

## **Waterless Fracturing Technology: Making the Most of your Reservoir**

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As the oil and gas industry tackles lower quality reservoirs and the need for more environmentally sustainable techniques grow, a new stimulation technology has been introduced to enhance well performance by eliminating the use of water in the stimulation process. The answer is using LPG or propane as the fracturing fluid. LPG is a nondamaging fluid, will not create water blocks, and has minimal surface tension making its post frac recovery approaching 100%. LPG is pumped as a x-linked liquid on the surface with the ability to carry high sand concentrations and will "disappear" after the frac job due to its solubility in the natural gas and miscibility in crude oil leaving only the proppant left in the fracture thus resulting in the longer effective fracture lengths and eliminating all production impairments associated with today's water base frac fluids. LPG as a fracturing fluid provides operators with superior well rates, recoveries, financial performance, and environmental sustainability. The follow aspects of LPG fracturing will be addressed:

- Technical Benefits of LPG Fracturing
- Economic Benefits
- Safety
- Case Histories
- Environmental Benefits of LPG Fracturing