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# ANTON Composite Temporary Plugging Fracturing Technology

## 1. Technical Introduction

During fracturing, composite temporary plugging agent will be added, the plugging agent gathers at the target fracturing location. this increases net bottom hole pressure, changes fracture extension direction and creates new fractures stimulated volume will be increased eventually and fracturing results will be improved as well. Composite temporary plugging agent is soluble. After stimulation, temporary plugging agent will be dissolved automatically and connectivity will be regained.

#### 2. Technical Features

- (1) Our self-developed temporary plugging fracturing design software provides accurate results.
- (2) according to large numbers of modeling test and plugging evaluation data, key parameters (particle size ratio, filling thickness) can be optimized, therefore, success rate can be enhanced
- (3) Complete patent temporary plugging agent product system. The dissolution time can be customized.
- (4) Matching special batch mixing and adding equipment to solve the contradiction of pumping large-size temporary plugging agent and increase the plugging pressure greatly.

### 3. Range of Application

- (1) Re-fracturing for old wells.
- (2) Diverting fracturing for new wells.

### 4. Application Conditions

- (1) High temperature resistance: 175 °C.
- (2) pH: 1-14.
- (3) Salinity: < 200,000 mg/L.

### 5. Application Performance

- (1) Have done 300 wells in terms of old well re-fracturing with 98% success rate.
- (2) 50 new horizontal wells have been implemented temporary plugging techniques with 100% success rate.

