

High Performance for High Temperatures.

BORAJEL ht

FRACTURING FLUID SYSTEM

The New High Temperature
Fracturing Fluid System
That Offers Gel Stability and
Break Time Control

Pride by Performance.



From Sanjel,
a specialized energy
service company,
comes BORAjel-HT,
a new, field-proven
fracturing fluid system
that maximizes gel stability
and provides predictable,
customizable control of
break times, even at
temperatures up to
140°C (284°F).

Now there's a
high performance
alternative for
high temperature
scenarios.

Sanjel

System Description

The BORAjel-HT system is a water-based delayed borate crosslinked fluid. It maintains low viscosity for a controlled time while pumping, and then develops high viscosity at temperatures ranging from 100 – 140°C (212 – 284°F) for proppant delivery and placement followed by a clean, controlled break. It uses a derivitized guar polymer (WG-4TL) as a gelling agent, as well as a high temperature delayed borate crosslinking agent (BX-3LD). The system is customized for each well scenario with a blend of crosslink accelerants and high temperature gel stabilizers. This unique combination produces a highly stable fluid with excellent rheological characteristics at elevated temperatures while maintaining a clean and predictable break.

BORAjel^{ht}

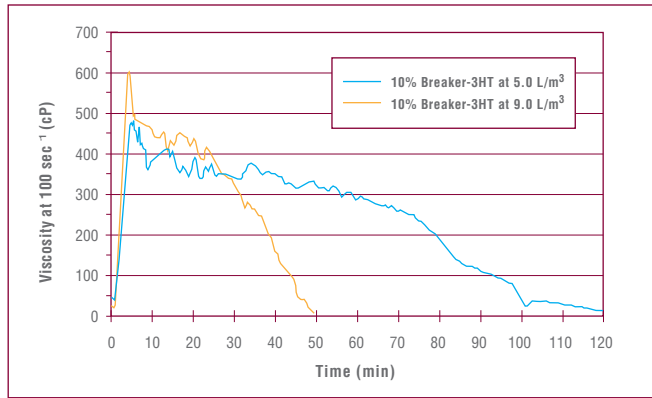
FRACTURING FLUID SYSTEM

System Characteristics

- High temperature fracturing fluid system.
 - High pH delayed crosslinking system.
 - Uses a delayed borate crosslinker, accelerant and gel stabilizer.
 - Delay time and ultimate viscosity are independently controllable.
 - Not shear sensitive.
 - Uses HPG as a gelling agent.
 - Can be pumped on-the-fly with a hydration unit.
 - Low residue system.
 - Can be energized with N₂.
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Break Profile

Viscosity as a Function of Time
for a BORAjel-7HT at 110°C (230°F)

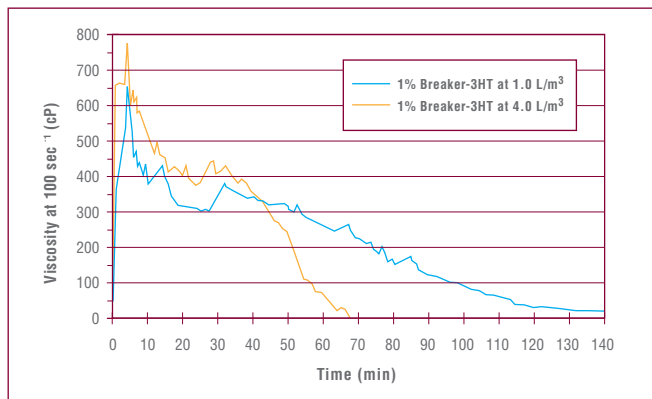


Break Profiles

The BORAjel-HT break profiles can be customized for each treatment. As indicated in the charts at left, the BORAjel-HT break is controllable and complete, a difficult task as traditional breakers will react too quickly at higher temperatures and degrade the gel prematurely.

Break Profile

Viscosity as a Function of Time
for a BORAjel-8HT at 126°C (260°F)

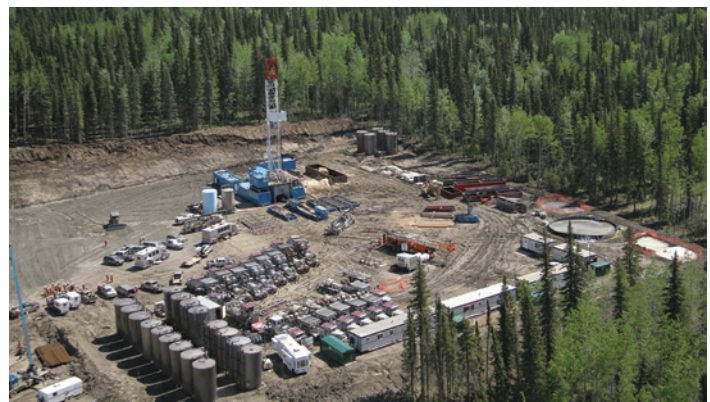
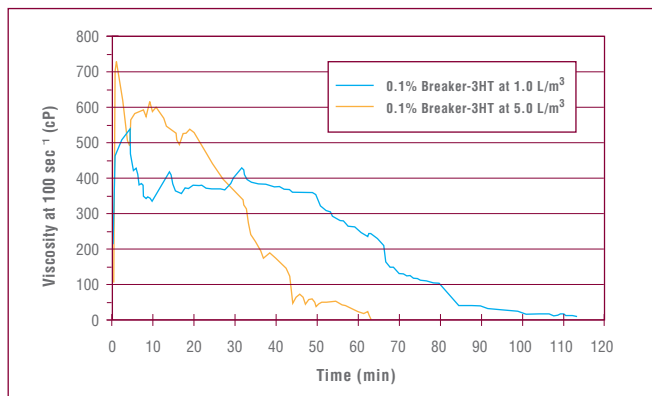


BORAjel-HT
Provides
High
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Break Profile

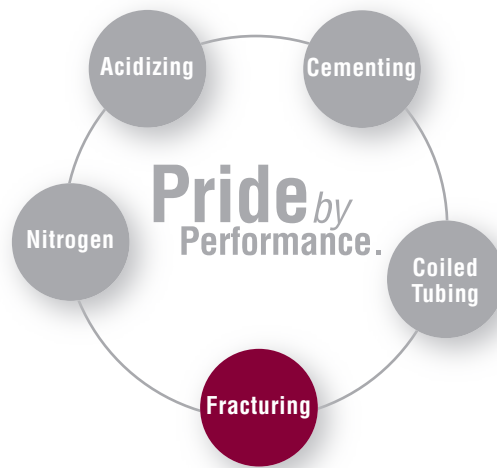
Viscosity as a Function of Time
for a BORAjel-8HT at 137°C (280°F)



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Ask your Sanjel Representative about how you can take advantage of the BORAJel-HT Fracturing Fluid System from Sanjel, a specialized energy service company.



Sanjel

Worldwide Innovation, Commitment, Performance, and Results.

sanjel.com

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