

Case study: Trinidad and Tobago

FASTrak LWD service acquires downhole samples in challenging well

BP Trinidad and Tobago needed samples from the deepest part of a reservoir to confirm the presence of gas condensate. Analyses from existing samples taken from the upper reservoir, using a competitor's wireline testing tool, suggested a very dry gas accumulation. Samples from the reservoir's lower section would enable multiphase meters to be accurately calibrated should liquids be present.

The **FASTrak™ LWD fluid analysis sampling and testing service**, from Baker Hughes conducted the operation using the **SmartPad™ closed-loop**

sealing system and the **SmartTest™ intelligent testing system**. This enabled successful pressure testing and real-time fluid analysis and facilitated the recovery of three samples from the lower reservoir.

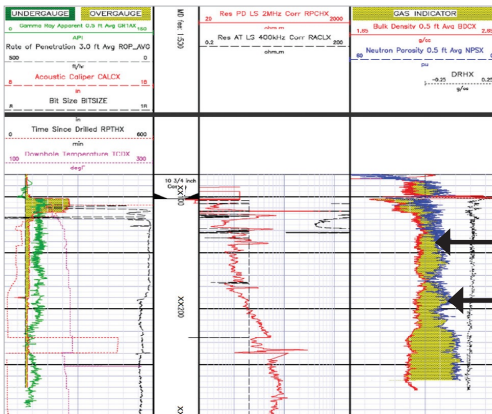
By enabling full formation testing in all deviated and horizontal wells, the FASTrak LWD service provided BP with a safe, cost-effective alternative to wireline that can be used in even the most challenging test environments—including reservoirs once considered too risky or costly to test.

Challenges

- Determine the presence of gas condensate in deepest part of reservoir
- Perform real-time downhole fluid analysis, collect samples, and gather formation pressure and mobility data

Results

- Increased reservoir knowledge through real-time analysis of downhole fluid properties
- Acquired fluid samples immediately after drilling, minimizing mud filtrate invasion and pump-out time
- Provided accurate pressure testing



Sample 1 and 2
1,320 md/cP

Sample 3
795 md/cP