

Versalis e[®]

SMART W33

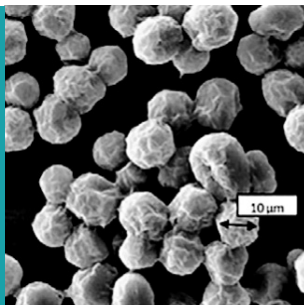


OUR PRODUCT

Versalis e[®] - smart W33 is a chemical-based water shut-off technology for reducing water cut and increasing crude oil production in mature fields. With **Versalis e[®] - smart W33**, it is possible to increase estimated recoverable reserves and avoid wells' premature shut-in.

TECHNOLOGY DESCRIPTION

Versalis e[®] - smart W33 is composed of micro-scale polymeric gel beads (micron size range) suspended in an organic solvent; the beads swell selectively upon contact with formation water, remaining stable in contact with crude oil. In crude oil fractures, polymer particles remain inert and easily dispersible; in water fractures, instead, they increase in volume by absorbing water and generate a network of swollen gel beads, plugging the fracture and stopping the water flow.



MAIN FEATURES

Versalis e[®] - smart W33:

- is versatile and stable at different reservoir conditions;
- shows good chemical and physical behavior under mechanical, thermal and biological stress;
- is environmentally safe;
- is easy to apply on field using standard equipment with sensible water cut reduction;
- offers reversible application, using proper well stimulation treatments.

MAIN EXPECTED BENEFITS

- Successful well exploitation prior to field abandonment;
- significant reduction of water cut production (i.e. approximately from 65% to 35%);
- further increase in crude oil production, thanks to synergic solvent stimulation;
- reduced volume of water to treat;
- improvements in crude oil production, as current use of Sucker Rod Pump is directly linked to water cut reduction, with return of investment achieved in a relatively short time.