

11 June 2020

**ASX Announcement** 

# **Detailed Gravity and Aircore Extends Mawson Footprint**

- Gravity survey identifies three high gravity anomalies
- Anomalous nickel-copper aircore geochemistry straddles the gravity anomalies
- RC drill programme planned to test gravity and geochemistry targets

Legend Mining Limited (Legend) is pleased to announce results from the recent detailed gravity survey at Mawson Prospect, Rockford Project, Western Australia and an upcoming reverse circulation ("RC") drilling programme to test the gravity and new geochemistry targets. The results are discussed in detail in the body of this announcement.

Legend Managing Director Mr Mark Wilson said: "The size, strength and location of these gravity highs between the two geochem anomalies makes this a very exciting feature of the Mawson story. The footprint that has now been interpreted, demonstrates the current extent of the large mineralised Mawson system. We have scheduled an RC drill programme to commence as soon as possible, which is designed to provide the geology to help identify the source of the massive sulphide mineralisation which we have already discovered."



Figure 1: Mawson Gravity Image with Anomalous Aircore Drillholes (Pink and red colours represent high gravity response)



## **TECHNICAL DISCUSSION**

The Mawson gravity survey comprising 2,325 stations at 50m x 50m and 100m x 100m spacings covering 10.8km<sup>2</sup> has been completed and the data processed (see Figure 1). The survey was aimed at providing high resolution data to better define the main 4mgal gravity high and to be used in conjunction with aircore drilling to assist deep drill targeting.

Figure 1 shows three discrete gravity highs (pink/red colour) within a larger 3km long arcuate feature with elevated gravity response. The main southern gravity high has a N-S trend and is situated ~300m east of the Ni-Cu sulphide mineralisation intersected in diamond drilling. The two other gravity highs trend NE-SW and lie 650m and 1,100m respectively NE of the mineralisation. 2D gravity modelling of the three gravity highs indicates densities associated with mafic and ultramafic lithologies as the likely source, and represent highly favourable Ni-Cu host rocks.

Recent and historic aircore drilling at Mawson has defined two coherent Ni-Cu anomalies which straddle the gravity highs (see Figure 1). The western anomaly relates directly to the Ni-Cu sulphide mineralisation identified in diamond drilling, while the larger 1,100m x 200m eastern anomaly (open to the east) lies on the eastern and southeastern margin of the main gravity trend.

Importantly, all aircore drillholes from both the western and eastern Ni-Cu anomalies intersected mafic or ultramafic intrusives in bottom of hole samples. Conversely, aircore drillholes over the gravity highs intersected metasediments or granulite and returned no anomalous Ni-Cu results. The gravity highs however cannot be explained by low density metasediments/granulite and are interpreted to represent dense mafic/ultramafic intrusives directly underlying the metasediments/granulite.

Figure 2 schematically illustrates this point with respect to the main N-S trending southern gravity high. Aircore drilling to the west and east of the gravity high intersected mafic/ultramafic intrusions in bottom of hole samples and returned anomalous Ni-Cu results. The drilling directly over the gravity high however intersected metasediments/granulite and did not penetrate deep enough to intersect the underlying intrusives, hence no anomalous geochemistry.



Figure 2: Schematic section showing relationship between anomalous aircore drillholes, mafic/ultramafic intrusives and barren metasediments/granulite "blanketing" the gravity high.



It is expected that deeper drilling through the metasediments/granulite into the gravity high will intersect prospective mafic/ultramafic intrusives. It is possible that this gravity high may represent the primary source of mineralisation identified in the Mawson diamond drilling to date.

The upcoming RC drilling programme has been designed to test a combination of gravity and aircore geochemical targets.

### Mawson Future Programmes

- RC programme to test a combination of gravity and aircore geochemical targets.
- Diamond drill testing Northeast Mawson conductors D13 and D15.
- Complete 200m x 200m aircore drilling programme.
- LF-FLTEM over Mawson D1 conductor following up offhole feature in RKDD006.
- Ongoing regional MLTEM survey at South Mawson



Figure 3: Rockford Project – Prospect Locations

Authorised by Mark Wilson, Managing Director.



#### **Competent Person Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr Derek Waterfield, a Member of the Australian Institute of Geoscientists and a full time employee of Legend Mining Limited. Mr Waterfield has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Waterfield consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Legend's Exploration Results is a compilation of previously released to ASX by Legend Mining (11 December 2017, 9 April 2018, 12 June 2018, 9 December 2019, 31 March 2020, 21 & 26 May 2020) and Mr Derek Waterfield consents to the inclusion of these Results in this report. Mr Waterfield has advised that this consent remains in place for subsequent releases by Legend of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent. Legend confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters in the market announcements continue to apply and have not materially changed. Legend confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

#### COVID-19

The Company has been proactively managing the potential impact of COVID-19 and has developed systems and policies to ensure the health and safety of our employees and contractors, and limiting the risk to our operations. These systems and policies have been developed in line with the formal guidance of State and Federal health authorities and with the assistance of our contractors.

To ensure the health and wellbeing of our employees and contractors, the Company has implemented a range of measures to minimise the risk of infection and rate of transmission of COVID-19. These measures include employees and contractors completing a COVID-19 Exposure Questionnaire, increased hygiene practices, restrictions on non-essential travel, establishing strong infection control systems and protocols across the business and facilitating remote working arrangements, where practicable. The Company will continue to monitor the formal requirements and guidance of State and Federal health authorities, and act accordingly.

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

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Appendix 1: Legend Mining Ltd – Gravity Survey and Aircore Drilling – Mawson Prospect JORC Code Edition 2012: Table 1

Section 1:	Sampling	Techniq	ues and	Data
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Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>JORC Code Explanation</li> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>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</li> </ul>	Atlas Geophysics conducted a ground gravity survey between 14-27 May 2020 with survey details provided below. • Station spacing 50mx50m (1,651 stns) and 100mx100m (674 stns) • Scintrex CG5 digital gravity meter • Hi Target differential GNSS receiver • Accuracy <0.02 mGal • Elevations accuracy <2cm.
Drilling techniques	<ul> <li>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.).</li> </ul>	<ul> <li>No drilling undertaken.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure</li> </ul>	<ul> <li>No drilling undertaken.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	representative nature of the	-
	samples.	
	Whether a relationship exists     between complements and	
	grade and whether sample bias	
	may have occurred due to	
	preferential loss/gain of	
logging	Tine/coarse material.	No drilling undertaken
	have been geologically and	
	geotechnically logged to a level	
	of detail to support appropriate	
	mining studies and metallurgical	
	studies.	
	• Whether logging is qualitative or	
	quantitative in nature. Core (or	
	photography.	
	• The total length and percentage	
	of the relevant intersections	
Sub-sampling	Iogged.	No sampling undertaken
techniques and sample	<i>e</i> whether quarter, half or all core	
preparation	taken.	
	• If non-core, whether riffled, tube	
	sampled, rotary split, etc. and whether sampled wet or dry	
	<ul> <li>For all sample types, the nature.</li> </ul>	
	quality and appropriateness of	
	the sample preparation	
	Ouality 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	
	<ul> <li>Whether sample sizes are</li> </ul>	
	appropriate to the grain size of	
	the material being sampled.	
Quality of assay data	The nature, quality and     appropriate page of the appropriate page.	No sampling undertaken.
and laboratory tests	and laboratory procedures used	
	and whether the technique is	
	considered partial or total.	
	For geophysical tools,     spectrometers, bandhold VPE	
	instruments, etc., the parameters	
	used in determining the analysis	
	including instrument make and	

Criteria		JORC Code Explanation model, reading times, calibrations factors applied and their derivation, etc.	Commentary
	•	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.	
Verification of sampling and assaying	•	The verification of significant intersections by either independent or alternative company personnel.	<ul> <li>No sampling undertaken.</li> </ul>
	•	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.	
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.	• No drilling undertaken.
	•	Quality and adequacy of topographic control.	
Data spacing and distribution	•	Data spacing for reporting of Exploration Results.	<ul> <li>No drilling undertaken.</li> </ul>
	•	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.	
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.	<ul> <li>No drilling undertaken.</li> </ul>
	•	It 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	<ul> <li>The measures taken to ensure sample security.</li> </ul>	<ul> <li>No sampling undertaken.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>No external reviews have been undertaken.</li> </ul>

# Section 2: Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and	Type, reference	The Rockford Project comprises nine
land tenure status	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> <li>granted exploration licences, covering 2,430km<sup>2</sup>, (Legend manager).</li> <li>Rockford JV tenements:</li> <li>E28/2188, 2189, 2192 (70% Legend, 30% Rockford Minerals Pty Ltd)</li> <li>E28/1716, 1717, 1718, 1727 (70% Legend, 30% Ponton Minerals Pty Ltd).</li> <li>Legend 100%: E28/2404, 2405.</li> <li>The Project is located 280km east of Kalgoorlie mostly on vacant crown land with the eastern portion on Kanandah Pastoral Station.</li> <li>There are no Native Title Claims over tenements E28/1716, 1717, 2188, 2189, 2192, 2405. Tenements E28/1718, E28/1727 &amp; E28/2404 are covered 90%, 20% and 100% respectively by the Ngadju Native Title Claim.</li> <li>The tenements are in good standing and there are no known impediments.</li> </ul>
Exploration done by other parties	Acknowledgment and     appraisal of exploration by     other parties.	Not applicable, not referred to.
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The primary target is Nova style nickel- copper mineralisation hosted in high grade mafic granulites within the Fraser Complex.</li> <li>A secondary target is Tropicana style structurally controlled gold mineralisation.</li> </ul>
Drill hole Information	<ul> <li>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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> </ul>	No drilling undertaken.

Criteria	JORC Code Explanation	Commentary
	<ul> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent yalues should be clearly stated.</li> </ul>	No drilling undertaken.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>No drilling undertaken.</li> </ul>
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.	<ul> <li>Project location map and gravity image with previous aircore drilling included in the body of the report.</li> </ul>
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative	All significant results are reported.

Criteria	JORC Code Explanation	Commentary
	grades and/or widths should be	
	practiced to avoid misleading	
	reporting of Exploration Results.	
Other substantive exploration data	<ul> <li>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</li> </ul>	• Detailed high quality aeromagnetic and previous aircore drilling results have been used to assist data interpretation.
Further work	Substances.     The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	<ul> <li>Completion of 2D gravity modelling across the entire Mawson prospect and integration with aircore drilling results.</li> <li>RC/diamond drill testing of a combination</li> </ul>
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	of gravity and aircore targets.