

ASX:LEG

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ASX Announcement

Multiple New Conductors Enhance Prospectivity at Area D

- Five new and two remodelled conductors mapping central intrusive body-possibly indicative of basal contact (likely location of massive sulphide accumulations)
- Three discrete Northern conductors in different structural setting
- Southern conductor in intriguing setting

Legend Mining Limited ("Legend") is pleased to announce the results from the recently completed innovative moving loop electromagnetic ("MLTEM") surveys at Area D at the Rockford Project in the Fraser Range of Western Australia (see Figure 1). A full technical discussion follows in the body of this announcement.

Legend Managing Director Mr Mark Wilson said, "The prospectivity at Area D has been enhanced by these results and they have shed new light on the prospect. They have provided 11 new conductors each of which has the characteristics of the nickel-copper mineralisation we are seeking. Our task is now to prioritise all these conductors for diamond drilling. Legend has booked an IP geophysical survey to commence in February 2019 as we are aware that this technique has been successfully used to assist in identifying diamond drill targets at other deposits in the Fraser Zone.

The EM crew have now mobilised to Shackleton to do a MLTEM survey over the main mag feature and we expect results from this work before the Christmas break".



Figure 1: Rockford Project highlighting Area D and Shackleton Prospects



Technical Discussion

Area D MLTEM Survey

The recent MLTEM surveys over Area D have now been completed and comprised; 38 lines for 77.9km with 832 stations covering an area of 23km². The surveys were designed to test for massive sulphide mineralisation associated with four zones of coherent anomalous Ni-Cu-Co geochemistry defined in aircore drilling, as well as the wider Area D region where numerous mafic/ultramafic intrusions have been identified.

The surveys were successful in delineating nine new bedrock conductors (D9-D17) as well as providing better definition on the previously identified D3 and D5 conductors (see Figure 2 & Table 1). The survey took longer than the planned 4-6 week period due to ten infill lines being added to the survey, plus several weather and operational delays.



Figure 2: Area D MLTEM Conductor Plates with Anomalous Aircore Drillholes on Aeromagnetics



Table 1: Area D MLTEM Conductor Description				
Conductor	Conductance	Dimensions	Depth to Top	Plate Orientation
D3*	~8,000-12,000S+	~1,000m x 700m	200-250m	55-65º NW dip
D5*	~1,500-2,500S	~1,000m x 1,500m	125-175m	~80 ⁰ ESE dip
D9	~1,500-2,500S	~1,000m x 1,500m	125-175m	75-80º SE dip
D10	~1,500-2,500S	~1,200m x 1,400m	125-175m	~80-90 ⁰ SSE dip
D11	~2,000-3,000S	~1,200m x 1,500m	125-175m	~75 ⁰ SSE dip
D12	~3,000-6,000S	~600m x 1,000m	150-200m	60-70 ⁰ NW dip
D13	~2,000-3,000S	~300 x 800m	125-150m	~80-90 ⁰ NNW dip
D14	~7,000-12,000S+	~200m x 50-75m	100-150m	60-70 ⁰ N dip
D15	~9,000-12,000S+	~250m x 500m	275-350m	70-80º N dip
D16	~5,000-6,000S	~900m x 1,000m	125-175m	75-85 ⁰ SE dip
D17	400-750S	~700m x 800m+	150-200m	~60 ⁰ WNW dip

* Conductors D3 and D5 originally identified in the November 2015 survey have been remodelled with infill data from the November 2018 survey.

A total of 17 conductors with varying parameters/character have now been identified at Area D by the original MLTEM survey in November 2015, a FLTEM survey in April 2016 and the current MLTEM survey. A summary of the conductors identified in the current MLTEM survey is given below.

Conductor D5

D5 is a high priority conductor given its close proximity to aircore drillhole RKAC183, which intersected disseminated pyrrhotite-pentlandite-chalcopyrite in a gabbronorite host rock. RKAC183 previously returned the significant assay result of: 14m @ 0.37% Ni, 0.43% Cu, 0.03% Co from 72m to end of hole, including 2m @ 0.46% Ni, 1.44% Cu, 0.04% Co from 77m (ASX announcement 9 April 2018).

The D5 conductor has been remodelled incorporating recent infill data and defined a large (1,000m x 1,500m) feature with moderate conductance of 1,500-2,500S and a depth to top of conductor of 125-175m. Significantly, the modelled top of the conductor lies 200m to the west of aircore drillhole RKAC183 with the \sim 80⁰ ESE dip indicating the conductor extends below RKAC183.

Conductors D3, D9-D12, D16

These six conductors have similar parameters and together define an oval shaped structure in the centre of Area D (see Figure 2). The orientation and dip of this group of conductors outlines a large synformal structure, which importantly is the same architectural setting as the Nova deposit.

Previously identified and drilled MLTEM conductors D1 and D2 are related to this group and intersected barren sulphide±graphite units within a broader metasedimentary package. Despite this association with barren sulphide±graphite the presence of gabbronorite intrusions in close proximity to the conductors increases the prospectivity of the central synform. Given the moderate to very high conductances of these conductors, there is also a possibility that any massive sulphide mineralisation immediately adjacent or beneath the conductors may be masked and "invisible" to the MLTEM.

Conductors D13-D15

D13 is a moderate conductor (~2,000-3,000S) and shows similarities to the conductors associated with the synformal structure mentioned above. However, it is a relatively discrete feature and appears related to a linear magnetic unit some 200m to the north.



D14 and D15 differ to many/most of the Area D conductors in that they are discrete features with high conductances (7,000-12,000S). They are also directly associated with a coincident localised magnetic high and gravity high/ridge in the far northeast of Area D (see Figure 2). Further infill MLTEM or FLTEM may be required to better define the orientation and parameters of the features.

Conductor D17

D17 is a mid-size, low conductance (400-750S) feature located on the eastern margin of a 1.5km circular magnetic feature with a central high (see Figure 2). Aircore drilling over the central high of the magnetic feature intersected gabbro/gabbronorite and metasediment/granulite. This feature requires further evaluation.

Area D Future Programmes

- An IP survey over the conductors in the central synform will be undertaken, also covering aircore drillhole RKAC183 which contained disseminated pyrrhotite-pentlandite-chalcopyrite sulphides and conductor D5.
- Aircore drilling aimed at providing geological information/context for identified conductors to assist with target prioritisation.
- Infill/detailed FLTEM/MLTEM surveys to better define parameters and orientation of D13-D15 conductors.

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:

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Appendix 1: Legend Mining Ltd – MLTEM Survey Area D - Rockford Project JORC Code Edition 2012: Table 1

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 originally 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 multielement 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, TI, Tm, U, V, W, Y, Yb, Zn, Zr.
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 90mm 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. 	 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.



Criteria	JORC Code Explanation	Commentary	
	 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. 	 No relationship has been determined between sample recoveries and grade and there is insufficient data to 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 logged. 	 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	 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. 	 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	 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, 	 Aircore samples were analysed for Au by 50g fire assay with an ICP-MS 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 	



Criteria	JORC Code Explanation	Commentary
	calibrations factors applied and	using methods; FA50/OE04 (Au),
	their derivation, etc.	4A/MS48 (multi-elements) and
	 Nature of quality control 	4A/MS48R (REE extended suite).
	procedures adopted (e.g.	
	standards, blanks, duplicates,	
	external laboratory checks) and	
	whether acceptable levels of	
	nrecision have been established	
Verification of sampling	The verification of significant	 Primary data was collected in the field
and assaving	intersections by either	using a set of standard logging templates
	independent or alternative	and entered into a laptop computer. The
	company personnel.	data was forwarded to Legend's
	The use of twinned holes	database manager for validation and
	Desumentation of primary data	loading into the company's drilling
	Documentation of primary data,	database.
	verification data storage	 No adjustments of assay results have
	(physical and electronic)	been undertaken.
	protocols.	
	Discuss any adjustment to assay	
	data.	
Location of data points	Accuracy and quality of surveys	• Aircore drillhole collars are surveyed with
	used to locate drill holes (collar	a handheld GPS unit with an accuracy of
	and down-hole surveys),	±5m which is considered sufficiently
	trenches, mine workings and	accurate for the purpose of the drillhole.
	other locations used in Mineral	All co-ordinates are expressed in GDA94
	Resource estimation.	datum, Zone 51.
	 Specification of the grid system used. 	 Regional topographic control has an accuracy of ±2m based on detailed DTM
	Quality and adequacy of	data.
	topographic control.	
Data spacing and	Data spacing for reporting of	Aircore drill traverses are not regular or
distribution	Exploration Results.	grid based, with the location of traverses
	Whether the data spacing and	governed by aeromagnetic/gravity
	distribution is sufficient to	targets.
	establish the degree of	Individual drillholes along traverses are
	geological and grade continuity	spaced at 400m with minor infill to
	appropriate for the Mineral	20011/10011 were deemed necessary.
	Resource and Ore Reserve	 Drinnoles are sampled in the residual portion of the profile only as 4m
	estimation procedure(s) and	composites on a routine basis or as 2m
		3m and 5m composites at the end of
	Whether sample compositing	holes as required. Where anomalous
	nas been applied.	values are returned, 1m samples may be
		submitted for assay.
Urientation of data in	Whether the orientation of	The orientation of the aircore drill
	sampling achieves unbiased	traverses and broad spacing of the
structure	sampling of possible structures	achieve upbiased sampling
	known considering the denosit	aomere unbiaseu samping.
	type.	
	 If the relationship between the 	
	drilling orientation and the	
	orientation of key mineralised	
	structures is considered to have	
	introduced a sampling bias, this	



Criteria	JORC Code Explanation	Commentary
	should be assessed and reported if material.	
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. Acknowledgment and appraisal of exploration by other parties. 	 The Rockford Project comprises twelve granted exploration licences, covering 2,621km². 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. Not applicable, not referred to.
Geology Drill hole	 Deposit type, geological setting and style of mineralisation. A summary of all information material to the understanding 	 The primary target is Nova style nickel- copper mineralisation hosted in high grade mafic granulites within the Fraser Complex. Secondary targets are: Andromeda style VHMS copper-zinc mineralisation and Tropicana style structurally controlled gold mineralisation. Refer to Figure 2.
Intormation	 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 	



Criteria	JORC Code Explanation	Commentary
	 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 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 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	 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, EM conductor plate and drillhole location maps have been included in the body of the report.



Criteria	JORC Code Explanation	Commentary
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, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 Detailed high quality aeromagnetic and gravity datasets and aircore drilling have been used in the targeting of the MLTEM survey. Highpower EM Geophysical Services Pty Ltd have undertaken high powered moving loop electromagnetic surveying (MLTEM) over Area D at the Rockford Project to assist with drillhole targeting. <i>MLTEM Details</i> Loop Size: 300mx300m, single turn Line/Station Spacing: 500m spaced lines with 100m stations, infill line spacing 150-250m Configuration: Slingram position, 150m offset from loop edge Transmitter: HPEM HPTX (~200 amps) Receiver: GDD NordicEM24 Sensor: CSIRO LANDTEM HT SQUID, 3 component B field sensor Base frequency/time base/ramp: 0.25Hz (1,000msec time base), ~0.7msec 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. 	 Further activities include: aircore drilling, infill moving loop and fixed loop electromagnetic surveying and IP surveying.