

30 October 2018

## ASX Announcement

### Mt Mulgine Project Update

Australian tungsten development company, Tungsten Mining NL (ASX:TGN) (Tungsten Mining or the Company), is pleased to provide the following market update in relation to its development activities.

#### Resource Development

A program of infill, diamond, sterilisation and exploration drilling was completed at the Mt Mulgine Project between 27 August and 5 October – comprising 107 holes in total for 6,789m completed. Results for the first 92 RC holes (of 102 drilled) were reported earlier today. The assays received so far, along with the earlier infill and sterilisation drilling completed between November 2017 and April this year have highlighted the more extensive nature of tungsten and molybdenum mineralisation at Mt Mulgine (refer ASX announcements 16 February, 4 May, 31 July and 30 October 2018)

Although there has been a focus on tungsten mineralisation and its recovery, there is now a far better appreciation of the extent of molybdenum mineralisation at Mt Mulgine, highlighting the need for additional work in this area to potentially unlock significant project value.

Once all the assays have been received, the data will be used to update the geological resource model, after which revised pit optimisations, pit designs and mining schedules will be generated as part of a wider program of activity directed at enhancing potential project returns at Mulgine Hill prior to a final investment decision.

#### Engineering and Procurement

In addition to the drilling activity, considerable progress has been made in recent months with the process design and engineering required for the planned Mulgine Hill processing plant. This work has seen Company personnel collaborate with Primero, a WA based multi-disciplinary engineering group specialising in the design, construction and operation of resource projects, to define the process flowsheet, equipment selection and capital costs for the construction of the tungsten concentrate processing plant. This work has included value engineering and optioneering to define alternative start-up options, in terms of scale (production throughput), plant configuration and cost trade off (capital versus operating).

This work has provided Tungsten Mining greater clarity for its implementation strategy and risk management.

The Company has contracted with Tomra Sorting Solutions for the purchase and supply of two x-ray ore sorters (model COM Tertiary XRT 1200/B), identified as critical long lead items during the work completed with Primero.

#### Regulatory Approvals

As reported previously, the Mining Proposal, Works Approval and Native Vegetation Clearing Permit documents were submitted to the relevant Government departments immediately following the end of the June quarter (refer ASX announcement 31 July 2017). The Mining Proposal and Works Approval submissions have progressed through a process of departmental review and management follow up with the re-submission of the Works Approval and pending re-submission of the Mining Proposal. Decisions on these two key operating approvals are now anticipated in November/December. The Company has also recently received feedback from the Department of Mines Industry Regulation and Safety in relation to its Native Vegetation Clearing Permit application and is working with its environmental advisers to respond to the matters raised by the regulator.

#### Market Development

During September the Company hosted representatives of Xiamen Tungsten Co., Ltd (XTC) of China for a series of meetings at its corporate office in Perth and site visit to Mt Mulgine. The meetings were undertaken to further develop the growing relationship between Tungsten Mining and XTC and provide an opportunity for senior management of both organisations to share their views on project development activities and opportunities to enhance project value. Discussions are ongoing, consistent with the framework outlined in the Memorandum of Understanding executed between the parties in November 2017.

The Company is currently completing the processing of a 6 tonne bulk sample of material from Mulgine Hill to produce sufficient volume of tungsten concentrate marketing samples to potential off-take partners. Wet tabling work has produced a good upgrade of WO<sub>3</sub> and will be followed by a flotation stage to remove sulphide minerals.

### **Strategic Review - Large Scale Mining and Processing operations**

The far greater extent of tungsten and molybdenum mineralisation at Mt Mulgine identified during the recent drilling programs demands a clearer understanding of the potential for resource sterilisation from currently planned mining activities and further opportunities for resource growth, particularly in the case of molybdenum. Accordingly, the Company is engaging specialist resource consultants to undertake a strategic review of the entire Mt Mulgine project to better understand these risks and opportunities and, importantly, to assess and inform the decision for implementing the project on the basis of large-scale mining and processing activities. This work will be conducted concurrent with the resource upgrade and re-optimisation of the Mulgine Hill project, outlined above, and directed at ensuring the maximum value can be derived from the Mt Mulgine Project over the long term.

Whilst the initial focus of the strategic review will be upon the Mt Mulgine Project, it is also planned that the scope of the review will extend to an assessment of other projects held in the Company's portfolio to assist in ranking and developing a comprehensive project development pipeline – this can include opportunities for joint venture and fast tracking development activities.

### **Project Schedule**

The nature of the work outlined above and strategic review will necessarily impact on the timing for commencement of operations. A revised schedule will be determined as a component of the development activities and strategic review described above.

### **Competent Person's Statement**

*The information in this report that relates to Exploration Targets and Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Peter Bleakley, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Bleakley is not a full-time employee of the company. Mr Bleakley is a consultant to the mining industry. Mr Bleakley has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Bleakley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

-ENDS-

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## About Tungsten Mining

Emerging Australian tungsten developer, Tungsten Mining NL is an Australian based resources company listed on the Australian Securities Exchange. The Company's prime focus is the exploration and development of tungsten projects in Australia.

Tungsten (chemical symbol W), occurs naturally on Earth, not in its pure form but as a constituent of other minerals, only two of which support commercial extraction and processing - wolframite ((Fe, Mn)WO<sub>4</sub>) and scheelite (CaWO<sub>4</sub>).

Tungsten has the highest melting point of all elements except carbon – around 3400 °C giving it excellent high temperature mechanical properties and the lowest expansion coefficient of all metals. Tungsten is a metal of considerable strategic importance, essential to modern industrial development (across aerospace and defence, electronics, automotive, extractive and construction sectors) with uses in cemented carbides, high-speed steels and super alloys, tungsten mill products and chemicals.

Tungsten Mining has four advanced tungsten projects in Australia: in Western Australia, the Mt Mulgine Project in the Murchison region, the Big Hill Project in the Pilbara region and the Kilba Project in the Ashburton region and in Queensland the Watershed Project in north east Queensland.

Tungsten Mining is implementing a staged approach to the development of the Mt Mulgine Tungsten Project, initially focussed on a low capital start-up from Mulgine Hill, directed at demonstrating a pathway to positive cash flow and the basis for large scale mining and processing operations at Mulgine Trench.