

20 October 2016

## Jervois Exploration Update

- **Copper mineralisation intersected in Conductor 6 at Rockface**

The diamond drilling program at Rockface is continuing with two holes targeting Down-Hole Electromagnetic (DHEM) anomalies east and west of KJCD197.

The first hole was designed to test the recently identified Conductor 6 anomaly that was modelled from the DHEM survey of KJCD197. The modelling, positioned the conductor in the hanging wall, well above Conductor 3 and to the east of KJCD197. The western edge of Conductor 6 was modelled to be approximately 20m to the east of KJCD197 and had a modelled strike length of 120m with a down dip extent of 110m.

Diamond hole KJCD198 successfully intersected sulphides at Conductor 6. Significant mineralisation includes:

- 449.7 – 453m Magnetite-chalcopyrite mineralisation ~70% sulphide (Figure 1)
- 453 – 455.7m Silicified schist with magnetite and chalcopyrite veins ~10 -15% sulphides
- 455.7 – 457.1m Schist with minor galena ~2- 4% sulphides



Figure 1 Mineralised core from K JCD198 (circa 452m) Conductor 6

Modelling of the DHEM results has shown that Conductor 6 is more complex in shape than previously modelled. It comprises two conductive horizons separated by approximately 15m that extend further east and down dip than previous models indicated. It is possible that Conductors 6&7 are the faulted offsets of Conductors 3&5 that have been displaced by late faulting along the axis of the Jervois 'J-Fold'.

KJCD198 was then extended to test an area beyond the eastern edge of Conductor 3, approximately 80m along strike to the east of KJCD197, where it intersected a broad zone of strong alteration and minor chalcopyrite-pyrite. This alteration extends through the modelled eastern edge of Conductor 5 where a narrow interval of massive magnetite-pyrite-chalcopyrite was intersected.

Modelling of the DHEM from KJCD198 confirmed that the western edge of both Conductors 3 & 5 are less than 10m to the west of the hole. The close proximity of these conductors is evident from the strong alteration and disseminated mineralisation that was intersected.

The second diamond hole KJCD199 was designed to test the western edge of Conductors 3 & 5 as modelled from the DHEM surveys of previous holes. This hole intersected a broad zone of moderate to strong alteration with minor mineralisation from 550m to 620m mostly pyrite with a minor chalcopyrite. The best chalcopyrite mineralisation is in late quartz veins that have likely scavenged and remobilised earlier mineralisation.

Modelling of the DHEM data confirmed that the western edge of Conductors 3&5 is located approximately 15-20m east of the strongest alteration observed in KJCD199 between 550-575m. The size and strength of the off-hole anomaly observed in KJCD199 meant that the modelled response required Conductors 3 & 5 to be extended further down dip.

The style of mineralisation in KJCD198 is similar to that observed in KJCD195-6, KJCD171 and KJCD182-3. Chalcopyrite occurs as fracture fill primarily within a magnetite host rock, and grades into zones of semi-massive and veined chalcopyrite-pyrite. The host rock is a metasiltstone with narrow interbeds of fine grained metasandstone that has been moderately to strongly altered to an assemblage containing chlorite, biotite, garnet and magnetite.

Site processing of the core for KJCD198 and KJCD199 is now completed and the last of the samples will be delivered to the laboratory by the end of this week. Final assays results are anticipated to be received by mid-November.

The announcement is based solely on a visual inspection of the core sample and Niton handheld XRF analysis. The core samples have yet to be assayed and analysed.



Figure 2 DHEM logging crew surveying KJCD199

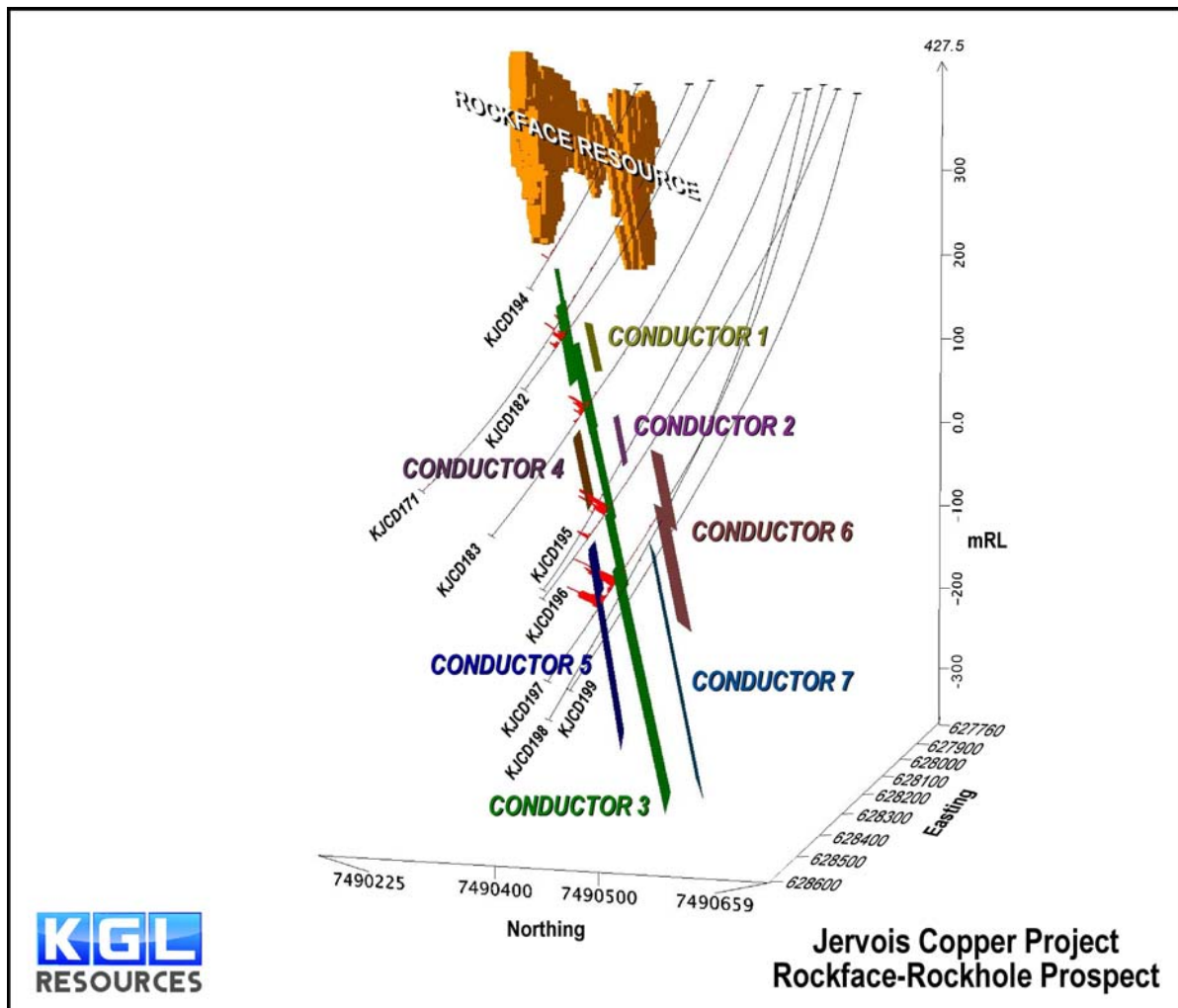


Figure 3 Rockface DHEM Conductors (looking west)



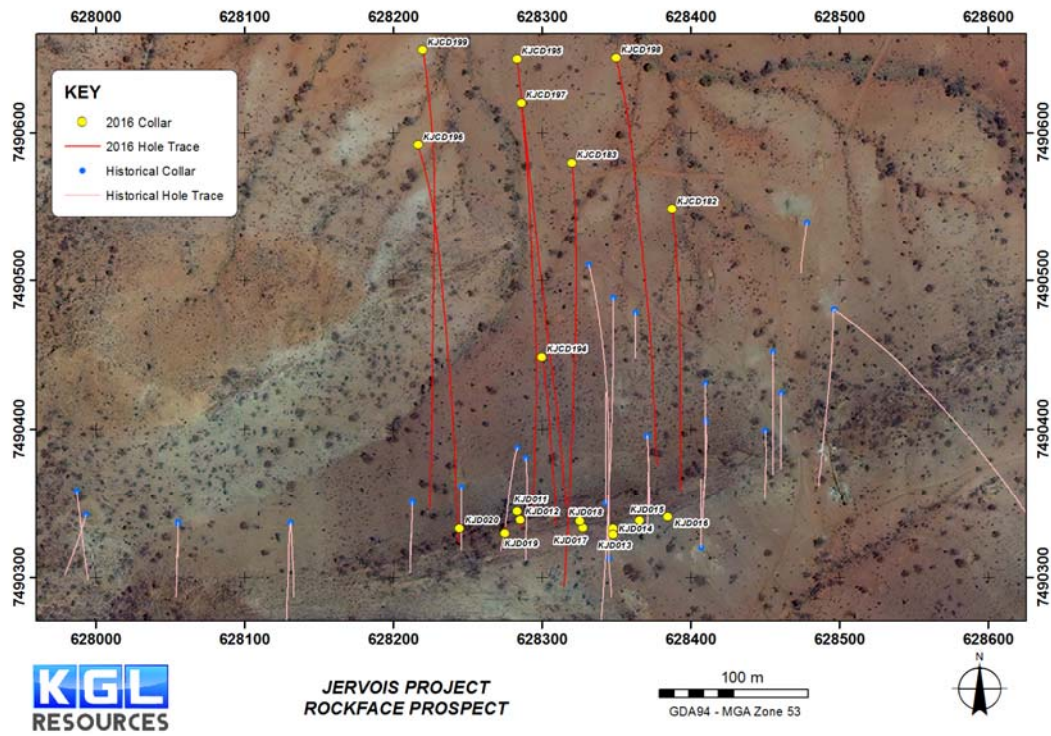


Figure 4 Plan of Rockface drilling

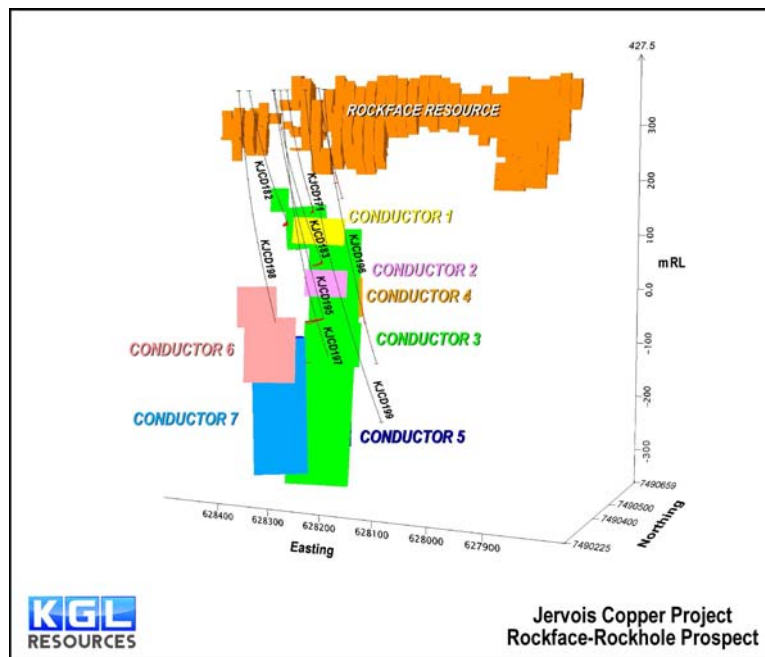


Figure 5 Rockface DHEM Conductors (looking south-east)

High-grade copper mineralisation in the magnetite-chalcopyrite zone continues to respond very well to DHEM and results from this most recent survey will assist in optimising the targeting of additional drilling into the highest grade mineralisation.

**For further information contact:**

Kylie Anderson  
Company Secretary  
Phone: (07) 3071 9003

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 Rudy Lennartz, a member of the Australian Institute of Mining and Metallurgy and a full time employee of KGL Resources Limited.

Mr. Lennartz 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. Lennartz has consented to the inclusion of this information in the form and context in which it appears in this report.

The following drill holes were originally reported on the date indicated and using the JORC code specified in the table. Results reported under JORC 2004 have not been updated to comply with JORC 2012 on the basis that the information has not materially changed since it was last reported.

Hole	Date originally Reported	JORC Reported Under
KJCD171	22/10/2015	2012
KJC035	08/11/2013	2004
KJC039	29/05/2014	2012
KJCD182	09/05/2016	2012
KJCD183	26/04/2016	2012
KJCD195	02/08/2016	2012
KJCD197	19/09/2016	2012
J9	08/11/2013	2004

# 1 JORC CODE, 2012 EDITION – TABLE 1

## 1.1 Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drilling and reverse circulation (RC) drilling were used to obtain samples for geological logging and assaying.</li> <li>RC drill holes are sampled at 1m intervals and split using a cone splitter attached to the cyclone to generate a split of ~3kg.</li> <li>Diamond core was quartered with a diamond saw and generally sampled at 1m intervals with shorter samples at geological contacts.</li> <li>RC samples are routinely scanned with a Niton XRF. Samples assaying greater than 0.1% Cu, Pb or Zn are submitted for analysis at a commercial laboratory.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>RC Drilling was conducted using a reverse circulation rig with a 5.25" face-sampling bit. Diamond drilling was either in NQ2 or HQ3 drill diameters. Metallurgical diamond drilling (JMET holes) were PQ</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>RC samples were not weighed on a regular basis but no sample recovery issues were encountered during the drilling program.</li> <li>Overweight samples (&gt;3kg) were re-split with portable riffle splitter</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All RC and diamond core samples are geologically logged. Core samples are also orientated and logged for geotechnical information.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>RC drill holes are sampled at 1m intervals and split using a cone splitter attached to the cyclone to generate a split of ~3kg.</li> <li>Diamond core was quartered with a diamond saw and generally sampled at 1m intervals with shorter samples at geological contacts.</li> <li>RC sample splits (~3kg) are pulverized to 85% passing 75 microns.</li> <li>Diamond core samples are crushed to 70% passing 2mm and then pulverized to 85% passing 75 microns.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>The QAQC data includes standards, duplicates and laboratory checks. In ore zones Standards are added at a ratio of 1:10 and duplicates and blanks 1:20.</li> <li>Basemetal samples are assayed using a four acid digest with an ICP AES finish. Gold samples are assayed by Aqua Regia with an ICP MS finish. Samples over 1ppm Au are re-assayed by Fire Assay with an AAS finish.</li> <li>An umpire laboratory is used to check ~1% of samples analysed.</li> </ul>

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Data is validated on entry into the Datashed database.</li> <li>Further validation is conducted when data is imported into Vulcan</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Surface collar surveys were picked up using a Trimble DGPS.</li> <li>Downhole surveys were taken during drilling with a Ranger or Reflex survey tool every 30m with checks conducted with a Gyrosmart gyro and Azimuth Aligner.</li> <li>All drilling is conducted on the MGA 94 Zone 53 grid. All downhole magnetic surveys were converted to MGA 94 grid.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling for Inferred resources has been conducted at a spacing of 50m along strike and 80m within the plane of the mineralized zone. Closer spaced drilling was used for Indicated resources.</li> <li>Shallow oxide RC drilling was conducted on 80m spaced traverses with holes 10m apart</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Holes were drilled perpendicular to the strike of the mineralization a default angle of -60 degrees but holes vary from -45 to -80.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were stored in sealed polyweave bags on site and transported to the laboratory at regular intervals by KGL staff or a transport contractor.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>The sampling techniques are regularly reviewed.</li> </ul>

## 1.2

## 1.3 Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Jervois project is within E30242 100% owned by Jinka Minerals and operated by Kentor Minerals (NT), both wholly owned subsidiaries of KGL Resources.</li> <li>The Jervois project is covered by Mineral Claims and an Exploration licence owned by KGL Resources subsidiary Jinka Minerals.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Previous exploration has primarily been conducted by Reward Minerals, MIM and Plenty River.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>EL30242 lies on the Huckitta 1: 250 000 map sheet (SF 53-11). The tenement is located mainly within the Palaeo-Proterozoic Bonya Schist on the northeastern boundary of the Arunta Orogenic Domain. The Arunta Orogenic Domain in the north western part of the tenement is overlain unconformably by Neo-Proterozoic sediments of the Georgina Basin.</li> <li>The copper-lead-zinc mineralisation is interpreted to be stratabound in nature, probably relating to the discharge of base metal-rich fluids in association with volcanism or metamorphism or dewatering</li> </ul>



Criteria	JORC Code explanation	Commentary
		of the underlying rocks at a particular time in the geological history of the area.
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Figures 3,4,5 &amp; 6</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>na</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>na</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Refer Figures 3, 4, 5 &amp; 6</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>na</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>na</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Refer Figures 3, 4, 5 &amp; 6</li> </ul>