Kentor Minerals (NT) Pty. Ltd.

(a wholly owned subsidiary of KGL Resources)

CORE 2015
GEOPHYSICS AND DRILLING
COLLABORATIONS PROGRAM

BELLBIRD DIAMOND DRILLING
EL25429
JERVOIS PROJECT, NT

Huckitta (SF3-11) 1:250,000 map sheet
Jervois (6152) 1:100,000 map sheet

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CONTENTS

EXECUTIVE SUMMARY

1.0 INTRODUCTION.....1

2.0 LOCATION AND ACCESS.....1

3.0 GEOLOGICAL SETTING.....1

4.0 EXPLORATION AND MINING HISTORY.....3

5.0 EXPLORATION CONCEPT.....3

6.0 DETAILS OF COLLABORATIVE PROGRAM.....5

7.0 RESULTS AND INTERPRETATION.....6

8.0 DISCUSSION AND CONCLUSIONS.....8

9.0 REFERENCES.....9

APPENDIX 1: KJCD168 Collar data

APPENDIX 2: KJCD168 Lithology data

APPENDIX 3: KJCD168 Assay data

APPENDIX 4: KJCD168 Survey data

APPENDIX 5: KJCD168 DHEM Report

EXECUTIVE SUMMARY

In 2015, KGL Resources was granted funding from the Northern Territory Government as part of the Geophysics and Drilling Collaborations Program. The funding was for a diamond hole to test a coincident chargeability and conductivity induced polarization (IP) target at the Bellbird prospect at the Jervois Project.

The Jervois Cu-Pb-Zn-Ag-Au project is located 250km ENE of Alice Springs and has a total endowment of 327kt copper, 190kt of lead-zinc and 22.6Moz of silver. Mineralisation is hosted by the Palaeoproterozoic Bonya Metamorphics within the Aileron Province of the Eastern Arunta. The Bonya Metamorphics comprises of siltstones, sandstones and limestone that have been metamorphosed to amphibolite grade schists, quartzite and marble. The main copper resources are at Reward and Bellbird with smaller lead-zinc resources at Green Parrot and Bellbird North prospects. The resources are made up of several steeply dipping sulphide lenses that are stratabound within a mineralisaed trend that extends for 12km within KGL's project area.

An Induced Polarisation survey was conducted in 2015 covering the Bellbird resource and east to Rockface. The survey located a large coincident chargeability and conductivity anomaly to the east of Bellbird. The anomaly was interpreted to be either a folded or faulted repetition of the Bellbird resource or a new mineralized horizon. A 550m diamond hole (KJCD168) was designed to test the IP anomaly.

KJCD168 intersected a broad package of cordierite/andalusite schist to 379m and then schists interbedded with calcsilicate/marble to 556m. From 556m to the end of hole at 710m the sequence was predominantly quartzite/psammite with decreasing schist. Copper, zinc and tungsten values were weakly anomalous within the calcsilicate with maximum values of 0.13% Cu, 0.21% Zn and 0.13% W.

The sedimentary sequence intersected in KJCD168 is different to the sequence that hosts the Bellbird resource. It was concluded that the IP anomaly is not a folded or faulted repetition of Bellbird but a weakly mineralized horizon stratigraphically above the Bellbird resource. Although the copper values were only weakly anomalous the results are considered significant. The hole was designed to test the location where the IP chargeability and conductivity anomalies coincide. An additional hole will be required to test the centre of the chargeability anomaly that is considered to be a more prospective target.

1.0 INTRODUCTION

In 2015, KGL Resources applied for funding in Round 8 of the Northern Territory Government's Geophysics and Drilling Collaborations program to drill a deep hole to test a geophysical target at the Jervois Project. The target was interpreted to be a folded or faulted repetition of the Bellbird resource that had the potential to substantially increase the global resource at Jervois. A deep hole at Marshall-Reward funded by Round 7 of the program intersected mineralization 300m below the existing resource highlighting the potential of the project.

2.0 LOCATION AND ACCESS

Jervois is located ~250km ENE of Alice Springs and can be accessed via the Stuart Highway and then the Plenty Highway to Harts Range and Jervois Station. Approximately 20km north-east of Jervois Station is a turnoff for the Lucy Creek Station and the Jervois project (Figure 1). The Plenty Highway is sealed for the first 90km from the Stuart Highway and then becomes a well maintained gravel road. The project area is located on the Jervois Pastoral Lease and is close to the Bonya Aboriginal Community that has a gravel air strip.

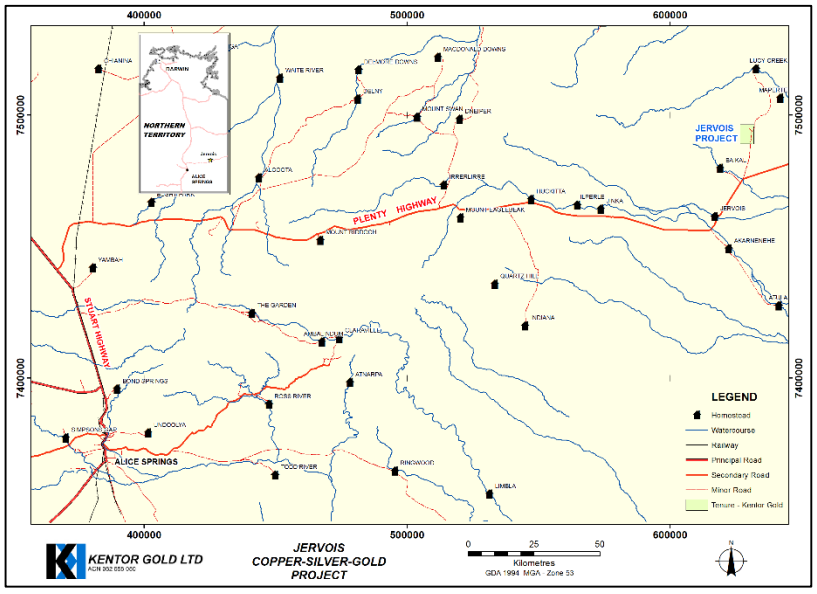


Figure 1: Jervois project location plan

3.0 GEOLOGICAL SETTING

The Jervois deposit is hosted by the Bonya Metamorphics (Reno 2015) that forms part of the Aileron Province that is defined as Palaeoproterozoic crust in the Arunta Region that formed part of the North Australian Craton prior to 1700Ma (Scrimgeour 2013). Metasedimentary successions in the Aileron Province are believed to have been deposited within the interval 1860-1740 Ma and the majority of the magmatism occurred in the interval 1820-1700Ma (Scrimgeour 2013). The Bonya Metamorphics is a high-temperature, low-pressure package of metasedimentary rocks with protoliths interpreted to be equivalent to the lower Strangways Metamorphic Complex (Reno 2015).

At Jervois the Bonya Metamorphics is dominated by quartz-muscovite schist representing metamorphosed siltstone and mudstone . The schist is interbedded with fine to medium grained beds of metasandstone that typically vary from 1cm to 30cm but much thicker beds and lenses of metasandstone have been

mapped at the surface. Within the fine grained schistose beds there are broad belts with distinctive cordierite and/or andalusite porphyroblasts that give the rock a knotted appearance. Beds of marble and calc-silicate rock occur throughout the Jervois project area but have poor strike continuity because they are rheologically competent and have been attenuated and boudinaged during deformation. Although minor in extent narrow beds of finely bedded quartz-tourmaline and fine to coarse grained volcanic/ volcaniclastic rocks of rhyolitic composition have been mapped. The Jervois sequence has been intruded by several phases of pegmatite and an amphibolitic rock interpreted to correlate with the Attutra Metagabbro (ca 1786 Ma). The Bonya Metamorphics is unconformably overlain by Neoproterozoic sediments of the Georgina Basin that forms a prominent ridge on the western edge of the project area (Figure 2).

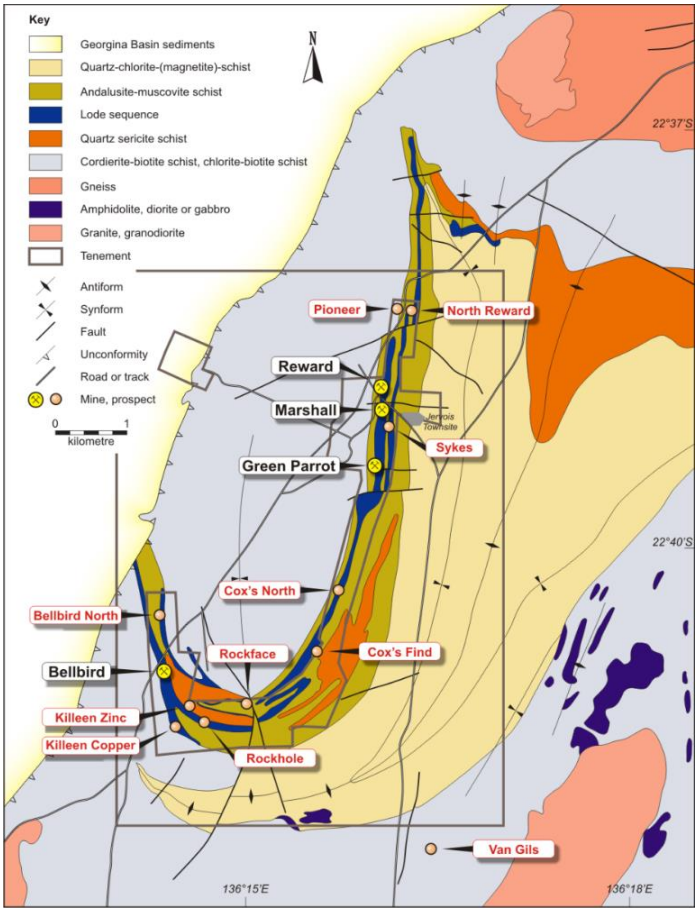


Figure 2: Jervois Project geological interpretation showing prospect locations

Three main deformation events have been identified at Jervois. D_1 is cryptic and not well exposed in the Jervois area but was interpreted to be a large westward closing recumbent fold. The dominant structural fabric seen throughout the Jervois area relates to D_2. The foliation is sub-parallel to bedding and is interpreted to have formed in an east-west, possibly transpressional regime. Importantly isoclinal folding during D_2 may have resulted in repetitions of the mineralised horizons across strike. Examples include Reward and Reward East/ Sykes, ~100m to the east and Bellbird and Bellbird East. During a progressive D_2 deformation strain hardening resulted in the formation of a conjugate set of northeast and southwest trending faults that has resulted in the offset of mineralised trends and some units along strike. D_3 resulted in the refolding of the D_2 isoclinal folds and foliation, and formation of the characteristic 'J' shaped Jervois Range. In the axial plane of the D_3 at the southern end of the Jervois Range the D_2 foliation has been crenulated and kinked.

4.0 EXPLORATION AND MINING HISTORY

Copper was discovered at Jervois in 1929 during a muster of stray cattle on a track from Tobermorey on the Northern Territory border. Small scale mining commenced in the 1950s when renowned Territorian Kurt Johannsen acquired leases over the area and trucked copper carbonate to Mount Isa where it was used as a flux in the smelter. In the 1982 Plenty River Mining commenced mining high-grade lead and-silver ore from the Green Parrot open pit but a sharp fall in the lead price resulted in the closure of the operation within a year. Between 1999 and 2001 MIM Exploration farmed into the project and conducted an induced polarisation survey followed by diamond drilling but withdrew because of the perceived limited size potential. Kentor Gold Ltd, now KGL Resources Ltd, acquired the project in 2011 with the takeover of Jinka Minerals. Between 2011 and 2015 KGL completed over 100,000m of drilling, conducted geophysical and geochemical surveys, detailed geological mapping and supported research on the deposit by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and the Northern Territory Geological Survey (NTGS). The current copper resource is 26.7Mt at 1.12% Cu, 16.6g/t Ag and a lead-zinc resource of 3.8Mt at 3.7% Pb, 1.2% Zn, 0.72% Cu, 67.5g/t Ag.

5.0 EXPLORATION CONCEPT

Original Exploration Target

Exploration by KGL has primarily focused on the copper resources at Jervois but the discovery of new high grade lead-zinc lenses in 2014 and a steady increase in the gold and silver resource has highlighted that Jervois is polymetallic (Cu-Pb-Zn-Ag-Au). The increasing lead-zinc resource has prompted a reassessment of the deposit style that has never been adequately resolved in the past. Recently completed research by the NTGS and CSIRO has proposed that Jervois is a 'hybrid SEDEX-VMS deposit' that has undergone substantial modification during deformation and metamorphism.

The hybrid SEDEX-VMS style attributed to Jervois suggests the deposit could be larger and more extensive than previously thought. SEDEX and VMS deposits can have a large lateral extent and can develop at one or more levels in the stratigraphic sequence. A mine camp commonly contains multiple lenses some of which may have no surface expression. There is also the potential for high-grade lenses of copper and/or lead-zinc mineralisation that may be spatially separated corresponding to the original metal zonation around a hydrothermal vent. Lead-zinc mineralisation in VMS systems is commonly distal to the hydrothermal vent whilst copper may be focused in feeder veins below the vent.

A deep hole under Reward targeting mineralisation 300m below the current resource confirmed that the mineralisation extends 800m below surface and may extend much further. Mineralisation extends almost continuously for 12km around the J-fold, delineating the surface expression of the mineralised horizon within a north plunging syncline. Bellbird dips steeply east and Marshall-Reward dips steeply west with Rockface and Cox's Find at the southern end of the J-fold dipping north and north-west respectively.

A deep hole under the existing Bellbird resource will reveal whether the mineralisation extends to in excess of 500m below surface as it does at Marshall-Reward. The hole will also reveal if the mineralisation is hosted within a single or multiple stratabound horizons or if there is a fault control. Magnetic and sub-audio magnetic (SAM) images indicate the western limb of the J-fold has bedding parallel shears that may have controlled remobilization of mineralization during later deformation events.

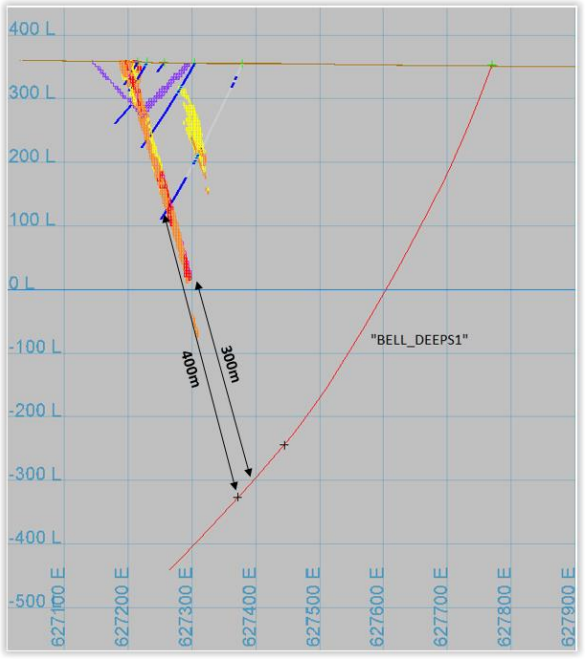
The sulphide lenses at Jervois are stratabound and hosted within the limbs of what is now a D3 synform. An investigation of the structural setting by CSIRO has shown that the limbs contain refolded D1 and D2 folds

that have caused repetition of the mineralised horizon(s). Examples include the Reward and East Reward lenses and Bellbird and Bellbird East lenses that are separated by ~50m. Structural data from diamond core at Reward appears to support this model but the fold closures are difficult to confirm at the surface or in core because of the intense D2 foliation that has sheared out fold closures. The proposed hole will provide additional structural data to support the existence of isoclinal fold repetitions of the ore lenses.

An additional aim of the hole is to provide a profile through the hangingwall and footwall of the Bellbird resource that will be scanned using the Hylogger and assayed for multielement to assess the alteration geochemistry and mineralogy. This information is particularly valuable for exploration to develop vectors to mineralisation. Hylogger data of the deep Reward hole revealed variations in the garnet geochemistry with proximity to mineralisation. Differences between the garnet zonation at Bellbird and Reward may indicate differences in the style of mineralisation. Recent research by CSIRO has shown Bellbird has a geochemical signature more typical of VMS style deposits in comparison with Reward which has more affinity with SEDEX deposits.

Revised Exploration Target

In 2015, KGL conducted an Orion 3D induced polarization survey over the Bellbird and Rockface prospects. Modelling revealed a strong coincident chargeability and conductivity anomaly to the east of Bellbird that was named Target X (Figure 4). The anomaly was interpreted to be either the down dip extension of Bellbird close to the keel of the J-Fold syncline or a separate mineralized horizon. Target X was considered a high priority target that could result in a major extension to the resource at Jervois. The relationship between the existing Bellbird resource and Target X was not known but it was considered possible that Target X was either a faulted or folded repetition of Bellbird. The original target and application for the co-funded drillhole was modified to test the Target X IP anomaly.



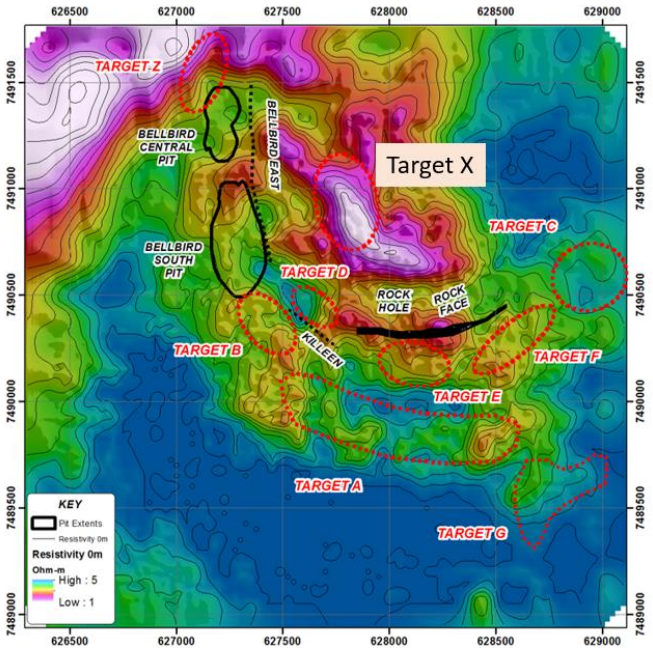


Figure 3: Cross section of Bellbird showing location of proposed hole 300m below the current resource
Figure 4: Conductivity image of Bellbird showing location of revised target for drilling (Target X)

6.0 DETAILS OF COLLABORATIVE PROGRAM

A single ~550m deep diamond hole was planned to test the Target X anomaly. The hole was designed with a 150m RC precollar followed by a 400m HQ diamond tail. The IP conductivity anomaly strikes NW-SE and dips steeply to the northeast parallel to bedding within the J-Fold. To ensure the anomaly was intersected perpendicular to bedding the hole was designed with an azimuth of 225 degrees with a dip of -60 degrees.

The hole was surveyed after completion with a gyro tool rather than a multishot camera because of magnetite in the formation that could cause erroneous readings. Diamond core was orientated at 30m intervals with an Easymark tool or similar to allow measurement of structural features.

A downhole electromagnetic survey will be conducted by Quantec Geophysics to locate any offhole sulphide conductors.

A buffer zone of at least 50m above and below mineralisation intersected was cut and sampled at 1m intervals and submitted to a commercial laboratory for multielement analysis including gold. Pulps of the samples were retained to allow additional analysis as required.

Following cutting and sampling the HQ core was transported to the NTGS in Darwin for a Hylogger survey.

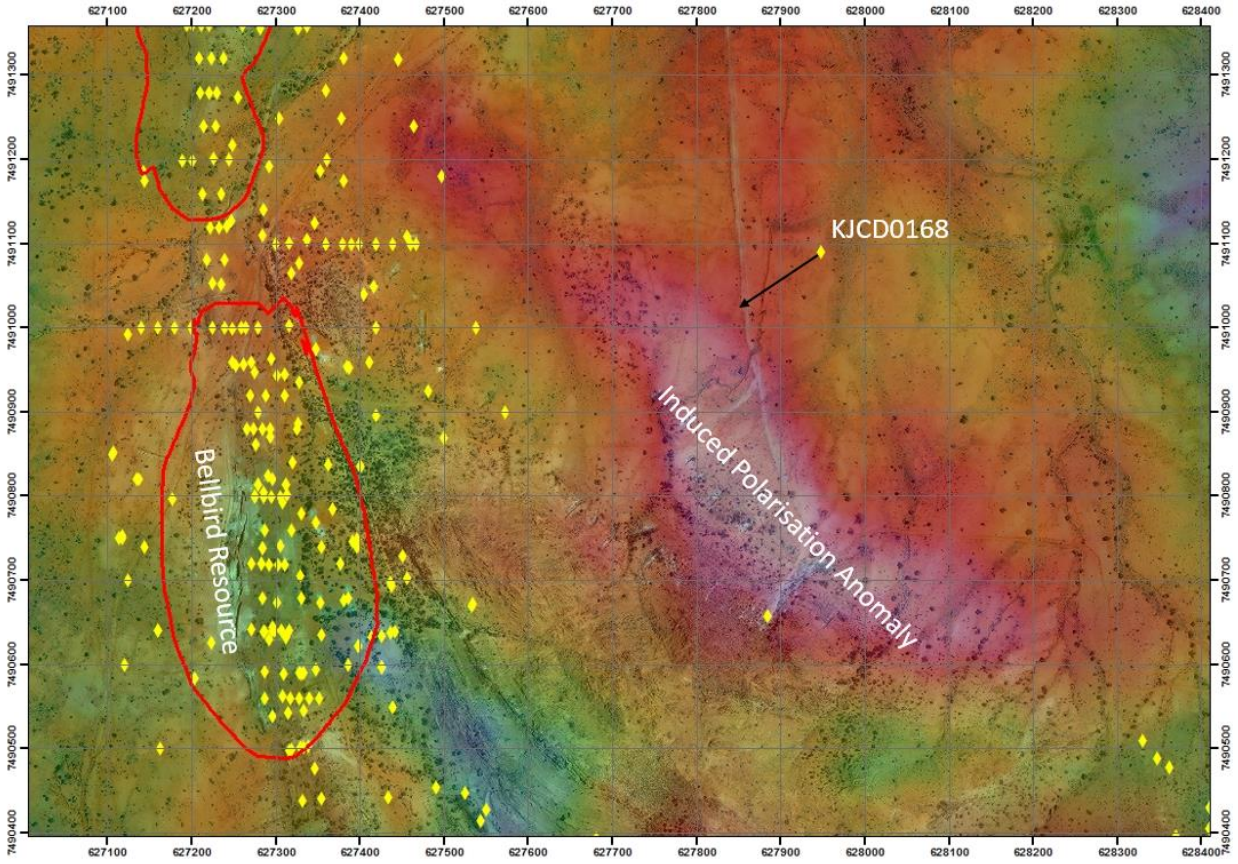


Figure 5: Plan view of Target X conductivity anomaly showing location of hole KJCD168 collar. Bellbird open pit shells and exploration drillcollars shown to west.

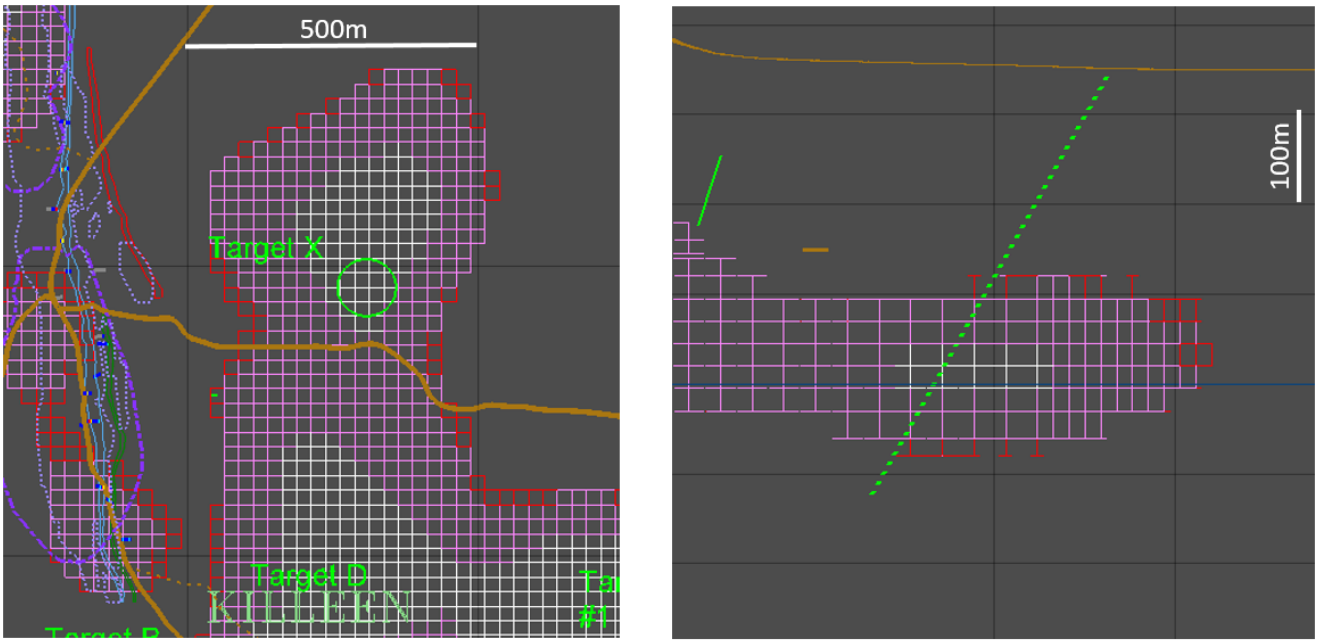


Figure 6: Plan and cross section view of Target X anomaly showing planned drillhole. Conductivity anomaly is flat lying and does not extend to surface

7.0 RESULTS AND INTERPRETATION

The Target X prospect was drill tested by diamond hole KJCD168 that was drilled between 21/8/15 and 8/9/15 to a total depth of 710m. A RC precollar was drilled to 59.5m followed by 650.6m of HQ diamond core. Hole details are shown below (Table 1).

BHID	East	North	RL	Depth	Dip	Azimuth
KJCD168	627949.2	7491092	352.648	710.1	-65.1628	216.65

Table 1: KJCD168 drill details

Between surface and 379m downhole the KJCD168 intersected a sequence of siltstone/mudstone with interbedded sandstones. This package of sediments is typical of the footwall and hangingwall sequences at both Marshall-Reward and Bellbird. The siltstones/mudstones have been metamorphosed to quartz-muscovite schist that typically contain knots of andalusite/cordierite depending on the aluminosilicate content. The schists are interbedded with fine to medium grained sandstone (psammite) that can contain variable amounts of magnetite. Individual beds are rarely greater than 1m in thickness. There are occasional narrow veins of pegmatite and thin beds of calcsilicate.

At 379m there is a contact with an increase in the proportion of psammite and calc-silicate relative to the pelitic schists (Figure 7). Between 379m to 556m psammite is interbedded with calc-silicate units with relatively minor pelitic schist (Figure 8). Then from 556m to the end of hole at 710m the sequence is dominated by quartzite/psammite with decreasing amounts of pelitic schist (Figure 9). Pegmatite veins are common within the sandstone but are mostly less than 1m thick. There are rare interbeds of chlorite schist and calc-silicate.

Figure 7: KJCD168 328.88-335.68m interbedded knotted schist and sandstone

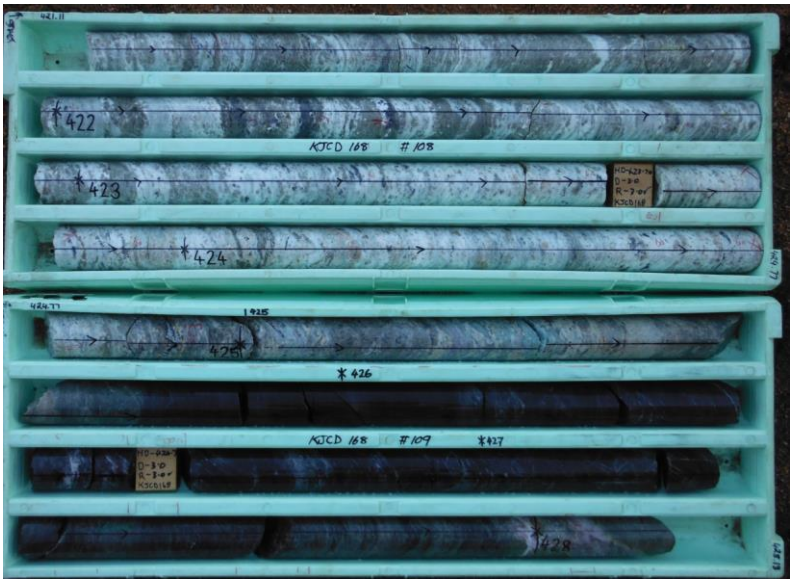


Figure 8: KJCD168 421.11-428.2m Marble and sandstone

Figure 9: KJCD168 504.6-510.89m Quartzite/ psammite

KJCD168 intersected several intervals of minor copper, zinc and tungsten mineralization. The best zones of mineralization coincide with intervals of marble and calcsilicate.

2m @ 1114ppm Cu from 422m
8m @ 800ppm Zn from 418m
4m @ 909ppm W from 425m

3m @ 1561ppm Zn from 499m
1m @ 1156ppm W from 499m

Copper and zinc values increase above background from 415m, 1.65m before a calcsilicate contact at 417.65m. The maximum zinc value is 1319ppm Zn (0.132% Zn) at 422-423m which coincides with the highest silver value of 4.4g/t in a background of 0.25g/t, the detection limit. At 426m the copper, zinc and silver values decrease to background but tungsten increases, peaking at 1249ppm W at 427-428m. The interval 417.65m to 428.38m is logged as either calcsilicate or marble.

Within the mineralized interval the most common sulphide minerals are bornite and chalcocite that occur as dark grey blebs and veins (Figure 10).

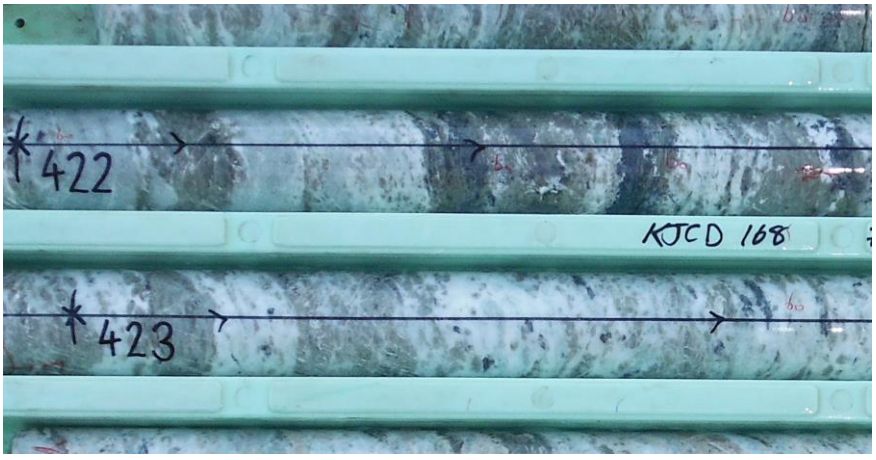


Figure 10: KJCD168 422-423m. Dark grey blebs and veins of bornite-chalcocite in marble

Elevated silver, copper, zinc and tungsten values also occur in the ranges 467-471m and 499-503m which again coincide with logged intervals of marble and calcsilicate. Calcsilicate is rare below 503m, at which depth the basemetal and tungsten values also decline.

Weakly elevated copper, zinc and bismuth values occur between 384-387m with bismuth peaking at 99ppm. This intersection approximately coincides with a pegmatite vein.

A downhole electromagnetic survey was conducted following completion of drilling. The survey failed to locate any strong conductors. A conductor close to the collar is not considered significant. Details of the survey are contained in Appendix 5.

8.0 DISCUSSION AND CONCLUSIONS

Narrow intervals of elevated base metals and tungsten were intersected in KJCD168 and show a close correlation with logged intervals of calcsilicate. It is interpreted that the carbonate rich intervals are more

reactive and have preferentially resulted in the precipitation of base metals and tungsten from hydrothermal fluids. The timing of the mineralization cannot be determined with accuracy but the orientation of the sulphide veins relative to the rock fabric suggests that the sulphides were deposited during one of the deformation events that effected the eastern Arunta. There are no textures to suggest a syn-sedimentary origin as elsewhere in the Jervois project area.

The amount of mineralization intersected was disappointing and does not adequately explain the strong coincident, low resistivity (conductive) and high chargeability IP response. Targeting of the hole was a compromise between testing the chargeability anomaly and the conductivity anomaly. It is possible the best sulphide mineralization is centred on the strong chargeability response to the north of KJCD168. An additional hole would be required to test this target.

The rock sequence intersected in KJCD168 does not have any close similarity to the sequence at Bellbird to the west. Interbedded psammite and calcsilicate was not intersected in the resource drilling at Bellbird. The thick unit of psammite/ quartzite below 503m is also unlike any rock type intersected at Bellbird. From this it can be concluded that KJCD168 intersected a sedimentary sequence in the hangingwall of the Bellbird deposit, not a folded or faulted repetition of the Bellbird resource.

9.0 REFERENCES

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APPENDIX 1

DRILL DATA