

# Market Announcement

## For Immediate Release

**NEW Talisman**  
GOLD MINES LIMITED

### Quarterly Activities Report to 31 March 2019

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 Stevens** Non-Executive Director  
**Tony Haworth** Independent Director  
**Jane Bell** Company Secretary  
**Wayne Chowles** Chief Operating Officer

**Capital Structure**  
**Ordinary Shares** at 20/06/2018 2,164m

**Share Price**  
**Share Price** at 30/04/2019 (NZX) 1.2cps  
**Share Price** at 30/04/2019 (ASX) 1.0cps



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### **QUARTER HIGHLIGHTS**

- Sampling results from Mystery Vein show extension of high-grade gold and silver mineralisation following initial refurbishment and sampling
- Auxiliary fan commissioned and loading at Dubbo Zone underway
- Development of the Keillors 8A return airway commences
- Blasting Extraction and stockpiling continues underground
- Access to Dubbo Zone advances substantially

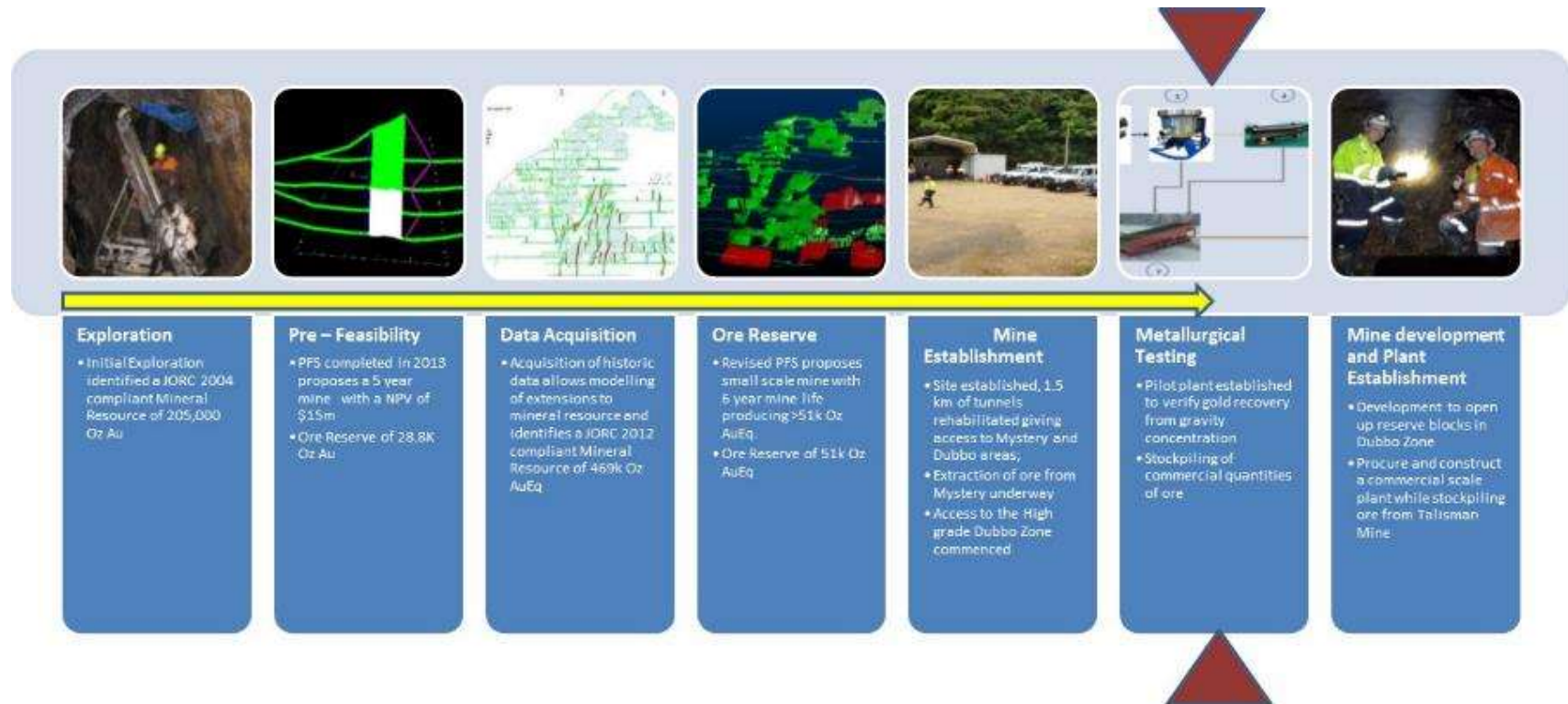
The beginning of the 2019 calendar saw another busy quarter at the Talisman mine with great strides being taken to secure access to the BM37 Rise in the Dubbo Zone area. Following completion of refurbishments and testing of the face at Mystery the focus this quarter has been on gaining access to Dubbo and finalising resource consent for pilot plant operations. While the Dubbo area has been slower to progress than expected the material removed to date shows significant promise as set out in this report. Over the next quarter the company will focus on progressing further into Mystery vein extension, moving ore to the pilot plant for processing and making safe the Dubbo area in order to commence sampling of the vein faces.



Figure 1 – Cleaning out BM37 Cross-cut

## TALISMAN MINE PROJECT

The Diagram below shows the stages of development and evolution the mine has taken since Heritage commenced exploration activities through to mine development and planning.



Following the initial proving of the vein extension at Dubbo all underground resources were mobilized to gaining access to this high grade area. Access was gained into the Dubbo area during the quarter and revealed extensive excavations with refurbishments needed prior to extraction of samples from the exposed vein. Following the end of the period the team had progressed the excavations and improvements.

Now that access has been gained to Dubbo and the program of works needed in order for the team to safely access the vein has commenced, technical resources have been deployed to the blasting and excavation activities at Mystery and commencement of metallurgical testwork to determine requirements for a higher volume plant.

### **Dubbo Zone Access**

With installation of the underground auxiliary fan complete, the fan has been commissioned and air ducting in place through the single-entry Dubbo extension of No 8 Level, mobile machinery was deployed to the BM37 Cross-cut to commence loading of waste rock so that clearing access to the BM37 rise could get underway. This zone was identified by borehole BM37 which **assayed 656 g/t Au over 1.8m including 1154 g/t Au over 1.0m and was the location of the last mining activity to take place under the mines previous owners in the late 1980's.**

Initial inspection of the area indicated that there had been a fall of ground in the on vein rise at the end of BM37 Cross-cut, completely blocking access to vein.



As loading progressed it became apparent that the hangingwall in the excavation had fallen against a fault zone, filling the rise with fine material that was overlain with large blocks of andesite. Removal of the material was complicated by the presence of a wooden scaffold, previously erected to gain access to the rise above, which acted as a canopy preventing the free flow of rock from the excavation.





*Figure 2 - the Brow of the Dubbo Rise showing fine material being loaded out*

Sufficient rock has now been removed to allow partial access to the rise and a small area of the vein exposure. From preliminary inspection of the size and physical conditions further up in the area, it is apparent that the rise extends approximately 15m upwards at a dip of approximately 80 degrees and has been opened to approximately 8m wide along the strike of the vein. There is also evidence of two drives extending north and south from the base of the cross-cut along the vein although the complete strike extent of these cannot be measured as yet. The vein itself is evident in the upper part of both drives.



*Figure 3 - the brow below the Dubbo Rise showing large material dislodged from the rise hangingwall.*

Support requirements have been assessed and a staged approach has been adopted to making the area safe for human access. Stage 1 of this programme involves the construction of wooden and steel sets from the brow of the cross-cut extending into the lower portion of the rise at approximately the

elevation intersected by the BM37 borehole. This will allow the remaining rock to be removed from the base of the cross-cut, which will, in turn, provide access to the vein material exposed on the faces of the Northern and Southern drives and sampling of this material will get underway. The sets will also provide a platform from which work can commence on removing remaining rocks hanging up in the rise and constructing a suitable platform from which to work in these very difficult conditions.



*Figure 4 - Historical support in place below the Dubbo Maria Vein exposure*



*Figure 5 - Exposure of the Maria Vein on the Northern sidewall of BM37 cross-cut below the rise*





*Figure 6 - Timber sets being constructed to reinforce the brow at the entrance to the Dubbo Rise*

To date, from the Dubbo area alone, approximately 200 tonnes of rock, comprising mainly host andesite mixed with fine vein material, has been removed from the area using a small bogger and handheld equipment. Where possible the quartz has been trammed separately from the andesite. Where larger sized blocks of ore could be identified they have been removed and are stored separately for later testing in the pilot plant. Assays of grab samples from run of mine ore have ranged between **trace and 515g/t gold for an average of 34.8g/t Au, and trace and 4070g/t silver for an average of 296g/t Ag.**

Representative samples have been taken of broken ore removed from northern face and removed to rom stockpile Has yielded grades **between 2.65g/t and 130g/t gold for an average of 36g/t Au, and between 35g/t and 441g/t silver for an average of 146g/t Ag.**



*Figure 7 - Photo taken inside the Dubbo Rise looking upwards at 80 degrees from vertical*

### **Dubbo Return Airway and Second Escape**

Development of the Dubbo Return Airway continued, an additional flat blast was taken to attain the position where the inclined end will begin. This drive will connect Keillors Cross cut with the BM37 rise to provide a route through which air will return from the Dubbo workings and will also create a second escape route from the area. This incline is targeted to intersect the Maria vein approximately 15m above the existing Dubbo extension and, from that point, will follow the vein to the intersection of the BM37 rise.

### **Mystery Vein**

Due to the focus on the Dubbo area during the quarter, work on the Mystery Vein Northern Drive was limited to the removal of the waste rock left behind during the first stage of the rescue mining method. This has proven effective and, with the opening of Dubbo area for access now nearing completion, resources will again be directed towards advancing this drive with ore moved to ROM stockpile. The Mystery Vein poses the most significant potential for expansion given the positive results achieved on proving the extension of high grade gold and silver mineralization.

The Mystery Vein was discovered in the 1980's, by then operator Cyprus Mines Corporation in joint venture with New Zealand Gold Fields Ltd, when developing Keillors Crosscut to connect the Talisman Mine with the adjacent Crown Mine. This cross-cut intersected a previously unidentified vein, now called Mystery Vein, approximately mid-way between the historically productive Maria and Crown vein systems. It is believed that this vein had not been identified previously because of its location on the boundary between the two historic mining permits, although there is evidence that the vein may have been encountered in the lower levels of the Talisman Mine. The vein has been exposed over a strike length of some 50m and regular sampling carried out by New Talisman (then called Heritage Gold) identified samples on the face of Mystery with grades of up to 50 g/t. Recent check sampling of ore exposed at the drive face yielded grades of up to 40 g/t Au (please see <https://www.asx.com.au/asxpdf/20180508/pdf/43tvlpmv420f4f.pdf>.)

The Mystery vein shows similar geological characteristics to the adjacent veins and follows a similar north south strike direction, suggesting that this may be the same vein system worked at the historic Rhoderick Dhu Mine which is located roughly mid-way between the Talisman and Crown Mines around 100m below the current exposure on No 8 Level. Current activities at the Talisman prioritize enhancing the Company's understanding of the full extent of the vein given its potential to be a major contributor to mine life.



*Figure 8 - the face of the Mystery Drive showing the extension of the vein before sidewall waste is removed*

### **Metallurgical Testwork Pilot Plant**

Commissioning of the pilot processing plant has been delayed by land use consent applications which are being processed. All components of plant have arrived and are awaiting assembly off site. It is anticipated that resource consent issues will be resolved by end May following which the plant can be commissioned. In the interim the ROM stockpile continues to grow and will remain stored inside the mine until the plant is operational. One aim of this test batch is to prove that the required precious metal recovery rates can be achieved and any potentially acid forming minerals can be removed from the waste material leaving a chemically inert commercially viable by-product.

While the capacity of the pilot plant is relatively low the aim is to replicate the recovery rates which were achieved using a similar flowsheet in the testwork carried out in South Africa in February 2018 (please see <https://www.asx.com.au/asxpdf/20180322/pdf/43sn63s00fjnz6.pdf> ) . Once recovery rates are confirmed a larger plant, suitable for the longer-term needs is planned, dependent on other options as the company continues to assess enquiries regarding alternative potential treatment options.

### **Tenements Held**

Rahu EL40117 - Rahu Resources (100% New Talisman)

Talisman ML51326 - 100% 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 to 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 one of New Zealand's highest-grade underground gold mines, a JORC 2012 compliant mineral resource of over 469,000 ounces AuEq at an average above 15 g/t AuEq and a JORC compliant reserve statement. The Company owns 100% of the Rahu exploration permit, 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.