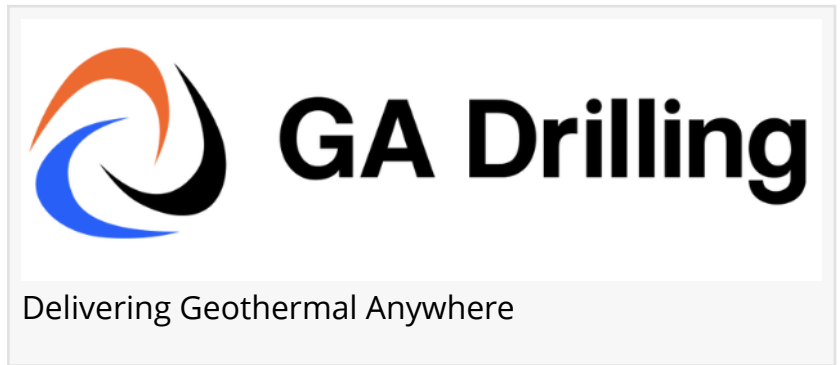


GA Drilling Collaborates with NREL to Commercialize Geothermal Power Technology

HOUSTON, TX, UNITED STATES, February 13, 2025 /EINPresswire.com/ -- GA Drilling, a geothermal drilling company specializing in deep geothermal drilling technology, has partnered with the U.S. National Renewable Energy Laboratory (NREL) to accelerate the commercialization of a high-temperature downhole generator designed to enhance geothermal drilling applications.



The collaboration aims to expedite the advancement of this technology to full-scale field testing in commercial drilling systems. The National Renewable Energy Laboratory (NREL) has designed

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Igor Kocis, CEO of GA Drilling.

and demonstrated a novel generator with exceptional performance for downhole power generation during geothermal drilling. GA Drilling will leverage NREL's expertise to develop this generator technology further by integrating it into their PLASMABIT® Hybrid drilling solution.

“Geothermal energy has the potential to revolutionize clean energy production, and this collaboration with NREL marks a significant step toward making deep geothermal drilling more viable and efficient,” said Igor Kocis, CEO of GA Drilling. “By leveraging NREL's cutting-edge downhole

power generation technology along with their research bench, we aim to overcome key technical barriers and accelerate the commercialization of our PLASMABIT Hybrid drilling system.”

High-energy drilling methods are essential for improving penetration rates in hard, hot rock, essential for deep geothermal access. Yet, traditional power supply solutions—such as running an electric cable downhole—pose significant economic and technical challenges. To address this, NREL has successfully developed and demonstrated a downhole generator capable of producing electricity directly at the drill bit to overcome these obstacles. Designed to operate in temperatures up to 250°C, this breakthrough eliminates the need for external power cables,

reducing operational delays and enhancing drilling efficiency. The objective is to progress it to full-scale field testing in commercial drilling systems.

GA Drilling is actively advancing toward full-scale commercialization, with this collaboration providing crucial support for technology refinement and upcoming field testing. The partnership underscores the company's leadership in geothermal innovation and strengthens its position in emerging ultra-deep geothermal markets seeking cost-effective, high-efficiency drilling solutions.

Geothermal energy, one of the most abundant and reliable renewable sources, accounts for less than 0.2% of global energy production. However, advancements in ultra-deep drilling technology, including those pioneered by GA Drilling, are poised to expand the sector's reach dramatically. Advances in ultra-deep drilling, like GA Drilling's technology, are set to increase its role in the global energy mix.

About GA Drilling

GA Drilling, the leader in deep geothermal drilling technology, is changing the economics behind access to clean, safe, and abundant energy. Our technology offers a secure solution for local and independent sources of electricity, heating, clean water, and food production. Geothermal energy is the only renewable source that delivers regardless of weather conditions or the day/night cycle. GA Drilling's scalable, modular solutions can access clean, baseload energy faster, at deeper depths, and more cost-effectively than ever before, even through hard rock and steel.

GA Drilling's success results from 10+ years of R&D, 25+ awarded patents, and support from a full-time team of 50+ engineers. The company has industrial funding, VC investors, 20 EU research grants, and strategic technology development partnerships with drilling industry leaders from Europe, the U.S., and Asia. Learn more at www.gadrilling.com.

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