

Thermal Response Test Equipment Data

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Country: Bulgaria

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GENERAL TRT DATA

| | | | |
|---|------------|--|--|
| Type: <i>Heat injection</i> | No TRTs: 3 | Size, weight: 4,25 x 1,96 x 2,2m; 900 kg | |
| Aim: <i>Research/ development</i> | | Pump: <i>frequency regulator, MOELLER" DF51-322</i> | |
| Powered by: <i>Electricity</i> | | Heater: <i>three stage, tubular type, 5 kW</i> | |
| Built on/in: <i>Trailer</i> | | HP/Cooler: <i>non</i> | |
| <p>(1) electrical boiler, (2) calorimeter, (3) pressure watch, (4) expansion tank, (5) thermo - manometer, (6) filter, (7) circulation pump, (8) de-aeration pipe, (9) quick couplings, (10) valves and (11) electrical unit.</p> <p style="text-align: center;"><u>Principle outline</u></p> | | Temperature measurements: <i>temperature elements with PT100, ±0,15K</i> | |
| | | | Flow rate measurements: <i>calorimeter MEGATRON2, SIEMENS production</i> |
| | | | Voltage stabilization: <i>Yes</i> |
| | | | Supply Power Monitoring: <i>Yes, automatically</i> |
| | | | GPS: <i>No</i> |
| | | | Remote Control of Operation: <i>No</i> |
| | | | Remote Data Collection: <i>No</i> |
| | | Logger: <i>automatic, SIGMATECH (Bg production)</i> | |

TRT EXPERIENCE

Years of operation: 2

Number of performed measurements: 3 *Research/ development*

Typical borehole depths: 41 m

Applications: *BHE*

Typical collector type: *1U*

Typical fluid type: water

Typical groundwater temperature: 16,3°C

Geographical area: *Plovdiv, Bulgaria, 170 m over sea level*