Jervois MINING LIMITED

24 May 2019 ASX: JRV

Positive Preliminary Economic Assessment for Nico Young and M2 Cobalt Merger Update

- **Jervois Mining ("Jervois") has received conditional approval from the TSX Venture Exchange ("TSX.V") to list its ordinary shares on the TSX.V in connection with its proposed merger with M2 Cobalt Corp ("M2 Cobalt") (the "Merger"); Jervois will trade in Canada under the ticker JRV**

- **M2 Cobalt has released the shareholder circular for the Merger. Included in the circular is a summary of the positive NI 43-101 compliant Preliminary Economic Assessment ("PEA") on Jervois's 100%-owned Nico Young Nickel-Cobalt Project in New South Wales, Australia**

- **Nico Young provides an attractive opportunity for development when commodity prices improve. It will be fully funded by third parties up to construction and Jervois will sell down its current 100% equity ownership. Offtake and partner negotiations are advancing**

- **Jervois is redirecting its financial resources to other publicly disclosed growth opportunities – the M2 Cobalt and eCobalt Solutions mergers, together with Kabanga and Kilembe discussions with the Governments of Tanzania and Uganda respectively**

- **Nico Young PEA envisages heap leaching and refining through an integrated processing facility to produce battery grade nickel sulphate and cobalt in refined sulphide**

- **Nico Young has the potential to deliver significant local and regional economic and social benefits into the Young area of New South Wales, Australia**

- **Positive commercial outcomes of the PEA are expected to underpin a process to secure joint venture partner(s) and progress a Definitive Feasibility Study ("DFS") for Nico Young. In conjunction with the DFS, Jervois will seek necessary regulatory approvals for project development**

- **Upon project financing close, Jervois expects a four-year construction period with commissioning to start after two years. First commercial production targeted for 2023**

CAUTIONARY AND FORWARD LOOKING STATEMENTS

The Technical Study referred to in this announcement has been conducted to investigate the technical and economic viability of a mining operation for the Nico Young Project.

This news release also contains references to estimates of Mineral Resources. The estimation of Mineral Resources is inherently uncertain and involves subjective judgements about many relevant factors. Mineral Resources do not have demonstrated economic viability. The accuracy of such estimates is a function of the quantity and quality of available data, and of the assumptions made and judgements used in engineering and geological interpretation. These assumptions and judgments may prove to be unreliable and may depend, to a certain extent, upon the analysis of drilling results and statistical inferences that may ultimately prove to be inaccurate.

The Inferred Mineral Resources constitute a significant proportion of the Nico Young Project Mineral Resources and are considered to be determinative of the project economics. For the above reasons, under ASX reporting guidelines the Technical Study is considered to be a "Scoping Study" as defined by the JORC Code (2012 Edition) clause 38 for reporting purposes and does not provide a basis for Jervois to publish a production target or forecast financial information derived from a production target.

While the Technical Study has been conducted to a degree of accuracy consistent with a pre-feasibility study and was titled as such by its authors, the Mineral Resource is insufficient to support the estimation of ore reserves or to provide an assurance of economic development. For ASX reporting purposes, the Technical Study therefore cannot be classified or referred to as a "pre-feasibility study" as defined by JORC Code (2012 Edition) clause 39. The Technical Study is based on the material assumptions set out in this announcement. These include assumptions about the availability of funding. While Jervois considers that all material assumptions are based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes in the Technical Study will be achieved. Further drilling and evaluation are required before Jervois will be in a position to estimate any ore reserves or provide any assurance of an economic development case. Investors should note that there is no certainty that the Company will be able to raise the required funds when needed, and that it is possible that such funding may be only available on terms that may be dilutive or otherwise affect the value of Jervois shares. Given the uncertainties involved, the outcomes of the Technical Study and the Company's current expectations of future results or events should not be solely relied upon by investors when making investment decisions.

Comprehensive Pre-feasibility level mining study work was undertaken. This work included pit optimization, design, sequence, haulage study, mining schedule, equipment selection and mine cost estimation. A comprehensive metallurgical test work programme was also undertaken. This work included agglomeration, stacking, and feed leaching analysis along with process waste stream determinations. Ore leach pad options were thoroughly scoped out and investigated to a preliminary level of understanding. Transport and logistics options were investigated to a preliminary level of understanding and included port, rail, road, and the various handling and infrastructure requirements associated with each component. Water supply and power supply options were investigated with robust credible solutions established. Preliminary social, environmental, archaeological, and ethnographic investigative works were undertaken.

This announcement contains "forward-looking information" that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the technical study, the Company's business strategy, plan, development, objectives, performance, outlook, growth, projections, targets and expectations, mineral resources, results of exploration and related expenses. Generally, this forward looking information can be

identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information

Forward-looking information is developed based on Jervois management and adviser assumptions based on their experience and knowledge of the mining industry about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of nickel and cobalt and other metals; possible variations of ore grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect or forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information. The Company disclaims any intent or obligations to or revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

Jervois Mining Limited (JRV:ASX) ("**Jervois**" or the "**Company**") is pleased to announce:

- Completion of a Technical Study ("**Study**") for its 100%-owned Nico Young nickel-cobalt project in New South Wales, Australia, supporting the technical and economic viability of producing refined nickel sulphate and cobalt sulphide for sale into the nascent battery sector that is rapidly evolving for personal devices, electric vehicles and stationary storage;
- Jervois has received conditional approval from the TSX Venture Exchange ("**TSX.V**") to list its ordinary shares on the TSX.V in connection with its proposed merger with M2 Cobalt (the "**Merger**"), as announced to ASX on 22 January 2019; and
- M2 Cobalt Corp ("**M2 Cobalt**") has released its management information circular in connection with the Merger, following which M2 Cobalt shareholders will vote on the Merger on 14 June 2019.

To comply with Canadian legal and regulatory requirements for the Merger, as part of the Study, Jervois commissioned the preparation of a National Instrument 43-101 compliant Preliminary Economic Assessment ("**PEA**"), which has been incorporated by reference into the management information circular provided to M2 Cobalt shareholders for the Merger. Due to the PEA's reliance on inferred mineral resources, Australian regulatory requirements prevent the release of the PEA on the ASX. Accordingly, Jervois shareholders and potential investors are cautioned against placing undue reliance on the content or outcomes of the PEA.

Consistent with other nickel-cobalt laterites in Australia, Nico Young requires higher commodity prices than prevail today to generate acceptable investment returns. However, Jervois is confident that the chosen heap leach flowsheet is a sensible, lower capital and with reduced technical risk development approach versus the high capital and elevated construction and operating risk nature of high-pressure acid leach ("**HPAL**") facilities.

Notwithstanding the positive outcomes of the PEA, as of today Nico Young is not material to the future prospects of the Company. In event nickel and cobalt prices rise from prevailing levels, the asset represents a call option on such developments. Third party interest in the project remains strong despite today's subdued commodity prices.

The Nico Young flow sheet includes crushing, agglomeration and heap leaching of the nickel cobalt ores. The pregnant leach solution ("**PLS**") from the heap leach operation is neutralised in the primary and secondary neutralisation circuits to precipitate impurities from solution. Direct solvent extraction is subsequently applied to extract high purity nickel and cobalt sulphate. Battery grade nickel sulphate hexahydrate crystal and cobalt sulphide is produced as the final products. Cobalt sulphate heptahydrate crystals or high purity cobalt hydroxide could also be produced for the battery metals market and will be considered further during the next stage of development.

Jervois' team, made up of former Xstrata and Glencore executives, has significant experience in design, constructing and commissioning similar operations to Nico Young. Specifically, members of the team were responsible for the design, construction, commissioning and operation of the heap leach circuit at Glencore's Murrin Murrin Operations in Western Australia, where heap leaching was a technical and commercial success on ores similar to Nico Young.

Heap leaching is the most attractive development route for the low-grade nickel-cobalt mineralisation of Eastern Australia. Heap leaching uses dilute sulphuric acid, passing through crushed and then agglomerated ore on sealed pads, to extract metals into solution from which they are precipitated and refined. There are no high pressure or temperature vessels or fluid flows.

The optimal production scale of the project is greater than originally envisaged, and larger than what Jervois believes is prudent to move forward with alone. This is particularly relevant given the company's other investment opportunities. Jervois remains committed to majority ownership and joint venture operatorship of Nico Young, but wishes to introduce a credible partner that can add value as the Company seeks to move into DFS in 2019.

Background

The Nico Young deposit sits over two distinct bodies of mineralisation held under separate but adjacent exploration licenses, EL 5527 ("Ardnaree") and EL 5571 ("Thuddungra"). The Mineral Resource is in an established mining and farming region of central west New South Wales, Australia, about 300km due west of Wollongong and Sydney ports. The Nico Young deposit is a laterite nickel-cobalt deposit and extends along a 15km NNE-SSW strike. Jervois holds 100% of the licenses with no private royalties or other encumbrances over title. The Mineral Resource is favourably located geographically and is proximate to key infrastructure such as rail, the National Electricity Grid and major highways. The deposit is approximately 25km north-west of the town of Young, which has a permanent population of 7,000 people.

Geology and Mineral Resources

The Nico Young Project comprises three known soil covered nickel-cobalt laterite deposits formed over the Wambidgee Serpentinite of Cambrian age: Ardnaree, East and West Thuddungra. All have been periodically drill sampled since 1998. The tertiary laterisation has produced a profile over the serpentinites that comprises hematitic clay, limonitic clay, weathered saprolite – fresh serpentinite and ultramafic which is weakly weathered. The bulk of the nickel and cobalt mineralisation is found in the weathered saprolite- serpentinite and lesser occurrences in the limonitic clay and hematitic clay.

As drill defined to 2018, the Ardnaree deposit extends over 9km along strike and up to 700m across strike, with mineralisation present from surface to a maximum vertical depth of 56m. Average mineralisation thickness is 13m. Virtually 100% of the Ardnaree resource is located within 50m from the topographic surface. Mineralisation at Ardnaree is characterised by an overall northeast trend and a sub-horizontal to horizontal dip. Similarly, the Thuddungra deposit extends 5.9km along strike up to the northern boundary of the Jervois licences and up to 715m across strike, with mineralisation present from 6m below the topography surface to a maximum vertical depth of 98m. Average mineralisation thickness is 22m. Approximately 80% of the Thuddungra resource is located within 50m from the topographic surface. Mineralisation at Thuddungra is characterised by an overall north-northeast trend.

Mineral Resource Estimate

Snowden Mining Industry Consultants Pty Ltd ("Snowden") updated Mineral Resource estimates (from those set out in the ASX announcement dated 22 November 2017) to incorporate additional drilling completed in February 2018 by Jervois, together with additional multi-element assays completed in 2018 on samples from earlier drill programmes. All material assumptions and technical parameters underpinning the Mineral Resource estimate

in the ASX announcement dated 22 November 2017 continue to apply and have not materially changed.

The Nico Young nickel/cobalt deposit is reported at a 0.5% Ni cut-off in accordance with the JORC Code (2012) as listed in Table 2 below.

Table 1: Ardnaree and Thuddungra Mineral Resource estimate using a 0.5% Ni cut-off

Resource category (JORC 2012)	Deposit	Rock	Tonnes (Mt)	Ni (%)	Co (%)	Mg (%)	Fe (%)	Al (%)
Indicated	Ardnaree	2000	3.1	0.67	0.04	4.89	15.92	3.29
		3000	0.1	0.57	0.02	12.48	9.47	2.83
	Total – Indicated		3.2	0.67	0.04	5.15	15.70	3.27
Inferred	Ardnaree	2000	21.2	0.64	0.04	6.29	14.86	3.50
		3000	16.3	0.66	0.03	13.16	8.92	2.44
	Thuddungra	2000	34.0	0.63	0.07	3.41	22.20	5.23
		3000	18.7	0.62	0.03	12.89	9.77	2.12
	Total – Inferred		90.1	0.63	0.05	7.82	15.50	3.68

Note: Small discrepancies may occur due to effects of rounding

Rock type 2000 = limonite and saprolite

Rock type 3000 = serpentinite

Mining

Conventional truck and shovel mining method has been applied with no or little blasting anticipated. Ore will be transported to a central leach pad or stockpiles near each deposit (for low grade). Mined-out open pits will be backfilled with mine waste as there are no permanent waste dumps.

The mine plan was prepared and costed by Snowden, under the supervision of Mr Stuart Bodey from Mining Plus. Pit optimisations and designs were completed considering Indicated and Inferred Resources, with Inferred Resources representing a significant majority of forecast mine tonnes. Jervois purposely elected not to spend shareholder funds raising the JORC resource confidence level at Nico Young prematurely, in advance of a positive Study conclusion across key areas such as metallurgy, infrastructure, logistics and construction costs.

An overall mine layout is shown in Appendix A.

Ore is extracted from the northern end of Ardnaree in the early years of operation, and subsequently from Thuddungra in parallel. The mining direction for each deposit is generally

away from the leach pad to minimise early haulage costs. Ardnaree pits are complete by year 12 and year 20 for Thuddungra.

Metallurgy

As set out in the ASX announcement dated 29 August 2018, testwork included geo-metallurgical testing of samples across the Ardnaree resource at Brisbane Met Laboratories to determine total acid soluble nickel and cobalt contents, and acid consumption characteristics. Composites representing the three major ore types, namely limonite, saprolite and weathered serpentinite were subjected to bottle rolls and column leach testing at SGS Australia Pty Ltd ("SGS") in Perth. Jervois also sent composites to HydroGeoSense in Tucson, Arizona USA for agglomeration and stacking testing.

Similar results are projected for the Thuddungra deposit as it is geologically similar and previous metallurgical testing gave very close nickel and cobalt recoveries for the limonite, saprolite and weathered serpentinite. This will be reconfirmed during DFS.

The Nico Young integrated flowsheet is based on demonstrated process technology previously applied in commercial operations, including the heap leach circuit at Murrin Murrin, a Glencore operation that Jervois' principals led.

The Nico Young integrated flowsheet is based on the production of battery grade nickel sulphate and cobalt sulphide based on a refinery design including direct solvent extraction of neutralised PLS from the heap leach. The refinery flowsheet design was not studied to the same level of detail as the remainder of the Study integrated flowsheet.

The refinery flowsheet is based on technically proven unit operations however, the integrated refinery has not yet been demonstrated on a feed stream that would be processed at Nico Young. This risk will be adequately addressed in DFS by progressing appropriate metallurgical and pilot scale test work.

Heap leach testwork at SGS involved bottle rolls and two (2) and four (4) metre columns of 150mm diameter. In order to test lithologies across envisaged life of mine mineralisation types the columns were a combination of saprolite, limonitic clays and weathered serpentinite; metallurgical composites were crushed to -25mm top size – the nominal crush size expected for commercial heap leach operations. Geotechnical integrity of the columns remained positive with minimal slumping and consistent percolation throughout.

At SGS targeted irrigation rates for the columns ranged from 7 to 15 litres per hour per m^2 ("L/h/m^2"), at varying levels of acid concentration in order to assess extraction recoverability and residence times. No polymers or other binding agents were used for the agglomeration process, with sulphuric acid, at optimal moisture content, adequate. Various rates of

sulphuric acid were applied to the ore during agglomeration to better understand impacts on future operational pad residence times.

To support the heap leach testwork completed at SGS, composite ore samples were provided to HydroGeoSense in Tucson, Arizona USA for agglomeration and hydrodynamic characterization testing. Results from HydroGeoSense confirmed hydraulic conductivity consistently improved with agglomeration, and optimal acid addition in agglomeration is between 50 and 100kg/t of ore; final Study design applied 75kg per tonne.

Overall the testwork confirmed the Study design parameters of 4m heaps with leach solution application of 10 L/h/m^2 easily supportable based on percolation capacity tests. It is expected that saprolite will show the best hydraulic behavior of the ore types, though blending limonite and serpentine ore with saprolite is operationally recommended.

Key metallurgical outputs from the Study are summarised in Table 2 below. Strip ratios are expected to be low, particularly in early years when ore is largely extracted from the Ardnaree deposit. Metallurgical recoveries to pregnant liquor solution ("PLS") of cobalt are strong at 84% across all lithologies. Nickel recoveries to PLS are acceptable across saprolite (72%) and serpentine (80%); however similar to Jervois' experience at heap leaching other laterites, limonite recoveries for nickel are poor (42%).

The Nico Young JORC resource consists of approximately 25% limonite, 50% saprolite and 25% weathered serpentinite. The final mining and processing schedule were adjusted by Snowden to optimise head grade and leaching characteristics. Lower grade cobalt limonite ore is stockpiled for deferred processing during the operational life.

Table 2: Key Metallurgical Parameters

	Unit	Life of Mine
Nickel Process Recovery to PLS		
>> Limonite	%	42.0
>> Saprolite	%	72.0
>> Serpentine	%	80.0
Cobalt Process Recovery to PLS		
>> Limonite	%	84.0
>> Saprolite	%	84.0
>> Serpentine	%	84.0
Acid Consumption		
>> Limonite	kg/t	400
>> Saprolite	kg/t	550
>> Serpentine	kg/t	400

Impurity removal testwork was completed on recovered heap leach PLS. The downstream refinery flowsheet was modelled by Elemental Engineering for Lycopodium Minerals Pty Ltd ("Lycopodium").

The proposed integrated flowsheet is shown in Appendix B.

The Company is not aware of any new information or data that materially affects the information included in the ASX announcement dated 29 August 2018.

Mineral Processing

Lycopodium was engineering lead for Process Plant and Site Design. This included inter alia mass balances, heap leach flow diagrams, water balances, mechanical equipment, acid plant selection, and site layout designs including process plant and refinery. All associated plant and surface infrastructure were part of Lycopodium's design scope.

Infrastructure

The layout for mine and process plant surface facilities has been prepared to take advantage of existing topographical features to the extent possible. The production scale determined for the Study has resulted in certain plant infrastructure being located outside current exploration license boundaries. During DFS and subsequent Mining Lease application, the location of major infrastructure will be finalised and engineered including raw water pipeline, railway spur route for sulphur delivery, construction camp, electrical transmission lines and supplementary (blackstart) onsite power generation.

The 4,400tpd acid plant design basis has a 35MW co-generation power plant to generate the required electrical demand at all times by either producing excess acid into storage on ore types with lower acid demand or withdrawing acid from storage when processing ore types with higher acid demand. Onsite power generation from the acid plant is supplemented with 14MW diesel supply which will only be required for blackstarts, the potential of grid connection will be further investigated during DFS.

The proposed water requirement will be sourced from Jugiong which is the nearest point on the Murrumbidgee system to the project site. The pipeline route proposed will run parallel to the power distribution corridor, approximately 85kms.

Land & Marine Geological Services Pty Ltd ("L&MGSPL") completed geotechnical plans for heap leach pad design, site water balances, residue disposal (tailings) and an evaporation pond.

Logistics

Lycopodium Infrastructure completed a review of transport and logistics relating to the import of reagents for mining operations at the proposed Nico Young mine. Logistics relate to incoming freight including the import of bulk sulphur into the east coast ports of New South Wales and Victoria and the transportation of goods to the Nico Young mine site. Preliminary consultation was held with the appropriate authorities and transport industry operators. At the design mining rates, the quantities of reagent are significant, and logistics are based on a combination of rail and road.

Environment and Permitting

RW Corkery & Co ("RW Corkery") coordinated environmental workstreams with soil, heritage, biodiversity, noise and air quality consultants each assessing site. Water consultant AQ2 completed assessment on water availability with several potential alternatives identified and published in the Study. The baseline data and workstreams supporting an Environmental Impact Statement ("EIS") is well underway. Next steps during DFS are to secure conditional agreements with all affected landholders for operational surface access and to apply for a Mining License.

Marketing

Nickel

The majority of nickel is used in the production of stainless steels which account for slightly greater than two thirds of world demand. Whilst stainless steels will remain an important driver of future nickel consumption, the electrification of the global transportation sector will become increasingly important for future demand trends. This is specifically due to the use of nickel in batteries. At a point during the 2020's more nickel will be used in non-stainless-steel applications than stainless.

Nickel is used in a variety of batteries but the most significant for future pricing dynamics are its utilisation in the cathodes of lithium ion chemistries, specifically Nickel-Manganese-Cobalt ("NMC") and Nickel-Cobalt-Aluminium ("NCA"). Nickel is important for the projected penetration rates of electric vehicles (EVs). High purity nickel sulphate is required to satisfy the forecast demand side growth in battery metals. Nico Young will produce high purity nickel sulphate hexahydrate NiSO4.6H2O crystals, having 22.3% nickel content.

The proposed Nico Young nickel product is similar to leading nickel sulphate brands offered in the marketplace today, that are considered the global benchmark for high purity nickel sulphate with less than 5ppm per deleterious elements. This will enable the product to be

qualified by potential end users for acceptance in the most demanding electrochemical applications. As such Nico Young product is targeted to be suitable for high end nickel-containing battery precursors and to the plating industry worldwide, where optimum premium levels can be achieved with a strong technically-based sales and marketing programme.

Target markets for Nico Young high purity nickel sulphate are the battery and plating industries. A commercially sound sales and marketing plan will be developed, recognising that major end-users of nickel sulphate for these electrochemical applications will need to pre-qualify before use as battery grade metals. Representative samples of future production will therefore be supplied to targeted direct customers and distributors well before supply commences; this process is accommodated in the envisaged DFS schedule. Technical sales and service personnel will be engaged to conduct such qualification trials at potential customers and continue thereafter in support of ongoing sales.

Cobalt

The cobalt market is in the early stages of a transformation due to its role in the electrification of the global economy, particularly in transportation. Already nearly 60% of all cobalt is used in batteries, mostly in Li-ion cathodes. Nico Young is significant in terms of its geographic position as a potential Australian source of cobalt supply – both in terms of stability and ethics versus the Democratic Republic of Congo ("DRC"), from where around three quarters of cobalt was mined in 2018 and frequently further processed by refineries in China.

Jervois considers cobalt supply the key constraint on how rapidly the world will be able to electrify its commercial and personal transportation sectors. As such there is expected to be significant support for cobalt in the future which is forecast to result in a rebasing of cobalt pricing versus historical averages.

Nico Young will produce cobalt sulphide product with 66% cobalt content. The product is expected to contain low impurity levels as the cobalt sulphide will be precipitated after impurity removal and selective solvent extraction. Nico Young would become the industry leader in the supply of a bulk high purity cobalt sulphide product. If economically warranted a crystallisation circuit could added to the refinery to produce cobalt sulphate at relatively nominal cost. This will be investigated further during DFS.

Way Forward

Jervois was pleased that independent verification of the value of Nico Young was received as part of the Company's previously announced mergers with M2 Cobalt and eCobalt Solutions.

The investment banks Canaccord Genuity Corp and TD Securities Inc. undertook due diligence on the Nico Young Study as part of these transactions, and both provided positive fairness opinions to their client's Board of Directors.

Jervois remains in active negotiations with multiple potential Nico Young project partners and off-takers.

Jervois has begun negotiations with potential debt advisers for Nico Young, and expects to formally appoint an investment bank during DFS. Once appointed, this adviser will undertake a formal review and benchmarking of potential sources of capital. This is expected to include potential bank, bond, term loan, ECA, clean energy fund, royalty, off-take, construction and equity partner sources.

Specifically, debt options highlighted include bank loans, investment grade bonds, leasing and other senior debt, high yield and mezzanine structures. Typically, at Jervois' level of market capitalisation, project financing structures include a higher proportion of equity (due to an inability of parent entities to provide completion guarantees). It is for this reason Jervois will ultimately seek equity partners in Nico Young. In addition to potential off-takers accessing Jervois' data room, leading global royalty and streaming companies have also signed NDA's and are undertaking due diligence.

The Company's initial intention is to commit only off-take required to facilitate the introduction of partner funding to complete the Nico Young DFS. Upon completion of the DFS, Jervois will again reassess its level of equity share of Nico Young, and uncommitted off-take, and determine a suitable ownership structure and marketing strategy to facilitate obtaining project financing to move into construction.

Jervois and its advisers have identified various areas of potential improvement to project economics; other activities are planned during DFS to further mitigate risk. Specifically:

- Mineral resource estimation update to include planned infill drilling to a pattern of 100m x 50m to define a large component to "Indicated" resources standard. Infill drilling will improve the confidence in the resource to bring it to Indicated & Measured Resources classification to support the definition of Ore Reserves;

- Additional drilling to provide sufficient representative samples of ore types and potential ore type variability for material characterisation across lithologies;

- Further metallurgical testwork including additional geometallurgical testing and batch column leach testing; batch neutralisation and DSX testing, and an integrated pilot plant for the generation of marketing samples;

- Review the planned cobalt sulphide product and determine if a crystallisation circuit should be added at nominal cost to the refinery to produce cobalt sulphate, the pre-cursor material for Li-ion battery cathodes; and

- Engaging with key stakeholders to secure all regulatory approvals for project development.

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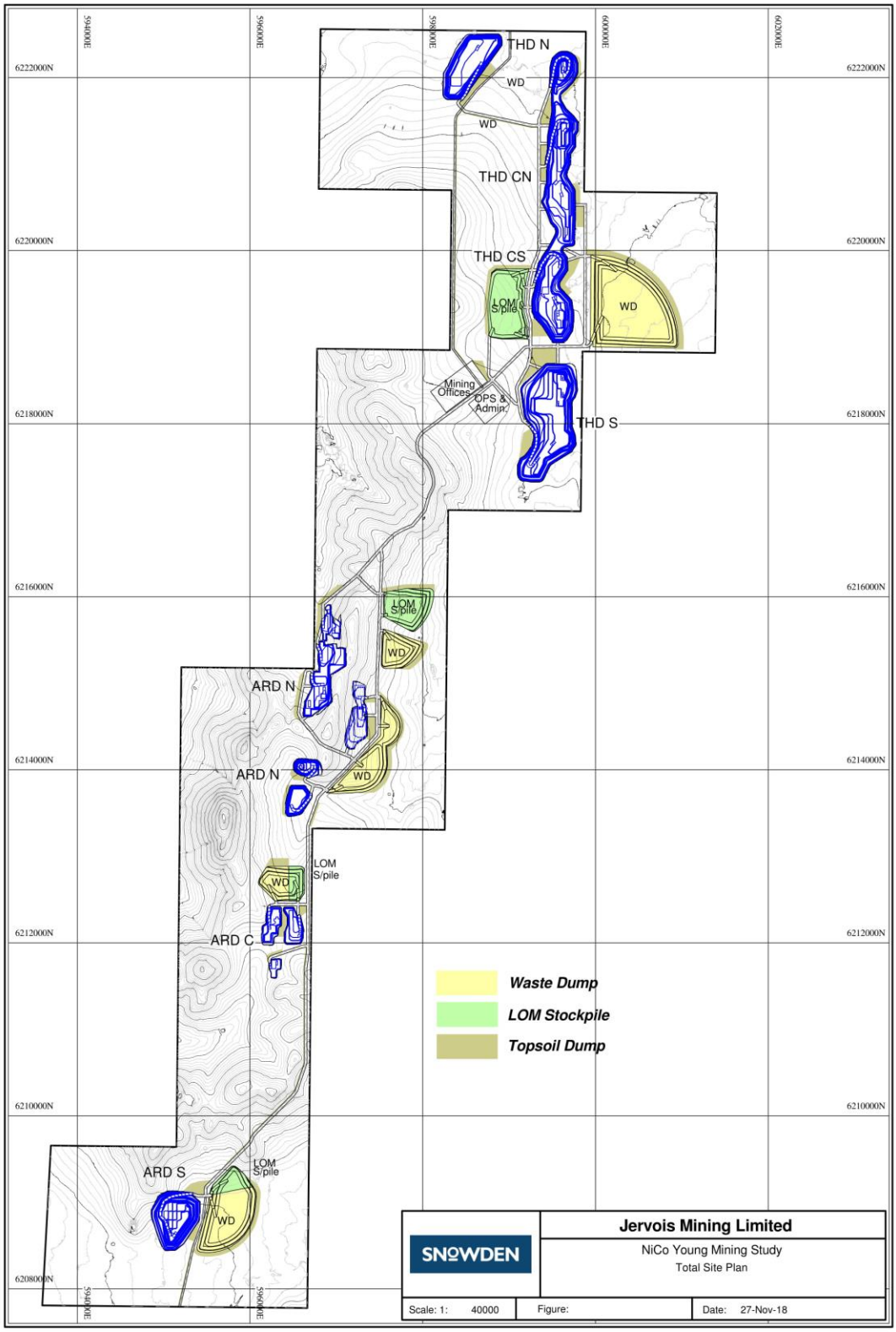
Appendix A – Mine Plan Layout



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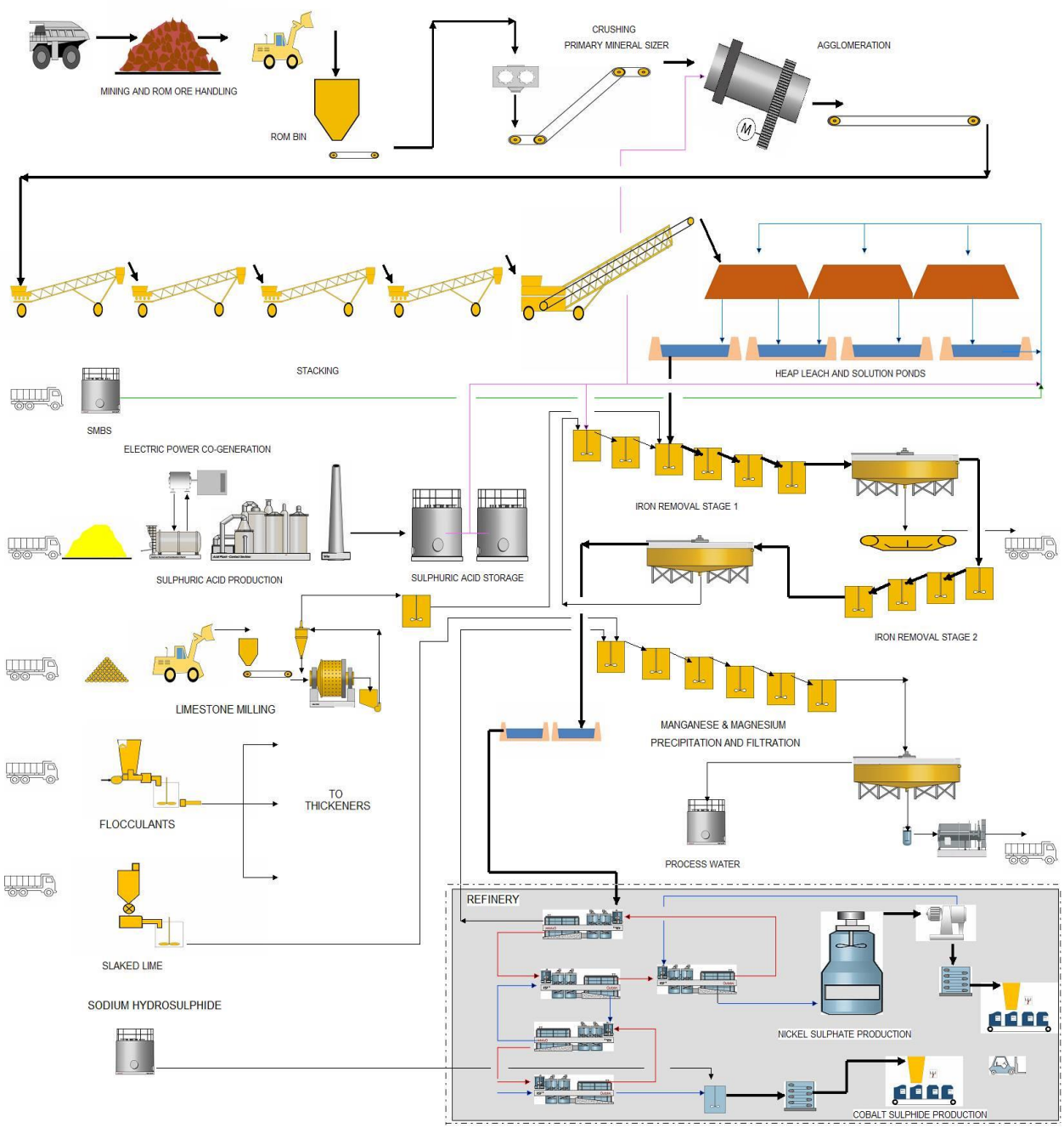
Appendix B – Integrated Process Flowsheet



Competent Person Statement:

The information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Mr David Selfe who is a full-time employee of the Company and a Member of the Australasian Institute of Mining and Metallurgy. Mr Selfe has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration 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'. Mr Selfe consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to Surface Mining and related operating and capital cost estimates is based on information reviewed by Mr Stuart Bodey (FAusIMM). Mr Bodey is an independent consulting engineer working through a Company known as Mining Plus. Mr Bodey has 30 years of relevant Mining experience in work that ranges from design through construction to operations and operational management. Mr Bodey consents to the inclusion in this announcement of the matters based on information reviewed by him and in the form and context in which it appears.

The information in this announcement that relates to Lateritic Nickel and Cobalt Processing / Engineering and related operating and capital cost estimates is based on information reviewed by Mr David Readett (B.E. Met Eng., FAusIMM, CP (Met)). Mr Readett is an independent consulting engineer working through a Company known as MWorx Pty Ltd. Mr Readett is a Chartered Professional Metallurgical Engineer and has 25 years of relevant experience in this area of work. Mr Readett consents to the inclusion in this announcement of the matters based on information provided by him and in the form and context in which it appears.

The information in this announcement that relates to Process Plant and associated infrastructure design and related operating and capital cost estimates is based on information reviewed by Mr Geoff Duckworth (B.Eng (Chem), M. Eng Sc, PhD, FIChemE, MIEAust, FAusIMM, RPEQ 2702)). Mr Duckworth is an independent consulting engineer working for Lycopodium Minerals Pty Ltd. Mr Duckworth has 40 years of relevant experience in this area of work. Mr Duckworth consents to the inclusion in this announcement of the matters based on information provided by him and in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section 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.* • *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.*	• The data used for Resource estimation is based on the logging and sampling of AC drilling completed over several campaigns since 1998 and RC drilling completed in 2018. The Competent Person excluded older RC drilling, DD and some AC results on the grounds the sampling and therefore the analytical work was likely to be poor. The Competent Person believes the data used for the estimate has most likely been done to a reasonable standard. • A nominal 1 m sample interval was used for both RC and AC drilling. • Samples were typically sent to ALS laboratories in Orange or Brisbane for analysis using a four-acid digest with an AAS or ICP-AES finish.
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).*	• All drilling used in the estimate consisted of vertical RC or AC holes drilled to relatively shallow depths. • All drilling was face sampling and 113mm diameter aircore. • The average hole depth is 35 m.
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*	• Very little sample recovery information exists for any of the drilling. Some drilling was known to have sample recovery issues and these holes were excluded from the estimate. These decisions were made based on

Criteria	JORC Code explanation	Commentary
	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.*	discussions with Jervois staff and reviewing site logs. • No direct recovery measurements of aircore and reverse circulation samples were performed • AC samples from 2007 onwards were weighed however sample recovery was not assessed. • It is not possible to assess whether a significant relationship between sample recovery and grade exists.
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.* • *The total length and percentage of the relevant intersections logged.*	• Geological logging of drill hole samples (core and chips) was done with sufficient detail to meet the requirements of resource estimation and mining studies. • Core is photographed and chip trays retained. • No geotechnical logging has been sighted by the Competent Person.
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.*	• RC and AC samples were typically collected using a riffle splitter although some spear sampling was used. Wet samples were processed using grab sampling or allowed to dry and then riffle split. • Sampling methods, with the exception of spear and grab sampling, are in line with standard industry practices. • Duplicate samples were inserted in sequence (1 in every 20 sample numbers). • Quartz blanks were inserted at the start of every batch of samples sent to the laboratory, at the start of every new hole, and at every 50th sample number. • Snowden has recommended the use of spear and grab sampling be discontinued.
Quality of assay data and	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• Snowden's analysis of the QC data based on historical reports found that while a number of issues were identified, the data is still suitable for

Criteria	JORC Code explanation	Commentary
laboratory tests	• *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.*	resource estimation purposes. Increasingly the issue of incomplete assays and poorly documented past drilling is being partly mitigated by the resubmission of sample pulps for multi-element analysis and new infill drilling.
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.*	• Snowden reviewed the drilling data and visited site in late 2017 (Snowden, 2017) and made a number of recommendations with regard to improving procedures for future drilling work. Drilling data excluded from this estimate is based largely on this review. • Snowden has not sighted any results from drilling by independent third-party companies (confirmatory drilling). While some twinning of AC holes with RC and DD holes has been done known issues with the RC and DD sample quality has rendered the results of limited value. • There is no documentation describing how the digital data was managed or validated. The drilling database was supplied by Jervois as a Microsoft Access database. The database is managed by an independent contractor (Geostats and OMI) on behalf of Jervois.
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.*	• Drill hole collars were surveyed by licensed surveyors or trained Jervois personnel. All drilling is vertical and shallow and so downhole surveying was not required. • The drilling and topography survey coordinates are all in MGA94 Zone 51 coordinates. • AAM Group was engaged to undertake aerial light detection and ranging (LiDAR) survey in May 2018. This data was used to create a surface digital terrain model (DTM).

Criteria	JORC Code explanation	Commentary
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.*	• The drilling was completed along a set of northwest-southeast trending sections perpendicular to the strike of the mineralisation. At Ardnaree, the drill spacing ranged from 90 m to 650 m along strike and averaged 100 m across strike. At Thuddungra, the drilling spacing ranges from 200 m to 420 m along strike and averaged 100 m across strike. • The section spacing is sufficient to establish the degree of geological and grade continuity necessary to support the resource classifications that were applied. • All samples were composited using a nominal 1 m interval prior to compiling the estimate. Where necessary the composite interval has been adjusted to ensure that there are no residual sample lengths. While some splitting of larger intervals will occur, the impact is not considered material.
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 location and orientation of the Ardnaree and Thuddungra drilling is appropriate, given the strike and morphology of the mineralisation. • The location and orientation of the drilling is unlikely to introduce any material sample bias
Sample security	• *The measures taken to ensure sample security.*	• From September 2009 onwards, all returned pulps are stored in a locked facility in the town of Young.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• The most recent review was by Snowden of the last resource estimate and accompanying data in late 2017. The review also included a site visit. • Snowden made a number of recommendations in line with the review findings which were considered when compiling this estimate. Jervois has also started to act on some of the recommendations including the collection of additional density data and infill drilling.

Section 2 Reporting of Exploration Results

(Where relevant to reporting Mineral Resources)

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.*	• The Young deposit is located on exploration licences EL5527 and EL5571 which are 100% held by Jervois. These licences were granted on 6 October 1998 and 6 May 1999 respectively. • These licences are located on agricultural land owned privately. Access agreements were made with all landholders for drilling, with thorough rehabilitation made post-drilling. • Nine units were relinquished from EL5527 in 2016, and four units from EL5571 in 2016. • The tenements are in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No exploration results are being reported.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Nico Young deposit is a nickel laterite located within the Jindalee Beds sequence, on the western edge of a granodiorite complex near Young in New South Wales, Australia. The Ni and Co mineralisation are the product of the laterisation of a Cambrian serpentinite unit within the Jindalee beds.

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*
		• No exploration results are being reported.

Criteria	JORC Code explanation	Commentary
	○ *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.*	
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.*	• No exploration results are being reported.
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').*	• No exploration results are being 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.*	• No exploration results are being reported.
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.*	• No exploration results are being reported.

Criteria	JORC Code explanation	Commentary
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.*	• No exploration results are being reported.
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.*	• Jervois plans to undertake infill drilling to better define the define the extents and chemical composition on the Ni, Co bearing laterite.

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.*	• The data was provided to Snowden as a Microsoft Access database. Snowden undertook a basic check of the database for potential errors as a preliminary step to compiling the resource estimate. No significant flaws were identified.
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.*	• Snowden visited site during the period of 8 - 9 November 2017. Snowden viewed the logging and sampling facilities and drilled areas at Ardnaree and Thuddungra. No drilling or sampling was being undertaken at the time of the visit. • The results of the review were documented in the Snowden 2017 report. • The Competent Person visited site 3 times between July 2018 and November 2018 whilst drilling, sampling and sample storage activities were being conducted.

Criteria	JORC Code explanation	Commentary
		• During this time improvements to procedures as previously recommended by Snowden were implemented.
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.*	• It is Snowden's opinion that the local geology and style of mineralization is well understood as a result of work undertaken by Jervois. • Snowden's interpretation of the mineralisation based on a combination of the geological logging and multi-element chemistry is a common approach used at other laterite projects. • Alternative interpretations based on profile chemistry as per the Snowden approach are unlikely to yield materially different global result. • Constraining the mineralisation based on a Ni threshold has the potential to raise the reported grade; however, there will be a corresponding drop in tonnage and there is no known statistical basis for doing this.
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.*	• The Ardnaree deposit extends over 9 km along strike and up to 700 m across strike, with mineralisation present from surface to a maximum vertical depth of 56 m. The average mineralisation thickness is 13 m. • The Thuddungra deposit extends 5.9 km along strike up to the northern boundary of the Jervois licence and up to 715 m across strike, with mineralisation present from 6 m below the topography surface to a maximum vertical depth of 98 m. The average mineralisation thickness is 22 m.
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*	• The mineralisation has been estimated using unfolded ordinary block kriging using hard boundary domains for all domains. • Block modelling and grade estimation was undertaken using Datamine Studio (Datamine) software. • The deposit was last estimated in 2017 by Geostats Services. • No assumptions were made in terms of potential by-products or selective mining units.

Criteria	JORC Code explanation	Commentary
	appropriate account of such data. • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. 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.*	• A parent block size of 100 m x 100 m x 2 m was used (east-west, north-south and vertical directions respectively) in the final model to reflect the main drill hole spacing. • In areas with 100 m x 100 m spaced drilling, the parent block size was reduced to 25 m x 25 m x 2 m for estimation purposed before resetting the parent size back to 100 m x 100 m x 2 m. • The estimates were validated using a visual and statistical comparison of the block grade estimates to the input drill hole composite data.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• All tonnages have been estimated as dry tonnages.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The mineralisation was reported using a 0.5 % Ni cut-off grade as a reasonable lower grade which may be economic by heap leach extraction considering nickel and cobalt prices over 15 years.
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.*	• It is assumed the deposit will be mined using open cut methods with a minimum bench height of 2m, based on current nickel laterite mining operations in Australia.

Criteria	JORC Code explanation	Commentary
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. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Given the relatively low tenor of the mineralisation it is assumed the ore stream would be processed using a heap leach approach.
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 greenfield 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 assumptions at this stage in regard to environmental factors or assumptions have been made.
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.*	• Dry bulk density values for the main laterite units were derived from 99 core samples processed at the SGS laboratory in Perth in mid-2018 using the water displacement method. • Samples were shrink wrapped in plastic film during the immersion step to allow for voids and cavities in the core.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e.*	• The resources have been classified based on continuity of the Ni grades, the drill hole spacing as well as the information summarised in this table. • The classification takes into account views and concerns raised by a

Criteria	JORC Code explanation	Commentary
	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.*	number of previous workers. • Snowden believes the estimate appropriately reflects the view of the competent person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Snowden model has been internally peer reviewed by Snowden. • The previous estimate by Geostats was also reviewed by Snowden in 2007. No external (independent) reviews of have been carried out.
Discussion of relative accuracy/ confidence	• *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 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.*	• There has been no historical mining of the two deposits. • No statistical assessment of estimation error (e.g. using conditional simulation tools) has been undertaken. The existing drill hole spacing would not support such a study (too broad).

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• There has been no Ore Reserve estimate developed. The Mineral Resource is predominantly categorized as Inferred. Comprehensive Pre-Feasibility level mining study work was however undertaken. This work included pit optimization, design, sequence, haulage study, mining schedule, equipment selection and mine cost estimation.
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.*	• Site visit occurred but not relevant as there has been no Ore Reserve estimate developed.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• There has been no Ore Reserve estimate developed.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• There has been no Ore Reserve estimate developed.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s)*	• There has been no Ore Reserve estimate developed.

Criteria	JORC Code explanation	Commentary
	and other mining parameters including associated design issues such as pre-strip, access, etc. • *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made, and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• There has been no Ore Reserve estimate developed.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the*	• There has been no Ore Reserve estimate developed.

Criteria	JORC Code explanation	Commentary
	consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.*	• There has been no Ore Reserve estimate developed.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• There has been no Ore Reserve estimate developed.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• There has been no Ore Reserve estimate developed.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance*	• There has been no Ore Reserve estimate developed.

Criteria	JORC Code explanation	Commentary
	requirements prior to a supply contract.	
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• There has been no Ore Reserve estimate developed.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• There has been no Ore Reserve estimate developed.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• There has been no Ore Reserve estimate developed.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• There has been no Ore Reserve estimate developed.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• There has been no Ore Reserve estimate developed.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which 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.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• There has been no Ore Reserve estimate developed.