



# SWELLPLUG ZI

SUCCESS STORY

## SWELLPLUG ZI INTERVENTION FOR CASING FAILURE IN MIDCON FRAC OPERATIONS

Mid Continent, Oklahoma, USA

**11,200psi**      **5-10**      **Reduction**

PRESSURE APPLIED

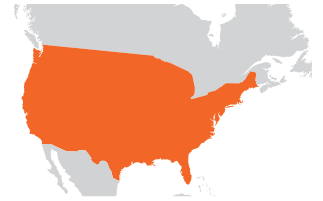
DAYS OF COMPLEX WORKOVER ELIMINATED

IN PRODUCT REQUIRED

SwellPlug ZI is a cost-effective, low-complexity, patented product that isolates existing perforations and/or formation intervals enabling shutoff of the target zone and permanent isolation and can effectively seal and prevent flow into and out of the target interval.

### THE CHALLENGE

During fracking operations, an operator faced casing integrity issues. An extensive intervention has been performed to re-align the casing with a high-pressure expandable liner and high-pressure sealing system from 16,831' MD to 16,960' MD. However, pressure testing later revealed a failure in the upper portion of the expandable liner, suggesting a leak in the upper high-pressure seal.



### THE SOLUTION

Client agreed to trial SwellPlug ZI to plug off the leaking interval. The objective was to pump a blend of 80/20 Swell Frac material of Coarse (1mm-3mm)/Fine (100µm-400µm) into the damaged area, allow it to swell and seal to regain isolation and resume Frac Operations.

### THE RESULT

A retrievable bridge plug was set below the casing patch to protect the perforations and Coiled Tubing with a ported wash nozzle was used to inject a 90lbs SwellPlug ZI pill into the failure area. Initial injection reached 6BPM at 6,200 PSI, allowing the material to swell for 120 minutes. A second SwellPlug ZI pill was pumped, causing pressure to spike to 9,900 PSI.

The operator successfully resumed frac operations with accurate treating pressures and no issues with pumping guns or frac plugs through the damaged section. A total of 134lbs of SwellPlug ZI Coarse and 36lbs of SwellPlug ZI Fine were used in two treatments to resolve the casing integrity issue.

#### WELL DATA

- Basin: MidCon
- Well Type: Oil Producer
- Treatment Date: December 2023

