

SALTGUARD inhibits halite scaling, prevents production decline and reduces lease operating expenses

SALTGUARD proppant-delivered halite-inhibiting technology prevents salt precipitation in the fracture and eliminates freshwater injection costs

Northeast, USA

The challenge

The operator's wells located in the Northeast are situated in a formation with high levels of salt saturated water. Once the wells are brought on production, the salt precipitates and halite scaling rapidly chokes off production. These wells experienced a significant production decline over a very short period.

The operator was pumping freshwater into the well to dissolve any precipitated halite. However, these treatments only resulted in a nominal production recovery quickly followed by another production decline.

In addition, the wells Lease Operating Expenses (LOE) increased substantially due to freshwater consumption and its subsequent disposal costs during production.

The solution

SALTGUARD™ proppant-delivered halite-inhibiting technology was selected for a field trial to compare performance and economics to previous wells using freshwater injections. The trial wells were on the same pad targeting the same formation. Less than 1% of the total proppant volume was replaced with SALTGUARD technology.

SALTGUARD technology is an encapsulated, porous ceramic proppant infused with halite inhibiting-chemicals that is placed throughout the entire fracture as part of the standard fracturing process.

The engineered, uniformly distributed, interconnected porosity in the proppant is infused with a polymeric halite inhibitor chemical. The proppant is encapsulated to ensure a predictable and controlled release of halite inhibitor only on contact with produced water.

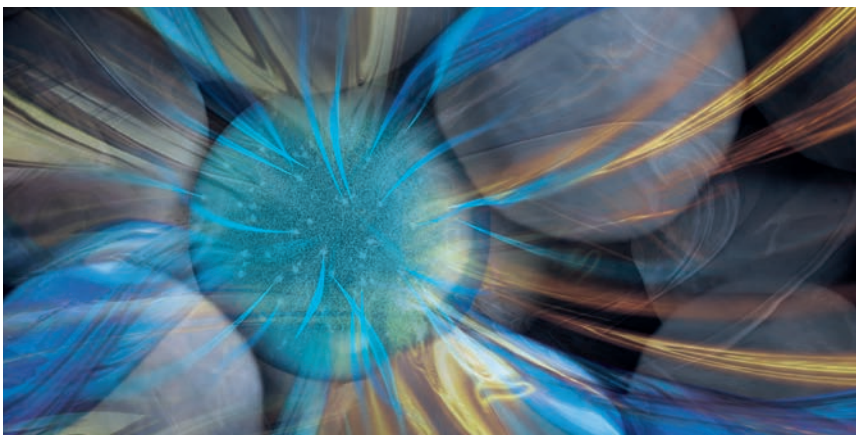
Well Data

Location: Northeast USA

Operator: Large independent

Formation: Marcellus

Well type: Gas



SALTGUARD technology delivers a predictable and controlled release of halite inhibitor on contact with produced water



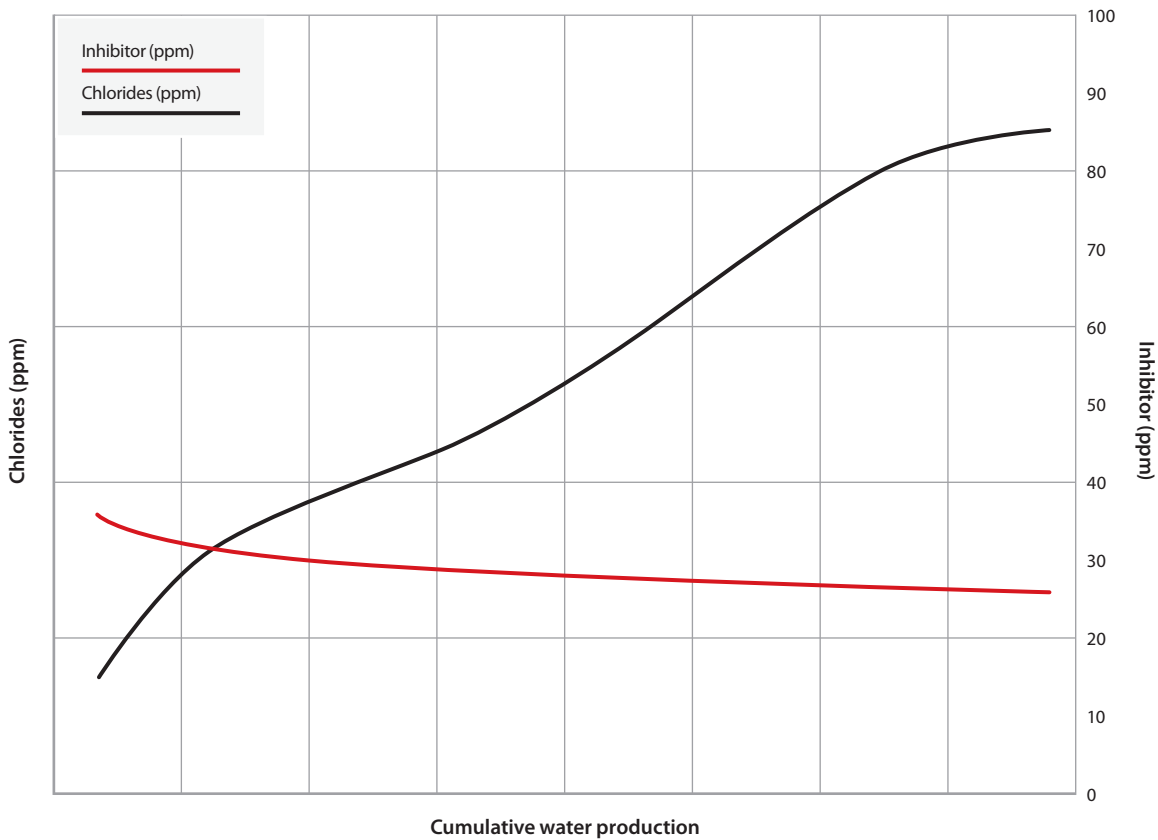
Production. Enhanced.

The results

The technology performed successfully with the halite inhibitor released at the required minimum inhibitor level (MIC) and prevented the precipitation of salt from the produced brine. The wells completed with SALTGUARD technology required no freshwater injections and sustained much higher production levels than untreated wells.

Based on the field trial success, the operator is using SALTGUARD technology on its new wells in the area. Even after remediation with freshwater injection, the previously completed wells did not return to the same production levels as the SALTGUARD wells, as freshwater treatment only remove scaling in the wellbore and not in the fracture.

SALTGUARD field trials



SALTGUARD technology eliminates halite precipitation and resulting hydrocarbon loss and production impairment.

For more information contact:

Production.Assurance@carboceramics.com

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

carboceramics.com



Production. Enhanced.