

ASX:LEG

23 January 2020

ASX Announcement

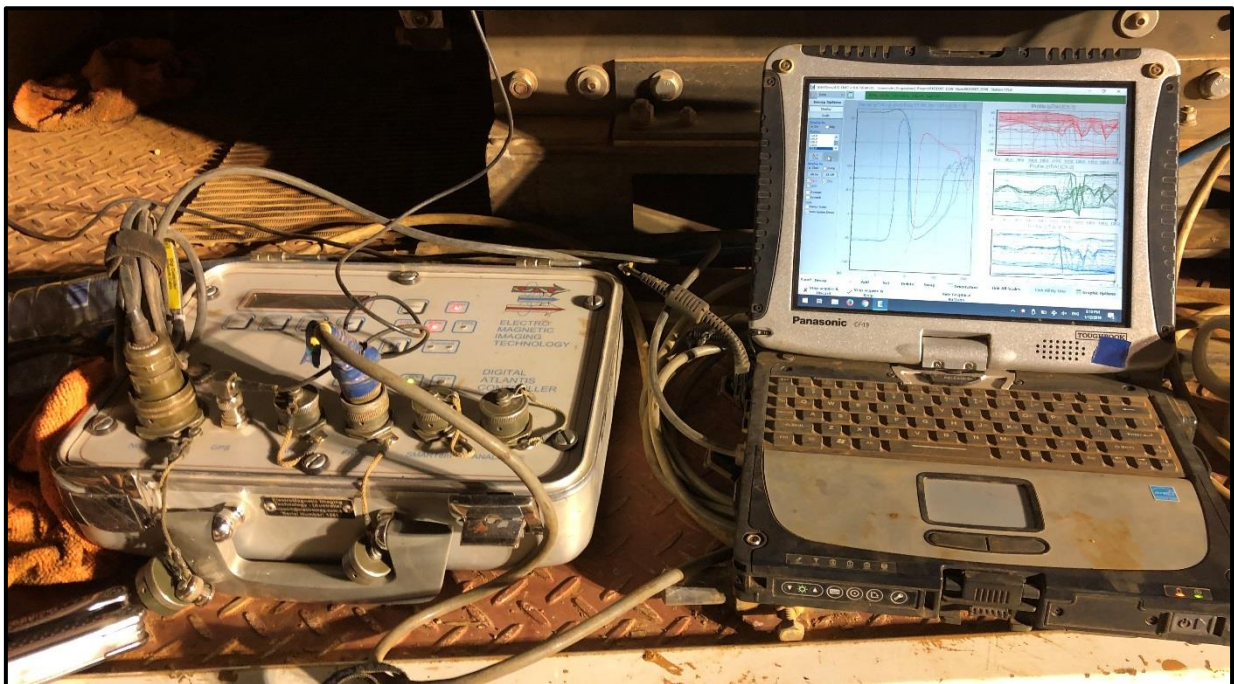
Downhole EM Identifies Priority Drill Target at Mawson

- A strong 6,000-8,000S offhole EM conductor defined in diamond drillhole RKDD007
- The offhole conductor is interpreted to be within the same mafic/ultramafic intrusive as RKDD007
- An inhole conductor associated with Ni-Cu sulphide interval also confirmed

Legend Mining Limited (Legend) is pleased to announce results from the December 2019 downhole electromagnetic (DHTEM) survey from diamond drillhole RKDD007 at the Mawson Prospect, Fraser Range, Western Australia. Details are in the technical discussion in this announcement.

Legend Managing Director Mr Mark Wilson said: “The diamond drillhole to test this offhole conductor at Mawson will be the first hole drilled in the upcoming March drill programme. The modelled strength and location with respect to the known mineralisation in hole 007 makes this a compelling target.

Meanwhile the development of the 3D model of Mawson is ongoing with further diamond drill targets to be determined in due course.”



DHTEM surveying of Diamond Drillhole RKDD007

TECHNICAL DISCUSSION

Modelling of DHTeM survey data from the recent diamond drilling programme at Mawson has now been completed. This modelling incorporated all geological and structural data to assist with the EM plate interpretation and provide geological context/control to the modelling. Multi-loop interpretations were necessary to overcome issues related to conductive overburden and the close proximity of large stratigraphic conductors (previously identified moving loop EM conductors D1, D7 and D8) with the potential to mask mineralisation.

RKDD007 returned significant DHTeM results with an inhole feature associated with the 14.9m main sulphide mineralisation intersection and a strong down dip offhole conductor located to the southwest (see Figure 1 & Table 1).

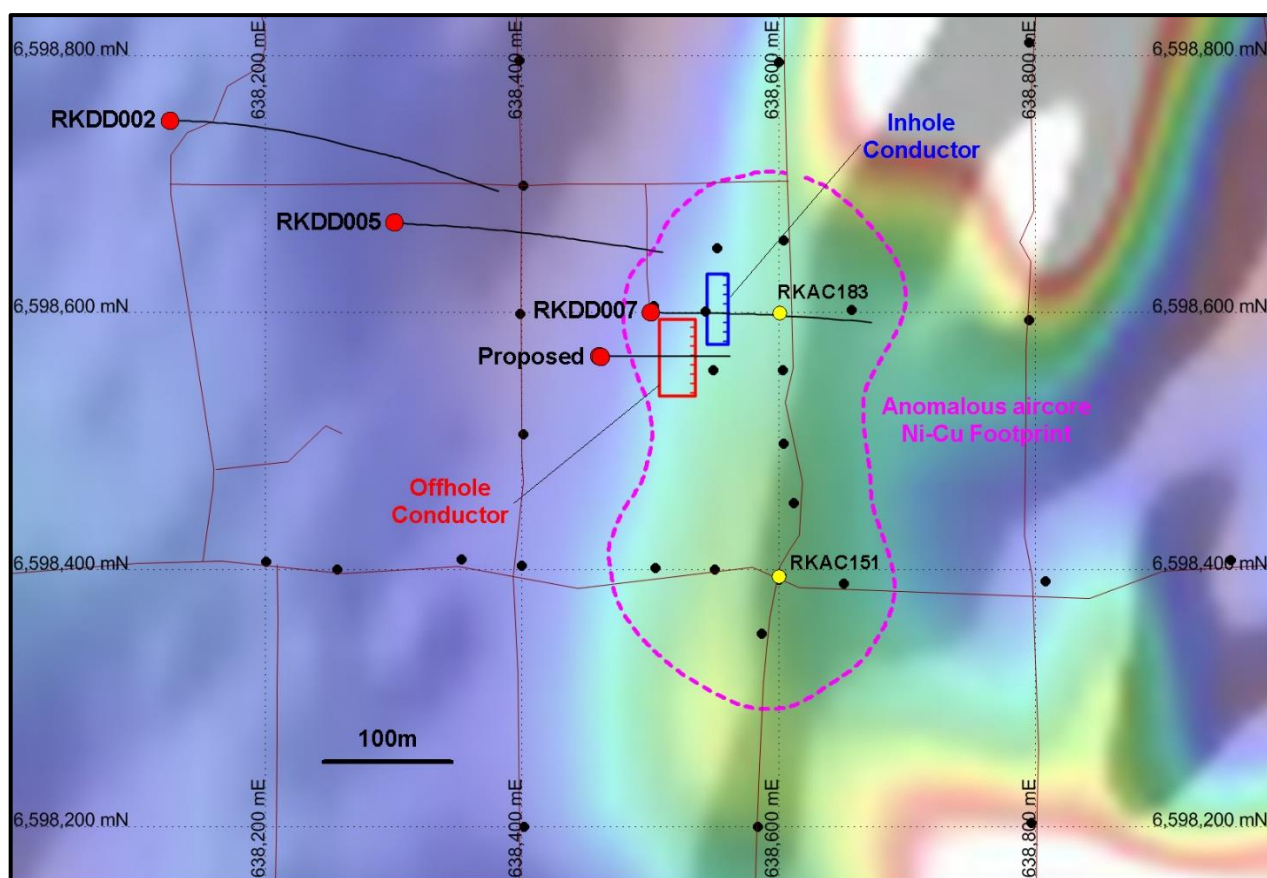


Figure 1: Mawson Diamond Drillhole Locations – Showing DHTeM Plates in RKDD007

Table 1: Mawson DHTeM Conductors (Modelled Parameters)					
Conductor	Conductance	Dimensions	Depth to Top	Orientation	Comment
Offhole	6,000-8,000S	60m x 60m	~140m	60-70° W dip	Interpreted as down dip extension of inhole conductor
Inhole	1,250-2,000S	35m x 55m	~90m	60-70° W dip	Associated with Ni-Cu sulphide mineralisation

The inhole conductor is a localised feature associated with the previously reported Ni-Cu sulphide intersection of 14.9m @ 1.07%, 0.75% Cu, 0.06% Co from 114m and is hosted within a mafic/ultramafic intrusive (ASX 9 December 2019).

The modelled offhole conductor is considered a high priority drill target given its strong conductance of 6,000-8,000S and its interpreted position down dip of the sulphide mineralisation intersected in RKDD007. The offhole feature is located “below” the hole trace ~80m down dip to the southwest of the sulphide mineralisation and interpreted to be hosted within the same mafic/ultramafic intrusive. A 300m diamond drillhole is proposed to test the offhole conductor and underlying basal contact between the mafic/ultramafic intrusive and metasediment (see Figure 1).

An additional three lower priority inhole/offhole conductors were also identified between 170-230m in RKDD007 associated with footwall metasediments below the main mineralised mafic/ultramafic intrusive.

The 3D modelling of Mawson integrating drilling, geological, geochemical and geophysical datasets is continuing. It is envisaged that further diamond drillhole targets will be generated from this work.

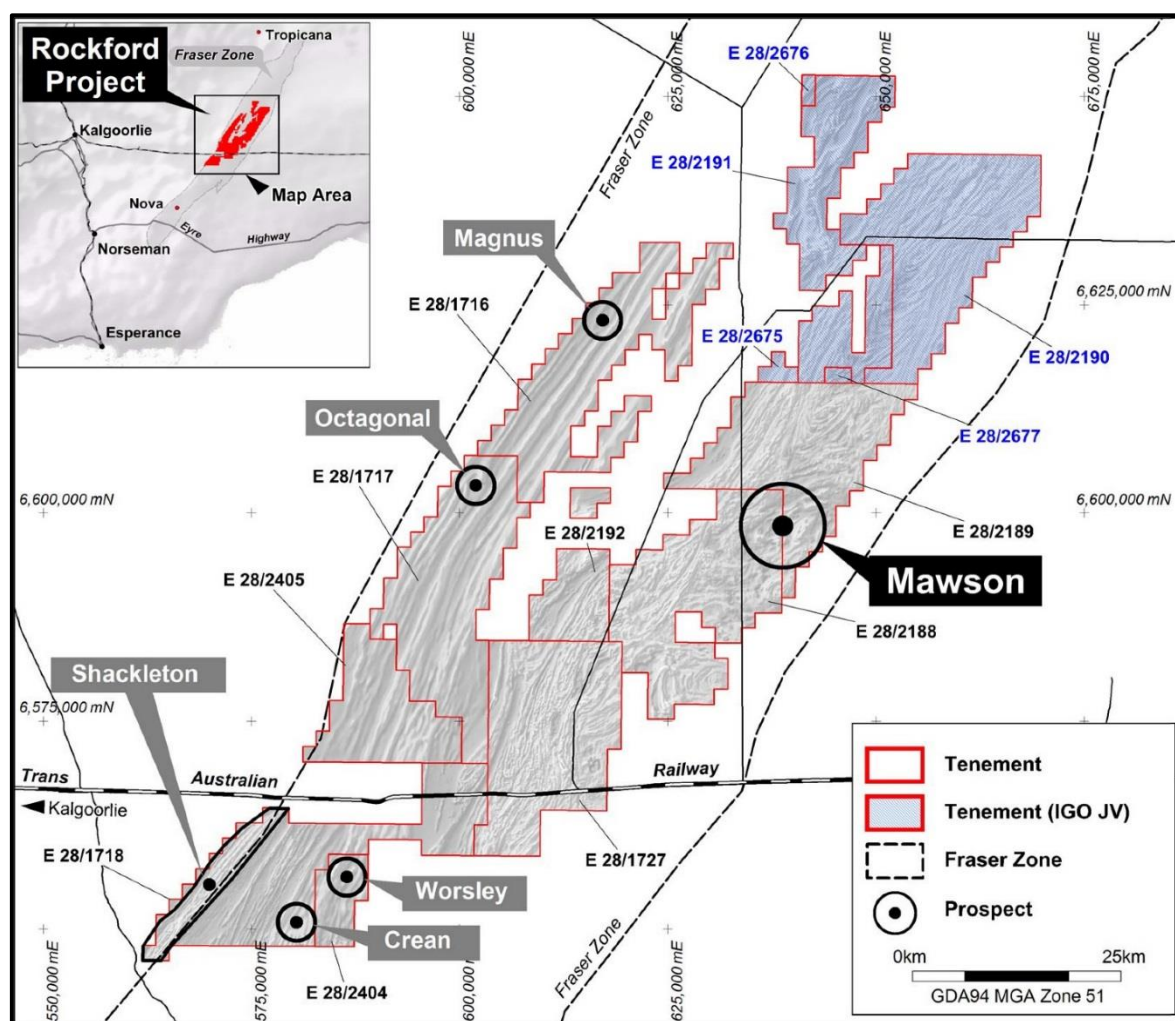


Figure 2: Rockford Project – Mawson Location



Table 2: Mawson Diamond Drillhole Details

Hole	MGA94-East	MGA94-North	RL	Azimuth	Dip	Total Depth
RKDD005	638,300	6,598,670	203	090 ⁰	-70 ⁰	586.2
RKDD006	638,890	6,598,050	205	135 ⁰	-70 ⁰	473.7
RKDD007	638,500	6,598,600	202	090 ⁰	-60 ⁰	363.3

Authorised by Mark Wilson, Managing Director.

Competent Person Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Derek Waterfield, a Member of the Australian Institute of Geoscientists and a full time employee of Legend Mining Limited. Mr Waterfield has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity being undertaken, 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” (JORC Code). Mr Waterfield consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Legend’s Exploration Results is a compilation of previously released to ASX by Legend Mining (11 December 2017, 9 April 2018, 12 June 2018, 9 December 2019 & 15 January 2020) and Mr Derek Waterfield consents to the inclusion of these Results in this report. Mr Waterfield has advised that this consent remains in place for subsequent releases by Legend of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent. Legend confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters in the market announcements continue to apply and have not materially changed. Legend confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements.

Visit www.legendmining.com.au for further information and announcements.

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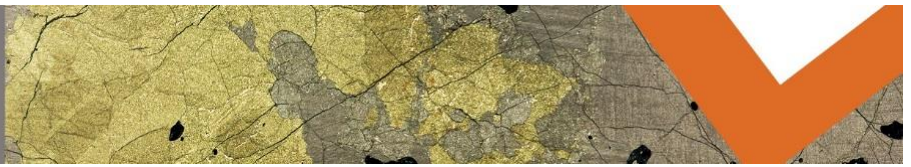
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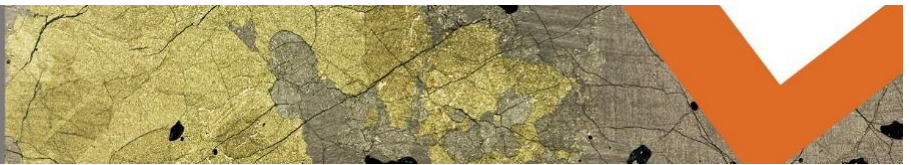
Appendix 1:
Legend Mining Ltd – Diamond Drilling Programme Mawson Prospect - Rockford Project
JORC Code Edition 2012: Table 1

Section 1: Sampling Techniques and Data

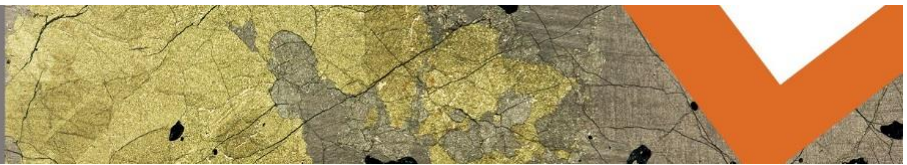
Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> • <i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i> 	<ul style="list-style-type: none"> • Diamond drilling was used to produce half NQ2 core samples (between 0.2m-1.6m) which were submitted to Intertek Genalysis Laboratory Services Perth for geochemical analysis. • Sample intervals were based on geology and style of sulphide occurrence. • QAQC standard samples were included (1 standard per 30 samples). • Samples were analysed for: <ul style="list-style-type: none"> ➤ Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr by methods 4A/MS48R and 4AH/OM (four acid digest with ICP-MS finish). ➤ Au, Pt, Pd by method FA50/MS (fire assay with an ICP-MS finish).
Drilling techniques	<ul style="list-style-type: none"> • <i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i> 	<ul style="list-style-type: none"> • Diamond drillhole pre-collars were completed using the mud rotary technique to depths of 64.2-79.2m. No samples were recovered from the mud rotary pre-collar. • The remainder of the hole was drilled with HQ into the top of fresh rock (depths between 80.4-89.7m), followed by NQ2 diamond coring to end of hole. • Orlando Drilling completed the drilling.



Criteria	JORC Code Explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Drill core orientation was recorded when possible at the end of each drill run (line on bottom of core). • Drill core sample recoveries for the HQ and NQ2 core were measured and recorded in drill log sheets. • No relationship has been determined between sample recoveries and grade and there is insufficient data to determine if there is a sample bias.
Logging	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • Geological logging of all drillholes included; lithology, grainsize, texture, deformation, mineralisation, alteration, veining, colour, weathering. • Drill core logging is qualitative and based on drill core retained in core trays. • All drillholes were logged in their entirety.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Selected sawn half NQ2 core samples based on geology and sulphide occurrence were submitted for geochemical analysis. • The size of the sample from the diamond drilling method is considered appropriate for the mineralisation style sought and for the analytical technique used. • The samples are dried, crushed and pulverised before analysis. • A quartz wash was utilised between samples to avoid any carry over. • QAQC standard samples were included (1 standard per 30 samples).



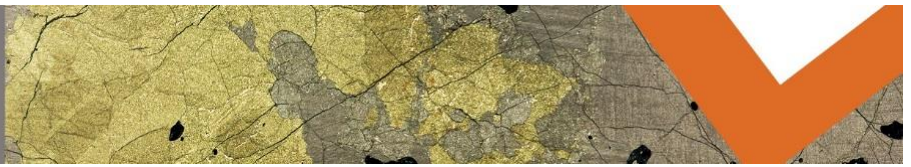
Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> Whether sample sizes are appropriate to the grain size of the material being sampled. 	
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Samples were analysed for: <ul style="list-style-type: none"> Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr by methods 4A/MS48R and 4AH/OM (four acid digest with ICP-MS finish). Au, Pt, Pd by method FA50/MS (fire assay with an ICP-MS finish). These assay methods are considered appropriate. QAQC standard samples were included (1 standard per 30 samples). In addition, reliance is placed on laboratory procedures and internal laboratory batch standards and blanks. All samples were analysed by Intertek Genalysis Laboratory Services Perth.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Significant intersections were verified by senior exploration personnel. Primary data was collected in the field using a set of standard logging templates and entered into a laptop computer. The data was forwarded to Legend's database manager for validation and loading into the company's drilling database. No adjustments of assay results have been undertaken.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> All drillhole collars are surveyed with a handheld GPS unit with an accuracy of $\pm 5\text{m}$ which is considered sufficiently accurate for the purpose of the drillhole. All co-ordinates are expressed in GDA94 datum, Zone 51. Regional topographic control has an accuracy of $\pm 2\text{m}$ based on detailed DTM data.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to 	<ul style="list-style-type: none"> Diamond drillhole spacing is not regular or grid based, with the location of individual drillholes governed by targeting the position of modelled EM conductor plates and anomalous



Criteria	JORC Code Explanation	Commentary
	<p><i>establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> • <i>Whether sample compositing has been applied.</i> 	<p>geochemical results in previous aircore drillholes.</p> <ul style="list-style-type: none"> • Only selected sawn NQ2 half core samples based on geology and sulphide mineralisation were submitted for geochemical analysis.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Diamond drillholes were planned to intersect modelled EM conductor plates perpendicular to strike and beneath anomalous geochemistry in previous aircore drillholes. • The relationship between drill orientation and mineralisation is unknown.
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • Individual calico sample bags from the core drilling were placed in polyweave bags and hand delivered directly to the assay laboratory in Perth by company personnel. • All diamond drill core will be removed from site and stored at an appropriate facility.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • Internal audits/reviews of procedures are ongoing, however no external reviews have been undertaken.

Section 2: Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • The Rockford Project comprises nine granted exploration licences, covering 2,430km², (Legend manager). • Rockford JV tenements: <ul style="list-style-type: none"> ➢ E28/2188, 2189, 2192 (70% Legend, 30% Rockford Minerals Pty Ltd) ➢ E28/1716, 1717, 1718, 1727 (70% Legend, 30% Ponton Minerals Pty Ltd). • Legend 100%: E28/2404, 2405. • The Project is located 280km east of Kalgoorlie mostly on vacant crown land with the eastern portion on Kanandah Pastoral Station. • There are no determined Native Title Claims over tenements E28/1716, 1717, 2188, 2189, 2192, 2405.



Criteria	JORC Code Explanation	Commentary
		Tenements E28/1718, E28/1727 & E28/2404 are covered 90%, 20% and 100% respectively by the Ngadju Native Title Claim. <ul style="list-style-type: none"> The tenements are in good standing and there are no known impediments.
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> Not applicable, not referred to.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> The primary target is Nova style nickel-copper mineralisation hosted in mafic/ultramafic intrusives within the Fraser Zone of the larger Albany-Fraser Orogen. Secondary targets include VMS style zinc-copper-lead-silver mineralisation and structurally controlled Tropicana style gold.
Drill hole Information	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>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.</i> 	<ul style="list-style-type: none"> Refer to table of drillhole collars in body of report.



Criteria	JORC Code Explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> • <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i> • <i>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.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • Individual sample assays and weighted averages are presented.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i> 	<ul style="list-style-type: none"> • The drill core has been oriented to enable structural logging and evaluation of true thicknesses of the mineralised intervals. • All drillhole intercepts/intervals are measured downhole in metres.
Diagrams	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Project and drillhole location maps and a drill section have been included in the body of the report.
Balanced reporting	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Assay results presented are balanced.
Other substantive exploration data	<ul style="list-style-type: none"> • <i>Other exploration data, if meaningful and material, should be reported including</i> 	<ul style="list-style-type: none"> • Detailed high quality aeromagnetic and gravity datasets, aircore drilling and ground EM surveys have been

Criteria	JORC Code Explanation	Commentary
	<p><i>(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.</i></p>	<p>used to target drilling.</p> <ul style="list-style-type: none"> • GEM Geophysics completed downhole EM surveying of RKDD005-007. <p>DHTEM Details</p> <ul style="list-style-type: none"> ➤ Loop Size: 300mx300m, double turn ➤ Station Spacing: 2-10m intervals ➤ Sensor: B-field DigiAtlantis ➤ Base/frequency: 0.125Hz ➤ Stacking: ~32-64 stacks, 2-3 repeatable readings
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • Full geological, geophysical and geochemical integration of data. • Plan further diamond drillholes.