Scale prevented for over two years in 150 Permian wells with a cumulative 10M bbl of produced water

SCALEGUARD technology outperforms all other scale preventative measures in the Permian

Permian Basin, West Texas

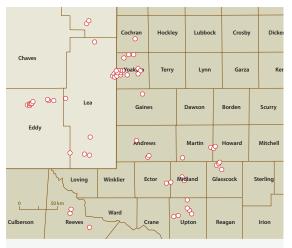
The challenge

Across the Permian Basin, operators face high well maintenance costs and deferred production due to the large amounts of produced water volumes with scaling tendencies to form scale in all parts of the well; from the perforations to the separator topside. These restrictions, reduce oil production, cause increased skin damage, pump failure, and require regular scale removal from the production tubing and separator.

The solution

SCALEGUARD® proppant-delivered scale-inhibiting technology was proposed by CARBO to operators and was involved in several head-to-head performance trials with other scale preventative measures. SCALEGUARD technology consistently outperformed other measures proving itself to be the most longterm effective and cost-efficient scale prevention measure that protected the entire production systems from the fracture tip through to the separator.

Key to the superior performance of SCALEGUARD technology is a controlled chemical release mechanism that ensures the continued elution of scale-inhibiting chemistry where other products treatment rates decline and cannot sustain adequate treatment.



Wells protected by SCALEGUARD technology in the Permian Basin

The results

SCALEGUARD technology has been employed in over 150 wells with over 10M bbl of produced water cumulatively treated and counting. In all wells completed with SCALEGUARD technology there continues to be no signs of scale deposits for over two years. Residual analysis shows there is adequate scale inhibitor returning to the surface to continue to prevent scale deposition for several more years.

Well Data

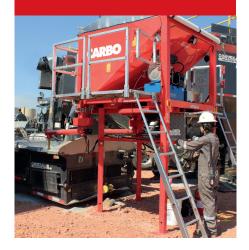
Location: West Texas

Area: Central Basin Platform, Delaware, Midland, and Northwest Shelf

Well Type: Oil

Produced water volume: >10M bbl over 2 years

Proppant: SCALEGUARD proppantdelivered scale-inhibiting technology mixed with ceramic proppant or mixed with frac sand



Talk to CARBO to find out how we can help you enhance your production.

Visit carboceramics.com or email Production.Assurance@carboceramics.com

