Reducing Near-Wellbore Entry Friction

Horizontal wells are normally fracture stimulated in multiple stages to help increase production. Limited entry perforating is used to achieve stimulation over a wide interval. Cementing horizontal shale wells using SoluCem™ cement provides significant benefits. SoluCem cement is engineered to be more soluble in acid (up to 95%) than conventional cements. It provides sufficient compressive strength, provides excellent yield for a given density, and can be foamed to provide significant elasticity when necessary. Temperature range: <150°F (66°C) to >300°F (149°C)

- Dissolving the annular cement creates a cavity to provide access to more open and optimally-oriented perforations
- Fractures can be more dependably initiated perpendicular to the least formation stress and help reduce near-wellbore friction (tortuosity)
- Higher concentrations of larger mesh proppant can be placed when perforation restrictions are reduced, increasing reservoir exposure
- Reduced surface treating pressure results in lower hydraulic horsepower requirements for greater completion efficiency and lower cost