ReLease[™] Performance Stimulation Fluid Systems

for fresh water



NexTierOFS.com

ReLease performance stimulation fluid systems are designed to help you increase production and improve ROI with best-in-class friction reducers and crosslinked gel systems. We have solutions for pumping slickwater, linear gel and both borate- and zirconium-crosslinked gels.

Prior to field application of ReLease systems, NexTier performs testing on source water and formation samples to optimize fluid characteristics for your unique well environment.



Our custom chemistry is developed by a staff of specialists, with decades of combined industry experience, at NexTier's Innovation Center in The Woodlands, Texas.

To address local formation challenges before operations begin, our network of laboratories extends this expertise to the heart of every major basin.

ReLease Speed[™] Slickwater Fluid Systems

Our ReLease Speed formulations are available in a full line of slickwater systems with friction reducers (FR). To enhance performance, ReLease Speed systems are customized within economical limits for stimulation, using either a cationic or anionic freshwater solution, including low-salinity brine applications. The Innovation Center team recommends adding clay stabilizers in the Permian, Eagle Ford, Mid-Con, and Marcellus when the salinity of the source water is less than 30,000 mg/L. In these applications, testing should be conducted on all water sources.

Fluid System	Breakers	Polymer	Optimal Performance
ReLease Speed	KGBO-1KWBO-2KWBO-11	Anionic/cationic polyacrylamide (FR)	 Water hardness up to 2,500 mg/L TDS up to 30,000 mg/L pH >4.5 when using anionic FR No pH limits when using cationic FR

ReLease Dry[™] Slickwater Fluid Systems

ReLease Dry systems offer cost-effective, dry-FR alternatives that reduce spill risk. Similar to our ReLease Speed systems, this dry product provides state-of-the-art, proprietary FRs for effective application in all major shale formations.

Fluid System	Breakers	Polymer	Optimal Performance
ReLease Dry	KGBO-1KWBO-2KWBO-11	Anionic/cationic polyacrylamide (FR)	 Water hardness up to 2,500 mg/L TDS up to 30,000 mg/L pH >4.5 when using anionic FR No pH limits when using cationic FR

ReLease Linear[™] Fluid Systems

ReLease Linear fluid systems are natural or modified-natural polymers used without crosslinkers. Our custom designs take the unique environment of each well into consideration to ensure reservoir compatibility for maximum production. ReLease Linear systems provide an economical fluid option without compromising viscosity characteristics. The gelling agents used are available in dry or slurry form. Polymers used include guar (G), carboxymethyl cellulose (CMC) or cellulose gum, and carboxymethyl hydroxy propyl guar (CMHPG).

Fluid System	Polymer Product	Polymer Type	Breakers	Optimal Performance
ReLease Linear-CMC	KWG-7 L or D	СМС	KWBO-2	Water hardness <2,500 mg/LpH 6.5 to 8.5
ReLease Linear-G	KWG-111 L or D	Guar	KWBO-2	Any water condition within a pH range of 6.5 to 8.5
ReLease Linear-CMH	KWG-33 L or D	CMHPG	KWBO-2	Any water condition



Release Ultra[™] Viscosifying-FR Fluid Systems

ReLease Ultra viscosifying-FR fluid systems are a simple alternative to traditional hybrid fluid designs. Typically, a hybrid system requires a pump schedule that alternates slickwater, linear and crosslinked fluids.

ReLease Ultra systems deliver the next level of fluid performance – eliminating the need for multiple pump schedules.

ReLease Ultra systems are pumped on the fly and can be controlled to increase or decrease viscosity on demand. This not only simplifies operational procedures, but it also reduces equipment on-site by eliminating the need for a hydration unit.

These viscosifying-FR systems do not require heating during cold weather conditions. The solution can incorporate clay stabilizer, bactericide and surfactant in a mixture designed specifically to meet reservoir conditions.



Release Ultra systems can simply be dialed up or down – to modify viscosity on demand.

Fluid System	Polymer	Breakers	Optimal Performance	Target Basins
ReLease Ultra	Anionic/cationic polyacrylamide- polysaccharide	KGBO-1 KWBO-2	 Sulfates <150 mg/L TDS <5,000 mg/L Temperatures >32 °F pH >4.5 Water hardness <1,000 mg/L 	 Bakken West Texas South Texas (Eagle Ford, Pearsall) Mid-Con (SCOOP, STACK)

ReLease XB[™] Crosslinked Borate Fluid Systems

ReLease XB guar-crosslinked borate fluid systems provide a variety of solutions for achieving effective stimulation with different polymer loadings. ReLease XB systems perform reliably in temperatures up to 320°F, making them suitable for every major US basin. These flexible systems enable highest proppant transport for increased reservoir contact. Proper breaking translates to maximum regained conductivity and permeability. ReLease XB systems are pumped at a lower rate and are ideal for large casing or shallow wells.

Optional additives include scale inhibitor, clay control, surfactants, bactericide and other chemicals as required for well conditions.

ReLease XB-HT Fluid System

This high-rate, high-temperature system incorporates a delayed crosslinker, which is ideal for long laterals and small casing.

ReLease XB-LT Fluid System

This low-polymer fluid system is best suited for low-temperature or shallow wells. It is also ideal for high-conductivity, low-permeability reservoirs and is a step up from a slickwater fluid system.

Fluid System	Guar Crosslinker	Buffer/pH Additive	Breakers	Optimal Performance	Target Basins
ReLease XB	Instant crosslinker: KWXB-14 KWXB-20	KPH-14L	KWBO-2KWBO-13	 Water hardness <2,500 mg/L Temperatures up to 240°F 	Bakken, West Texas, South Texas (Pearsall), Marcellus and Utica (when crosslinked system required)
ReLease XB-HT	Delayed crosslinker: • KWXB-19 • KWXB-22 • KWXB-15C	KPH-14LKPH-16L	KWBO-13KWBO-8	 Water hardness <2,500 mg/L Temperatures up to 320°F 	South Texas (Eagle Ford), Eaglebine, Woodbine, Mid- Con (SCOOP, STACK), Bakken (lower shale)
ReLease XB-LT	All above with polymer loading range of 8 to 12 lb	 KPH-14L KPH-15L KPH-2 KPH-4 	KWBO-2Encap-LPKWBO-13	 Water hardness <2,500 mg/L Temperatures 100 to 180°F 	West Texas, Mid-Con (SCOOP, STACK)

ReLease XZ[™] Crosslinked Zirconium Fluid Systems

ReLease XZ crosslinked zirconium fluid systems are an alternative to guar-based fluids and are ideal for tight sands in gas reservoirs or where carbon dioxide is present. ReLease XZ systems deliver the best viscosity performance in proppant-carrying capabilities and crosslinking control in freshwater and low-salinity environments.

ReLease XZ-Clean Fluid System

This is a low-pH system – one of the cleanest crosslink systems on the market for improved permeability in the proppant pack. The system uses a carboxymethyl cellulose (CMC) polymer.

ReLease XZ-HT Fluid System

This crosslinked system uses a carboxymethyl hydroxypropyl guar (CMHPG) polymer. It is exceptionally stable in hightemperature reservoirs up to 375°F.

Fluid System	Fluid pH	Polymer Crosslinker	Buffer	Breakers	Optimal Performance	Target Basin
ReLease XZ-Clean	Low pH	KWXZ-4KWXZ-5KWXZ-6	■ KPH-2■ KPH-4	KWBO-2KWBO-13	 Water hardness <2,500 mg/L Temperatures up to 260°F 	South Texas (Pearsall)Rockies
ReLease XZ-HT	High pH	KWXZ-4KWXZ-5KWXZ-6	KPH-14LKPH-15KPH-16	■ KWBO-8	 Water hardness <2,500 mg/L Sulphates <1,000 mg/L Temperatures up to 375°F 	HT basinsEagle Ford dry gas



NexTier is a leading provider of integrated completions, focused on the most demanding land basins in the US. Across the nation, we are committed to helping the most demanding producers accelerate production through proven, integrated completion solutions. Our focus on safety, innovation and efficiency driv es leading results for our customers.



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