

9 September, 2019

# **EXPLORATION UPDATE AND PROJECT PROGRESS:**High grade copper extensions at Jervois

## **Exploration**

- High grade copper intersection expected to lead to upgrading of a previous low grade area at Reward
- High grade mineralisation trends extended at Bellbird
- Conductor zone at Amigo has been redefined in a favourable structural position
- Copper mineralisation intersected at Ma'a Salama in area of gravity and magnetic anomalies

### **Project progress**

Preferred mining contractor engaged to optimise mine plan

KGL Resources Limited (ASX: KGL) (KGL or the Company) is pleased to report recent drill results and other mine planning progress at KGL's 100% Jervois Copper Project in the Northern Territory.

KGL Chairman Denis Wood said directors were pleased with the positive results from the current drilling plan that was designed to enhance resources ahead of mining.

"We are concentrating on increasing and upgrading the resources at the known deposits that are part of our concept mining plans," he said.

"The results are confirming resource growth potential around the entire Reward resource and around Bellbird underground.

"The mining contractor we have now engaged will optimise the mine planning. We aim to have this completed this year as part of the progress we are making with the project development plans required for the government licensing process."

KGL has recently received assay results of 11 holes drilled at the Reward, Bellbird, Amigo and Ma'a Salama prospects at KGL's 100% owned Jervois Copper Project in the Northern Territory. The results are provided in Table 1 and in Figures 1 to 5.

Table 1: Summary of significant assays received.

| Prospect    | Hole ID   | From<br>(m) | To<br>(m) | Interval<br>(m) | Cu %         | Pb % | Zn % | Ag g/t | Au g/t |
|-------------|-----------|-------------|-----------|-----------------|--------------|------|------|--------|--------|
|             | KJCD344W1 | 202.9       | 212.6     | 9.7             | 2.99         | 1.17 | 0.87 | 59.90  | 0.54   |
| Reward      |           | 315.7       | 323.8     | 8.1             | 1.36         | 0.01 | 0.05 | 15.80  | 0.11   |
| neward      | KJCD345   | 96.2        | 101.2     | 5.0             | 0.61         | 0.06 | 0.17 | 9.20   | 0.16   |
|             |           | 273.7       | 278.7     | 5.0             | 0.45         | 0.00 | 0.02 | 5.70   | 0.02   |
|             | KJD346W1  | 236.1       | 240.5     | 4.4             | 6.07         | 0.05 | 0.03 | 50.50  | 0.31   |
|             | KJD347W1  | 151.8       | 165.9     | 14.1            | 1.96         | 0.02 | 0.04 | 19.00  | 0.13   |
|             |           | 151.8       | 156.7     | 4.9             | 2.40         | 0.02 | 0.03 | 15.50  | 0.20   |
|             |           | 162.6       | 165.9     | 3.2             | 4.31         | 0.03 | 0.05 | 50.40  | 0.22   |
|             | KJCD349   | 224.7       | 229.3     | 4.6             | 1.78         | 0.02 | 0.01 | 18.40  | 0.12   |
|             | KJD350    | 151.8       | 157.2     | 5.4             | 1.21         | 0.01 | 0.02 | 6.20   | 0.15   |
| Bellbird    |           | 162.4       | 184.8     | 22.4            | 2.15         | 0.02 | 0.02 | 13.90  | 0.08   |
|             |           | 172.2       | 177.5     | 5.2             | 6.98         | 0.05 | 0.01 | 44.10  | 0.25   |
|             | KJD351    | 186.9       | 199.1     | 12.2            | 1.03         | 0.01 | 0.02 | 5.10   | 0.06   |
|             |           | 215.0       | 222.6     | 7.6             | 1.09         | 0.01 | 0.02 | 6.00   | 0.03   |
|             |           | 226.6       | 228.7     | 2.0             | 1.90         | 0.02 | 0.01 | 10.00  | 0.05   |
|             | KJD352    | 248.4       | 250.5     | 2.1             | 1.92         | 0.05 | 0.02 | 10.00  | 1.04   |
|             |           | 280.0       | 282.0     | 2.0             | 1.39         | 0.01 | 0.02 | 6.00   | 0.03   |
| Amigo       | KJD348    | 114.4       | 119.9     | 5.5             | 0.24         | 0.00 | 0.02 | 1.70   | 0.01   |
|             |           | 165.2       | 170.4     | 5.2             | 0.35         | 0.00 | 0.03 | 3.70   | 0.03   |
|             | KJD340    | 30.3        | 32.8      | 2.4             | 0.32         | 0.00 | 0.02 | 0.50   | 0.02   |
|             |           | 44.0        | 45.8      | 1.8             | 0.53         | 0.00 | 0.02 | 3.40   | 0.02   |
| Ma'a Salama | KJD341    |             |           |                 | no<br>assays |      |      |        |        |
|             | KJCD342   | 276.0       | 281.0     | 5.0             | 0.19         | 0.00 | 0.02 | 1.40   | 0.01   |
|             |           | 293.4       | 294.2     | 0.8             | 1.43         | 0.00 | 0.02 | 4.00   | 0.04   |

#### Reward

At Reward, where half of the current estimated resources at Jervois are located, an encouraging drill result is expected to lead to upgrading of resources.

Results were received for two holes drilled at Reward.

**KJCD344** intersected two mineralised zones. The upper interval of 9.7 m grading 3.0% Cu from 202.9 m is up-dip of the Reward Deeps Lode (Figures 1 & 2).

The resource blocks around this intersection are currently classed as Inferred and of lower grade. The new result is expected to improve both confidence and grade in the surrounding resources.

The deeper mineralised interval in **KJCD344** comprised 8.1 m @ 1.4% Cu from 315.7 m. This intercept corresponds with the strike extension of Reward East (Figure 2).

**KJCD345** intersected minor mineralisation in both the Reward UG Lode (5 m @ 0.6% Cu from 96.2 m) and the Reward East Lode (5 m @ 0.5% Cu from 273.7 m) as shown in Figures 1 and 2. The intercept in the Reward UG lode is similar to surrounding holes. The Reward East Lode has been sparsely drilled.

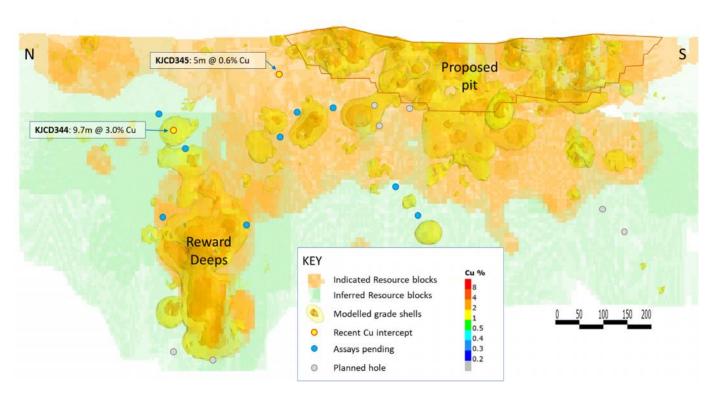


Figure 1 Long section of recent assay results from Reward, showing the current resource block model and current Cu mineralisation model (decimals rounded for ease of presentation).

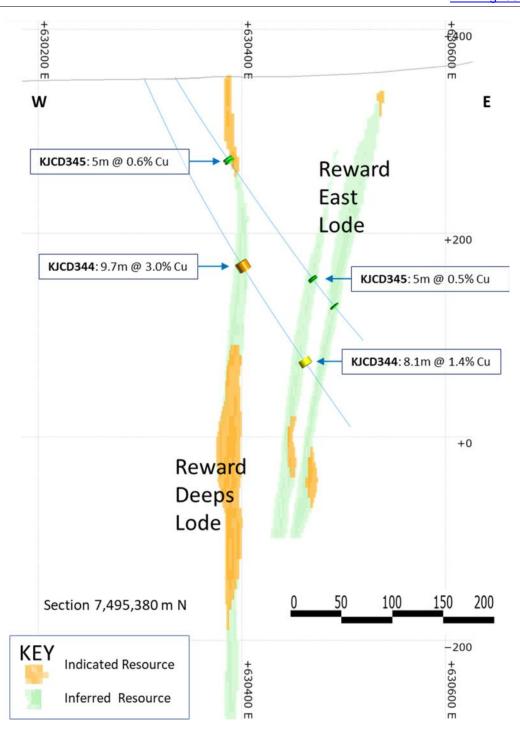


Figure 2 Cross section of recent assay results from the upper part of Reward Deeps and Reward East, showing the current resource block model (decimals rounded for ease of presentation).

#### **Bellbird**

Infill and exploration drilling at Bellbird has extended high grade copper mineralisation trends.

Thirteen holes have recently been completed at Bellbird to test the exploration potential outside the current Inferred and Indicated Resources. Assays from six holes were recently received: KJD346, KJD347, KJCD349, KJD350, KJD351 and KJD352 (Figure 3).

The holes intercepted copper mineralisation. The grade and thickness of the intercepts are similar to those in the adjacent holes. The intercepts are at their expected depths, along strike and down-dip of previous intercepts, thus confirming the continuity of the high grade copper trends in Figure 3. The intercepts are expected to contribute to a future resource update at Bellbird.

The mineralised zones often contain a distinct narrow, higher grade interval. The initial premise was that these higher grade zones could be feeder zones leading to a larger ore shoot. The down hole electromagnetic (DHEM) surveys did not confirm this, while detecting conductors in areas that were previously drilled (Figure 3).

The massive magnetite lodes that typically host the best mineralisation at Rockface and Reward Deeps appear to be not present at Bellbird. More mapping and geological modelling are planned to find possible massive magnetite lodes at Bellbird.

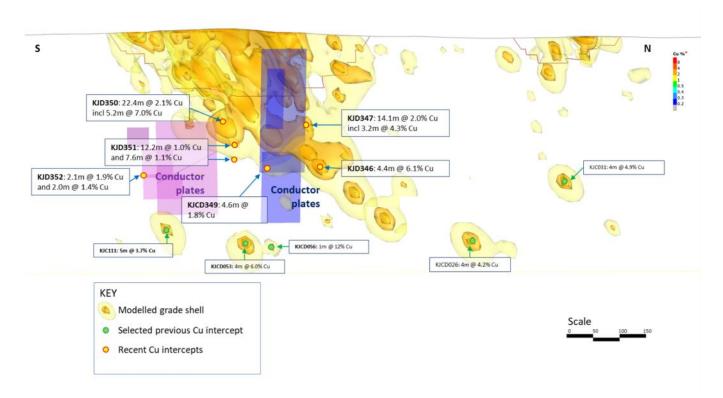


Figure 3: Longitudinal section of Bellbird, recent assays and current Cu mineralisation model (decimals rounded for ease of presentation).

## **Amigo**

At Amigo, hole KJCD348 intercepted two zones of low grade copper mineralisation (see Figure 4):

- 5.5 m @ 0.2% Cu from 114.4 m, and
- 5.2 m @ 0.4% Cu, from 165.2 m.

The weak copper mineralisation is typical for the stratiform copper found in the target horizons along the J-fold at Jervois. Favourable structures and lithologies can accumulate significant amounts of copper, as seen in Rockface and Reward Deeps.

The DHEM survey data obtained from KJD348 indicates the presence of a conductor in the western part of Amigo (Figure 4), considered to be a 'weak conductor', similar in tenor to the conductors in the upper part of Rockface. Surface mapping has identified magnetite-bearing strata located in a western plunging isoclinal fold hinge, in a similar geological position to the nearby Rockface mineralisation. The conductor is currently being drilled.

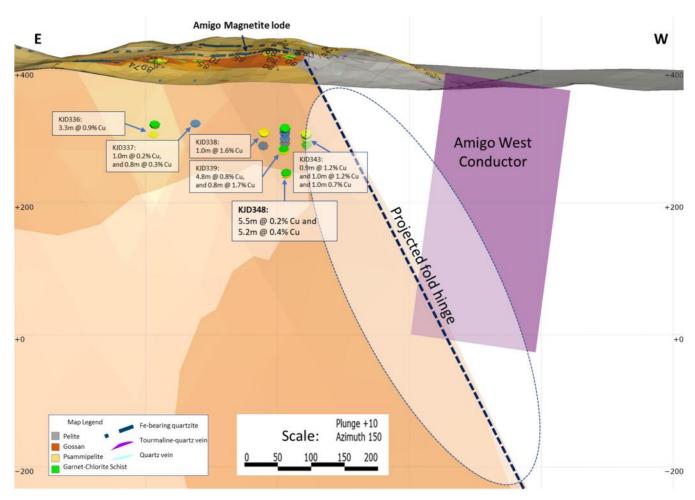


Figure 3: Longitudinal section of the Amigo Prospect, recent assays and visual mineralisation estimates, interpreted structures and new conductors at Amigo West (decimals rounded for ease of presentation).

#### Ma'a Salama

Three holes were completed at Ma'a Salama: **KJD340**, **KJD341** and **KJCD342** (Figure 5). The targets are marked by strong surface mineralisation and underlain by a positive magnetic feature. Evaluation of the magnetic feature in conjunction with the surface geology provided the incentive to drill this target.

All three holes intercepted the magnetite-bearing target horizon. **KJD340** and **KJD341** targeted possible mineralisation below the surface magnetite associated copper mineralisation (Figure 5). However, only low grade copper was intercepted in KJD340 and no visual chalcopyrite was intercepted in KJD341.

KJCD342 targeted a deeper area of the coincident magnetic and gravity features (Figure 5). It intercepted:

5.0 m @ 0.2% Cu in strong magnetite alteration from 276 m and0.80 m @ 1.43% Cu from 293.36 m.

Further drilling will be contingent on further structural mapping, and the re-evaluation of other existing data, including IP data.

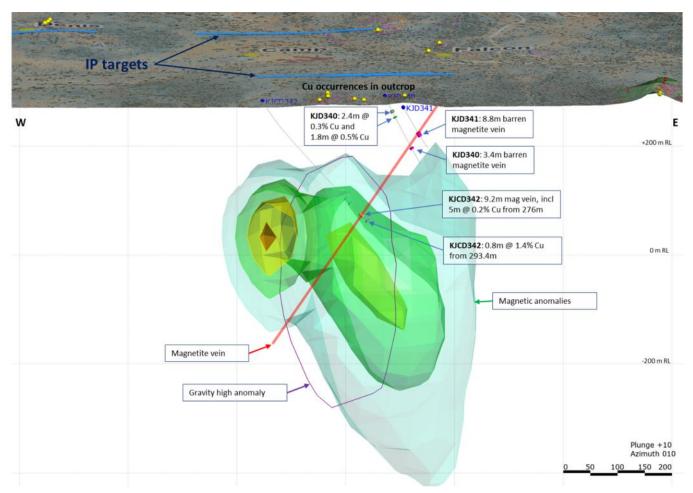


Figure 5: Longitudinal section of Ma'a Salama prospect with recent assay results, and visual mineralisation estimates, magnetic and gravity anomalies (decimals rounded for ease of presentation).

## **Project progress**

Progress at Jervois has given the Company's board the confidence to advance to the mine planning stage of the project approval process.

The Company has signed a contract with mining contractor, Macmahon Contractors (Macmahon) to prepare a mine plan for Jervois. The contract designates Macmahon as the preferred mining contractor for the Jervois Project.

The mine plan will form the basis of the Mine Management Plan that requires Northern Territory Government approval for the project to proceed.

Macmahon will optimise the conceptual mine planning that has been undertaken for the Jervois Project. A 10-year mine plan will continue to be targeted. The two drilling rigs at Jervois will have their short term focus diverted from exploration to the geotechnical assessment required for the mine planning.

# **APPENDIX I. Drill hole information and assay results**

| Prospect    | Hole ID   | Easting<br>(m) | Northing<br>(m) | RL (m) | Dip   | Azi   | Total<br>Depth (m) | From (m) | To (m) | Interval<br>(m) | ETW (m) | Cu %     | РЬ % | Zn % | Ag g/t | Au g/t |
|-------------|-----------|----------------|-----------------|--------|-------|-------|--------------------|----------|--------|-----------------|---------|----------|------|------|--------|--------|
|             | KJCD344W1 | 630304         | 7495384         | 351    | -65.3 | 89.0  | 397.9              | 202.9    | 212.6  | 9.7             | 5.9     | 2.99     | 1.17 | 0.87 | 59.90  | 0.54   |
| Reward      |           |                |                 |        |       |       | and                | 315.7    | 323.8  | 8.1             | 5.2     | 1.36     | 0.01 | 0.05 | 15.80  | 0.11   |
| nemara      | KJCD345   | 630306         | 7495187         | 353    | -59.2 | 86.0  | 321.6              | 96.2     | 101.2  | 5.0             | 3.3     | 0.61     | 0.06 | 0.17 | 9.20   | 0.16   |
|             |           |                |                 |        |       |       | and                | 273.7    | 278.7  | 5.0             | 3.6     | 0.45     | 0.00 | 0.02 | 5.70   | 0.02   |
|             | KJD346W1  | 627420         | 7490880         | 363    | -66.5 | 260.4 | 291.7              | 236.1    | 240.5  | 4.4             | 2.6     | 6.07     | 0.05 | 0.03 | 50.50  | 0.31   |
|             | KJD347W1  | 627361         | 7490841         | 362    | -65.1 | 263.0 | 201.1              | 151.8    | 165.9  | 14.1            | 8.4     | 1.96     | 0.02 | 0.04 | 19.00  | 0.13   |
|             |           |                |                 |        |       |       | including          | 151.8    | 156.7  | 4.9             | 2.9     | 2.40     | 0.02 | 0.03 | 15.50  | 0.20   |
|             |           |                |                 |        |       | and   | dincluding         | 162.6    | 165.9  | 3.2             | 2.0     | 4.31     | 0.03 | 0.05 | 50.40  | 0.22   |
|             | KJCD349   | 627381         | 7490788         | 364    | -80.1 | 240.8 | 323.7              | 224.7    | 229.3  | 4.6             | 2.4     | 1.78     | 0.02 | 0.01 | 18.40  | 0.12   |
|             | KJD350    | 627397         | 7490716         | 365    | -56.4 | 251.0 | 220.2              | 151.8    | 157.2  | 5.4             | 3.5     | 1.21     | 0.01 | 0.02 | 6.20   | 0.15   |
| Bellbird    |           |                |                 |        |       |       | and                | 162.4    | 184.8  | 22.4            | 14.8    | 2.15     | 0.02 | 0.02 | 13.90  | 0.08   |
|             |           |                |                 |        |       |       | including          | 172.2    | 177.5  | 5.2             | 3.5     | 6.98     | 0.05 | 0.01 | 44.10  | 0.25   |
|             | KJD351    | 627398         | 7490716         | 365    | -68.6 | 271.0 | 273.5              | 186.9    | 199.1  | 12.2            | 6.4     | 1.03     | 0.01 | 0.02 | 5.10   | 0.06   |
|             |           |                |                 |        |       |       | and                | 215.0    | 222.6  | 7.6             | 4.0     | 1.09     | 0.01 | 0.02 | 6.00   | 0.03   |
|             |           |                |                 |        |       |       | and                | 226.6    | 228.7  | 2.0             | 1.1     | 1.90     | 0.02 | 0.01 | 10.00  | 0.05   |
|             | KJD352    | 627445         | 7490592         | 368    | -70.0 | 255.3 | 315.7              | 248.4    | 250.5  | 2.1             | 1.1     | 1.92     | 0.05 | 0.02 | 10.00  | 1.04   |
|             |           |                |                 |        |       |       | and                | 280.0    | 282.0  | 2.0             | 1.1     | 1.39     | 0.01 | 0.02 | 6.00   | 0.03   |
| Amigo       | KJD348    | 628584         | 7490351         | 373    | -62.3 | 155.0 | 300.7              | 114.4    | 119.9  | 5.5             | 3.3     | 0.24     | 0.00 | 0.02 | 1.70   | 0.01   |
| range       |           |                |                 |        |       |       | and                | 165.2    | 170.4  | 5.2             | 3.4     | 0.35     | 0.00 | 0.03 | 3.70   | 0.03   |
|             | KJD340    | 629738         | 7492220         | 344    | -66.1 | 91.0  | 144.8              | 30.3     | 32.8   | 2.4             | 1.9     | 0.32     | 0.00 | 0.02 | 0.50   | 0.02   |
|             |           |                |                 |        |       |       | and                | 44.0     | 45.8   | 1.8             | 1.4     | 0.53     | 0.00 | 0.02 | 3.40   | 0.02   |
| Ma'a Salama | KJD341    | 629747         | 7492075         | 348    | -60.6 | 89.0  | 89.9               |          |        |                 | n       | o assays |      |      |        |        |
|             | KJCD342   | 629510         | 7492220         | 342    | -60.8 | 90.2  | 393.9              | 276.0    | 281.0  | 5.0             | 4.7     | 0.19     | 0.00 | 0.02 | 1.40   | 0.01   |
|             |           |                |                 |        |       |       | and                | 293.4    | 294.2  | 0.8             | 0.8     | 1.43     | 0.00 | 0.02 | 4.00   | 0.04   |

ETW - Estimated True width

## **Competent Persons Statement**

The Jervois Exploration data in this report is based on information compiled by Adriaan van Herk, a member of the Australian Institute of Geoscientists, Chief Geologist and a full-time employee of KGL Resources Limited.

Mr. van Herk 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. van Herk 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 |
|------|-----|--------------------------|---------------------|
|      |     |                          |                     |
| KJC  | 031 | 16/06/2014               | 2012                |
| KJCD | 026 | 24/04/2014               | 2012                |
| KJCD | 056 | 16/06/2014               | 2012                |
| KJCD | 053 | 11/08/2014               | 2012                |
| KJC  | 111 | 17/04/2015               | 2012                |
| KJD  | 336 | 29/07/2019               | 2012                |
| KJD  | 337 | 29/07/2019               | 2012                |
| KJD  | 338 | 29/07/2019               | 2012                |
| KJD  | 339 | 29/07/2019               | 2012                |
| KJD  | 343 | 29/07/2019               | 2012                |
|      |     |                          |                     |

# 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    | Nature and quality of sampling (e.g. 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.  Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  Aspects of the determination of mineralisation that are Material to the Public Report.  In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information. | At Reward diamond drilling and reverse circulation (RC) drilling were used to obtain samples for geological logging and assaying. The core samples comprised a mixture of sawn HQ quarter core, sawn NQ half core and possibly BQ half core (historical drilling only). Sample lengths are generally 1m, but at times length were adjusted to take into account geological variations. RC sample intervals are predominantly 1m intervals with some 2 and 4m compositing (historical holes only). A total of 586 drillholes for 83,400m, were completed, sited predominantly within the planned open pit area, but include 10 new KGL diamond (and minor RC) infill and extensional drilling totalling 6,812m. Drilling is on a nominal 25m spacing near surface expanding at depth to 50m and then to 100m on the periphery of the mineralisation  At Rockface diamond drilling was used to obtain samples for geological logging and assaying. Sample lengths are generally 1m in length, but adjusted at times to take into account geological variations. The samples comprised sawn HQ quarter core. A total of 33 holes for 19,330m were included on approximately 50m centres.  RC samples are routinely scanned by KGL Resources with a Niton XRF. Samples assaying greater than 0.1% Cu, Pb or Zn are submitted for analysis at a commercial laboratory.  Mineralisation at both deposits is characterized by disseminations, veinlets and large masses of chalcopyrite, associated with magnetite-rich alteration within a psammite. The mineralisation has textures indicative of structural emplacement within specific strata i.e. the mineral appears stratabound.  Documentation of the historical drilling (pre-2011) for Reward is variable. |
| Drilling<br>techniques | Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).   | <ul> <li>The KGL and previous Jinka-Minerals RC drilling was conducted using a reverse circulation rig with a 5.25-inch face-sampling bit. Diamond drilling was either in NQ2 or HQ3 drill diameters.         Metallurgical diamond drilling (JMET holes) were PQ</li> <li>There is no documentation for the historic drilling techniques.</li> <li>Diamond drilling was generally cored from surface with some of the deeper holes at Rockface and Reward utilizing RC precollars.</li> <li>Oriented core has been measured for the recent KGL drilling.</li> </ul>  |

| Criteria   | JORC Code explanation  | Commentary  |
|--|--|---|
| Drill sample recovery                            | <ul> <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> <li>The KGL RC samples were not weighed on a regular basis but when completed no sample recovery issues were encountered during the drilling program.</li> <li>Jinka Minerals and KGL split the rare overweight samples (&gt;3kg) for assay. Since overweight samples were rarely reported no sample bias was established between sample recovery and grade.</li> <li>Core recovery for Rockface is &gt;95% with the mineral zones having virtually 100% recovery.</li> <li>The core recovery for the KGL drilling of Reward has been regarded as acceptable although there is no documentation for the historical drilling.</li> <li>No evidence has been found for any relationship between sample recovery and copper grade and there are no biases in the sampling with respect to copper grade and recovery.</li> </ul> |
| Logging  | <ul> <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>   | All KGL RC and diamond core samples are geologically logged. Logging in conjunction with multi-element assays is appropriate for Mineral Resource estimation.      Core samples are also orientated and logged for geotechnical information.      All logging has been converted to quantitative and qualitative codes in the KGL Access database.      All relevant intersections were logged.      Paper logs existed for the historical drilling. There is very little historical core available for inspection.   |
| Sub-sampling techniques and sample preparation   | <ul> <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> | The following describes the recent KGL sampling and assaying process:  RC drill holes are sampled at 1m intervals and split using a cone splitter attached to the cyclone to generate a split of ~3kg;  RC sample splits (~3kg) are pulverized to 85% passing 75 microns.  Diamond core was quartered with a diamond saw and generally sampled at 1m intervals with samples lengths adjusted at geological contacts;  Diamond core samples are crushed to 70% passing 2mm and then pulverized to 85% passing 75 microns.  Two quarter core field duplicates were taken for every 20m samples by Jinka Minerals and KGL Resources.  All sampling methods and sample sizes are deemed appropriate for resource estimation  Details for the historical sampling are not available.   |
| Quality of assay<br>data and<br>laboratory tests | <ul> <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 (e.g. standards,</li> </ul>  | <ul> <li>The KGL drilling has QAQC data that 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>Base metal samples are assayed using a four-acid digest with an ICP AES finish. Gold samples are assayed by Aqua Regia</li> </ul>   |

| Criteria   | JORC Code explanation  | Commentary  |
|--|--|---|
|  | blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.   | with an ICP MS finish. Samples over 1ppm Au are re-assayed by Fire Assay with an AAS finish.  There are no details of the historic drill sample assaying or any QAQC.  All assay methods were deemed appropriate at the time of undertaking.  |
| Verification of<br>sampling and<br>assaying                      | <ul> <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>  | Data is validated on entry into the MS Access database, using Database check queries and Maxwell's DataShed.  Further validation is conducted when data is imported into Surpac and Leapfrog Geo.  Hole twinning was occasionally conducted at Reward with mixed results. This may be due to inaccuracies with historic hole locations rather than mineral continuity issues.  For the resource estimation below detection values were converted to half the lower detection limit.   |
| Location of data points  | <ul> <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> <li>For the KGL drilling surface collar surveys were picked up using a Trimble DGPS, with accuracy to 1 cm or smaller.</li> <li>Downhole surveys were taken during drilling with a Ranger or Reflex survey tool at 30m intervals. Checks were conducted with a Gyrosmart gyro and Azimuth Aligner.</li> <li>All drilling by Jinka Minerals and KGL is referenced on the MGA 94 Zone 53 grid. All downhole magnetic surveys were converted to MGA 94 grid.</li> <li>For Reward there are concerns about the accuracy of some of the historic drillhole collars. There are virtually no preserved historic collars for checking.</li> <li>There is no documentation for the downhole survey method for the historic drilling.</li> <li>Topography was mapped using Trimble DGPS (see location points)</li> </ul> |
| Data spacing and distribution                                    | <ul> <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> <li>Drilling at Rockface was on nominal 50m centres with downhole sampling on 1m intervals.</li> <li>Drilling at Reward was on 25m spaced sections in the upper part of the mineralisation extending to 50m centres with depth and ultimately reaching 100m spacing on the periphery of mineralisation.</li> <li>For Reward shallow oxide RC drilling was conducted on 80m spaced traverses with holes 10m apart.</li> <li>The drill spacing for all areas is appropriate for resource estimation and the relevant classifications applied.</li> <li>A small amount of sample compositing has been applied to some of the near surface historic drilling.</li> </ul>   |
| Orientation of<br>data in relation to<br>geological<br>structure | <ul> <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> <li>Holes were drilled perpendicular to the strike of the mineralization; the default angle is -60 degrees, but holes vary from -45 to -80.</li> <li>Drilling orientations are considered appropriate and no obvious sampling bias was detected.</li> </ul>  |

| Criteria          | JORC Code explanation   | Commentary   |
|-------------------|---|--|
| Sample security   | ) The measures taken to ensure sample security.                       | Samples were stored in sealed polyweave<br>bags on site and transported to the<br>laboratory at regular intervals by KGL staff<br>or a transport contractor. |
| Audits or reviews | The results of any audits or reviews of sampling techniques and data. | The sampling techniques are regularly<br>reviewed internally and by external<br>consultants.   |

# **1.2** Section 2 Reporting of Exploration Results

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

| Criteria                                      | JORC Code explanation   | Commentary  |
|---|---|---|
| Mineral tenement<br>and land tenure<br>status | <ul> <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> <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             | ) Acknowledgment and appraisal of exploration by other parties.   | <ul> <li>Previous exploration has primarily been<br/>conducted by Reward Minerals, MIM and<br/>Plenty River.</li> </ul>   |
| Geology                                       | Deposit type, geological setting and style of mineralisation.   | 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 Orogen Domain in the north western part of the tenement is overlain unconformably by Neo-Proterozoic sediments of the Georgina Basin.  The stratabound mineralisation for the projectonsists of a series of complex, narrow, structurally controlled, sub-vertical sulphide/magnetite-rich deposits hosted by Proterozoic-aged, amphibolite grade metamorphosed sediments of the Arunta Inlier.  Mineralisation is characterised by veinlets an disseminations of chalcopyrite in association with magnetite. In the oxide zone which is vertically limited malachite, azurite, chalcocit are the main Cu-minerals.  Massive to semi-massive galena in association with sphalerite occur locally in hig grade lenses of limited extent with oxide equivalents including cerussite and anglesite the oxide zone. Generally, these lenses are associated with more carbonate-rich host rocks occurring at Green Parrot, Reward and Bellbird North. |
| Drill hole<br>Information                     | <ul> <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> <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> | Refer Table 1 and Figures 1, 2, 3, 4 and 5 and Appendix I   |

| Criteria   | JOI    | RC Code explanation  | Co | mmentary  |
|--|--------|--|----|---|
| Data aggregation<br>methods  | )<br>, | 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.  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. The assumptions used for any reporting of metal equivalent values should be clearly stated. | J  | Minimum grade truncation 0.5%Cu   |
| Relationship<br>between<br>mineralisation<br>widths and<br>intercept lengths | J<br>J | These relationships are particularly important in the reporting of Exploration Results.  If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.  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').  | J  | Refer Table 1 and Figures 1, 2, 3, 4 and 5 and Appendix I                                   |
| Diagrams   | J      | 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.  | J  | Refer Figures 1, 2, 3, 4 and 5  |
| Balanced reporting   | J      | 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.  | J  | Refer Appendix I  |
| Other substantive exploration data   | J      | 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.  | J  | Outcrop mapping of exploration targets using Real time DGPS. Refer Figures 1, 2, 3, 4 and 5 |
| Further work   | J      | The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.  | J  | Refer Figure 4 and 5  |