CASE HISTORY
RECORD 24 HOUR LATERAL FOOTAGE IN SAN JUAN BASIN

APPLICATION
Drilling Optimization

TECHNOLOGY
Falcon EM MWD, Sci-GAIN Gamma Ray and Inclination

LOCATION
San Juan County, New Mexico

CUSTOMER CHALLENGE
To improve drilling efficiency utilizing latest tools and technology available for drilling the Chaco Field in the San Juan Basin.

SDI was challenged to build on historical benchmarks with this customer and work towards continuous drilling efficiency improvement.

SCIENTIFIC SOLUTION
Scientific Drilling utilized our highly experienced Directional Drillers with knowledge of the San Juan Basin and the Falcon EM MWD system.

Specifically utilizing the Sci-GAIN Gamma Ray and Inclination tool, along with good communication with the on-site Geology Team, the Directional Drilling and MWD personnel were able to be proactive with target changes. The precision inclination measurement was used by the Directional Driller during the section for early response to the well trajectory tendencies, thereby optimizing the drilling process.

While rotating in the lateral, the continuous inclination measurements were used to monitor and maintain the wellbore trajectory. By doing this, they were able to reduce slide percentages and maximize rotation intervals, resulting in a record 24 hour lateral footage of 6,553’.

CUSTOMER VALUE
The collaborative approach yielded 96.6% rotary drilling and 3.4% sliding, with an average rate of penetration of 314 ft/hr.

These results set new performance benchmarks for the customer, achieving the goal that was set and saving on the overall spend for the well.

“Without the help of Scientific Drilling and the outstanding Team they have put together for our rig, we would not be seeing the success we are. Their tools have been great but their Team is even better. We currently hold the basin record, but we still have our eyes set on the lateral footage 24 hour world record. With the help of Scientific as well as every other member of this team we expect to set that as well.”

-Senior Drilling Engineer