling and completion engineers, drilling supervisors, well planning engineers, engineering managers, and technical specialists responsible for drilling operations, engineering support, and project execution within operating and drilling contractor organizations.

Course Agenda:

Day 1

- Introduction to complex wells
- Classification of the complex wells, including extended-reach (ERD), 3D, J-shape, and S-shape wells
- Planning and drilling considerations for extended-reach wells
- Preliminary well design and planning
- Torque and Drag fundamentals

Day 2

- Torque and Drag fundamentals (continued)
- Hole Cleaning
- Tripping and backreaming

Day 3

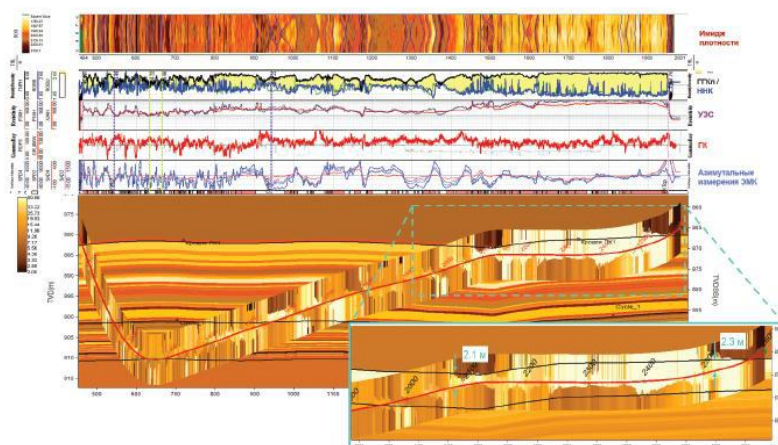
- Tripping and backreaming (continued)
- Drilling hydraulics
- Equivalent Circulating Density (ECD) management
- Surge and Swab management
- Connection practices optimization
- Casing and drill pipe wear

Day 4

- Fundamentals of wellbore stability (geomechanics)
- Wellbore condition monitoring
- Differential sticking
- Torque and Drag modelling

Day 5

- Running casing and liners
- Cementing operations
- Case studies demonstrating an integrated approach to high-angle drilling
- Course summary and conclusions



Target audience:

- Drilling, Completion, and Well Planning Engineers
 - Drilling Supervisors
 - Engineering Managers
- Technical specialists from operating companies and drilling contractors