



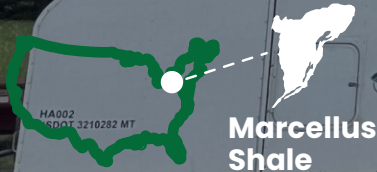
BioSqueeze
SEALED WELL

Case Study 051



BioSqueeze® Seals Casing Leak

Location



Results



Integrity Restored

Two leaking zones sealed.

Well completed and turned over to production.

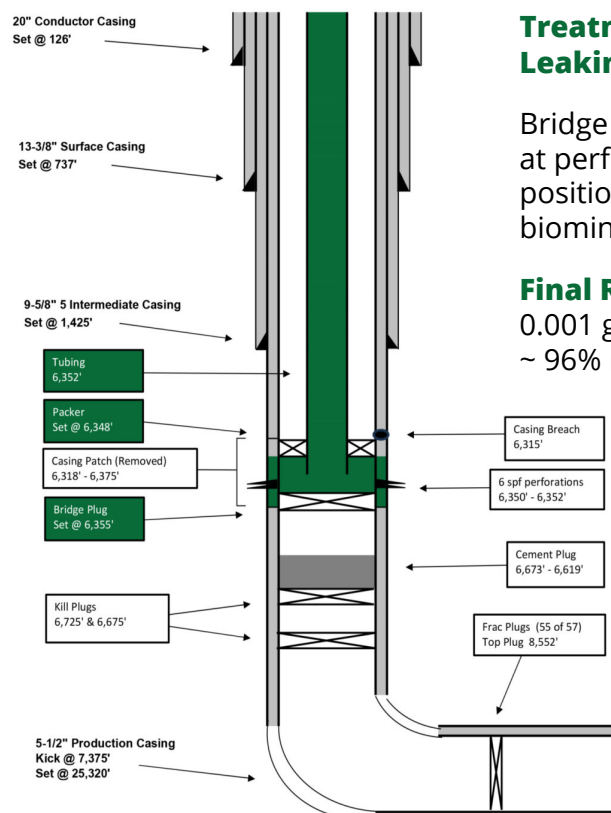
Challenge

Well Leaking During Hydraulic Fracturing Operations

BioSqueeze Inc. was contracted to restore mechanical integrity on a Marcellus Shale well undergoing post-frac drillout to bring the asset online. On stage 56 of 57 pressure rapidly decreased and a subsequent camera run revealed the patch was compromised. The patch was then removed, and resin was squeezed into the perforations, but they continued to leak at which point BioSqueeze Inc. was brought in to address the issue.

Solution

Perforations & Casing Leak Treated with a Downhole BioSqueeze®



Treatment One: Leaking Perforations

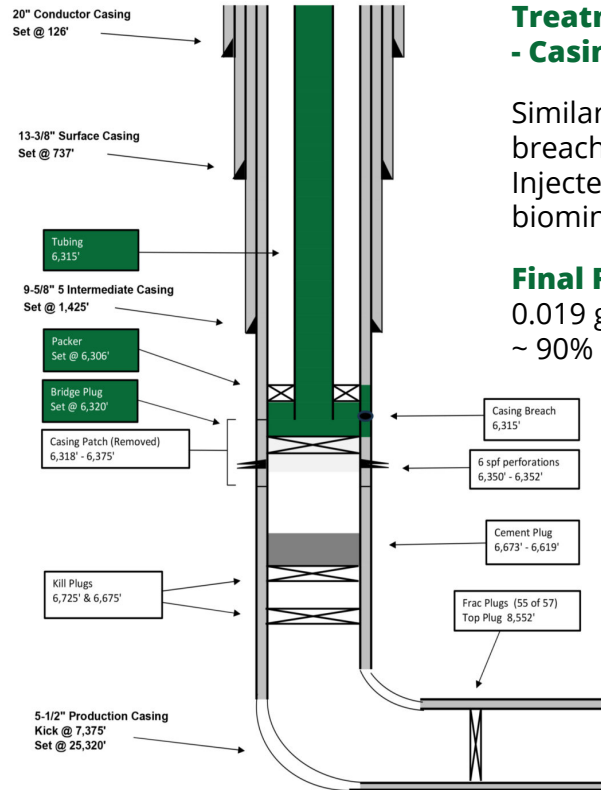
Bridge plug set, tubing hung at perforated interval, packer positioned. Injected 1.67 gallons biomineralizing fluid.

Final Rate:

0.001 gpm @ 1,608 psi
~ 96% reduction

Solution

Perforations & Casing Leak Treated with a Downhole BioSqueeze®



Treatment Two - Casing Breach

Similar setup for the casing breach with 24-hour operations. Injected 46 gallons of biomineralizing fluids.

Final Rate:

0.019 gpm @ 1,600 psi
~ 90% reduction

Results

Mechanical Integrity Restored, Well Completed & Put On Production

✓ Perforations:

Initial Rate - 29 psi/15 min ~2.9% (at 988 psi)
Final Rate - 2 psi/15 min ~0.12% (at 1,608 psi)

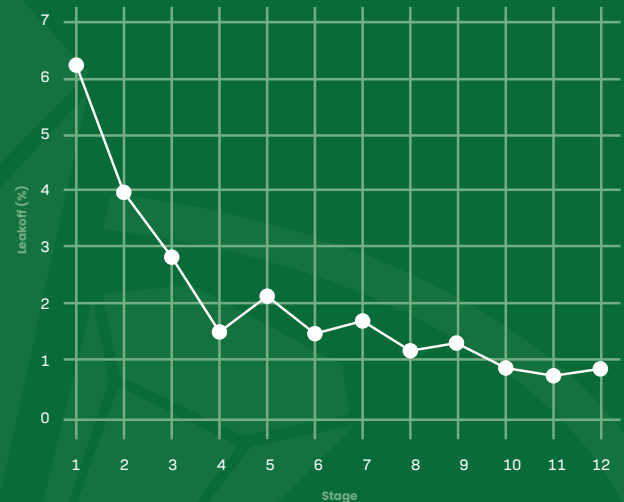
✓ Casing Breach:

Initial Rate - 79 psi/5 min ~7.9% (at 1,000 psi)
Final Rate - 13 psi/15 min ~0.81% (at 1,600 psi)

✓ The well was held static at pressure for 10 hours without any further loss, allowing the well to be completed and put into production.

Pressure Falloff

Treatment Two: Casing Breach



"Contact BioSqueeze® for effective well remediation and integrity management solutions."



BioSqueeze
SEALED WELL

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