

3.6 Sorell 1

The heat flow model for Sorell 1 (Fig.5) illustrates a good fit between the observed and predicted temperature profiles. The well intersected sandstone and black shale in the upper section before entering Jurassic dolerite beneath 168–172m depth. Thermal conductivities range from 2.20 – 3.76 W/mK. The modelled conductive surface heat flow is $83.0 \pm 1.1 \text{ mW/m}^2$ calculated from the conductivity-constrained interval (approximately 105 m – 245m).

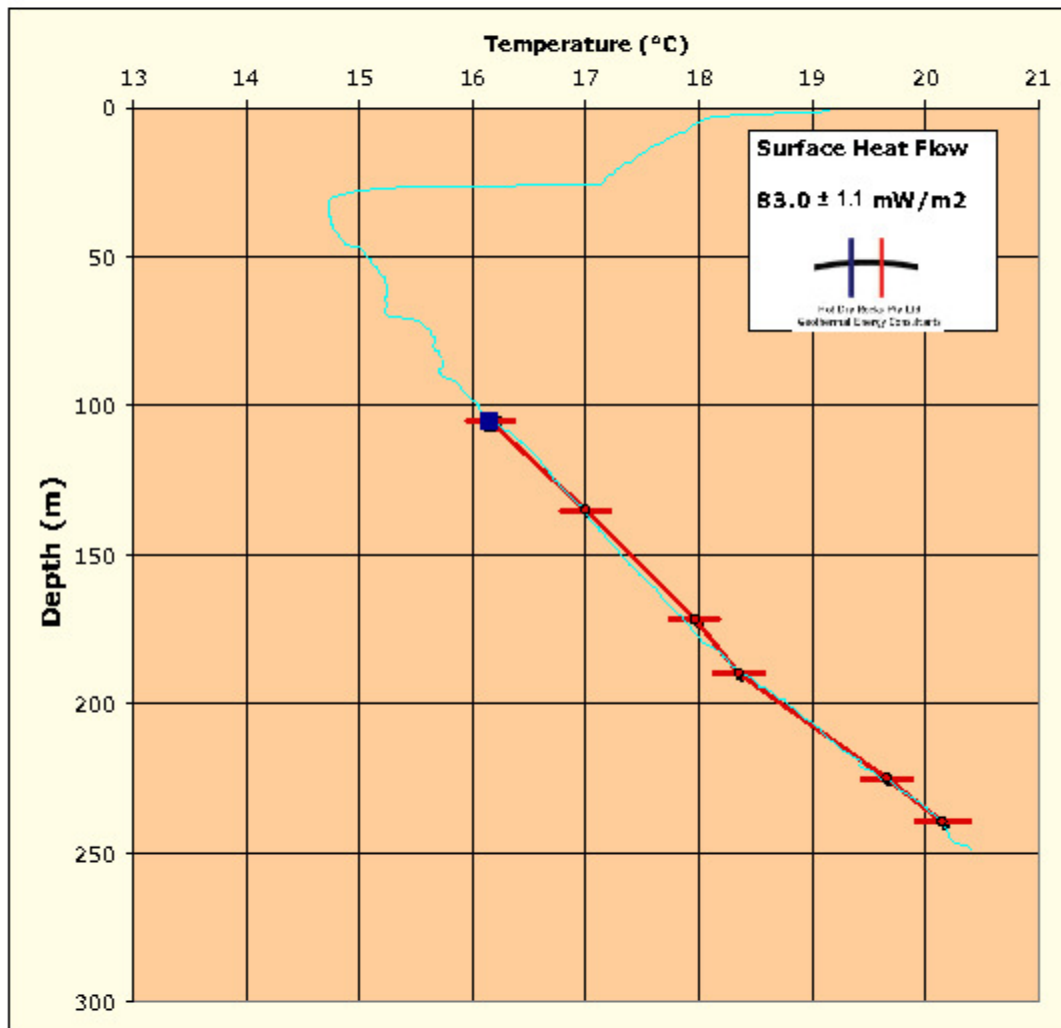


Figure 5. Sorell 1 – conductive heat flow modelled from rock thermal conductivity data and precision temperature log (blue line). Red line is the modelled temperature profile for the stated heat flow.