



ABN 67 152 084 403

Suite 3  
23 Belgravia Street  
Belmont WA 6104

PO Box 588  
Belmont WA 6984

Phone +61 (0) 8 9477 3031  
Fax +61 (0) 8 9475 0847  
info@tungstenmining.com  
www.tungstenmining.com

24 October 2013

## **UPDATES TO SCOPING STUDY FURTHER IMPROVE PROSPECTS OF THE KILBA TUNGSTEN PROJECT**

### **Highlights**

- **Metallurgical testwork indicates Kilba ore amenable to Dense Medium Scalping**
- **Dense Medium Scalping is a proven process applied in producing tungsten mines internationally**
- **Process will reduce capital and operating costs, resulting in improved economics for the Kilba Project**

Tungsten Mining NL (ASX:TGN, “Tungsten Mining” or the “Company”) is pleased to announce that as part of its ongoing studies into the Kilba Project (“Kilba” or the “Project”) , it has completed analysing data from metallurgical testwork carried out on Kilba drill core as part of the recently announced Scoping Study (refer ASX announcements dated 12 June 2013 and 19 June 2013). This data strongly supports the conclusion that Kilba ore is amenable to the process enhancement of Dense Medium Scalping.

This is a process whereby, in the case of Kilba, ore would be crushed to approximately 5mm and then subject to separation in a dense medium cyclone circuit that will reject in excess of 55% of the mass of the Run-of-Mine (“ROM”) ore as barren waste with high efficiency due to the coarse-grained nature of the tungsten scheelite mineralisation.

Thereafter, only the remaining 45% of the ore, effectively now more than doubled in grade, need be delivered to the rod mill for grinding and treatment by conventional gravimetric circuits to produce the final saleable tungsten concentrate.

Dense Medium Separation is a proven process that has been successfully applied to other tungsten projects, including the Panasqueira mine in Portugal. It is also a key component in the design of the process plant for the Hemerdon Tungsten and Tin Project in England currently in construction.



Application of the Dense Medium Scalping process is expected to significantly:

- reduce capacity requirements of the process plant;
- reduce capital and operating costs; and
- improve overall Project economics.

Updated modelling indicates that inclusion of the Dense Medium Scalping circuit has the potential to reduce capital cost from \$56M to \$47M, and to improve the operating cost margin from 39% to 52%.

*The purpose of the Scoping Study was to assess the potential viability of options for the development of a tungsten mining and processing operation to be located near the Nanutarra Roadhouse on the main Northwest Coastal Highway in WA. The Scoping Study was undertaken in-house based on information provided by independent consultants, Mintrex, and presented some commercial parameters and direction for the future of the Project.*

*Tungsten Mining cautions that the Scoping Study referred to in this announcement (refer ASX announcements dated 12 June 2013 and 19 June 2013), as well as the metallurgical assessments reported herein, are based on low-level technical and economic assessments that are insufficient to support estimation of Ore Reserve, to provide assurance of an economic development case at this stage or to provide certainty that the conclusions of the Scoping Study, or of this updated study, will be realised.*

*Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource that is the subject of the Scoping Study will be converted into mineral reserve. No mineral reserves were estimated as part of the Scoping Study.*

*Investors are advised that the results of the Scoping Study do not establish the economic viability or definite value of the Project. Investors should note that for the Company to establish economic viability of its Project, the Company will need to establish sufficient Indicated Mineral Resources and sufficiently consider mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and government factors. Owing to this fact, some of the economic assumptions used in the Scoping Study may never be realised.*

*This scoping study and updated metallurgical assessment are preliminary in nature, as their conclusions are drawn partly on inferred resources (being 70% of the total stated tungsten resource) as well as indicated resources (30% of the total). There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised.*

*As was set out in the Scoping Study announcement, the Company intends to use the work done in the Scoping Study to further progress evaluation and development of the Project. This is expected to include an infill drilling program and commencement of definitive engineering to better define the Inferred Mineral Resource, along with additional evaluation work, to determine whether the Company is able to increase its level of Indicated Mineral Resource.*

Tungsten's Managing Director, Paul Berndt said "The incorporation of Dense media Scalping allows rejection of barren material very early in the flowsheet. This significantly reduces the power required for crushing and grinding, and the scale and complexity of the process plant, which in turn improves the economics"

"We are looking to progress the Definitive Feasibility Study for Kilba as soon as possible to provide a quick path to cashflow"

The key assumptions employed in the Updated Scoping Study are set out in the appendix.



**For further information contact**

**Paul Berndt**     **Managing Director Tel: +61 8 9477 3031**  
**Colin Hay**     **PPR Public Relations Tel: +61 8 9388 0944**

[info@tungstenmining.com](mailto:info@tungstenmining.com)  
[colin.hay@ppr.com.au](mailto:colin.hay@ppr.com.au)

Further information about the company's activities may be found at [www.tungstenmining.com](http://www.tungstenmining.com).

**About Tungsten Mining:** ***Tungsten Mining NL** was admitted to ASX on 13 December, 2012. The Company is focused on development and exploitation of tungsten deposits. The management and Board of the company have previous experience in tungsten mine development and operations in Spain, through Daytal Resources S.L, the operator of the Los Santos tungsten mine.*

**Appendix: key parameters for financial model**

- Initial Mine life: 7 years
- Total production (life of mine) WO<sub>3</sub>: 968,000 mtu
- Average annual production WO<sub>3</sub>: 147,700 mtu
- Capital cost: \$47M
- Average LOM operating Cost: \$167/mtu
- Tungsten recovery 81.2%
- Tungsten concentrate grade >65% WO<sub>3</sub>
- Assumed WO<sub>3</sub> price (APT): US\$440/mtu
- Debt/Equity ratio 70:30
- Assumed exchange rate A\$1 = US\$0.92