

New downhole fluid measurements

SCHLUMBERGER HAS ANNOUNCED THE release of the InSitu Family⁺ reservoir fluid measurements. These measurements are acquired with the InSitu Fluid Analyzer⁺ system, which delivers the next generation of measurements for real-time downhole fluid analysis (DFA).

Today the InSitu Family portfolio comprises seven measurement services:

- ◆ InSitu Composition⁺ hydrocarbon fluid composition measurement
- ◆ InSitu GOR⁺ reservoir fluid gas/oil ratio measurement
- ◆ InSitu CO₂⁺ reservoir fluid CO₂ measurement
- ◆ InSitu Density⁺ reservoir fluid density measurement
- ◆ InSitu Color⁺ reservoir fluid color measurement

- ◆ InSitu Fluorescence⁺ reservoir fluid fluorescence measurement
- ◆ InSitu pH⁺ reservoir fluid pH measurement

Quantitative fluid measurements that were previously unachievable from wireline technology are now possible downhole and in real time. By investigating fluids at the reservoir, a deeper insight to fluid composition and distribution is gained for improved reservoir understanding.

“Operators no longer have to wait for samples to be returned to the surface for analysis,” said Zied Ben Hamad, marketing and technology manager, Schlumberger Wireline. “This real-time information helps operators confirm assumptions on

reservoir compartmentalization and make informed decisions on completion and surface facility design.”

Fluid Profiling⁺ analysis with InSitu Family measurements gives further insight to reservoir fluid distribution and variation. This is made possible with the Schlumberger Quicksilver Probe⁺ focused fluid extraction tool that acquires reservoir fluid with ultra-low or no contamination for InSitu Fluid Analyzer DFA. Characterization of the reservoir fluid system is extended from a single well to multiple-well (field-based) applications, such as quantifying compositional gradients and identifying zonal connectivity. In development for five years, the InSitu Family portfolio has been field tested worldwide.

