



TERRATHERM™ HIGH-PERFORMANCE GEOTHERMAL
WATER-BASED DRILLING FLUID SYSTEM

A SUSTAINABLE SOLUTION DESIGNED TO STAND THE HEAT

Explore our specialist geothermal system
proven at temperatures of up to 480°C/896°F



NEWPARK
FLUIDS SYSTEMS

Optimize drilling performance and reduce costs in demanding geothermal conditions

As the dedicated global fluids-focused company – we know exactly how to keep your operation one step ahead of the unique demands of geothermal drilling.



TerraTherm™ high-performance water based geothermal drilling fluid system is carefully designed, stress-tested and validated in the field to withstand extreme temperatures in the world's most challenging geothermal applications.

- Drill faster and more efficiently
- Mitigate losses and optimize well construction
- Eliminate the high costs associated with non-aqueous fluids
- Field-proven in 250+ geothermal wells around the world
- Enjoy consistent performance at temperatures of up to 480°C/896°F
- Adaptable at the rig site to overcome unpredicted well events and fluctuating H₂, He, CO₂ and H₂S

Build a more sustainable geothermal operation with the Newpark service advantage

Creating safe, sustainable, and efficient operations relies on dynamic and trusted partnerships. So, put your trust in the most experienced fluids company in the global market. 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.



Geothermal fluids expertise

By utilizing specialized instruments, particle-size tests and accurate modeling, our global team of experts can provide custom-formulated fluids – validating fluid performance and providing ongoing technical support throughout drilling operations.



Rising to your fluid needs

By manufacturing and developing our own chemistry, in our own industry-leading laboratories, we have the agility to customize fluids to your exact requirements. And with our global supply chain, we get them to you at pace. Every step along the way.



World-class laboratory network

Bring us your drilling 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.

Unlock over three decades of geothermal excellence

Expertly tailored over 30 years, TerraTherm™ has an excellent environmental and sustainability profile that is ideal for the demands of this renewable energy source development. This water-based system is built on our experience in over 5,000 oil & gas wells. The system offers exceptional flexibility, while tailored formulations and rig site augmentations keep you one step ahead of unforeseen conditions like temperature fluctuations, unpredicted changes in lithology and well control events.

A specialist approach for a unique challenge

From our portfolio of industry-leading fluid systems and additives, we engineer the right formulation of the TerraTherm™ system for your geothermal application. We anticipate the challenging conditions of thermal instability, high fluid loss and fluctuating H₂, He, CO₂ and H₂S that you may face – ensuring we are prepared to deal with them. Creating truly specialist solutions for a truly specialist industry.

Minimize lost circulation

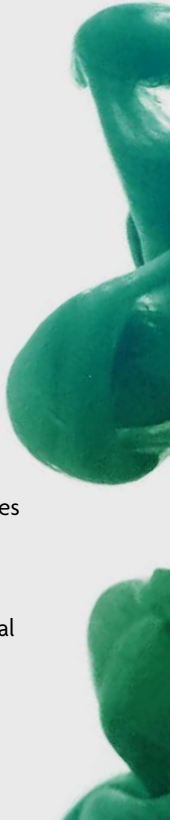
TerraTherm™ high-performance geothermal water-based fluid system has been proven in the field at extreme temperatures of up to 480°C/896°F. Making it the choice for operators keen to proactively mitigate costly lost circulation associated with drilling geothermal wells.

Increase operational sustainability

Maximize geothermal productivity while caring for the environment with the TerraTherm™ system – its low-hazard, low-environmental-impact chemicals have been specially designed to deliver outstanding performance that is safer for the environment and better for your bottom line.

Eliminate the costs of non-aqueous systems

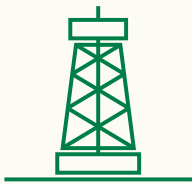
As a water-based fluid system, the TerraTherm™ system removes the high cost and impacts of oil-based or non-aqueous fluids systems. Blending the fluid on location utilizing local water sources removes the high transportation cost associated with transporting non-aqueous systems. The treatment and disposal of waste from the drilling process are also greatly simplified, reducing costs.





An industry-leading reputation built on field-proven results

Read our case studies and download our TerraTherm™ data sheet to discover how this system is already delivering exceptional operational performance in the field.



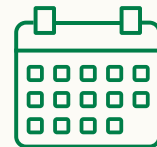
>240
geothermal
wells drilled



480°C/896°F
max bottom hole
static temperature



4,628m
max depth achieved



59 days
average drilling time
per well

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 and high-performance breakers
- Stimulation fluids
- Fluids system additives
- Digital fluids solutions
- Shaker screens
- Solids control & waste management



Contact our fluids-focused experts nfs@newpark.com

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