



**Problem:** To produce clean geothermal energy, we need a new mechanical device that is used in the wells to isolate zones. This device must work at extremely high temperatures and be easily deployed and retrieved.

**Solution:** The engineering team at *Downhole Emerging Solutions* in Houston, Texas have invented a solution and are developing this technology now. One key component of this invention cannot be machined. It MUST use "Additive Manufacturing", also known as "3D Printing" to be manufactured.

**Status:** With funding from the Department of Energy's American-Made Geothermal Prize contest, prototypes have been designed and manufactured. Testing in the lab has been successful. It's time to move to the field.

To follow: See the contest here.



Solutions for Geothermal Problems