How Waterflood/Polymer Works

Voiceover

In an offshore reservoir, Chevron is testing polymer to improve the sweep of existing waterflood systems. In traditional waterflood systems, Chevron pumps water through long injector wells to push oil toward production wells. In some reservoirs, this waterflood narrows its course between the horizontal injector wells and the producers. This results in a “coning” pattern and the waterflood passes large, oil-rich sections of rock.

To make a better waterflood, Chevron thickens the water with polymers – used safely in food additives and various chemical products – to more efficiently push oil through the reservoir. The polymers essentially bunch up and, like a squeegee, push individual oil droplets together into oil “banks” that are swept toward production wells.