



Production Logging

MODULE

About the Skill Module

Experience indicates that surface fluid measurements are not adequate enough to describe the efficiency of the downhole production system. In new completions, production logging services are used both to ensure optimum ultimate recovery and to investigate production problems brought to light by surface performance. In older wells, the logs aid in identifying mechanical issues and thus assist in planning remedial work for declining producers. If properly planned and executed, production logging is an intrusive measurement method which will help to diagnose the health of producer or injector wells.

This module describes the principles of wireline-run cased hole logging tools. Included in the family of production logging devices are flowmeters, high-resolution thermometers, gradiomanometers, and through-tubing calipers. To evaluate downhole flowrates, these instruments enable recording of hole sizes, temperature and flow rate profiles. Accurate depth control is ensured by gamma ray logs and counting casing collars.

It is recommended that the learner have previous knowledge of basic Inflow and outflow concepts, fluid behavior and completion downhole equipment.

Target Audience

Petroleum engineers, production operations staff, reservoir engineers, facilities staff, drilling and completion engineers, geologists, field supervisors and managers, field technicians, service company engineers and managers, and especially engineers starting a work assignment in production engineering and operations or other engineers seeking a well-rounded foundation in production engineering.

You Will Learn

- The principles of cased-hole evaluation tools
- The typical applications and justification for running cased-hole evaluation tools
- The conveyance methods for running cased-hole evaluation tools in the field
- The principles of wireline-run cased hole evaluation tools
- The principles and operation of:
- The logging tools associated with flowmeter tools
- The principles and operation of:
 - The basic temperature logs
 - Basic radioactive tracer logs

- Basic spinner flowmeter logs
- The gradiomanometer log
- The performance of cased hole logs in single phase flow
- The advantages of running multiple tools within a Production Combination Tool
- The added value of running a downhole video log in addition to production logs

Product Details

Categories: Upstream

Disciplines: Production and Completions Engineering Petrophysics

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 3 hours (approx.)

\$395.00