



### 16 October 2024

## Updated Version of "Large, high-conductance zones identified by **HPFLTEM survey at Magnus" announcement**

Legend Mining Limited (ASX: LEG) (the Company) is pleased to provide a updated version of its announcement entitled "Large, high-conductance zones identified by HPFLTEM survey at Magnus" dated 15 October 2024.

The updated announcement includes additional commentary in the JORC Code Edition 2012: Table 1 as set out in Appendix 2 of the attached updated announcement.

This announcement was authorised for release by Oliver Kiddie, Managing Director.

Visit www.legendmining.com.au 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



#### 16 October 2024

## **Updated Version**

## Large, high-conductance zones identified by HPFLTEM survey at Magnus

#### **HIGHLIGHTS**

- Maiden High-Power Fixed Loop Electro-Magnetics (HPFLTEM) survey has identified 4 zones with multiple conductors at the Magnus prospect
- Large, high- conductance zone up to 5,000 siemens identified on the margin of a gravity anomaly outside and below existing drilling
- Moving Loop Electro-Magnetic survey (MLTEM) underway at Area Y

**Legend Mining Limited** (Legend) is pleased to report results of the HPFLTEM survey at the Magnus prospect within the Rockford Project, Fraser Range, Western Australia (see Figures 1 and 3).

Legend Executive Chair, Mr Mark Wilson said: "These are some of the better results from EM surveying conducted by Legend at the Rockford Project. The size, strength and interpreted geological setting of zone 3 in particular, makes this zone a promising drill target.

"We are looking forward to diamond drill testing these targets once we have negotiated a land access agreement with the Upurli Upirli Nguratja Aboriginal Corporation whose claim was determined on 28 November 2023."

"It is particularly pleasing from an R&D perspective, that these results demonstrate that the Legend team has been able to design a surface EM system which can identify conductive zones below 600m, which challenges conventional thinking."



Photo 1: HPFLTEM survey at Magnus, October 2024





#### **TECHNICAL DISCUSSION**

#### **Magnus Prospect**

Following the excellent response to the HPFLTEM survey technique completed across Octagonal, a maiden HPFLTEM survey was designed for the Magnus intrusion (see Figure 1). Prospectivity of the Magnus intrusion had previously been confirmed with a single diamond drillhole completed by Legend, suggesting a fertile host intrusion for Nova-Bollinger style Ni-Cu sulphide deposits (see ASX Announcement 20 September 2021).

The survey has been completed, including additional infill and extension lines to close off identified conductive zones. Modelling has identified 12 conductors across four zones (see Figure 1 and Table 1). The 3 zones on the eastern flank of the Magnus intrusion report as a series of complex conductors, resulting in multiple conductive sources and associated models across each zone.

Zone 3 comprises 4 conductors of high interest. The conductors are large in spatial size and up to 5,000 siemens conductance. They are located on the margin of a gravity feature at 550m depth below surface, with the gravity feature interpreted to be intrusion at depth. Encouragingly, these conductors cross-cut aeromagnetic (AMAG) stratigraphy, suggesting they are not of a stratigraphic nature. These conductors are located outside and below levels of aircore drilling completed to date.

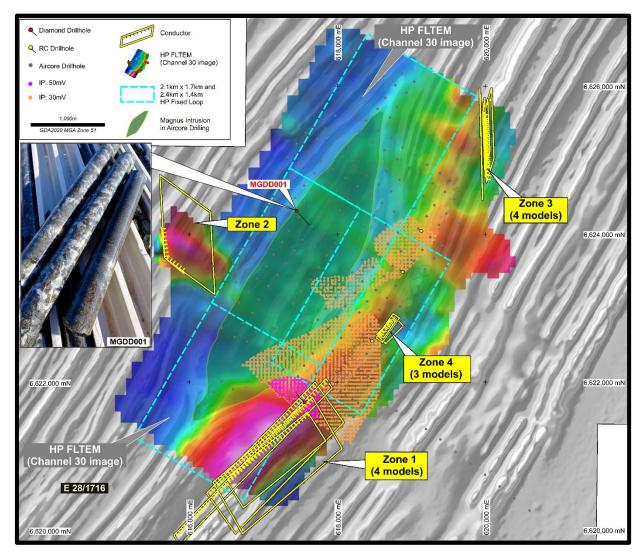
Zone 4 comprises 3 conductors which are discrete in nature, up to 1,000 siemens conductance, aligning with the margin of another gravity feature.

Zone 1 comprises 4 conductors of large spatial size and low conductance, aligning with interpreted stratigraphy from AMAG.

Zone 2 identified a single conductor on the western flank of the Magnus intrusion, which is interpreted to relate to a deep paleochannel.

Zones 3 and 4 warrant drill testing to investigate the source of these conductive features.





**Figure 1:** Magnus plan view showing completed HPFLTEM survey loops with identified conductors on channel 30HD imagery, IP anomalies, and the interpreted Magnus intrusion model projected to surface on AMAG.

Table 1: Magnus HPFLTEM Conductor Parameters						
Zone	Model No.	Conductance	Dimensions	Depth to Plate Top	Orientation	Dip
	1	100S	3,000m x 1,600m	175-225m	NE-SW	85º SE
1	2	200S	2,100mx 1,100m	200-300m	NE-SW	55º SE
ļ.	3	2008	1,400m x 800m	200-250m	NE-SW	55º SE
	4	200S	1,750m x 1,050m	250-300m	NE-SW	40º SE
2	1	300-350S	1,300m x 1,250m	300-400m	NW-SE	65º NE
	1	1,200S	1,000m x 1,000m	550-650m	N-S	85º E
3	2	2,200S	750m x 750m	600-700m	N-S	85º E
3	3	3,000\$	950m x 500m	600-700m	N-S	85º E
	4	5,000S	1,500m x 300m	550-650m	N-S	85-90° E
4	1	550S	400m x 400m	100-150m	NE-SW	75º SE
	2	1,000S	300m x 300m	125-175m	NE-SW	75º SE
	3	550S	300m x 1,000m	100-150m	NE-SW	80º SE





#### Area Y

Aircore drilling completed in 2022 originally identified prospective intrusions at Area Y, located ~10km directly south-west of Mawson, defined by a combination of aeromagnetic and gravity features (see Figure 2). The drilling intersected extensive ultramafic and mafic intrusives including olivine websterite and gabbronorite, visually similar to those which host Ni-Cu-Co mineralisation at Mawson. Geochemistry supported the visual assessment that these identified intrusions are prospective for Mawson style mineralisation.

First pass Moving Loop EM (MLTEM) has been designed to test for conductive features associated with the identified intrusions, with the aim to identify Ni-Cu sulphide targets. The MLTEM survey is underway at time of writing, with preliminary results expected by mid-November 2024.

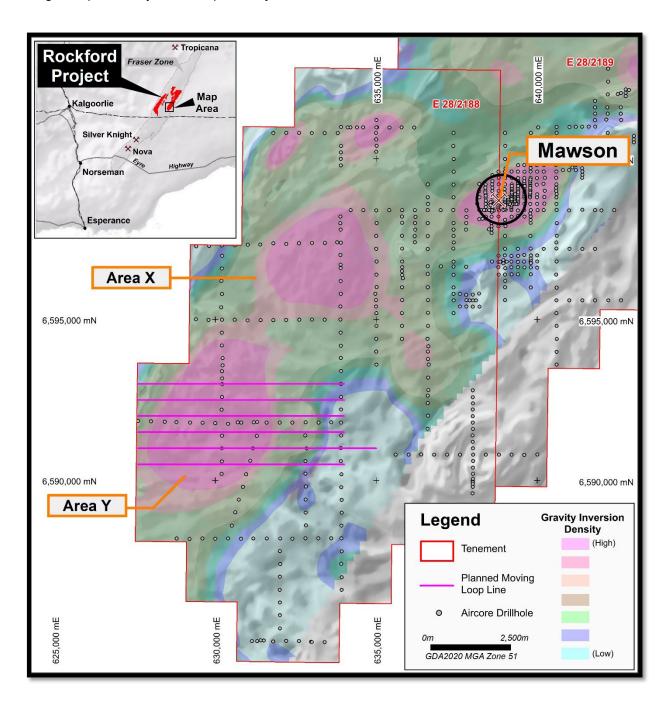


Figure 2: Plan view showing proposed MLTEM survey lines across Area Y on Gravity Inversion.



#### **FUTURE PROGRAMMES**

- Incorporate and interrogate Al/ML, drilling, gravity modelling, AMAG modelling, and HPFLTEM datasets across Magnus to define drill targets
- Heritage clearance for drilling at Magnus
- MLTEM survey results processing at Area Y and extension/infill of survey if warranted

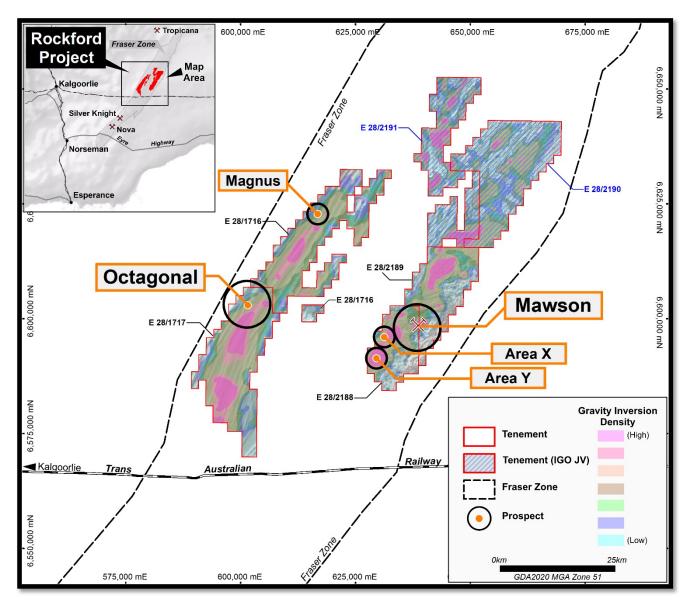


Figure 3: Current Rockford Project Prospect Locations on Gravity.

Authorised by Oliver Kiddie, Managing Director.





#### Appendix 1 - Magnus Diamond Drillhole Details

Hole	Type	MGA2020-East	MGA2020-North	RL	Azimuth	Dip	Total Depth
MGDD001	DD	617,452	6,624,315	261	140	-61	597.3m

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 (20 September 2021, 15 September 2022, 2 July 2024, 18 July 2024, and 20 August 2024). 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 www.legendmining.com.au 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 – Magnus and Area Y Exploration Programme - Rockford Project JORC Code Edition 2012: Table 1

Section 1: Sampling Techniques and Data

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>Highpower EM Geophysical Services Pty Ltd completed high powered fixed loop electromagnetic (HPFLTEM) surveying in August-October 2024 over the Magnus prospect.</li> <li>HPFLTEM Details</li> <li>Loop Size: 2.1km x 1.7km and 2.4km x 1.4km single turn</li> <li>Line/Station Spacing: 250m spaced lines with 125m stations</li> <li>Transmitter: HPEM HPTX (~130 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>
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.).	Not applicable : No drilling has been undertaken.
Drill sample recovery	Method of recording and assessing core and chip sample	Not applicable: No drilling has been undertaken.





Criteria	JORC Code Explanation	Commentary
	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 have occurred due to preferential loss/gain of fine/coarse material.	
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> </ul>	Not applicable: No drilling or sampling has been undertaken.
	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.	Not applicable: No drilling or sampling has been undertaken.
	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.	
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used	Not applicable: No drilling or sampling has been undertaken.



Criteria	JORC Code Explanation	Commentary
	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, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	
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> </ul>	Not applicable: No drilling or sampling has been undertaken.
	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	<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> <li>Quality and adequacy of topographic control.</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>
Data spacing and	Data spacing for reporting of	As no drilling has been undertaken,
distribution	<ul> <li>Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	the Company refers the reader to "Other substantive exploration data" in Section 2 of this Table 1.



Criteria	JORC Code Explanation	Commentary
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	Not applicable: No drilling or sampling has been undertaken. Orientation of potential mineralised unknown.
Sample security	The measures taken to ensure sample security.	Not applicable: No drilling or sampling has been undertaken.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Internal audits/reviews of electromagnetic procedures were completed, with external reviews managed by GeoPotential Consulting Pty Ltd, who found the data resulting from the HPFLTEM survey at Magnus to be of good quality, low noise, and within survey design parameters.

#### **Section 2: Reporting of Exploration Results**

Criteria	JORC Code Explanation	Commentary	
Mineral tenement and land tenure status	<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 1,087km², (Legend manager).</li> <li>Rockford JV tenements: <ul> <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 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> </li> </ul>	
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 mafic/ultramafic intrusives within the	



Criteria	JORC Code Explanation	Commentary
		Fraser Zone of the larger Albany-Fraser Orogen.  • Secondary targets include VMS style zinc-copper-lead-silver mineralisation and structurally controlled Tropicana style gold.
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:         <ul> <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> </ul> </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>	Not applicable: No drilling or sampling has been undertaken.
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>	Not applicable: No drilling or sampling has been undertaken. No data aggregation methods applied. The Company refers the reader to "Other substantive exploration data" in Section 2 of this Table 1.
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</li> </ul>	Not applicable: No drilling or sampling has been undertaken. The Company refers the reader to "Other substantive exploration data" in Section 2 of this Table 1.



Criteria	JORC Code Explanation	Commentary
	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').	
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 maps and HPFLTEM and MLTEM plans 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, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>Detailed high quality aeromagnetic and gravity datasets, aircore drilling, ground IP surveys, ground EM surveys and DHTEM surveys have been used to target drilling.</li> <li>IP Survey</li> <li>Moombarriga Geoscience completed pole-dipole surveys in 2015 and 2016 comprising seven lines for 26.0km over the Magnus prospect.</li> <li>Survey Details</li> <li>Array: Pole – Dipole</li> <li>Line spacing: 400-700m</li> <li>A-Spacing: 100m / 95m</li> <li>N-Level: 16</li> <li>Base Frequency: 0.125 Hz</li> <li>Typical Current: 0.2 - 4 amps (2015)</li> <li>2.4-22 amps (2016)</li> <li>Stacking: 32</li> <li>Transmitter: Zonge GGT-30 (2015)</li> <li>Search 50kV/A (2016)</li> <li>Receiver: Smartem</li> <li>Receiver pots: Phoenix</li> <li>Sample Rate: 1 200</li> <li>Tx Frequency: 0.125Hz / 8 seconds</li> <li>Power Source: Motor Generator</li> <li>EM Surveys</li> <li>Highpower EM Geophysical Services Pty Ltd completed high powered moving loop electromagnetic (MLTEM) surveying in 2019 and 2020, and high powered fixed loop</li> </ul>





Criteria	JORC Code Explanation	Commentary
		electromagnetic (HPFLTEM) surveying in August-October 2024 over the Magnus prospect MLTEM Details
		<ul> <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>HPFLTEM Details</li> </ul>
		<ul> <li>Loop Size: 2.1km x 1.7km and 2.4km x 1.4km single turn</li> <li>Line/Station Spacing: 250m spaced lines with 125m stations</li> <li>Transmitter: HPEM HPTX (~130 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, and geochemical data.</li> <li>Plan further drillholes if warranted.</li> <li>Plan further EM surveys if warranted.</li> <li>Heritage clearance.</li> </ul>