



The Manager
Market Announcements Office
Level 40, Central Park,
152-158 St George's Terrace
Perth WA 6000

ACN: 142 411 390

T: 08 6489 1600

F: 08 6489 1601

E: info@emetalslimited.com.au

W: www.emetalslimited.com.au

Directors

Gary Lyons, Chairman

Mathew Walker, Director

Teck Siong Wong, Director

Sonu Cheema, Company Secretary

Issued Capital (ASX Code: EMT)

425,000,000 Ordinary Shares

25,000,000 Unquoted options exercisable at \$0.05 on or before 31 December 2022



12 April 2021

EXPLORATION UPDATE

eMetals Limited (ASX:EMT) ("eMetals" or the "Company") is pleased to update shareholders on exploration activities which have commenced across the Company's projects.

HIGHLIGHTS

- Drilling at Beryl Well Li-Ta-Nb-Be prospect and Nardoo Well tungsten skarns completed for an advance of 30 holes for 1.757m
- Multiple pegmatites intersected with **up to 63m of pegmatite** from surface (NWRC017, 0-63m).
- Significant pegmatites mapped and sampled at Morrissey South up to **100m thick and 500m** long.
- Moving Loop EM is has commenced on the Mughal Ni-Cu-PGE Prospect, Poona Project, testing for bedrock conductors associated with nickel anomalies.

eMetals Director Mathew Walker commented: "We are delighted drilling is underway on the Company's highly prospective Nardoo Rare Metals Project.

Drilling to date has confirmed the thickness and strike continuity of pegmatites at Beryl Well which have historical tantalite, beryl and lithium occurrences. Mapping at Morrissey South shows further potential, with mapping of huge pegmatites, and we await the results of initial sampling to determine ongoing exploration objectives.

At the Poona Project, the Company has developed the Mughal Ni-Cu-PGE project from its initial soil sampling results to an initial moving loop EM survey within 6 months, with a field crew on site. We expect to receive finalised results in the coming months."





Figure 1 Drill rig at Beryl Well E09/2156 on NWRC019

NARDOO RARE METALS PROJECT

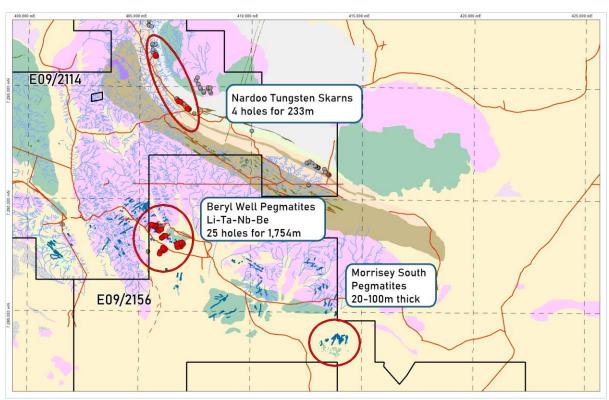


Figure 2 April 2021 exploration work, Nardoo Rare Metals Project



Drilling has tested the Nardoo Well tungsten skarns with 5 holes (NWRC001 to NWRC005) for 233m. Drill holes encountered skarnified calc-arenite as expected with assays in the laboratory and results expected within approximately 5 weeks.

Drilling has tested the Beryl Well Li-Ta-Nb pegmatite occurrence with 25 holes for 1,524 metres completed to date (NWRC006 to NWRC030). Drilling has demonstrated down hole thicknesses of up to 63 metres of pegmatite hosted in remnants of metasediment schist caught up within a foliated metagranite pluton. Pegmatite forms thick sheets or dykes up to 600m in length and up to 50m wide at surface that dip either northwest or southeast. The true thicknesses of the pegmatite dykes are not known but it is expected to be 30-100% of the down hole length. See Figure 3, below.

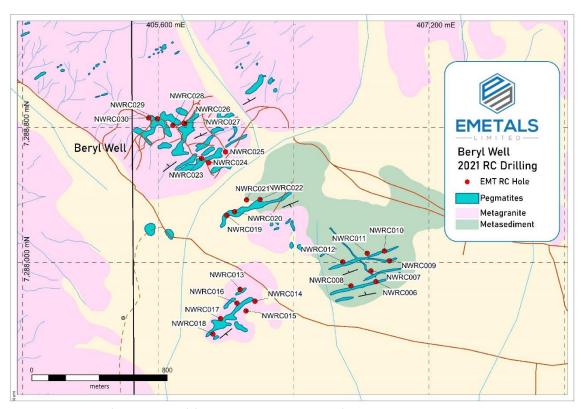


Figure 3 RC Drilling and mapped Pegmatites, Beryl Well Prospect

Mapping and surface sampling of pegmatites at Morrissey South has defined multiple pegmatite intrusions between 25 metres and 100 metres wide at surface, dipping steeply to sub-vertically hosted within metagranite. Individual intrusions continue for up to 500m. Rock chip and stream samples have been submitted for assay, with results due in approximately 6 weeks. Refer to Figure 4.



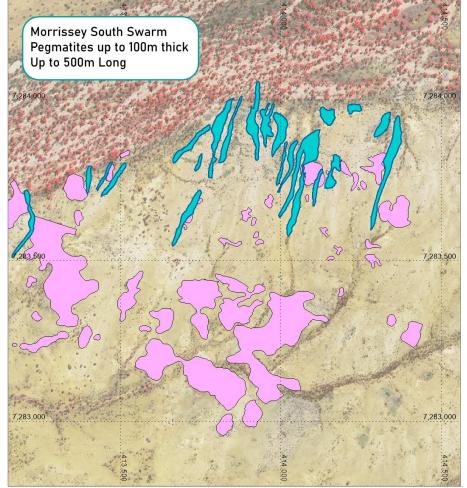


Figure 4 Pegmatite Swarm mapped at Morrissey South

MUGHAL NICKEL PROSPECT EM SURVEY

The Mughal Prospect is a greenfields nickel, copper and platinum group element prospect which eMetals Limited has developed on its 90% owned Poona Project, near Cue, Western Australia.

Evidence of potential nickel sulphide mineralization has been developed from soil sampling over mafic and ultramafic rocks carried out in 2020. Soil anomalies have been defined over approximately 9 kilometres of stratigraphy, with highly coincident geochemistry up to 0.15% Ni, 240ppm Cu, 380ppm Co and 114ppb PGE's overlying lateritised ultramafic rocks. eMetals interprets the stratigraphy to potentially represent a similar intrusive unit to the nearby 1.39 million ounce Parks Reef platinum project (Podium Minerals Limited).

Moving Loop EM has commenced on the Mughal Ni-Cu-PGE Prospect, Poona Project, testing for bedrock conductors that could represent magmatic nickel sulphides. Results will be interpreted by the Company's geophysical consultants and reported when modelling is completed. This is expected in the next 4 weeks.



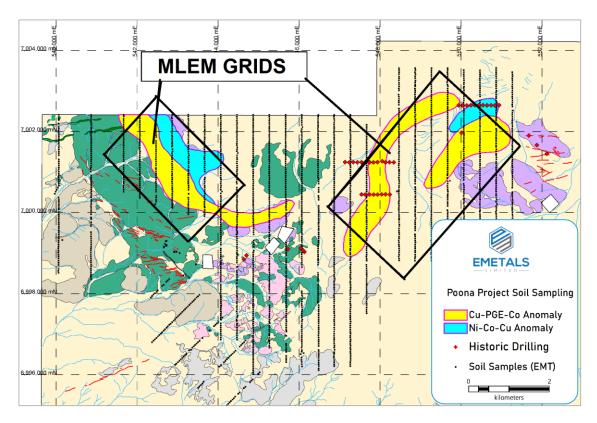


Figure 5 - Moving Loop EM Survey Grids, Mughal Prospect

ONGOING EXPLORATION

The Company is mobilizing the drill rig to the Twin Hills gold project to in-fill and extend upon on initial successful RC drilling (see ASX announcement 25th February 2021). A further 1,200 metres of AC and RC drilling is planned.

Thereafter, the Company will mobilise the drill rig to the Cowalinya ionic clay REE prospect to drill approximately 800m in a 'proof of concept' test.

ADDENDUM TO PRIOR EXPLORATION UPDATE DATED 29 MARCH 2021

EMT confirms a correction to the prior ASX release on 29 March 2021, in which the date for ASX release reference is corrected to 25 February 2021 <u>not</u> 3 March 2021 with respect to the results below.

 Drilling of the Twin Hills Project will recommence immediately thereafter with 1,200m of RC drilling to infill and extend the encouraging initial drilling program which returned results of:

8m @ 2.66g/t Au from 40m including 4m @ 3.62g/t Au from 44m (THRC014); 4m @ 1.18g/t Au from 32m (THRC015);

12m @ 0.62g/t Au from 40m including 4m @ 1.10g/t Au (THRC008); and which remains open in all directions (*Please refer announcement dated 25 February* 2021).



This announcement has been authorised by the Board of eMetals Limited.

For, and on behalf of, the Board of the Company
Mathew Walker
Director
EMETALS Limited

-ENDS-

Shareholders and other interested parties can speak to Mr Sonu Cheema if they have any queries in relation to this announcement: +618 6489 1600.

Forward looking statements

This announcement contains forward-looking statements which are identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects', or 'intends' and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this announcement, are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the directors and our management. We cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this prospectus will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. We have no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this announcement, except where required by law. These forward looking statements are subject to various risk factors that could cause our actual results to differ materially from the results expressed or anticipated in these statements.

Competent Persons Statement

The information in this announcement that relates to Exploration Results is based on and fairly represents information and supporting documentation prepared by Mr Roland Gotthard. Mr Gotthard is a consultant geologist for eMetals and a member of the Australian Institute of Mining and Metallurgy. Mr Gotthard has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this announcement and to the activity which they are undertaking 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 Gotthard consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.



DRILL HOLE COLLAR INFORMATION

Hole_ID	MGA_E	MGA_N	Azi	Dip	EOH Depth	Prospect	Target
NWRC001	405707	7296369	100	-60	55	Nardoo Well	W Skarn
NWRC002	405677	7296416	70	-70	40	Nardoo Well	W Skarn
NWRC003	406717	7294376	40	-65	40	Nardoo Well	W Skarn
NWRC004	406820	7294338	40	-80	46	Nardoo Well	W Skarn
NWRC005	407135	7294029	40	-70	52	Nardoo Well	W Skarn
NWRC006	406885	7287889	320	-60	79	Beryl Well	Pegmatite
NWRC007	406856	7287952	165	-60	31	Beryl Well	Pegmatite
NWRC008	406738	7287864	140	-60	80	Beryl Well	Pegmatite
NWRC009	406965	7288012	140	-60	77	Beryl Well	Pegmatite
NWRC010	406935	7288070	140	-60	85	Beryl Well	Pegmatite
NWRC011	406834	7288056	140	60	80	Beryl Well	Pegmatite
NWRC012	406690	7288005	140	-60	80	Beryl Well	Pegmatite
NWRC013	406083	7287843	130	-60	34	Beryl Well	Pegmatite
NWRC014	406171	7287773	310	-60	109	Beryl Well	Pegmatite
NWRC015	406118	7287716	310	-60	49	Beryl Well	Pegmatite
NWRC016	406064	7287762	140	-60	80	Beryl Well	Pegmatite
NWRC017	405968	7287670	130	-60	80	Beryl Well	Pegmatite
NWRC018	405923	7287579	140	-60	80	Beryl Well	Pegmatite
NWRC019	406005	7288280	60	-60	40	Beryl Well	Pegmatite
NWRC020	406051	7288302	140	-60	80	Beryl Well	Pegmatite
NWRC021	406121	7288372	140	-60	60	Beryl Well	Pegmatite
NWRC022	406201	7288374	140	-60	80	Beryl Well	Pegmatite
NWRC023	405855.35	7288616.6	140	-60	80	Beryl Well	Pegmatite
NWRC024	405898	7288591	330	-60	40	Beryl Well	Pegmatite
NWRC025	405997	7288655	330	-60	40	Beryl Well	Pegmatite
NWRC026	405757	7288821	160	-60	20	Beryl Well	Pegmatite
NWRC027	405751	7288825	340	-60	40	Beryl Well	Pegmatite
NWRC028	405686	7288812	160	-60	20	Beryl Well	Pegmatite
NWRC029	405595	7288851	160	-60	52	Beryl Well	Pegmatite
NWRC030	405543	7288856	160	-60	28	Beryl Well	Pegmatite

Table 1 2021 RC Holes, Nardoo Rare Metals Project
MGA94 z505 Projection

GPS Survey +/-3m Accuracy



59.5 - 80 m

Metasediment Gneiss

DRILL HOLE SUMMARY LOGS, BERYL WELL RC DRILLING

DRILL HOLL 30	WILL HOLL SOMMANT LOOS, BENTE WELL NO BRIEFING				
NWRC006					
0 - 79m	Metasediment Schist and Granite	NWRC019			
		0 – 12m	Pegmatite		
NWRC007		12 - 40m	Metasediment Gneiss		
0 - 1.5m	Pegmatite				
1.5 - 3m	Metasediment Schist	NWRC020			
3 - 10m	Pegmatite	0 - 63.5 m	Pegmatite		
10 - 31m	Schist and Granite	63.5m - 80m	Granite, Metasediment		
NWRC008		NWRC021			
0 - 7m	Granite	0 – 45m	Pegmatite		
7 - 30m	Pegmatite	45 – 60m	Granite, Metasediment		
30 - 80m	Granite and Schist.				
		NWRC022			
NWRC009		0 – 8m	Granite		
0 - 77m	Schist and Granite	8 – 24m	Pegmatite		
		25m – 25m	Metasediment		
NWRC010		25 – 26.5m	Pegmatite		
0 - 5.5m	Granite	26.5 – 28.5m	Metasediment		
5.5 - 11.5m	Pegmatite	28.5 – 30m	Pegmatite		
11.5 – 85m	Granite and Schist	30 – 53m	Granite, Metasediment		
NIM/DC 044		53 – 54.5m	Pegmatite		
NWRC 011 0 – 28m	Granite and Schist	54.5 – 80m	Metasediment		
28 - 39.5m	Pegmatite	NWRC023			
39.5 – 80m	Schist and Granite	0 – 80m	Granite, Metasediment		
39.3 – 6011	Schist and Granite	0 – 00111	Granite, Metasediment		
NWRC012.		NWRD024			
0 - 18	Gr/Schist	0 – 24m	Pegmatite		
18 - 35	Pegmatite	24 – 40m	Metasediment Schist		
35 – 80m	Schist and Granite				
		NWRC025			
NWRC013		0 - 4m	Metasediment Schist		
0 - 13m	Metasediment Schist	4 - 20m	Altered Schist		
13 – 19m	Pegmatite	20 - 31.5m	Pegmatite		
19 – 34m	Schist and Granite	31.5 – 40m	Metasediment Schist		
NWRC014		NWRC026			
0 – 27m	Schist and Granite	0 – 11	Pegmatite		
27 – 59m	Pegmatite	11 – 20m	Metasediment Schist		
59 – 109m	Granite and schist with minor	NIM/DO007			
pegmatites		NWRC027	Do anno all'Illa		
NIMPC01E		0 – 25m	Pegmatite Metasediment Schist		
NWRC015 0 – 10m	Pegmatite	25 – 40	Metasediment Schist		
10 - 49	Metasedimentary Schist	NWRC028			
10 - 49	Wetasedimentary Scriist	0 – 9m	Pegmatite		
NWRC016		9 – 20m	Metasediment Schist		
0 - 29	Pegmatite	0 2011	Wetascament Const		
29 - 80	Metasedimentary Schist.	NWRC029			
~		0 – 36m	Pegmatite		
NWRC017		36 – 52m	Metasediment Schist		
0 - 63.5m	Pegmatite				
63.5 – 80m	Metasediment Gneiss	NWRC030			
		0 – 16m	Metasediment Schist		
NWRC018		16 – 21m	Pegmatite		
0 – 23m	Metasediment Gneiss	21 – 28	Metasediment Schist		
23 - 59.5m	Pegmatite				
E0 E 90 m	Matagadiment Chaigs				



JORC CODE, 2012 EDITION - TABLE 1

Critoria	IOPC Code explanation	apply to all succeeding sections.)		
Criteria	JORC Code explanation	Commentary		
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	 Reverse circulation drilling 1 metre conical split samples taken from drill rig splitter used to obtain a 2-3kg sample 3kg sample pulverized and split to a 5g sub-sample Rock chip sampling Stream sediment sampling used the 0.4mm to 0.96mm fraction taken from stream bed samples 		
	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.			
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).	 Slim line reverse circulation drilling using a truck mounted rig with auxiliary compressor with 550cfm air capacity Face sampling hammer 		
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 Sample recovery was assessed qualitatively, with sample moisture, bulk recovery and quality recorded Samples were collected via dry samples No known relationship between sample recovery and assay grade can be determined from the limited drilling undertaken to date 		
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 	 A reference set of rock chips were collected into chip trays for logging by the on-site geologist for every metre drilled Chip trays were photographed to assist in verification of mineralised intercepts Logging is qualitative only and used for geochemical purposes 		



Criteria	JORC Code explanation	Commentary		
	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. 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. 	 Reverse circulation drilling was used to obtain 2-3 kilograms of rock chips per metre Samples were collected every metre into calico sample bags via conical splitter with a duplicate sample collected every 18 metres into a calico sample bag Samples were split to 500g, pulverised and a 25g charge assayed Sample quality was monitored for recovery and moisture content to ensure adequate sample recovery Bulk sample rejects were placed on the ground and reference rock chips collected in plastic sampling trays for geological logging and any further spectroscopic work The sampling method is considered appropriate for low-level geochemical reconnaissance sampling Sample size is considered appropriate to the material being sampled Samples are dried, pulverised and split to 25g in the laboratory prior to assay 		
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. 	 Appropriate matrix-matched, low-level commercially available geochemical standards were inserted at a rate of 2 per 100 samples Duplicate samples on 1m samples were collected in the field at the rate of 1 per 18 Samples assayed via a variety of methods Tungsten Skarn samples assayed via sodium peroxide fusion, nickel crucible with ICP-MS finish for tungsten and REE's, and Peroxide Fusion with XRF Pegmatite samples assayed via 4-acid digestion Lithium Package with ICP-OES finish, with Ta-Nb >500ppm via LiB fusion Stream sediments assayed via 4 acid digest, with ICP-MS for 48 elements plus REEs Single metre assays via 50g charge lead collection fire assay 		



Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. 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. 	 Data entry is via tough pad or similar digital tablet in the field Significant intersections were verified by alternate company personnel No twinned holes have been conducted Assay data is not adjusted. Fusion digestion is prioritized over 4-acid digestions and significant mineralized tungsten, Ta-Nb, or REE results are confirmed via fusion digestion All sample pulps are stored at a dedicated facility by EMT
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. Quality and adequacy of topographic control. 	 Holes were located in the field using a handheld tough pad with GPS capability and locations recorded in the field Downhole survey was via slimline gyroscopic instrument at a minimum of 40m intervals or EOH shot
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. 	 Data spacing is considered appropriate for exploration of this nature Drill hole spacing is not sufficient to calculate a mineral resource. Further work is planned.
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. 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. 	 Mapping of pegmatite outcrops shows clear NE strike and drilling is oriented orthogonal to strike Drilling has shown that individual pegmetites dip in various directions and hence, true thickness is uncertain Based on all information to date, drilling is oriented roughly orthogonal to structural and stratigraphic trends The true orientation of structural controls is not known at this stage, but it is unlikely to be unduly influencing reported wiaths
Sample security	The measures taken to ensure sample security.	Samples were delivered via commercial courier company
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Not applicable



Section 2 Reporting of Exploration Results

Criteria listed in the preceding section also apply to this section.

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status Exploration done by other parties	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. Acknowledgment and appraisal of exploration by other parties. 	 E09/2114, E09/2156 and E09/2472 is owned 100% by RWG Minerals Pty Ltd, a subsidiary of eMetals Limited E20/885 is owned 90% by RWG Minerals Pty Ltd, a subsidiary of eMetals Heritage clearances and agreements are in place and drilling is under an approved Programme of Works Considerable historical exploration has been carried out by Venus Metals Corporation Ltd and other parties Drilling of Beryl Well occurred in around 1996 but no results are recorded in the WAMEX database
Geology	Deposit type, geological setting and style of mineralisation.	Skarnified carbonate sediments bearing scheelite at Nardoo Well Sheets of Li-Be-Ta-Nb-REE pegmatite within metasediments and metagranites at Beryl Well
Drill hole Information	 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	A map of drill holes is provided illustrating the drilling



	MITED iteria	JORC Code explanation	Commentary
•	Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	• N/A
•	Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	 Insufficient work has been undertaken to understand the true width of any mineralization Summary logs are provided for context
•	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.	No cross sections are presented as the data is incomplete and requires interpretation
•	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.	 True width of pegmatite at Beryl Well is not known with certainty due to the variable dip and orientation of the dykes Based on outcrop mapping and drilling information true thickness is believed to be from 60-100% of down hole length
•	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.	Not applicable
•	Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Infill drilling where warranted