

#### 26 February 2018

# NSW Lachlan Cu/Au Project: Targeting Review Completed

### High Priority prospect areas identified from mapping and historic data.

## **Highlights**

- Comprehensive review of regional geology and available government datasets completed.
- Numerous high priority prospect areas identified, including:
  - o advanced targets with previous RC and diamond drilling (Blind Calf Prospect);
  - o areas of anomalous historic soil and rock chip geochemistry; and
  - o geological extensions of known mineralisation bearing stratigraphy.
- Historic drilling at the *Blind Calf Prospect* identified near surface **high-grade copper** mineralisation remaining **open along strike and at depth,** including:
  - o KD11-17: 27m @ 6.08% Cu, 7.6g/t Ag (from 24m) i
  - o KD11-19: **14m @ 2.32% Cu**, 1.98g/t Ag (from 97m)<sup>i</sup>
  - o KD10-1: **21m @ 2.24% Cu**, 2.82g/t Ag (from 41m)<sup>i</sup>
  - o KD11-22: **13m @ 2.18% Cu**, 2.5g/t Ag (from 71m)<sup>i</sup>
- Updated **3D sectional interpretation** of the known high-grade copper mineralisation at *Blind Calf* underway ahead of proposed RC and diamond drilling.
- **High-grade copper, gold** and **lead** results from historic rock chip sampling highlights additional prospect areas, including:
  - 23.9% Pb, 3.7 g/t Au (gossan outcrop)<sup>iii</sup>
  - o 8.2% Cu, 3.73% Pb (gossan outcrop)<sup>iii</sup>
  - o 21.1 g/t Au; 13.6g/t Au; 7.8g/t Au (qtz vein outcrop)<sup>iv</sup>
- Talisman continues to develop a strong community licence to operate through a culture of inclusive communication and ongoing engagement with local stakeholders.
- Upcoming and planned work to include:
  - o RC and diamond drilling, following the receipt of required regulatory approvals;
  - o geochemical auger drilling;
  - o detailed geological and structural mapping; and
  - o geophysical surveys.

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#### **Overview**

The Lachlan Copper-Gold Project represents a significant, strategic tenement package of 2,808km<sup>2</sup> covering a strike length of approximately 160km along the Gilmore Suture (*Figure 1*) which hosts the high-grade historic Mt Boppy, Bobadah and Mineral Hill gold, copper and base metal mines.

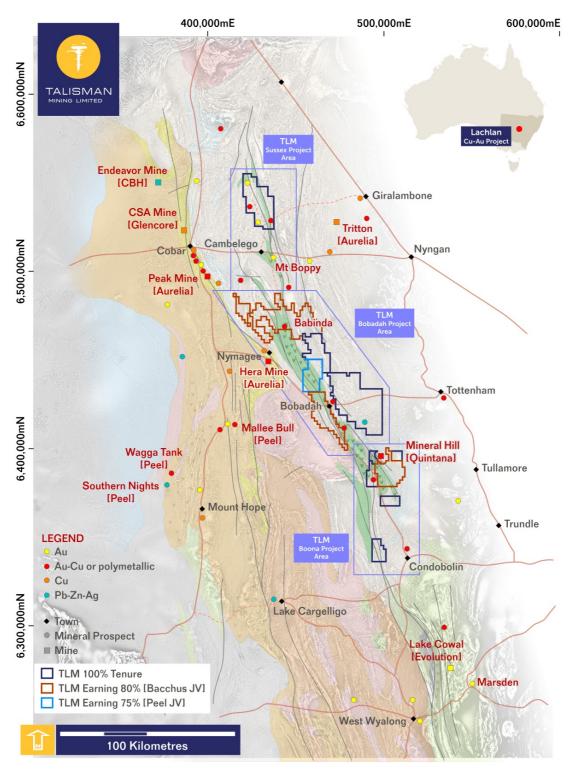


Figure 1: NSW Lachlan Project Tenure simplified regional geology and structure



Talisman Mining Ltd (ASX:**TLM**; "**Talisman**") has secured this substantial landholding for low upfront cost by pegging open ground, the purchase of ground and Joint Venture agreements with Peel Mining Ltd (ASX:**PEX**) and Bacchus Resources Pty Ltd ("**Bacchus**").

Talisman has now completed a comprehensive compilation and review of historic drilling and other existing exploration data across Talisman's wholly owned and Joint Venture tenure that makes up the Lachlan Copper-Gold Project.

Historic data comprises sporadic isolated surface sampling (soil, rock-chip and auger samples), and limited RC and diamond drilling. The majority of the work was completed by a number of explorers throughout the 1970's, 1980's and early 1990's, with some of the most recent work completed in 2010 and 2011. Talisman's review of the data has highlighted that there has been no coordinated, systematic regional exploration across the tenement package, which until now has been fragmented and under the control of multiple exploration companies.

In addition to the review of available historic data, Talisman, in association with specialists from SRK Consulting, has undertaken a regional structural and geological interpretation of the area as part of its first pass exploration work. This work included a detailed geological review of the known major mineral deposits in the district which has provided insight to the major regional controls on mineralisation.

Talisman has also recently completed its second field visit to undertake reconnaissance field mapping and rock-chip sampling over known prospective areas.

As a result of the work undertaken to date, Talisman has highlighted several high priority areas for initial focus where more detailed geological interpretations have been completed or are underway.

The nature of the cover, lithology and mineralisation styles within the Lachlan Copper-Gold Project area means geophysical targeting techniques such as EM, IP and gravity surveying are effective tools in defining drill targets. Talisman intends to build a strong database of soil sampling, auger sampling, geological and structure mapping and geophysical surveys to develop and prioritise targets for drilling.

#### **Boona Project Area**

#### Blind Calf Prospect (100% Talisman Tenure)

The Blind Calf Prospect is located within Talisman's 100% tenure approximately 5km to the South West of the Mineral Hill Mine (*Figure 2*) and is a high priority for near term on-ground exploration drilling.

The Blind Calf Prospect, comprises a cluster of 13 historic (early 1900's) mining shafts, developed on a series of shear hosted sulphide rich quartz lodes with mapped outcrop strike extents of between 40m to 100m and widths of 5m at surface.

Drilling by previous explorers in early 2011 has confirmed that these lodes contain significant highgrade copper mineralisation, with results including:

- KD11-17: 27m @ 6.08% Cu, 7.6g/t Ag (from 24m)<sup>l</sup>;
- KD11-19: 14m @ 2.32% Cu, 1.98g/t Ag (from 97m)<sup>1</sup>;
- KD10-1: **21m @ 2.24% Cu, 2.82g/t Ag** (from 41m)<sup>1</sup>; and
- KD11-22: 13m @ 2.18% Cu, 2.5g/t Ag (from 71m)<sup>i</sup>.

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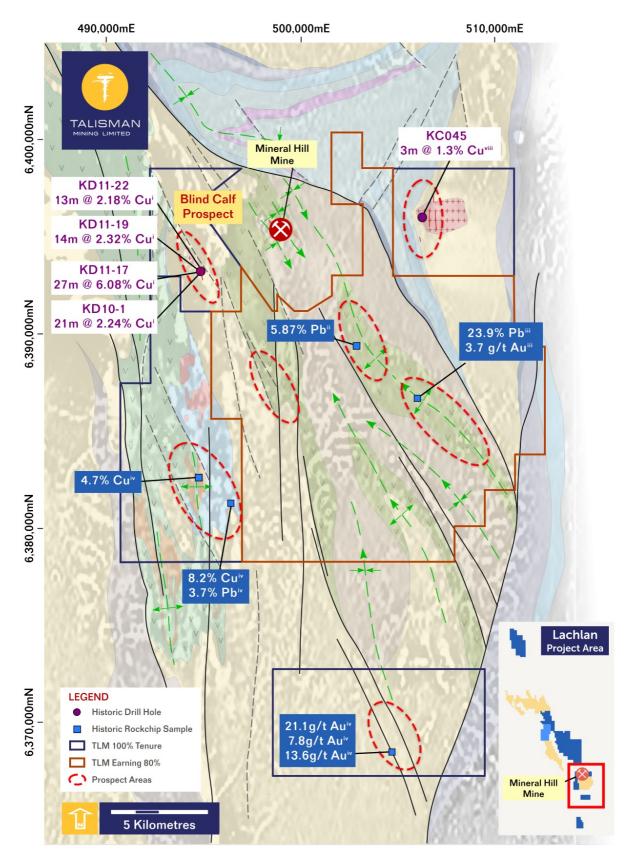


Figure 2: Detailed geology and prospectivity map of the Boona Project Area





The majority of the historic drilling has been within the top 150m from surface, with very limited deeper drilling completed. The deepest intersection to date was from hole KD004<sup>v</sup> which intersected **1.0m @ 1.13% Cu**<sup>v</sup> from a depth of 467.3m.



**Figure 3:**  $KD004^{v}$  – a section of drill core showing fresh copper sulphides (chalcopyrite) from the beneath the historic Dunbar Shaft.

Detailed 3D sectional modelling of these and other historic results from the *Blind Calf Prospect* is currently underway and will form the basis of a targeting process for a planned RC and diamond drilling program aimed at confirming the high-grade nature, thickness and strike extent of the identified lodes.

Previous explorers have indicated that a series of four separate IP chargeability anomalies<sup>vi</sup> are present below the currently identified mineralisation. Talisman has been unable to secure this geophysical data for reprocessing and interpretation, and as a result will look to complete a new geophysical survey over this area and utilising the latest IP survey technology.

#### **Other Prospect Areas**

The area surrounding and along strike to the south east of the Mineral Hill copper and base metal mine forms part of the Bacchus Joint Venture where TLM is earning up to an 80% interest (*Figure 2*). This is another high priority area identified from both the regional geological review and the compilation of historic results.

The Mineral Hill gold and base metal mine (historic production of some 395,000oz Au and 32,500t Cu), comprises a series of shear hosted sulphide rich lodes with varied mineralogy, including copper rich lodes, lead-zinc lodes, and gold only systems.

Talisman's tenements contain the southern strike extensions of the Mineral Hill host volcanic sequence (*Figure 2*). The volcanic sequence extends for over 10km into Talisman's tenure, with a number of historic copper and gold occurrences documented in the NSW government database along an anticline structure mapped by Talisman. Results of rock chip sampling by previous explorers of gossanous base metal (Pb/Zn) outcrop adjacent to small scale historic mine shafts along this structure include **5.87% Pb<sup>ii</sup>**, **23.0% Pb<sup>iii</sup>** and **3.7g/t Au<sup>iii</sup>**. This same anticline structure also has an extensive coincident historic gold and base metal soil (*MMI*) anomaly<sup>vii</sup> which extends for over 3km along strike.





Talisman believes that the Mineral Hill lodes and the mineralisation seen at *Blind Calf* and surrounding area (*rock chip results of* **8.2% Cu<sup>iv</sup>**, **3.7% Pb<sup>iv</sup>** and **4.7% Cu<sup>iv</sup>**), may be part of a larger mineralising system in this area associated with the Mineral Hill Volcanics (*Figure 2*) and the regional Gilmore Suture, over which Talisman hold significant tenure.

This region, which comprises a moderate amount of sub-outcrop and shallow cover sequences, is highlight amenable to surface geochemical sampling/shallow auger sampling, along with airborne and surface geophysical techniques. This will enable rapid, low-cost initial exploration over large areas to draw out and prioritise prospective target areas.



Figure 4: Blind Calf historic workings, with outcropping copper-rich sheared quartz vein lodes.

Other highly prospective areas have been identified in this region where limited RC drilling beneath outcropping epithermal quartz-malachite veining has returned shallow intersections of copper mineralisation, including: *KC45: 3m @ 1.3% Cu<sup>viii</sup>*; and where numerous rock chip samples of outcropping quartz vein have returned high-grade gold results, including: 21.1g/t Au<sup>iv</sup>, 13.6 g/t Au<sup>iv</sup>, 7.8 g/t Au<sup>iv</sup>, 6.7g/t Au<sup>iv</sup>.







Figure 5: Gossanous sub-outcrop at the historic base-metal Durning's Shaft within the Boona Prospect area.

#### **Tenure and Other Activities**

Talisman has continued to work closely with the relevant local landholders to secure access across its tenure. Talisman's culture of inclusive communication and engagement with all stakeholders has seen it establish a strong community licence to operate in the area, while securing access to all of the currently identified high priority areas.



Figure 6: Flat, open areas with shallow regolith on the Boona Project, amenable to low-cost surface geochemical sampling and airborne geophysical survey techniques



Talisman has also opened communication with the appropriate NSW Government departments at the highest levels, to facilitate a smooth entry into this new regulatory environment; and to ensure that Talisman remains compliant with all regulatory, tenement and environmental requirements.

Talisman has submitted the required documentation for an initial auger geochemical sampling program over the prospects outlined above and is confident of receiving final approval to enable the commencement of this work in the current quarter. Similarly, Talisman is confident that the required regulatory grants and approvals to progress to drill testing of the advanced Blind Calf Prospect will also be received in the current quarter.

### Ends

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### **About Talisman Mining**

Talisman Mining Limited (ASX:TLM) is an Australian mineral development and exploration company. The Company's aim is to maximise shareholder value through exploration, discovery and development of complementary opportunities in base and precious metals.

Talisman holds a 30% interest in the Springfield Joint Venture with Sandfire Resources NL (70% and JV manager). Springfield is located in a proven VMS province in Western Australia's Bryah Basin and contains multiple prospective corridors and active exploration activities. Springfield hosts the high-grade Monty copper-gold deposit which is located 10 kilometres from Sandfire's DeGrussa operations. Monty is one of the highest-grade copper-gold discoveries made globally in recent decades and a Feasibility Study on its development was completed in March 2017. The Feasibility Study highlighted the strong technical and financial viability of Monty. The Monty deposit is currently under development and Talisman has secured project debt financing for 100% of its share of pre-production capital costs.

Talisman also holds 100% of the Sinclair Nickel Project located in the world-class Agnew-Wiluna greenstone belt in WA's north-eastern Goldfields. The Sinclair nickel deposit, developed and commissioned in 2008 and operated successfully before being placed on care and maintenance in August 2013, produced approximately 38,500 tonnes of nickel at an average life-of-mine head grade of 2.44% nickel. Sinclair has extensive infrastructure and includes a substantial 290km2 tenement package covering more than 80km of strike in prospective ultramafic contact within a 35km radius of existing processing plant and infrastructure.

Talisman has also secured tenements in the Cobar/Mineral Hill region in Central NSW through the grant of 100% owned Exploration Licenses and through separate earn-in Joint Venture and tenement purchase agreements. The Cobar/Mineral Hill region is a richly mineralised district that hosts several base and precious metal mines including the CSA, Tritton, and Hera/Nymagee mines. This region contains highly prospective geology that has produced many long-life, high-grade mineral discoveries. Talisman has identified a number of areas within its own and Joint Venture tenements that show evidence of base and precious metals endowment which have had very little modern systematic exploration completed to date. Talisman believes there is significant potential for the discovery of substantial base metals and gold mineralisation within this land package.





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

Information in this ASX release that relates to Exploration Results and Exploration Targets is based on information completed by Mr Anthony Greenaway, who is a member of the Australasian Institute of Mining and Metallurgy. Mr Greenaway is a full-time employee of Talisman Mining Ltd and has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code for Reporting of Mineral Resources and Ore Reserves". Mr Greenaway consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

No new information that is considered material is included in this document. All information relating to exploration results has been previously released to the market and is appropriately referenced in this document. JORC tables are not considered necessary to accompany this document.

### **Forward-Looking Statements**

This ASX release may include forward-looking statements. These forward-looking statements are not historical facts but rather are based on Talisman Mining Ltd.'s current expectations, estimates and assumptions about the industry in which Talisman Mining Ltd operates, and beliefs and assumptions regarding Talisman Mining Ltd.'s future performance. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates", "potential" and similar expressions are intended to identify forward-looking statements. Forwardlooking statements are only predictions and are not guaranteed, and they are subject to known and unknown risks, uncertainties and assumptions, some of which are outside the control of Talisman Mining Ltd. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. Actual values, results or events may be materially different to those expressed or implied in this presentation. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Talisman Mining Ltd does not undertake any obligation to update or revise any information or any of the forward looking statements in this announcement or any changes in events, conditions or circumstances on which any such forward looking statement is based.

viii For full details, refer to Kidman Resources (ASX: KDR) ASX announcement "New Copper Discovery at Wilmatha" dated 30 November 2011



<sup>&</sup>lt;sup>i</sup> For full details, refer to Kidman Resources (ASX: KDR) ASX announcement "Mineralisation Extended at Blind Calf" dated 07 July 2011,

<sup>&</sup>lt;sup>ii</sup> Result taken from work completed by Geopeko and Mount Conqueror Minerals, GS2000/292.R00042454. Geological Survey of NSW DIGS reporting system

iii Result taken from CRA Exploration Pty Ltd report GS1978/259.R00023043. Geological Survey of NSW DIGS reporting system

<sup>&</sup>lt;sup>iv</sup> Result taken from Triako Resources Ltd report R000300065. Geological Survey of NSW DIGS reporting system

<sup>&</sup>lt;sup>v</sup> For full details, refer to Kidman Resources (ASX: KDR) ASX announcement "Blind Calf Copper Continues at Depth" dated 05 April 2012

v<sup>i</sup> For full details, refer to Kidman Resources (ASX: KDR) ASX announcement "Strong IP targets Identified at Blind Calf" dated 07 Dec 2011

vii For full details, refer to Triako Resources Ltd report R0001203. Geological Survey of NSW DIGS reporting system