



Petrology and New Assay Results Further Increase Prospectivity at Area D Rockford Project

- **Petrology identifies olivine-rich gabbronorite host rock in RKAC151**
- **New assays results from aircore drillhole RKAC167 return:**
 - **10m @ 0.09% Ni, 0.10% Cu and 0.01% Co from 56m to EOH**
 - **Including: 4m @ 0.13% Ni, 0.16% Cu and 0.02% Co from 60m**

Legend Mining Limited (“Legend”) is pleased to announce petrology from the bottom of hole (“BOH”) sample from RKAC151 and final assay results (20 holes) from the recent Area D aircore drilling at its Rockford Project in the Fraser Range of Western Australia, see Figure 1.

Legend Managing Director Mark Wilson said, “The petrographic identification of an olivine-rich gabbronorite with associated anomalous nickel-copper-cobalt is good news for Legend shareholders. This is the host rock for the Nova ore body. The anomalous nickel-copper assays from drillhole RKAC167, which is 1.6km from hole RKAC151, starts to identify the potential scale of this anomalous footprint.”

A technical discussion of these results is provided in the body of this report.



Photo 1 : Aircore Drillhole RKAC151 showing strong Fe-rich clay and goethite development between 73-111m EOH



Photo 2: Olivine Gabbronorite BOH petrology sample from RKAC151. (Photo taken prior to final thin section preparation, width 3cm).

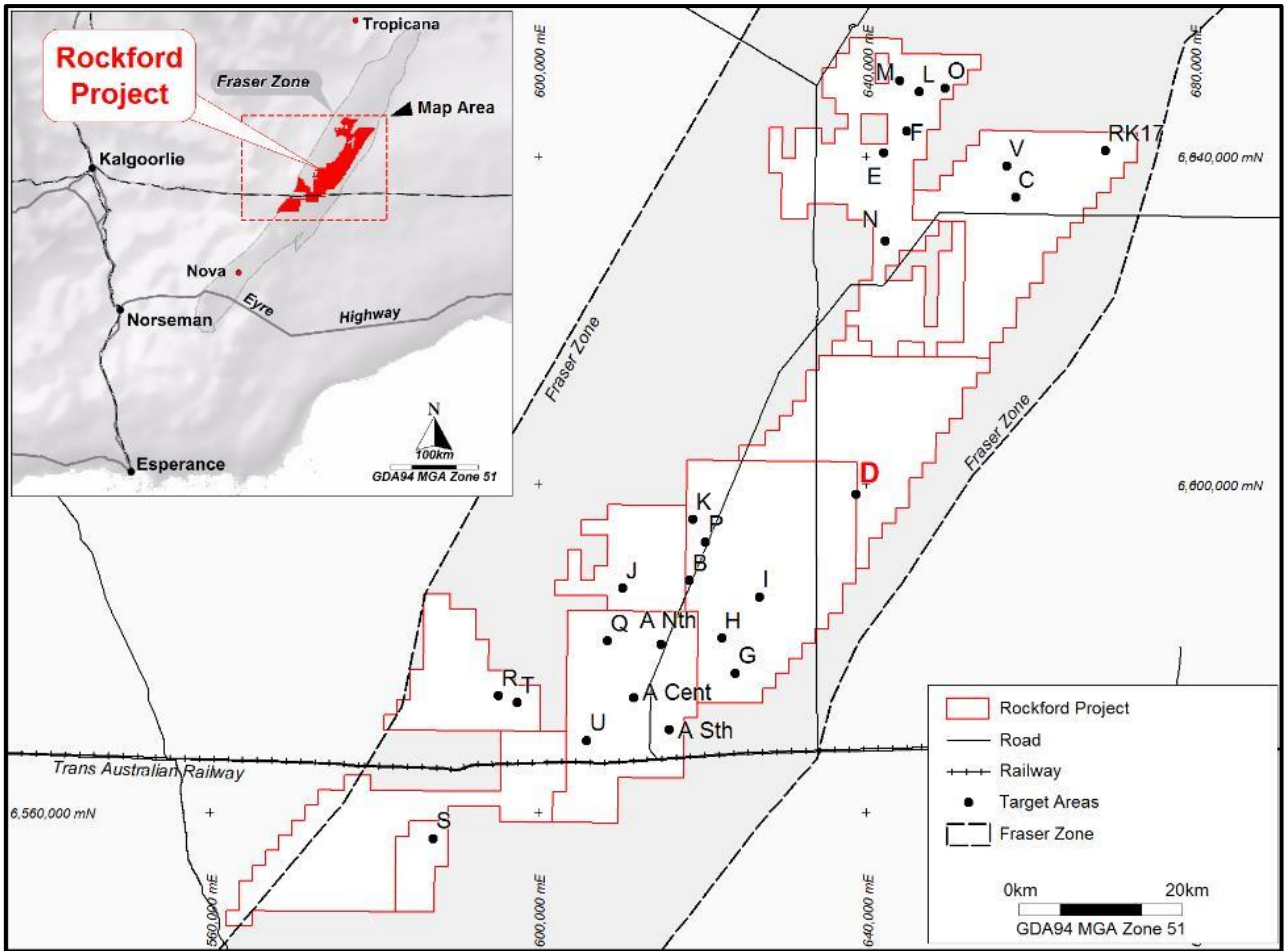


Figure 1: Area D Location

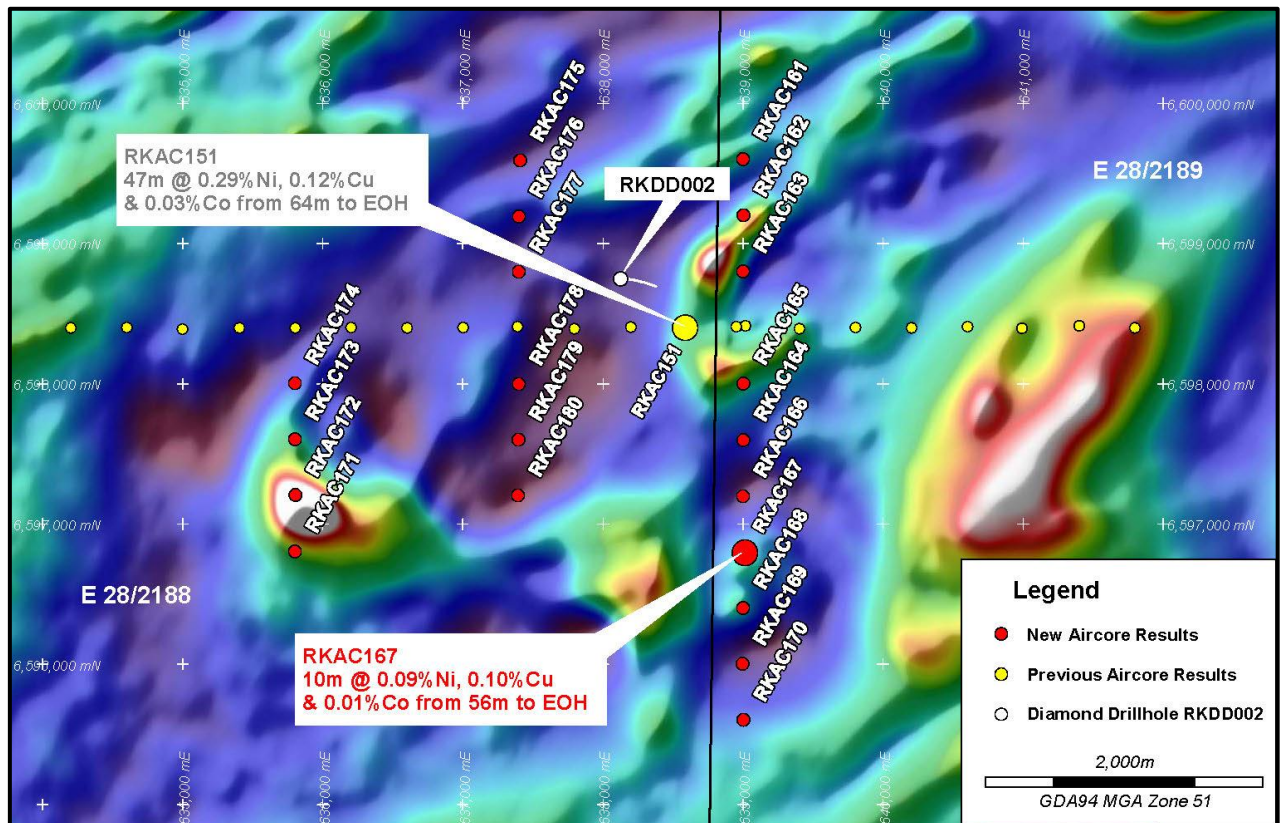


Figure 2: Area D Aircore Drillholes on Aeromagnetics



Technical Discussion

Petrology Results

Petrological examination of the BOH sample in aircore drillhole RKAC151 has identified the host rock as a weathered olivine-rich gabbro-norite orthocumulate (Photo 2), which is a favourable host rock for nickel-copper mineralisation. The significance of this host rock is further enhanced by the assay results from RKAC151, which returned an intersection of 47m @ 0.29% Ni, 0.12% Cu and 0.03% Co from 64m to end of hole (previously announced 11 December 2017).

The peak nickel value of 0.40% Ni cannot be fully explained by nickel-in-olivine, when related to the amount of olivine originally present in the gabbro-norite, however the value can be explained by the weathering of primary nickel sulphides.

The petrology has also identified minor amounts of a variety of copper minerals including; chalcocite, digenite, chalcopyrite and thin veinlets of native copper, thus explaining the anomalous copper assays. The presence of chalcocite suggests chalcocite-blanket weathering, where chalcocite has replaced pyrrhotite dominated Fe-Ni-Cu magmatic sulphides. This interpretation is supported by the presence of extensive Fe-rich clay development and goethitic material (up to 34.4% Fe) throughout the 47m interval of anomalous Ni-Cu-Co mineralisation, see Photo 1.

Further work is planned to investigate the anomalous Ni-Cu-Co in RKAC151 with regard to whether it is the result of insitu weathering of sulphides or supergene enrichment.

The results from this petrology report, along with the anomalous Ni-Cu-Co assays have greatly increased in the prospectivity of RKAC151 and the immediate surrounds of Area D.

New Assay Results

The second batch of sample results from the recently completed aircore drilling programme at Area D (20 holes) covering three N-S traverses has been received, see Figure 2 and Appendix 1.

Drillhole RKAC167 returned an anomalous Ni-Cu-Co intersection of: **10m @ 0.09% Ni, 0.10% Cu and 0.01% Co from 56m** to end of hole. Whilst the nickel tenor is less than in RKAC151, the elevated copper and associated MgO are positive geochemical factors. This hole lies 1.6km to the SSW of RKAC151 and given the broad spacing of drilling to date, highlights the potential of the prospect.

Table 1 below provides all Ni, Cu, Co and MgO assay results from RKAC167 including composite samples (56-66m) and a BOH sample (65-66m).



Table 1: Area D - Aircore Drillhole RKAC167 Assays

Drillhole	From	To	Int.	Ni %	Cu %	Co %	MgO %	Lithology
RKAC167	56	60	4	0.06	0.06	0.01	1.88	Saprolite / Saprock
RKAC167	60	64	4	0.13	0.16	0.02	5.79	Saprock / Mafic
RKAC167	64	66	2	0.07	0.03	0.01	9.85	Pyroxene-rich Mafic
*RKAC167	65	66	1	0.05	0.02	0.01	11.38	Pyroxene-rich Mafic

RKAC167 collar details: 638999E / 6596799N, GDA94 MGA Zone 51, Dip -90⁰, Azimuth 0⁰.

Only residual profile sampled in RKAC167 (56-66m) - top 56m comprises transported cover.

* Results from 1m bottom of hole sample (not composite sample)

The anomalous intersection in RKAC167 is associated with a logged pyroxene-rich mafic and coincides with a 600m circular feature with elevated magnetic response centred within a larger 2km circular magnetic low, see Figure 2. There are several similar untested magnetic features throughout Area D, interpreted as possible intrusives, and require follow up exploration.

Future Activities

- Additional sampling at 1m intervals over the entire anomalous intersections in RKAC151 and RKAC167.
- Analysis of Fe-rich clays and goethitic material in RKAC151 to assist understanding the character of the anomalous Ni-Cu-Co.
- Further BOH sample petrology to assist with bedrock rock identification.

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.

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

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Appendix 1: Aircore Drillhole Details

Drillhole	Easting	Northing	RL (m)	Dip	Azimuth	Depth (m)
*RKAC140	634201	6598398	202	-90	0	51
*RKAC141	634600	6598403	202	-90	0	65
*RKAC142	634998	6598391	202	-90	0	70
*RKAC143	635405	6598400	202	-90	0	84
*RKAC144	635804	6598399	202	-90	0	104
*RKAC145	636201	6598401	202	-90	0	91
*RKAC146	636601	6598398	203	-90	0	107
*RKAC147	637001	6598403	202	-90	0	100
*RKAC148	637391	6598408	203	-90	0	98
*RKAC149	637798	6598394	202	-90	0	92
*RKAC150	638201	6598406	203	-90	0	72
*RKAC151	638602	6598395	203	-90	0	111
*RKAC152	639018	6598413	204	-90	0	49
*RKAC153	639403	6598394	206	-90	0	67
*RKAC154	639803	6598402	205	-90	0	93
*RKAC155	640604	6598408	205	-90	0	63
*RKAC156	640993	6598397	203	-90	0	113
*RKAC157	641402	6598413	202	-90	0	134
*RKAC158	641799	6598400	202	-90	0	141
*RKAC159	640203	6598398	202	-90	0	102
*RKAC160	638952	6598407	202	-90	0	51
RKAC161	639001	6599604	202	-90	0	72
RKAC162	639004	6599203	202	-90	0	71
RKAC163	639000	6598801	202	-90	0	47
RKAC164	639004	6597599	206	-90	0	49
RKAC165	639004	6598002	207	-90	0	78
RKAC166	639001	6597199	206	-90	0	90
RKAC167	638999	6596799	206	-90	0	66
RKAC168	639000	6596401	206	-90	0	87
RKAC169	638998	6596003	204	-90	0	63
RKAC170	639002	6595603	204	-90	0	81
RKAC171	635802	6596805	203	-90	0	76
RKAC172	635805	6597207	204	-90	0	76
RKAC173	635801	6597606	201	-90	0	98
RKAC174	635803	6598006	201	-90	0	74
RKAC175	637409	6599595	203	-90	0	132
RKAC176	637400	6599195	203	-90	0	74
RKAC177	637400	6598800	204	-90	0	115
RKAC178	637400	6597999	202	-90	0	97
RKAC179	637397	6597602	202	-90	0	95
RKAC180	637393	6597205	202	-90	0	95

Note: Co-ordinates GDA94 MGA Zone 51

* Assay results previously reported (11/12/2017).



**Appendix 2:
Legend Mining Ltd – Aircore Drilling Programme Rockford Project – Area D
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"> • Aircore drilling was undertaken on broad spaced traverses testing aeromagnetic and gravity targets. • The residual (non-transported) portion only of each drillhole was sampled as 4m composites to the end of hole, with a 1m bottom of hole sample also collected. All samples weighed 2-3kg. • QAQC standards and duplicate samples were included routinely (approximately 1 each every 50 samples). • Samples were submitted to an independent commercial assay laboratory. • Au was analysed by fire assay with an ICP-OES finish. A four acid digest with ICP-MS finish was used for a multi-element suite including: 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.
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"> • The aircore drilling technique was used, utilising a 85mm bit and completed by Drillpower.
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> 	<ul style="list-style-type: none"> • Sample recoveries are visually estimated for each metre by the supervising rig geologist with poor or wet samples recorded in drill and sample log sheets. • The sample cyclone is routinely cleaned at the end of each rod (3m) and when deemed necessary. • No relationship has been determined between sample recoveries and grade



Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> 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. 	<p>and there is insufficient data to determine if there is a sample bias.</p>
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Geological logging of all drillholes included; lithology, grainsize, texture, deformation, mineralisation, alteration, veining, colour, weathering. Logging is qualitative and based on 1m intervals. Representative drill chips from the bottom of hole are retained in chip trays. All drillholes were logged in their entirety.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> All aircore drill samples were collected using a PVC spear or scoop as 4m composites (2-3kg). Other composites of 2m, 3m and 5m and individual 1m samples were collected where required, i.e. bottom of hole. Both wet and dry samples were collected. The samples are dried and pulverised before analysis. QAQC reference samples and duplicates were routinely submitted with each sample batch. The size of the sample is considered appropriate for the mineralisation style sought and for the analytical technique used.
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. 	<ul style="list-style-type: none"> Aircore samples were analysed for Au by 50g fire assay with an ICP-OES finish, and for a multi-element suite by ICP-MS following a four acid digest. These assay methods are considered appropriate. QAQC standards and duplicate samples were included routinely (approximately 1 each every 50 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 using methods; FA50/OE04 (Au),

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> 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. 	4A/MS48 (multi-elements) and 4A/MS48R (REE extended suite).
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"> 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"> Aircore 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 establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Aircore drill traverses are not regular or grid based, with the location of traverses governed by aeromagnetic/gravity targets. Individual drillholes along traverses are spaced at 400m with minor infill to 200m/100m were deemed necessary. Drillholes are sampled in the residual portion of the profile only as 4m composites on a routine basis or as 2m, 3m and 5m composites at the end of holes as required. Where anomalous values are returned, 1m samples may be submitted for assay.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	<ul style="list-style-type: none"> The orientation of the aircore drill traverses and broad spacing of the individual drillholes is considered to achieve unbiased sampling.



Criteria	JORC Code Explanation	Commentary
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Individual calico sample bags were placed in polyweave bags and delivered directly to the assay laboratory prep facility in Kalgoorlie by company personnel.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<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"> 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. 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. 	<ul style="list-style-type: none"> The Rockford Project comprises twelve granted exploration licences, covering 2,792km². Rockford JV tenements: E28/2188-2192 (70% Legend, 30% Rockford Metals Pty Ltd), E28/1718 & E28/1727 (70% Legend, 30% Ponton Minerals Pty Ltd). Legend 100% owned: E28/2404-2405, E28/2675-2677. The Project is located 280km east of Kalgoorlie mostly on vacant crown land with the eastern portion on Kanandah Pastoral Station. There are no Native Title Claims over tenements E28/2188-2192, E28/2405 & E28/2675-2677. Tenements E28/1718, E28/1727 & E28/2404 are covered 90%, 20% and 100% respectively by the Ngadju Native Title Claim. The tenements are in good standing and there are no known impediments.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Not applicable, not referred to.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The primary target is Nova style nickel-copper mineralisation hosted in high grade mafic granulites within the Fraser Complex. A secondary target is Tropicana style structurally controlled gold mineralisation.
Drill hole Information	<ul style="list-style-type: none"> 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"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 	<ul style="list-style-type: none"> Refer to table of collars in Appendix 1.



Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> Weighted averaging based on sample interval has been used in the reporting of the aircore drilling results. No short length high grade results were returned (therefore not included in aggregate intercepts) and no metal equivalent values have been reported.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	<ul style="list-style-type: none"> The geometry of anomalous nickel-copper assays with respect to the aircore drilling angle and orientation is unknown. All drillhole intercepts are measured downhole in metres.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Project location and drillhole location maps have been included in the body of the report.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All significant results are reported.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should 	<ul style="list-style-type: none"> Detailed high quality aeromagnetic and gravity datasets have been used in the



Criteria	JORC Code Explanation	Commentary
	<p><i>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.</i></p>	<p>targeting of the aircore drilling.</p>
<p>Further work</p>	<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"> • Further aircore drilling along with moving and fixed loop electromagnetic surveying is planned.