

Cut Multistage Fracturing Time by 15 Days

Case study: AbrasiFRAC service more than doubles gas production

Challenge

Improve multistage fracturing efficiency where conventional techniques would take an average of 18 days.

Solution

AbrasiFRAC* stimulation service, which perforates and stimulates multiple intervals in a single field operation.

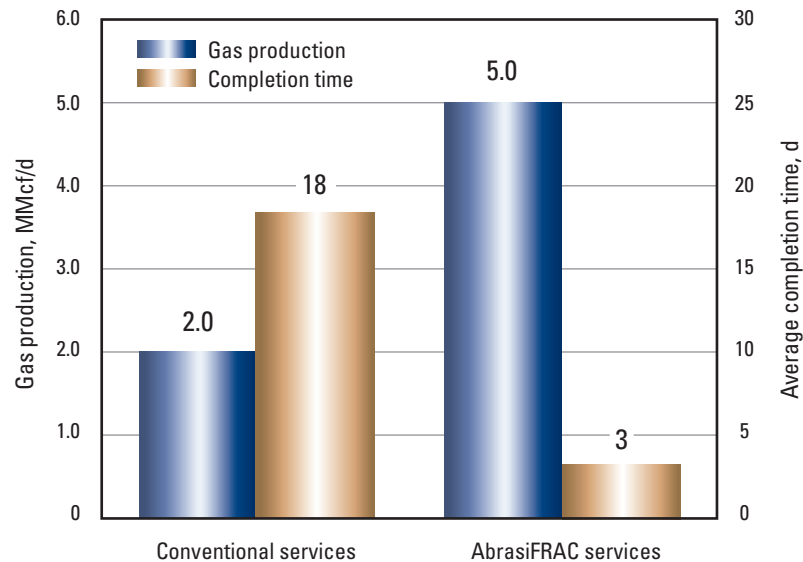
Results

Completion of 5-stage fracturing job in 3 days, with stabilized gas production after 30 days that was 150% greater than offset wells.

Challenging time constraints

In the Vicksburg field in South Texas, The Houston Exploration Company was conducting a multistage hydraulic fracturing operation. The conventional process for stimulation requires repeatedly perforating, setting plugs, and stimulating for each stage of the operation. The process takes an average of 18 days and can be costly. Houston Exploration wanted to complete the stimulation job more efficiently while improving productivity.

Houston Exploration selected the AbrasiFRAC stimulation service, which perforates and stimulates multiple intervals in the well in a single field operation, offering better access in less time. The multistage or multilayer fracturing technique enables accurate placement of fracturing treatments down the casing or the CT-casing annulus.

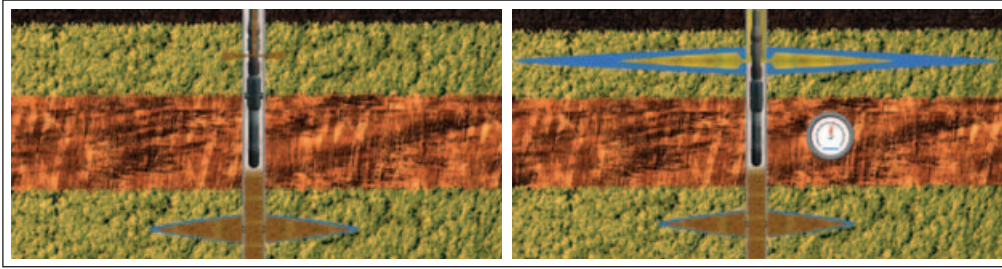


The AbrasiFRAC service allowed Houston Exploration to reduce completion time by 15 days while more than doubling production.





Case study: AbrasiFRAC service more than doubles gas production



The AbrasiFRAC service allows perforation and stimulation in one field operation.

Slurry containing abrasive solids is pumped at high differential pressure through a specially designed jet gun conveyed on a CT workstring. The resulting high-velocity fluid stream perforates tubulars and surrounding cement sheath. AbrasiFRAC service can also be used in openhole applications.

For multiple-stage treatments, sand plugs or bridge plugs can be used for zonal isolation between the fracturing treatment stages. The AbrasiFRAC process can be more cost-efficient than traditional methods, because it requires lower breakdown pressure, permitting reduced horsepower requirements.

Houston Exploration's multistage fracturing operation was completed in 3 days, an 80% efficiency increase compared to the usual time required using conventional techniques. Well productivity increased because the AbrasiFRAC service permitted accurate placement of stimulation. The well stabilized production rate after 30 days was 5.0 MMcf/d, compared to 2.0 MMcf/d in typical offset wells.

About the Contact family

Contact* staged fracturing and completion services maximize reservoir contact by offering the most efficient and effective services for each well. This portfolio of services offers wide breadth of choices in four fundamental categories. Each choice can be enhanced with real-time measurement options. The Contact intervention category enables multiple stages to be perforated/jetted, fractured, and isolated in one intervention.

"The Houston Exploration Company was pleased with the overall performance of this stimulation. It takes a lot of detailed planning and coordination to make a complicated job like this run on schedule, and your team pulled it off. Congratulations on a job well done!"

**Allen Dutt
Production Engineer
The Houston
Exploration Company**

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