

# ASX Announcement

## Increase in JORC Measured Resource for Jervois Project



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23 May 2024

### Updated Reward Resource

- Reward Mineral Resource Estimate (MRE) for both the Open-cut and Underground updated:
  - **13.16 Mt at 1.79% Cu**, 34 g/t Ag and 0.33 g/t Au for **234.9 kt of copper metal** and 14.5 Moz of silver and 139.9 koz of gold.
  - Includes maiden measured resource in the opencut area of **2.63Mt at 1.91% Cu**, 46.2g/t Ag and 0.43g/t Au for **50.3kt of Cu metal**, 3.91Moz Ag and 36koz Au

### Measured Resources at Jervois

- The updated JORC MRE achieves a key milestone with the resource in the measured category covering the initial years of planned production, which will assist financing.
- The updated Reward resource, combined with the Bellbird resource, gives JORC Measured Resource within two planned open pits at Jervois Project
  - 67% Measured
  - 32% Indicated
  - 1% Inferred

### Next Steps

- The Rockface resource is the next scheduled for update following completion of infill drilling and analysis.
- KGL is proposing to release an updated Feasibility Study by end Q3/ beginning Q4 2024. Part of the program of works to achieve that goal includes updating mine plans based on the updated resources and the proposed increase in processing capacity to 2.0Mtpa.
- The drilling program in 2024 will also focus on potential resource extensions at Rockface shallow to intermediate depths, Rockface Deeps and Reward Deeps.

KGL Resources (**ASX:KGL**) is pleased to announce an update to the mineral resource estimate (MRE) for the Reward Deposit. The improved confidence in the Reward estimate combined with the Bellbird estimate<sup>1</sup> brings the initial years of open pit production<sup>2</sup> into the Measured Category which will assist with financing.

KGL's CEO Kylie Anderson commented:

"We completed the RC infill drilling, assaying, and resource estimation program at Reward in 2023/24, the aim of which was to improve the confidence in the Resource. The outcome is that there is now a contained copper resource at Reward in the measured category. This is an excellent outcome for the project and is also significant as mining in the current mine plan integrates open cut mining at both Bellbird and Reward simultaneously optimising mill feed to the plant."

<sup>1</sup> Bellbird Deposit Mineral Resource Update (ASX:KGL 17/09/2022)

<sup>2</sup> Based on a 2Mtpa Processing Plant

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### Results

The reported mineral resource aligns with the company's objective of having measured resources defined for the initial years of the production.

Figure 1 shows the planned pit shell with the updated **Reward Mineral Resource**, a significant proportion has been classified as measured. Figure 2 shows **Bellbird pit shell** relative to the measured resource.

NB. Mineral Resources are not Ore Reserves and do not have demonstrated economic viability

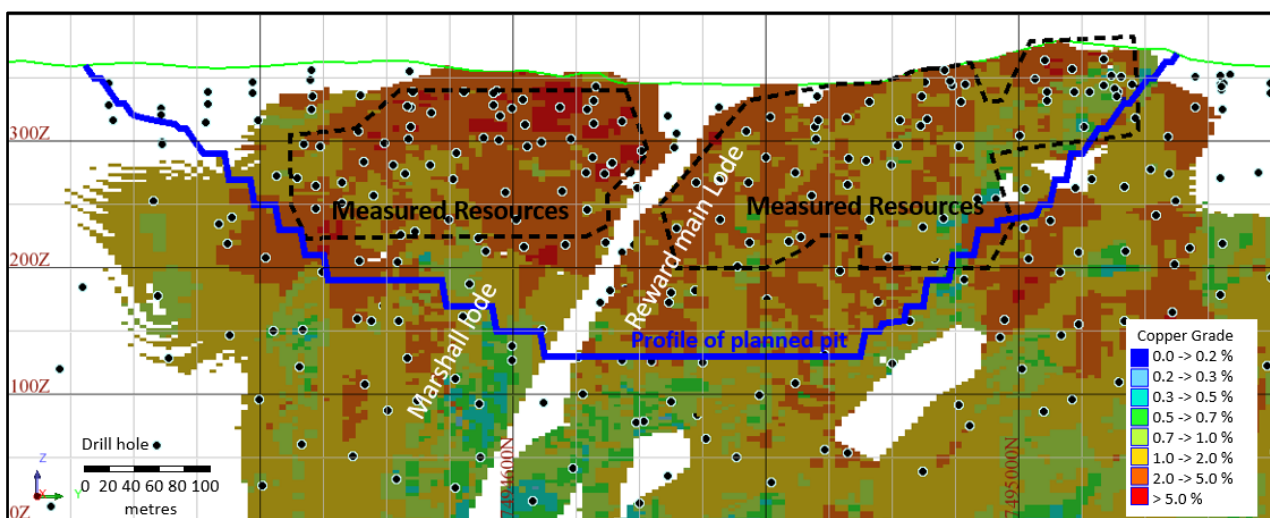


Figure 1. Longitudinal projection of the Reward Open Pit showing proportion of measured resources.

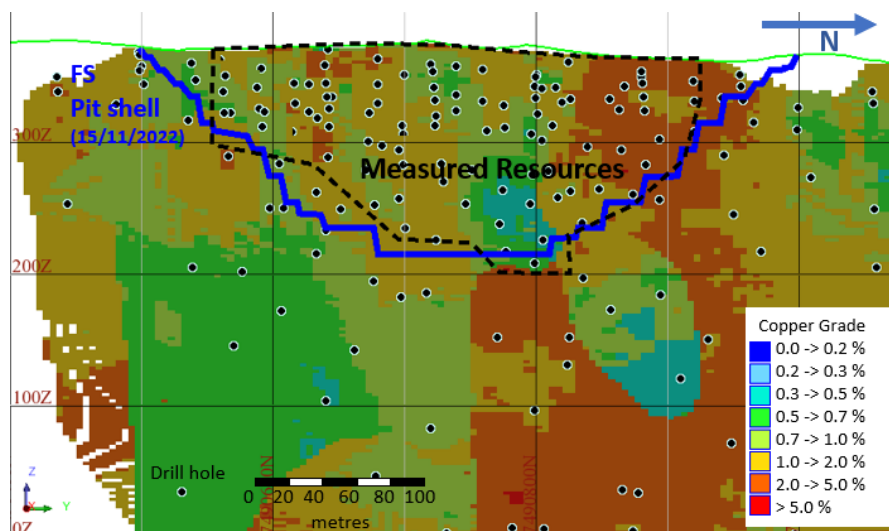


Figure 2. Longitudinal projection of the Bellbird Open Pit showing proportion of measured resources.

The infill drilling has resulted in a reduction of inferred copper tonnes and an increase in measured copper tonnes. While it would be reasonable to expect that the majority of Inferred Mineral Resources would upgrade with continued exploration, due to the uncertainty of Inferred Mineral Resources, it should not be assumed that such upgrading will always occur. Confidence in the estimate of Inferred Mineral Resources is not sufficient to allow the results of the application of technical and economic parameters to be used for detailed planning in a Feasibility study, and for this reason drilling will focus on converting inferred resources in the mine plan.

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While the total MRE at Reward remains about the same as the 2022 MRE, the focus of the drilling program in 2023 was primarily to increase confidence in the resource within the proposed open pit design to support the increase in design processing capacity to 2 Mtpa. The Measured Resource at Reward and Bellbird now represents approximately 67% of the total MRE within the proposed open pit designs.

Recent infill drilling within the planned Reward open pit design also confirmed shallow intersections of high-grade copper and silver as well as deeper intersections with thick zones of strong copper with higher grade cores supporting a positive impact on the Project's economics.

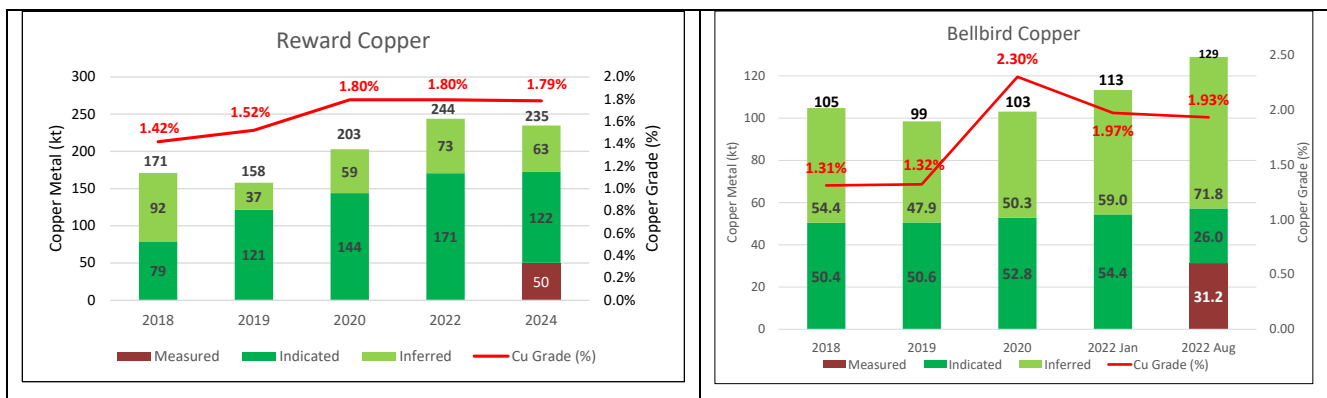


Figure 3. Showing the progression of Reward copper mineral resource estimates from 2018 until the current estimate 2024. The 2024 estimate shows a decrease in the less confident inferred category.

Both gold and silver have marginally increased from the 2022 to the 2024 estimate, Figure 4 shows the progression of the silver metal content and grade since 2018, similarly for gold estimates, Figure 5.

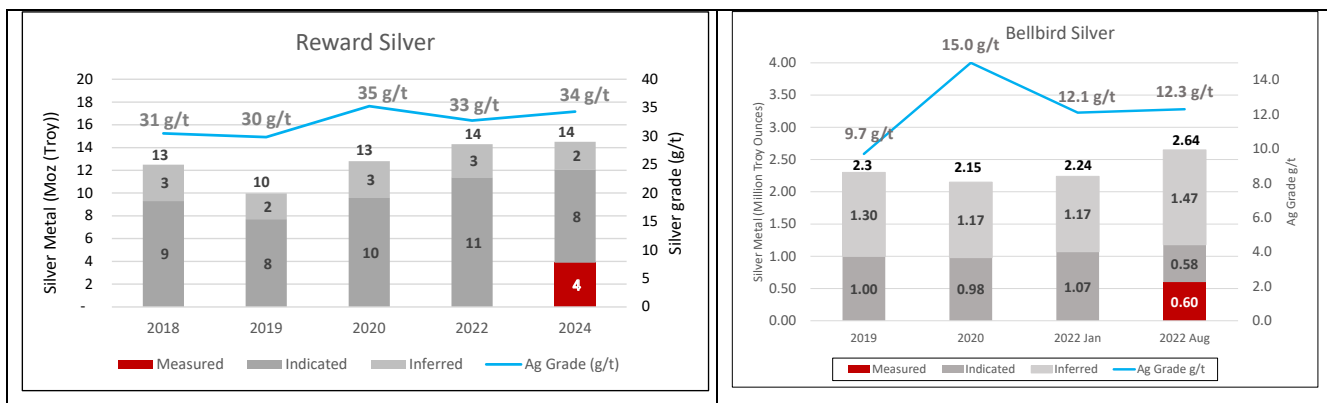


Figure 4. Showing the progression of Reward silver mineral resource estimate from 2018 to current 2024 estimate.

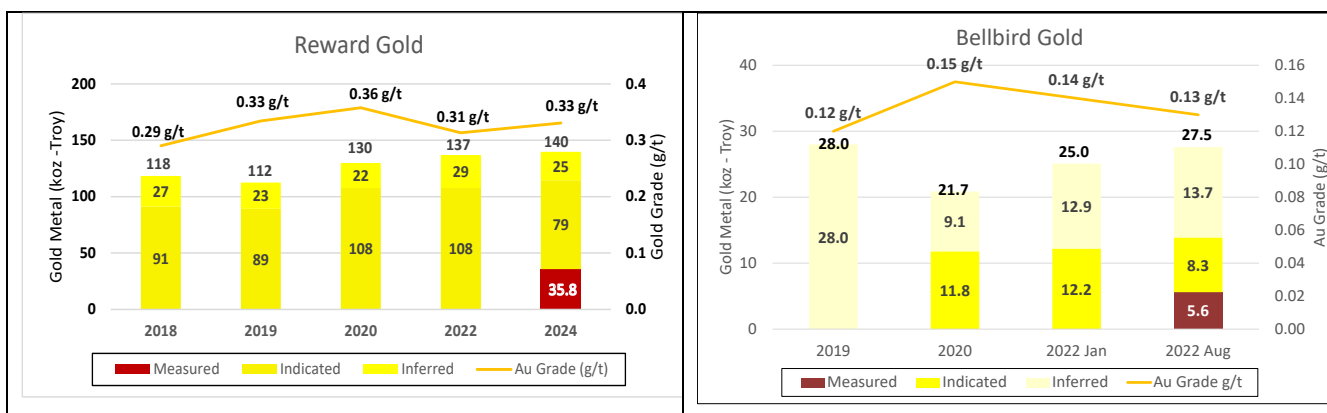


Figure 5. Showing the progression of Reward gold mineral resource estimate from 2018 to current 2024 estimate.

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### Next Steps

#### Update to Feasibility Study

KGL is now consolidating the studies which were aimed at improving key value drivers and financing options for the project. KGL is proposing to release an updated Feasibility Study by the end Q3/ beginning Q4 2024.

Part of the program of works to achieve that goal includes updating Mine Plans based on the updated resources, and on the increase in processing capacity to 2.0 Mtpa.

#### Drilling Program

The priorities for the drilling program in 2024 include:

- Update the Rockface MRE
  - Most of the planned infill drilling at Rockface has been completed, with assays underway. The primary objective is to increase confidence in the resource by upgrading inferred to indicated status. This information will be the basis for an update to the Rockface resource model.
- Update the Reward Underground
  - The primary objective is for infill drilling of the Reward underground resource and increase confidence in the resource by upgrading inferred to indicated status
- Targeted Resource Extensions:
  - Rockface shallow to intermediate depths
  - Rockface Deeps extension
  - Reward Deeps extension
- Review other open cut resource opportunities based on previous drilling programs

#### Copper Market

Growing the high-grade copper resource and mine life at Jervois continues to be a key value driver for KGL. Surging demand for copper – driven by the clean energy transition and demand from modern technologies including semiconductors and the digital economy (data centres & AI industry), together with supply challenges, low inventories and a lack of investment in exploration and new mine projects has analysts forecasting a chronic shortfall in copper over the next decade commencing in 2024.

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### Reward Resource Update

The mineral resource estimate was completed by experienced and independent consultants, Mining Associates Pty Ltd, and their summary report is included as part of the announcement. The mineral resource estimate incorporating the results from drilling during 2023 and all previous validated data. The mineral resource estimate is reported according to the JORC (2012) guidelines.

*Table 1. 2024 Reward Resource Summary*

Resource		Mineralised	Grade			Metal		
Area	Category	Mt	Copper (%)	Silver (g/t)	Gold (g/t)	Copper (kt)	Silver (Moz)	Gold (koz)
Open Cut Potential >0.5 % Cu	Measured	2.63	1.91	46	0.43	50.3	3.91	36.0
	Indicated	0.92	1.61	43	0.26	14.8	1.28	7.7
	Inferred	0.68	0.94	11	0.07	6.4	0.23	1.4
Sub Total (< 200 mRL)		4.23	1.69	40	0.33	71.5	5.42	45.1
Underground Potential > 1% Cu	Indicated	5.26	2.04	41	0.42	107.3	6.90	70.8
	Inferred	3.67	1.53	19	0.20	56.1	2.19	23.9
Sub Total (> 200 mRL)		8.92	1.83	32	0.33	163.4	9.10	94.7
Subtotal	Measured	2.63	1.91	46	0.43	50.3	3.91	36.0
	Indicated	6.18	1.98	41	0.40	122.1	8.17	78.5
	Inferred	4.35	1.44	17	0.18	62.5	2.43	25.4
Total		13.16	1.79	34	0.33	234.9	14.5	139.9

\* Due to rounding to appropriate significant figures, minor discrepancies may occur, tonnages are dry metric tonnes.

Mineral Resources are not Ore Reserves and do not have demonstrated economic viability.

Inferred resource have less geological confidence than Indicated resources and should not have modifying factors applied to them. It is reasonable to expect that with further exploration most of the inferred resources could be upgraded to indicated resources.

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Of the 5.62 Mt contained in the two planned open pits at the Jervois Project, 3.79 Mt @ 2.10% Cu for 79.5 Kt of Cu metal is classified as measured, corresponding to 67% of the tonnes and 70% of the contained metal.

*Table 2. Reward and Bellbird Resource, pit constrained at a 0.5 % Cu.*

Resource	Proportion of Tonnes	Tonnes (Mt)	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Cu Metal (t)	Metal Proportion
Measured	67%	3.79	2.10	0.29	0.23	0.34	36	79,500	70%
Indicated	32%	1.78	1.80	0.34	0.40	0.28	46	31,900	28%
Inferred	1%	0.05	1.32	0.33	0.32	0.16	28	700	1%
<b>Total</b>		<b>5.62</b>	<b>2.06</b>	<b>0.31</b>	<b>0.41</b>	<b>0.36</b>	<b>35</b>	<b>113,000</b>	

The current total resource for the Jervois Project is 23.37Mt at 2.02% Cu, 26.0 g/t Ag, and 0.26 g/t Au for 472.2 kt of copper, 19.5 Moz of silver and 192.8 koz of gold. reported in May (2024) at a 0.5% Cu cut off within approximately 150 m of the surface and above 1% Cu below 150 m (below 200 mRL).

*Table 3. Current Mineral Resources for the Jervois Project.*

Resource	Area	Material		Grade				Metal	
		Category	Mt	Copper (%)	Silver (g/t)	Gold (g/t)	Copper (kt)	Silver (Moz)	Gold (koz)
Open Cut Potential > 0.5 % Cu	Reward	Measured	2.63	1.91	46.20	0.43	50.30	3.91	36.0
		Indicated	0.92	1.61	43.20	0.26	14.81	1.28	7.7
		Inferred	0.68	0.94	10.70	0.07	6.41	0.23	1.4
	Bellbird	Measured	1.23	2.53	15.1	0.14	31.18	0.6	5.6
		Indicated	1.26	1.45	9.1	0.17	18.23	0.37	6.8
		Inferred	1.02	1.24	10.6	0.12	12.67	0.35	4.0
<b>Sub Total</b>			<b>7.74</b>	<b>1.72</b>	<b>27.1</b>	<b>0.25</b>	<b>133.6</b>	<b>6.7</b>	<b>61.5</b>
Underground Potential > 1 % Cu	Reward	Indicated	5.3	2.0	40.8	0.4	107.3	6.9	70.8
		Inferred	3.7	1.5	18.6	0.2	56.1	2.2	23.9
	Bellbird	Indicated	0.33	2.33	19.8	0.14	7.78	0.21	1.5
		Inferred	2.84	2.09	12.3	0.11	59.15	1.12	9.7
	Rockface	Indicated	2.80	3.37	21.4	0.23	94.31	1.93	21.1
		Inferred	0.73	1.92	19	0.18	13.97	0.45	4.2
<b>Sub Total</b>			<b>15.62</b>	<b>2.17</b>	<b>25.5</b>	<b>0.26</b>	<b>338.6</b>	<b>12.8</b>	<b>131.3</b>
<b>Total</b>			<b>23.37</b>	<b>2.02</b>	<b>26.0</b>	<b>0.26</b>	<b>472.2</b>	<b>19.5</b>	<b>192.8</b>

This announcement has been approved by the directors of KGL Resources Limited.

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### Competent Person Statement

The information in this announcement that relates to Reward Mineral Resource Estimates is based on data compiled by Ian Taylor BSc(Hons), a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Taylor is an independent consultant working for Mining Associates. Mr Taylor has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Taylor consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

The Bellbird Resource information was first released to the market on 17/09/2022 and complies with JORC 2012. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

The Rockface Resource information was first released to the market on 07/03/2022 and complies with JORC 2012. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

### Forward Looking statements

This release includes certain forward-looking statements. The words "forecast", "estimate", "like", "anticipate", "project", "opinion", "should", "could", "may", "target" and other similar expressions are intended to identify forward looking statements. All statements, other than statements of historical fact, included herein, including without limitation, statements regarding forecast cash flows and potential mineralisation, resources and reserves, exploration results and future expansion plans and development objectives of KGL are forward-looking statements that involve various risks and uncertainties. Although every effort has been made to verify such forward-looking statements, there can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. You should therefore not place undue reliance on such forward-looking statements.

Statements regarding plans with respect to the Company's mineral properties may contain forward looking statements. Statements in relation to future matters can only be made where the Company has a reasonable basis for making those statements.

## Mineral Resource Estimate for Reward Deposit, Jervois Project, NT

### SUMMARY

The Reward Deposit is the largest of the deposits identified within KGL's Jervois Project. The Jervois Project is located in the Northern Territory, 275 km ENE of Alice Springs. (22.65°S and 136.27°E). The Exploration Licence and four Mining Claims are 100% owned by KGL subsidiary Jinka Minerals Ltd.

Mining Associates Pty Ltd ("MA") was commissioned by KGL Resources. ("KGL", or the "Company"), a mineral exploration and development company currently listed on the Australian Stock Exchange ("ASX"), to prepare a Mineral Resource Estimate ("MRE") and Technical Report on the Reward Deposit.

Based on the reported study, delineated mineralization of the Reward Deposit is classified as Measured, Indicated and Inferred Mineral Resource according to the definitions outlined in JORC (2012). Confidence and classification regarding the grade estimates are based on several factors, including but not limited to sample and drill spacing relative to geological and geostatistical observations, the continuity of mineralization, mining history, bulk density determinations, accuracy of drill collar locations, quality of the assay data, and other estimation statistics.

The resource is reported above a depth of 200 m RL and a 0.5% copper cut off and below 200 m RL at a 1% copper cut off (200 m RL is approximately 150 m below the surface).

Resource		Mineralised	Grade			Metal		
Area	Category	Mt	Copper (%)	Silver (g/t)	Gold (g/t)	Copper (kt)	Silver (Moz)	Gold (koz)
Open Cut Potential	Measured	2.63	1.91	46.2	0.43	50.3	3.91	36.0
>0.5 % Cu	Indicated	0.92	1.61	43.2	0.26	14.8	1.28	7.7
	Inferred	0.68	0.94	10.7	0.07	6.4	0.23	1.4
Sub Total (< 200 mRL)		4.23	1.69	39.8	0.33	71.5	5.42	45.1
Underground Potential	Indicated	5.26	2.04	40.8	0.42	107.3	6.90	70.8
> 1% Cu	Inferred	3.67	1.53	18.6	0.20	56.1	2.19	23.9
Sub Total (> 200 mRL)		8.92	1.83	31.7	0.33	163.4	9.10	94.7
<b>Subtotal</b>	<b>Measured</b>	<b>2.63</b>	<b>1.91</b>	<b>46.2</b>	<b>0.43</b>	<b>50.3</b>	<b>3.91</b>	<b>36.0</b>
	<b>Indicated</b>	<b>6.18</b>	<b>1.98</b>	<b>41.2</b>	<b>0.40</b>	<b>122.1</b>	<b>8.17</b>	<b>78.5</b>
	<b>Inferred</b>	<b>4.35</b>	<b>1.44</b>	<b>17.4</b>	<b>0.18</b>	<b>62.5</b>	<b>2.43</b>	<b>25.4</b>
<b>Total</b>		<b>13.16</b>	<b>1.79</b>	<b>34.3</b>	<b>0.33</b>	<b>234.9</b>	<b>14.5</b>	<b>139.9</b>

\* Due to rounding to appropriate significant figures, minor discrepancies may occur, tonnages are dry metric tonnes. Mineral Resources are not Ore Reserves and do not have demonstrated economic viability.

Inferred resource have less geological confidence than Indicated resources and should not have modifying factors applied to them. It is reasonable to expect that with further exploration most of the inferred resources could be upgraded to indicated resources.



KGL is considering different processing and or differing recoveries based how weathered or how preserved the sulphide minerals are and which deleterious elements may be present. Table 4 shows the deposits reported by weathering profiles, including the High Sulphur resource (S/Cu > 4.5).

Table 4. Reward Resource reported by weathering.

Resource		Material	Grade						Metal				
Category	weathering	(Mt)	Cu %	Pb %	Zn %	Ag g/t	Au g/t	S %	Cu kt	Pb kt	Zn kt	Ag Moz	Au Koz
Measured	Oxide	0.14	1.89	1.04	0.43	57.6	0.45	0.4	2.7	1.5	0.6	0.26	2.05
	Transitional	0.16	2.44	0.95	0.39	66.3	0.46	1.2	3.8	1.5	0.6	0.33	2.35
	High Sulfur	0.02	0.71	0.80	0.41	43.3	0.33	4.2	0.1	0.1	0.1	0.02	0.17
	Fresh	2.32	1.88	0.35	0.32	44.1	0.42	1.8	43.7	8.0	7.4	3.29	31.39
Indicated	Oxide	0.08	2.01	0.39	0.25	39.1	0.43	0.2	1.5	0.3	0.2	0.09	1.03
	Transitional	0.10	1.74	0.61	0.32	41.2	0.23	0.6	1.7	0.6	0.3	0.13	0.72
	High Sulfur	0.22	1.30	0.40	0.25	26.8	0.21	7.7	2.8	0.9	0.5	0.19	1.43
	Fresh	5.79	2.01	0.50	0.41	41.8	0.40	2.2	116.1	29.2	23.5	7.78	75.36
Inferred	Oxide	0.01	0.97	0.06	0.15	10.4	0.05	0.0	0.05	0.003	0.007	0.00	0.008
	Transitional	0.03	0.98	0.07	0.15	11.9	0.05	0.1	0.29	0.02	0.05	0.01	0.045
	High Sulfur	0.12	0.88	0.07	0.07	10.4	0.07	5.2	1.07	0.08	0.09	0.04	0.28
	Fresh	4.19	1.46	0.26	0.21	17.6	0.19	1.4	61.1	11.0	8.9	2.38	24.97
Subtotal	Oxide	0.22	1.91	0.80	0.36	50.3	0.43	0.3	4.2	1.8	0.8	0.36	3.09
	Transitional	0.28	2.05	0.74	0.34	52.1	0.34	0.9	5.8	2.1	1.0	0.47	3.11
	High Sulfur	0.35	1.13	0.30	0.19	21.9	0.17	6.7	4.0	1.1	0.7	0.25	1.88
	Fresh	12.30	1.80	0.39	0.32	34.0	0.33	1.9	220.9	48.2	39.8	13.44	131.7
Total		13.16	1.79	0.40	0.32	34.3	0.33	1.9	234.9	53.2	42.3	14.52	139.9

Due to rounding to appropriate significant figures, minor discrepancies may occur, tonnages are dry metric tonnes.

## Geology and geology interpretation

Reward is interpreted as an original syn-depositional copper-rich polymetallic massive sulphide deposit that has undergone deformation, metamorphism and some degree of structural remobilisation. Recent modelling of mineralisation by KGL geologists strongly supports the interpretation of a lower, broadly stratabound zone, overprinted by higher grade 'shoots' that represent structural remobilisation into fold hinges and breccia style structures.

Interpretation of higher-grade zones is based primarily on geological logging supported by abrupt changes in copper and/or silver grades. High grade structural shoots are characterised by coarser grained sulphides and magnetite sulphide breccia. The lower grade stratabound halo was defined as greater than 0.5% sulphur. Intervals encompassing high grade shoots and stratabound mineralisation were modelled using Leapfrog software with an anisotropic component conforming to the plunge of measured F2 fold hinges.

Reward domains were created primarily based on structural shoots orientation (Figure 6), weathering and grade. Cross sections of the interpreted implicit models for Marshall shoot and Deeps South are shown in Figure 7 and Figure 8.

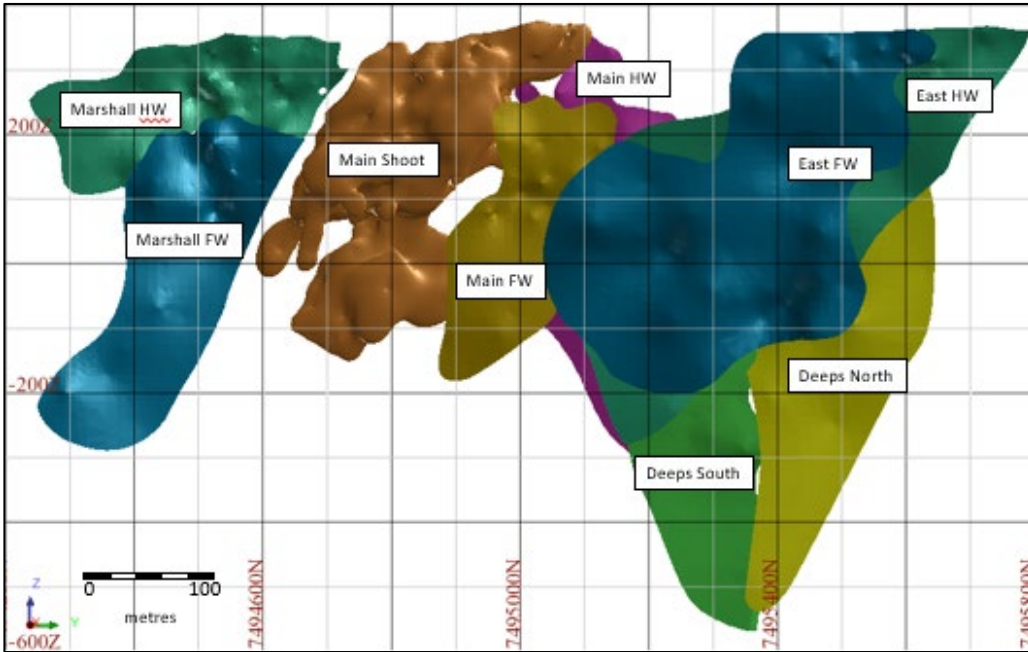


Figure 6. Long Section View showing wireframe domains

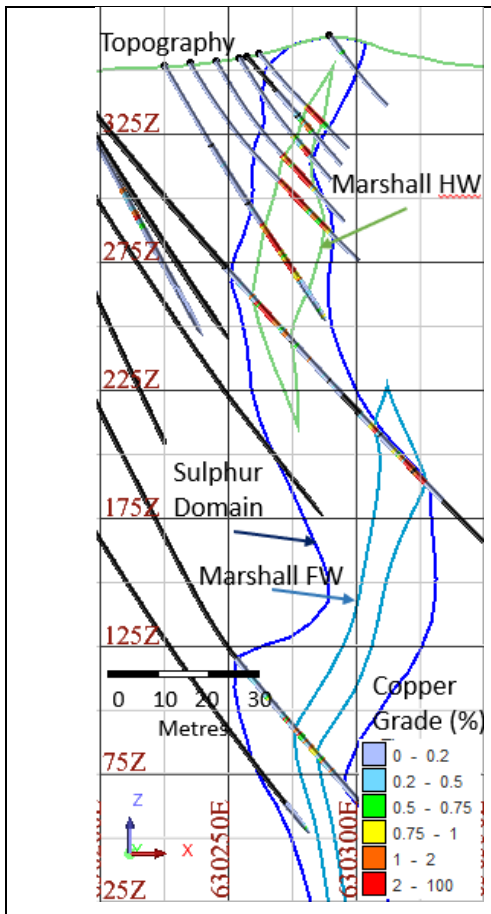


Figure 7. Marshall Lode Cross Section (7494525 mN ± 12.5m)

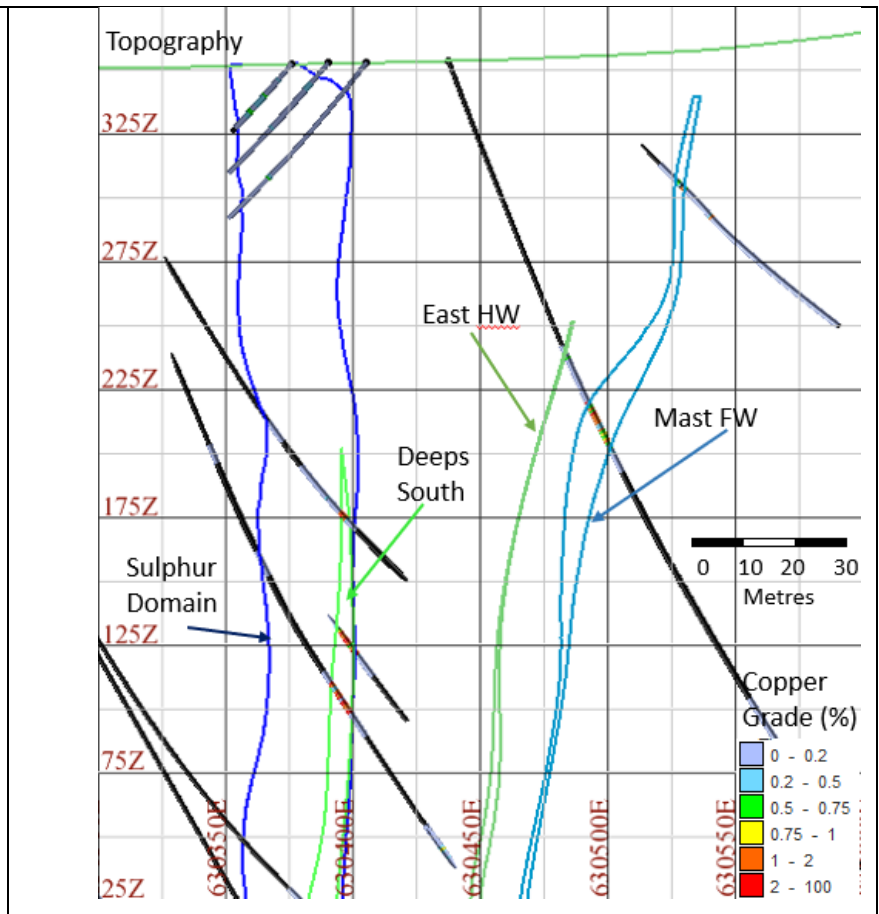


Figure 8. Deeps South and East Lodes, Cross Section (7495350 mN ± 12.5m)

## Drilling Techniques

Resource definition drilling over the life of the project has been undertaken on 50 m spaced cross sections perpendicular to strike with holes spaced on average 50 m (50 x 50m grid). The higher grade shoots and shallower mineralisation (above 200m RL) has been infilled to approximately 25 x 50 m. Of the 598 holes (125 km of drilling) on the deposit, 70 holes (historical) have been rejected, deemed unreliable either in survey or have missing data. The total number of validated holes at Reward is 528 holes for 120 km of drilling.

KGL drilling since 2011 mostly utilised a combination of RC pre-collars (5.25" face sampling bit) to a pre-determined depth above predicted mineralisation followed by diamond coring (wireline with dominantly HQ3 (63 mm) diameter with some NQ3 (45 mm) diameter). Pre-2011 hole diameter and drill type details are generally not recorded (NR) in the database. A total of 163 holes in the drill hole database have been judged as unreliable based on limited down hole surveys, spurious drill collars or down hole intervals not agreeing with newer drilling. Table 5 summarises drilling statistics by drill hole type. RC\_DD drill holes utilised RC pre-collars with diamond coring through zones of mineralisation, and DDW denotes diamond drilling wedges, or child holes drilled from a pre-existing hole path by directional drilling methods.

*Table 5 Summary of drilling by drill hole type*

Project	Hole type	Count	Total meters
Reward	DD	152	40,856.3
	DHW	15	9,010.4
	RC	247	26,616.3
	RC_DD	145	62,284.5
	UNK	42	6,227.1
Total		601	144,995

## Sampling and Sub-Sampling Techniques

Sampling was continuous through mineralisation/alteration zones and extended up to 10 m for diamond core and up to 50 m for RC up and down-hole. HQ drill core since 2021 is quarter core sampled and NQ drill core has been half core sampled. The 2020-2021 sampling program was all quarter sawn diamond core, earlier sampling included quarter core and riffle split RC samples.

### QAQC

KGL submits field duplicates, Certified Reference Material and blanks as part of the QAQC procedures.

10,116 samples were submitted in 2023 of which 175 were duplicates, 213 base metal CRM's and 107 gold CRM's and 181 blanks. This equates to 16% of all assays are a form of QAQC sample, common practice within the industry is 5% of all samples are a form of QAQC sample.

Field duplicates performed as expected, with few outliers. The CRMs performed well, with few copper fails (5), lead was more erratic with 9 fails and no gold CRM's failed and 3 silver standards failed.

During the 18 months since the last report the Alice Preparation Laboratory has ceased operation and KGL samples are trucked to Darwin for processing. As before samples are assayed at the Townsville Laboratory. The move to Darwin Preparation laboratory has seen a marked increase in the number of blank fails, 17% of blanks sent to Darwin failed. No blanks failed while sample preparation was undertaken at Alice Springs. The Townsville laboratory performed repeat assays confirming the issue is in the sample preparation stage.

## Sample Analysis

Since mid-2015 KGL has sent all samples to Intertek laboratories in Alice Springs for sample preparation, from where they were forwarded to Intertek in Townsville for analysis. Earlier 2011 to 2015 samples were sent to ALS



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Global in Townsville. Intertek and ALS analysis used a 4-acid digest with ICP-OES finish. Over-grade (> 2 % Cu) samples were re-analysed by 4-acid digest and ICP-OES finish on a larger initial sample and longer digest time. KGL QAQC protocols are designed to establish measurement systems and procedures to provide adequate confidence that quality is adhered to, and results are suitable for inclusion in Resource Estimation.

### **Estimation Methodology**

The Mineral Resource statement reported herein is a reasonable representation of the Reward deposit based on current sampling data. Grade estimation was undertaken using Geovia's Surpac™ software package (v7.7). Ordinary Kriging ("OK") was selected for grade estimation of copper, silver and gold (and the ancillary elements).

Copper is the primary economic element, silver, gold, lead, zinc, are estimated using the copper domains as hard boundaries and utilising dynamic search ellipses. Deleterious elements U W Bi and F are estimated within the sulphur domain (a soft boundary across the copper domains). Iron and Sulphur are estimated inside the sulphur domain using dynamic search ellipses. Iron and Sulphur are estimated into the country rock to aid waste rock classification. Only Main shoot and Marshall have sufficient oxidised samples to enable the weathering profile to be used as an additional hard boundary.

The block model utilises parent blocks measuring 2.5 m x 10 m x 5 m with sub-blocking to 1.25 m x 5 m x 2.5 m to better define the volumes. Blocks above topography are excluded from the estimation. Estimation resolution was set at the parent block size. Due to the reasonably spaced drill patterns, search radii were found to be optimal near 70 m for the major axis of the search ellipse. Anisotropic ratios of 1.5 and 2.5 were applied to the semi-major and minor axis of the search ellipse. The minimum and maximum samples utilised were 8 and 20 for the first pass and reduced to 6 and 15 for the second pass. Third pass informing samples were further reduced to a minimum of 2 and maximum of 10. Search distances were factored by the estimation pass. Grade capping was applied to all elements except Fe and S. Experimental variograms were generated where possible. Domains and elements where experimental variograms could not be created, variogram models were borrowed from similar domains or elements (with weak to moderate correlations to the element under investigation).

The default density of the block model is 2.80 t/m<sup>3</sup>. All oxide material is assigned 2.6 t/m<sup>3</sup>. The mineralised transitional material is assigned 3.0 t/m<sup>3</sup> and the transitional waste is assigned a density of 2.8 t/m<sup>3</sup>. Density values were further improved with a 2-pass estimation strategy. Pass one used measured density readings (n = 13,577, average 3.01, Variance 0.1 and CV 0.105) to estimate the block density, the second pass used density values determined from a linear regression of iron assays. The mineral resource averages 3.08 t/m<sup>3</sup>.

Block model validation consisted of visual checks in plan and section, global comparisons between input and output means, alternative estimation techniques, swath plots and to previous estimates.

### **Cut-Off Grades**

Cut off grades of 0.5% Cu above 200 m RL and 1% Cu below 200 m RL; 200 m RL is approximately 150 m below the surface and is considered to the depth limit for potential open pit mining. KGL are considering the optimal transition depth for the change over from open pit to underground in the previous FS (ASX:KGL, 10.11.22).

Classified resources (combined indicated and inferred) as defined above are presented at increasing copper cut offs highlighting the department of associated elements (Table 6). Figure 9 shows the resource as grade tonnage curves by resource category.

Table 6. Department of associated elements with copper mineralization

Resource Category	weathering	Material (Mt)	Grade											Metal				
			Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %	S %	Bi %	F %	Cu kt	Pb kt	Zn kt	Ag Moz	Au Koz		
Measured	Oxide	0.14	1.89	1.04	0.43	57.6	0.45	16.3	0.4	0.04	0.37	2.7	1.5	0.6	0.26	2.05		
	Transitional	0.16	2.44	0.95	0.39	66.3	0.46	14.2	1.2	0.04	0.39	3.8	1.5	0.6	0.33	2.35		
	High Sulphur	0.02	0.71	0.80	0.41	43.3	0.33	15.8	4.2	0.05	0.57	0.1	0.1	0.1	0.02	0.17		
	Fresh	2.32	1.88	0.35	0.32	44.1	0.42	15.5	1.8	0.04	0.49	43.7	8.0	7.4	3.29	31.39		
Indicated	Oxide	0.08	2.01	0.39	0.25	39.1	0.43	12.5	0.2	0.02	0.29	1.5	0.3	0.2	0.09	1.03		
	Transitional	0.10	1.74	0.61	0.32	41.2	0.23	9.2	0.6	0.01	0.22	1.7	0.6	0.3	0.13	0.72		
	High Sulphur	0.22	1.30	0.40	0.25	26.8	0.21	17.5	7.7	0.07	0.15	2.8	0.9	0.5	0.19	1.43		
	Fresh	5.79	2.01	0.50	0.41	41.8	0.40	17.3	2.2	0.03	0.35	116.1	29.2	23.5	7.78	75.36		
Inferred	Oxide	0.01	0.97	0.06	0.15	10.4	0.05	7.3	0.0	0.00	0.07	0.05	0.003	0.007	0.00	0.008		
	Transitional	0.03	0.98	0.07	0.15	11.9	0.05	7.4	0.1	0.00	0.07	0.29	0.02	0.05	0.01	0.045		
	High Sulphur	0.12	0.88	0.07	0.07	10.4	0.07	20.4	5.2	0.04	0.10	1.07	0.08	0.09	0.04	0.28		
	Fresh	4.19	1.46	0.26	0.21	17.6	0.19	16.4	1.4	0.01	0.21	61.1	11.0	8.9	2.38	24.97		
Subtotal	Oxide	0.22	1.91	0.80	0.36	50.3	0.43	14.8	0.3	0.03	0.34	4.2	1.8	0.8	0.36	3.09		
	Transitional	0.28	2.05	0.74	0.34	52.1	0.34	11.8	0.9	0.03	0.30	5.8	2.1	1.0	0.47	3.11		
	High Sulphur	0.35	1.13	0.30	0.19	21.9	0.17	18.4	6.7	0.06	0.16	4.0	1.1	0.7	0.25	1.88		
	Fresh	12.30	1.80	0.39	0.32	34.0	0.33	16.6	1.9	0.03	0.33	220.9	48.2	39.8	13.44	131.72		
Total		13.16	1.79	0.40	0.32	34.3	0.33	16.6	1.9	0.03	0.33	234.9	53.2	42.3	14.52	139.80		

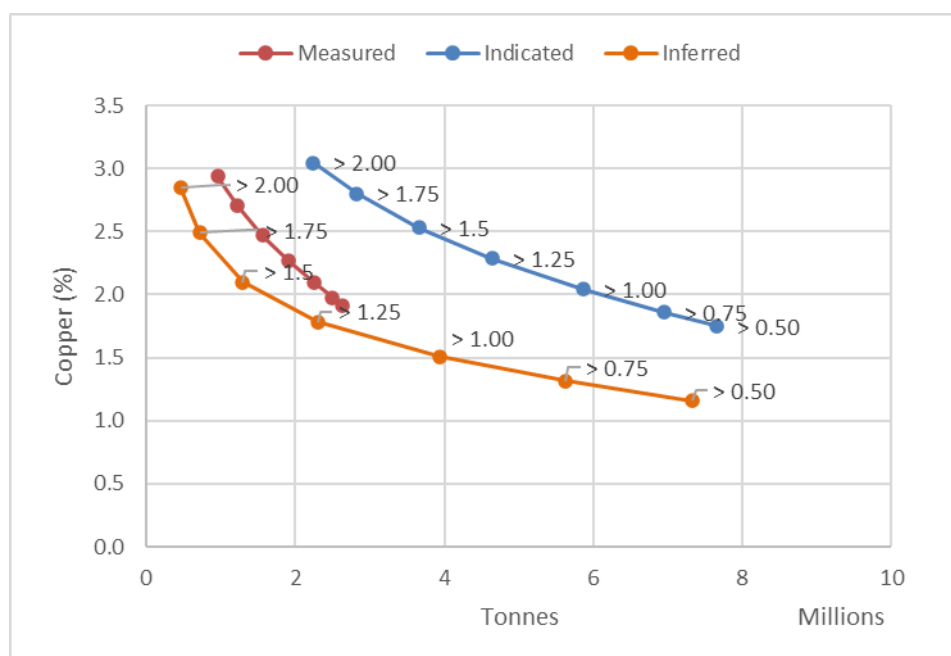


Figure 9. Grade tonnage curves by resource category.

### Criteria Used for Classification

Resource classification is based on data quality, drill density, number of informing samples, kriging variance, conditional bias slope, average distance to informing samples and geological continuity (deposit consistency). The confidence in the quality of the data and historic mining activities justified the classification of measured, indicated and inferred resources.

Measured resources are defined as portions of the deposit infilled with 25 m x 25 m drill spacing sufficient to confirm geological and grade continuity between points of observation where data and samples are gathered. Indicated resources are the portions of the deposit with a drill spacing of 50 m x 50 m and



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demonstrate a reasonable level of confidence in the geological continuity of the mineralisation, supported by some infill drilling. Inferred resources are the portions of the deposit covered by drill spacing greater than 50 m or those portions of the deposit with a smaller number of intercepts but demonstrating an acceptable level of geological confidence. Portions of the resource that do not meet these requirements remain unclassified resources and are not reported.

A mineral resource is not an ore reserve and does not have demonstrated economic viability.

### **Mining and Metallurgical Methods and Parameters and Other Material Modifying Factors Considered to Data**

The mineralisation above the 200 m RL (approximately 150 m below the surface) has been deemed to be potentially accessible by open cut mining methods. The Reward Deposit is a large steeply dipping syn-depositional copper deposit likely resulting in a high strip ratio. Mineralisation below the 200 m RL (approximately 150 m below the surface) is considered to have underground potential above a 1 % Cu cut off. No other mining assumptions have been used in the estimation of the Mineral Resource.

KGL have commissioned metallurgical testing of multiple composite samples from the Jervois project.

Mineral processing and metallurgical recoveries do not have a significant impact on the mineral resource estimate and have not been applied to the in-situ grades. Metallurgical recoveries are considered when determining “reasonable prospects for eventual economic extraction. Metallurgical Recoveries for copper and silver are reported as functions of copper grade in oxide/transitional and sulphide ore (Table 7).

*Table 7: Recovery Assumptions*

Material	Recovery Algorithm	Example
Oxide and Transition	$Cu\ Rec = (\% Cu - (0.48 - (0.04 \times \% Cu))) / \% Cu$	For a Cu Head Grade of 1.9%, the Copper Recovery will be 78.7%
	$Ag\ Rec = 0.88 * LN(\% Cu\ Rec * 100) - 2.98$	For a Cu Recovery of 78.7%, the Silver Recovery will be 86.2%
Sulphide Ore	$Cu\ Rec = (\% Cu - 0.075) \times 0.975 / \% Cu$	For a Cu Head Grade of 1.9%, the Copper Recovery will be 93.7%
	$Ag\ Rec = 2.07 \times \% Cu\ Rec - 1.255$	For a Cu recovery of 93.7%, the Silver Recovery will be 68.5%

Sulphur has been estimated through-out the block model. Fe and S have been estimated within the S domain and outside the sulphur domain (waste rock). It is assumed that surface waste dumps will be used to store waste material and conventional storage facilities will be used for the process plant tailings. KGL has undertaken kinetic test work to assess potential for acid mine drainage, results indicate most of the waste material recoverable by mining will have low potential to become acidic.

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Date: 22<sup>th</sup> May 2022

## JORC CODE, 2012 EDITION – TABLE 1

Notes on data relating to Resource Estimates. Data provided by and verified by MA.

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<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>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 1 m, but at times length were adjusted to take into account geological variations. RC sample intervals are predominantly 1 m intervals with some 2 and 4 m compositing (historical holes only).</li> <li>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 chemical analysis at a commercial laboratory.</li> <li>Mineralisation at all deposits (Jervois Project) 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 remobilised within a stratabound unit.</li> <li>Documentation of the historical drilling (pre-2011) for Reward is variable.</li> </ul>
<b>Drilling techniques</b>	<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>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.</li> <li>Metallurgical diamond drilling (JMET holes) were PQ core.</li> <li>There is no documentation for the historic drilling techniques, drill type is recorded as UNK.</li> <li>Diamond drilling was generally cored from surface with some of the deeper holes at Rockface and Reward utilizing RC pre-collars.</li> <li>Oriented core has been measured for the KGL drill program</li> </ul>
<b>Drill sample</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results</li> </ul>	<ul style="list-style-type: none"> <li>The KGL RC samples were not weighed on a regular</li> </ul>

<p><b>recovery</b></p>	<p>assessed.</p> <ul style="list-style-type: none"> <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>	<p>basis, KGL report no sample recovery issues were encountered during the drilling program.</p> <ul style="list-style-type: none"> <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>Drilling muds are used to improve drilling recovery, in broken ground tripple tube barrels are employed. Core recovery for recent drilling is &gt;95% with the mineral zones having virtually 100% recovery.</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>
<p><b>Logging</b></p>	<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 KGL RC and diamond core samples are geologically logged. Logging in conjunction with multi-element assays is appropriate for mineral resource estimation.</li> <li>Core samples are orientated and logged for geotechnical information suitable for mining studies.</li> <li>All logging has been converted to quantitative and qualitative codes in the KGL Access database.</li> <li>All relevant intersections are logged.</li> <li>Paper logs existed for the historical drilling. There is very little historical core available for inspection.</li> </ul>
<p><b>Sub-sampling techniques and sample preparation</b></p>	<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 ~3 kg;</li> <li>RC sample splits (~3 kg) are pulverized to 85% passing 75 microns.</li> <li>Diamond core was quartered with a diamond saw and generally sampled at 1 m intervals with samples lengths adjusted at geological contacts;</li> <li>Diamond core samples are crushed to 70% passing 2 mm and then pulverized to 85% passing 75 microns.</li> <li>Two quarter core field duplicates were taken for every 20 m samples by Jinka Minerals and KGL Resources.</li> <li>All sampling methods and sample sizes are deemed appropriate for mineral resource estimation</li> <li>Details for the historical sampling are not available</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<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</li> </ul>	<ul style="list-style-type: none"> <li>The KGL sample submission includes standards, duplicates and laboratory checks to provide quality assurance and control. In mineralisation 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 with an ICP MS finish. Samples over 1ppm Au are re-assayed by Fire Assay with an</li> </ul>



	<p>model, reading times, calibrations factors applied and their derivation, etc.</p> <ul style="list-style-type: none"> <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>	<p>AAS finish.</p> <ul style="list-style-type: none"> <li>There are no details of the historic drill sample assaying or any QAQC.</li> <li>All assay methods were deemed appropriate at the time of undertaking.</li> </ul>
<p><b>Verification of sampling and assaying</b></p>	<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 MS Access database, using Database check queries within Maxwell's DataShed.</li> <li>Further validation is conducted when data is imported into Micromine and Leapfrog Geo software.</li> <li>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.</li> <li>For the resource estimation below detection values were converted to half the lower detection limit. Below detection limit samples of some historic holes are stored as a small negative number.</li> </ul>
<p><b>Location of data points</b></p>	<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>For the KGL drilling surface collar surveys were picked up using a Trimble DGPS, with accuracy to 1 cm or better.</li> <li>Downhole surveys were taken during drilling with a Ranger or Reflex survey tool at 30 m intervals</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. Spurious holes are flagged in the database and not used in the mineral resource estimate.</li> <li>There is no documentation for the downhole survey method for the historic drilling.</li> <li>Topography was mapped using Trimble DGPS and merged with the LIDAR</li> </ul>
<p><b>Data spacing and distribution</b></p>	<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 at Reward was on 25 m spaced sections in the upper part of the mineralisation extending to 50 m centres with depth and ultimately reaching 100 m spacing on the periphery of mineralisation.</li> <li>For Reward shallow oxide RC drilling was conducted on 80 m spaced traverses with holes 10 m 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>
<p><b>Orientation of data in relation to geological</b></p>	<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> </ul>	<ul style="list-style-type: none"> <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</li> </ul>



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<p><b>structure</b></p>	<ul style="list-style-type: none"> <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>	<p><i>obvious sampling bias was detected.</i></p>
<p><b>Sample security</b></p>	<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>
<p><b>Audits or reviews</b></p>	<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 internally and by external consultants.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<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 covered by Mineral Claims and an Exploration licence owned by KGL Resources subsidiary Jinka Minerals</li> <li>The Jervois Project is within EL25429 and EL28082 100% owned by Jinka Minerals and operated by Kentor Minerals (NT), both wholly owned subsidiaries of KGL Resources</li> <li>Excised from the Exploration Licences are four Mining claims (ML 30180, ML 30182, ML 30829 &amp; ML 32277) owned by Jinka Minerals</li> </ul>
<b>Exploration done by other parties</b>	<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>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>EL25429 and EL28082 lie 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 stratabound mineralisation for the project consists 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.</li> <li>Mineralisation is characterised by veinlets and disseminations of chalcopyrite in association with magnetite. In the oxide zone which is vertically limited malachite, azurite, chalcocite are the main Cu-minerals.</li> <li>Massive to semi-massive galena in association with sphalerite occur locally in high grade lenses of limited extent with oxide equivalents including cerussite and anglesite in the oxide zone. Generally, these lenses are associated with more carbonate-rich host rocks occurring at Reward South, Reward and Bellbird North.</li> </ul>
<b>Drill hole Information</b>	<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> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Not applicable, this table references a Mineral Resource Estimate</li> <li>All drill holes are stored in the drill hole database, detailing drill hole collar location, elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar, dip and azimuth of the hole at consistent points down hole, and hole length.</li> </ul>

	<ul style="list-style-type: none"> <li>• down hole length and interception depth</li> <li>• hole length.</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>	
<b>Data aggregation methods</b>	<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>• This table and report references a Mineral Resource Estimate, specific details are part of the resource procedure</li> <li>• Top cut analysis was carried out top cuts were applied on a domain basis. No minimum grade truncations were applied.</li> <li>• Samples were aggregated down hole to one metre composites, and the weighted average grade of each one metre composite was used.</li> <li>• No metal equivalents are used</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<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>• Not applicable, this table references a Mineral Resource Estimate</li> </ul>
<b>Diagrams</b>	<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 to Figures in the announcement</li> </ul>
<b>Balanced reporting</b>	<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>• The interpretation considers all drilling. Unreliable holes that show a lack of either continuous assaying or unacceptable sample practices/lengths or have spurious collar locations, (163 drill holes) were removed for the purposes of interpreting the mineral resource. The remaining 523 holes (mineralised or barren) were used to define the extents of the mineral resource.</li> </ul>
<b>Other substantive exploration data</b>	<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,</li> </ul>	<ul style="list-style-type: none"> <li>• Outcrop mapping of exploration targets using Real time DGPS.</li> <li>• IP, Magnetics, Gravity, Downhole EM are all used for targeting</li> <li>• Metallurgical studies are well advanced including recovery of the payable metals including Cu, Ag and Au.</li> </ul>



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*geotechnical and rock characteristics; potential deleterious or contaminating substances.*

- Deleterious elements such as Pb Zn Bi and F are modelled

**Further work**

- *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.*

- The current report relates to an updated mineral resource as a result of confirmatory drilling. The updated resource will be considered for reserves.

## Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>MA has undertaken limited independent first principal checks of the database.</li> <li>Historical ITRs accept the integrity of the database with the exception of the rejected holes.</li> <li>The geological database is managed and updated by KGL Staff.</li> <li>Basic database validation checks were run, including checks for missing intervals, overlapping intervals, down hole deviation checks and hole depth mismatches.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The CP (Mr I. Taylor) visited site from the 1st to 3rd November 2020 to review the geology, drill core and field practices as part of the 2020 DFS and Mineral Resource Estimate Update.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>The geological model is well understood at a deposit scale. Reward is interpreted as an original syn-depositional copper rich polymetallic massive sulphide deposit that has undergone deformation, metamorphism and some degree of structural remobilisation.</li> <li>Geological logging, structural mapping and drill hole assays have been used in the establishment of a resource estimate. Validation has been carried out by KGL and MA competent persons.</li> <li>No alternative interpretations have been presented. Alternative estimation methods applied to density estimation had little effect on overall tonnes and grade.</li> <li>Geological and grade continuity within defined domains appears well understood. Lithology and weathering were considered during the mineralisation domain interpretations.</li> <li>Infill drilling by KGL since the 2020 resource update have increased the confidence in grade and geology interpretations which is the basis for the mineral resource estimation.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul style="list-style-type: none"> <li>The Reward deposits strike over 1.5 km. Within the structural corridor lie five high grade shoots each approximately 200 m in length, and plunge steeply south up to 800 m below the surface. Two lodes lie to the east in the footwall of the reward structure.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a</li> </ul>	<ul style="list-style-type: none"> <li>Ordinary Kriging has been used as the interpolation technique to estimate the Mineral Resource. This method considered appropriate given the nature of mineralisation. All elements were estimated using ordinary kriging.</li> <li>Estimation was undertaken in Surpac 2024 (v7.7).</li> <li>Drill hole intercepts were flagged manually within Surpac with individual domain codes. The flagged drill hole intercepts</li> </ul>

*description of computer software and parameters used.*

- *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*
- *The assumptions made regarding recovery of by-products.*
- *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*
- *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
- *Any assumptions behind modelling of selective mining units.*
- *Any assumptions about correlation between variables.*
- *Description of how the geological interpretation was used to control the resource estimates.*
- *Discussion of basis for using or not using grade cutting or capping.*
- *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*

were imported into LeapFrog, and three dimensional mineralisation wireframes created. Intervals were checked for inconsistencies, split samples, edge dilution and mineralisation outside the interpretation. A separate table was created to store drill hole intercepts greater than 0.2% S, these intercepts were domained as stratabound mineralisation.

- The domain codes (for Cu and S) have then been used to extract a raw assay file from MS Access for grade population analysis (multi-element), as well as analysis of the most appropriate composite length to be used for the estimation.
- Analysis of the raw samples within the Cu mineralisation domains indicates that the majority of sample lengths are at 1 m. Samples were composited to one metre honouring geological boundaries.
- Grade continuity analysis (variography) within Cu domains to define the mineralisation has been undertaken. Where variograms could not be generated for a particular element, variograms were considered from adjacent domains.
- 3D experimental variogram modelling using a nugget (C0) and two spherical models (C1, C2), occasionally one spherical model was sufficient. The stratabound mineralisation included a third long range structure (C3). Nuggets ranged from reasonable low to moderate, between 0.14 and 0.44, and variogram ranges varied between 60 and 133 m for Cu. Nuggets for additional elements ranged from 0.12 to 0.4 and variogram ranges varied between 80 and 180 m.
- Anisotropic ellipses based on the resulting bearing, plunge, dip, and defined ranges and anisotropic ratios were graphically plotted in Surpac and displayed against the extracted assay composites to ensure modelled parameters were reasonably orientated. Estimation utilised dynamic anisotropy based on local variations of the domain centre plane.
- The interpolations have been constrained within the mineralisation wireframes. Domains near surface were further constrained to above and below the top of fresh material. Interpolations were undertaken in three passes with the mineralisation wireframes (and weathering surface as appropriate) utilised as hard-boundaries during the estimation.
- The first pass utilised a search distance of 70 m and a minimum number of informing samples of 8, and a maximum number of informing samples of 20. The second pass utilised a minimum of 6 and maximum of 16 samples, the search distance was doubled to 140 m. Both passes restricted the maximum number of samples per hole to 4. The third pass dropped the minimum to 2 and maximum to 10 samples and the restriction of samples per hole was lifted. Third pass maximum search distance was 210 m. 54% of estimated metal (> 0.5 % Cu) is estimated in pass 1.
- The company is not intending to recover Pb, Zn at this stage of the project. Ag and Au will report to the copper

concentrate.

- The model includes an estimation of deleterious elements Bi, W, U and F, these elements will attract a penalty and rejection limits in the concentrate may apply. S for potential acid mine drainage characterisation is included in the block model.
- No specific assumptions have been made regarding selective mining units. However the sub-blocks are of a suitable selective mining unit size for either an open pit operation or underground mining scenario.
- A 3D model with a parent block size of 2.5 m (X) by 10 m (Y) by 5 m (Z) was used. The drill hole spacing in the deposit ranges from 25 m by 25 m in the better drilled parts of the deposit to the dominant 50 m by 50 m drill pattern. In order for effective boundary definition, a sub-block size of 1.25 m (X) by 5 m (Y) by 2.5 m (Z) has been used; the sub-blocks are estimated at the parent block scale.
- There is a moderate to good correlation between Pb and Ag and weak correlation between Bi and Ag. There is a moderate (> 0.5) correlation between Cu, Pb, Zn, Ag, Au and S. Fe is associated with magnetite and shows a weak correlation (< 0.3) with S and Cu There is no correlation between F, U and W and the other elements.
- The geological model (grade domains and faults interpretations and weathering profile) were used to control grade estimation.
- High grade outliers (Cu, Pb, Zn, Ag, Au, Bi, F, U and W) within the composite data were capped. No capping was applied to Fe and S. Domains were individually assessed for outliers using histograms, log probability plots and changes in average metal content; grade caps were applied as appropriate. Generally the domains defined a well distributed population with low CV's and only minimal grade-capping was required.
- The resource has been validated visually in section and level plan along with a statistical comparison of the block model grades against the composite grades to ensure that the block model is a realistic representation of the input grades. No issues material to the reported Mineral Resource have been identified in the validation process

**Moisture**

- Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.
- Tonnages are based on dry tonnes.

**Cut-off parameters**

- The basis of the adopted cut-off grade(s) or quality parameters applied.
- The resource is reported above 200 m RL and a 0.5 % Cu lower cut-off representing open pit potential mineralisation. Below 200 m RL the resource is reported at a 1 % Cu Cut-off reflecting an underground mining scenario. Assumed Copper price is \$AU 12,082/t (\$US 4.00/lb), and assumed Silver price of \$AU 24/t. The 2020 Recovery algorithms for copper and silver were supplied by KGL. Assumed payables are 95.5% Cu, 90% Ag > 30g/t and 90% Au > 1.0 g/t in concentrate.



**Mining factors or assumptions**

- Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.
- The mineralisation above the 200 m RL (approximately 150 m below the surface) has been deemed to be potentially accessible by open cut mining methods. The deposit is a large steeply dipping syn-depositional copper deposit likely resulting in a high strip ratio.
- Mineralisation below the 200 m RL (approximately 150 m below the surface) is considered to have underground potential above a 1 % Cu cut off.
- No other mining assumptions have been used in the estimation of the Mineral Resource.

**Metallurgical factors or assumptions**

- The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.
- No metallurgical factors have been applied to the in situ grade estimates.
- Metallurgical Recoveries for copper and silver are determined as functions of copper grade in oxide/transitional and sulphide ore.

**Environmental factors or assumptions**

- Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.
- Samples from the project representing different waste rock, ore, and tailings materials underwent laboratory scale column leach testing for durations between 64 and 132 weeks. The tests confirmed most of the waste material recoverable by mining will have low potential to become acidic. The volume of material with potential to become acidic can be encapsulated within the non-acid forming waste rock.
- Sulphur has been estimated through-out the block model. Fe and S have been estimated within the S domain and outside the sulphur domain (waste rock).
- It is assumed that surface waste dumps will be used to store waste material and conventional storage facilities will be used for the process plant tailings.

**Bulk density**

- Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.
- 14,270 density readings can be matched to an assay value. A total 16,017 density readings by water immersion method were conducted on competent transitional and fresh core. Limited oxide samples have been taken. 106 density readings were removed from the dataset, (Fresh samples below the base of weathering with an SG less than 2.0 t/m<sup>3</sup>)
- Dry bulk density has been varied according to the weathering profile. Within Fresh material bulk density was estimated (OK)

methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.

- Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.

directly from density readings. A minimum of 5 samples and a maximum of 12 samples was used. In areas not filled with estimated density values, a linear regression of iron assays was employed; the calculated density data was then used in a second pass.

- Reward - the average modelled density of mineralised oxide material is 2.60 t/m<sup>3</sup>, transitional material is 2.80 t/m<sup>3</sup>, the high sulphide material averages 3.12 t/m<sup>3</sup> and mineralised fresh material averages 3.13 t/m<sup>3</sup>

**Classification**

- The basis for the classification of the Mineral Resources into varying confidence categories.
- Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).
- Whether the result appropriately reflects the Competent Person's view of the deposit.

- Blocks have been classified as measured, Indicated, Inferred or Unclassified based on geological continuity and estimation quality parameters, dominantly influenced by drill spacing.
- The above criteria were used to determine areas of implied, assumed and confirmed geological and grade continuity. Only small areas have confirmed geological and grade continuity, and have been classified as measured. Classification was assessed on a per domain basis and resource categories were stamped onto the individual domains.
- Unclassified mineralisation has not been included in this Mineral Resource. Unclassified material is either contained in isolated block above cut off within the strata-bound domain and in deep proportions of the deposit with sparse drill intercepts.
- The classification reflects the competent person's view of the Reward deposit.

**Audits or reviews**

- The results of any audits or reviews of Mineral Resource estimates.

- There has been a limited independent audit of the data performed by MA, there has been no independent review of the mineral resource.

**Discussion of relative accuracy/confidence**

- Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.
- The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.
- These statements of relative accuracy and confidence of the estimate should be compared with

- With further drilling it is expected that there will be minimal variances to the tonnage, grade and contained metal within the deposit. The competent person does not expect that these variances will impact the economic extraction of the deposit.
- The mineral resource estimate appropriately reflects the competent person's view of the deposit.
- No geostatistical confidence limits have been estimated. Consideration has been given to all relevant factors in the classification of the mineral resource.
- The ordinary kriging result, due to the level of smoothing, should only be regarded as a global estimate, and is suitable as a life of mine planning tool.
- Should local estimates be required for detailed mine scheduling, techniques such as uniform conditioning or conditional simulation could be considered. Ultimately grade control drilling will be required.
- Limited Mining records exist (40 kt of oxide extracted from Green Parrot – south of Reward Deposit). Some historic mining has occurred on the Marshal – Reward structure, records are insufficient to reconcile.



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*production data, where available.*