

CASE HISTORY

HIGH SPEED MUD PULSE MWD PROVIDES SIGNIFICANT TIME SAVINGS

APPLICATION

Geosteering

TECHNOLOGY

Falcon MP MWD
(High Speed Mud Pulse)

LOCATION

Niobrara Formation in the DJ
Basin (Denver-Julesburg)

CUSTOMER CHALLENGE

The client called for a mud pulse tool that would meet their high ROP expectations and provide real-time logging data, while drilling horizontal wells at 7,800 ft TVD, built on 10°/100' curves. The operating area was located in a formation with properties that ruled out the use of electromagnetic tools.

SCIENTIFIC SOLUTION

Scientific Drilling utilized their high speed Falcon MP to meet the challenge. In the vertical hole section, the tool delivered 1.2 data points per foot with the build section averaging over 2 data points per foot.

This provided the customer gamma-ray logs from surface to completion of the build section without degradation of data. The Falcon MP averaged between 400 and 500 ft/hr in the vertical hole section and up to 300 ft/hr in the build.

CUSTOMER VALUE

The Falcon MP provided the customer with accurate, high density gamma-ray data without limiting their planned ROP. While operating in high-speed mode, the tool was able to save approximately 80 seconds per survey station, which equated to almost 3 hours saved over 12,186 feet drilled, essentially matching the speed and data density performance of an EM MWD.

