ASX RELEASE
22 JANUARY 2021
ASX: JRL

PROSPECT RIDGE: EXPLORATION TARGET FOR LYONS RIVER DEPOSIT

- **Exploration Target Range estimated for Lyons River deposit**
- **Mineralisation at Lyons River remains open at depth**
- **ETR is in addition to Jindalee's Arthur River resource, 6.5km to the north**

Note that the potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Jindalee Resources Limited (**Jindalee**, the **Company**) is pleased to announce the completion of an Exploration Target Range (ETR) at its Lyons River magnesite deposit as part of the greater Prospect Ridge Project. The Prospect Ridge Project is 100% owned by Jindalee.

The Lyons River ETR is based on a total of 37 diamond drillholes completed by CRA Exploration (now Rio Tinto) between 1982 and 1989 (Figure 1) with mineralisation delineated over a 2km strike, 400m wide and 300m deep. Mineralisation remains open at depth.

At a 40% MgO cut-off, the ETR is 40 to 60 Mt @ 40 – 44% MgO, 2.5 – 3.5% CaO, 5.5 - 6.5 % Fe_2O_3 and 1.0 - 1.2% SiO with (Table 1). The ETR is constrained to 100m depth from surface. Other details pertaining to the calculation of the ETR are included in Annexure A with drillhole data in Annexure B.

Cut Off (% MgO)	Mass (Mt)	MgO %	CaO %	Fe_2O_3 %	SiO_2 %
>40%	40-60	40-44	2.5-3.5	5.5-6.5	1.0-1.2
>38%	90-110	40-42	3.0-4.0	8.0-10.0	0.9-1.0
>35%	140-180	38-41	3.0-5.0	10.0-11.0	0.9-1.0
No cut	200-250	35-37	6.0-7.0	10.0-12.0	0.9-1.0

Table 1 – Lyons River Exploration Target Range at a series of MgO cut-offs reported above 100mRL

The Lyons River ETR demonstrates the potential to increase the existing Mineral Resource base at the Prospect Ridge Project, which should positively impact the economics of any mining studies at the Project. A 3,000m diamond drill program has been designed to infill the deposit to provide the necessary confidence in grade and geological continuity required to upgrade the ETR to a Mineral Resource.

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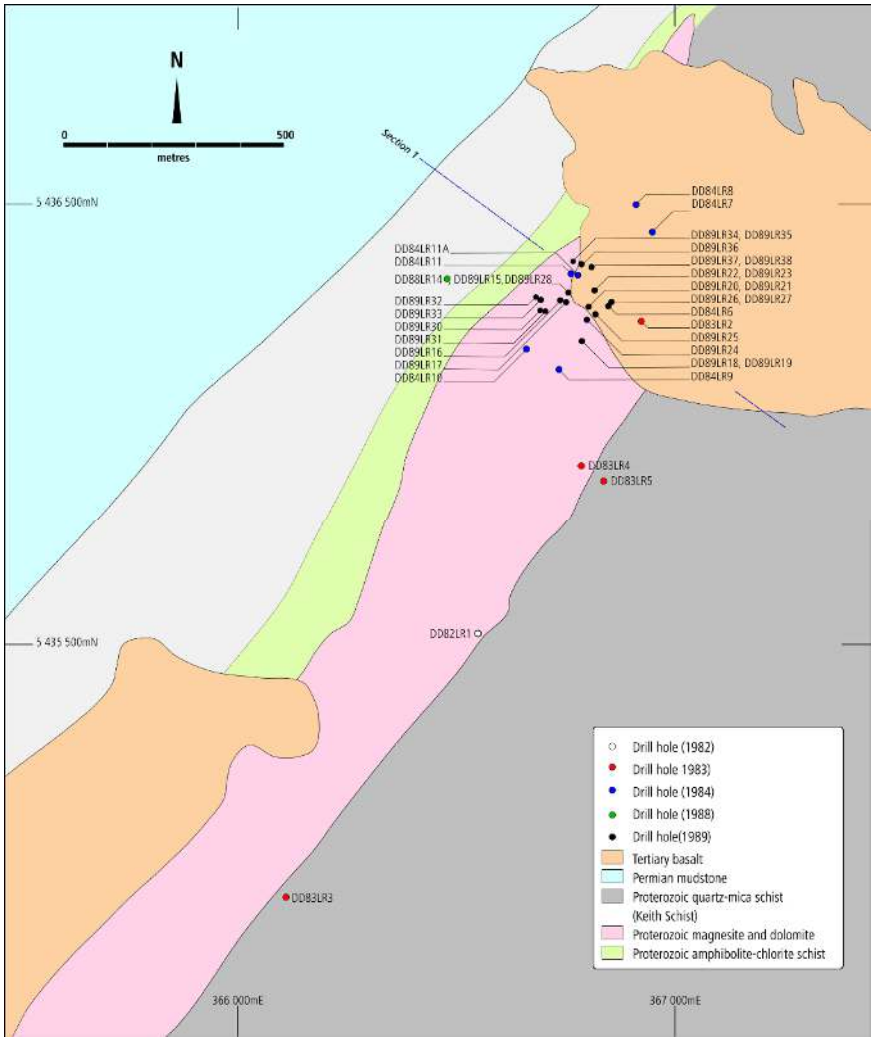


Figure 1 – Plan of drillhole collar positions at Lyons River

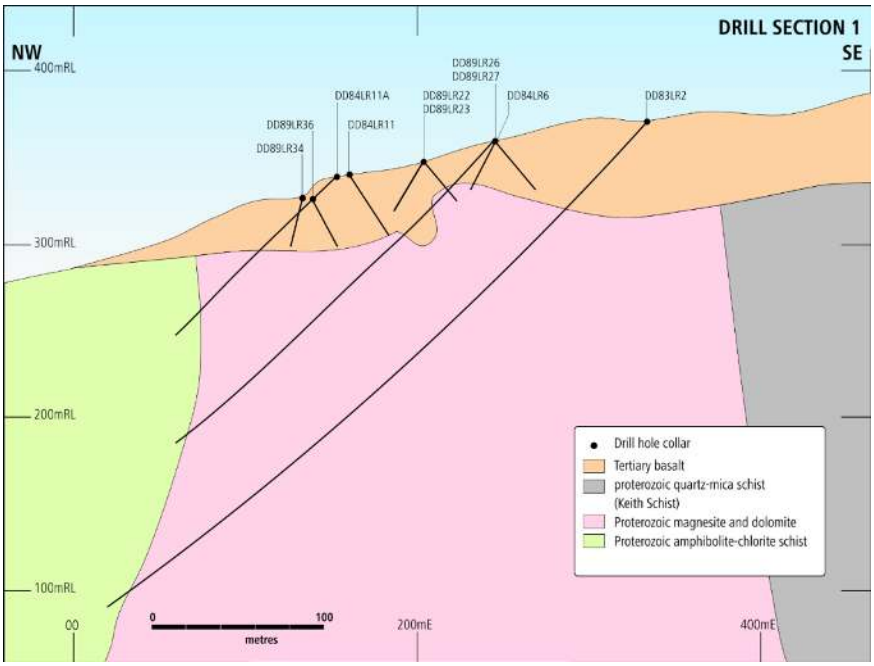


Figure 2 – North west to South east cross section through Lyons River

Prospect Ridge Project – Background



Figure 3 – Location of Prospect Ridge Project

The Prospect Ridge project is located in north-west Tasmania and consists of both the Arthur River and Lyons River magnesite deposits (Figure 3) with Jindalee holding 100% beneficial interest in the project.

Magnesite was first discovered in the area in 1925, with exploration conducted over a 40-year period by Mineral Holdings Australia, BHP, Crest Magnesium, CRA (now Rio Tinto) and Beacon Hill Resources Plc.

Jindalee acquired the project in May 2016[1] and has steadily progressed the project by converting the historic resources into JORC 2012 compliant equivalents.

In late 2017 Jindalee announced an Inferred Mineral Resource of **25Mt @ 42.4% MgO, 2.6% CaO, 1.4%Fe_2O_3 and 4.8% SiO** at 40% MgO cut-off[2] at the Arthur River deposit (refer Table 2, below):

Lower Cut Off (% MgO)	Mass (Mt)	MgO %	CaO %	Fe_2O_3 %	SiO_2 %
44%	3.05	44.5	1.9	1.0	3.0
42%	15.3	43.3	2.2	1.3	4.2
40%	25.1	42.4	2.6	1.4	4.8
38%	32.1	41.7	2.8	1.6	5.4
36%	36.8	41.1	2.9	1.7	5.9

Table 2 – Arthur River Inferred Mineral Resource

The Arthur River Mineral Resource was reported using a cut-off grade of 40% MgO, which is considered appropriate in the context of similar projects and based on an assessment of the likelihood of future economic extraction as required by the JORC (2012) Code. The Arthur River Mineral Resource is located 6.5km north along strike of the Lyons River deposit, with the area between the two deposits only lightly explored.

Jindalee is actively engaged in discussions with potential project partners seeking to continue advancing the Prospect Ridge project.

The Company confirms that it is not aware of any new information or data that materially affects the information included in this market announcement and that all material assumptions and technical parameters underpinning the estimates of mineral resources referenced in this market announcement continue to apply and have not materially changed.

About Magnesite

Magnesite or magnesium carbonate ($MgCO_3$) is the primary source of magnesia (MgO). Annual production of magnesia is approximately 9.4Mt with about 90% of this produced from magnesite feedstock and the balance from seawater and magnesia rich brines. There are three main types of magnesia: caustic calcined magnesia (CCM), deadburned magnesia (DBM) and electrofused magnesia (EFM). CCM is used as a chemical in a number of markets including agriculture (fertiliser and feedstock), mineral processing, pulp and paper manufacture and water treatment. DBM and EFM are used mainly in the refractory industry as a kiln liner and so are essential for the production of steel, cement and glass.

Magnesia and magnesium brines are also used to make magnesium metal (Mg). Magnesium (atomic number 12) is one of the lightest metals and is commonly alloyed with aluminium to create a light, high-strength and corrosion-resistant alloy which is widely used in the aerospace and automotive industries. Magnesium is also being increasingly used in the electronics industry, in both primary and rechargeable batteries and in superconductors. It is also used as a desulphurisation agent in steelmaking.

The strong forecast growth in demand for magnesium has seen the European Commission include magnesium in their latest list of 30 EU Critical Materials, published September 2020 (refer www.ec.europa.eu).

Authorised for release by the Board of Jindalee Resources Limited.

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About Jindalee

Jindalee Resources Limited (ASX: JRL) is an exploration company with direct and indirect exposure to lithium, gold, base and strategic metals, iron ore, uranium and magnesite through projects generated by the Company's technical team. Jindalee has a track record of rewarding shareholders, including priority entitlements to several successful IPO's and payment of a special dividend.

Jindalee's strategy is to acquire prospective ground, add value through low-cost exploration and, where appropriate, either introduce partners to assist in funding further progress, or fund this activity via a dedicated company in which Jindalee retains a significant interest.

At 30 September 2020 Jindalee held cash and marketable securities worth approximately $3.9M, with a further $0.62M raised in an entitlement offer which closed 16 October 2020[3]. This funding, combined with the Company's tight capital structure (only 44.7M shares on issue), provides a strong base for advancing projects currently held by Jindalee and leveraging into new opportunities.

References:

Additional details including JORC 2012 reporting tables, where applicable, can be found in the following releases lodged with ASX and referred to in this announcement:

1. Jindalee Resources ASX announcement 23/05/2016: "Jindalee acquires Australia's 3rd largest magnesite deposit".
2. Jindalee Resources ASX announcement 10/10/2017: "Arthur River Magnesite Deposit (JORC 2012) Resource Estimate".
3. Jindalee Resources ASX announcement 29/10/2020: "Quarterly Activities & Cashflow Report".

Competent Persons Statement

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Lindsay Dudfield and Mrs Karen Wellman. Mr Dudfield is consultant to the Company and a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mrs Wellman is an employee of the Company and a Member of the Australasian Institute of Mining and Metallurgy. Both Mr Dudfield and Mrs Wellman have sufficient experience relevant to the styles of mineralisation and types of deposits under consideration, and to the activity being undertaken, to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves.' Mr Dudfield and Mrs Wellman consent to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to the Exploration Target and the Mineral Resource Estimate for the Lyons River deposit is based on information compiled by Mr. Tim Callaghan, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Callaghan is an independent mining consultant for Resource and Exploration Geology engaged by Jindalee Resources. Mr Callaghan has sufficient experience relevant to the style of mineralisation and type 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. Callaghan consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Forward-Looking Statements

This document may contain certain forward-looking statements. Forward-looking statements include but are not limited to statements concerning Jindalee Resources Limited's (Jindalee's) current expectations, estimates and projections about the industry in which Jindalee operates, and beliefs and assumptions regarding Jindalee's future performance. When used in this document, the words such as "anticipate", "could", "plan", "estimate", "expects", "seeks", "intends", "may", "potential", "should", and similar expressions are forward-looking statements. Although Jindalee believes that its expectations reflected in these forward-looking statements are reasonable, such statements are subject to known and unknown risks, uncertainties and other factors, some of which are beyond the control of Jindalee and no assurance can be given that actual results will be consistent with these forward-looking statements.

Annexure A:
JORC Code, 2012 Edition – Table 1
Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg 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.* • *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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• The Lyon's River Magnesite deposit has been sampled through several historic surface diamond drilling campaigns between 1983 and 1989 by CRA Exploration (CRAE) • 37 historic diamond drill holes were completed for 3,553m • Approximately 3-5m samples of 10-15kg were taken from diamond saw cut drill core whilst respecting geological boundaries
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• Generally NQ diamond core for surface drillholes reducing to BQ down hole • Core was not oriented
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.*	• Core was reconstituted, marked up and measured for recovery in all drilling campaigns • Generally poor to very poor in weathered and karst carbonates, excellent elsewhere (95-100%) • No relationship between recovery and grade was observed
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*	• Historic core was geologically logged onto handwritten paper logs by experienced personnel • Standard lithology codes were assigned to geology logs

Criteria	JORC Code explanation	Commentary
	studies. • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Recoveries were logged • Historic logs were loaded into excel spreadsheets and uploaded into access database by experienced geologist.
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.*	• No record of historic sample preparation but evidently core split by diamond saw on 3 – 5m sample intervals while respecting geological contacts • Core was delivered to commercial Laboratories in Burnie (Analabs) • No record of sample preparation was located but assumed to have been standard crushing, splitting and pulverizing of subsample to pass 70micron, which was employed by commercial laboratories of the time
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• No record of QAQC procedures were available for historic sampling • Historic samples were assayed for standard whole rock MgO, CaO, Fe2O3, SiO2, MnO, Na2O, K2O, SO3, Al2O3 by fusion disc XRF and LOI in commercial Analabs laboratory
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.*	• No direct verification sampling was completed • Metallurgical bulk samples were similar to drill hole analyses • No independent laboratory analyses were completed • No twinned holes were drilled • Primary assay data was presumably received electronically and on paper as per the time • Historic data was loaded into excel then Access database • Data validation with Surpac software, basic statistical analysis

Criteria	JORC Code explanation	Commentary
		and comparison with historic plans and sections • Below detection limit assay data has been entered as -0.01%
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.*	• No hole collar surveys are available • All coordinates were digitized from plans in GDA94 datum • RL's were recorded as MSL • Down hole surveys by Eastman single shot downhole camera • Topographic dtm created from 10m contours
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.*	• Sample spacing approximately 500 x 500m for much of the resource with minor 100 x 100m drilling in the north • Drill spacing is NOT considered to be appropriate for the estimation of Measured and Indicated Mineral resources • Samples have been composited on 3m intercepts for the resource estimation
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.*	• The majority of DDH have been drilled northwest sub-perpendicular to the steeply dipping mineralisation • Drill hole orientation is not considered to have introduced any material sampling bias
Sample security	• *The measures taken to ensure sample security.*	• No information on sample security is available • Drill core is stored in Mineral Resources Tasmania core library
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of sampling data and techniques were completed

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	• *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.*	• EL5/2016 is located at Arthur River, Northwest Tasmania • The EL is 100% owned by Jindalee Resources Limited through its subsidiary HiTec Minerals Pty Ltd • The area is located in State forest which abuts a national park. However there are no known or experienced impediments to operating a license in this area • EL5/2016 expires in November 2021 • State Royalties are 5.35% on any future production with a 1% royalty payable to an outside party
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Exploration and drilling completed by CRAE with technical studies completed by Crest Magnesium and Tasmanian Magnesite Ltd
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Lyon's River magnesite deposit is a metasomatic replacement of calcareous sedimentary rocks within the Proterozoic Arthur Metamorphic Lineament, northwest Tasmania. Magnesite occurs as complete to partial replacement of dolomite forming massive and brecciated mineralisation. Karstic features are common near surface and on the western margin

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.*
		• Drillholes summarised in Annexure B

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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.*	• No top cuts were applied • No metal equivalents were used • Mineralised zones were reported as length weighted intercepts
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 (eg 'down hole length, true width not known').*	• Most drill holes have been drilled to intercept the deposit at high angles to best represent true widths of the mineralisation • Downhole lengths reported
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.*	• See body of announcement
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.*	• Not applicable. This report is a Mineral Resource Estimation and does not contain any exploration Results. • All drillhole data summarised above
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.*	• Bulk samples and diamond drill core have been selected for metallurgical test work by Jindalee and previous workers. Based on metallurgical test work conducted by Jindalee, Crest, CRAE and TMNL it is reasonable to assume that marketable calcine products can be produced from the magnesite, utilizing floatation and calcining
Further work	• *The nature and scale of planned further work (eg 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.*	• Further resource infill drilling on 100m spaced centres is recommended. Routine bulk density, recovery and geotechnical logging is recommended

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• All data was captured and stored in customized Access database • Data integrity was validated with Surpac Software for EOH depth and sample overlaps and transcription errors • Historic data was digitized by database consultants and uploaded to access database • Data was validated against historic plans and sections • Below detection results were converted to -0.01%
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• No site visit was undertaken by the Competent Person responsible for the calculation of the ETR
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• High confidence in the broad scale geological model. Low confidence in local dolomite-magnesite variability • Diamond drillholes and sections were used for geological domaining • No alternative geological interpretations were attempted • A geology model was used for mineralised domain modelling • Mineralogical variability affects grade and the geology model
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• NE-SW striking, vertical to steep south east dipping stratabound mineralisation extends 2,000m in strike, by 400m width and open at depth
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.*	• Block modeled estimation was completed with Surpac TM software licensed to Tim Callaghan. • Wire-framed solid models were created from diamond drillholes and sectional interpretation. • Solid models were snapped to drill holes • No minimum mining width • No internal dilution sub domained. Dilution was restricted by search ellipse anisotropy • Data was composited on 3m downhole lengths including MgO, CaO, SiO2, LOI and Fe2O3

Criteria	JORC Code explanation	Commentary
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• No top cutting was required. • There is an inverse correlation between MgO and CaO • Rotated (25°) block model extent of 5434500N to 5438000N, 365000E to 367500E and -150 to 410m • No variogram models were produced due to insufficient data • Search ellipse set at 500m spherical range to ensure most blocks above 100m RL populated with strong anisotropy of 1y:3x • Inverse distance squared block model constrained by geology solid model • Block grades were validated visually against input data • Good correlation with previous estimations
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The estimate based on a dry tonnage basis
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Cut off grades have been based on the natural break between magnesite and dolomite from univariate statistics. Metallurgical testwork has also informed cut-off grade analysis • 35%, 38% and 40% MgO cut offs were used for modelling and reporting
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Given the geometry of the mineralisation (2,000m long x 400m wide x >100m deep) it is assumed that mining will be via open pit
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous.*	• Based on metallurgical test work conducted by Jindalee, Crest, CRAE and TMNL it is reasonable to assume that marketable calcine products can be produced from the magnesite, utilizing floatation and calcining

Criteria	JORC Code explanation	Commentary
	Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• No environmental assumptions have been made in this report Standard approval process through local and state government agencies are anticipated if further mining studies are warranted
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk density was derived from CRAE reports and the northern Arthur River resource estimation as it was deemed to be similar • Further systematic bulk density determination is recommended, as is modelling of karst • Bulk densities used were 2.7 for magnesite and 2.5 for waste rock
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The estimation was not considered to be classifiable under the guidelines of the 2012 edition of the JORC Code. Drill data spacing, location, QAQC and bulk density determinations were considered inadequate • An exploration target has been defined to assist decision making and future exploration
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No audits or reviews have been completed for this estimation
Discussion of relative	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For*	• The Drill data spacing, location, QAQC and bulk density determinations were considered inadequate for accurate modelling of the resource

Criteria	JORC Code explanation	Commentary
accuracy/ confidence	*example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Mineralogical variability between dolomite and magnesite is considered the most important and inadequately constrained variable for accurate estimation of resources • Infill drilling and data acquisition is recommended

Annexure B:

Summary table of drillhole data for Lyons River with all coordinates in GDA94

Hole ID	Northing	Easting	RL	EOH	Dip	Azimuth	From	To	Length	MgO %	CaO %	SiO2 %	Fe2O3 %
DD82LR1	5435525	366535	245	389	-50	319.5	22.7	369.4	346.7	36.5	8.2	9.3	1.6
DD83LR2	5436235	366915	372	418.5	-46	311	68.5	407.3	338.8	39.3	5.1	8.6	0.8
DD83LR3	5434925	366110	245	367.5	-46	298.5	50	92.1	42.1	35.2	12.2	6.3	0.6
DD83LR4	5435900	366795	290	37	-50	311	No significant interval						
DD83LR5	5435905	366830	310	452.5	-46	299.5	133.4	445.6	312.2	35.0	7.6	11.7	0.9
DD84LR6	5436275	366835	360	223	-46	300	25.64	223	197.36	36.4	9.4	11.6	1.2
DD84LR7	5436440	366935	347	176	-46	299.5	27	146	119	40.6	6.4	10.6	0.4
DD84LR8	5436500	366900	330	59	-46	299.5	No significant interval						
DD84LR9	5436125	366725	328	209	-46	300	23	196.7	173.7	31.8	9.9	13.9	1.4
DD84LR10	5436170	366655	332	138	-48	300	2	98	96	29.2	15.5	10.0	1.8
DD84LR11	5436340	366770	340	109	-46	300	No significant interval						
DD84LR11A	5436340	366765	340	128	-46	300	49.6	101.2	51.6	42.8	0.8	8.3	0.9
DD88LR14	5436302.8	366743.6	321	30	-60	300	No assay data						
DD89LR15	5436302.8	366743.6	321	40	-45	120	10.5	40	29.5	40.5	2.1	9.5	1.4
DD89LR16	5436283.8	366727.6	326	35	-60	300	14.4	35	20.6	34.0	7.9	13.6	0.5
DD89LR17	5436283.8	366727.6	326	35	-50	120	10.5	35	24.5	40.9	1.0	9.4	0.8
DD89LR18	5436189.8	366775.6	351	40	-55	120	20.4	40	19.6	33.1	3.7	21.4	1.6
DD89LR19	5436189.8	366775.6	351	45	-55	300	26	45	19	26.5	15.8	11.8	0.6
DD89LR20	5436265.8	366791.6	345	40	-65	300	11.5	40	28.5	31.0	8.3	15.9	1.4
DD89LR21	5436265.8	366791.6	345	30	-45	120	2	30	28	29.2	12.1	10.8	1.4
DD89LR22	5436304.8	366805.6	349	35	-60	300	15.5	35	19.5	25.6	25.6	8.7	1.4
DD89LR23	5436304.8	366805.6	349	30	-45	120	8	30	22	32.4	4.9	18.3	1.1
DD89LR24	5436240.8	366790.6	356	35	-50	120	No assay data						
DD89LR25	5436251.8	366808.6	358	40	-60	300	19.9	40	20.1	33.3	6.4	15.9	1.6
DD89LR26	5436275.8	366835.6	360	30	-60	300	21	30	9	35.7	1.4	19.4	1.2
DD89LR27	5436275.8	366835.6	360	35	-50	120	20.6	35	14.4	31.9	4.0	21.7	1.2
DD89LR28	5436302.8	366743.6	326	20	-90	300	15	20	5	42.1	0.8	6.3	0.9
DD89LR29	5436277.8	366742.6	327	14	-70	120	No significant interval						
DD89LR30	5436259.8	366694.6	322	40.3	-55	326	20.1	40.3	20.2	23.9	23.0	11.4	0.9
DD89LR31	5436256.8	366696.6	332	37.8	-50	146	21.7	37.8	16.1	41.8	7.5	2.2	1.9
DD89LR32	5436281.8	366683.6	332	43.3	-55	326	No significant interval						
DD89LR33	5436279.8	366686.6	323.5	30	-55	146	20.1	30	9.9	21.2	25.4	11.4	1.3
DD89LR34	5436366.8	366766.6	327	30.8	-55	281	No assay data						
DD89LR35	5436366.8	366766.6	327	31	-70	281	No assay data						
DD89LR36	5436365.8	366769.6	327	30	-55	101	16.5	30	13.5	39.7	1.7	12.7	0.6
DD89LR37	5436357.8	366794.6	336	40	-50	101	26.3	40	13.7	22.5	19.9	17.0	0.5
DD89LR38	5436357.8	366794.6	336	29.3	-50	101	26.3	29.3	3	29.3	2.4	32.0	0.6