

8 August 2014

# New zone of mineralisation discovered at the Morley prospect parallel to the Marshall and Reward deposits

#### **Highlights**

- Reconnaissance RC drilling at the Morley prospect to the east of East Reward intersected a new zone of shallow mineralisation located beneath outcropping gossans including

14m @ 2.01% Cu, 7.7g/t Ag, 0.06g/t Au from 17 m

- East Reward mineralisation extended at depth

4m @ 3.09% Cu, 0.54% Zn, 28.2g/t Ag, 0.08g/t Au from 485 m

- Extension drilling intersects copper mineralisation below Marshall coincident with a DHEM conductor that lies well outside the existing resource
- Green Parrot mineralisation strike length now increased to approximately 1.1 km with further assays due soon

#### Morley

Morley is a recently discovered mineralised trend located east of East Reward (Figure 1) and is coincident with a strong induced polarisation anomaly that runs parallel to the Marshall – Reward deposit. Geological mapping along the trend has identified exposures of gossan and calc-silicate rocks with associated malachite (copper carbonate).

A few shallow holes were drilled at Morley as part of the recent oxide drilling program. Hole JOC172 intersected 14m @ 2.01% Cu, 7.7g/t Ag from 17m. The mineralisation is in alignment with an intersection in the RC pre collar for diamond hole KJCD074 (11m @ 0.86% Cu, 9.8g/t Ag from 12m) also interpreted to be part of the Morley trend. Additional drilling is scheduled for later in the year to test for extensions along strike to the north and south.

#### **East Reward**

Drilling in 2013/14 has improved delineation of the East Reward mineralised zone that trends N-S parallel to the Reward resource that lies approximately 80m to the west. Drilling has been on an approximate 80m x 50m grid to support estimation of a maiden resource and has confirmed the continuity of mineralisation. Hole RJ235 drilled in 2012 was re-entered and extended to the east where it recorded several mineralised intercepts including:

- 6m @ 1.71% Cu, 0.41% Zn, 6.2g/t Ag, 0.04g/t Au from 400 m and
- 4m @ 3.09% Cu, 0.54% Zn, 28.2g/t Ag, 0.08g/t Au from 485 m

#### **Green Parrot**

Reconnaissance drilling 500m north of the historic Green Parrot open pit (Figure 2) has intersected further shallow copper mineralisation. Results include:

- 3m @ 1.12% Cu and 45.9g/t Ag from 6m in JOC157 and
- 3m @ 1.13% Cu, 56.4g/t Ag from 12m in JOC163

Green Parrot is now interpreted to extend north along a series of shallow workings to the west of the Marshall deposit for a total strike length of approximately 1.1 km. Recent shallow drilling has not closed off this trend with the most northern traverse intersecting copper mineralisation.

#### Marshall

Diamond hole KJCD078 was drilled beneath Marshall beyond the current resource to test a downhole electromagnetic conductor identified from the recent geophysical survey. A broad 30m mineralised interval was intersected in the Marshall-Reward position. Best results include:

- 2m @ 0.96% Cu, 4.2g/t Ag, 0.15g/t Au from 620 m
- 3m @ 2.12% Cu, 8.7g/t Ag, 0.06g/t Au from 645 m

The intersection is significant because it is located 110m south and 90m below any previous drilling at Marshall and indicates the Marshall mineralisation is more extensive than previously thought.

Simon Milroy the managing director of KGL Resources comments "This is very significant for the project because we have now identified four separate parallel trends of mineralisation at the northern end of Jervois. From west to east we have Green Parrot, Marshall/Reward, East Reward and now Morley."

"Further results are still pending from the previous drilling programme at Cox's Find, Bellbird deeps and at Green Parrot."

"Further drilling is currently being planned for the Jervois project which is expected to commence in September".

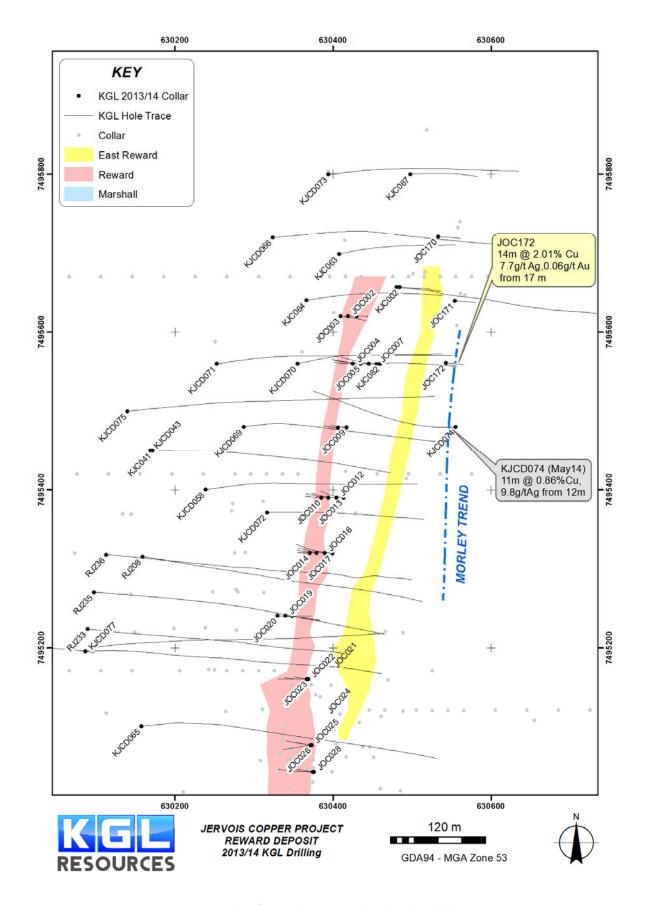


Figure 1 Plan of Reward, East Reward and Morley drilling

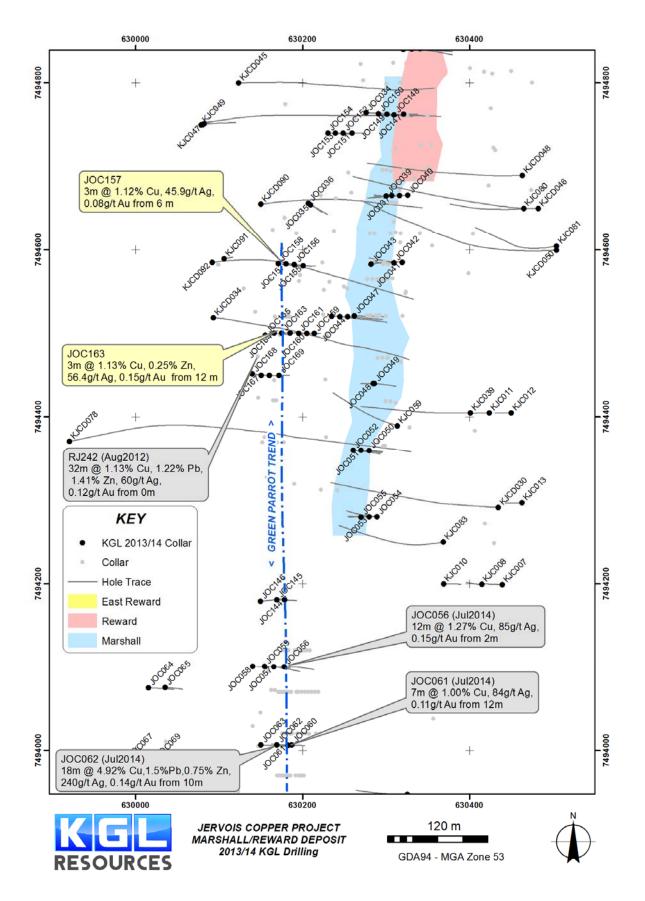
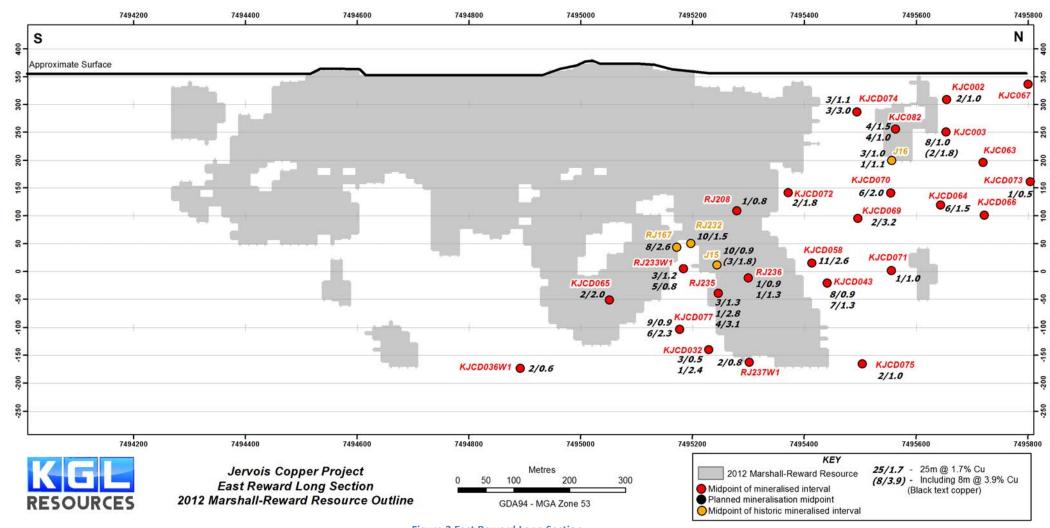
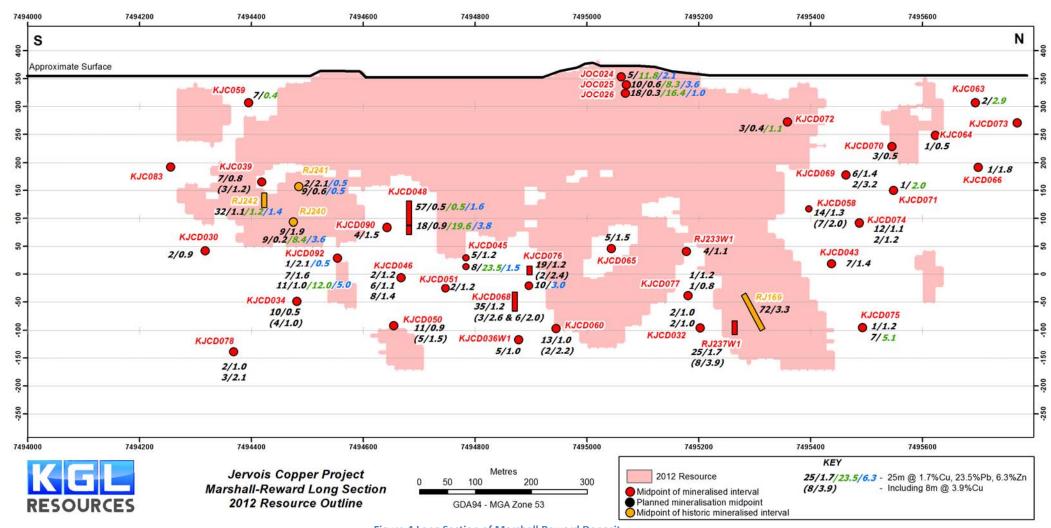


Figure 2 Plan of Marshall/Reward and Green Parrot Extension drilling



**Figure 3 East Reward Long-Section** 



**Figure 4 Long Section of Marshall Reward Deposit** 

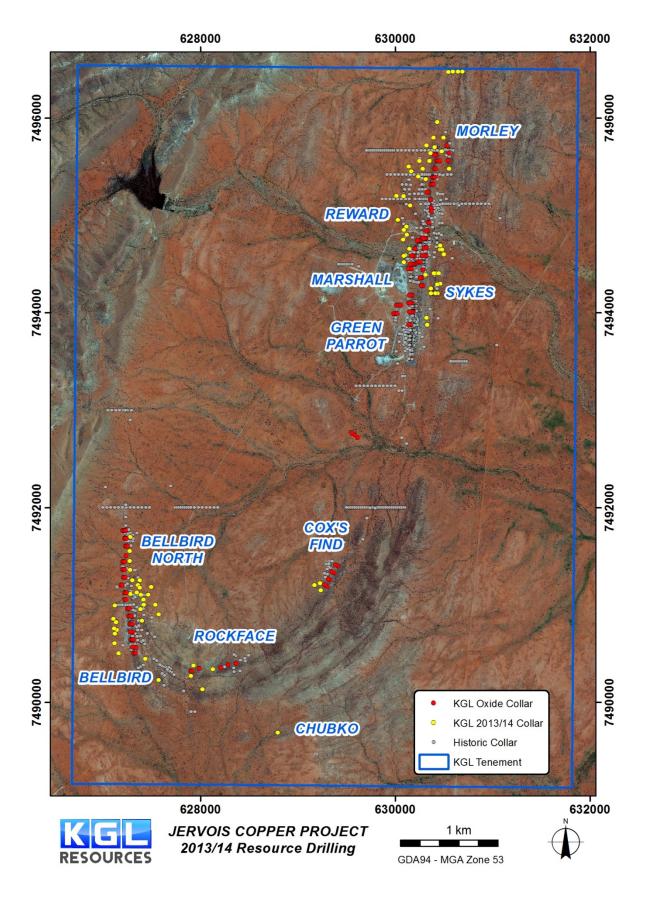


Figure 5 Plan of Jervois tenement and drill hole collar locations

Table 1 Table of significant results

Hole ID	Easting (m)	Northing (m)	RL (m)	Dip	Azimuth	BOX <sup>1</sup> (m)	Total Depth (m)	From (m)	To (m)	Interval (m)	ETW² (m)	Cu %	Pb %	Zn %	Ag g/t	Au g/t
JOC157	630180.4	7494583.2	347.9	-60.69	98	25	30.0	6	9	3	1.5	1.12	0.03	0.22	45.90	0.08
								19	21	2	1.0	0.71	0.17	0.1	39.20	0.06
JOC163	630175.3	7494500.4	349.0	-62.72	91	28	28.0	12	15	3	1.4	1.13	0.01	0.25	56.40	0.15
JOC172	630543.5	7495561.0	358.8	-59.83	94	38	42.0	17	31	14	7.7	2.01	0.01	0.02	7.70	0.06
								31	32	1	0.5	0.61	0	0.01	0.80	0.01
KJC079	630435.0	7495960.2	359.5	-61.72	82	28	384.0	309	316	7	3.6	0.06	0.92	0.75	22.70	0.01
KJCD073	630394.7	7495800.1	355.7	-55.46	84	36	429.8	322	323	1	0.6	0.51	0	0.03	1.70	0.02
KJC082	630460.5	7495560.0	357.5	-63.23	87	37	180.0	115	119	4	2.3	1.51	0.04	0.04	11.60	0.16
								142	146	4	2.2	1.01	0.01	0.02	4.00	0.03
								149	150	1	0.5	1.33	0	0.02	11.50	0.03
RJ208	630159.1	7495315.2	348.8	-50.92	99	30	462.1	385	386	1	0.9	0.76	0.01	0.03	2.70	0.04
RJ235	630097.4	7495270.1	347.7	-57.85	93	34	534.6	400	406	6	4.7	1.71	0.02	0.41	6.20	0.04
								419	421	2	1.7	1.17	0.04	0.23	9.40	0.19
								452	453	1	0.8	1.05	0.02	0.04	2.50	0.03
								457	460	3	2.5	1.33	0.03	0.16	7.20	0.05
								469	470	1	0.9	2.82	0.03	0.15	15.20	0.04
								472	473	1	0.9	0.6	0	0.04	4.00	0.03
								475	477	2	1.7	0.77	0.01	0.1	6.30	0.02
								485	489	4	3.6	3.09	0.08	0.54	28.20	0.08
RJ236	630113.0	7495317.6	348.4	-60.88	92	28	567.8	498	500	2	1.8	0.65	0.01	0.03	7.00	0.05
								505	506	1	0.9	0.91	0.01	0.02	4.50	0.04
								522	524	2	1.8	0.06	0.01	0.03	4.20	0.43
								526	527	1	0.9	1.3	0.08	0.1	23.00	0.05
KJCD078	629920.8	7494370.9	349.2	-57.57	79	6	686.9	620	622	2	1.4	0.96	0.01	0.05	4.2	0.15
								634	635	1	0.7	0.73	0.03	0.03	5.2	0.07
								645	648	3	2.1	2.12	0.05	0.08	8.7	0.06

<sup>&</sup>lt;sup>1</sup>Base of Oxidisation down hole depth <sup>2</sup>Estimated true width

#### For further information contact:

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#### **About KGL Resources**

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

#### **JORC Compliance Statement**

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

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

Hole		Date originally Reported	JORC Reported Under
KJC	2	8/11/2013	2004
KJC	3	8/11/2013	2004
KJC	4	8/11/2013	2004
KJC	5	8/11/2013	2004
KJC	6	8/11/2013	2004
KJC	10	8/11/2013	2004
KJC	11	8/11/2013	2004
KJC	14	8/11/2013	2004
KJC	15	8/11/2013	2004
KJC	19	16/06/2014	2012
KJC	29	16/06/2014	2012
KJC	30	29/05/2014	2012
KJC	32	29/05/2014	2012
KJC	33	8/11/2013	2004
KJC	34	21/03/2014	2012
KJC	35	8/11/2013	2004
KJC	39	29/05/2014	2012
KJC	43	21/03/2104	2012
KJC	45	3/02/2014	2012
KJC	46	29/05/2014	2012
KJC	48	9/12/2014	2012
KJC	50	29/05/2014	2012
KJC	51	29/07/2014	2012
KJC	56	16/06/2014	2012
KJC	58	21/03/2014	2012
KJC	59	29/05/2014	2012
KJC	60	29/05/2014	2012
KJC	63	29/05/2014	2012
KJC	64	29/05/2014	2012
KJC	65	29/05/2014	2012

Hole		Date originally Reported	JORC Reported Under
KJC	66	29/05/2014	2012
KJC	67	29/07/2014	2012
KJC	68	29/07/2014	2012
KJC	69	29/05/2014	2012
KJC	70	29/05/2014	2012
KJC	71	29/07/2014	2012
KJC	72	29/05/2014	2012
KJC	73	21/07/2014	2012
KJC	74	29/05/2014	2012
KJC	75	29/07/2014	2012
KJC	76	21/07/2014	2012
KJC	77	29/07/2014	2012
KJC	90	29/07/2014	2012
KJC	92	29/07/2014	2012
JOC	24	29/07/2014	2012
JOC	25	29/07/2014	2012
JOC	26	29/07/2014	2012
JOC	61	18/07/2014	2012
JOC	62	18/07/2014	2012
RJ	169	7/09/2011	2004
RJ	167	15/08/2011	2004
RJ	232	15/08/2011	2004
RJ	233w	15/08/2011	2004
RJ	237w	29/05/2014	2012
RJ	240	2/08/2012	2004
RJ	241	2/08/2012	2004
RJ	242	2/08/2012	2004
KJC	36W1	29/05/2014	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	<ul> <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> <li>Diamond drilling and reverse circulation (RC) drilling were used to obtain samples for geological logging and assaying.</li> <li>RC drill holes are sampled at 1m intervals and split using a cone splitter attached to the cyclone to generate a split of ~3kg.</li> <li>Diamond core was quartered with a diamond saw and generally sampled at 1m intervals with shorter samples at geological contacts.</li> <li>RC samples are routinely scanned with a Niton XRF. Samples assaying greater than 0.1% Cu, Pb or Zn are submitted for analysis at a commercial laboratory.</li> </ul>
Drilling techniques	<ul> <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> <li>RC Drilling was conducted using a reverse circulation rig with a 5.25" face-sampling bit. Diamond drilling was either in NQ2 or HQ3 drill diameters.</li> </ul>
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>RC samples were not weighed on a regular basis but no sample recovery issues were encountered during the drilling program.</li> <li>Overweight samples (&gt;3kg) were re-split with portable riffle splitter</li> </ul>
Logging	<ul> <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 RC and diamond core samples are geologically logged. Core samples are also orientated and logged for geotechnical information.
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>	<ul> <li>RC drill holes are sampled at 1m intervals and split using a cone splitter attached to the cyclone to generate a split of ~3kg.</li> <li>Diamond core was quartered with a diamond saw and generally sampled at 1m intervals with shorter samples at geological contacts.</li> <li>RC sample splits (~3kg) are pulverized to 85% passing 75 microns.</li> <li>Diamond core samples are crushed to 70% passing 2mm and then pulverized to 85% passing 75 microns.</li> </ul>
Quality of assay data and laboratory tests	<ul> <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,</li> </ul>	<ul> <li>The QAQC data includes standards, duplicates and laboratory checks. In ore zones Standards are added at a ratio of 1:10 and duplicates and blanks 1:20.</li> <li>Basemetal samples are assayed using a four acid digest with an ICP AES finish.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	Gold samples are assayed by Aqua Regia with an ICP MS finish. Samples over 1ppm Au are re-assayed by Fire Assay with an AAS finish.  • An umpire laboratory is used to check ~1% of samples analysed.
Verification of sampling and 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>	<ul> <li>Data is validated on entry into the Datashed database.</li> <li>Further validation is conducted when data is imported into Vulcan</li> </ul>
Location of data points	<ul> <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>Surface collar surveys were picked up using a Trimble DGPS.</li> <li>Downhole surveys were taken during drilling with a Ranger or Reflex survey tool every 30m with checks conducted with a Gyrosmart gyro and Azimuth Aligner.</li> <li>All drilling is conducted on the MGA 94 Zone 53 grid. All downhole magnetic surveys were converted to MGA 94 grid.</li> </ul>
Data spacing and distribution	<ul> <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 for Inferred resources has been conducted at a spacing of 50m along strike and 80m within the plane of the mineralized zone. Closer spaced drilling was used for Indicated resources.</li> <li>Shallow oxide RC drilling was conducted on 80m spaced traverses with holes 10m apart</li> </ul>
Orientation of data in relation to geological structure	<ul> <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 a default angle of -60 degrees but holes vary from -45 to - 80.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples were stored in sealed polyweave bags on site and transported to the laboratory at regular intervals by KGL staff.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>The sampling techniques are regularly reviewed.</li> </ul>

### 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 and land tenure status	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.	<ul> <li>The Jervois project is within E25429 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</li> </ul>
	<ul> <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>	by KGL Resources subsidiary Jinka Minerals.
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Previous exploration has primarily been conducted by Reward Minerals, MIM and Plenty River.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	EL25429 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

Criteria	JORC Code explanation	Commentary
		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.  The copper-lead-zinc mineralisation is interpreted to be stratabound in nature, probably relating to the discharge of base metal-rich fluids in association with volcanism or metamorphism or dewatering of the underlying rocks at a particular time in the geological history of the area.
Drill hole Information	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:    Compared to the compared to th	<u> </u>
	<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> </ul>	
	o dip and azimuth of the hole	
	down hole length and interception depth	
	o hole length.	
	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.	
Data aggregation methods	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.	Refer Table 1
	<ul> <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> </ul>	
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	Refer Table 1
mineralisation widths and	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	
intercept lengths	<ul> <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>	
Diagrams	<ul> <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>	Refer Figures 1,2,3, 4 & 5
Balanced reporting	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.	Refer Table 1
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Refer Figure 5
	<ul> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	