CASE HISTORY

# PASSIVE RANGING CLOSE PROXIMITY CAVERN ENTRY

## APPLICATION

Storage Well, Wellbore Twinning, Collision Avoidance

## TECHNOLOGY

MagTraC
Continuous BTotal
gyroMWD

## LOCATION

Chambers County, TX

## CUSTOMER CHALLENGE

The state required that the storage cavern have an access point to check for cavern integrity. The existing access well had collapsed at 450ft MD several years prior. The client wanted to drill a replacement well to penetrate the cavern roof within 10ft of the existing well. The replacement well was to be drilled in a homogeneous salt formation, and was positioned 130ft away from the existing well on surface. The existing well had not been fully resurveyed in 55 years.

## SCIENTIFIC SOLUTION

SDI's MagTraC passive ranging service was used to detect and follow the existing wellbore down to the cavern entry point. The Continuous BTotal service enabled early detection of the offset well while drilling, and the ranging measurements were used to determine the relative position of the existing well.

SDI's gyroMWD technology was used to provide accurate surveys and steering information in the presence of magnetic interference, thereby allowing the well to be directionally drilled to meet the proximity objectives.

## CUSTOMER VALUE

SDI's MagTraC passive ranging service helped the project to be successfully completed under budget, and the cavern was re-entered within 5ft of the existing access well. MagTraC is a cost effective solution where alternative ranging technologies are either ineffective in salt formations, or prohibitively expensive.

SDI's gyroMWD technology enabled gyro quality surveys to be taken while drilling, eliminating the need for wireline runs to acquire gyro surveys for wellbore positioning.

## CUSTOMER TESTIMONIAL

"Scientific Drilling provided exceptional engineering and planning to help mitigate the contingencies that this drilling project included. With precise data, and full transparency and communication, we were able to make and surpass our goal and successfully enter the target. It was a pleasure working with the Scientific Drilling ranging team."

-Client Lead Engineer


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