

ASX:LEG

13 June 2017

ASX Announcement

EXPLORATION UPDATE Rockford Project, Fraser Range

- RC/Diamond drilling scheduled to commence on 21 June 2017
- Diamond drilling planned to test conductors N1 and N2
- RC drilling planned to test conductors E2, F1 and O1
- New conductors defined at Areas E and O
- Conductor better defined at Area F

Legend Mining Limited ("Legend") is pleased to announce details of its proposed diamond drilling programme to test high-priority EM conductors at the Area N prospect (Figure 1) in the northern part of its Rockford Project in the Fraser Range district of Western Australia, as advised in the ASX announcement of 6 June 2017.

Legend is also commencing a reverse circulation ("RC") drilling programme targeting three EM conductors defined by extensive EM surveying at Areas E, F and O (Figure 1) also in the northern part of the Rockford Project.

All conductors have been defined using innovative moving ("MLTEM") and fixed ("FLTEM") loop electromagnetic surveys designed to identify conductors up to 600m below the surface. The diamond and RC drilling programmes are designed to test the source of these conductors. Comprehensive details of the five EM conductors to be drill tested are contained in the body of this report.

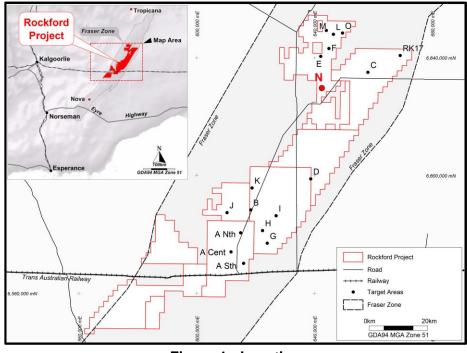


Figure 1: Location

Legend Managing Director Mark Wilson said; "This upcoming diamond and RC drilling is the culmination of more than six months work centred around the northern portion of the Rockford project. The results of this drilling programme are eagerly awaited by all stakeholders."



Technical Discussion

MLTEM surveys were completed over Areas E, L, M and O, along with FLTEM surveys at Areas E and M during March/May 2017. As a result of these surveys, geophysical modelling has defined two significant bedrock conductors (E2 and O1) to go with three previously defined conductors (F1, N1, N2), see Figure 2.

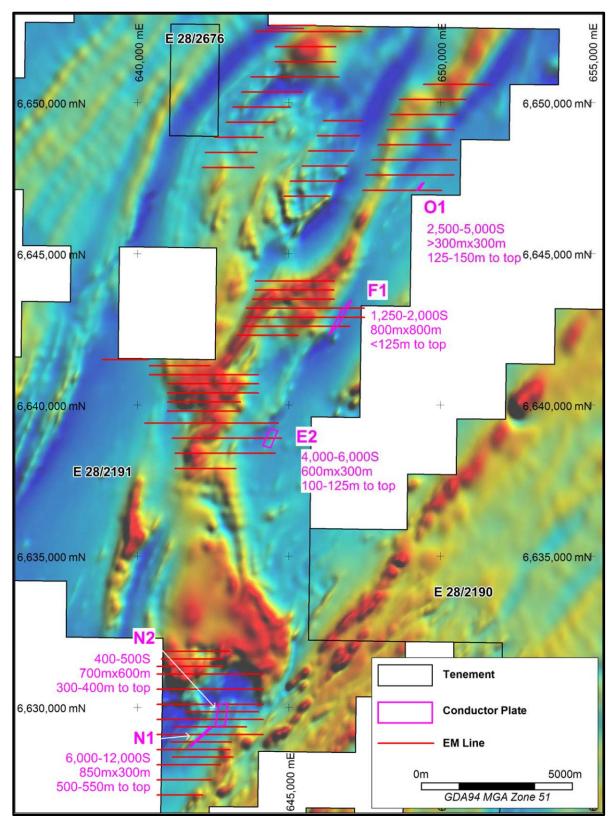


Figure 2: EM Conductors Over Regional Aeromagnetics



The five conductors are discussed in further detail below with conductor parameters summarised below in Table 1.

Table 1: Summary of Conductor Parameters						
Conductor	Method	Conductance	Dimensions	Dip	Orientation	Depth to Top
N1	FLTEM	6,000-12,000S	850m x 300m	75-85 ⁰ NW	NE-SW	500-550m
N2	FLTEM	400-500S	700m x 600m	50-65 ⁰ E	N-S	300-400m
E2	MLTEM	4,000-6,000S	600m x 300m	35-50° WNW	NNE-SSW	100-125m
F1	MLTEM	1,250-2,000S	800m x 800m	80-85 ⁰ WNW	NNE-SSW	<125m
01	MLTEM	2,500-5,000S	>300m x 300m	70-80 ⁰ WNW	NNE-SSW	125-150m

Two diamond drillholes are planned to test conductors N1-N2 and three RC drillholes to test conductors E2, F1 and O1. All drillholes will be cased with PVC to enable downhole electromagnetic surveying.

Conductor N1

Area N is characterised by a large folded and/or intrusive feature with generally low magnetic response closely associated with a 2.5 x 0.5km NE-SW trending gravity feature. MLTEM surveys originally identified two conductors (N1-N2), however follow up FLTEM surveying was required over both conductors to allow accurate geophysical modelling.

The modelling of the FLTEM N1 conductor indicates a strong bedrock conductor (6,000-12,000S) with dimensions 850m x 300m, a NE-SW strike, a steep 75-85^o NW dip and an estimated depth to top of source of 500-550m. The conductor lies on the SE margin of both the NE-SW trending gravity feature and central aeromagnetic high.

As previously reported (ASX announcements 9 May & 6 June 2017), an aircore drill traverse over the N1 conductor intersected a 300m wide hornblende-rich metamorphosed mafic containing supergene nickel minerals along with chalcopyrite (copper sulphide). Petrological analysis of the metamorphosed mafic indicated an original igneous composition rich in orthopyroxene/ clinopyroxene, with subordinate plagioclase and olivine and a cumulate texture. Anomalous nickel-copper results were returned from two aircore drillholes containing the mafic unit, as shown below:

- RKAC068 37m @ 0.10% Ni, 0.01% Cu from 24m to BOH,
 - incl. 4m @ 0.14% Ni, 0.01% Cu from 28m
- RKAC119 31m @ 0.09% Ni, 0.03% Cu from 20m to BOH, incl. 4m @ 0.14% Ni, 0.06% Cu from 32m

Importantly, the metamorphosed mafic unit correlates with the up-dip projection of the strong (6,000-12,000S) N1 conductor and is closely associated with the gravity feature and a localised aeromagnetic high. This is a high priority target and will be tested with a deep diamond drillhole.

Conductor N2

The conductance of the N2 conductor (400-500S) is an order of magnitude lower than N1, however given its location on the SE margin of both the gravity and aeromagnetic feature (similar to N1) it remains a target of interest. A diamond drillhole has been planned for N2, pending positive results from the N1 conductor.



Conductor E2

Area E was originally selected for follow up MLTEM surveying focussed on a discrete 1.5km x 1.3km gravity high with associated strong magnetic response representing a complex fold closure. E2 is located on the far eastern side of Area E and associated with a subtle magnetic and gravity response. The moderate to strong bedrock conductor (4,000-6,000S) has a modelled size of 600m x 300m and a depth to top of source of 100-125m. RC drill testing of this conductor is planned.

Conductor F1

Area F is characterised by an elongate NE trending gravity high in the west and a more subtle gravity trend in the east. The aeromagnetics indicates a large open Z-parasitic fold and a regional scale NW trending cross structure.

A MLTEM survey completed in December 2015 identified a NNE trending moderate bedrock conductor situated on the flank of the subtle eastern gravity trend. Modelling of the conductor indicated a depth to top of source of <125m, a conductance of 1,250-2,000S and a plate with dimensions of 800m x 800m. RC drill testing of this conductor is planned.

Conductor O1

Area O is characterised by a 3km x 1.5km folded and/or intrusive feature with low/moderate magnetic response. A NE-SW trending gravity ridge occurs in the eastern part of the prospect. MLTEM surveying identified a moderate to strong bedrock conductor (O1) in the SE.

Modelling of the conductor indicated a depth to top of source of 125-150m, a conductance of 2,500-5,000S and a plate with dimensions of >300m x 300m. RC drill testing of this conductor is planned.

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.

For more information:

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



Appendix 2: Legend Mining Ltd – EM Survey and Aircore Drilling Programme Rockford Project JORC Code Edition 2012: Table 1

Section 1: Sampling Techniques and Data	Section 1:	Sampling	Techniques and Data
---	------------	----------	----------------------------

Criteria	JORC Code Explanation	Commentary
Sampling techniques	 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. 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 (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. 	 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 (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.). 	 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 	 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



Criteria	JORC Code Explanation	Commentary
	grade and whether sample bias	between sample recoveries and
	may have occurred due to	grade and there is insufficient data to
	preferential loss/gain of fine/coarse material.	determine if there is a sample bias.
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 	 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.
	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 whether sampled wet or dry. 	 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 where required i.e. bottom of bole
	 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 	 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
	 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. 	 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 (e.g. standards, blanks, duplicates, 	 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), 4A/MS48 (multi-elements) and



Criteria	JORC Code Explanation	Commentary
	whether acceptable levels of	4A/MS48R (REE extended suite).
	accuracy (i.e. lack of bias) and	
Verification of sampling and assaying	 precision have been established. 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 	 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	 data. 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 	 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.
	topographic control.	
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/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	 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 individual drillholes is considered to achieve unbiased sampling.
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.



Criteria JORC Code Explanation		Commentary
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 nine granted exploration licences and three applications, covering 2,792km². Rockford JV tenements: E28/2188-2192 (70% Legend, 30% Rockford Minerals Pty Ltd), E28/1718 & E28/1727 (70% Legend, 30% Ponton Minerals Pty Ltd). Legend 100% owned: E28/2404-2405 & ELA28/2638-2640. 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. 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	 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 not Material and this exclusion does not detract 	Refer to table of collars in body of report.



Criteria	JORC Code Explanation	Commentary	
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 (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. 	 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 mineralisation widths and intercept lengths	 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'). 	 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	 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, FLTEM 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; 	 Detailed high quality aeromagnetic and gravity datasets have been used in the targeting of FLTEM surveys and aircore drilling. Highpower EM Geophysical Services Pty Ltd have undertaken high powered fixed loop electromagnetic surveying over the Rockford Project. 	



Criteria JORC Code Explanation		Commentary
	metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	 FLTEM Details Loop Sizes: 400mx600m up to 800mx800m, single turn Line/Station Spacing: 150m spaced lines with 100m stations Transmitter: HPTX (270-290 amps) Receiver: GDD Nordic EM24 Sensor: EMIT Fluxgate 3 component B field sensor Time base/frequency: 0.125Hz (2000msec time base), ~1.75msec and 10msec ramp
Further work	 The nature and scale of planned further work (e.g. 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. 	 Diamond drill testing and follow up downhole electromagnetics of the N1 conductor is planned.