Case study: UAE

PowerTrac successfully utilized in challenging HPHT gas wells environment

The customer was planning to execute a logging and plug & perforation campaign in horizontal HPHT wells as part of a major unconventional gas development project. The use of tractor conveyance technology had been attempted unsuccessfully in the past, with the challenging HPHT environment resulting in failures. When evaluating deployment alternatives other challenges arose, namely the inability to pump down the e-line toolstring due to low injectivity rates, and the unavailability of coiled tubing.

Solution

The customer wanted an alternative tractor conveyance solution, one that would manage to operate successfully in the specified HPHT environment. Our PowerTrac 318 tractor technology utilizing some upgraded electronics was proposed for the campaign, and heat tested to ensure it sustained the expected temperature conditions. The tractor was thoroughly checked out with the relevant wireline tool strings and mobilized for the project.

Results

Using the PowerTrac 318 conveyance solution, a total of 26 runs were executed successfully on 3 wells, conveying a range of logging tools to acquire reservoir and casing integrity data, perforating guns and plugs. The average tractoring distances in this challenging high temperature / high pressure unconventional gas wells environment was in the order of 2000 ft (600 m) per well. The success of these operations helped the customer meet their objectives and deadlines.

Challenges

- Execute a logging and plug & perforation campaign in horizontal HPHT wells as part of a major unconventional gas development project
- When evaluating deployment alternatives, challenges arose, namely the inability to pump down the e-line toolstring, and unavailability of coiled tubing
- Max temperature/pressure: 335°F (168°C) / 14.5KPSI

Results

- Using PowerTrac 318 conveyance solution, a total of 26 runs were executed on three wells
- Average tractoring distances were in the order of 2000 ft (600 m) per well

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