

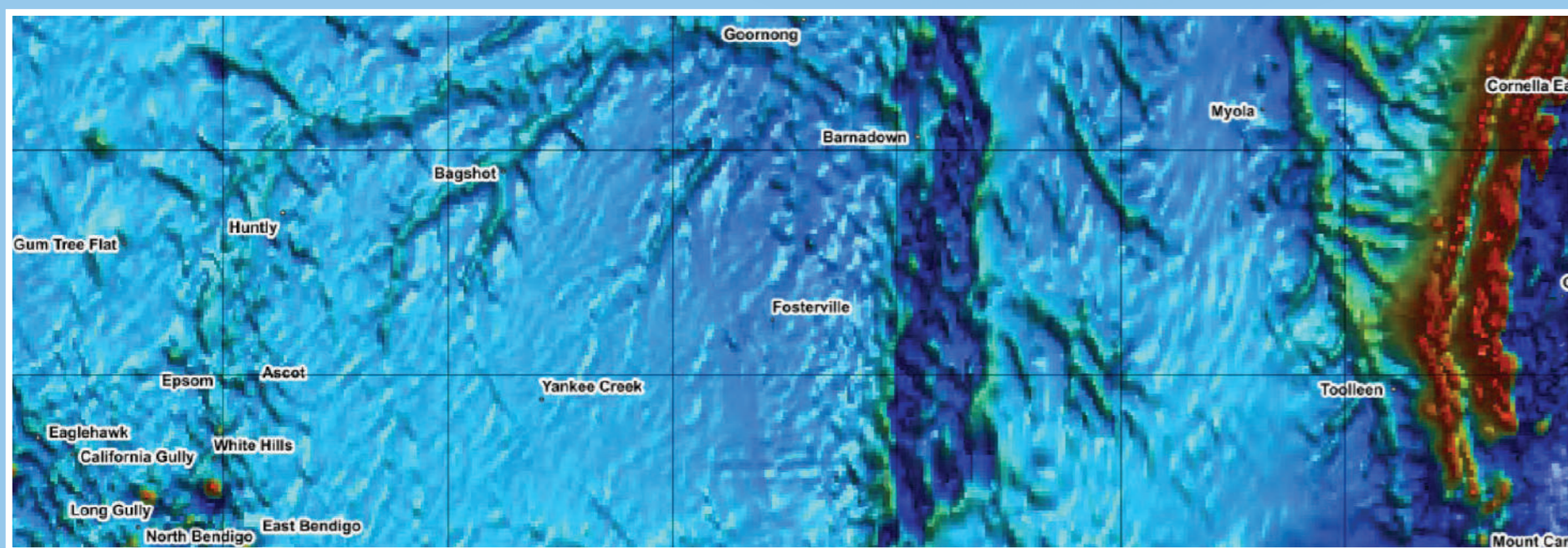
Regional exploration

Many large mineral deposits are covered by deep soil and sedimentary sequences. In order to find new areas of gold mineralisation, the Exploration Geologists use a combination of reconnaissance and low impact exploration including surface soil sampling, geophysical surveying and drilling to find prospective mineral deposits.

Geophysics

Often the first step in green-fields exploration, geophysics is vital in the creation of new exploration targets. It provides information on a large scale.

- › Rock variations identified by measuring their response when exposed to inputs such as gravity, magnetic fields and electrical currents.
- › Surveys are completed on the surface or with aeroplanes and helicopters.
- › Variations in the rocks allow geologist to distinguish areas that are prospective for gold mineralisation.



Soil sampling

Soil sampling is usually the next step taken, as soils often reflects the type of rock that sits below the soil. The soil sampling process is done by:

- › Digging small holes with hand tools at selected locations, soil is removed and sieved.
- › The digging sites are immediately back filled and rehabilitated.
- › Samples are then sent to a laboratory for analysis.
- › Results then identify areas elevated in pathfinder elements associated with gold.



Diamond drilling

Diamond drilling is usually one of the final stages of exploration, often used to confirm the presence of gold mineralisation. Small diameter core is drilled and removed from the Earth's crust at depths of up to 2km.

Once the drill core is removed, high resolution detail can be seen, making the following data sets available:

- › Amount of gold and other elements (Elemental abundance or geochemistry).
- › Petrology (physical properties of the rock such as density).
- › Structural data (how the rock beds, faults and quartz veins are oriented in the rocks below).
- › and more!



Regional exploration

In addition to the mine lease (MIN5404), larger portions of land called exploration tenements have been leased to Fosterville Gold Mine. The regional exploration team explore these areas for new mineral deposits.

