



## GEOTHERMAL EXPLORATION

GeoPower Corporation – a developer of geothermal sources - has recently completed drilling three 1,600 foot deep exploration holes in an attempt to locate a geothermal resource thought to be in the Eastern part of Arizona. The holes were filled with water and after several weeks, the water temperature became the same as the temperature of the surrounding rock. Readings of the water temperature at every 200 feet were taken to determine how the temperature changed with depth.

The results of the temperature measurements are given below.

If a temperature of at least 300 degrees F is needed to make use of a geothermal resource:

1. Which hole would you recommend developing?
2. At what depth would you expect to reach the 300 degree F geothermal reservoir?

### GeoPower - Eastern Arizona Exploration Results

| Depth (Feet) | Bore-Hole #1 (Deg F) | Bore-Hole #2 (Deg F) | Bore-Hole #3 (Deg F) |
|--------------|----------------------|----------------------|----------------------|
| 200          | 40                   | 60                   | 42                   |
| 400          | 40                   | 85                   | 44                   |
| 600          | 42                   | 105                  | 50                   |
| 800          | 44                   | 115                  | 60                   |
| 1,000        | 50                   | 125                  | 75                   |
| 1,200        | 60                   | 130                  | 90                   |
| 1,400        | 85                   | 135                  | 105                  |
| 1,600        | 116                  | 138                  | 123                  |



## GeoPower - Exploration Hole Analysis Chart

