

# LIVE Digital Slickline Services Eliminate Need for Potential Workover

LIVE Act mechanical services help locate side pocket mandrel and monitor valve retrieval

**CHALLENGE**

Locate a side pocket mandrel in a well and retrieve the dummy insert valve to begin chemical injection for wax prevention.

**SOLUTION**

Run LIVE Act\* digital slickline mechanical services to locate the exact depth of the mandrel and monitor pressure and temperature during jarring to retrieve the valve.

**RESULTS**

Successfully retrieved the valve, as confirmed using the downhole digital pressure gauge of LIVE\* digital slickline services, after locating the mandrel at 689 ft with a real-time surface-readout casing collar locator (CCL) instead of 3,940 ft on the completion sketch.



**Retrieving dummy valve for wax prevention operation**

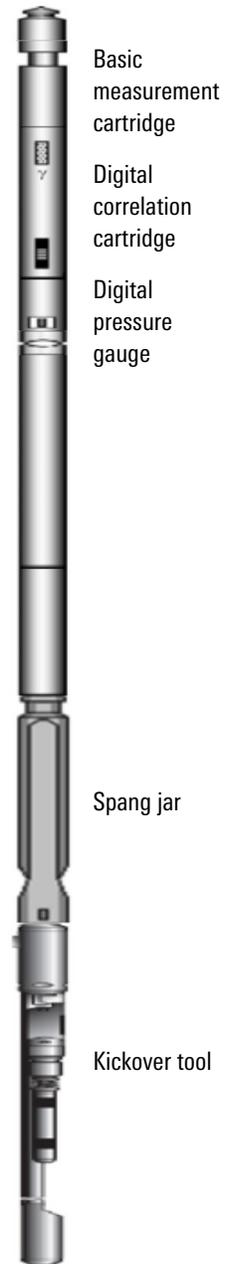
Completion for a producing well in the Republic of the Congo required chemical injection to treat wax buildup. However, the operator’s previous attempts using a kickover tool (KOT) were unsuccessful in locating and retrieving the dummy valve insert from the side pocket mandrel for chemical injection. A full day of operations with a conventional slickline unit was unable to locate the mandrel because of wax in the mandrel and uncertainty in the mandrel’s depth.

**Locating the completion element and retrieving the valve**

The operator selected LIVE digital slickline services to improve operational effectiveness through real-time data acquisition and surface control of the downhole tools. A CCL was run using LIVE services to locate the mandrel. Real-time confirmation of retrieval by LIVE Act mechanical services was obtained with the LIVE services real-time measurements. Pressure, temperature, and shock were monitored before, during, and after the retrieval operation, and the successful retrieval was easily confirmed using these measurements.

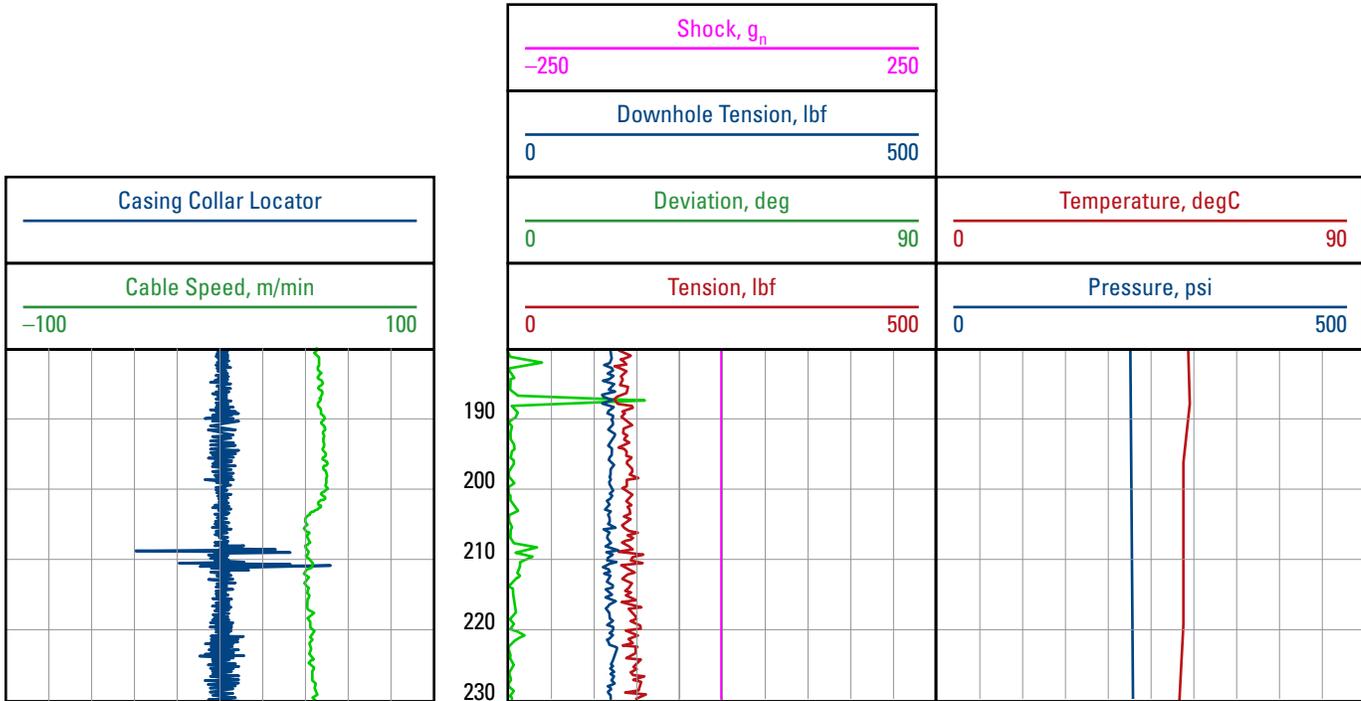
**Optimizing retrieval operation with surface readout**

Using the real-time LIVE services measurements enabled the CCL to easily identify the chemical injection mandrel at 689 ft, not 3,940 ft as indicated on the completion sketch. With a positive location identified, it was possible to retrieve the mandrel. The retrieval operation was optimized using LIVE digital slickline services, which monitored shock and provided feedback on jar performance in combination with head tension. Positive indications of the successful retrieval were then seen as a change in the bottomhole temperature response. Only 4 hours of operating time was necessary to successfully perform this job.

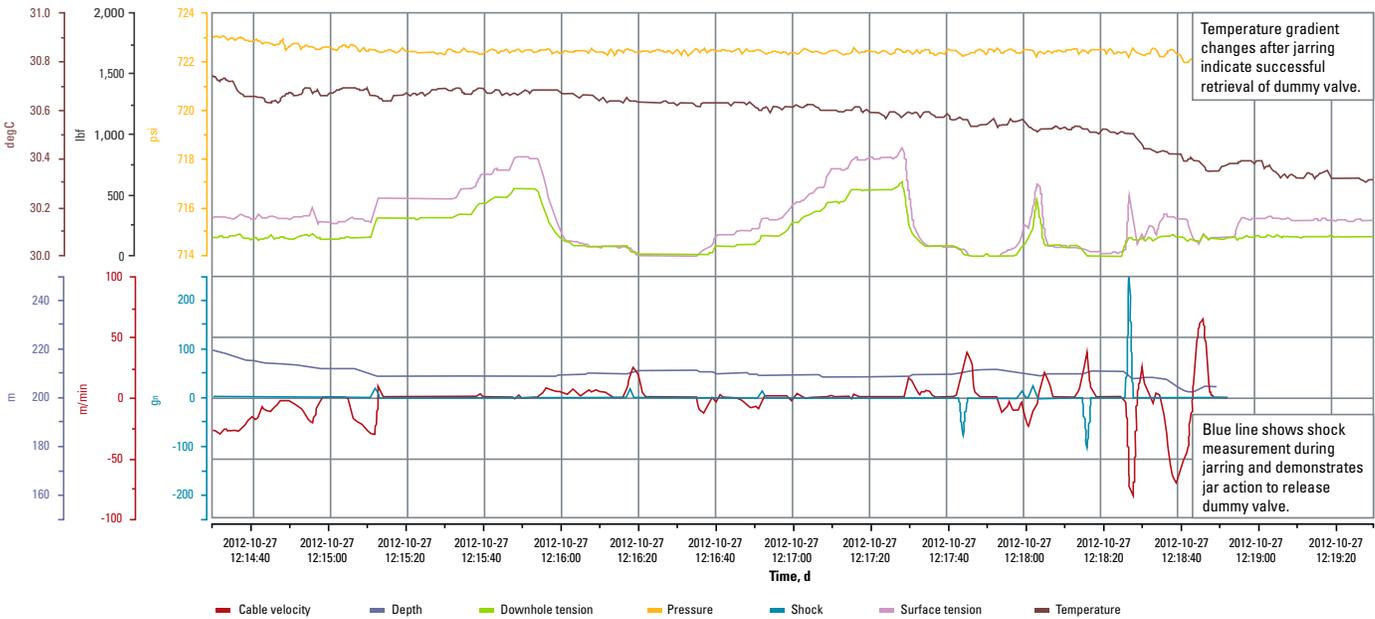


*Toolstring that includes LIVE Act services.*

# CASE STUDY: LIVE Act services help locate side pocket mandrel and monitor valve retrieval



CCL data displayed at the surface in real time, which aided in locating the mandrel.



Monitoring of jarring operation to retrieve the dummy valve.

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