

ADR RESPONSES TO VARYING GEOTHERMAL GRADIENTS



WHILST GENERATING ONLY A SMALL CARBON FOOTPRINT
(AVERAGE OF 4.72 tCO₂e PER SURVEY)

Adrok have applied their sub-surface heat detection methods in the Weardale Granite, NE England, as well as the Wairakei Geothermal Field, New Zealand.

Low values in the Energy Gamma (basic measure of energy reflectivity) component of the ADR Harmonics correspond to high temperatures beneath the ground.

The Weardale (UK) E-Gamma plot shows strong thermal impact targets from 500-700m depths, followed by a relatively uneventful thermal impact down to 2000m. In the Wairakei (NZ) E-Gamma plot, there are consistent large thermal impact targets from 500m to 2000m. The thermal anomalies are consistent throughout the length of the scan.

The E-Gamma thermal impact in New Zealand is much more significant than in the UK for the first 2000m. This reflects the much higher geothermal gradients in Wairakei (125°C/km), compared to NE England (38°C/km).

