LiteProp ultralightweight proppant for sand control

Improve gravel pack operations with reduced pumping footprint

Applications

- Conventional horizontal open hole gravel pack
- Gravel packing of Inflow Control Devices
- Multipath screen horizontal open hole gravel pack
- Cased hole gravel pack in low frac gradient environment

Features and Benefits

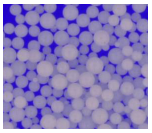
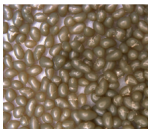
- Neutral buoyancy in completion brines
  - Enables transport with very limited horsepower
  - Creates easy remobilization when settled
  - Eliminates need for gel carrier fluid
  - Reduces slurry density for low frac gradient applications
- Viscous gravel pack gels are not required
  - Reduces pumping/ mixing footprint
  - Saves formation permeability and proppant pack conductivity

Baker Hughes product portfolio of **LiteProp™ ultralightweight proppant (ULWP)** provides a broad range of materials and particle sizes to optimize proppant transport in gravel packing operations.

By selecting a density that substantially matches brine density, proppant transport becomes extremely efficient with lower requirement on the carrier fluid and an expanded engineering envelope to perform gravel pack operations at lower pumping rates and/or over longer distances.

ULWP has been used in alpha-beta wave gravel packing operations in conjunction with conventional screens and inflow control devices. They can also be used in conjunction with multipath screens, reducing the pumping equipment requirements as there is no need for viscosified fluids to serve as a means for proppant transport.

Typical properties

	LiteProp Prime 108	LiteProp 125	LiteProp 140	LiteProp 175
Specific gravity (g/cm^3)	1.06	1.25	1.39	2.0
Bulk density (lbs/ft^3)	40.4	52	54.3	73.5
Neutral buoyancy brine (ppg)	8.84	10.4	11.66	15.85
Maximum BHST	275°F (135°C)	225°F (107°C)	225°F (107°C)	275°F (135°C)
Sphericity/ roundness	0.9/0.9	Both >0.6	0.90/0.84	Both >0.8
Acid solubility, %	0.3	0.1	0.1	4.3
Mesh sizes	14/40	14/30, 20/40	16/30, 20/40 Other sizes upon request	20/40
Permeability (D) at 1000 psi closure stress	212 (14/40 mesh)	234* (20/40)	250 (16/30 mesh)	170 (20/40 mesh)
Appearance				

*Calculated using the Fair and Hatch formulas.

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