

MetalSkin® HP Liner System

Isolates Leaking DV Tool, Enables High-Pressure Frac Completion

Objectives

- Isolate a leaking differential valve (DV tool) and restore well integrity to allow for a high-pressure fracturing completion below the DV tool.

Our Approach

- Weatherford deployed a comprehensive well integrity restoration team. They began with an evaluation of the wellbore and recommended the installation of a 5 1/2- × 7-in. MetalSkin high-pressure (MCL-HP) solid expandable cased-hole liner. The MCL-HP system includes a proprietary coating that supports the outside of the liner as internal pressure is applied and the liner over-expands against the ID of the parent casing. This allows the liner to be rated to the same internal pressure as the parent casing.
- The Weatherford team first prepped the casing with a cleanout run. They used tandem mills that were sized 1/16-in. over the drift of the parent casing.
- Next, the team logged the well with the CalView* tool, a part of the SecureView® casing integrity and cement evaluation service. Log analysis confirmed the casing ID, condition, setting depths, and expansion cone size to be used for the expandable installation.
- The MetalSkin liner was then installed. Once expansion was completed and the expandable tools were retrieved to surface, the system was successfully pressure tested to 9,900 psi (68.2 Mpa).
- Upon installation of a packer seat and production packer, the operator continued with fracturing operations at the desired pressures and rates.

Value to Client

- The Weatherford MetalSkin system provided a permanent, one-time solution for isolating the leaking DV tool. Once wellbore integrity was restored, the operator was able to complete a high-pressure fracturing job in a lower zone.
- The operation was completed without environmental or safety incidents.



The Weatherford MetalSkin solid expandable system isolated a leaking DV tool and enabled subsequent high-pressure fracturing operations.

LOCATION

Pecos, Texas, USA

WELL TYPE

Onshore oil and gas

PARENT CASING TYPE AND SIZE

7-in., 32 ppf HCP-110 BTC

LINER SETTING DEPTH

6,953 to 7,103 ft (2,119 to 2,165 m)

PACKER SEAT SETTING DEPTH

9,777 to 9,837 ft (2,980 to 2,998 m)

PRODUCTS/SERVICES

- Tubing rental services
- Wellbore cleaning services
- SecureView service
- Calview logging tool
- 5 1/2- × 7-in. MetalSkin HP system



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