

30 April 2018

# Quarterly Activities Report March 2018

## **Highlights**

#### Springfield Cu-Au Project - (30% Talisman)

#### **Monty Mine Development and Economic Evaluation**

- Monty underground development ahead of schedule. Decline development at end of March 2018 advanced to 664 metres compared to a budgeted 711 metres.
- Talisman's share of actual pre-production capital costs to date of \$10.3M are under Budget and Feasibility Study costs.
- Go-forward<sup>4</sup> pre-tax ungeared NPV of Talisman's 30% share in Monty, as per the Monty Feasibility Study<sup>3</sup>, as at 1 April 2018 of \$66 million.

#### **Exploration Activities**

- Joint Venture exploration activities completed for the quarter included:
  - o Diamond drilling of the Monty Upper Zone
  - Two diamond drill holes at Monty NE aircore anomaly and Monty East Trend
  - o Infill aircore drilling at Homer and the Southern Volcanics
- Budgeted exploration for the June Quarter includes on-going aircore drilling and follow-up RC drilling of anomalies identified from aircore drilling.

#### **Lachlan Cu-Au Projects**

- New exploration licences at Crowl Creek in the Boona Project Area granted for six year terms.
- Remodelling of mineralisation at Blind Calf Prospect highlights multiple lenses, open along strike and at depth.
- A 1,000m seven-hole RC/diamond drilling program at Blind Calf Prospect has been submitted to the NSW Department of Planning and Environment for approval.
- Commencement of 4,500-hole auger geochemical drilling campaign at the Cumbine Prospect (Peel JV) in the Bobadah Project Area.

#### **Sinclair Nickel Project - (100% Talisman)**

 Ongoing review and assessment to identify and prioritise potential future on-ground near mine and regional exploration activities.





## Springfield Copper-Gold Project (Joint Venture with Sandfire Resources NL)

During the March 2018 quarter, joint venture activities at the Springfield Cu-Au Project (**Springfield**) continued to progress the development of the Monty Copper-Gold Project (**Monty**); while exploration focused on better defining the Monty Deposit Upper Zone, diamond drill testing of the Monty NE anomaly, and infill aircore drilling at the Homer Prospect and Southern Volcanics Trend.

### **Monty Development**

On-site construction activities for Monty progressed throughout the March 2018 quarter. Significant Infrastructure milestones included:

- Works Approval by DWER to allow for dewatering infrastructure to be constructed;
- Completion of all contracted bulk earthworks and civils;
- Commissioning and utilisation of on-site office facilities;
- Completion of high-voltage infrastructure, now energised and ready for underground substation commissioning; and
- Breakthrough of the return air-drive to the base of the vent shaft.



Figure 1: Monty Project: Site office, power generators and associated infrastructure.





Figure 2: Monty Project: High voltage switchgear installed and ready for use



Figure 3: Monty Project: Underground ventilation pumping station

Monty underground development continued to make good progress throughout the March quarter with total development metres ahead of schedule on a year-to-date basis.





Decline development was impacted by water ingress from discrete structures during the month. By the end of March, the decline had advanced to 664 metres compared to a corresponding feasibility study budget of 711 metres. It is anticipated that the decline advance will be realigned with the schedule during the current June quarter.

Total development advance was 1,322 meters as at the end of March, compared to the Feasibility Study schedule of 1,276 meters.

### **Monty Development Budget**

In December 2017, the Joint Venture approved a new budget for the period ending 30 June 2018 and a forecast to 31 December 2018 (Current Budget/Forecast)<sup>1</sup> which reflected approximately \$8M (100% basis) of realised capital cost savings to the end of November 2017 compared to the Monty Feasibility Study total (100% basis) pre-production capital cost estimate of \$72.6M. Talisman's share of this reduction in pre-production capital was estimated at \$2.4M<sup>1</sup>.

On a 100% basis, actual Monty pre-production capital expenditure in the first quarter of the 2018 calendar year was \$10.8M compared to the Current Budget/Forecast of \$14.8M. Talisman's share of actual expenditure for the quarter was \$3.2M compared to the Current Budget/Forecast of \$4.4M.

On a project to date basis (1 July 2017 to 31 March 2018) Talisman's 30% share of actual preproduction capital costs are \$10.3M compared to corresponding Monty Feasibility Study costs of \$14.6M.

The Joint Venture is currently preparing an updated budget from 1 July 2018 to 30 June 2019.

## **Monty Project Financing Facility (PFF)**

Talisman has secured a project debt Facility Agreement with Taurus for US\$20M to fund 100% of Talisman's share of Monty pre-production capital<sup>2</sup>.

Talisman has made two drawdowns to date totalling US\$11.5M. The drawdowns were to cover preproduction costs from 1 July 2017 to 31 March 2018. A further US\$8.5M is available to be drawn down against the facility for future pre-production capital costs.

As at 31 March 2018, Talisman held approximately A\$4.3M of funds drawn down but not yet called by the Joint Venture Manager.

Talisman's share of the Current Budget/Forecast pre-production capital for the quarter ending 30 June 2018 is A\$3.1M. This expenditure will be funded by the existing surplus in funds drawn but not called by the Joint Venture and a third drawdown against the facility which is likely to be made in the June 2018 quarter.

<sup>&</sup>lt;sup>2</sup> Please refer to TLM ASX announcement "Monty Financing Finalised", dated 30 October 2017



 $<sup>^{1}</sup>$  Please refer to TLM ASX announcement: "Monty Development Update", dated 12 January 2018.



#### **Economic Evaluation**

As at 1 April 2018, one year from the publication of the Monty Feasibility Study results<sup>3</sup>, Monty has a go-forward<sup>4</sup>, pre tax, ungeared Net Present Value (**NPV**) of \$66M based on the Monty Feasibility Study assumptions. These assumptions are as announced to the ASX on 5 April 2017 in Talisman's ASX announcement "Monty Feasibility Study Results". (Mineral Resource, Ore Reserve estimates and Production Target for the Monty Feasibility Study are shown in Appendix 4).

With these strong expected margins, the Monty Feasibility Study is forecast to yield more than \$78M in go-forward ungeared pre-tax free cash flow to Talisman. Talisman will incur financing and interest costs for the life of the project loan plus structured royalty payments under the Project Financing Facility (PFF)<sup>2</sup>.

As previously announced, the Talisman Group (Group) has carried forward tax losses as at 30 June 2017 of \$44M. These losses are expected to be fully available to be offset against future taxable income of the Group including future taxable income from Monty.

#### **Commodity Prices and Exchange Rates**

Table 1 outlines the commodity price and exchange rate assumptions utilised to undertake the financial assessment of the Monty Feasibility Study. These assumptions reflect the price and exchange rate forecasts adopted by the Study Manager, Sandfire, in finalising the Monty Feasibility Study.

Commodity / FX	Units	CY 2018	CY 2019	CY 2020	CY 2021
Copper	US\$/t	6031	6196	6119	5899
Gold	US\$/oz	1398	1375	1374	1296
Silver	US\$/oz	19.14	18.84	18.83	17.75
A\$/US\$	USc	0.730	0.725	0.720	0.715

Table 1: Forecast commodity price and exchange rates utilised for the Monty Feasibility Study

Table 2 shows the sensitivity of the go-forward Monty Feasibility Study NPV estimate as at 1 April 2018 to variations in forecast copper price and AUD:USD exchange rate.

Measure	Units	Spot Case (go-forward basis)	Upside Case (go-forward basis)
Copper Price	US\$/t	6,796	7,500
Exchange rate	AUD:USD	0.754	0.750
Free Cash flow - ungeared pre tax	A\$M	88	107
$NPV_8$ (Ungeared pre tax)	A\$M	74	90
IRR (ungeared pre tax)	%	370	455
Notional C1 Cost	A\$/lb Cu	1.56	1.56

Table 2: Monty Project Financial Return Sensitivity based on Monty Feasibility Study assumptions from 1 April 2018 (Talisman 30% attributable basis)

Talisman retains full exposure to commodity price and exchange rate movements on its share of Monty ore under the terms of the previously announced Ore Sale and Purchase Agreement.

<sup>&</sup>lt;sup>4</sup> Go-forward is from 1 April 2018 and is exclusive of Project capital to 31 March 2018.



<sup>&</sup>lt;sup>3</sup> Please refer to TLM ASX announcement: "Monty Feasibility Study Results", dated 6 April 2017 for further details and description of the financial parameters & summary of key Monty Feasibility Study financial return outcomes.



#### **Exploration**

Budgeted work at Springfield during the quarter ending 31 March 2018 focused on drill testing of interpreted target horizons at Monty NE, Monty East and Homer South. A summary of drilling completed during the guarter is provided in Table 3.

Prospect	Drill Type	Holes Drilled	Meters Drilled	Status
Monty NE	DD	1	893	Complete
Monty East	DD	1	786	Complete
Monty Upper Zone	DD	9	1,425	Results Pending
Homer	AC	79	3,694	Complete
Southern Volcanics	AC	40	2,418	Results Pending

**Table 3: Springfield Project Exploration Drilling summary** 

Diamond drilling activities completed during the quarter comprised both exploration and resource definition drilling. Two drill holes, TLDD117A and TLDD119 were drilled to test target positions at Monty NE and Monty East respectively (*Figure 4*).

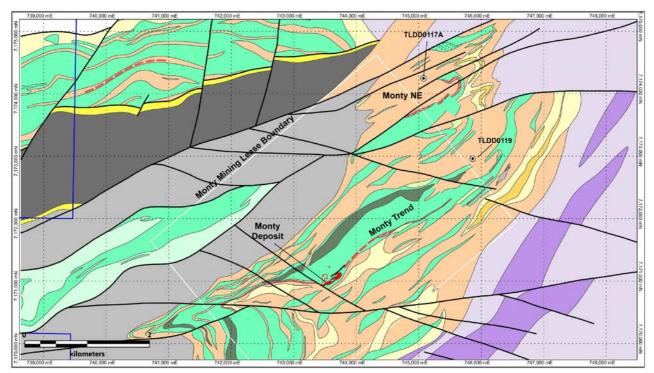


Figure 4: Springfield – Monty Region drill collar location plan for the three-month period ending 31 March 2018.

TLDD117A and TLDD119 were interpreted to have intersected sediment horizons similar to the Monty host stratigraphy. Sampling of the available drill core from these two holes did not return any significant mineralisation. DHEM geophysical surveys have been completed on both drill holes and Sandfire advised that no anomalies were identified in the data. Talisman is currently reviewing the available DHEM data.

In addition to the two exploration diamond drill holes completed during the quarter, the Joint Venture drilled a total of nine holes (TLDD0120 – TLDD0126A), into the Upper Zone of the defined Monty





Resource (Table 4 and Table 5). The primary aim of this drilling was to provide additional geotechnical, geological and analytical data on the Upper Zone. It also provided infill drilling between the existing resource definition drill holes in selected areas.

All the completed drill holes into the Monty Upper Zone intersected massive sulphide mineralisation and initial observations show a good correlation with the modelled orebody.

The drill holes are in the process of being logged in detail for geology and structural analysis prior to sampling.

Aircore drilling during the quarter focused on the interpreted Homer South position and the Southern Volcanics trend. Drilling was designed to infill previous aircore drilling and provide additional information over newly interpreted host positions.

Drilling comprised a total of 79 holes for 3,694 metres at Homer and 40 holes for 2,418 metres along the Southern Volcanics. Assay results from composite sampling of the Homer South drilling are currently being interpreted by Sandfire, while the Southern Volcanics drilling is ongoing, with assay results from completed drilling yet to be received.

#### **Budgeted exploration for quarter ending 30 June 2018**

Budgeted exploration for the June quarter will focus on the completion of aircore drilling along the Southern Volcanics. Provisional RC drilling of any identified anomalies from the results of the Southern Volcanic and Homer South aircore drilling has been included in the approved June quarter budget.

The Joint Venture has approved an independent technical review of Springfield exploration data. This review will encompass geological and structural data generated to date.

In addition to, and in parallel with, this review of drilling information, a separate review of the available surface and down-hole geophysical data has been initiated, and will include FLEM, SQUID MLEM, IP and DHEM geophysical data.

### **Sinclair Nickel Project Exploration**

Field activities for the March quarter included a programme of reconnaissance regolith mapping and rock-chip sampling, as a precursor to proposed aircore drilling over previously untested geophysical trends.

A total of 533 outcrop samples were collected and submitted for multi element analysis. Results highlighted a number of previously unrecognised prospective areas that will require additional follow up work including aircore and potentially deeper RC drilling.

Approvals for both aircore and RC drilling are in place, with first pass reconnaissance drilling over a number of new areas, as well as infill aircore drilling over existing prospects scheduled to commence in the June quarter.

Strategically, Talisman continues to assess value maximising options for the Sinclair Nickel Project.





## **Lachlan Copper-Gold Project**

During the March quarter, Talisman completed a comprehensive compilation and review of historic drilling and other existing exploration data across 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.

Talisman has highlighted multiple high priority areas across the tenure for initial focus where more detailed geological interpretations have been completed or are underway.

The wider Lachlan Copper-Gold Project, including the Boona Project Area and Blind Calf Prospect, lies within a regional Strategic Alliance ("Alliance") between Talisman and Bacchus Resources Pty Ltd ("Bacchus"). The Alliance allows Talisman and Bacchus to work together to identify and pursue potential opportunities within the region that compliment, benefit or provide synergies to the Joint Venture or are suitable for Joint Venture, given both parties' technical and financial capacities and the parties' corporate objectives.

#### **Tenement Administration**

Talisman received final confirmation of the grant of two new Exploration Licences from the NSW Department of Planning and Environment – Division of Resources and Geoscience. These tenements are located in the Boona Project Area to the west and south of the current Talisman-Bacchus Joint Venture tenements (*Appendix 1*) and cover the historic Crowl Creek tenements acquired from Kidman Resources (*see ASX announcement 9 January 2018*). The new licences have been granted for a period of six years.

#### Blind Calf Prospect

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.

The Blind Calf Prospect is located approximately 5km to the South West of the Mineral Hill Mine (*Figure 6*) and is a priority for near term initial on-ground exploration drilling.

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

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





Talisman recently completed a review and interpretation of historic drill data, modelling a total of 10 separate north-south striking, roughly parallel lodes with a steep, sub-vertical dip (*Figure 5*, *Figure 6* and *Figure 7*). Historic drilling has been mostly shallow and concentrated beneath the historic workings. All the identified lodes are open at depth and along strike.

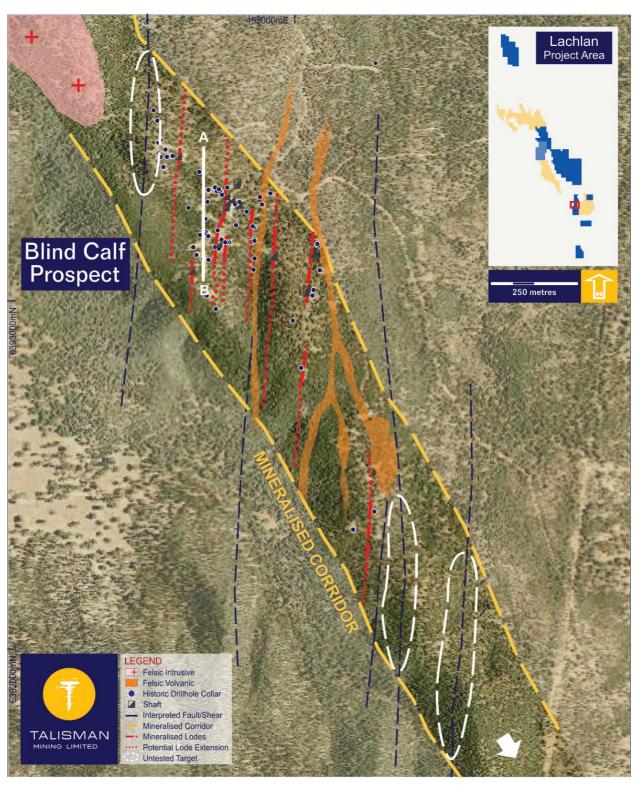


Figure 5: Blind Calf Prospect area, highlighting high-grade copper lodes and untested parallel N-S oriented structures





At a more regional scale, mineralisation in this area appears to be associated with the intersection of the regional north-south orientated structures and northwest-southeast cross cutting structures. This essentially creates a prospective corridor that bounds the north-south striking lodes, as evidenced at both Mineral Hill and Blind Calf. Importantly both the Mineral Hill and Blind Calf corridors trend to the southwest into Talisman-Bacchus Joint Venture tenure, where additional untested target areas have been identified. These target areas are supported by historic rock-chip sampling which has returned high-grade gold and lead assay results (*Figure 6*).

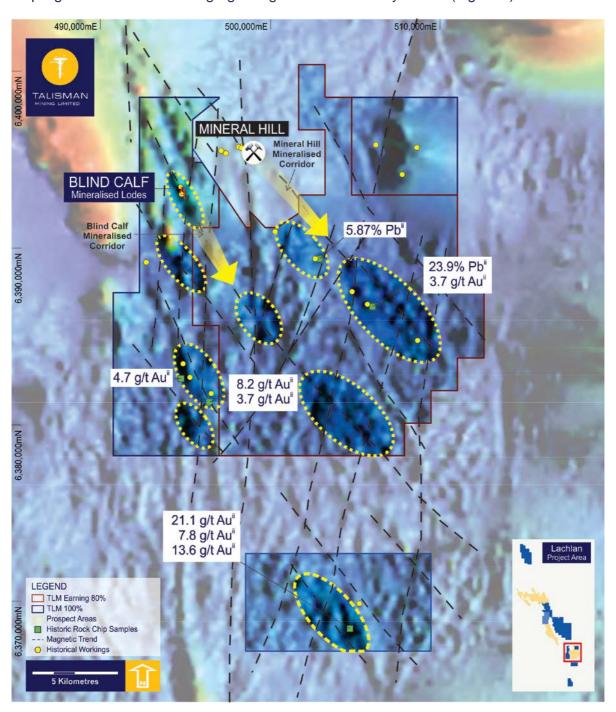


Figure 6: Regional RTP Magnetic image showing N-S and NW-SE trending structures, and interpreted target areas





The forthcoming maiden RC drilling program for Talisman at the Boona Project Area is designed to confirm historic intersections at Blind Calf as well as extend the modelled lenses down dip and along strike. The proposed drilling is to a maximum planned depth of 180m down hole highlighting the shallow nature of the previous testing (*Figure 7*).

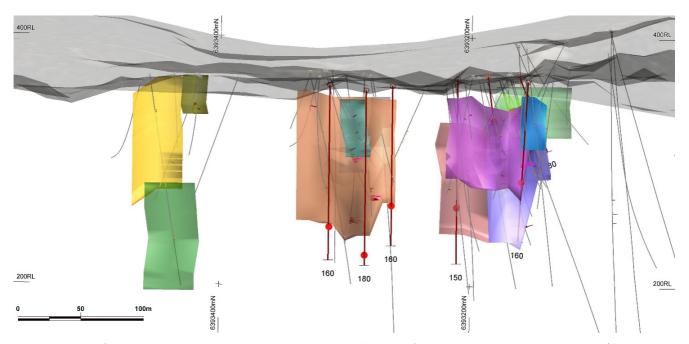


Figure 7: Blind Calf Prospect long section showing existing mineralised lode wireframes and Talisman proposed drilling (shown in red), designed to test below and along strike from existing intersections

Talisman has signed land access agreements with all landholders in the areas of interest and a work program for an initial RC drilling campaign of 1,000m has been submitted to regulators for approval.

Requests for the submission of drilling tenders have been made and initial indications are that drill rig availability in the area is good. Talisman anticipates commencing drilling shortly after departmental approvals have been received.

#### Regional Geochemical Survey at Bobadah Project Area

Systematic auger drilling by a specialist geochemical sampling team has now commenced over the Cumbine Prospect area within the Peel Joint Venture tenement and will shortly move to the wider Bobadah Project Area (*Figure 8*). A total of approximately 4,500 sample sites are proposed on a 50m x 200m grid over areas highlighted by Talisman's recent regional targeting exercise. This initial phase of work is estimated to run for the majority of the forthcoming quarter.



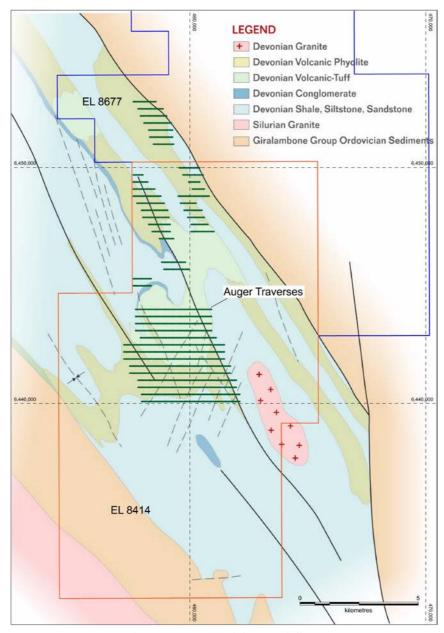


Figure 8: Boonah Project Area: regolith auger drilling summary map

Preparations have begun for the next phase of geochemical work which will target the Boona Project area. This program will focus on the southwest extension of the Blind Calf and Mineral Hill mineralised corridors, and other structural target areas.

## **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 coppergold 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.



<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,

ii Result taken from CRA Exploration Pty Ltd report GS1978/259.R00023043 and Result taken from Triako Resources Ltd report R000300065. Geological Survey of NSW DIGS reporting system



## **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.

Table 4: Drill-hole Information Summary, Springfield Cu-Au Project

Details and co-ordinates of drill-hole collars for diamond drilling completed during the March 2018 quarter:

Hole ID	Grid ID	Dip	Azimuth	East (m)	North (m)	RL (m)	Hole Type	Max Depth	Comment
<i>TLDD0117A</i>	MGA94_Z50	<b>-62</b> <sup>0</sup>	126 <sup>0</sup>	745078	7174246	605	DD	893.1	Monty NE
TLDD0119	MGA94_Z50	<b>-62</b> <sup>0</sup>	1220	745865	7172960	612	DD	786.4	Monty East
TLDD0120	MGA94_Z50	<b>-60</b> <sup>0</sup>	3220	743621	7170941	602	DD	195.8	Monty UZ
TLDD0121	MGA94_Z50	<b>-</b> 60 <sup>0</sup>	321 <sup>0</sup>	743581	7170940	602	DD	162.7	Monty UZ
TLDD0122	MGA94_Z50	-60°	321 <sup>0</sup>	743599	7170922	602	DD	198.0	Monty UZ
TLDD0123	MGA94_Z50	-60 <sup>0</sup>	3220	743610	7170901	602	DD	219.0	Monty UZ
TLDD0124	MGA94_Z50	-60°	320 <sup>0</sup>	743546	7170919	600	DD	45.5	Abandoned
TLDD0124A	MGA94_Z50	<b>-</b> 60 <sup>0</sup>	321 <sup>0</sup>	743545	7170920	600	DD	162.0	Monty UZ
TLDD0125	MGA94_Z50	-60°	3220	743568	7170907	601	DD	190.2	Monty UZ
TLDD0126	MGA94_Z50	-60°	3220	743576	7170881	600	DD	41.8	Abandoned
TLDD0126A	MGA94_Z50	-60°	3220	743576	7170881	600	DD	209.8	Monty UZ



## Table 5: Diamond drill-hole Assay Intersections for the Springfield Cu-Au Project

Details of relevant intersections received by Talisman during the March 2018 quarter are provided below.

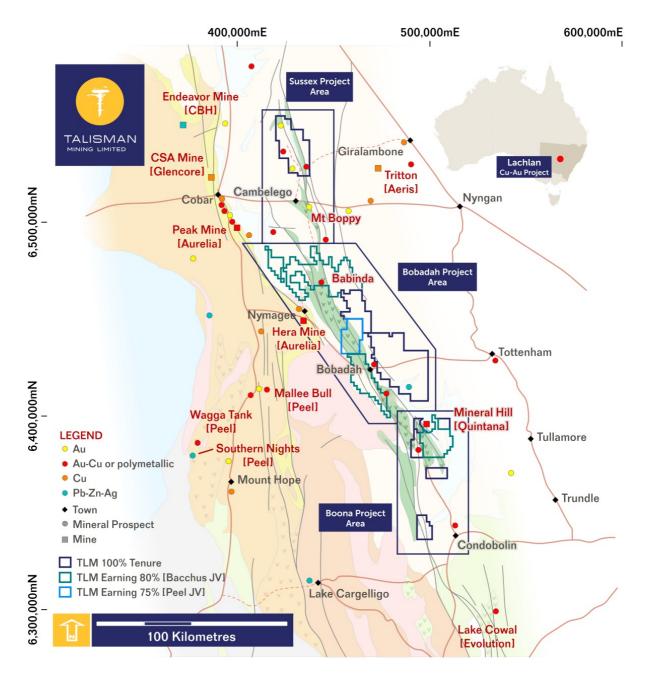
Calculation of DD intersections for inclusion into this table are based on a 0.5% Cu cut-off, no more than 3m of internal dilution and a minimum composite grade of 1% Cu. Intersection length, Cu (%), Au (ppm), Ag (ppm) and Zn (%) are rounded to 1 decimal point.

Hole ID	Depth From	Depth To	Interval	Cu	Au	Zn	
	(m)	(m)	(m)	(%)	(ppm)	(%)	
<i>TLDD0117A</i>	No significant res	sults					
TLDD0119	No significant res	sults					
TLDD0120	Results Pending						
TLDD0121	Results Pending						
TLDD0122	Results Pending						
TLDD0123	Results Pending	Results Pending					
TLDD0124A	Results Pending						
TLDD0125	Results Pending						
TLDD0126A	Results Pending						



APPENDIX 1

NSW Lachlan Project Tenure simplified regional geology and structure





# APPENDIX 2

Talisman's Tenement Holdings

Project / Tenement	Location and Blocks (Area)	Interest at Beginning Quarter	Interest at End Quarter	Acquired during Quarter	Surrendered during Quarter	Joint Venture Partner / Farm-In Party
HALLOWEEN WEST	Western Austral	ia				JV - Sandfire Resources NL
E52/2275	6	18.8%	18.8%	-	-	11000010001112
HALLOWEEN	Western Austral	ia				JV - Sandfire
P52/1528	(200 HA)	18.8%	18.8%	-		Resources NL
SPRINGFIELD	W Australia					
E52/2282	42	30%	30%	-	-	
E52/2313	8	30%	30%	-	-	
E52/2466	14	30%	30%	=	-	
E52/3423	1	30%	30%	-	-	JV - Sandfire
E52/3424	1	30%	30%	-	-	Resources NL
E52/3425	6	30%	30%	-	-	
E52/3466	12	30%	30%	-	-	
E52/3467	20	30%	30%	-	-	
L52/170	(246.4HA)	30%	30%	-	-	
M52/1071	(1,642HA)	30%	30%	=	-	

Project / Tenement	Location and Blocks (Area)	Interest at Beginning of Quarter	Interest at End of Quarter	Acquired during Quarter	Surrendered during Quarter	Joint Venture Partner / Farm-In Party
SINCLAIR NICKEL PROJECT	Western Austra	ia				
E36/650	16	100%	100%	-	-	
E37/903	13	100%	100%	-	-	
E37/1231	3	100%	100%	-		
L36/198	(103.1 HA)	100%	100%	-	-	
L37/175	(83.9 HA)	100%	100%	-	-	
M36/444	(568.0 HA)	100%	100%	-	-	
M36/445	(973.0 HA)	100%	100%	-	-	
M36/446	(843.0 HA)	100%	100%	-	-	
M37/362	(981.5 HA)	100%	100%	-	-	N/A
M37/383	(841.7 HA)	100%	100%	-	-	
M37/384	(536.7 HA)	100%	100%	-	-	
M37/385	(926.8 HA)	100%	100%	-	-	
M37/386	(983.8 HA)	100%	100%	-	-	
M37/424	(891.0 HA)	100%	100%	-	-	
M37/426	(505.0 HA)	100%	100%	-	-	
M37/427	(821.0 HA)	100%	100%	-	-	
M37/590	(120.0 HA)	100%	100%	-	-	
M37/692	(136.1 HA)	100%	100%	-	-	
M37/735	(959.0 HA)	100%	100%	-	-	



Project / Tenement	Location and Blocks (Area)	Interest at Beginning of Quarter	Interest at End of Quarter	Acquired during Quarter	Surrendered during Quarter	Joint Venture Partner / Farm-In Party
M37/816	(818.4 HA)	100%	100%	-	-	
M37/818	(806.5 HA)	100%	100%	-	-	
M37/819	(380.2 HA)	100%	100%	-	-	
M37/1063	(604.0 HA)	100%	100%	-	-	
M37/1089	(574 HA)	100%	100%	-	-	
M37/1090	(478 HA)	100%	100%	-	-	
M37/1126	(603 HA)	100%	100%	-	-	
M37/1127	(603 HA)	100%	100%	-	-	
M37/1136	(986 HA)	100%	100%	-	-	
M37/1137	(850 HA)	100%	100%	-	-	
M37/1148	(44.78 HA)	100%	100%	-	-	
M37/1168	(190 HA)	100%	100%	-	-	
M37/1223	(675 HA)	100%	100%	-	-	
M37/1275	(1,961 HA)	100%	100%	-	-	
P37/7228	(61.57 HA)	100%	100%	-	-	
P37/7233	(116.01 HA)	100%	100%	1	-	

Project / Tenement	Location and Blocks (Area)	Interest at Beginning of Quarter	Interest at End of Quarter	Acquired during Quarter	Surrendered during Quarter	Joint Venture Partner / Farm-In Party
LACHLAN PROJECT	NSW					
EL8615	(726km²)	100%	100%	-	-	
EL8659	(373km²)	100%	100%	-	-	N/A
EL8677	(193km²)	100%	100%	-		
EL8414	(174km²)	0%	0%	-	-	JV – Peel Mining Ltd (TLM earning up to 75%)
EL8547	(205km²)	0%	0%	-	-	
EL8571	(258km²)	0%	0%	-	-	JV – Bacchus
EL8638	(192km²)	0%	0%	-	-	Resources Pty Ltd
EL8657	(134m²)	0%	0%	-	-	(TLM earning up to
EL8658	(256km²)	0%	0%	-	-	80%)
EL8680	(20km²)	0%	0%	-	-	
EL8718	(86km²)	0%	100%	Granted	-	New tenements
EL8719	(191km²)	0%	100%	Granted	-	granted over Crowl Creek Project
OTHER	NSW					
EL8451	(276km²)	0%	0%	-	-	JV – Peel Mining Ltd (TLM earning up to 75%)



## **APPENDIX 3**

JORC Tables Section 1 & 2

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections)

Criteria JORC Code explanation Sampling • Nature and quality of sampling (e.g. cut	Commentary
L Sampling L • Nature and quality of sampling (o.g. out	
techniques  channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down-hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.  Include reference to measures taken to	<ul> <li>Sampling techniques employed by Sandfire on the Doolgunna Project include half core sampling of NQ2 Diamond Drill (DD) core, Reverse Circulation (RC) drilling samples collected by a cone splitter for single metre samples or sampling spear for composite samples, and aircore (AC) sample collected using spear techniques for both composite and single metre samples.</li> <li>Sampling is guided by Sandfire DeGrussa protocols and</li> </ul>
ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  • Aspects of the determination of mineralisation	<ul> <li>QAQC procedures as per industry standard.</li> <li>RC sample size reduction is completed through a Boyd crusher to -10mm and pulverised via LM5 to nominal -75µm. Pulp size checks are completed.</li> </ul>
that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3kg was pulverised to	<ul> <li>Diamond core size reduction is through a Jaques jaw crusher to -10mm and all samples Boyd crushed to -4mm and pulverised via LM5 to nominal 90% passing -75µm using wet sieving technique.</li> <li>Samples are assayed using Mixed 4 Acid Digest (MAD)</li> </ul>
produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent	<ul> <li>0.3g charge and MAD Hotbox 0.15g charge methods with ICPOES or ICPMS.</li> <li>Fire Assay is completed by firing 40g portion of the</li> </ul>
sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	sample with ICPMS finish.
may warrant disclosure of detailed information.	Sampling techniques employed by Talisman at the Sinclair Nickel Project include saw cut diamond drill core (DD) samples in NQ2 size sampled on geological intervals (0.2 m to 2 m), cut into half (NQ2) core to give sample weights under 3 kg, Reverse Circulation (RC) drilling samples collected by a cone splitter for single metre samples or sampling spear for composite samples, and aircore (AC) sample collected using spear techniques for composite samples or collected by a riffle splitter for single metre samples.
	<ul> <li>Sampling is guided by Talisman protocols and QAQC procedures as per industry standard</li> </ul>
	<ul> <li>Samples were crushed, dried and pulverised (total prep) to produce a 30g sub sample for analysis by four acid digest with an ICP/AES finish for base metals; and a 50g Fire assay with an AAS finish for gold</li> </ul>
Drilling techniques  • Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Sandfire drilling is completed using industry standard practices. RC drilling with a face sampling hammer of nominal 140mm size and diamond drilling is completed using NQ2 size coring equipment.</li> <li>All drill collars are surveyed using RTK GPS.</li> </ul>
	All core, where possible is oriented using a Reflex ACT II RD orientation tool.
	Downhole surveying is undertaken using a gyroscopic survey instrument.



Criteria	JORC Code explanation	Commentary
		<ul> <li>Talisman drilling is completed using industry standard practices. AC drilling with a face sampling blade or hammer.</li> <li>AC drill collars are located using handheld GPS</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Sandfire core is meter marked and orientated to check against the driller's blocks, ensuring that all core loss is taken into account. Diamond core recovery is logged and captured into the database with weighted average core recoveries of approximately 99%.</li> <li>Surface RC sampling is good with almost no wet sampling in the project area. AC drilling recovery is good with sample quality captured in the database.</li> <li>Samples are routinely weighed and captured into a central secured database.</li> <li>No indication of sample bias with respect to recovery has been established.</li> <li>Sinclair AC drilling recovery is good with sample quality captured in the database.</li> <li>No indication of sample bias with respect to recovery</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Sandfire geological logging is completed for all holes and is representative across the ore body. The lithology, alteration, and structural characteristics of drill samples are logged directly to a digital format following standard procedures and using Sandfire DeGrussa geological codes. Data is imported into the central database after validation in LogChief™.</li> <li>Logging is both qualitative and quantitative depending on field being logged.</li> <li>All drill-holes are logged in full.</li> <li>All cores are digitally photographed and stored.</li> <li>Talisman logging records lithology, mineralogy, mineralisation, alteration, structure, weathering, colour and other primary features of the rock samples and is considered to be representative across the intercepted geological units.</li> <li>Logging is both qualitative and quantitative depending on the field being logged.</li> <li>All drill-holes are logged in full to end of hole.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul> <li>Sandfire DD Core orientation is completed where possible and core is marked prior to sampling. Half core samples are produced using Almonte Core Saw. Samples are weighed and recorded.</li> <li>RC samples are split using a cone or riffle splitter. A majority of RC samples are dry. On occasions that wet</li> </ul>





Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation  Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.  Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.  Whether sample sizes are appropriate to the grain size of the material being sampled.	<ul> <li>Commentary</li> <li>samples are encountered they are dried prior to splitting with a riffle splitter.</li> <li>All samples are dried at 80° for up to 24 hours and weighed. DD Samples are then crushed through Jaques crusher to nominal -10mm. Second stage crushing uses Boyd crusher to nominal -4mm. Pulverising is completed using LM5 mill to 90% passing 75%μm. RC samples are Boyd crushed to -4mm.</li> <li>Sample splits are weighed at a frequency of 1:20 and entered into the job results file. Pulverising is completed using LM5 mill to 90% passing 75%μm using wet sieving technique.</li> <li>1:20 grind quality checks are completed for 90% passing 75%μm criteria to ensure representativeness of sub-samples.</li> <li>Sampling is carried out in accordance with Sandfire protocols as per industry best practice.</li> <li>The sample size is appropriate for the VHMS and Gold mineralisation styles.</li> <li>Sinclair diamond core is HQ and NQ2 size, sampled on geological intervals (0.2 m to 1.2 m), cut into half (NQ2) or quarter (HQ) core to give sample weights under 3 kg Samples were selected to weigh less than 3kg to ensure total preparation at the pulverization stage.</li> <li>Samples were submitted to ALS Chemex Laboratories for preparation. The sample preparation follows industry best practice where all drill samples are crushed and split to 1kg then dried, pulverized and (&gt;85%) sieved through 75 microns to produce a 30g charge for 4-acid digest with an ICP-MS or AAS finish for base metals, and a 50g fire assay with an AAS finish for pold.</li> <li>QAQC protocols for all diamond drill sampling involved the use of Certified Reference Material (CRM) as assay standards. The insertion ratio of CRM standards was 1 in 25 with a minimum of 2 per batch. OREAS and Geostats standards were selected on their grade range and mineralogical properties.</li> <li>All QAQC controls and measures were routinely reviewed and reported on a sample submission, and drilling campaign basis.</li> <li>Duplicate samples were inserted at a fr</li></ul>
		<ul> <li>25, with placement determined by Ni grade and homogeneity.</li> <li>Sample size is considered appropriate for nickel sulphide mineralisation</li> </ul>
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Sandfire samples are assayed using Mixed 4 Acid Digest (MAD) 0.3g charge and MAD Hotbox 0.15g charge methods with ICPOES or ICPMS. The samples are digested and refluxed with a mixture of acids including Hydrofluoric, Nitric, Hydrochloric and





Criteria	JORC Code explanation	Commentary
Officeria	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.  Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Perchloric acids and conducted for multi elements including Cu, Pb, Zn, Ag, As, Fe, S, Sb, Bi, Mo, Re, Mn, Co, Cd, Cr, Ni, Se, Te, Ti, Zr, V, Sn, W and Ba. The MAD Hotbox method is an extended digest method that approaches a total digest for many elements however some refractory minerals are not completely attacked. The elements S, Cu, Zn, Co, Fe, Ca, Mg, Mn, Ni, Cr, Ti, K, Na, V are determined by ICPOES, and Ag, Pb, As, Sb, Bi, Cd, Se, Te, Mo, Re, Zr, Ba, Sn, W are determined by ICPMS. Samples are analysed for Au, Pd and Pt by firing a 40g of sample with ICP AES/MS finish. Lower sample weights are employed where samples have very high S contents. This is a classical FA process and results in total separation of Au, Pt and Pd in the samples.  No geophysical tools are used in the analysis.  Sandfire DeGrussa QAQC protocol is considered industry standard with standard reference material (SRM) submitted on regular basis with routine samples. SRMs and blanks are inserted at a minimum of 5% frequency rate.  Sinclair drill samples were submitted to ALS Chemex Laboratories in Perth for multi-element analysis using a 1g charge with a multi-acid digest and ICP-MS or AAS finish (OG62). Analytes include Al, Fe, Mg, Mn, S, Ti, Ag, As, Co, Cr, Cu, Ni, Pb, V, Zn, Zr.  Samples are analysed for Au, by firing a 50g of sample with AAS finish  QAQC protocols for all drill sampling involved the use of Certified Reference Material (CRM) as assay standards. The insertion ratio of CRM standards was 1 in 33 with a minimum of two per batch. OREAS and Geostats standards are selected on their grade range and mineralogical properties.  All drill assays are required to conform to the procedural QAQC guidelines as well as routine laboratory QAQC guidelines.  All QAQC controls and measures were routinely reviewed and reported on a monthly, quarterly and annual basis. Historic results for all standards and duplicates indicate most performing well within the two standard deviation limit.
Marife C. C.		<ul> <li>Portable XRF instruments are used only for qualitative field analysis. No portable XRF results are reported.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	Significant intersections have been verified by alternate Talisman personnel.
, ,	The use of twinned holes.	<ul> <li>Sandfire primary data is captured on field tough book laptops using Logchief™ Software. The software has validation routines and data is then imported into a secure central database.</li> </ul>





Criteria	JORC Code explanation	Commentary
Cinteria	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	The primary data is always kept and is never replaced by adjusted or interpreted data.
	Discuss any adjustment to assay data.	Sinclair significant intercepts have been verified by alternate company personnel
		<ul> <li>No twinned holes are being drilled as part of this program.</li> </ul>
		<ul> <li>Logging and sampling data is captured and imported using Expedio Ocris software.</li> </ul>
		<ul> <li>All Sinclair drill-hole, sampling and assay data is stored in a SQL server (Datashed) database. Assay data is reviewed via DataShed, QAQCR and other customised software and databases. Datashed software has numerous validation checks which are completed at regular time intervals.</li> </ul>
		<ul> <li>Primary assay data is always kept and is not replaced by any adjusted or interpreted data.</li> </ul>
Location of data points	Accuracy and quality of surveys used to locate drill-holes (collar and down- hole surveys), trenches, mine workings and other	<ul> <li>Sandfire DeGrussa Survey team undertakes survey works under the guidelines of best industry practice. All surface drilling is located using RTK-GPS.</li> </ul>
	locations used in Mineral Resource estimation.  Specification of the grid system used.  Quality and adequacy of topographic control.	<ul> <li>All drill collars are accurately surveyed using RTK GPS system within +/-50mm of accuracy (X, Y, Z).</li> </ul>
		<ul> <li>For the Springfield project MGA94 Zone 50 grid coordinate system is used.</li> </ul>
		Topographic control was established using LiDar laser imagery technology.
		Historic drill collars locations were picked up by Sinclair Mine Surveyors, with an independent survey contract group to locate completed DD and RC drill collars, working under the guidelines of best industry practice.
		AC drill collars are located using handheld GPS
		<ul> <li>The coordinate system used is the Geocentric Datum of Australia (GDA) 1994. Coordinates are in the Map Grid of Australia zone 51 (MGA).</li> </ul>
Data spacing and distribution	Data spacing for reporting of Exploration Results.	<ul> <li>Infill drilling at Monty is based on a nominal 30m x 40m grid.</li> </ul>
distribution	<ul> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Resource definition drill spacing and distribution of exploration results is sufficient to support Mineral Resource Estimation procedures. Refer ASX:SFR 13/04/2016 Maiden High Grade Mineral Resource for Monty VMS Deposit</li> </ul>
		<ul> <li>Exploration drill spacing outside of the Monty Mineral Resource is not sufficient to estimate Mineral Resources.</li> </ul>
		No sample compositing has been applied to the exploration results.
		Drill spacing at Sinclair was nominally 200m x 25m.
		<ul> <li>No mineral resource is being reported for the Sinclair Nickel Project.</li> </ul>





Criteria	JORC Code explanation	Commentary		
		<ul> <li>AC drill samples are collected in the field as 4 metre composite samples.</li> </ul>		
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>At Monty, no significant orientation based sampling bias is known at this time.</li> <li>The drill holes may not necessarily be perpendicular to the orientation of the intersected mineralisation.</li> <li>The orientation of drilling at Sinclair is designed to intersect either geophysical targets or geological targets at high angle in order to best represent stratigraphy.</li> <li>No significant orientation based sampling bias at Sinclair is known at this time. Drill-holes may not necessarily be oriented perpendicular to intersected stratigraphy or mineralisation. All reported intervals are down-hole intervals, not true widths.</li> </ul>		
Sample security	The measures taken to ensure sample security.	<ul> <li>Appropriate security measures are taken to dispatch samples to the laboratory. Chain of custody of samples is being managed by Sandfire Resources NL. Samples are stored onsite and transported to laboratory by a licenced transport company in sealed bulker bags. The laboratory receipts received samples against the sample dispatch documents and issues a reconciliation report for every sample batch.</li> <li>Samples were stored at the Sinclair Nickel Mine Site prior to submission under the supervision of the Senior Project Geologist. Samples were transported to ALS Perth by an accredited courier service.</li> </ul>		
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No external audits or reviews of the sampling techniques and data have been completed.		



Section 2 Reporting of Exploration Results
(Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary			
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title	<ul> <li>Sandfire Resources NL and Talisman Mining Limited have formed a Joint Venture which covers Talisman's Doolgunna Project tenements (E52/2282, E52/2313, E52/2466, E52/2275).</li> </ul>			
	<ul> <li>interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>Sandfire and Talisman hold a 70%:30% interest respectively in the Joint Venture, with the exception of tenement E52/2275 where interests of approximately 81%:19% respectively are held.</li> </ul>			
	3	<ul> <li>Both parties are contributing proportionately to expenditure.</li> </ul>			
		<ul> <li>Sandfire Resources NL has been appointed as the Joint Venture Manager.</li> </ul>			
		All tenements are current and in good standing.			
		The Talisman tenements are currently subject to a Native Title Claim by the Yungunga-Nya People (WAD6132/98). Sandfire currently has a Land Access Agreement in place with the Yungunga-Nya Native Title Claimants and have assumed management of Heritage Agreements which were executed by Talisman. These agreements allow Sandfire to carry out mining and exploration activities on their traditional land.			
		The Sinclair Nickel Project is held 100% by Talisman Nickel Pty Ltd, a wholly owned subsidiary of Talisman Mining Ltd.			
		<ul> <li>There are no known Native Title Claims over the Sinclair Nickel Project.</li> </ul>			
		<ul> <li>All tenements are in good standing and there are no existing known impediments to exploration or mining.</li> </ul>			
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Exploration work at Springfield completed prior to Talisman's tenure included geochemical soil and rock chip sampling combined with geological mapping. Some targeted RC drilling was completed over gold and diamond targets.</li> </ul>			
		<ul> <li>The Sinclair Nickel Deposit was discovered in 2005 by Jubilee Mines NL drill testing a ground EM anomaly.</li> </ul>			
		<ul> <li>M37/1275 hosts the Sinclair Nickel Mine which was operated by XNAO from 2007-2013 and produced approximately 38,500 tonnes of contained nickel metal.</li> </ul>			
		<ul> <li>Exploration work on has included diamond, RC and aircore drilling, ground and downhole EM surveys, soil sampling, geological interpretation and other geophysics (magnetics, gravity).</li> </ul>			



Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	The Doolgunna Project lies within the Proterozoic- aged Bryah rift basin enclosed between the Archaean Marymia Inlier to the north and the Proterozoic Yerrida basin to the south.
		The principal exploration targets at the Doolgunna Projects are Volcanogenic Massive Sulphide (VMS) deposits located with the Proterozoic Bryah Basin of Western Australia.
		The Sinclair project lies within the Archean aged Norseman-Wiluna Greenstone Belt.
		<ul> <li>The Sinclair Nickel Deposit is an example of an Archaean-aged komatiite-hosted nickel deposit, with massive nickel- iron sulphides hosted at or near the basal contact of high-MgO ultramafic lava channels with footwall basaltic volcanic and sedimentary rocks.</li> </ul>
Drill-hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill-holes:</li> <li>easting and northing of the drill-hole collar</li> </ul>	Drill hole information relating to the Doolgunna Project is included In Table 4: Drill-hole Information Summary, Springfield Cu-Au Project.
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill-hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not material and this exclusion does not detract from the understanding of the report, the</li> </ul>	
Doto	Competent Person should clearly explain why this is the case.	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Significant intersections reported from the Springfield Project are based on greater than 0.5% Cu and may include up to a maximum of 3.0m of internal dilution, with a minimum composite grade of 1.0% Cu.</li> <li>Cu grades used for calculating significant intersections are uncut.</li> </ul>
		Minimum and maximum DD sample intervals used for intersection calculation are 0.3m and 1.2m respectively.
		RC reported intersections are based on regular 1m sample intervals.
		No metal equivalents are used in the intersection calculation.  Where are less assured the guarante length weighted.
		<ul> <li>Where core loss occurs; the average length-weighted grade of the two adjacent samples are attributed to the interval for the purpose of calculating the intersection. The maximum interval of missing core which can be incorporated with the reported intersection is 1m.</li> </ul>



Criteria	JORC Code explanation	Commentary
		Significant intersections reported from the Sinclair Nickel Project are based on greater than 0.5% Ni and may include up to 1m of internal dilution, with a minimum composite grade of 1% Ni.
		<ul> <li>Ni grades used for calculating significant intersections are uncut.</li> </ul>
		<ul> <li>A minimum diamond core sample interval of 0.15m and a maximum interval of 1m is used for intersection calculations subject to the location of geological boundaries.</li> </ul>
		<ul> <li>Length weighted intercepts are reported for mineralised intersections.</li> </ul>
		No metal equivalents are used in the intersection calculations.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>Drill-hole intercepts relating to the Doolgunna Project in this release are reported as both down-hole intersection widths and estimated true width intersections (refer Table 5: Drill hole assay intersections for the Springfield Cu-Au Project).</li> <li>The geometry of the mineralisation has been interpreted using top of mineralisation surfaces that link mineralised zones, thought to be continuous, between neighbouring drill-holes. Given the variable, and often steeply dipping orientation of the mineralisation, the angle between mineralisation and drill-holes is not consistent. Downhole intercepts for each drill-hole are converted to estimated true widths using a trigonometric function that utilises the dip and dip direction of the interpreted top of mineralisation surface (at the intersection point of that drill-hole) as well as the dip and azimuth of the drill-hole at that position.</li> </ul>
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill-hole collar locations and appropriate sectional views.	Appropriate maps with scale are included within the body of the accompanying document.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The accompanying document is considered to represent a balanced report.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics;	Other exploration data collected is not considered as material to this document at this stage. Other data collection will be reviewed and reported when considered material.



Criteria	JORC Code explanation	Commentary		
	potential deleterious or contaminating substances.			
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Planned exploration across the Springfield Joint Venture Project area includes both surface and down-hole geophysical techniques and reconnaissance and exploration drilling with diamond, RC and aircore drilling techniques.		
		Planned future work at the Sinclair Nickel Project includes geophysical surveys, re-logging of historic diamond drill core and RC and diamond drilling.		



#### **APPENDIX 4**

### Mineral Resource and Ore Reserve estimates and Production Target

Talisman confirms that all the material assumptions underpinning the Monty Ore Reserve and the forecast financial information derived from the Monty Ore Reserve announced to the ASX on 5 April 2017<sup>5</sup> continue to apply and have not materially changed.

#### Mineral Resource estimate on 100% Basis

Mineralisation Style	Mineral Resource Category	Tonnes (t) <sup>6</sup>	Copper (%)	Gold (g/t)	Contained Copper (t) <sup>6</sup>	Contained Gold (oz) <sup>6</sup>
Massive Sulphides	Indicated	754,000	12.0	2.1	91,000	51,000
	Inferred	9,000	20.7	2.7	2,000	1,000
	Total	763,000	12.1	2.1	92,000	52,000
Halo	Indicated	287,000	2.2	0.3	6,000	3,000
	Inferred	-	-	-	-	-
	Total	287,000	2.2	0.3	6,000	3,000
Total	Indicated	1,041,000	9.3	1.6	97,000	54,000
	Inferred	9,000	20.7	2.7	22,000	1,000
	Total	1,050,000	9.4	1.6	99,000	55,000

Table 6: Mineral Resource estimate for the Monty deposit (100% basis)

#### Ore Reserve estimate and Mine Plan on 100% Basis as at 31 March 2017

Reserve Category	Tonnes (t)6	Copper (%)	Gold (g/t)	Contained Copper (t) <sup>6</sup>	Contained Gold (oz)6
Proved	-	-	-	-	-
Probable	920,000	8.7	1.4	80,000	42,000
Total	920,000	8.7	1.4	80,000	42,000
Mine Plan	800,000	9.4	1.5	74,000	38,000

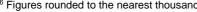
Table 7: Ore Reserve estimate and Mine Plan for the Monty deposit (100% basis)

#### Ore Reserve estimate and Mine Plan on Talisman 30% Basis as at 31 March 2017

Reserve Category	Tonnes (t)6	Copper (%)	Gold (g/t)	Contained Copper (t) <sup>6</sup>	Contained Gold (oz) <sup>6</sup>
Proved	-	-	-	-	-
Probable	280,000	8.7	1.4	24,000	13,000
Total	280,000	8.7	1.4	24,000	13,000
Mine Plan	240,000	9.4	1.5	22,000	11,000

Table 8: Ore Reserve estimate and Mine Plan for the Monty deposit (30% basis)

<sup>&</sup>lt;sup>5</sup> Please refer to TLM ASX announcement: "Monty Feasibility Study Results", dated 6 April 2017 for further details and description of the financial parameters & summary of key Monty Feasibility Study financial return outcomes. <sup>6</sup> Figures rounded to the nearest thousand







Operating parameters (Talisman 30% basis)	Units	FS (Mar 2017)
Pre-production mine development	months	12
Ore production mine life	months	30
Total mined ore	kt	239
Copper head grade (LOM avg)	% Cu	9.35
Gold head grade (LOM avg)	g/t Au	1.50
Silver head grade (LOM avg)	g/t Ag	16.2
Total copper-in-ore mined	kt	22.3
Total gold-in-ore mined	koz	11.5
Total silver-in-ore mined	koz	124.0
Total payable copper metal	kt	19.9
Total payable gold metal	koz	5.7
Total payable silver metal	koz	56.2

Table 9: Monty Feasibility Study Operational Results (Talisman 30% attributable basis)