Conformance

Injectrol® Service

njectrol® service is an internally catalyzed silicate system that achieves intermediate depth-of-matrix penetration. This action helps control water flow during drilling, completion, production, and injection operations.

Application

The primary application of Injectrol sealant is to decrease water-to-oil ratios and water-injection profiles in sandstone and/or carbonate formations. The internal catalyst allows pumping a low-viscosity solution (1.2 cp) into the formation matrix before the material sets to a stiff gel. The stiff gel formed in the matrix seals the formation pores and diverts or blocks water production.

Injectrol service can be used for the following applications in injection wells:

- casing leaks
- · channels behind casing
- · conduits through reservoirs to producers
- · high-permeability streaks
- · injection out of zone

Injectrol service can be used for the following applications in producing wells:

- · acid/fracture jobs gone to water
- · bottomwater coning
- · cresting
- · bottomwater shutoffs
- · casing leaks
- · channels behind casing
- · conduits through reservoirs from injectors
- · fracturing out of zone
- · high-permeability streaks
- · sealing high-pressure zones

Benefits

An Injectrol service treatment has the following benefits:

- Inexpensive materials allow large-volume treatments that provide deep-formation penetration.
- A rig is not normally required.
- The shut-in time on the treated well is short, usually overnight.
- Low viscosity is necessary for ease of penetration.

This sealant can be used alone or with a tail-in cement squeeze that causes a synergistic effect on the treatment. Reaction of the Injectrol treatment with cement causes gelation of the Injectrol sealant and hydration of the cement almost immediately. The resulting cement has a high compressive strength near the wellbore, where the differential pressure is the highest.

The gel time of Injectrol Service can be controlled from a few minutes to several hours with a temperature range of 60° to 300°F (16° to 149°C). This control is achieved by catalyst selection and concentration.



