

Project Hot Hammer

Hammer bits generally yield 10 times higher ROP than alternative methods in hard rock (greater than 30MPa compressive strength) applications.

Traditional

- ▶ Solid steel body from stock or forging
- ▶ Holes drilled into face of bit
- ▶ Tungsten carbide and diamond cutters
- ▶ Cutters spherical
- ▶ Max Temperature rating of 200°C

Prototype

- ▶ Combination of solid body and additive manufacturing
- ▶ Unique geometry interface
- ▶ Tungsten carbide and diamond cutters
- ▶ Cutters spherical
- ▶ Max Temperature rating of 600°C

Estimated time and cost of 1/3 and 1/4 over traditional drilling. This will greatly increase the feasibility of geothermal wells and can help enable development into wide-scale production applications around the world.

