TECHNOLOGY APPLICATIONS



Chris Carpenter, JPT Technology Editor

Fluid-Characterization Service

The average quality of discovered oil is decreasing through time, and oils with very different properties coexist in many wells. Consequently, good completion and flow-assurance strategies can guarantee more value from assets. A continuous oil-quality profile of a reservoir, produced at wellsite, can support important decisions for well completion, avoiding costly downhole sampling programs and lengthy delays waiting for lab results. Geolog's G9+ service can characterize reservoir fluids in near-real-time, with only a few minutes' delay, with low rates of penetration using low-cost thermalextraction techniques formerly applied only in analytical laboratories (Fig. 4). This approach provides timely assessments of oil quality, including wax content, presence of biodegradation or water washing, and differentiation of oil intervals with different American Petroleum Institute gravities, all without any additional rig time. The service delivers rapid measurements of the liquid hydrocarbons in the range of C9-C27 from cuttings. Successful applications have been delivered in areas such as West Africa and the Middle East, where both heavy and high-quality oils commonly occur in the same intervals.

▶ For additional information, visit www.geolog.com.



Fig. 4—The G9+ service from Geolog can characterize reservoir fluids in near-real-time.

20 JPT • JUNE 2017