CASE HISTORY

SAVING TIME ON OFFSHORE DRILLING PROJECT

APPLICATION

Top Hole Batch Setting
"Factory Drilling"
Environment

TECHNOLOGY

FALCON HSMP MWD

LOCATION

Gulf of Thailand,
South East Asia

CHALLENGE

Chevron Thailand E&P operates one of the most efficient factory drilling environments in the industry. In this demanding setting, the constant evaluation of new technology and improved procedures is critical to deliver the best solution for wellbore positioning challenges.

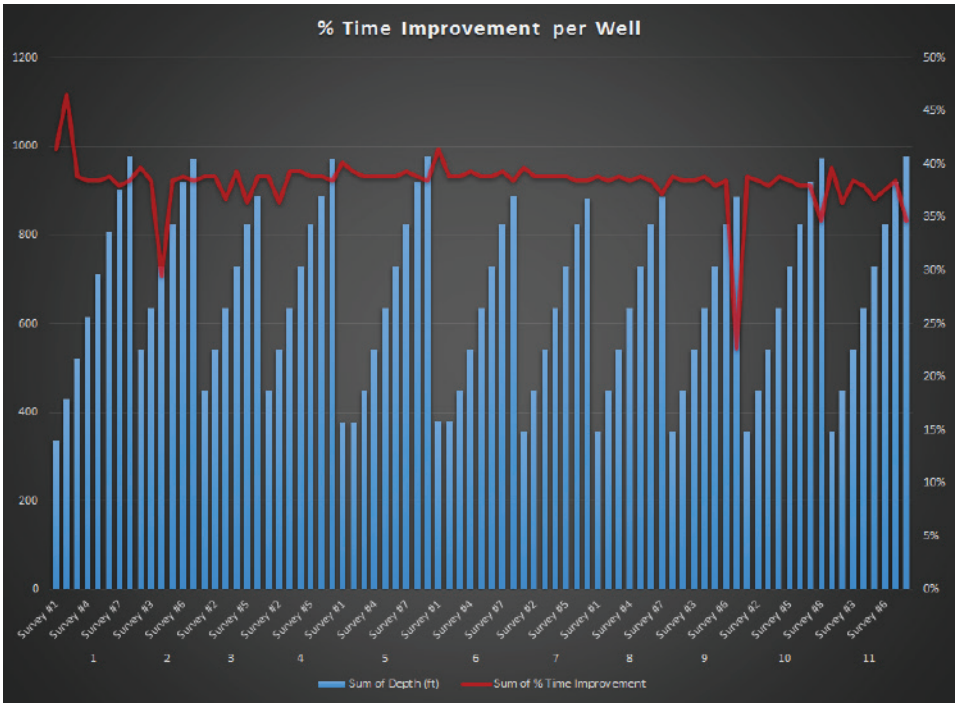
SDI was challenged to safely reduce operational time in batch set operations.

SCIENTIFIC SOLUTION

The SDI team analyzed the data from previous batch set operation using a standard gyroMWD system.

By modeling the operating parameters and studying the effect on the tool performance we were able to determine that the Falcon Hi-Speed Mud Pulse (HSMP) system would not only be very effective in these well designs, but would bring both considerable time and cost savings over the course of a typical batch set operation.

Using our modeling we were able to program the tool to deliver the optimum performance; delivering a transmission pulse 70% faster than the standard tool, whilst ensuring continued tool reliability.



CLIENT VALUE

The Falcon HSMP MWD proved an immediate success, delivering 81 gyroMWD surveys across the entire batch set operation without the need to re-shoot a single survey; together with providing a consistent and reliable gyro toolface for anti-collision throughout.

A reduction in survey transmission time by 101 seconds per survey was produced, and with the gyro toolface available much sooner after a connection, drilling could safely commence quicker. The improved data rate meant that toolface updates were occurring 70% faster than the standard tool, enabling a much quicker response in directionally drilling the well to plan.

Over the batch set, the HSMP functionality resulted in 2.27 hour rig time saving in total, significant for offshore operations.

Client Testimonial: "....offshore team was positive. There were no downhole or surface problems encountered."

Updated February 2017