Successful diversion with CARBOBALL opens increased reservoir rock contact and well productivity

CARBOBALL MT biodegradable perforation ball sealer achieves successful diversion in two cluster vertical well

Rusk County, Texas

The challenge

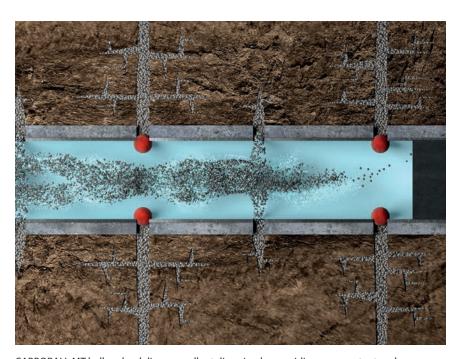
In an effort to increase reservoir rock contact, an E&P operator wanted to temporarily seal off 'open' perforations that were readily accepting stimulation fluids and redirect the fluid toward other perforations not accepting fluids. The objective was to initiate new fractures and increase well productivity.

This single stage, two cluster vertical completion was a low-rate, low-treating pressure application targeting the Travis Peak formation located in Rusk County, Texas.

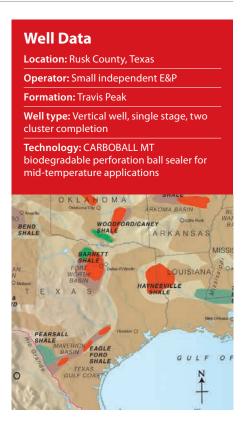
The solution

CARBOBALL MT, a cost-effective biodegradable perforation ball sealer for mid-temperature applications, was successfully deployed between two proppant pumping stages.

The CARBOBALL MT ball sealer features a novel chemical formulation that delivers unique dissolution and softening characteristics upon contact with the treating fluid, providing excellent diversion by ensuring a competent seal across the perforations.



CARBOBALL MT ball sealer delivers excellent diversion by providing a competent seal across the perforation



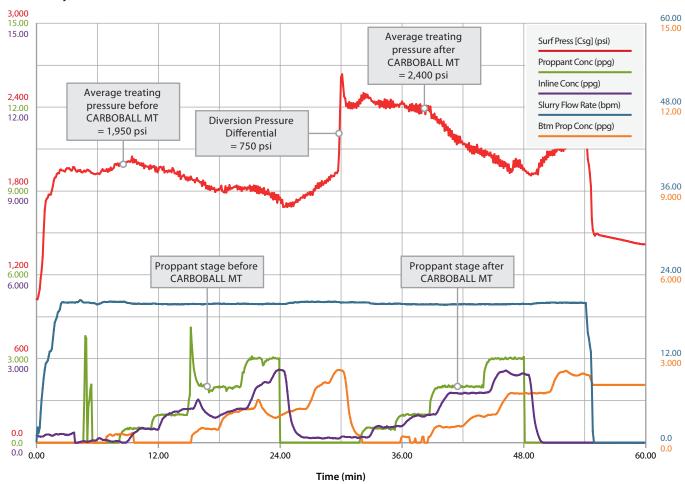


The results

A significant diversion treating pressure response was observed after the CARBOBALL MT ball sealer was deployed, indicating effective diversion at the open perforations.

A diversion pressure differential of 750 psi was recorded at the surface and an overall average pressure increase of approximately 500 psi was observed in the post-diversion stage.

Mechanical diversion using CARBOBALL MT biodegradable perforation ball sealer, Rusk County, Texas



Patent pending: CARBOBALL is covered by the following patent application: US 2017/0210976.

