

Hazen International Case Studies

DEEP GUIDE / CANADIAN PIPELINE PROJECT

Hazen International was chosen to complete a deep pipeline intersection for a Canadian customer where the bore had over 160 meters of ground cover.

Two horizontal drilling rigs had an approximate separation of 1800m on either side of the site restricted valley. The first rig drilled ~65% of the bore toward the exit point, subsequently the drilling assembly was pulled and the Deep Guide™ tool was positioned inside a non-mag drill collar and run in the bore under the valley. The second rig drilled downslope toward the intersect point, utilizing both a surface loop and the Deep Guide's guidance information. The second rig's drilling assembly consisted of: Bit, MagSub, bent housing mud motor and MWD tool.

Based on Deep Guide's data, it was determined that the bore was heading away from the intended point of intersection. The bore's direction was corrected to the left and drilling proceeded using only Deep Guide's proximity data and the two bores were connected. The initial plan called for a bore overlap of ~80m, but with the improved guidance information provided, the intersection was achieved in less than 30 m. This saved the customer over 6 hours of drilling.

The client is completely satisfied with Hazen's accurate and fast data acquisition for steering the bore. The client has requested Deep Guide's services for the next intersection and plans to utilize Deep Guide for other projects.