

ASX:LEG

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ASX Announcement

Multiple Conductors Identified at Areas N and J at Rockford Project

- Two strong-moderate conductors defined at Area N
- Two moderate-weak conductors defined at Area J

Legend Mining Limited ("Legend") is pleased to announce the identification of multiple conductors from moving loop electromagnetic ("MLTEM") surveying over Areas N and J at its Rockford Project in the Fraser Range district of Western Australia.

The 2016 regional MLTEM programme was designed to test eight areas (Areas G-N), interpreted as possible mafic/ultramafic intrusive bodies, for conductive features consistent with massive sulphide Ni-Cu occurrences. Promising conductors have been identified at Areas N and J as detailed in the body of this report. Survey delays due to bushfires and poor weather conditions during November and December meant that surveying at Areas L and M along with planned infill at Area N were unable to be completed and will form part of next year's field activities.

Legend Managing Director Mark Wilson said, "The conductors at Area N look to be walk up drill targets for the first quarter in 2017. Further ground EM is required to better model their precise locations and this work will be prioritised in the New Year."



MLTEM Surveying at Rockford Project



Technical Discussion

MLTEM Survey

MLTEM surveying over the Rockford Project has concluded for the 2016 field season with six of the eight planned target areas completed (Areas G-K, N), see Figure 1. Unfortunately surveying was severely delayed during November and December through a combination of bushfires, wet weather and atmospheric conditions (lightning) interfering with data collection. As a result, Areas L and M were unable to be completed and will be followed up in early 2017.

Two strong-moderate conductors were identified at Area N (N1-N2) and two moderateweak conductors identified at Area J (J1-J2), and are discussed in detail below.

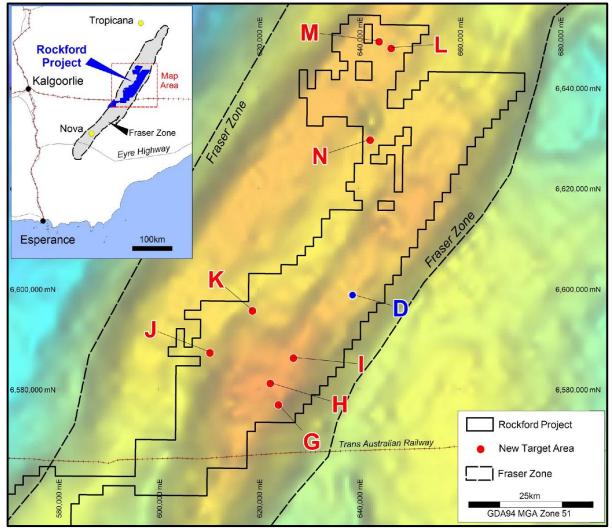


Figure 1: Rockford Project Target Areas on Regional Gravity

Area N

Area N contains a large folded and/or intrusive feature with low magnetic response closely associated with a 2.5 x 0.5km NE-SW trending gravity feature. Nine 500m spaced regional lines of MLTEM were completed over Area N identifying two strong to moderate conductive bodies (N1-N2), see Figure 2.

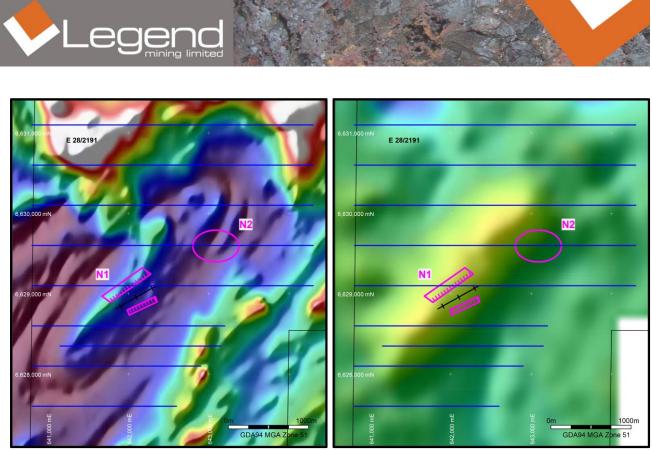


Figure 2: Area N Conductors on Aeromagnetics (left) and Gravity (right) Images (*Note: Conductor N1 defined in preliminary modelling only, while Conductor N2 requires infill MLTEM to enable final modelling*)

Five lines of infill MLTEM were planned to provide better definition of the conductors and allow more accurate modelling, however only one line was completed before the end of the field season. As a result, only preliminary modelling of the southwestern conductor (N1) was possible, while the northeastern conductor (N2) could not be accurately modelled, see Figure 2.

The preliminary modelling over conductor N1 indicates a strong to moderate bedrock conductor (3,000-5,000S+) with an overall strike of NE-SW and an estimated depth to top of source of >300m. The conductor is interpreted to represent either a deep, steeply dipping conductor mid-way between two observed anomaly peaks or a fold structure with moderately to steeply dipping NW and SE conductors/limbs.

N1 is located in the centre of the folded/intrusive feature, as shown on the aeromagnetic and gravity images, making this a compelling target for follow up work. Accurate modelling of this feature will require infill MLTEM and potentially FLTEM surveying to define possible RC/diamond drill targets.

As mentioned, conductor N2 could not be accurately modelled, however early indications suggest a moderate strength conductor (~3,000S), striking NE-SW, <500m x 500m in size and with a depth to top of source of >300m. Further MLTEM/FLTEM is required to better define this conductor, which again is located in an interesting position with respect to the localised aeromagnetic and gravity features.



Area J

Area J was originally selected for MLTEM follow up based on the coincidence of a broad aeromagnetic low and a subtle 2.5 x 0.6km gravity feature. A total of 10 lines of high power MLTEM were completed over Area J, including two infill lines to provide better definition of the conductors and allow more accurate modelling.

The MLTEM survey identified two conductors J1-J2, which are summarised in Table 1 below and located on aeromagnetic and gravity images in Figure 3.

Table 1: Area J Conductor Description				
Conductor	Conductance	Dimensions	Depth to Top	Plate Orientation
J1	500-750S	300m x 1,500m	150-250m	60-70 deg. NW dip
J2	150-250S	>2km x 2km	300-500m	60 deg. W dip

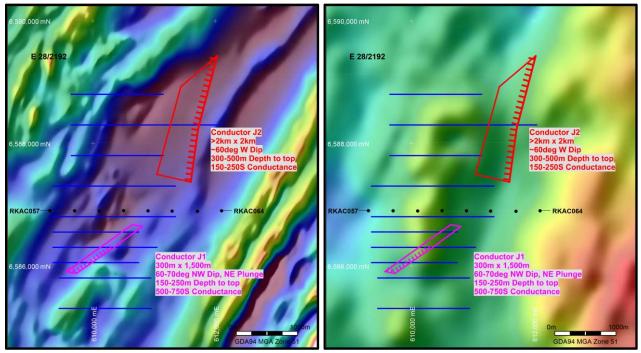


Figure 3: Area J Conductors (J1-J2) on Aeromagnetics (left) & Gravity (right) Images

Conductor J1 represents a moderate-weak, broad (300m wide x 1,500m down plunge) conductor interestingly located on the northern margin of a small aeromagnetic unit and the southern margin of a localised gravity feature, see Figure 3. Low to moderate conductance levels of ~500-750S were apparent from modelling, with the associated source having an estimated depth to top of source of 150-250m, orientated NE-SW and dipping at $60-70^{\circ}$ to the NW.

Conductor J2 represents a weak, extensive (>2km x 2km) conductor interpreted as being related to stratigraphy or a large scale structural feature, see Figure 3. Low conductance levels of ~150-250S were apparent from modelling, with the associated source having an estimated depth to top of source of 300-500m, orientated NNE-SSW and dipping at 60° to the W.



A single aircore drill traverse (Line 8) comprising eight holes (RKAC057-064) for 585m was completed across Area J in November aimed at providing information on the depth of cover, bedrock lithologies and geochemical data, see Figure 3 and Table 2 for details. The drilling intersected mafic/ultramafic lithologies on the western end of the line, with a combination of felsic-mafic granulites and gneiss to the east, including over the gravity feature. No significant nickel-copper assays were returned from this traverse.

Table 2: Aircore Drillhole Details for Line 8 - Area J						
Drillhole	MGA94_East	MGA94_North	RL (m)	Dip	Azimuth	Final Depth (m)
RKAC057 * #	609298	6586899	207	-90	0	96
RKAC058	609704	6586897	210	-90	0	88
RKAC059	610105	6586895	211	-90	0	14
RKAC060*	610502	6586900	212	-90	0	39
RKAC061	610902	6586898	211	-90	0	91
RKAC062	611297	6586893	212	-90	0	102
RKAC063	611709	6586890	215	-90	0	89
RKAC064	612105	6586897	216	-90	0	66

Note: Co-ordinates GDA94 MGA Zone 51, * Mafic/Ultramafic rocks # Olivine bearing;

Further evaluation of conductor J1 is required given its location on the margins of both aeromagnetic and gravity features. Conductor J2 is considered a low priority target as it appears to be stratigraphic in character with low conductance.

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 <u>www.legendmining.com.au</u> for further information and announcements.

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Mr Derek Waterfield Executive Director - Technical Ph: (08) 9212 0600



Appendix 1: Legend Mining Limited – MLTEM Survey Rockford Project JORC Code Edition 2012: Table 1

Criteria	JORC Code Explanation	Commentary
Sampling techniques	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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. 	 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. A four acid digest was used, with samples analysed for; Au by fire assay and a multi-element suite including Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr by ICP-MS. Bottom of hole samples were also analysed for a suite of REE including Dy, Er, Eu, Gd, Ho, Lu, Nd, Pr, Sm, Tb, Tm, Yb by ICP-MS.
Drilling techniques	 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). 	• The aircore drilling technique was used, utilising a 85mm bit and completed by Drillpower.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may 	 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 and there is insufficient data to determine if there is a sample bias.

Section 1: Sampling Techniques and Data



Criteria	JORC Code Explanation	Commentary
	have occurred due to preferential loss/gain of fine/coarse material.	
Logging	 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. 	
Sub-sampling techniques and sample preparation	 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 	 No drillcore was collected. 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
	 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. 	 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	 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	finish, and for a multi-element suite by
Verification of sampling and assaying		 Primary data was collected in the field using a set of standard logging templates and entered into a laptop



Criteria	JORC Code Explanation	Commentary
	 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. 	 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	 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. 	 Aircore drillhole collars are surveyed with a handheld GPS unit with an accuracy of ±5m 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 ±2m based on detailed DTM data.
Data spacing and distribution	 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. 	 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 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	 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. 	The orientation of the aircore drill traverses and broad spacing of the
Sample security	The measures taken to ensure sample security.	 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	 The results of any audits or reviews of sampling techniques and data. 	 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	 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. 	 The Rockford Project comprises seven granted tenements; E28/2188-2192 (70% Legend, 30% Rockford Minerals Pty Ltd JV), E28/1718 & E28/1727 (70% Legend, 30% Ponton Minerals Pty Ltd JV) and three applications ELA28/2638-2640 (100% Legend). 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. Tenements E28/1718 & E28/1727 are covered 90% and 20% respectively by the Ngadju Native Title Claim. The tenements are in good standing and there are no known impediments.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Not applicable, not referred to.
Geology	Deposit type, geological setting and style of mineralisation.	 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	 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: 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. If the exclusion of this information is justified on the basis that the information is exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	Refer to table of collars in body of report.



Criteria	JORC Code Explanation	Commentary
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. 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. 	 Weighted averaging based on sample interval has been used in the reporting of the aircore drilling results. No high grade results were returned (therefore not included in aggregate intercepts) and no metal equivalent values have been reported.
Relationship between	 The assumptions used for any reporting of metal equivalent values should be clearly stated. These relationships are particularly improved in the 	The geometry of anomalous nickel-
mineralisation widths and intercept lengths	 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, the should be reported. 	 copper assays with respect to the aircore drilling angle and orientation is unknown. All drillhole intercepts are measured downhole in metres.
	there should be a clear statement to this effect (eg 'down hole length, true width not known').	
Diagrams	 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. 	 Project location, MLTEM conductor and drillhole location maps have been included in the body of the report.
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. 	All significant results are reported.
Other substantive exploration data	 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, 	 Detailed high quality aeromagnetic and gravity datasets have been used in the targeting of MLTEM surveys. Highpower EM Geophysical Services Pty Ltd have undertaken high powered moving loop electromagnetic surveying over the Rockford Project. Loop Size: 300m x 300m, single turn Line/Station Spacing: 500m spaced lines with 100m stations



Criteria	JORC Code Explanation	Commentary
	geotechnical and rock characteristics; potential deleterious or contaminating substances.	 Configuration: Slingram position, 150m offset from loop edge Transmitter: HPEM HPTX (~200 amps) Receiver: GDD NordicEM24 Sensor: Landtem SQUID B-field sensor Time base/frequency: 0.5Hz (500msec time base), ~1msec ramp
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. 	 Infill MLTEM surveying will be undertaken at Area N. FLTEM surveying may be required to accurately define possible RC/diamond drill targets. FLTEM surveying and/or aircore drilling at Area J is envisaged.