WNE-352LN Microemulsion Surfactant

Improves fluid recovery and enhances gas well production

Applications

- Enhances fluid recovery during flowback operations, when used in fracturing fluids
- Reduces the differential pressure required to flow fluid through a formation capillary while assisting with removal or prevention of emulsion and water blocks

Features and Benefits

- Increases load water recovery to improve fluid flowback and enhances relative permeability
- Normal concentration range is 0.2 to 2.0 gal/1,000 gal (0.2 to 2.0 L/m^3) of treatment fluid, depending on the specific application
  - Higher loadings of 5 to 20 gal/1,000 gal (5 to 20 L/m^3) of treatment fluid should be used in remediation of oil blocks, water blocks, or other formation damage

Description

Weatherford WNE-352LN is a microemulsion surfactant that reduces surface tension and capillary pressures while increasing water contact angle to improve fluid recovery and enhance gas well production. WNE-352LN is composed of a unique combination of surfactant, solvent/oil/co-solvent, and water to create a system with size distribution below 10 nm (0.01 micron).

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Specifications

Appearance	Clear, transparent liquid
Specific gravity	0.98 to 1.01
pH (neat)	5.7 to 6.05
Flash point (TOC)	72°F (22.2°C)
Pour point	<12°F (<-11°C)
Ionic charge	Nonionic
pH	Soluble

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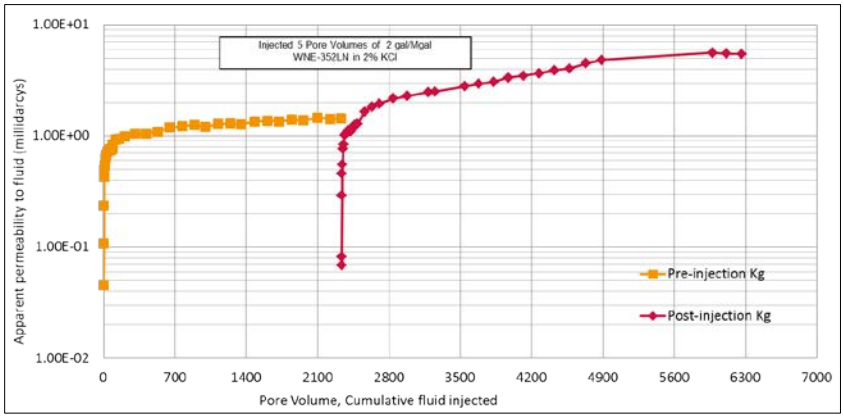
Regain Permeability to Gas



After 2% KCl, Berea Sandstone
Net Confining Stress: 800 psi (5.5 MPa) Temperature 200°F (93°C)