

# Thermal Response Test

## The foundation for a correct dimensioning

Through our thermal response test the mountains effective Thermal conductivity is brought properly, which is the crucial factor for the correct dimensioning. A properly dimensioned geothermal property for heating and / or cooling supply's green energy to the property for many years. The precondition for the implement of a proper calculation is that accurate data on the local conditions are there. Through our thermal response test the mountains effective Thermal conductivity is brought properly, which is the crucial factor for the correct dimensioning.

### What is a Geo thermal response test?

As soon as the drilled hole is being used, a thermal impact is going to exist between the drilled holes. How much energy and affectivity that can be used on the thermal impact is partly on the mountains thermal conductivity and resistance. We measure the local thermal conductivity and the resistance between the drilled holes by being in place with our equipment.

### Benefits

With the results on the thermal response test an optimized thermal drilling plan can be brought. This minimizes the future services expenses and optimizes the investments expenses in the energy wells.



*Accio offers geo energy related favors over the whole world and works neutral without connection to brands or company.*

### Why you shouldn't estimate from bedrocks maps

For single energy wells the sensitivity is lower and an overinvestment is higher. When it comes to facilities with many drilled holes the thermal interferences drilled holes is going to an important factor to the system design. Differences to the theoretical thermal conductivity are measured to be up to 70 % by our equipment. This shows the insecurity to use appreciated numbers for dimensioning.

### How is an TRT done?

To do a measurement an energy well is needed, which can be used later in the construction. Through business partners we can offer a total solution with energy drilling and thermal response test if you doesn't already have an energy well. The equipment measure on the construction normally for 3-5 days and can be done a couple of days after finished drilling.

### Energy balance calculation

When the thermal response test is done the number of energy wells, active drill depth and collector are going to be decided. In our energy balance calculation (optional for TRT) we take the object specific conditions and simulate the future service of energy wells in consideration. The purpose is to calculate the long-times effects so the system is sustainable and also to optimize the investments.

