

Market Announcement

For Immediate Release



METALLURGICAL TESTWORK RESULTS

New Talisman Gold Mines Limited

**Responsible,
Environmentally
Sustainable Mining**

ASX/NZX Code NTL

Commodity Exposure
GOLD and SILVER

Board and Management

Charbel Nader Chairman/Independent Director
Matthew Hill Chief Executive/ Managing Director
Murray McKee Independent Director
Murray Stevens Non Exec Director
Tony Haworth Independent Director
Jane Bell Company Secretary
Wayne Chowles Chief Operating Officer
Ash Clarke Chief Financial Officer

Capital Structure

Ordinary Shares at 20/03/2018 2,157m

Share Price

Share Price at 20/03/2018 (NZX) 1.6cps
Share Price at 20/03/2018 (ASX) 1.4cps



New Talisman Gold Mines Limited

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HIGHLIGHTS

- 75kg of ore from the target areas of Mystery and Dubbo have been treated using Gravity Concentration and Flotation methods;
- Testwork shows that 94% and 93.6% gold is recoverable in the Dubbo and Mystery samples respectively using this process;
- Only environmentally benign reagents are used to achieve these recovery levels;
- Design of pilot plant is underway.

Testwork Overview

Gold at the Talisman Mine is hosted in three major quartz veins, namely, the Maria, Mystery and Crown/Welcome. Of these three the Maria vein is the major contributor containing approximately 91% of the mines 469,000 Oz AuEq Mineral Resource within the Dubbo, Bonanza and Woodstock Zones. The average grade of the resources in these zones is estimated at 22.0g/t, 23.6g/t and 6.3g/t AuEq respectively with some 313,000 Oz lying in the Dubbo Zone. (please see announcement of <https://www.asx.com.au/asxpdf/20170905/pdf/43m2d5v2hnybjc.pdf>) Exploration in this area has yielded some spectacular results, notably hole BM 37 which yielded 1.8 m @ 656g/t Au and 2080g/t Ag.

The Mystery Vein is a newly discovered vein that is highly prospective and a potentially significant contributor to the future of the mine.

The metallurgical testwork was designed to deliver reliable and repeatable results which will be used to inform engineering studies and cost estimates both for pilot testwork during the Bulk Sampling Project and to inform design in an updated Pre-Feasibility Study.

Testwork examined the processing path, post mining, as illustrated below:



There are four stages to the metalurgical process once ore has been mined and crushed to a suitable feed size:

- 1) Grinding of ore to a suitable size to liberate gold;
- 2) Recovery of free milling gold in a gravity concentrator
- 3) Flotation of the concentrator tails to recover additional gold
- 4) Final recovery of gold from concentrate

Processing - Grinding



An important output from the testwork was to determine the optimal grind size to liberate gold contained in the ore. Grinding (or milling) of ore takes place in a ball mill and is the most expensive and energy intensive part of the process. The finer the grind size required the more energy and time is taken up. Two grind sizes were tested here with ore initially milled to p80 passing 106µm and again to p80 passing 53µm.

Processing – Gravity Concentration



The milled product was pulped to 50 % solids and the resultant pulp was subjected to gravity concentration via a Knelson Centrifugal Concentrator. The primary concentrate was upgraded via careful hand panning to provide final concentrate mass yield approaching that of operating Knelson installations. Final free gold concentrate (pan concentrate) was assayed via total fusion to eliminate sampling error and nugget effect. Secondary concentrate (pan tailing) and final tailings were dried, weighed and split for Au assay.

Results from this show that 61.3% of gold in Dubbo ore, and 81.9% of gold in Mystery ore can be recovered directly through this process.

Processing – Flotation



Tailings from the gravity concentrator were pulped to 20% solids and subjected to single stage flotation with the addition of copper sulphate, sodium isobutyl and Dow 250 which are all environmentally benign reagents.

This process resulted in recovery of an additional 32.7% of gold from Dubbo ore and 11.7% from Mystery ore, yielding overall recoveries of **94% and 93.6%** respectively. Variance of recovery rates between the two grind sizes was insignificant. This is comparable to the recovery achieved from Talisman ore which has previously been treated using a cyanide leach process. Importantly, the gravity and flotation process will produce inert tailings with low sulphide levels.

Processing – Gold Recovery



On exit from the flotation tanks the concentrate can either be sold directly on the market or the gold recovered on a shaker table and smelted.

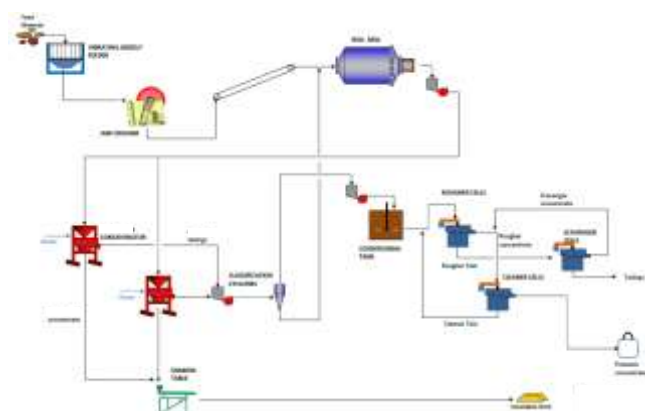
These results are very pleasing with recovery rates nearing those attained from similar tests involving cyanide leaching. Essentially this means that, following pilot testing, the company will be able to use only environmentally benign reagents for gold recovery which supports the company in its goal for the Talisman Mining operation to be a responsible, environmentally sustainable operation.



Chief operating officer and principal mining engineer Wayne Chowles said “The results of this testwork provides the necessary hard data with which to proceed with forward planning and takes us an important step closer to realizing the potential of this magnificent orebody”

Next Steps – Pilot Plant Design

Results from the testwork set out above will inform the design of a pilot plant layout which is



expected to be similar to that set out in the process flow diagram alongside. It is expected that the plant will be modular and scalable allowing components to be added as production volumes increase. Further information on this will be released to the market as it becomes available.

New Talisman CEO, Matthew Hill said “ The completion of this testwork demonstrates the successful ability to extract high grade concentrate from the existing orebodies without the use of any hazardous chemicals. From a processing perspective this is about as clean and environmentally friendly for treatment of gold ore as it gets with natural rock being reused as backfill. This is a key milestone for the company and allows us to develop a saleable product without the need for external parties.”

Matthew Hill

Chief Executive Officer

New Talisman Gold Mines Limited

About New Talisman Gold Mines Ltd

New Talisman Gold is a dual listed (NZSX & ASX: NTL) with over 2250 shareholders who are mainly from Australia and New Zealand and has been listed since 1986. It is a leading New Zealand minerals development and exploration company with a mining permit encompassing the Talisman mine, one of New Zealand's historically most productive gold mines. The company has commenced prospecting and upgrading activities at the mine and advance the exploration project and increase its considerable global exploration target into JORC 2012 resources.

Its gold properties near Paeroa in the Hauraki District of New Zealand are a granted mining permit, including New Zealand's highest-grade underground gold mine, a JORC 2012 compliant mineral resource of over 427,000 ounces au/eq at an average above 15 gt AU/eq and a JORC compliant reserve statement. The company owns 100% exploration permit Rahu, which lies along strike from the Talisman mine of which 80% was recently acquired from Newcrest Mining. The company will shortly commence exploration activities at Rahu.