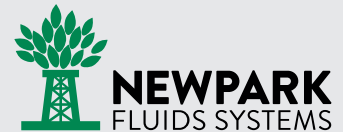


UNCONVENTIONAL FLUIDS THINKING

Drive improved performance, efficiency
and sustainability across your
unconventional operations.



Unconventional challenges call for unconventional fluids solutions

The tight margins associated with unconventional operations demand outstanding performance and efficiency.

Our expert team together with our leading fluids systems portfolio, meet these needs and the most complex demands of unconventional operations head-on.

Sustainability and performance

Our drilling and stimulation fluid solutions portfolio delivers improved drilling performance and EUR while reducing costs. As all our fluids innovations are designed with sustainability in mind, they minimize the impact of operations and contribute to lower-carbon oil & gas production.

Adding value and keeping your operations on track

At Newpark, we understand that no two wells are the same. Our highly experienced team have the competency and knowledge to design and deliver the optimum solution for your well. Utilizing their expertise, they anticipate challenges and assess each well's properties to optimize fluid systems' impact on operational performance.





Lower
CO₂ and energy
consumption



Lower
drilling cost



Lower total
fluids costs



Lower
freshwater
consumption



Less trucking,
landfill and
local impact



Lower
pumping
pressures

Drilling solutions for unconventional wells

Leading the way in the move to WBM

We are the industry leader in water-based drilling fluids. Our drilling fluid systems carefully balance operational efficiency, and profitability, with environmental credentials to meet the most rigorous operational demands, especially for unconventional and high-temperature applications.

The days of choosing between sustainability and profitability are over

Thanks to our continued investment, we have extended the use and capabilities of water-based fluids systems (WBM), limiting the need to use oil-based muds (OBM), lowering fluid cost while making operations more sustainable, and ensuring lower-carbon oil & gas production is more achievable than ever before.

With optimized performance often matching that of non-aqueous fluids (NAF) or OBM, the drilling advantages are only part of the story. From operational efficiencies and excellent environmental credentials to safety, economic, and additional sustainability advantages – the only thing missing is the need to compromise.





Nviros™ high-performance WBM

Our next-generation Nviros™ high-performance water-based mud (HPWBM) is field-proven to be a more sustainable and efficient alternative to oil-based muds in unconventional and extended-reach wells. At a fraction of the drilling cost/ft of non-aqueous systems.

The system enables you to drill unconventional wells faster due to excellent lubricity and shale inhibition qualities allowing you to achieve a higher ROP.

Strike the perfect balance between drilling performance and operational sustainability:

- Reduce fluids and waste trucking costs
- Lessen the amount of hazardous waste generated
- Reduce drilling time and overall drilling costs
- Cut energy consumption and CO₂ emissions



Setting new standards in the Permian Basin with Nviros™

By switching from OBM to Nviros™ HPWBM an operator was recently able to make some eye-catching savings across 6 wells.



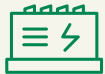
9.64 tons reduced
waste haul off



\$82,626 saved
per well in diesel,
barite and trucking.



37,773 lbs saved
of CO₂ per well.
(226,643.33 lbs total)



57.8% reduction
in energy consumption
and emissions



\$1.26 reduction
(average) in lateral cost/ft



Combat costly lost circulation

Fluid losses and the associated NPT can significantly impact your economic performance. Where losses are expected, we have a range of specialist fluids, wellbore strengthening and lost circulation additives.

Specialist solutions for demanding lost circulation challenges

We develop effective wellbore strengthening strategies to prevent and minimize the likelihood of lost circulation by strengthening the wellbore and arresting fracture growth. The result is an increased tolerance of higher downhole pressures under drilling and cementing conditions.

Woodford, USA

Wellbore stabilization cuts fluid losses by 77% and fluid cost by 50%

Preventative lost circulation strategy with FIX™ wellbore strengthening additives minimizes high fluid losses.

Tuscaloosa, Marine Shale

30% Saved on drilling fluid costs

Mechanical wellbore stabilizing fluids cut fluid costs and improve casing running in induced-fracture shale.

Drill with confidence with FIX™ wellbore strengthening additive series

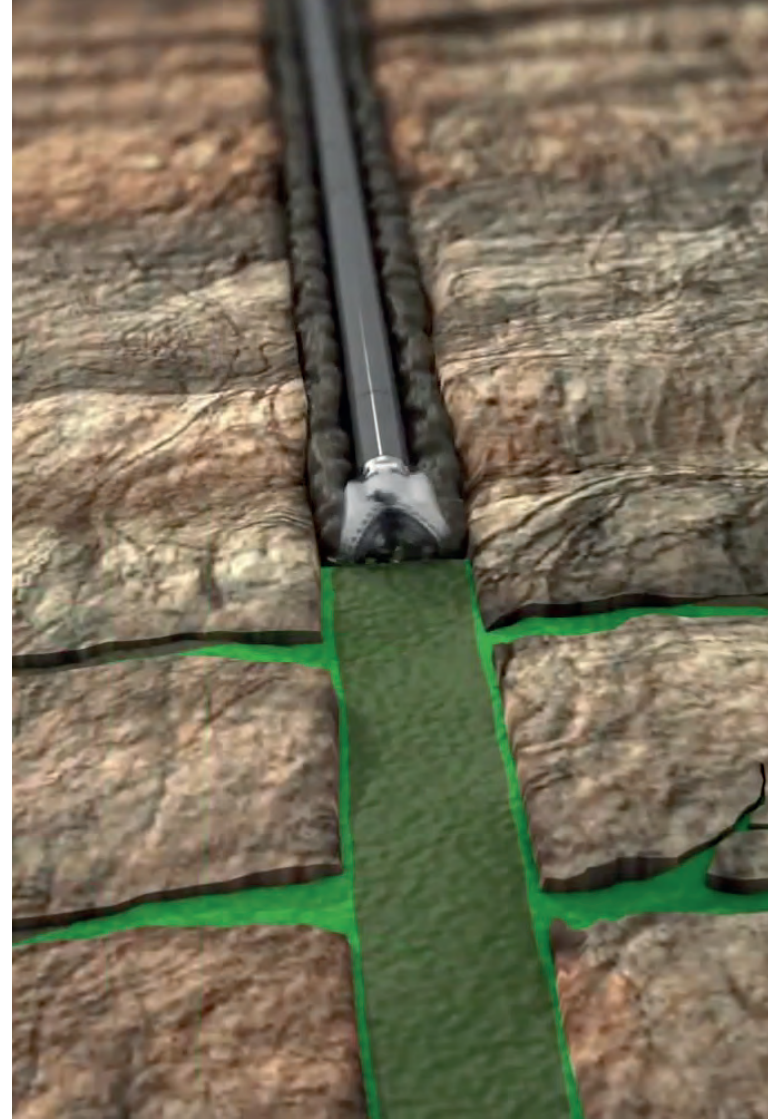
With FIX™ wellbore strengthening additives, you can drill exposed, weak formations or depleted zones with more confidence and cost certainty.

Newpark specialist's model predicted fracture width and loss rate to recommend the appropriate wellbore strengthening and loss prevention strategy. By deploying individually or a combination of single-sack FIX additives, Newpark can address seepage losses and bridge and plug natural and induced fractures with apertures up to 2mm.

Tackle high fluid loss scenarios with X-Prima high fluid loss squeeze

In formations with an increased risk of lost circulation and high fluid losses, X-Prima high fluid loss squeeze provides deep sealing in natural and induced fractures. It has been proven to significantly reduce fluid losses and save days of NPT in unconventional drilling applications while being particularly effective in the remediation of severe lost circulation and in cases where conventional LCM and cement plugs have failed.

X-Prima™ high fluid loss squeeze is a proprietary blend of granular and fibrous materials in a one-sack, high-solids formulation.

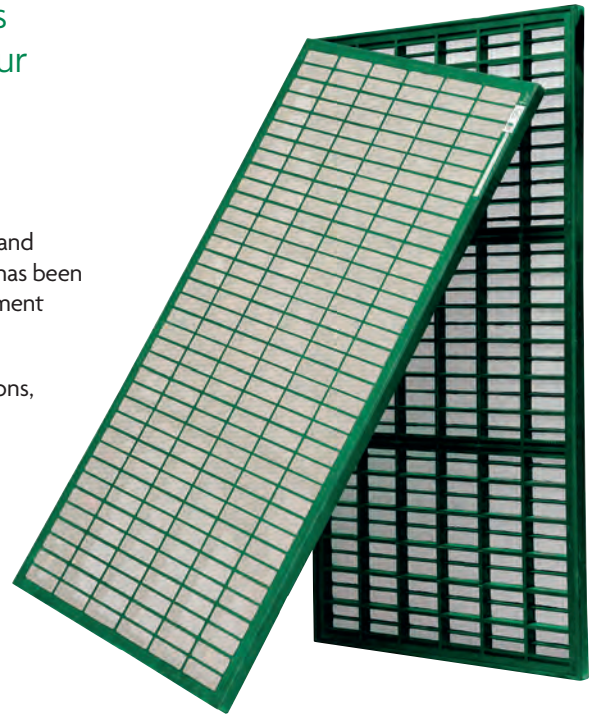


Bring fluids thinking to your shaker screen strategy

As the leading dedicated provider of fluid solutions around the globe, you can trust Newpark to be your supplier of quality shale shaker screens to maintain the quality of your fluid.

From durability and quality that you can rely on – to a flexible choice of premium and economy screens to fit the most popular shale shakers – our selection of screens has been carefully curated to maximize your investment. Bringing you optimum fluids treatment performance at some of the most competitive prices on the market.

Additionally, we add further value by reducing trucking costs and cutting emissions, as your screens can be delivered alongside your fluids.

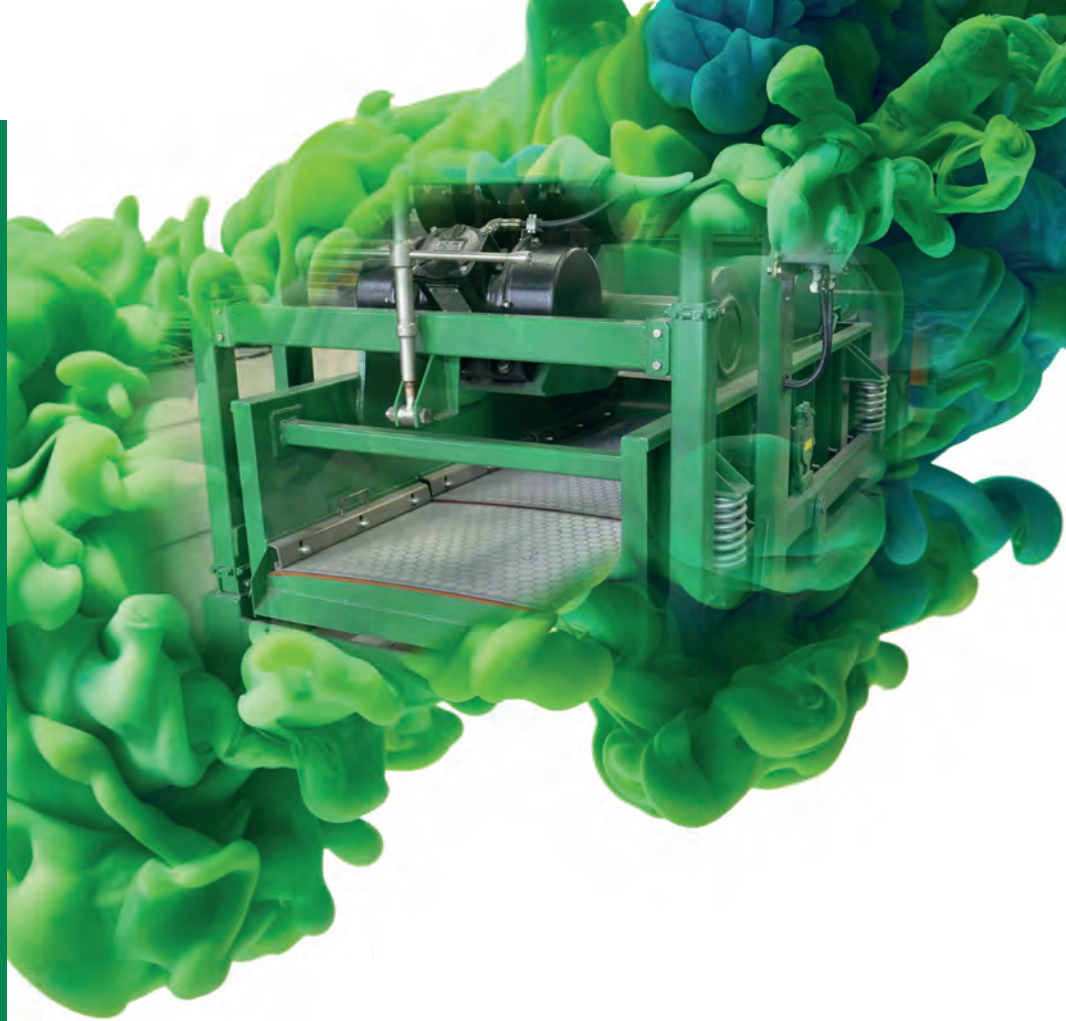


FIND THE OPTIMAL SCREEN FOR YOUR SHAKER

Use the Newpark Shaker Screen Optimizer App to find the right screen, from our high-quality extensive range, to maintain fluids quality and fit your shaker.



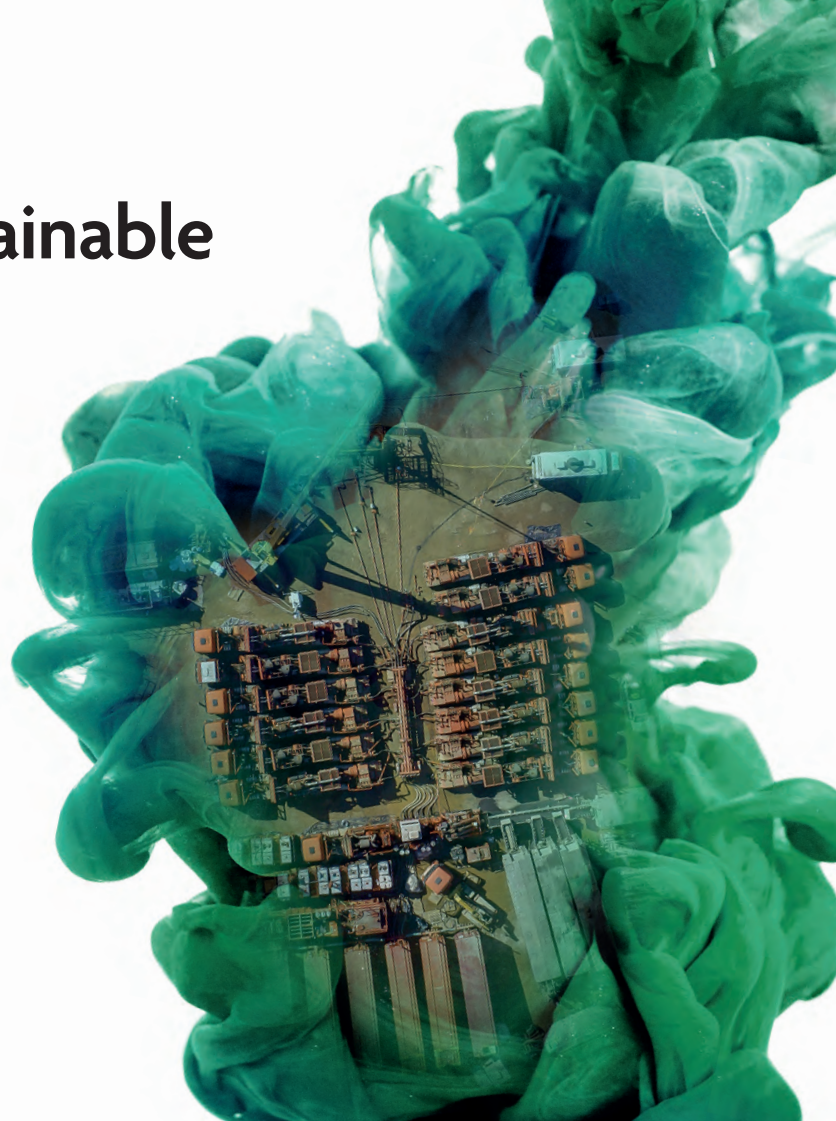
Search **Newpark Digital Hub**



Stimulation fluid solutions

Transition to more productive and sustainable hydraulic fracturing

Transition™ HVFRs have lower pumping pressures with excellent viscosity and viscoelastic properties, making your proppant transportation more efficient across the entire fracture.





Eliminate freshwater consumption

The volumes and costs associated with freshwater fracking are significant. They are also unsustainable. Transition™ brine-tolerant HVFRs enable the use of produced, recycled, and even seawater in your stimulation operation which offers reductions in operational costs and dramatically improves water sustainability.

Lower your costs of building and maintaining viscosity

Using produced and recycled water can dramatically reduce your cost base for building stimulation fluids. By utilizing

our high-performance chemistry, our Transition™ HVFR means you can maintain a viscosity of 10cP at pumping rates of over 150bbl/min. Transition™ HVFRs can be engineered to work in brines 7.5 times saltier than seawater.

High production, low formation damage

Transition™ HVFRs have lower pumping pressures with excellent viscosity and viscoelastic properties, your proppant transportation is more efficient across the entire fracture. A narrow molecular weight distribution allows for much-improved clean-up, whilst all the time protecting the reservoir and offering increased EUR.



Permian Basin, Texas

50% increase in anticipated production with costs and environmental impact reduced.

By switching to Transition™ HVFRs an operator recently increased production while eliminating NPT.

- 150 bbl/min frac pumping rates
- No shear degradation
- Maintained 10+ cP at 180 deg. F BHT
- Produced 20,000 gallons+ fluid per day
- No downtime or NPT

Data-driven performance enhancement with digital fluid solutions

We know the key to success is understanding exactly how the fluid system will behave in different unconventional drilling challenges you may encounter within your operations.

Newpark fluids specialists utilize innovative digital fluid solutions and software that bring together our vast fluids knowledge and historic well data with proprietary formation and rock properties to anticipate and overcome your challenges. Making informed, data-driven decisions to deliver consistent performance, leading best practices and superior service.



Fluid Architect™

When it comes to fluids knowledge management, it's important to get the basics right. From which fluids you're using and how much you're consuming to ensuring you're accurately billed – we ensure you get to the data you want, exactly how you want it:

- Daily Mud Report (DMR)
- Fluids properties specification tracking
- Fluids, chemical and additive consumption
- Standardized global reporting
- Customizable end of well reports
- Data for future analytics

Fluid Intelligence™

The Fluid Intelligence™ data analytics platform transforms data into actionable insights to optimize performance and drive operational efficiency. The platform integrates multiple data sources and data points to benchmark performance against global offset well and historical data analysis from a vast archive covering multiple geographies and environments.

- KPI tracking
- Depth based analysis for multiple wells
- Cost-benefit analysis comparing performance to cost by operator or by well
- Global product consumption and ESG stats (fluid usage of OBM vs WBM)

ClearTrack™

Accurately model, simulate and avoid unscheduled events. We'll help you understand, and balance, the behavior of fluids in different conditions, formations, pressures, temperatures and operating conditions – to ensure successful drilling, completion and stimulations operations.

- Accurate ECD/ESD
- Hole-cleaning
- Surge-swab
- MPD (including CML)
- HPHT rheological modeling with field calibration
- Temperature modeling
- Bridging based on rock properties
- What-If analysis

Anticipate and overcome your unique challenges with the Newpark Service Advantage

Creating safe, sustainable, and efficient unconventional operations relies on dynamic and trusted partnerships. So, put your trust in an experienced and specialist global fluids company. Our service advantage combines expertise, innovation, and an effective global supply chain to offer all the support you need to anticipate and overcome your unique challenges.





Unconventional fluids expertise

Our global team of experts can provide custom-formulated fluids – validating fluid performance and providing ongoing technical support throughout your drilling and stimulation operations. We invest heavily in the training of our teams and take pride in setting the highest standards possible.



Rising to your unique fluid needs

By developing our own chemistry, in our industry-leading laboratories, we have the ability to customize fluids to your exact requirements. And with our global supply chain, we can ensure they are manufactured to the highest quality and get them to you at pace.



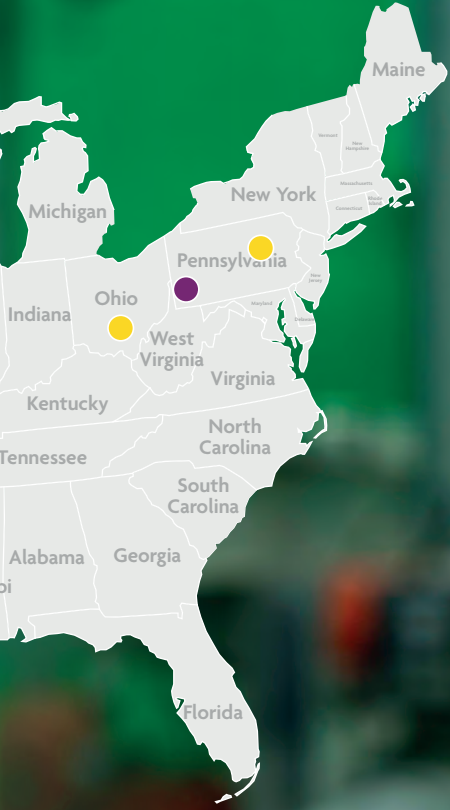
A world-class laboratory network

Bring us your unconventional fluids challenges and we'll find the optimum solutions. From stringent R&D, testing and refinement at our dedicated Field Services Lab to driving superior quality assurance in our state-of-the-art Analytical Lab – Newpark Technology Center leaves no stone unturned to deliver the best result for your unique challenges.

Right where you need us

We have been expanding and are continuing to invest in our facilities footprint to service US land operations.



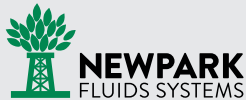


Stay one step ahead.

Our pure fluids-focused expertise keeps you ahead of the game by anticipating your challenges to deliver fluids solutions that make your operations more productive, more efficient, and more sustainable.

Total fluids solutions for oil & gas, geothermal and mining operations

- Drilling fluids
- Reservoir fluids
- Stimulation fluids
- Solids control & waste management
- Fluids system additives
- Digital fluids solutions
- Shaker screens



Contact our fluids-focused experts nfs@newpark.com

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