



A.B.N. 52 007 626 575

23 April 2018

ASX:JRV

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## Jervois Mining Quarterly Activities Report to 31 March 2018

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### Jervois Mining Limited

ACN: 007 626 575

ASX: JRV

### Corporate Information:

208.6 M Ordinary Shares

9.1 M listed Options

20.5 M unlisted Options

### Interim Executive Chairman

#### Chief Executive Officer

Bryce Crocker

### Non-Executive Director

Brian Kennedy

### Non-Executive Director

Michael Rodriguez

### Non-Executive Director

Stephen van der Sluys

### Company Secretary

Alwyn Davey

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### HIGHLIGHTS

- Nico Young PFS team composition was finalised. Key appointments included MiningPlus as Project Manager; Snowden Mining Industry Consultants Pty Ltd ("Snowden") as Geology and Mining Lead, Mworx Pty Ltd ("Mworx") as Metallurgical Lead, Lycopodium Minerals Pty Ltd ("Lycopodium") for Process Plant and Site Design and RW Corkery and Co ("Corkery") as Environmental and Permitting Lead.
- Ardnaree drill programme was successfully executed during the quarter. Samples were submitted for assaying and metallurgical testing, and a JORC resource update for incorporation into the Nico Young Pre-Feasibility Study ("PFS") will commence once the exploration results are available.
- Jervois purchased a 400TPH heap leach agglomerator, stacker and conveying infrastructure from Fox Resources for A\$0.5 million plus GST. This will accelerate the introduction of commercial scale heaps at Nico Young. Nominal capacity is significantly in excess of 1.0Mtpa ore, providing opportunity to increase headline production rates and accelerate initial ramp up via overstacking of heap pads
- The sale process involving Jervois's royalty portfolio is approaching finalization. Execution of definitive documents is in progress with a successful bidder for certain royalties.
- Sell down process has commenced for the Carbonate Creek / Khartoum tin exploration project in Queensland, Australia. Whilst geologically interesting the commodity is non-core.

## **CORPORATE UPDATE**

Jervois ended the March quarter with A\$16.6 million in cash, A\$0.8 million in public securities and no indebtedness. In relation to the Flemington sale, Australian Mines paid a subsequent A\$0.5 million in March 2018, and the final payment of A\$4.0 million to exercise the purchase option is due in Q4 2018.

Expenditure on exploration and development for the quarter was A\$0.4 million.

## **PROJECT UPDATE**

### **Nico Young Cobalt/Nickel, NSW, Australia**

#### **Background**

The Nico Young deposit comprises two distinct bodies of mineralization held under separate but adjacent exploration licenses 5527 (“Ardnaree”) and 5571 (“Thuddungra”). The Mineral Resource is in an established mining and farming region of central west New South Wales, Australia, around 300 kilometres due west of Wollongong and Sydney ports. The Nico Young deposit is a typical 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 and major highways. The deposit is approximately 25 kilometres north west of the township of Young which has a permanent population of 7,000 people.

#### **PFS Update**

Jervois has a PFS underway on Nico Young which is due at the end of Q3 2018. During the quarter remaining key appointments for the PFS team were finalized, namely:

- MiningPlus (Mr Stuart Bodey) was appointed as PFS Project Manager;
- Snowden were appointed as geological and mining lead;
- Land & Marine Geological Services Pty Ltd (“L&MG SPL”) have been retained to provide geotechnical advice for heap leach pad design, site water balances, waste disposal and an evaporation pond;
- Mworx (Mr David Readett) are lead metallurgical advisers for the PFS and are coordinating all testwork on behalf of Jervois;
- Nagrom Brisbane Laboratory (“Nagrom”) will provide rapid geometallurgical testwork;
- SGS Australia Pty Ltd (“SGS”) in Perth for column testing;
- HydroGeoSense (company principal Mr Amado Guzman) has been appointed to undertake detailed hydrodynamic characterization and agglomeration testing;

- Lycopodium as lead engineer, whom will provide process mass balances and heap leach flow diagrams, project water balances, mechanical equipment, and site layout designs including process plant and associated plant and surface infrastructure;
- RW Corkery have been appointed for environmental and permitting workstreams, who for the latter will work alongside Mining Title Services Pty Ltd (Mr Robert Harrison);
- AQ2 for hydrology and hydrogeology: as part of their assignment they will determine water supply and tailings storage facility / waste rock water management;
- R&J Shepherd assigned for logistics; and
- KSSM Consulting Pty Ltd for product transportation and marketing.

An infill drilling programme at the Ardnaree deposit at Nico Young was completed during the quarter with just over 2,400 metres drilled across 86 holes, of which 15 were diamond PQ and the remainder reverse cycle ("RC"). RC intervals have been submitted to ALS Global ("ALS") in Stafford, Brisbane, for testing. ALS are also preparing splits from the drilled bulk RC intervals for metallurgical testwork at Nagrom.

Diamond cores have been quarter sampled for both assay and assessment of specific gravity at ALS. Other core samples have been delivered to Nagrom and SGS in Perth, Western Australia for metallurgical testwork to assess heap leach performance.

SGS will generate and prepare composites for detailed agglomeration testing which will be undertaken by HydroGeoSense in Tucson Arizona, USA.

Snowden will complete an update of the geological model for the PFS, with technical assistance from Geostat Services Pty Ltd ("Geostat"). Based on the current mineral resource they have completed pit optimisations of both deposits using Whittle shell software. Initial indications have confirmed management's view that economically Ardnaree appears the more attractive deposit, and the higher value blocks at very low strip ratios in the mine plan are from the area that Jervois drilled in Q1 2018.

As the intention upon completion of operations is to restore the mine to its pre-mining state, pits will be progressively backfilled with waste from the mine. External dumps will be formed to store waste until there is sufficient void capacity for pit backfilling in that area to commence. Jervois's expectation is that "spent" ore from the pads will also be placed back into pit voids. Site layouts have been prepared and further work will occur as the new drilling results and an updated JORC resource are available.

Based on historical column test work at Nico Young, Jervois has generated preliminary process design criteria and flowsheet development including block flow diagrams from heap leach through to final mixed hydroxide production, together with a preliminary mass balance. Heap leach geotechnical design and site location and optimisation is already well advanced. All preliminary data has been delivered to Lycopodium to allow for commencement of PFS engineering design and costing activities.

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In parallel, a metallurgical testwork program is underway which is designed to both confirm existing process assumptions but also deliver a significantly improved understanding of the geometallurgical characteristics of the orebody. This will enable further definition of the downstream process conditions through to final product. Environmental baseline work is underway with the relevant monitoring equipment now being established at site. Arrangements are being made to have aerial photography taken over the leases in conjunction with a natural surface survey both of which will be used for a wide variety of planning purposes.

During the quarter Jervois purchased second-hand heap leach equipment from Fox Resources to fast-track development. Jervois has purchased an ore agglomerator, stacker and conveying heap leach equipment. It is currently located at the Mt Cuthbert Copper Project in Queensland, approximately 170km north east of Mt Isa by road. The infrastructure is modular and readily transportable via Cloncurry.

While the purchase has saved Jervois significant capital expenditure (estimated at A\$10 million), the benefits to compressing the project schedule are also important. Delivery times for similar new equipment would be approximately two years; the purchase of this secondhand equipment now removes this item from the critical path.

In April, after the March quarter end, all condition precedents in the contract were settled and the purchase completed.

Jervois remains on target to finalise the PFS for Nico Young by the end of Q3 2018.

## **EXPLORATION UPDATE**

### **Flemington / Syerston Scandium/Cobalt/Nickel Project, Fifield, NSW, Australia**

In 2016 an option was granted over all of Flemington project (EL 7805) to a wholly owned subsidiary of Australian Mines Limited (ASX:AUZ) – Flemington Mining Operations Pty Ltd.

The final payment of A\$4.0 million to exercise the option is due to Jervois in Q4 2018.

### **Khartoum Tin Project, Herberton, Queensland, Australia**

The Khartoum Tin Project comprises six tenements in the Mt Garnet / Herberton area of the Atherton Table Lands, North Queensland, Australia. It is an area, historically mined for tin, dominated by highly deformed greisen / skarn.

Although the properties are promising, Jervois has determined they are no longer core to our revised strategy to focus on lithium ion battery cathode raw materials. A data room has been established and a process to reduce or exit our interests is underway.

## **NON CORE ASSETS**

Mineral Royalties Online Pty Ltd, a specialized adviser, was engaged to sell the Jervois royalty portfolio. The royalties cover:

- The 3.8Moz Bullabulling Gold Project in Western Australia owned by Zijin Mining Group (A\$20-30/oz Au);
- The Flemington Cobalt-Scandium-Nickel Project in New South Wales operated by Australian Mines Limited (1.5% gross royalty);
- The Nyngan Scandium Project in New South Wales owned by Scandium International (1.7% gross royalty for the first 12 years of production);
- The Forest Reefs Copper-Gold Project in New South Wales owned by Newcrest Mining Limited (1.5% NSR); and
- The Mt Moss Magnetite and Base Metal Mine in Queensland owned by Curtain Bros (Qld) Pty Ltd and currently on care and maintenance (1.5% NSR).

Jervois has selected a successful bidder for certain royalties and definitive documents are being drafted.

Jervois continues to hold an investment in Elementos, an ASX listed tin exploration and development company, which owns 100% of the Cleveland Tin project in Tasmania, Australia. Although the holding is non-core we will continue to work with Elementos shareholders and management to optimize the value of our investment.

By Order of the Board

Bryce Crocker  
Interim Executive Chairman  
Chief Executive Officer

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## Australian Tenements

Description	Tenement number	Interest owned %
Ardnaree (NSW)	EL 5527	100.0
Thuddungra (NSW)	EL 5571	100.0
Syerston (NSW)	EL 7805	100.0
Kingsgate (NSW)	EL 8203	100.0
Area 1 (NSW)	EL 8474	100.0
6 Block (NSW)	EL 8546	100.0
West Arunta (WA)	E80 4820	100.0
Old Khartoum (QLD)	EPM 14797	100.0
North Khartoum (QLD)	EPM 15570	100.0
Khartoum (QLD)	EPM 19112	100.0
Three Mile Creek (QLD)	EPM 19113	100.0
Carbonate Creek (QLD)	EPM 19114	100.0
Mt Fairyland (QLD)	EPM 19203	100.0

*The information in this report that relates to Exploration Results is based on information compiled by S. van Huet (MAusIMM). S. van Huet 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 Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. S. van Huet consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.*