Gregg Drilling is pleased to announce the addition of sonic drilling to our suite of capabilities. The Mid-Roto Sonic 50K (MRS) features a full size sonic head on a compact crawler with typical depth capabilities of 6” casing to 300’ through nearly any geology. The MRS also features true 100% rod handling making it one of the safest Sonic drill in the United States. This is the primary reason Gregg Drilling selected this specific rig to enter into the field of sonic drilling.

Sonic drilling is renowned for its high quality samples, drilling speed, and capacity compared to rig weight, size and costs. Our state of the art equipment can be used to overcome typically problematic areas, provide higher quality samples and typically drill at a higher production rate than conventional methods with less waste.

**HOW IT WORKS**

Sonic drilling is a soil penetration technique that strongly reduces friction on the drill string and drill bit due to liquefaction, inertia effects and a temporary reduction of porosity of the soil. The combination makes penetrating a large range of soils easy for Gregg's sonic rigs and tooling.

When drilling with a sonic drill head, the entire drill string is brought to a vibration frequency of up to 150 Hz. This causes a very thin layer of soil particles directly surrounding the drill string and bit to lose structure. Instead of a stiff mass, the soil behaves like a fluid powder or paste. This fluidization, or liquefaction, dramatically reduces friction.

In alluvial material, vertical vibrations are generally enough to drive down a drill string for many meters without the injection of any water or air. When you are drilling in hard formations, liquefaction cannot take place. In such cases you can combine vibration with rotation, and use rock drill bits to cut the material.

For more information and to book your next sonic project, please contact Gregg's new Sonic Division Manager Mike Cramer: mcramer@greggdrilling.com

The Mid-Roto Sonic 50K features a full sized sonic drill head but a compact track mounted body for a smaller footprint on-site.