



«APPLIED WELL TEST DESIGN AND ANALYSIS (OIL)», 5 days

COURSE OBJECTIVE:

- Improvement of professional competencies of petroleum engineers,
- quality increase of hydrodynamic well testing, information support, prompt supervising of field development,
- cost cutting for inefficient sampling and testing with use of Saphir (KAPPA)/ Pan System (Weatherford) software for building of established models of oil and gas reservoirs.

ACQUIRED ABILITIES:

- specify optimal testing solutions for field tasks;
- plan priority and duration of well testing;
- implement interpretation of study in terms of uncertainties;
- apply testing results for well intervention planning and field development modeling with account for its validity.

COURSE CONTENT:

Module Name	Content
Theory of well test data interpretation	Darcy's equation, stationary filtering, skin factor. Diffusivity equation, non-stationary filtering. Well testing scale. Testing of flow pattern, well and formation models.
Practice of well testing interpretation in terms of restraining	Forms of well testing, method and technology. Input and output well test data, interpretation process. Analysis of process and features of interpretation based on case studies.
Modern forms of study	Production history analysis as a mean for expansion of traditional well testing tools. Principles, tools and information content of different forms of well interference testing. Interpretation of long-term pressure records on basis of deconvolutional technology.
Post processing of interpretation results. Well test design approaches	Results validity assessment. Well testing in terms of two-phase flow. Determination of methods and technics, study planning according to objectives and tasks.