# Compact™ Tools and Formation Tester (MFT)

## Navigate Washouts and Deviation, Detect Additional Oil and Gas Targets, Inform Production Strategy

The slim, self-centering Compact formation pressure tester reduced the risk of sticking in a deviated hole with washouts.

### Objectives

- Determine the fluid mobility and formation pressure gradient in the 8 1/2-in. section of a development well. The primary target—a Plio-Pleistocene layered sandstone—had coarsening and fining upward-channel deposition.
- Minimize the risk of stuck tools. Because of washouts and a 43.9° deviation, the client anticipated sticking issues with standard equipment.
- Provide real-time field data during the operation, followed by a formal interpretation and analysis at project close.

### Our Approach

- Following a thorough pre-job analysis, a Weatherford wireline team recommended using Compact wireline tools and the Compact formation pressure tester (MFT). The tools provide accurate formation measurements and can pass through restrictions as small as 3 in. (76 mm).
- For the first three runs, the team deployed a tool string with Compact photo density, dual neutron, and gamma ray tools. Each run measured the targeted section of the well without sticking or tool failure.
- For the fourth run, the team ran the MFT tool, collected 70 pressure point samples without sticking, and achieved a collection success rate of greater than 98%.
- The operation was completed in 24 hours with zero nonproductive time.

### Value to Client

- Weatherford wireline services acquired real-time formation test data for the 8 1/2-in. section of a development well. The data provided a detailed map that informed well perforation and production strategy.
- Analysis by Weatherford interpretation and evaluation services identified several secondary targets for both oil and gas zones and characterized the anticipated oil targets. These new targets gave additional options in the production strategy.
- Despite washouts and a 43.9° deviation, the operation was completed without stuck or failed tools.

**LOCATION**
Central Asia

**WELL TYPE**
Oil development

**HOLE SIZE AND ANGLE**
8-1/2 in., 43.9° maximum deviation

**CASING SIZE AND TYPE**
9 5/8 in., slanted

**WELL DEPTH**
15,328 ft (4,672 m)

**PRODUCTS/SERVICES**
- Wireline services
- Compact formation pressure tester (MFT)
- Compact photo density (MPD) tool
- Compact dual neutron (MDN) tool
- Compact gamma ray (MCG) tool
- Compact array induction (MAI) tool
- Interpretation and evaluation services

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