

# VaporFrac services

## Minimize water use while optimizing stimulation

### Applications

- Hydraulic fracturing operations in low-pressure or water-sensitive reservoirs
- Hydraulic fracturing operations in areas where water use is limited due to environmental regulations or availability

### Features and Benefits

- Reduces water required for fracturing by as much as 96%
  - Improves cleanup time from low-pressure wells
  - Minimizes formation damage
  - Limits environmental impact
- Uses patented LiteProp ultralightweight proppant
  - Leaves a conductive path from the formation to the wellbore, unlike proppantless fracs
  - Improves effective fracture area and conductivity compared with fracs using natural sand
  - Minimizes proppant volumes required to achieve stimulation goals
- Minimizes equipment footprint
  - Reduces truck traffic on leased roads and personnel on location
  - Allows fracturing operations on small locations
- Uses nonpolymer fluid system
  - Maximizes proppant pack conductivity and formation permeability

The patent-pending Baker Hughes **VaporFrac™ services** safely and efficiently treat low-pressure, underpressured, and water-sensitive formations by pumping ultralightweight proppant slurry directly into a high-pressure nitrogen and/or carbon dioxide gas stream. The nondamaging, environmentally preferred technique creates a flow stream that is 94 to 96% gas, significantly reducing freshwater requirements, post-frac cleanup time, and water disposal costs.

Liquid Baker Hughes **LiteProp™ slurry** combines ultralightweight proppant with an environmentally compliant carrier fluid, which is transported to location in a tanker. During the stimulation, the concentrated slurry is pumped directly into the high-pressure nitrogen gas stream, which is then pumped downhole.

### Safety and handling

Before handling, storage, or use, review the Safety Data Sheet (SDS) for guidance.

### Typical properties

Typical temperature range	Up to 275°F (135°C)
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VaporFrac is a member of the Baker Hughes **SmartCare™ family** of environmentally conscious chemical solutions, which helps ensure that clients' technical performance and environmental priorities are achieved. Evaluated by the Baker Hughes Environmental Services group's chemical assessment review process, this product has been methodically vetted for health, safety, and environmental criteria, performance, consistency, compatibility, and value.