

16 September 2015

## **Copper Intersected in 3DIP Targets at Jervois**

### **Highlights**

- **Drilling of IP targets is underway**
- **4 holes completed and one hole in progress with all holes intersecting copper mineralisation**
- **MT survey results identify new conductors**

KGL Minerals (KGL) recently completed a 3D - Induced Polarisation (3DIP) & Magnetotelluric (MT) survey in the Bellbird region to search for additional zones of mineralisation in a poorly tested and yet highly prospective zone along the 12km of mineralised strike length at Jervois.

Results from the MT have identified three main conductors within the survey area (Figure 9). These are: i) down dip of the Bellbird/Bellbird East mineralisation, ii) in the Chubko prospect, and iii) south west of Green Parrot (Figure 10 & 11).

Four holes of a ten hole, 3,500m drilling program designed to test the 3DIP targets at the Jervois project have been completed. Drill targets have been a combination of chargeability and conductivity anomalies at Target A, Target X, Target F and at Bellbird East (Figure 1). The fifth hole in the program KJCD171 is in progress and has also intersected copper mineralisation in reverse circulation (RC) drilling, prior to switching to diamond core drilling at 250m due to high ground water flows.

At Target A, RC hole KJC167 was drilled to 232m to test a chargeability anomaly extending south along strike from the Bellbird resource. Between 75-102m the hole intersected several zones of malachite and chalcopyrite in altered sediments with a second zone of minor mineralisation intersected at 217-220m. A second hole is planned to test the peak of the anomaly further to the west.

At Target X, diamond hole KJCD168 was drilled to a depth of 710m to test a bedding parallel conductivity trend with a coincident chargeability anomaly. The hole intersected beds of strongly altered limestone (diopside-garnet skarnoid) at 417.7m to 425.7m and 458m to 468m. In the first interval of limestone there were veins and disseminations of fine grained bornite-chalcocite with minor fluorite-scheelite. The second interval contained predominantly veins and disseminations of fluorite-scheelite. Minor stringers and blebs of chalcopyrite associated with quartz veins were intersected at 476m and 477.5m below the limestone units.

Hole KJCD168 was drilled as part of the NTGS CORE (Creating Opportunities for Resource Exploration) cofunding program. The core will now be sent to Darwin for scanning with the NTGS multispectral Hylogger before it can be cut and sampled for assaying.

KJC169 was drilled at the southern end of the Bellbird East prospect where previous drilling intersected lead-zinc-copper mineralisation along a fault zone bordering the Bellbird South open pit. Bellbird East is delineated by a chain of isolated chargeability anomalies in the 3DIP survey. A well defined zone of lead-zinc mineralisation was logged between 118-128m with quartz-epidote-garnet +/- chlorite alteration in schist that is interpreted to be an extension of Bellbird East prospect.

Hole KJC170 was drilled to test a conductivity anomaly at Target F. The conductive zone is located between the Rockface prospect and the Killeen copper trend further to the south. The 440m RC hole intersected multiple zones of minor disseminated and stringer chalcopyrite. An upper zone between 95-108m relates to the eastern extension of the Rockface resource. A second zone of disseminated chalcopyrite in garnet-magnetite altered sandstone centred on 366-383m is likely to be the down dip extension of the Killeen copper prospect.

Simon Milroy, the Managing Director of KGL Resources comments, "Targeting the anomalies identified in the recent 3DIP survey is working well so far with all holes intersecting new zones of mineralisation. Samples from the drilling are being progressively despatched to the lab so we should start to see the results over the next few weeks."

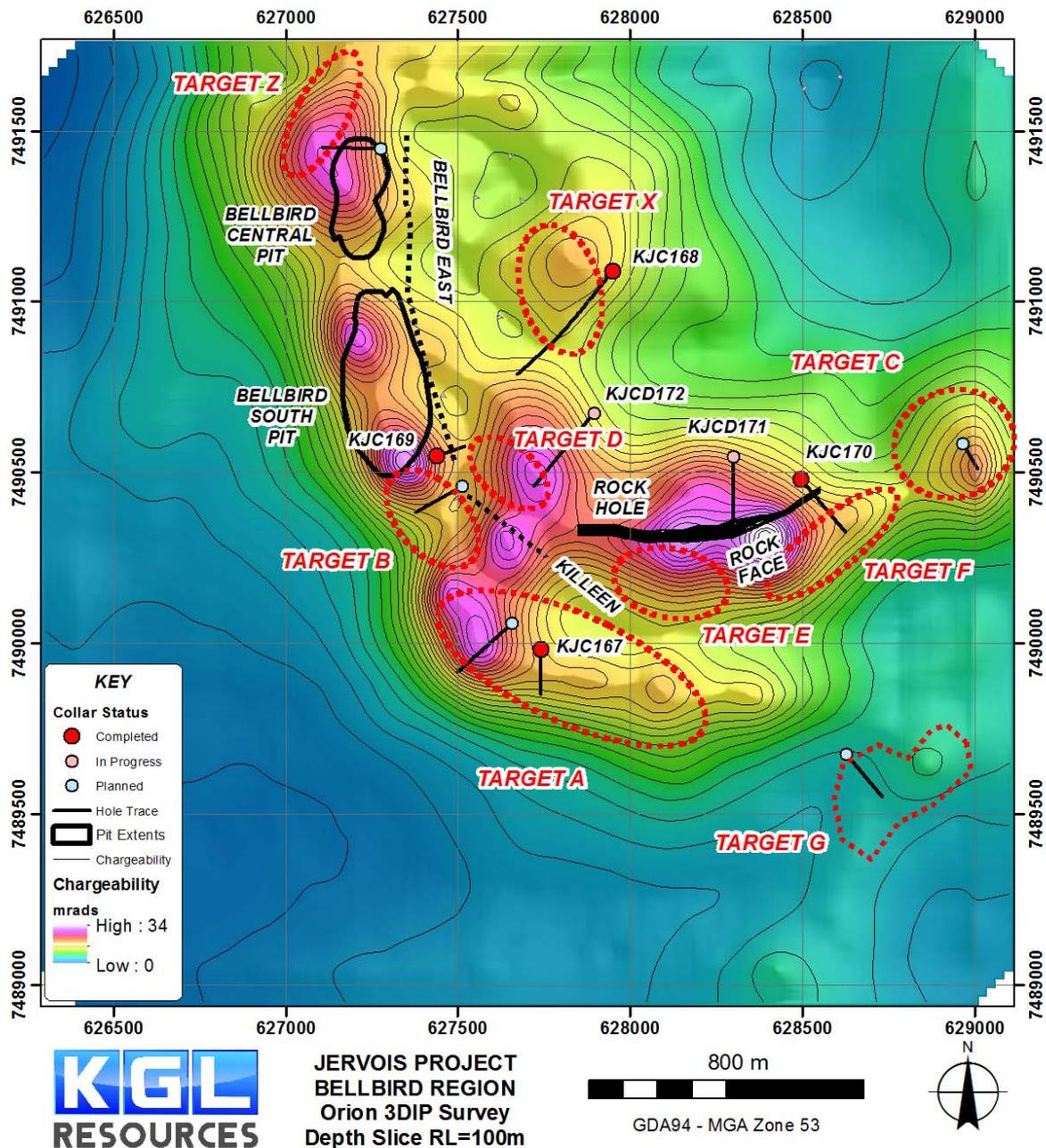


Figure 1 3DIP - Chargeability depth slice at RL 100m

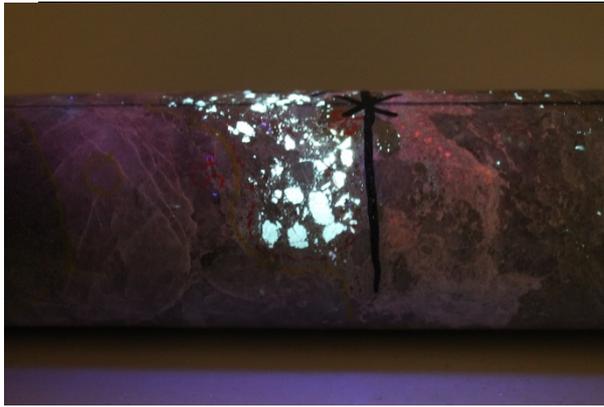


Figure 2 Scheelite (tungsten) highlighted under UV light  
KJCD168 - 427.95m

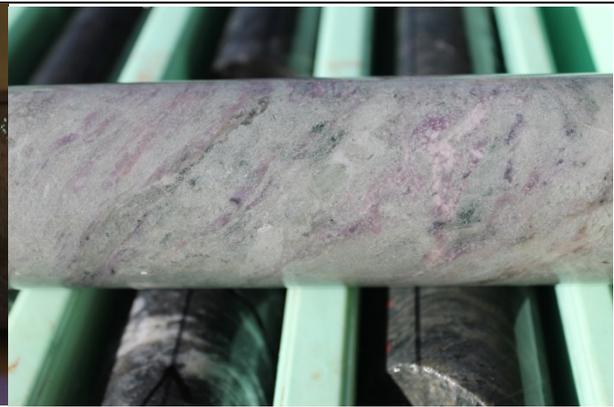


Figure 3 Altered limestone with fluorite and scheelite (tungsten) KJCD168 – 465.0m



Figure 4 Altered limestone with zones of bornite and chalcocite (copper) (diopside-garnet calcsilicate) KJCD168 - 424.9m



Figure 5 Altered limestone with zones of bornite and chalcocite (copper) (diopside-garnet calcsilicate) KJCD168 - 466.6m



Figure 6 Chalcocite & bornite vein (copper) in altered limestone (diopside-garnet calcsilicate) KJCD168 - 422.2m

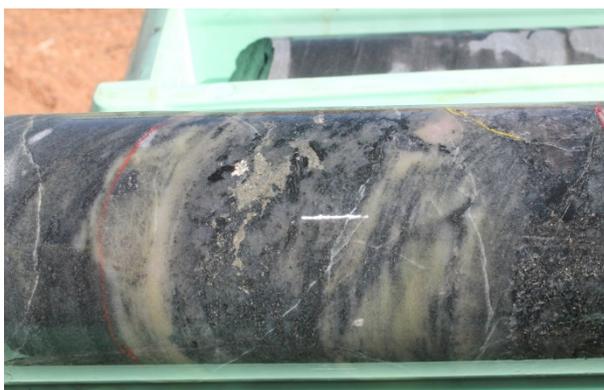


Figure 7 Silicified schist with pyrite/chalcopyrite (copper) in a quartz vein KJCD168 – 476.1m



Figure 8 RC drilling of Target "F" (KJC170) at Rockface Prospect

### MT Conductors

Quantec Geoscience ORION 3D is a multi-parameter distributed ground geophysical survey system that acquires large volumes of highly accurate subsurface physical property information from surface to depths of up to 800 metres with IP Chargeability and DC resistivity and to depths in excess of 1500 metres with MT resistivity. (Figure 9).

The attached Figures 10-11 are horizontal slices taken at a constant depth above sea level through the modelled resistivity results. The relative level (RL) at the surface varies with topography though is approx. 360mRL at the Bellbird deposit. In the figures below the depth slice at -100mRL is therefore approx. 460m below the surface and -500mRL is approx. 860m beneath the surface.

In the MT images white/pink regions correspond to low resistivity/high conductivity and blue/green regions correspond to high resistivity/low conductivity. Known copper and lead mineralisation generally responds as a moderate to good conductor in both IP and EM surveys conducted previously. The survey resolution is reasonably good within the Bellbird 3DIP block and is sparser in the peripheral areas as can be seen in Figure 9.

Mineralisation at Bellbird is dipping to the east-north-east. The conductor at the southern end of Bellbird is significant because this is where we are seeing some of the wider intervals of mineralisation in the existing drilling and this may suggest that mineralisation extends further down dip.

Mineralisation at the southern end of Green Parrot appears to have been faulted off against a NE-SW striking fault that is observable in the field and identified in airborne magnetics. The sense of movement in this generation of faults would see the southern block shifted to the south west and the conductor we see in the MT may possibly be the southern extension of Green Parrot.

The conductor in the Chubko area appears to broadly conform with stratigraphy. There is good exposure in the area but no significant indications of surface mineralisation.

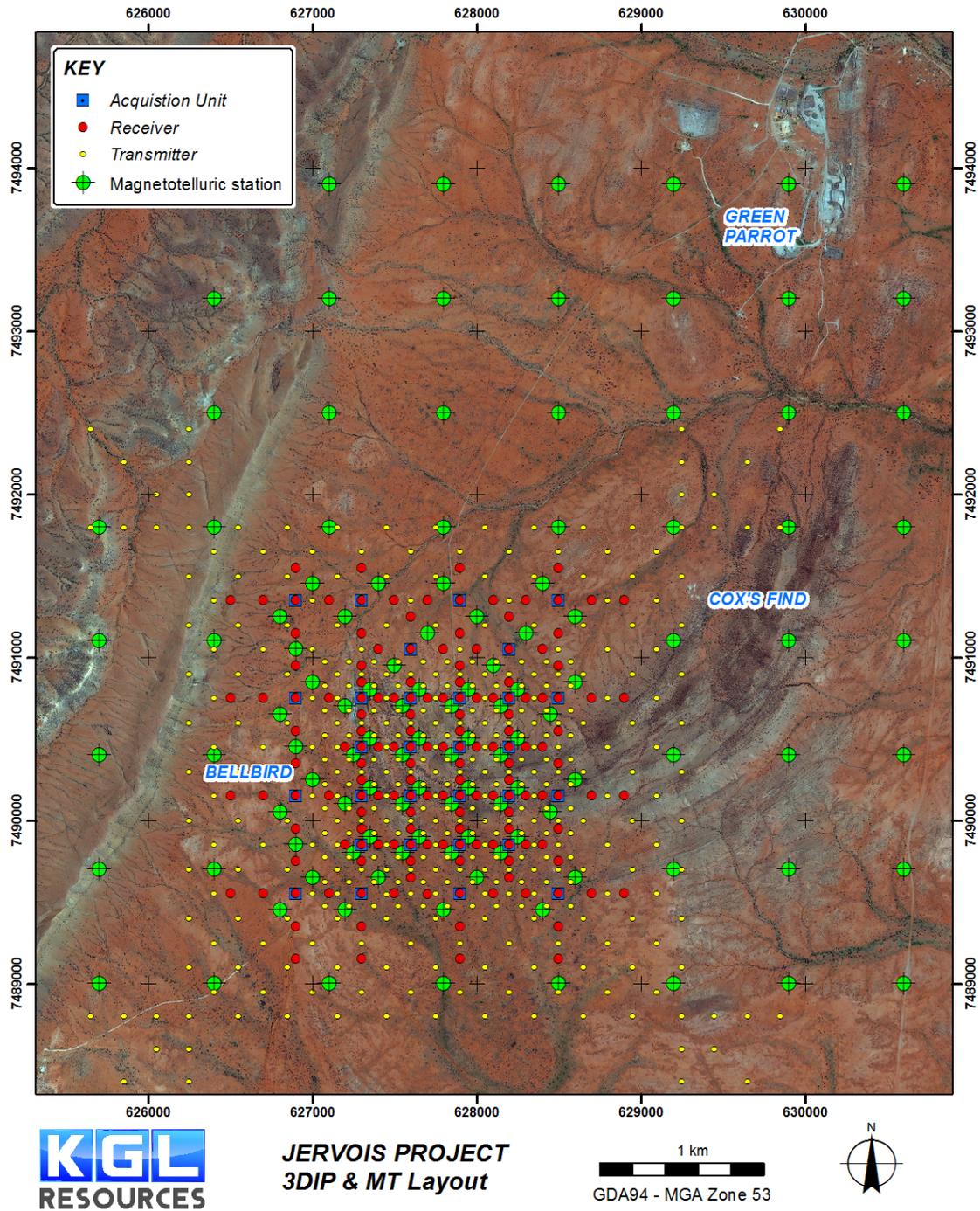


Figure 9 Jervois Survey layout for 3DIP and MT

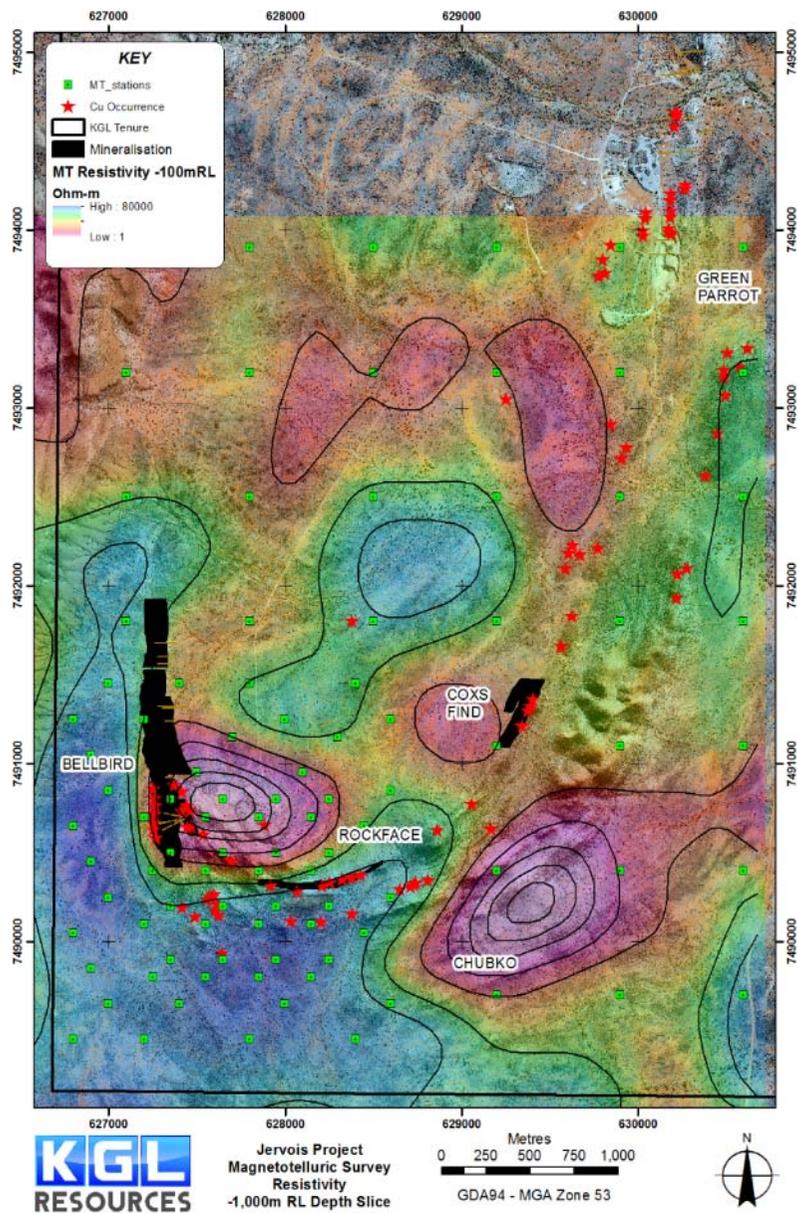


Figure 10 Jervois Magnetotellurics RL -100m depth slice of resistivity

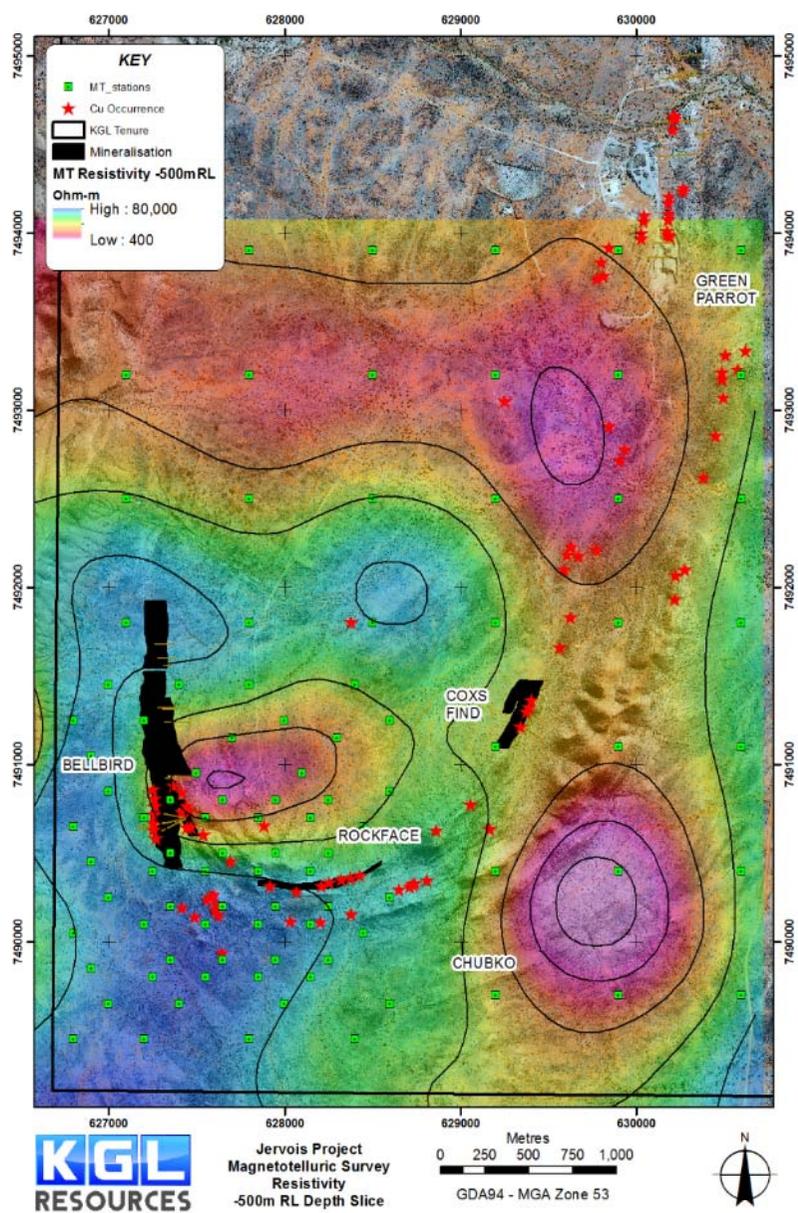


Figure 11 Bellbird Region RL -500m depth slice of resistivity

**For further information contact:**

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**About KGL Resources**

KGL Resources Limited is an Australian mineral exploration company focussed on increasing the high grade Resource at the Jervois Copper-Silver-Gold Project in the Northern Territory and developing it into a multi-metal mine.

**Competent Person Statement**

The Jervois Exploration data in this report is based on information compiled by Martin Bennett, who is a member of the Australian Institute of Geoscientists and a full time employee of KGL Resources Limited.

Mr. Bennett has sufficient experience which is relevant to the style of the mineralisation and the type of deposit under consideration and to the activity to which he is undertaking, to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Bennett has consented to the inclusion of this information in the form and context in which it appears in this report.