18 July 2024

### HPFLTEM survey underway at Octagonal

#### **HIGHLIGHTS**

- Extension of the maiden High-Power Fixed Loop Electro-Magnetics (HPFLTEM) survey (maiden survey completed in December 2023) is now underway following extensive weatherrelated access delays
- Survey to follow up a strong conductive zone on the eastern flank of Octagonal which remains open and is scheduled to take 20 days to complete
- Magnus HPFLTEM survey to follow post completion of the Octagonal programme

**Legend Mining Limited** (Legend) is pleased to report the HPFLTEM survey extension is now underway at the Octagonal prospect within the Rockford Project, Fraser Range, Western Australia (see Figures 1 and 2).

Legend Executive Chair, Mr Mark Wilson said: "Finally our 2024 field season is underway with the mobilisation of the High Power EM crew and equipment to Octagonal.

"The unprecedented rainfall in early March this year which inundated the Rockford project area has been followed by several more rain events which have cut vehicle access to the project, rendering any field work impossible.

"The Trans Australian Railway access road was opened to all traffic from 10am, Tuesday, 16<sup>th</sup> July 2024, which has cleared the way for the survey to start and news flow for our shareholders."



Photo 1: Sunrise at Rockford, July 2024

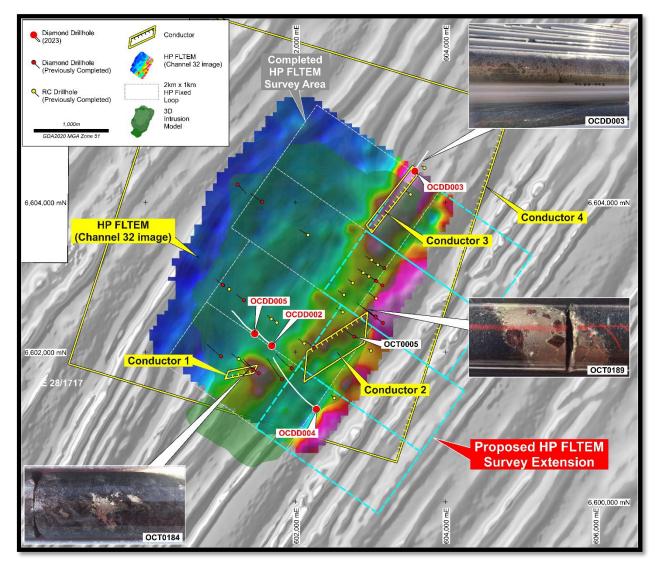
#### **TECHNICAL DISCUSSION**

The HPFLTEM survey extension at the Octagonal prospect is now underway following significant weather related access delays (see March 2024 Quarterly Activities Report released 11 April 2024 and ASX Announcement 2 July 2024).

Highpower EM Geophysical Services Pty Ltd have mobilised to site to commence the HPFLTEM survey extension data acquisition at Octagonal.

The channel 32 data of the maiden HPFLTEM survey identified a strong conductive source extending to the east of the completed survey area (see magenta zone in Figure 1). This area is of interest as it is the interpreted extension of the Octagonal intrusion based on completed drilling coupled with seismic and structural interpretation. Encouragingly, diamond drillholes OCT0189 and OCDD004 both intersected Ni-Cu sulphide within fertile ultramafic sills proximal to the strong conductive source, confirming mineralised intrusion occurs outside the main Octagonal Intrusive Complex (OIC) body. This is identical to the Nova-Bollinger mineralisation setting.

Data acquisition of the extension survey is envisaged to take 20 days to complete, followed by data modelling. Results are expected by end of August 2024. Post completion of the Octagonal HPFLTEM survey, data acquisition will commence at Magnus.



**Figure 1:** Octagonal plan view showing completed and proposed HPFLTEM survey loops and existing conductors on channel 32HD imagery with the interpreted Octagonal intrusion model projected to surface on AMAG.

#### FUTURE OCTAGONAL PROGRAMME

- HPFLTEM survey data modelling
- Seismic reprocessing results
- Diamond drillhole target generation
- Heritage clearance for diamond drilling

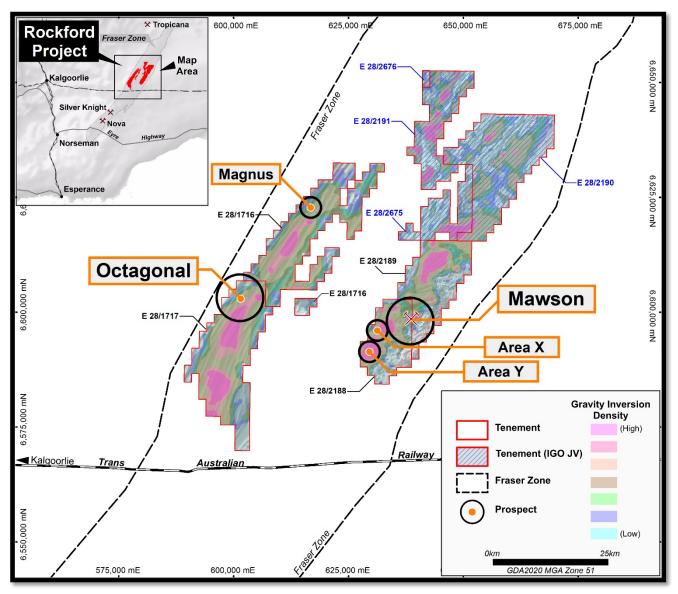


Figure 2: Current Rockford Project Prospect Locations on Gravity.

Authorised by Oliver Kiddie, Managing Director.

Hole	Туре	MGA2020-East	MGA2020-North	RL	Azimuth	Dip	Total Depth
OCDD002	DD	601,685	6,602,095	267	306	-70	1,031.0m
OCDD003	DD	603,595	6,604,425	263	034	-65	909.4m
OCDD004	DD	602,280	6,601,245	266	300	-65	1,710.8m
OCDD005	DD	601,457	6,602,256	267	302	-70	1,662.0m
OCT0005	DD	602,786	6,602,204	271	305	-75	720.6m
OCT0184	DD	601,512	6,601,715	263	305	-64	648.75m
OCT0189	DD	603,072	6,602,462	266	304	-65	504.6m
OCT0190	DD	601,441	6,601,761	263	304	-60	576.65m
OCT0193	RC	601,244	6,601,906	263	304	-65	310.0m

#### Appendix 1 – Octagonal Diamond Drillhole Details

Co-ordinates GDA2020 Zone 51

#### **Competent Person Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr Oliver Kiddie. Mr Kiddie is a Member of the Australasian Institute of Mining and Metallurgy and a full-time employee of Legend Mining Limited. Mr Kiddie 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 Kiddie 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 (28 March 2023, 20 April 2023, 17 May 2023, 5 June 2023, 27 June 2023, 31 July 2023, 31 August 2023, 3 October 2023, and 7 December 2023). Mr Oliver Kiddie consents to the inclusion of these Results in this report. Mr Kiddie 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.

#### Forward Looking Statements

This announcement contains "forward-looking statements" within the meaning of securities laws of applicable jurisdictions. Forward-looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "believe", "continue", "objectives", "outlook", "guidance" or other similar words, and include statements regarding certain plans, strategies and objectives of management and expected financial performance. Forward-looking statements are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance. These forward-looking statements are based upon a number of estimates, assumptions and expectations that, while considered to be reasonable by Legend Mining Limited, are inherently subject to significant uncertainties and contingencies, involve known and unknown risks, uncertainties and other factors, many of which are outside the control of Legend Mining Limited and any of its officers, employees, agents or associates.

Actual results, performance or achievements may vary materially from any projections and forward-looking statements and the assumptions on which those statements are based. Exploration potential is conceptual in nature, to date there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. Readers are cautioned not to place undue reliance on forward-looking statements and Legend Mining Limited assumes no obligation to update such information made in this announcement, to reflect the circumstances or events after the date of this announcement.

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

#### For more information contact:

Mr Mark Wilson Executive Chair Ph: +61 8 9212 0600 Mr Oliver Kiddie Managing Director Ph: +61 8 9212 0600

Appendix 2:

#### Legend Mining Ltd – Octagonal Exploration Programme - Rockford Project JORC Code Edition 2012: Table 1

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <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>	<ul> <li>HiSeis Pty Ltd conducted a ground seismic survey between 7 November and 24 November 2022, with survey details below.</li> <li>Equipment area coverage: ~19.2 km<sup>2</sup></li> <li>Total receivers: 10,986</li> <li>Total source points: 8,357</li> <li>Sample rate: 2 ms</li> <li>Record length: 3 s</li> <li>Source INOVA AHV-IV (60000 lb)</li> <li>Source array: 1 x AHV-IV</li> <li>Source number: 2 ping pong</li> <li>Recording Filters:</li> <li>Hi-cut: 0.8 Nyquist set to 205 Hz</li> <li>Notch: out</li> <li>Diversity stack: no</li> <li>Source Parameters:</li> <li>Source prequency: 3-180 Hz</li> <li>Sweep frequency: 3-180 Hz</li> <li>Sweep type: -0.8 db/oct</li> <li>Source array: stacked</li> <li>Tapers: 750 ms start and 350 ms end</li> <li>Maximum source gaps: as required for safety</li> <li>Drive level: 65%</li> <li>Receiver Parameters:</li> <li>Group spacing: 18 m</li> <li>Receiver line spacing: 108m (central area), 216m (outer area)</li> <li>Geophone type: Quantum 5 Hz (geophone (PS-5GR)) and STRYDE 10 Hz (accelerometer)</li> <li>Case: land</li> <li>Frequency: 5 Hz and 10 Hz</li> <li>Geophone spacing: 18 m</li> </ul>



Criteria	JORC Code Explanation	Commentary
		<ul> <li>No diamond drilling has been undertaken.</li> </ul>
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 diamond drilling has been 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 representative nature of the samples.</li> <li>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.</li> </ul>	No diamond drilling has been undertaken.
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>No diamond drilling has been undertaken.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling</li> </ul>	<ul> <li>No diamond drilling has been undertaken.</li> </ul>



Criteria	JORC Code Explanation	Commentary
	<ul> <li>stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of</li> </ul>	
Quality of assay data and laboratory tests	<ul> <li>the material being sampled.</li> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul> <li>No diamond drilling has been undertaken.</li> </ul>
	• 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> <li>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.</li> </ul>	
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data</li> </ul>	<ul> <li>No diamond drilling has been undertaken.</li> </ul>
	<ul> <li>verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> </ul>	<ul> <li>The drillhole collars were surveyed with a handheld GPS unit with an accuracy of ±5m which is considered sufficiently accurate for the purpose of the drillhole.</li> <li>All co-ordinates are expressed in GDA2020 datum, Zone 51.</li> <li>Regional topographic control has an accuracy of ±2m based on detailed DTM data.</li> </ul>



Criteria	JORC Code Explanation	Commentary
	<ul> <li>Quality and adequacy of topographic control.</li> </ul>	
Data spacing and distribution	Data spacing for reporting of Exploration Results.	No diamond drilling has been undertaken.
	• 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 diamond drilling has been undertaken.</li> </ul>
	• 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.	
Sample security	The measures taken to ensure sample security.	No diamond drilling has been undertaken.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>Internal audits/reviews of seismic procedures were completed, with external reviews managed by Terra Resources Pty Ltd.</li> </ul>

### Section 2: Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Rockford Project comprises four granted exploration licences, covering 1,087km<sup>2</sup>, (Legend manager).</li> <li>Rockford JV tenements:</li> <li>E28/2188, 2189 (70% Legend, 30% Rockford Metals Pty Ltd).</li> <li>E28/1716, 1717 (70% Legend, 30% Ponton Minerals Pty Ltd).</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>Tenements E28/1716, 1717, are covered by the Upurli Upurli Nguratja Native Title Claim.</li> <li>Tenement E28/2188 is covered 72% by the Upurli Upurli Nguratja Native</li> </ul>



Criteria	JORC Code Explanation	Commentary
		<ul> <li>Title Claim and 28% by the Untiri Pulka Native Title Claim.</li> <li>Tenement E28/2189 is covered 100% by the Untiri Pulka 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 mafic/ultramafic intrusives within the Fraser Zone of the larger Albany- Fraser Orogen.</li> <li>Secondary targets include VMS style zinc-copper-lead-silver mineralisation and structurally controlled Tropicana style gold.</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> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the</li> </ul>	No diamond drilling has been undertaken.
	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.	



Criteria	JORC Code Explanation	Commentary
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 values should be clearly stated.</li> </ul>	<ul> <li>No diamond drilling has been undertaken.</li> </ul>
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>	No diamond drilling has been undertaken.
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Project location maps and HPFLTEM plan has been included in the body of the report.</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>All significant results are reported.</li> </ul>
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;</li> </ul>	<ul> <li>Detailed high quality aeromagnetic and gravity datasets, aircore drilling, ground EM surveys and DHTEM surveys have been used to target drilling.</li> <li>Highpower EM Geophysical Services Pty Ltd completed high powered moving loop electromagnetic</li> </ul>

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Criteria	JORC Code Explanation	Commentary
	metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>(MLTEM) surveying over the Octagonal prospect.</li> <li>Highpower EM Geophysical Services Pty Ltd completed high powered fixed loop electromagnetic (HPFLTEM) surveying over the Octagonal prospect.</li> <li><i>MLTEM Details</i></li> <li>Loop Size: 300 x 300m, single turn</li> <li>Line/Station Spacing: 500/250m spaced lines with 100m stations</li> <li>Transmitter: HPEM HPTX (200 amps)</li> <li>Receiver: EMIT SMARTem24</li> <li>Sensor: HT SQUID LANDTEM 3 component B field sensor</li> <li>Time base/freq.: 0.25Hz (500msec time base), 0.5-1.0msec ramp</li> <li><i>HPFLTEM Details</i></li> <li>Loop Size: 2km x 1km single turn, 1km x 1km Figure 8 configuration</li> <li>Line/Station Spacing: 250m spaced lines with 125m stations</li> <li>Transmitter: HPEM HPTX (~200 amps)</li> <li>Receiver: EMIT SMARTem24</li> <li>Sensor: HT SQUID LANDTEM 3 component B field sensor</li> <li>Time base/freq.: 0.125-0.25Hz (1,000-2,000msec time base), 0.5- 1.0msec ramp</li> <li>Readings/Stacks: 2-3 repeatable readings, 64 stacks.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Full integration of geological, structural, geophysical (including seismic), and geochemical data.</li> <li>High-power surface EM surveying</li> <li>Plan further diamond drillholes.</li> <li>Plan further EM surveys.</li> <li>Heritage clearance.</li> </ul>