CobraMax® H Service Used to Complete Six Fracturing Treatments in 50 Hours – A New Record for Canada

Location: Canada

OPERATOR’S CHALLENGE – A Canadian operator had successfully used CobraMax® H service in late 2005 to fracture a horizontal well in the Dawson Creek field. In the treatment, five fractures were created with 200-m (656-ft) spacing and 120 t (265,000 lb) of proppant pumped into each fracture. Completing the five fractures took five days. The customer was very happy with the operation and safety of the treatment, and the production of 160,000 m³ gas/day (5650 mcf/D) was more than expected. This was the first well to be fractured using CobraMax H service in Canada.

The next year the operator asked Halliburton to fracture four additional horizontal wells, which achieved similar results. In reviewing the overall treatments, the operator and the Halliburton team noted that the treatment on each well required three bottomhole assemblies (BHA) and that each change required 8 hours of coiled tubing operation. The operator asked if this could be improved.

HALLIBURTON’S SOLUTION – Halliburton designed a new CobraMax H service BHA that is highly resistant to erosion and designed to withstand an entire operation on a well with no change-out required. In addition, Halliburton developed an improved sand plug technique to isolate each section that was to be fractured.
ECO N O M I C V A L U E C R E A T E D – In 2007, the operator asked the Halliburton team to undertake a five-well project. Halliburton implemented the improved BHA, new fluid design, and enhanced operational procedures. During the course of this project, Halliburton completed a fracturing treatment that created six fractures, placing 690 t (1.5 million lb) of proppant in the six fractures in a horizontal wellbore. Only one BHA was required, and the treatment was completed in only 50 hours.

The operator was very pleased with the safe operation, and the production is the best in the field. The combination of optimizing the treatment design and execution, improving efficiency, and changing the fracturing fluid has reduced the operator’s well completion costs by 43%.

For more information on any of the details featured here, please contact: stimulation@halliburton.com.

The patented CobraMax® H fracturing service includes Hydra-Jet™ service through coiled tubing for perforating and uses a proppant pack as the final stage of each fracture treatment. The technique achieves maximum conductivity in the near-wellbore region to overcome flow convergence issues common in horizontal wells.