

Regional 3D Geological Prospectivity Modelling

Bullabulling Gold Case Study

The Bullabulling Gold project is focussed on two large mineralised trends of primary orogenic gold mineralisation: the north-south striking Bullabulling Trend and the east-west to northwest-southeast striking Gibraltar Trend.

Bullabulling was originally owned by Samantha (Resolute Mining) and latterly by Jervois Mining.

A significant drillhole database (over 12,000 completed holes) was acquired with the purchase of the project. Many of the previous drill holes only averaged 34m in length; therefore the deposit had not been tested at depth and remained open along strike.



Most of the work over the last two years has focused on updating the JORC resource and validating the data from previous drilling. As of 13 May 2013, the latest JORC global resource estimate reported 3.5 million ounces of gold (108.4 Mt at 1.02g/t Au) using a 0.5g/t Au cut off.

Of this new estimate, 2.27 million ounces are in the Indicated resource category at a grade of 0.97 g/t Au.

Kenex and Impel Geoscience developed a regional 3D model of the Bullabulling project area and surrounds with GoCAD and Leapfrog in order to determine additional drill targets for the project. All geophysical data for the broader Bullabulling region was integrated with a two-dimensional geological interpretation, structure and geochemical data to construct a regional three-dimensional geological model.

Modelling Outcomes:

The modelling has shown that gold mineralisation at Bullabulling is associated with the largest fold in the region at the top and bottom contacts of a regionally extensive ultramafic unit.

This structural setting had not been described before at Bullabulling and its identification has important implications for ongoing exploration as, with the exception of the Bullabulling western limb, the fold limbs have not been tested by resource drilling. The Bullabulling eastern limb is completely untested by drilling, with the exception of a small number of holes which previously penetrated the prospective structure with mineralisation being intersected.

This supports the proposition that this eastern structure has the potential to host a similar resource to that delineated on the western limb. The Gibraltar fold limb (to the south of the main resource area) has not been drilled to date and these structures are considered to represent significant exploration targets.

