

Successful Cased Vertical Well Ranging and anti-collision

Date:	2024	Project Type:	SAGD Anti Collision
Location:	Alberta, Canada	Length:	1025-1617m MD
Industry:	Oil and Gas	Depth:	488m TVD
Customer:	Weatherford Int.	# of Ref. Wells:	3

Description: Weatherford Drilling Services was contracted to drill a horizontal well in an established heavy oil play. The bore path needed to avoid 3 vertical observation wells at a known distance. Standard MWD tools are not able to provide accurate positional data to vertical cased wells.

Solution: To maintain operational efficiencies the **MagSub** was installed behind the bit on the Weatherford drilling BHA at the start of the run. Later the Hazen **Deep Guide with Gyro** was deployed via wireline into the vertical wells.

Result: As the drilling assembly approached vertical well Hazen relayed the **Deep Guide** ranging data to the **ROC** where a ranging specialist provided real time positional data to the Weatherford drilling team. The process was repeated successfully without interrupting drilling operations or progress. **The collaboration between Hazen and Weatherford Drilling services was ultimately successful in avoiding all 3 cased vertical wells and provide accurate proximity data of the well path relative to the verticals.**

