

# CASE HISTORY

## MEMORY FLS DATA ACQUISITION CAMPAIGN

### APPLICATION

Extended Run Data Acquisition

### TECHNOLOGY

Standard FLS

### LOCATION

Qatar

### CUSTOMER CHALLENGE

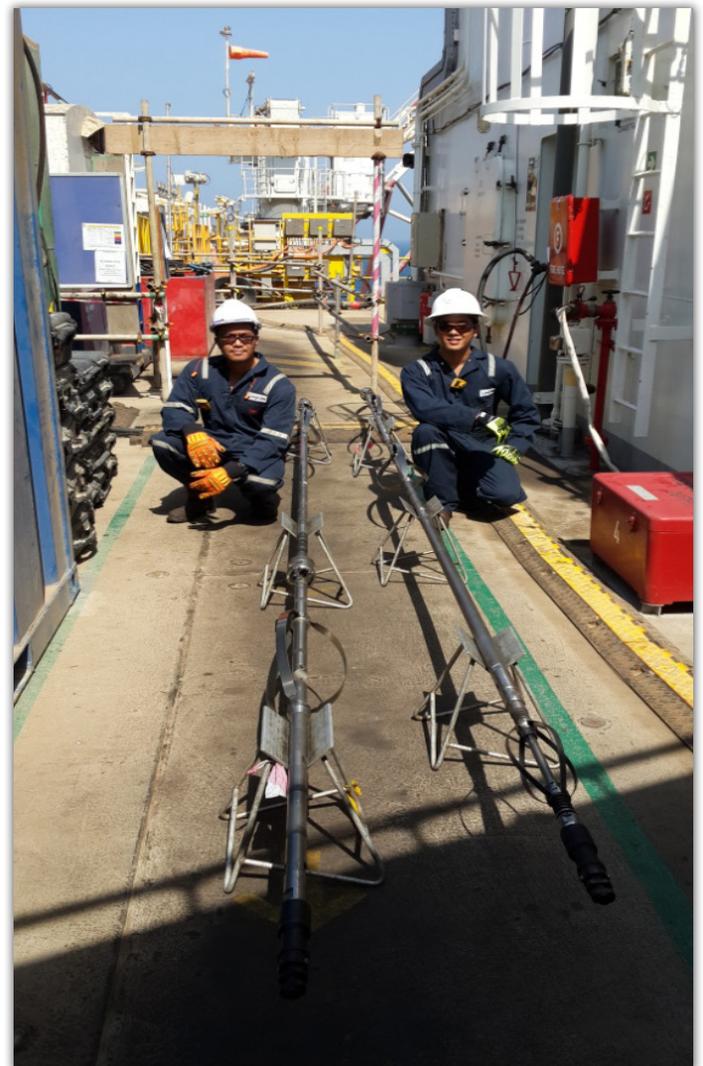
To acquire flow logging system (FLS) and pressure build-up data from 12 high pressure, high flow rate wells in the world's biggest gas field – North Field, Qatar – using memory tools (Previous attempts used surface readout, electric line conveyed tools). Included in the run program were shut-in calibration passes, three flow rates, followed by build-up periods of either 24 or 60 hours and a final set of shut-in passes across the perforated interval. The long run durations of 150 hours would present a huge challenge for the memory tools. The customer required accurate pressure, temperature, spinner, GR/CCL, fluid density and capacitance data, while strict data QA/QC protocols were stipulated by the national oil & gas operator.

### SCIENTIFIC SOLUTION

Scientific Drilling was able to configure a customized tool string to help ensure the job objectives were met every time. Because of the extended run durations, multiple tool-strings were deployed to assure data acquisition. SDI was able to build and supply three tool-strings per RIH and maintain a back-up of three tool-strings on surface. The long job program necessitated adapting batteries per tool-string, which required modifications to existing battery pack designs. These modifications proved to be highly reliable.

### CUSTOMER VALUE

The use of memory tools for flow logging and pressure build-up data acquisition eliminated the need for expensive electric line and vastly simplified pressure control. The job was made safer with the use of slickline. Also, memory tools acquired multiple data sets, providing far greater quality assurance than would a single data set from a surface read-out tool. The job required no re-runs and logged over 1400 hours of data. While other data acquisition attempts in the North Field had seen issues with the spinner response, SDI's continuous spinners proved to be highly effective. An excellent response was obtained from at least two spinners on every run.



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