MetalSkin® Cased-Hole Liner
Enables Deployment on Coiled Tubing to Save 3 Days of Rig Time

Objectives
- Overcome a casing integrity issue and high pressure that prevent the pumping of frac plugs to the desired depth and increase the risk of a blowout in a Marcellus natural gas well. The operator suspected that a parted collar caused the problems.
- Complete the repair under tight time constraints to make use of the frac crew during its short scheduled period.
- Enable finishing 18 of 30 stages in a fracturing operation with pumping pressures of more than 10,000 psi (68.945 Mpa).

Our Approach
- Weatherford first used wireline to run a caliper log, which confirmed the parted collar as the cause of the pressure.
- Weatherford designed a high-pressure casing repair procedure that accommodated the lubricator on location, facilitated deployment, and enhanced equipment integrity and personnel safety in this potentially volatile situation.
- Because of the 4,000 psi (27.58 Mpa) well pressures on the small location, the Weatherford crew deployed a coiled-tubing-conveyed, full-wrap, high-pressure MetalSkin cased-hole liner system. The system eliminated the need for time-consuming tool modifications, additional rig equipment, and drillout after expansion.
- The MCL was pressure tested to 10,000 psi (68.945 MPa) once the tools were removed.
- The quick deployment met the short timeline for repairing the wellbore, finishing the fracturing operation, and ultimately completing the well.

Value to Client
- The MetalSkin cased-hole liner system remediated the parted collar and reduced the high pressures in a single run. The system enabled the operator to complete the repair quickly, before the redeployment of the fracturing crew.
- The liner system eliminated the need to drill out a shoe, and deploying the system on coiled tubing required no additional equipment. The post-expanded ID of the MCL allowed the frac crew to continue a planned plug-and-perf operation, and the full wrap enabled them to stay within the treating pressure. Thus, the crew completed the operation 3 days earlier than planned.
- The operator was able to immediately return to fracturing operations and complete the 18 remaining stages on time.

The Weatherford coiled-tubing-conveyed MetalSkin cased-hole liner enabled the operator to complete fracturing operations in a short time frame in a natural gas well.

LOCATION
Northeast Pennsylvania

FORMATIONS
Marcellus Shale

RIG TYPE
Coiled tubing

WELL TYPE
Natural gas

HOLE ANGLE
Vertical

CASING TYPE AND SIZE
5 1/2-in., 23-lb/ft casing

MEASURED DEPTH
6,766 ft (2,062 m)

PRODUCTS/SERVICES
4.25-in. × 5.50-in. MetalSkin cased-hole liner

Weatherford®

