

# CASE HISTORY

## HIGH-ANGLE MEMORY GYRO SURVEY SUCCESS IN MAGNETIC INTERFERENCE ZONE

### APPLICATION

Wellbore Surveying  
Well Planning & Engineering

### TECHNOLOGY

Wellbore Surveying  
+ All-Attitude Drop Keeper Gyro (ADK)

### LOCATION

Awali Oilfield  
Kingdom of Bahrain

### CLIENT CHALLENGE

The client faced a critical challenge—they needed an accurate resurvey in a magnetic interference zone to prevent potential well collisions and confidently plan upcoming horizontal wells.

SDI's high-angle ADK gyro tool was the ideal technology for the job, but unexpected total fluid losses made the standard drop deployment impossible. With no fluid in the BHA to slow its descent, the tool would have free-fallen and risked severe damage—bringing the operation to a standstill and demanding a unique, innovative solution.

### SCIENTIFIC SOLUTION

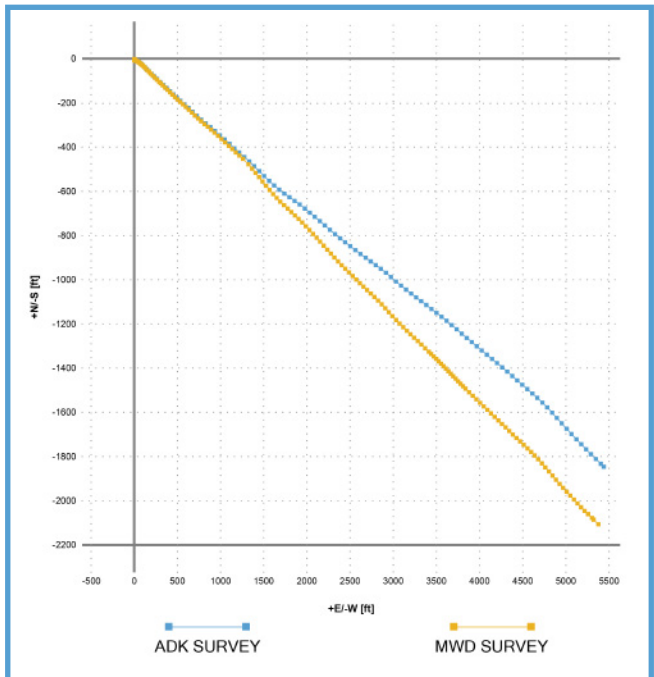
SDI proposed an alternative solution to install the ADK at surface and run it in-hole as part of the BHA. This approach required close coordination with the client to ensure the tool remained powered off until the BHA reached the planned depth.

Once approved, the teams executed the procedure in full alignment with ADK operating protocols, successfully capturing high-quality surveys during the trip out of hole.

### CLIENT VALUE

By enabling a reliable surveying approach despite total fluid losses, the ADK system's flexibility and Keeper gyro technology ensured the client still received a complete and accurate wellbore trajectory.

The success of this alternative approach not only resolved the immediate challenge—it also provided the client with a proven method they chose to implement on five additional wells experiencing similar conditions. This consistency contributed to the safe, confident execution of their ongoing drilling program.



ADK Survey Accuracy VS MWD Survey