CASE HISTORY
HIGH-QUALITY PLT AND MFT DATA FROM ULTRA HOT GAS WELL

APPLICATION
Production Logging
Well Integrity

TECHNOLOGY
Cased Hole Services
+ Vulcan FLS 2.25
+ Vulcan MFT-24

LOCATION
North Sea

CLIENT CHALLENGE
The operator of an HPHT well in the North Sea required accurate information from their high-production gas well for updated reservoir modeling.

The client required the acquisition of comprehensive production logging data from a single run that would include meeting the objectives of Selective Inflow Performance (which necessitates logging at multiple flow rates) and to assess the existence of any cross-flow across the two main producing intervals. The well's downhole temperature of 193°C (379°F) posed an additional challenge. The total expected run duration for the program was up to 23 hours.

In addition to the PLT data, a multi-finger caliper was required to evaluate the condition of the production liner.

SCIENTIFIC SOLUTION
Scientific Drilling International's (SDI) solution for the PLT was the Vulcan FLS 2.25 system deployed in memory mode. A tandem tool-string of GR/CCL, Pressure, Temperature & Spinner provided confidence in achieving the data gathering objectives.

SDI's Vulcan MFT-24 was also integrated into the tool string. With a temperature rating of 220°C (428°F), the Vulcan MFT-24 provided ideal results for meeting the production liner evaluation objectives. With a fast sampling rate of 0.01s, high-resolution data could be acquired.

VULCAN™ FLS 2.25
+ Dual-string of Memory GR/CCL, Pressure, Temperature, and Spinner + Multi-rate PLT test
+ 21 hours downhole in conditions exceeding 190°C + Excellent data quality from both tools
+ Vulcan FLS 2.25 extended duration capability reduced two runs to one

VULCAN™ MFT-24
+ Memory 24-arm caliper + Max temp 190°C + Excellent response + High sample rate – 0.01s

CLIENT VALUE
The Vulcan FLS 2.25 reduced what would conventionally entail two runs to meet the production logging objectives to one. This provided considerable cost savings to the client whilst significantly reducing the risk profile of the project.

The Vulcan MFT-24 memory caliper provided detailed insight into the condition of the production liner that revealed the presence of anomalies that would require regular monitoring to help ensure preservation of the well's integrity.

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