

SecureView® Service Saves \$300,000 in Casing Repairs by Pinpointing a Casing Leak and Locating the Top of the Cement

Objectives

- Identify the cause and location of a major leak in a new well.
- Evaluate integrity of both casing and cement and confirm a top-of-cement.
- Recommend a remediation strategy to restore well integrity and maintain the largest possible production wellbore.

Our Approach

- A Weatherford wireline team was dispatched to provide our SecureView Well Integrity service in an onshore horizontal oil well. In a single trip, the team ran a toolstring including a CalView®, BondView™, and gamma-ray tools, plus a casing collar locator. The team identified a 2-ft (0.6-m) section of parted casing between 3,434 and 3,436 ft (1,046 and 1,047 m). This indicated split connection on the box side.
- The cause of the casing failure was mechanical, specifically a completion using a port-type fracturing system. A repair risk-analysis identified two options: run a casing alignment tool and liner to reestablish well integrity (which would impair the production capability of the well) or pull and replace the casing.
- Because the TOC was well below the damaged casing section, the operator pulled the casing and replaced the damaged section.

Value to Customer

- The SecureView service provided a comprehensive well-integrity evaluation in one trip. By avoiding separate trips for casing and cement evaluations, the team saved the customer 10 hours of operating time.
- The Weatherford team identified the casing leak and the actual TOC depth. Doing so enabled the customer to remediate the wellbore without reducing its size and save \$300,000 in remediation work that would have included liner running.



The Weatherford SecureView service provided an exact casing-hole evaluation for a leaking well in the Wolfcamp shale formation. The pulled casing (top) shows damage identical to the damage indicated by the logs (bottom).

LOCATION AND FORMATION

Eastern New Mexico, USA
Permian Basin, Wolfcamp Shale

CASING SIZE AND TYPE

7-in. 26# P-110 LTC
4-in. 11.6# P-110 LTC

CASING DEPTHS

7-in. – Surface to 8,843 ft (2,695 m)
4-in. – 7,618 to 16,147 ft (2,322 to 4,922 m)

PRODUCTS/SERVICES

- SecureView service
- CalView and BondView tools
- Gamma ray tool
- Casing-collar locator
- Tvision Software

