PRODUCED WATER FROM NPR-3 OIL AND GAS WELLS FOR LOW-TEMPERATURE GEOTHERMAL APPLICATION

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ABSTRACT: There are a large number of oil and gas wells in the USA which produce hot water with the hydrocarbon product. These wells (which in general produce fluids at temperatures below 220 °**F**.) have been estimated as being capable of generating upwards of 5,000 MW. The Teapot Dome oilfield, also known as NPR-3, operated by the U.S. Department of Energy (DOE) is such a field. The present produced water from the Tensleep formation is projected to produce 180 kW of gross power. If the production from the Madison is included with potential increases in Tensleep production, the gross power potential would be be in the 540 to 900 kW range. To verify this concept, Ormat Nevada Inc., has entered into a Cooperative Research and Development Agreement (CRADA) with the DOE operated Rocky Mountain Oilf1.15 TD Rockd a

the breakdown of the projected production for indi

Figure 2. Potential Geothermal Supply Wells at NPR-3

Well	Zone	Rate, MBWPD		Comments
		Low	High	
17-WX-21	Madison	20	25	Flowing
17-WX-21	Tensleep	4	10	Needs perforating

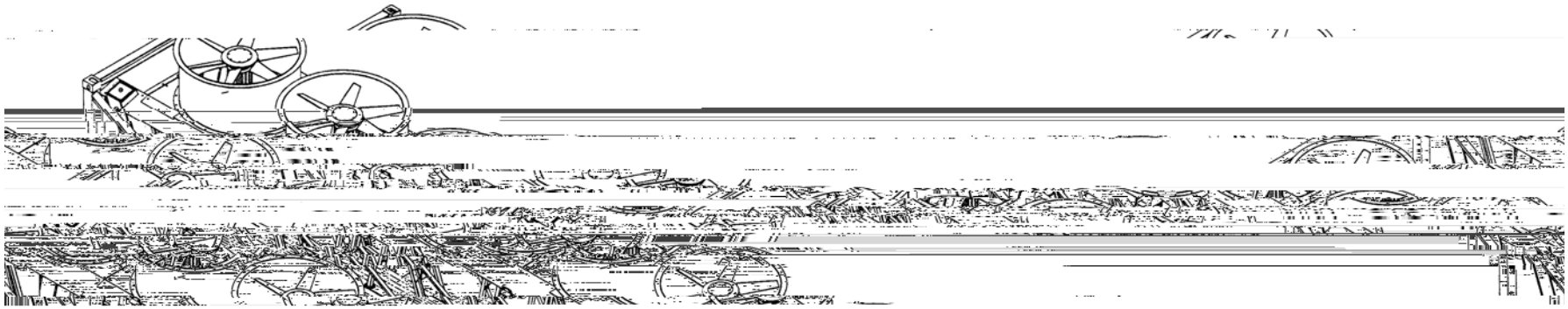

Figure 7. Conceptual drawing of proposed OEC unit.