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# Jervois appoints ICO bankable feasibility study engineers

#### **HIGHLIGHTS**

- Leading international engineering groups DRA Global and M3 Engineering appointed for Idaho Cobalt Operations ("ICO") Bankable Feasibility Study ("BFS")
- Jervois has completed 1,800 metres of diamond core drilling at ICO for metallurgical testwork and samples, infill drilling and expansion drilling of the footwall – with a further 1,300 metres to be completed through October
- Geological assaying and metallurgical testwork is underway from this drilling programme
- Metallurgical testwork will support the production of separate cobalt and copper concentrates, and prepare physical concentrate samples for delivery to potential off-take customers across Q4 2020
- Jervois will also receive tenders for a scoping study to produce refined cobalt and copper from concentrate in Idaho, United States. Such a facility will both enhance the security of United States critical minerals supply and improve project economics. Once this tender is complete the successful bidder will be disclosed
- BFS and refinery engineering scoping study to be complete by end Q1 2020

Jervois Mining Limited's ("Jervois" or "the Company") (ASX:JRV, TSX-V:JRV, OTCQB: JRVMF, FRA: IHS) is pleased to announce it has selected DRA Global ("DRA") and M3 Engineering ("M3") as lead engineers for finalisation of a Bankable Feasibility Study ("BFS") for its 100%-owned ICO in Idaho, United States.

DRA and M3 represent an integrated project solution for finalising and optimising an ICO feasibility study through to construction and commissioning.

DRA and M3 have extensive study and construction experience across all the relevant unit operations for the ICO, providing a strong basis for successful BFS delivery. They were chosen due to their strong track record with relevant process plant studies as well as construction and operating implementation

phases, as Jervois looks to move seamlessly into construction after BFS and project financing close. The joint engineering team has extensive global experience across both cobalt and copper mining operations and concentrator flowsheets, whilst also having a detailed understanding of project delivery in the United States, specifically local conditions in Idaho and regional contractor capabilities.

Finalisation of the BFS will be based on a flotation mill processing 1,200 short tonnes per day ("stpd") of ore, as well as ancillary facilities. The project will ultimately consist of an underground cobalt-copper mine, a flotation mill processing 1,200 stpd as well as ancillary facilities. These will include aspects such as the mine and related infrastructure, ROM pad and crushers, fine ore conveyor and silo, mill and flotation, tailings, waste rock and water storage facilities, water treatment plant, soil stockpile area, National Pollutant Discharge Elimination System ("NPDES") discharge outfall and non-process infrastructure to support the development and mine operations.

The ICO is located on National Forest lands, and activities adhere to United States Forest Service ("USFS") and Environmental Protection Agency ("EPA") requirements – the site is environmentally permitted with an approved Plan of Operations. The level of production permitted under ICO's approved Plan of Operations is 1,200 stpd ore processed and the BFS will be updated and optimised within the framework of existing approvals. In initial discussions with US regulators, Jervois expressed its confidence and desire that the operation can ultimately be expanded in an environmentally responsible manner. Design and construction of the 1,200 stpd mine and concentrator will be undertaken with a view to optimising future expansion. Jervois looks forward to working with the USFS, the Idaho Department of Environmental Quality, local environmental groups and other stakeholders to implement this vision.

Jervois expects the BFS will be concluded in Q1 2020 and summarized in a NI 43-101 compliant feasibility study soon after.

Jervois has commenced diamond core drilling programme at ICO to supply metallurgical samples for testwork to support the BFS update, and to infill drill the RAM deposit during initial years of envisaged mining operation. Most core will be drilled by large diameter PQ size to enable sufficient ore samples for comminution and flotation testing. In addition, HQ core will extend several holes to test for the existence of footwall lenses at depth, which is present in historic works south of the Jervois claims.

Diamond cores have been quarter sampled for both assay and assessment of specific gravity at SGS Canada Pty Ltd ("SGS") in Toronto, which is generating composites core samples for metallurgical testwork to optimise selective flotation and locked cycle testing of separate cobalt and copper concentrates. Orix Geoscience are executing the drill programme and will complete an update of the geological model for the BFS and NI 43-101 feasibility study.

Mineralogy will be defined via QEMSCAN characterisation and comminution characterisation work will confirm the crushing and milling circuit configuration. An assessment of the suitability of ICO

mineralisation to ore sorting will be progressed as part of the planned testwork programme scope of work.

ICO will initially produce and sell separate cobalt and copper concentrates, as Jervois formed a view early in its due diligence of ICO that reversion to separate concentrates was commercially necessary in the absence of a United States refinery. In comparison to the partially completed mine and mill, the refinery is at a preliminary level of study and technical certainty, and so cannot be realistically constructed within the same timeframe as mine to concentrate. Jervois has commenced discussions with off-take partners for an initial period covering mine ramp up and stabilisation.

Jervois will also commission a refinery engineering study to consider commercially proven technology to process concentrates, including third party feed through to refined cobalt and copper. Jervois is focused on building domestic cobalt refinery capacity locally within the United States. Idaho has access to competitive power costs produced by hydroelectric generators and competitive skilled labour costs, which are key determinants of refinery economics. Jervois owns a potential refinery site at Blackfoot, Idaho, and believes the ICO resource potential and production scale will ultimately support downstream refining. Initial discussions with Idaho politicians and stakeholders have been positive and highlight strong local support for this initiative.

With the ICO BFS team now established, DRA and M3 will progress the engineering design for the process plant and infrastructure. In parallel, Jervois has commenced discussions with potential lenders and a data room is being prepared to facilitate due diligence. Upon project financing close and opening of the ICO mine portal and decline, Jervois expects a 12-month construction period with first saleable concentrate in 2H 2021.

For further information, please contact:

**Investors and analysts:** 

Bryce Crocker
Chief Executive Officer
Jervois Mining

bcrocker@jervoismining.com.au

Office: +61 3 9583 0498

Media:

Nathan Ryan

**NWR Communications** 

nathan.ryan@nwrcommunications.com.au

Mob: +61 420 582 887

### **About DRA Global**

DRA Global ("DRA") is a diversified global engineering, project delivery and operations management group headquartered in Perth, Australia, with an impressive track record spanning more than three decades. Known for its collaborative approach and extensive experience in project origination and delivery, as well as turnkey operations and maintenance services, DRA Global delivers optimal solutions that are tailored to meet clients' needs. With expertise in the areas of project development, mining, mineral processing, plant optimisation, operations and maintenance and related water, energy, and infrastructure requirements, DRA Global delivers truly comprehensive solutions to the resources sector. DRA Global employs over 4300 people and offers flexible engineering, project delivery and operations & maintenance management services worldwide through 17 offices.

For more information, visit www.draglobal.com

## **Enquiries:**

Christo Visser
Senior Vice President - DRA Global
<a href="mailto:christo.visser@draglobal.com">christo.visser@draglobal.com</a>
+61402901555

## **About M3 Engineering**

M3 Engineering ("M3"), a full service Engineering, Procurement and Construction Management (EPCM) firm, has provided services for over 13,000 projects for some 1,000 clients in its 33-year history. Thousands of these have been retrofit, debottlenecking and expansion projects. From these M3 has developed a special expertise in optimizing plants and avoiding lengthy startups. M3 also has extensive experience in performing EPCM for grassroots projects in the US\$100 million to US\$1.5 billion range.

With a staff of over 700 personnel, M3 has the resources and expertise available to provide Jervois Mining the necessary engineering services for the Bankable Feasibility Study (BFS) and NI43-101 Feasibility Study.

Centered in a region with significant mining and astronomical projects, M3 is well known both domestically and internationally for its contributions to these industries. M3 brings to each endeavor a team comprised of members with a wide range of knowledge and understanding for the complexities of a project from the conceptual design phase through the construction phase.

Having a professional staff of diverse backgrounds in-house, M3 is extremely cost effective at multidisciplinary work and enjoys the challenges associated with such. Gaining an understanding of the project requirements and stakeholder concerns is paramount to developing a successful project. M3's staff takes pride in their ability to listen and learn from the stakeholder. The finished product is always a result of a close, collaborative effort between M3 staff and the stakeholders.

For more information, visit www.m3eng.com

#### **Qualified Person's Statement**

The technical content of this news release has been reviewed and approved by Dean Besserer, P.Geol., the Technical Advisor of the Company and a Qualified Person as defined by National Instrument 43-101

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