

## 29 July 2022

## **Mawson Exploration Activity Update**

- Diamond Drillholes RKDD083 and RKDD084 intersect prospective host rocks with magmatic sulphide
- 3D seismic data proving its value identifying diamond drill targets at Mawson
- DHTEM underway

Legend Mining Limited (Legend) is pleased to announce an exploration activity update at the Mawson Prospect, Fraser Range, Western Australia (see Figure 4).

Legend Managing Director, Mr Mark Wilson said: "There have been some genuinely exciting rocks intersected in the latest two diamond drillholes at Mawson as described in the body of this report. These drillholes are further evidence of the value of the 3D seismic data as well as validation of the size and prospectivity of the Mawson intrusion."

"Each of these two holes have been designed to intersect prospective target areas identified from interpretation of the 3D seismic data. We are gaining valuable geological information from diamond holes drilled to date and the extent of this information will only be fully understood once all follow up structural, geological, DHTEM and assay results are received."



Massive sulphide from RKDD084 from 450m, NQ2



#### **TECHNICAL DISCUSSION**

Exploration activity continues at the Mawson prospect, including diamond drilling testing areas identified from interpretation of the 3D seismic, associated DHTEM and physical property surveys. Below is an overview of completed diamond drillholes RKDD083 and RKDD084, while RKDD085 is ongoing at time of writing (see Figure 1).

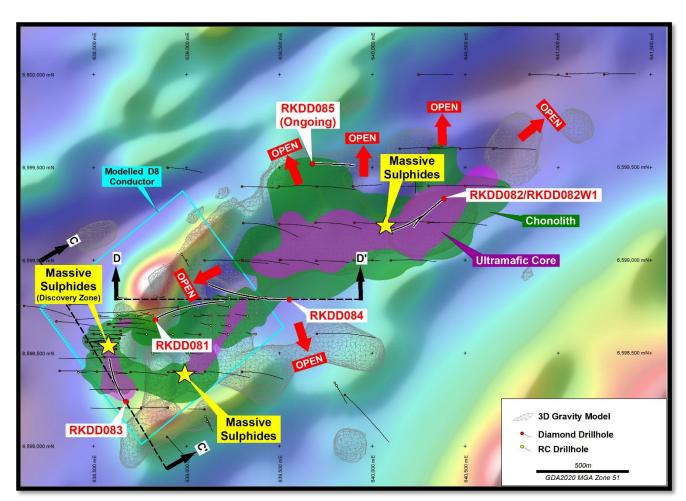


Figure 1: Mawson chonolith, diamond drillholes, and section locations

#### **MAWSON**

Diamond drillhole RKDD083 was designed to target a seismic feature interpreted to be prospective chonolith below the Mawson discovery zone, offset by the Mawson fault (see Figure 1 and Figure 2). The drillhole intersected the mineralised chonolith and metasedimentary packages, as predicted, above the Mawson fault. Below the fault, an assemblage of metasedimentary units and lesser mafic intrusive suites were intersected, including narrow veins of cross-cutting massive sulphide mineralisation (see Photo 1). The upper level of the main target zone encountered a prospective ultramafic unit with large amounts of digested metasediment. Marginal to this unit, a zone of heavy disseminated to net-textured magmatic sulphide was intersected at 751m downhole (see Photo 2). Further data analysis is underway, including structural vectoring and additional drilling, which will aid in refinement of this new target zone. DHTEM and assay results are pending. Petrophysical property measurements are underway with hand-held and downhole instrumentation, with results pending.



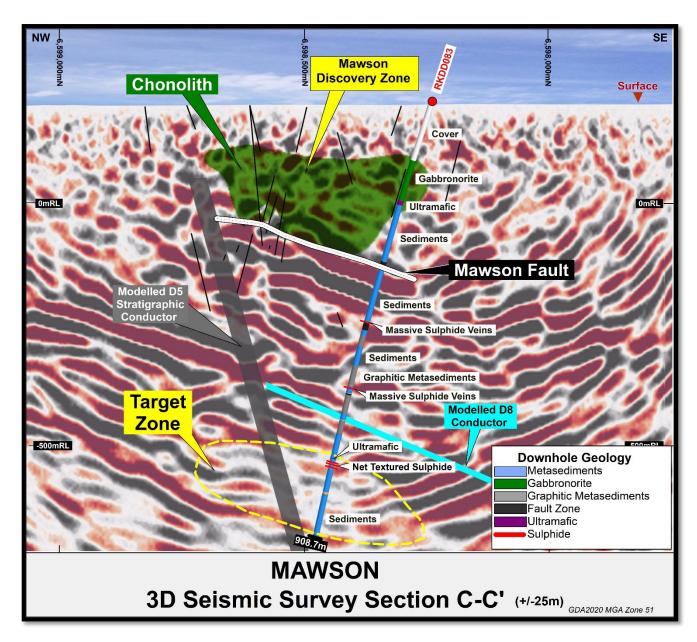


Figure 2: 3D Seismic section C-C' showing the Mawson chonolith with diamond drillhole RKDD083





Photo 1: Cross-cutting massive sulphide vein from RKDD083 from 480m, NQ2



Photo 2: Heavy Disseminated and Net-textured sulphide from RKDD083 from 751m, NQ2

## **ASX Announcement**





Diamond drillhole RKDD084 was designed to interrogate an area of seismic signature interpreted to be a continuation of prospective chonolith below existing RC drilling (see Figure 1 and Figure 3). The drillhole intersected a mineralised mafic intrusive package below existing drilling levels, confirming the Mawson chonolith extends at depth as predicted by the 3D seismic. The intrusive package was intersected over a wide zone as an intense array of norite and gabbronorite flat-lying and crosscutting dykes into the metasedimentary assemblage. Importantly, this metasedimentary assemblage contained a large abundance of carbonate, identified for the first time in abundance at Mawson. A <1m zone of massive magmatic sulphide with intense carbonate digestion was intersected at 450m downhole (see Photo 3). This intercept is strong evidence of carbonate horizons acting as preferential mineralisation traps. These carbonate stratigraphic horizons act as preferential pathways for the intrusion to propagate and focus into a zone in the country rock, as well as supplying easily digestible volatile for the mineralised intrusion. This is a significant identification in the understanding of the Mawson chonolith host stratigraphy, as the carbonate stratigraphic horizon is the host of the Nova chonolith and hosts the Nova and Bollinger orebodies. Detailed analysis is now underway on RKDD084.

Assay results, DHTEM, and petrophysical property measurements are pending.

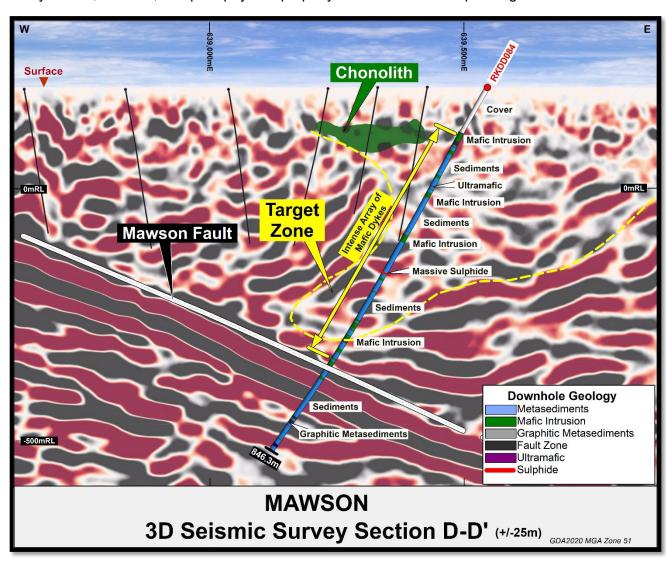


Figure 3: 3D Seismic section D-D' showing the Mawson chonolith with diamond drillhole RKDD084





Photo 3: Massive sulphide with digested carbonate from RKDD084 from 450m, NQ2

Diamond drillhole RKDD085 is underway at time of writing (see Figure 1).

This drillhole is designed to intersect a seismic signature replication of that identified by diamond drilling ~150m south. The geological, structural, and seismic interpretation is that the mineralised chonolith continues to the north-west of existing diamond drilling coverage.

#### **CORPORATE**

#### **Exploration Joint Venture Agreement Ponton JVA 2019**

Legend Mining Limited (Legend) and Mark Gareth Creasy, being the parties to the joint venture agreement, have varied the JVA whereby the Legend commitment to fund a proposed 2km diamond drillhole at the Octagonal prospect has been replaced with the commitment to fund a 24km<sup>2</sup> 3D seismic survey across the Octagonal prospect.



#### **FUTURE MAWSON PROGRAMMES**

- Seismic interrogation and modelling ongoing
- · Diamond drilling of seismic targets ongoing
- DHTEM, assays and downhole petrophysics on completed diamond drillholes

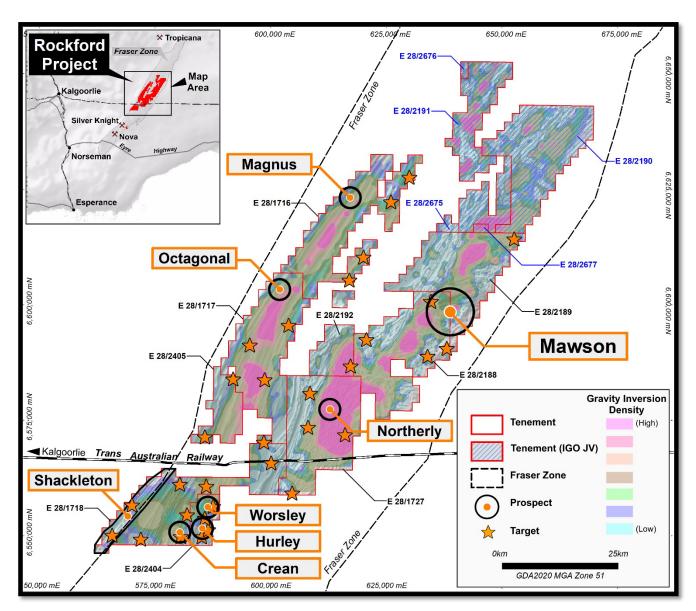


Figure 4: Rockford Project Prospect Locations on Gravity

Authorised by Mark Wilson, Managing Director.

# **ASX Announcement**





#### Appendix 1 - Mawson Diamond Drillhole Details

Hole	MGA2020-East	MGA2020-North	RL	Azimuth	Dip	Total Depth
RKDD081	638825	6598680	199	61	-68	955.7
RKDD082	640380	6599330	204	230	-70	633
RKDD082W1*	640380	6599330	204	230	-70	993
RKDD083	638665	6598245	204	330	-75	908.7
RKDD084	639550	6598790	204	270	-60	846.3
RKDD085**	639670	6599520	202	90	-60	Ongoing

<sup>\*</sup>RKDD082W1 is a wedge hole off RKDD082 at 347.4m

Co-ordinates GDA2020 Zone 51

#### **Appendix 2 - Legend Field Logging Guidelines**

#### **Legend Field Logging Guidelines**

Sulphide Mode	Percentage Range
Disseminated & blebby	1-5%
Heavy Disseminated	5-20%
Matrix	20-40%
Net-Textured	20-40%
Semi-Massive	>40% to <80%
Massive	>80%

#### 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 (17 March 2022 and 9 June 2022) 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:

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<sup>\*\*</sup>RKDD085 in progress



### Appendix 3:

# Legend Mining Ltd – Diamond Drilling 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>	HiSeis Pty Ltd conducted a ground seismic survey between 18 November and 8 December 2021, with survey details below.  Equipment area coverage: ~7.62 km² Total receivers: 8300 Total source points: 6012 Sample rate: 2 ms Record length: 3 s Source: INOVA AHV-IV (60000 lb) Source array: 1 x AHV-IV Source number: 2 ping pong  Recording Filters: Hi-cut: 0.8 Nyquist set to 205 Hz Notch: out Diversity stack: no  Source Parameters: Source spacing: 12.5 m nominal Sweep frequency: 6-160 Hz Sweep length: 20 s Sweep type: linear Source array: stacked Tapers: 500 ms Maximum source gaps: as required for safety  Receiver Parameters: Group spacing: varies: 12 m (highres) and 18 m (low-res) Geophone type: Quantum 5 Hz Case: land Frequency: 5 Hz Geophones per group: 1 Geophone spacing: varies: 12 m (high-res) and 18 m (low-res)
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.).	<ul> <li>Diamond drillholes RKDD083 and 084 were pre-collared using the mud rotary technique.</li> <li>No samples were recovered from the mud rotary pre-collar.</li> <li>The remainder of the holes were diamond drilled with HQ then NQ coring to end of hole.</li> <li>Terra Drilling completed the diamond</li> </ul>



Criteria	JORC Code Explanation	Commentary
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>	<ul> <li>drilling.</li> <li>Drill core sample recoveries for the HQ-NQ core were measured and recorded in drill log sheets.</li> <li>Drill core orientation was recorded when possible at the end of each drill run (line on bottom of core).</li> <li>No diamond drill core sampling has been undertaken.</li> </ul>
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</li> </ul>	<ul> <li>Geological logging of drillholes RKDD083 and 084 included; lithology, grainsize, texture, structure, deformation, mineralisation, alteration, veining, colour, weathering.</li> <li>Drill core logging is qualitative and based on drill core retained in core trays.</li> <li>The drillholes were logged in their entirety.</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 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 the material being sampled.</li> </ul>	No diamond core sampling has been undertaken.



Criteria	JORC Code Explanation	Commentary
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, 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> <li>Documentation of primary data, data entry procedures, data</li> </ul>	<ul> <li>Significant intersections were verified by senior exploration personnel.</li> <li>Primary data was collected in the field using a set of standard logging templates and entered into a laptop computer.</li> <li>The data was forwarded to Legend's database manager for validation and</li> </ul>
	verification, data storage (physical and electronic) protocols.  • Discuss any adjustment to assay data.	loading into the company's drilling database.
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</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> </ul>
	used.  • Quality and adequacy of topographic control.	Regional topographic control has an accuracy of ±2m based on detailed DTM data.
Data spacing and distribution	<ul> <li>Data spacing for reporting of 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 Resource.</li> </ul>	<ul> <li>No regular drill hole spacing has been set with individual holes design to intersect specific targets.</li> <li>Diamond drillholes RKDD083 and 084 were designed to test seismic features.</li> </ul>
	Resource and Ore Reserve estimation procedure(s) and classifications applied.	



Criteria	JORC Code Explanation	Commentary
	Whether sample compositing has been applied.	
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>	The relationship between drill orientation and mineralisation is unknown.
Sample security	The measures taken to ensure sample security.	<ul> <li>No diamond core sampling has been undertaken.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Internal audits/reviews of seismic procedures are ongoing, with external reviews managed by Terra Resources Pty Ltd.

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 ten granted exploration licences, covering 2,397km², (Legend manager).</li> <li>Rockford JV tenements: <ul> <li>E28/2188, 2189, 2192 (70%</li> <li>Legend, 30% Rockford Minerals Pty Ltd)</li> <li>E28/1716, 1717, 1718, 1727 (70%</li> <li>Legend, 30% Ponton Minerals Pty Ltd).</li> </ul> </li> <li>Legend 100%: E28/2404, 2405, 2795.</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, 2192, 2405 are covered by the Upurli Upurli Nguratja Native Title Claim. <ul> <li>Tenements E28/2188, and E28/2189 are covered 20% and 85% respectively by the Untiri Pulka Native Title Claim. Tenements E28/1718, E28/1727, E28/2404 &amp; E28/2795 are covered 90%, 20%, 100% 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> </li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Not applicable, not referred to.



Criteria	JORC Code Explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<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:         <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</li> </ul>	See Appendix 1.
Data aggregation methods	<ul> <li>explain why this is the case.</li> <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>	No assay results have been received.



Criteria	JORC Code Explanation	Commentary
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>The drill core has been oriented to enable structural logging and evaluation of true thicknesses of the mineralised intervals.</li> <li>Drillhole intercepts/intervals are measured downhole in metres.</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.	Project and drillhole location maps and seismic sections 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 EM surveys and DHTEM surveys have been used to target drilling.</li> <li>GEM Geophysics Pty Ltd to complete downhole electromagnetic (DHTEM) surveying in diamond holes RKDD083 and 084.</li> <li>DHTEM Details</li> <li>Loop Size: 800mx400m double turn &amp; 400mx400mx2 Figure 8</li> <li>Station Spacing: 2-10m intervals</li> <li>Sensor: B-field DigiAtlantis</li> <li>Base/frequency: 0.25Hz, 1,000ms time base, 0.5-1.0ms ramp</li> <li>Stacking: ~32-64 stacks, 2-3 repeatable readings</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>Submit selection of RKDD083 and 084 for geochemical analysis.</li> <li>Full integration of geological, structural, geophysical (including seismic), and geochemical data.</li> <li>Plan further diamond drillholes.</li> <li>Complete DHTEM surveying on completed diamond drillholes.</li> </ul>