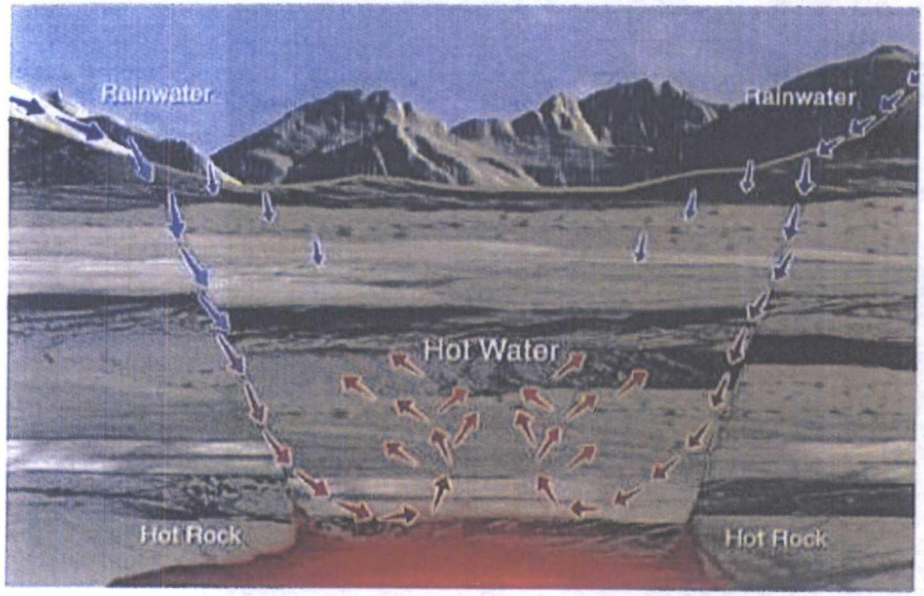
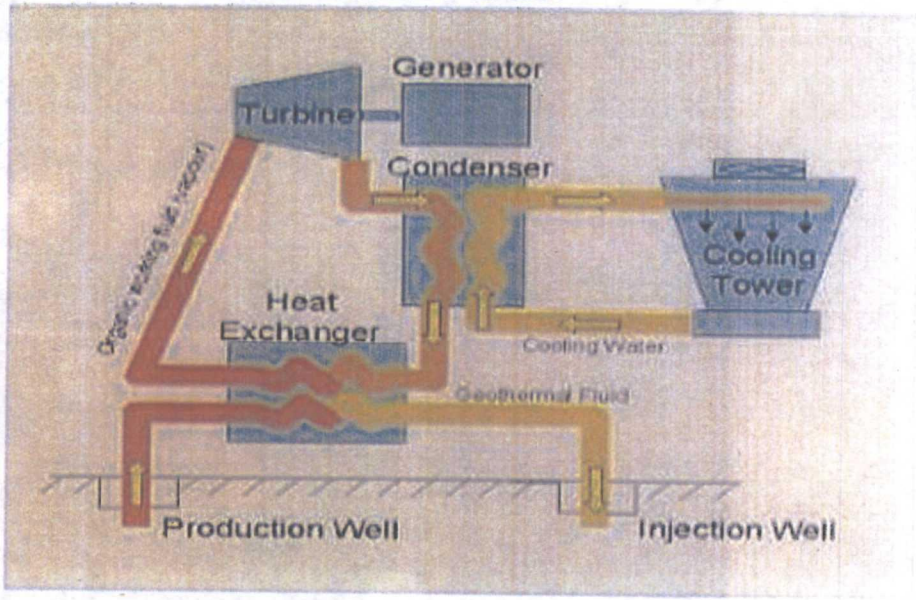
GEOTHERMAL ENERGY PROCESS

GEOTHERMAL RESERVOIR



BINARY CYCLE POWER PLANT



Water is pumped from a geothermal well through a heat exchanger and cooled water is returned to the underground reservoir. A second fluid with a low boiling point is then pumped at a high pressure through the heat exchanger and then vaporizes directing the turbine. It is then condensed by a cold air radiator or cool water and cycles back through the heat exchanger

EXHIBIT
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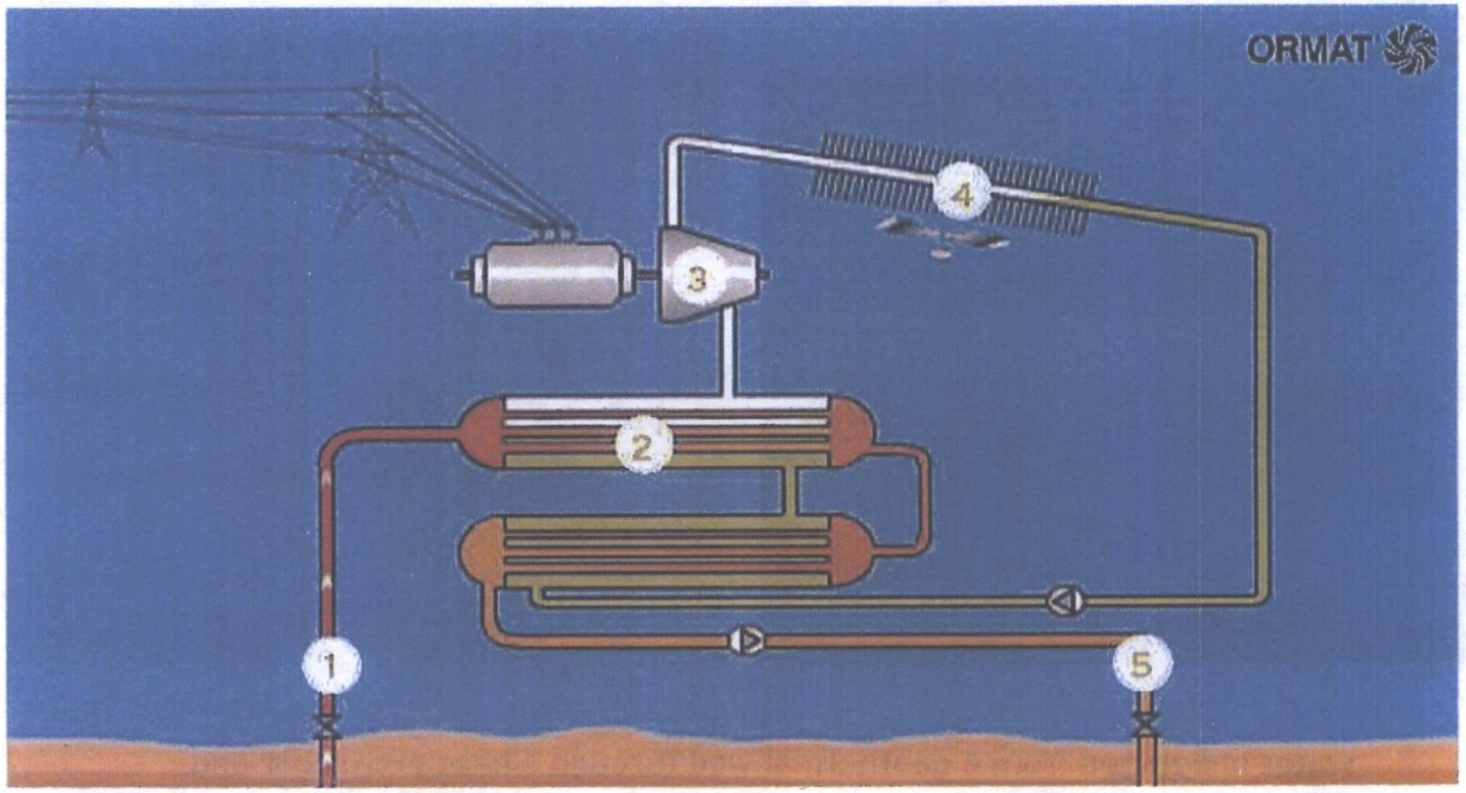
GEOTHERMAL - HOW BINARY (ORGANIC RANKINE CYCLE) WORKS



1. Geothermal fluid is pumped to the surface under pressure to keep it in liquid phase. It remains in the piping and is never exposed or mixed with other fluids.
2. Heat from the geothermal fluid is extracted through heat exchangers.
3. The secondary working fluid, the "binary" fluid with a very low boiling temperature, is vaporized and sent to the turbine to turn the generator
4. The vaporized binary fluid is condensed, returned to liquid phase, and pumped back to the vaporizers/ heat exchangers to repeat the process
5. Cooled geothermal fluid is re-injected into the deep geothermal reservoir to be reheated and re-circulated.