CASE STUDY

GWD90 MITIGATES COLLISION RISK AND IMPROVES WELLBORE PLACEMENT IN HIGH-ANGLE, MULTI-WELL PROJECT IN CANADA

TECHNOLOGY

- GWD90™

APPLICATION

- Gyro while drilling (GWD)
- Wellbore placement
- Collision risk mitigation

LOCATION

- Alberta, Canada

INDUSTRY CHALLENGE + OBJECTIVE

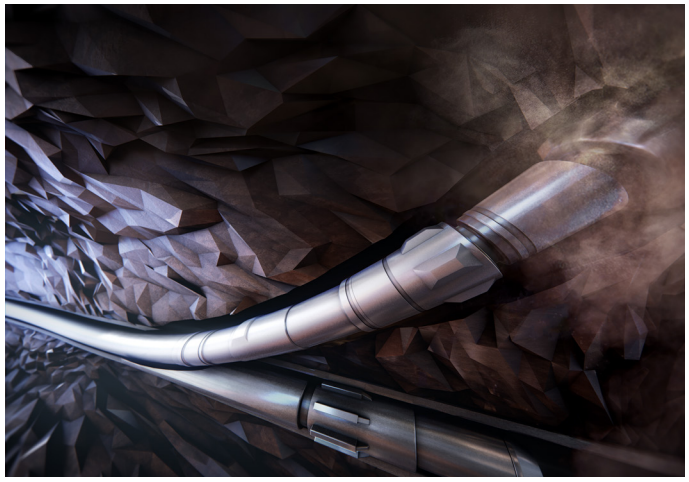
A major Canadian operator needed to sidetrack several wellbores at high angles in a developed area south of Fort McMurray, Alberta. As the operator foresaw challenges with magnetic interference, they requested a gyro surveying system be run with their directional provider for accurate wellbore placement and collision avoidance. We recommended our GWD90 system due to its ability to take surveys at any angle of inclination.

TECHNOLOGY + SERVICE SOLUTION

- The GWD90 system provided all-attitude, high-accuracy surveys in real time as drilling progressed through the zone of magnetic interference while offering mitigation for potential close approaches of offset wells.
- The GWD90 system utilizes gyro sensors to survey in excess of 70° inclination while also running MWD magnetic sensor simultaneously - improving survey accuracy and gross error detection. This allowed the operator to receive a more reliable, real-time measurement while drilling through the multi-well environment.

RESULTS + VALUE DELIVERED

- We integrated our GWD90 systems with the directional drilling provider's 6 ¼- and 6 ¾-in. collars for a seamless GWD operation.
- Once the whipstocks had been set and the windows cut, the combined GWD90 system was used to assist with the drill-out on three wells to gain separation from the existing wellbore and from the additional subsurface offset wells.
- All three GWD90 wells were successfully completed, with the gyro sensor less than 12 m from the bit to ensure accurate surveys while drilling.
- Using GWD eliminated the need for third-party wireline to run the gyros in areas of magnetic interference and the associated rig time, saving the operator thousands of dollars.



40 gyrodata YEARS OF INNOVATION