## PEXa GEOTHERMAL SYSTEM

## **ENGINEERED VS. TRADITIONAL**

System Component	PEXa System	Conventional System
Manifold vs. Header	- Easy-to-balance circuits	- Circuit Balance with U-Bend length
	- Easy-to-isolate circuits	- Circuit isolation not possible
	- Easy to purge circuits	- Circuits all purged at once
	- Factory made	- Field made
	- Above ground – easily accessed	- Buried – poor access
PEXa vs. HDPE	- Over 10,000 hr slow crack growth resistance	- 200 hrs slow crack growth resistance
	- Continuous pipe – no joints	- Joints throughout system (potential leaks)
	- 5x OD bending radius	- 35x OD Bending radius
	- Kink recovery	- Kinks must be cut out
	- Native backfill can be used	- Sand must be imported
	- Temperature operation up to 200°F	- Temperature operation up to 140°F
System Configuration	- No fusion – lower installation skill level; fusion	- Fusion required – higher installation skill level;
	equipment cost not required	fusion equipment required
	- Ease of installation – weight on end of U-	- More difficult install – no weight on end of U-
	Bend	Bend
	- Up to 15% more energy extracted – 2x U-	- Less energy extracted – 1x U-Bend; no pipe
	Bend; use of spacers	spacers available
	- Lower drilling costs – 2x U-Bend	- Higher drilling costs – 1x U-Bend