ThunderCloud™ Frac Plugs Fully Dissolved In Low Salinity Application

ThunderCloud™ MITIGATED CONCERNS OF FULLY DISSOLVING IN A LOW SALINITY DH CONDITION

JILING, NORTHEAST, CHINA

WELL PROFILE

- Oil well
- 2,720 Ft Hor. Interval
- 5-1/2" 20-23# Csg.
- DHT 206.6 F
- CL- 3,000mg/l
- 9,427 psi pressure rated

CHALLENGES

- Low Salinity
- No CT unit available for
- contingency mill-out

SOLUTIONS

- Customized design
- Lab Tested
- 7 ThunderCloud™ Dissolvable
- Frac Plugs

RESULTS

- Packer Set
- Ball Seated
- Pressure held up when fracturing
- Fully reliable dissolution confirmed by wiper trip conducted 7 days later

OVERVIEW

To reduce cost and completion time, CNPC one of the largest NOC China opted to use dissolvable technology to omit CT mill out intervention. But there were concerns about the capability to fully dissolved in the low salinity completion fluids. Petrostar tested and introduced an new series of ball and plugs with customized recipe. 7 ThunderCloud™ frac plugs were installed and well was isolated for fracturing without any issues, wiper trip conducted 7 days later confirming all plugs, balls were fully dissolved with fine debris returns.

OPERATIONS

7 ThunderCloud™ frac plugs were installed. Packer set, Balled seated and confirmed by pressure rating, Fracturing went well with max. pressure recorded at 9,427 psi and pressure held up without issues during fracturing. Wiper trip conducted 7 days later, no restriction encountered and fine debris returned verifying the reliable full dissolution.







