

MAJOR OPERATOR GAINS EFFICIENCIES WITH AUTOSLIDE

Challenge

A major oil and gas operator was interested in implementing technology and automation solutions for their Eagle Ford operations. Specifically, the customer was looking to land more curves in the zone, increase the Rate of Penetration (ROP) during the curve phase of drilling the wellbore and maximize hydrocarbon extraction per well.

Solution

The operator utilized a combination of H&P's super spec rig fleet, technology and automation to add increased value to their operations. In addition to the rigs, they also added a custom package of technologies to add increased value to their operations.

FlexApps

FlexApps are software applications that layer on top of the FlexRig drilling control system and provide machine/human collaboration during the drilling process to improve efficiency. The operator used one of H&P's FlexApp technologies:

- **FlexOscillator 2.0:** A rig control software that automates drill string rotation, reduces drag and decreases costly incidents of stuck pipe.

MOTIVE Bit Guidance System

In addition to FlexApps, the customer also used MOTIVE Bit Guidance System (BGS) to steer the bit in real time. BGS uses task automation, forward modeling and automated decision-making to guide the driller for more accurate positioning of the bit while drilling horizontal wells. The technology helps improve overall operating economics by lowering well construction costs, reducing future lifting costs and increasing hydrocarbon production potential.

AutoSlideSM

AutoSlide works together with Motive Bit Guidance System, receiving the sliding instructions and automatically optimizing parameters and orienting and holding toolface.



PROJECT OVERVIEW

Location

Seguin,
Eagle Ford Shale Play,
South Texas

Technology & Services Used

FlexApps (FlexOscillator 2.0),
Bit Guidance System,
AutoSlide



Results

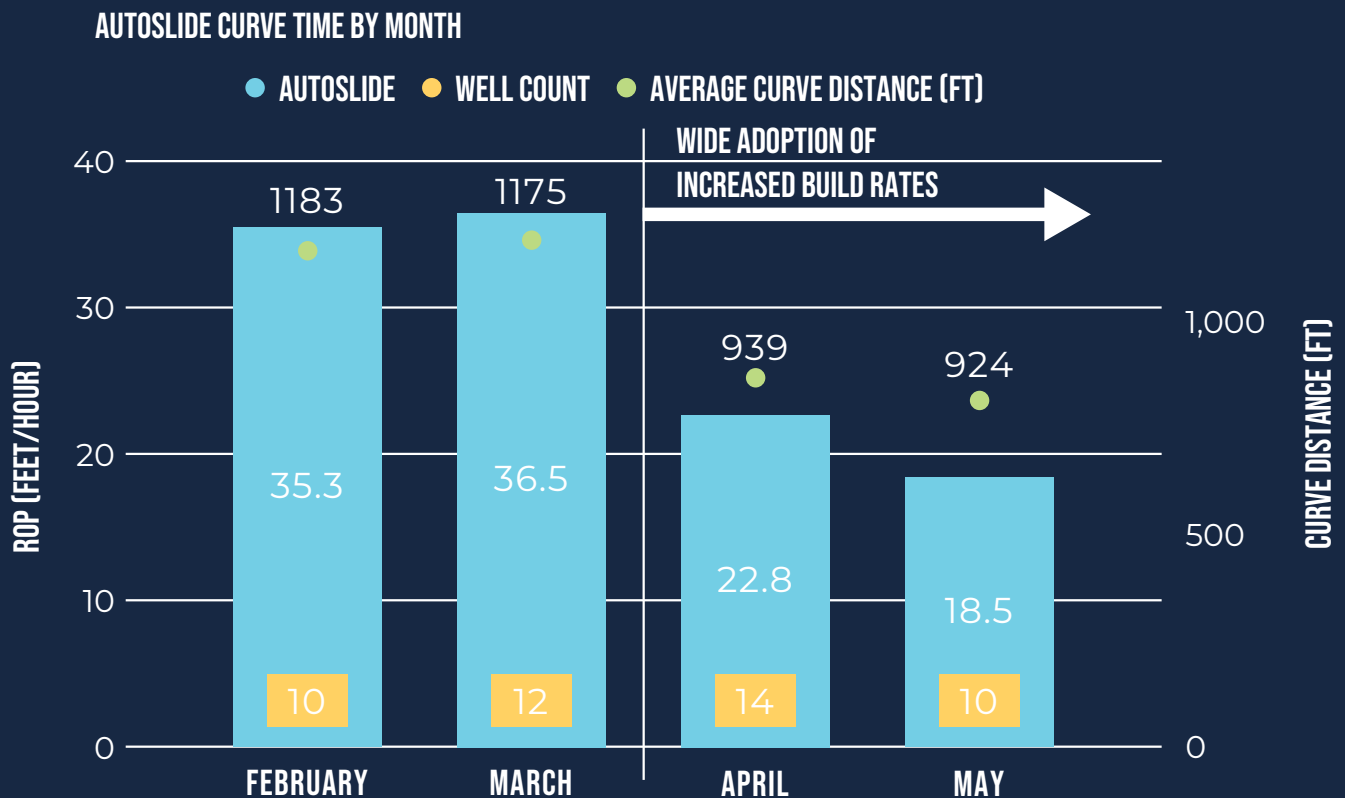
The combination of rigs and technologies allowed the customer to achieve remarkable results in their Eagle Ford operations.

The reliability of AutoSlide to deliver curves drove the operator to change their plan build rates from 8 degrees to 10 degrees, which allowed for a faster curve time (ROP).

The result is increased vertical section, or additional lateral footage, which could result in increased hydrocarbons while reducing overall drilling time.

The operator was so impressed by the results that they are trialing 11 degree build rates, and are ultimately aiming for 12 degree build rates, potentially increasing those benefits.

Because this combination of FlexApps, BGS and AutoSlide allows for the de-manning of directional drillers from location, the operator also saw cost and HSE benefits by reducing personnel onsite.



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