

Bellasol® H21

halite scale prevention

Bellasol H21 is the best treatment to minimize salt induced formation damage.



Bellasol H21 in action

50% increase in oil production (BOPD) & 55% increase in gas production (MCFD)

Reduced fresh water requirements by 50-80%

Increases deferred production

Scale inhibition of Ca, Ba, Sr & Mg

Readily biodegradable (OECD 306)

Challenge

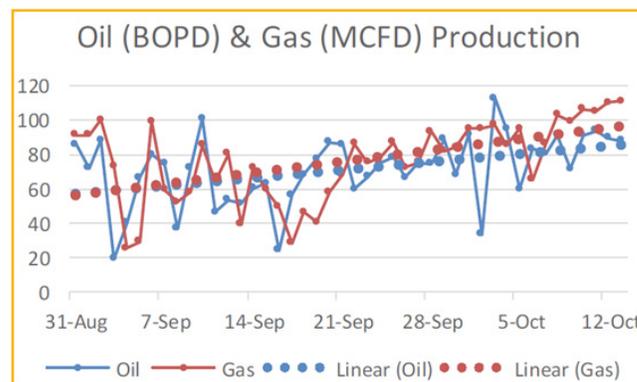
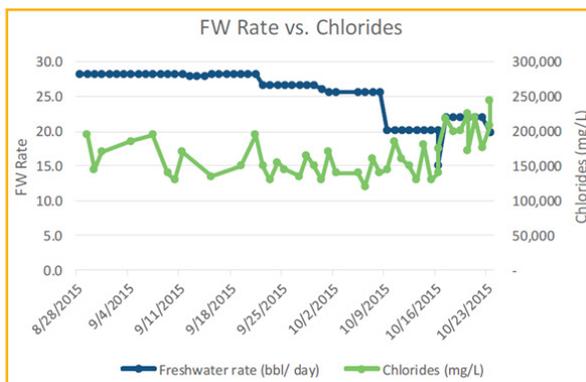
Prior to the implementation of Bellasol H21, an operator in the Bakken had been experiencing severe halite deposition and continuously decreasing oil and gas production. The well was continuously injecting fresh water (FW) at a rate of 28-30 barrels per day, which was the maximum injection rate of the system's pump.

Even with the system's FW rate at the maximum, the well was still not preventing halite deposition. The operator indicated that 40-50 barrels of FW per day was required, which was beyond system capabilities. As a result, Bellasol H21 was applied to the well at a rate of 150 ppm to mitigate halite deposition and reverse declining production trends.

Results

Over the course of approximately 45 days, the well was closely monitored for chlorides, total dissolved solids (TDS), product residuals, and production levels. In conjunction with the operator, the FW injection rate was successfully reduced to 18 barrels per day. Not only did the product reduce the fresh water injection rate by 50-60% over the estimated required rate, the operator found no halite deposition in any surface equipment. The residual analysis also showed strong scale inhibition which prompted the operator to drop the incumbent scale inhibitor program.

Furthermore, the well experienced an approximately 50% increase in oil production (BOPD) and 55% increase in gas production (MCFD) over the course of the 45 day trial, which the operator attributed to deferred production as a result of reduced fresh water injection.



Our wide selection of scale inhibitors can be tailored for any treatment scenario.

Learn more at www.wateradditives.com

Bellasol® H21

A halite inhibitor that is a water based polymer solution. It serves as an environmentally friendly and biodegradable replacement to conventional polyacrylates, polymaleates, and their copolymers and terpolymers. Our patented technology is designed to inhibit the formation of halite in high salinity brines where maintenance water is used either in a continuous or batch delivery. Because of the polymer's peptide features, its inhibition of sodium chloride allows for dramatic reduction in the amount of maintenance water (fresh water) required for dilution.

	Bellasol H21	Bellasol H31	Bellasol H32
Application	Halite/Mixed Scale	Halite/Mixed Scale in iron	Halite/Mixed Scale in heavy iron
Thermal Stability	120°C	120°C	120°C
Typical Dosage	50-100 ppm	75-125 ppm	75-125 ppm



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