# Xanthan Openhole Gravel-Pack Carrier Fluid

**Viscous gel for Alternate Path screens**

## APPLICATIONS
- Openhole completions implementing Alternate Path\(^1\) technology screens
- Vertical, inclined, and horizontal wellbores
- Land, shelf, and deepwater developments

## ADVANTAGES
- Works with monovalent and mixed monovalent brines with densities up to 12.5 lbm/galUS
- Stable up to 250 degF [121 degC]
- Provides high viscosity at low shear rates
- Provides efficient proppant transport
- Comes in slurry form
- Incorporates oxidative breakers to minimize gravel pack and formation damage
- Compatible with surfactants, filtercake breakers, biocides, and shale stabilizer (K240)

## Xanthan gravel-pack gel
Xanthan openhole gravel-pack fluid provides rapid viscosity development in brines. It is an option for openhole completions implementing Alternate Path technology screens. The viscosified fluid system consists of just three components: a biopolymer slurry, a brine, and a breaker.

Compatible brines include:
- potassium chloride brine
- sodium bromide brine
- potassium chloride/sodium bromide mixtures.

It can also be combined with surfactants, filtercake breakers, shale stabilizers, and biocides.

### Controllable viscosity reduction via the use of breaker technology
Polymer and breaker loading is tailored for each job based on the bottomhole static temperature, brine density, and gravel-pack requirements. The viscosity of xanthan fluid can be reduced in a controllable manner. Once the well is gravel packed, the fluid completely breaks and returns to surface with minimal damage to the formation and gravel pack.

### Simplified mixing process
The xanthan polymer is suspended as a slurry in a carrier fluid, making field mixing and hydration more efficient. Batch mixing eliminates the need for specialized equipment.
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Sand settling performance of 9.3 lbm xanthan fluid/gal US KCl at 180 degF (6 lbm of proppant added to 30/50 mesh ECONOPROP®).

Breaker performance at 180 degF (60 lbm/1,000 gal US xanthan fluid in 9.3 lbm/gal US KCl).