

SCALEGUARD tops competitors to become scale inhibitor of choice

Field trial reveals wells treated with proppant-delivered technology remain scale-free after two years

Permian Basin, West Texas

The challenge

Generated by notoriously high produced water volumes, downhole scale deposition is blamed for multiple production-related issues throughout the Permian Basin. The costly ramifications of scale build-up are particularly evident in clogged pumps and oil-water separators, typically forcing the inflicted well to be shut-in and production deferred.

The solution

To identify an optimum solution, the operator conducted a field trial to analyze the water-activated SCALEGUARD® proppant-delivered scale-inhibiting technology against two competing inhibitor products. Unlike both competing products tested, the encapsulated and controlled-release SCALEGUARD technology ensures the predictable delivery of infused chemicals upon contact with water, thereby attacking scale at its point of origin.

Well Data

Location: Eddy County, NM

Formation: Avalon Shale

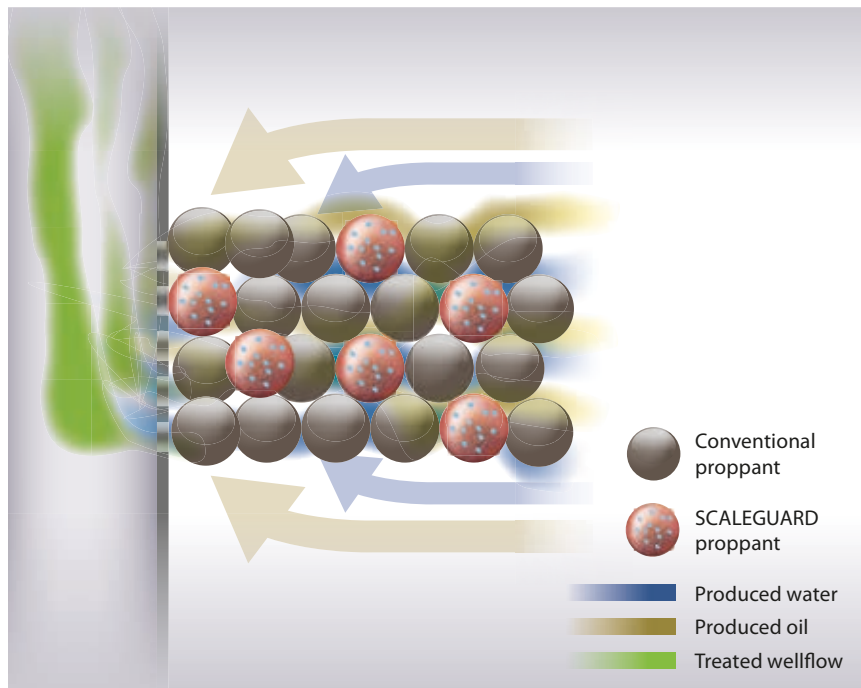
Operator: Large independent

Wells type: Oil

No. of stages: 70 per well

Produced water volume: 380,000 bbl over 2 years

Proppant types: Sand mixed with SCALEGUARD proppant-delivered scale-inhibiting technology



CARBO's water-activated SCALEGUARD proppant-delivered scale-inhibiting technology of choice to enhance production from Avalon Shale wells

The results

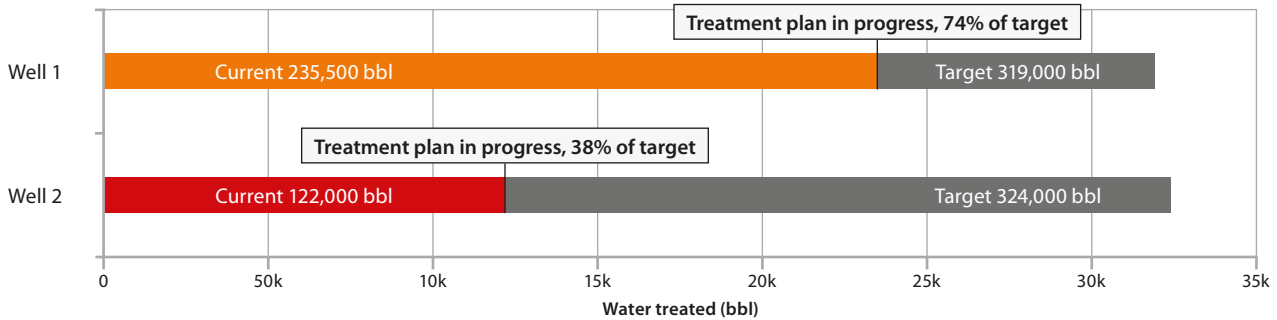
During the SCALEGUARD field trial that was in progress, the operator acquired another suite of wells, some of which had been treated with SCALEGUARD two years earlier. Upon analyzing the newly acquired wells, the operator discovered that the wells treated with SCALEGUARD were still releasing inhibitor levels from the original treatment.

Further, a comparative examination of the internal elements of the separators showed significant scale accumulation in the non-treated wells, while those incorporating SCALEGUARD were free of scale two years after the initial treatment. Owing to the cleanliness of the treated separators and recognizing the opportunity to appreciably reduce lease operating expenses throughout the asset, the operator modified its completion designs to incorporate SCALEGUARD in every well in the field.

Residual summary treated water

Well	Original water treatment target	Current water treated	Target
Well 1	319,000 bbl	235,500 bbl	74% of target
Well 2	324,000 bbl	122,000 bbl	38% of target

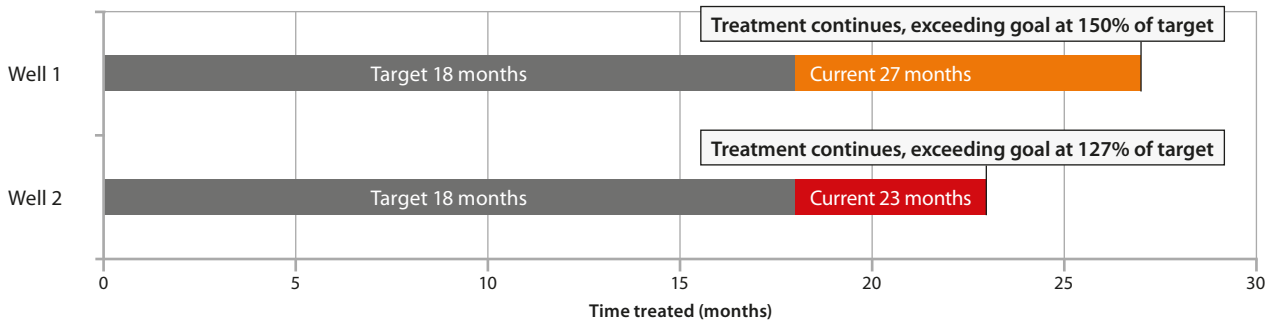
Treated water



Residual summary treatment time

Well	Original treatment time target	Current time on production	Target
Well 1	18 months	27 months	150% of target
Well 2	18 months	23 months	127% of target

Inhibition effectiveness



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

carboceramics.com

CARBO
Production. Enhanced.