TALISMAN MINING LIMITED
ASX Code: TLM

Contact Details

Telephone:
+61 8 9380 4230

Email:
info@talismanmining.com.au

Website:
www.talismanmining.com.au

Capital Structure

Shares on Issue:
185,699,879 (TLM)

Options on Issue:
10,505,000 (Unlisted)

ASX Media Release – 6th April 2017

Monty Feasibility Study Results

A High-Grade Development with Outstanding Returns

Highlights

- Feasibility Study approved and decision to proceed to **development of Monty made by Talisman Board**.
- Talisman is in final discussions with a short list of potential financiers **to debt fund up to 100% of its share of pre-production capital.**
- **Monty Mining Lease granted on 30 March 2017.** All remaining approvals expected by mid-CY2017.
- **Maiden Probable Ore Reserve**[i] for Monty of 80kt copper (and 42koz gold) at the exceptionally high grade of 8.7% copper (100% basis). This places Monty **amongst the highest grade copper mines globally**.
- Total **Mine Plan** copper-in-ore of 74kt over an **initial ore production life of 30 months** (100% basis). Talisman's 30% share equates to 22kt copper-in-ore and **20kt payable copper output**.
- **Low risk and low capital intensity development** via utilisation of JV partner Sandfire Resources' nearby DeGrussa facilities. Springfield Ore Sale and Purchase Agreement executed with Sandfire.
- **Outstanding expected financial returns**[1] (Talisman 30% share) of **A$64M pre-tax free cash flow**, pre-tax NPV_8 of A$46M and **78% pre-tax IRR**.
- Talisman's share of forecast **pre-production capital is A$22M**. Current planning targets decline development commencing 4Q CY2017 and **first ore delivered in 4Q CY2018**.
- Exploration programs to continue in parallel with project development to **test for mineralised zones in close proximity to the Monty deposit and target further new discoveries**.

[1] Please refer to Table 2 for a description of the financial parameters & summary of key Monty Feasibility Study financial return outcomes

MANAGEMENT COMMENT

Commenting on the Feasibility Study outcomes, Talisman Managing Director Dan Madden said:

"We are very pleased with the Monty Feasibility Study results released today which provide a robust basis for moving forward. The key operating and financial outcomes highlight the sheer quality of the Monty deposit and the strong expected financial returns from its development.

"The execution of an Ore Sale and Purchase Agreement on commercial terms with Sandfire allows Talisman to proceed with a low risk and low capital intensity development route. Talisman will sell its share of Monty ore to Sandfire and thus be effectively leveraging off the existing DeGrussa processing plant and infrastructure only 10 kilometres from Monty. This is a highly logical outcome that provides significant economic benefits directly to Talisman whilst minimising our exposure to processing and product risk.

"The excellent financial outcomes of the Feasibility Study have provided the Talisman Board with the confidence to give approval to proceed with Monty development. Discussions with potential financiers are well advanced and Talisman is confident of obtaining debt financing for up to 100% of its share of pre-production capital. The Board expects to mandate the selected financier early in the second quarter of the 2017 calendar year. Based on our current expectations, first ore production from Monty is targeted for the fourth quarter of calendar 2018.

"Importantly, we remain very excited about the upside that exists both from potential extensions to the Monty deposit and the significant untested potential across the 8 kilometre Monty Corridor, and the larger Springfield Joint Venture area. Exploration drilling is expected to continue in parallel with development of Monty to test for potential extensions to the deposit and target further new discoveries across the broader ground package."

Adding to Mr Madden's comments, Talisman Chairman Jeremy Kirkwood said:

"I would like to take this opportunity to thank our Springfield Joint Venture partner, Sandfire, for the effort and work undertaken in their role as Manager of the Joint Venture in preparing and delivering the Monty Feasibility Study. I also thank the external consultants for the key roles that they have played. Finally, I acknowledge my Talisman colleagues for their hard work and dedication to the task of progressing Talisman's interest in Monty and the broader Springfield Joint Venture to this very exciting point.

"Subject to receipt of final approvals and funding, the Board looks forward to shareholders enjoying the expected benefits of Talisman rapidly joining the ranks of Australian copper and gold producers."

EXECUTIVE SUMMARY

Overview

Talisman Mining Ltd (ASX: TLM) (**Talisman** or **the Company**) is pleased to announce the completion of the Feasibility Study and release of a maiden Ore Reserve for the Monty Copper-Gold deposit in Western Australia (**Monty**). Monty forms part of Talisman's Springfield Project (**Joint Venture**) with Sandfire Resources NL (**Sandfire**) in which Sandfire holds a 70% interest and is Joint Venture manager. Talisman holds a 30% interest in the Joint Venture.

The Monty deposit is located approximately 900km north of Perth and 10km east of Sandfire's DeGrussa copper-gold mine (**DeGrussa**) in the Gascoyne Region of Western Australia. Monty was discovered in mid-2015 and an initial Mineral Resource estimate[ii] for the deposit was reported in April 2016, notable for its very high copper grade. A Mining Lease Application (**MLA**) for Monty was submitted in July 2016 and is now granted. A detailed Feasibility Study has now been completed, concluding development of the deposit is both technically and financially viable.

Key agreements

An Ore Sale and Purchase Agreement (**OSPA**) has been executed between Talisman and Sandfire with Talisman's share of the ore mined from Monty, and any mineralised extensions to the Monty deposit, being sold to Sandfire for subsequent treatment at Sandfire's nearby DeGrussa plant allowing Talisman to benefit from the established infrastructure. Further economic discoveries made within the broader Joint Venture area will be subject to a new OSPA at the discretion of the Joint Venture parties and negotiated at that time. A Mining Joint Venture Agreement (**MJVA**) and an Exploration Joint Venture Agreement (**EJVA**) have also been executed between Talisman and Sandfire for the Joint Venture (collectively **Joint Venture Agreements**).

Monty will be connected to the DeGrussa processing facilities by a purpose built 14km haul road. The mining and processing of Monty ore has been integrated into Sandfire's DeGrussa production schedule in a manner that recognises the high-grade nature of Monty. Processing of Monty ore requires minor modifications to the existing processing circuit at DeGrussa in order to optimise recoveries when the high-grade Monty ore is blended with DeGrussa ore.

The OSPA provides for the sale of Talisman's share of Monty ore to Sandfire at the point of its delivery to a dedicated weighbridge near the ROM ore pad at the DeGrussa plant. Talisman will receive payment for this ore on an equivalent payable metals-in-concentrate basis after allowing deductions for a treatment fee applied per tonne of delivered ore (Ore Treatment Fee) and applicable state government and native title royalties.

The OSPA is a robust and transparent commercial agreement that appropriately recognises the strong expected metallurgical performance of Monty ore in subsequent processing and concentrate quality parameters. Based on Feasibility Study parameters, the Ore Treatment Fee equates to approximately A$ 211/t of delivered Monty ore (equivalent to US$0.83/lb[2] (A$ 1.15/lb) of payable copper metal) and is closely aligned with actual DeGrussa capital, processing, G&A and downstream costs.

[2] Calculated using the Feasibility Study life-of-mine average AUD:USD exchange rate of AUD 0.723

One of the key benefits of the OSPA structure for Talisman is that it includes relatively high metal recoveries (based upon *fixed* formulae derived from metallurgical test work) and *fixed* metal payabilities (based on industry standard levels). This fixed nature provides certainty to Talisman by removing exposure to actual metallurgical recoveries and concentrate quality resulting from Monty ore treatment.

A schematic summary of the OSPA and MJVA mechanics is illustrated in Figure 1.

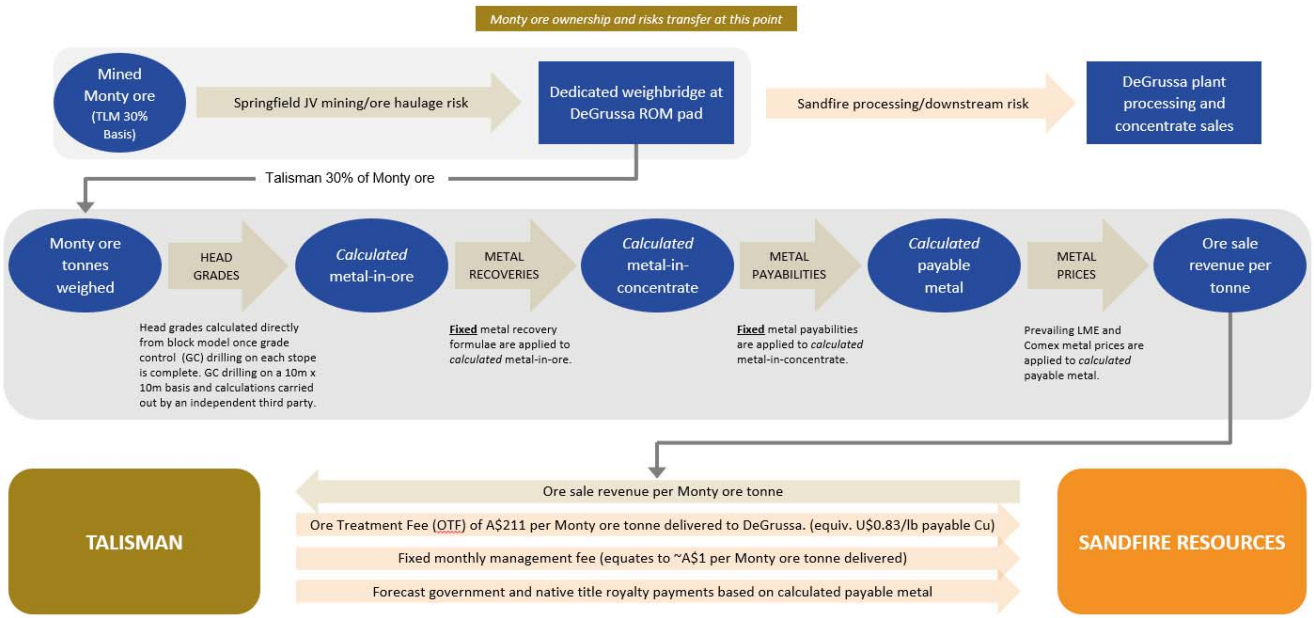


Figure 1: Schematic summary of OSPA and MJVA mechanics

Payment under the OSPA will recognise prevailing copper, gold and silver prices, and will be made on a Net Ore Sale Revenue basis, i.e. after deducting the annually indexed Ore Treatment Fee and forecast royalties. The table below illustrates the Net Ore Sale Revenue received by Talisman when applying the investment case Feasibility Study commodity prices and adjusting for a ±10% movement in respective commodity prices.

	-10%	Investment Case	+10%
$A Net Revenue per tonne	446	513	580
$US Net Revenue per lb payable Cu	1.76	2.02	2.29

More specific detail on the operation of the OSPA is contained in a later section of this announcement.

The EJVA covers the ongoing exploration activities of the Springfield Joint Venture on the Joint Venture tenements and outlines the rights and obligations of the Joint Venture parties. The MJVA establishes the rights and obligations of the Joint Venture parties related to activities associated with the development, mining and ultimate decommissioning of mineral discoveries. The development and mining of Monty will operate under the terms of this MJVA.

Ore Reserve[i]

The maiden Ore Reserve estimate for Monty, as at 31 March 2017, totals 0.92Mt at 8.7% copper and 1.4g/t gold. Contained metal stands at 80kt copper and 42koz gold at what is an extremely high copper, and copper-equivalent, grade relative to other copper projects globally. All of the current Ore Reserve estimate is contained in the Probable Ore Reserve category.

Talisman's 30% share of the currently defined Probable Ore Reserve estimate is 24kt copper and 13koz gold, being 0.28Mt at 8.7% copper and 1.4g/t gold.

The Ore Reserve estimate is based on the Indicated Mineral Resource[ii] estimate for Monty, released on 13 April 2016. The Probable Ore Reserve estimate includes both the defined Upper and Lower Zones of mineralisation at Monty.

Given the overall project parameters, copper distribution, development access and resource extraction, priority was placed on targeting the higher grade and higher tonnage Lower Zone. The Mine Plan selected for the Feasibility Study thus excludes the Upper Zone as this plan meets the Feasibility Study primary objective of maximising the value of the project whilst minimising project risk. The Probable Ore Reserve estimate however is based on including the Upper Zone as this material has marginally positive economics. The potential extraction of the Upper Zone remains an opportunity and will be reassessed post project implementation as underground grade control drilling provides further clarity.

Feasibility Study: Operating and financial outputs

Monty is one of the highest grade copper-gold discoveries made globally in recent decades, which has been a key driver of the highly attractive forecast financial returns outlined in the Feasibility Study. The proximity of the deposit to Sandfire's DeGrussa plant provides an expedited and low risk pathway to production with an extremely low development capital intensity compared to other greenfield copper discoveries globally.

The Feasibility Study details forecast total production of 74.4kt of contained copper (plus 38.4koz contained gold and 413.4koz contained silver) over an initial ore production life of 30 months. This production profile is a function of Monty being scheduled to be mined and processed through the DeGrussa plant at a maximum throughput rate of approximately 0.4Mtpa with a 4.5% Cu cut-off grade providing the best economic outcome.

Table 1 outlines the key physical operating outcomes from the Feasibility Study on a Talisman 30% attributable basis.

Operating parameters (Talisman 30% basis)	Units	FS (Mar 2017)
Total mined ore	kt	239
Ore production mine life	months	30
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
Total payable copper metal	kt	19.9
Total payable gold metal	koz	5.7
Total payable silver metal	koz	56.2

Table 1: Summary of key Monty Feasibility Study Operational Results (Talisman 30% attributable basis)

Table 2 outlines the key financial parameters and forecast returns from the Feasibility Study on a Talisman 30% attributable basis. A schematic of Talisman's underlying operating and economic interest in Monty, based on the Feasibility Study, is shown in Figure 2.

Financial parameters (Talisman 30% basis)	Units	FS (Mar 2017)
Forecast copper price (LOM avg)	US$/t	6,118
Forecast gold price (LOM avg)	US$/oz	1,369
Forecast A$/US$ (LOM avg)	USc	0.723
Total gross revenue	A$M	181
Total cash operating costs (incl.Ore Treatment Fee & royalties)	A$M	89
Pre-tax operating cashflow	A$M	92
Pre-production capital cost	A$M	22
LOM sustaining capital cost	A$M	5
Ungeared, pre-tax free cashflow	A$M	64
Notional C1 Operating cash cost (excl. royalties[3])	A$/lb pay Cu	1.56
Notional All-in-sustaining-cost (AISC[3])	A$/lb pay Cu	1.90
Pre-tax NPV (8% discount rate, real)	A$M	46
Pre-tax IRR	%	78
Payback period (from first production)	months	17
Mine life - to - payback period	x	1.8
NPV / pre-production capex	x	2.1

Table 2: Summary of key Monty Feasibility Study Financial Return Outcomes (Talisman 30% attributable basis)

Talisman's share of total estimated pre-production capital cost for the development of Monty is A$22M. This delivers an outstanding and globally attractive pre-production capital intensity of approximately A$2,500 (approx. US$2,000) per tonne of annual copper (in concentrate) production capacity

[3] C1 and AISC are calculated on the basis of notionally including the OSPA Ore Treatment Fee as a production cost. AISC is defined as the operating cash cost of production (net of by-product credits) plus royalties and sustaining capital and closure costs but exclusive of any finance costs or corporate overhead allocation

The key pre-production capital items comprise (on a 100% basis):

- Surface infrastructure including haul/access roads and drainage, box-cut and owner's team costs (A$33M).
- Underground mine development including portal and decline establishment (A$32M).
- Underground mine infrastructure including ventilation shaft and fan (A$8M).

Talisman's share of forecast life-of-mine sustaining capital is A$5.5M.

The estimated notional C1 Operating cash cost (excl. royalties) of production for Monty is an impressive A$1.56/lb (US$1.13/lb[4]) payable copper[5]. The notional All-in Sustaining Cost (**AISC**) is A$1.90/lb (US$1.37/lb[4]) of payable copper[5].

With these strong expected margins, Monty is forecast to yield more than A$64M in forecast ungeared pre-tax free cash flow to Talisman, inclusive of all capital expenditure. This delivers a pre-tax Net Present Value (**NPV**) of A$46M at a real 8% discount rate. The forecast pre-tax internal rate of return (**IRR**) is 78%.

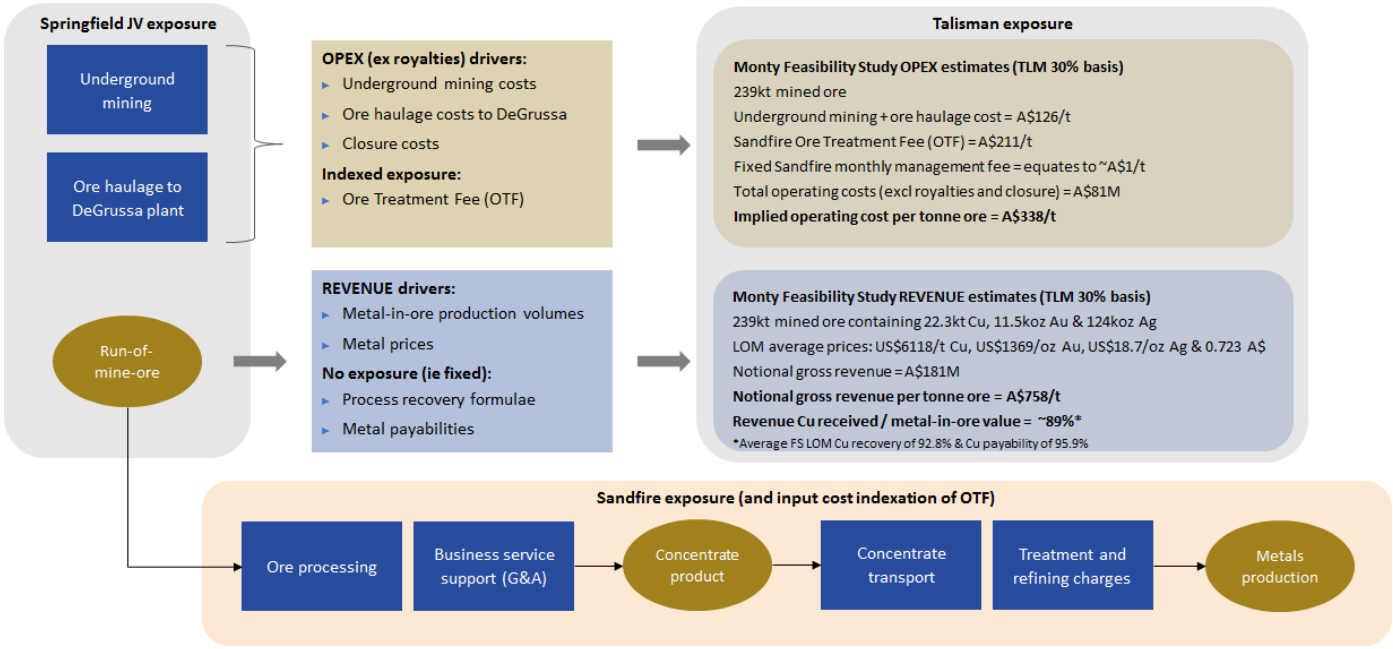


Figure 2: Talisman's underlying operating and economic interest in Monty

[4] Calculated using the Feasibility Study life-of-mine average AUD:USD exchange rate of AUD 0.723

[5] C1 and AISC are calculated on the basis of notionally including the OSPA Ore Treatment Fee as a production cost. AISC is defined as the operating cash cost of production (net of by-product credits) plus royalties and sustaining capital and closure costs but exclusive of any finance costs or corporate overhead allocation

Development timeline and funding

These robust Feasibility Study outcomes, coupled with the OSPA and Joint Venture Agreements executed with Sandfire, have resulted in Talisman's Board of Directors giving approval to proceed with the development of the Monty deposit.

The Talisman Board has approved A$0.6M of initial project development expenditure, representing its 30% share of detailed engineering design, preliminary site activities and long lead item orders. At 31 December 2016, Talisman had A$15.5M cash which provides ample liquidity to undertake these early project works and maintain current exploration expenditure levels.

While the ultimate funding structure for Monty remains subject to the finalisation of terms, Talisman is seeking to debt fund up to 100% of its A$22M share of Monty pre-production capital costs.

Following a competitive process, Talisman is in final discussions with a short list of potential financiers to provide project funding debt facilities. These facilities are expected to be in place by the third quarter of calendar 2017. Talisman is seeking to put these debt facilities in place without a mandatory requirement for price hedging of future production volumes.

Subject to the timing of final regulatory approvals current project scheduling targets the following development timeline:

- Detailed design and engineering – Q2 CY 2017
- Early mobilisation and preliminary site activities – late Q2 CY 2017
- Final project approval and start of infrastructure works – early Q3 CY 2017
- Commencement of decline development – early Q4 CY 2017
- First ore production – early Q4 CY 2018

Exploration upside

The discovery of Monty, when combined with Sandfire's DeGrussa complex of deposits provides genuine proof of concept for the potential of the region to host multiple clusters or "camps" of high-grade, high-value Volcanogenic Massive Sulphide (**VMS**) mineralisation.

With an estimated resource grade of 9.4% copper (see "Mineral Resource and Ore Reserve estimates" section) combined with spectacular bornite mineralisation not seen at DeGrussa, Monty represents a separate mineralising event within the Doolgunna region and the Bryah Basin. This further demonstrates the diversity of the ore forming systems in these exceptionally high value and prospective mining districts.

Critically, reverse circulation (**RC**) and diamond drilling outside of the currently defined mineralisation envelope at Monty is limited and Talisman believes that significant untested potential remains to discover additional mineralisation around Monty both laterally and at depth.

RC pre-collars are in place for two of three deep diamond holes (circa 1,400m each) around Monty, planned to commence in early April 2017. These holes are set to test the immediate vicinity of the known Monty deposit at depth (see Figure 3).

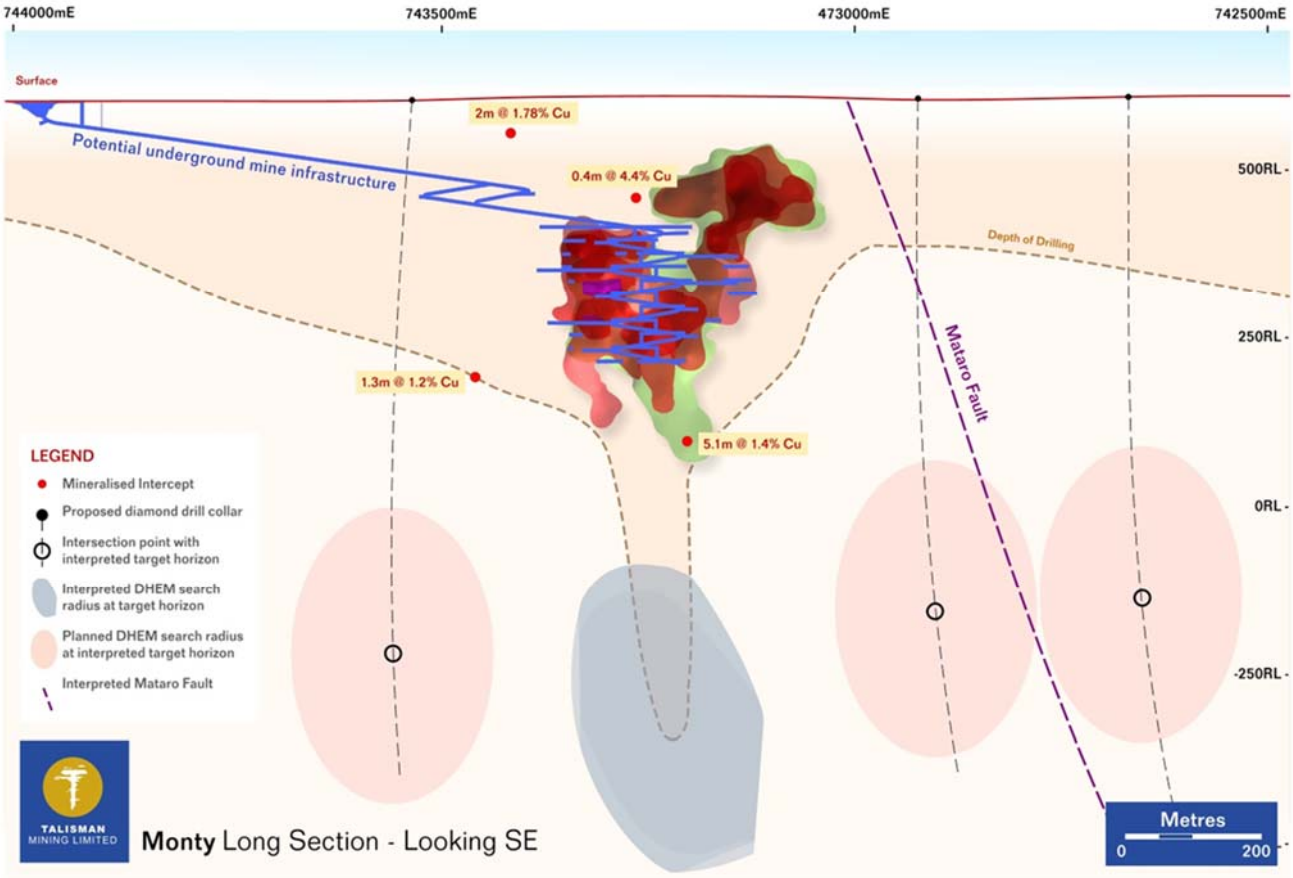


Figure 3: Monty Deposit Long Section with locations of proposed deep diamond DHEM platform holes.

These diamond holes will also provide additional Down-Hole Electromagnetic (**DHEM**) platforms to test within zones that could potentially be accessed from the proposed Monty mine infrastructure.

At a wider regional level only the 8km Monty Trend and a similar limited trend along the Homer Corridor have been the subject of targeted RC/diamond drilling and DHEM by the Joint Venture.

It is interpreted that there are multiple prospective VMS host horizons within the Bryah Basin stratigraphy. The Monty Trend represents only one limited stratigraphic horizon within the wider interpreted prospective VMS corridors (see Figure 4). The vast majority of the remaining prospective corridors have only been subject to air-core drill coverage and limited, isolated RC drill holes.

The Southern Volcanic Corridor is one such area. It has been subject to first pass air-core drilling but limited RC drilling (only five holes to date) by the Joint Venture. Talisman believes this 16km corridor represents a high priority for the next phase of systematic exploration by the Joint Venture.

Execution of the formal EJVA will now drive further systematic testing of this highly prospective region.

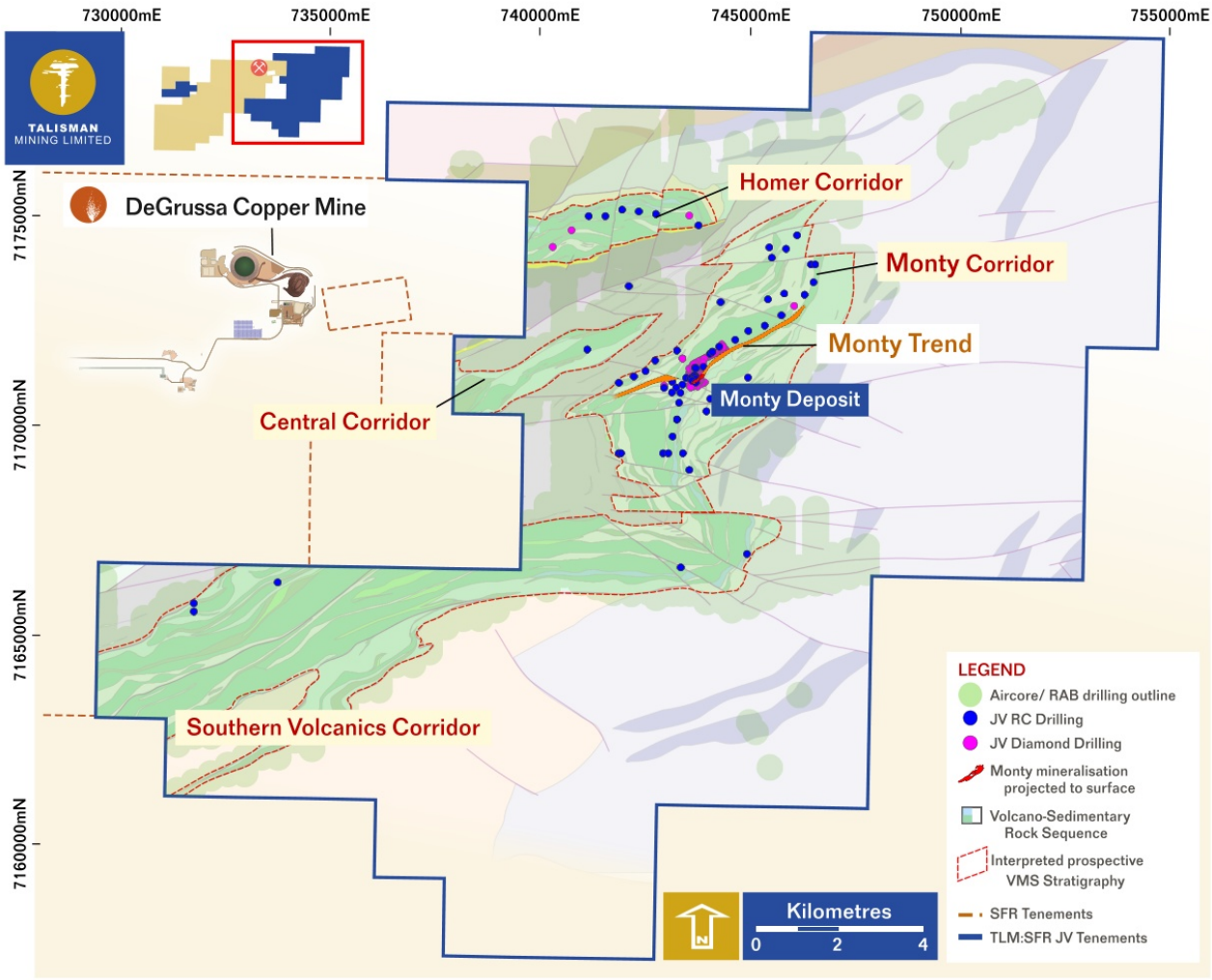


Figure 4: Geological Plan showing prospective Monty, Homer, Central and Southern Volcanics Corridors, highlighting the interpreted Monty Host trend with diamond and RC drill collars completed by the JV.

Further details of the Feasibility Study outcomes, OSPA / MJVA / EJVA and future work programs are provided in the remainder of this announcement.

MONTY FEASIBILITY STUDY DETAILS

Geology

The Monty deposit is located within the Bryah Basin. Mineralisation at Monty is blind (does not extend to the base of transported cover) and thus does not have a surface expression. The Monty deposit is contained within a host sequence of sediments and basalts known as the Karalundi Formation and occurs as multiple sulphide lenses at different stratigraphic levels, surrounded by disseminated and/or blebby sulphides (halo mineralisation) in chlorite-altered host sequence litho-types. The Monty deposit is interpreted to be a VMS deposit that formed during sub-sea floor replacement of the host sequence stratigraphy by mineralising hydrothermal fluids.

Mineralisation occurs within a narrow unit of interlayered sandstone and siltstone that contains minor basalt. This unit is referred to as the host unit or the Monty Trend (see Figure 5). Immediately to the southeast of the deposit the host unit is bounded by the Arneis fault (an early brittle-ductile shear zone). To the southwest the host unit and Arneis fault are truncated and offset by the Mataro fault.

The massive sulphide lenses are comprised predominantly of chalcopyrite and pyrite with minor sphalerite and pyrrhotite and very minor galena and tennantite. Within the lowermost massive sulphide lens there are two zones of high-grade bornite rich mineralisation referred to as bornite domains. The bornite domains are comprised of bornite, chalcopyrite and pyrite with very minor sphalerite, galena and tennantite and are characterised by exceptionally high copper grades throughout.

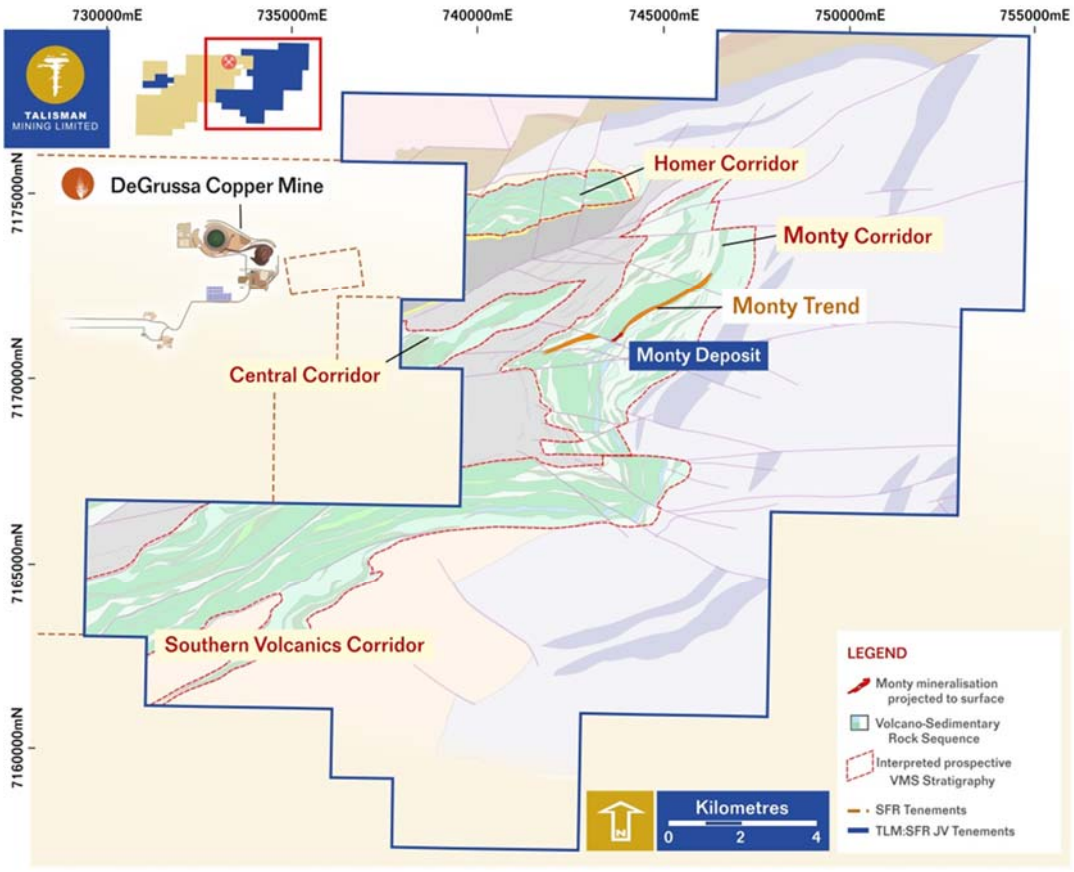


Figure 5: Springfield Joint Venture project highlighting the extensive prospective Karalundi formation within the project tenure which hosts both the DeGrussa and Monty Deposits.

Mineral Resource and Ore Reserve estimates[i] [ii]

The Mineral Resource estimate for the Monty deposit (previously announced on 13 April 2016), prepared in accordance with JORC (2012) and detailed in Table 3, has been classified as an Indicated and Inferred Mineral Resource based primarily on geological interpretation, grade continuity and sample spacing. Most of the deposit has been drilled to within a 40m nominal spacing and this has allowed for an Indicated classification across almost all of the Mineral Resource estimate.

Mineral Resource estimate on 100% Basis[ii]

Mineralisation Style	Mineral Resource Category	Tonnes (t)[6]	Copper (%)	Gold (g/t)	Contained Copper (t)[6]	Contained Gold (oz)[6]
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**	**2,000**	**1,000**
	Total	**1,050,000**	**9.4**	**1.6**	**99,000**	**55,000**

Table 3: Mineral Resource estimate for the Monty deposit (100% basis)

The maiden Ore Reserve estimate[i] for Monty, as at 31 March 2017, contains 920kt at 8.7% copper and 1.4g/t gold. It is based on the Indicated Mineral Resource estimate and includes both the defined Upper and Lower Zones of mineralisation at Monty. All of the current Ore Reserve estimate is contained in the Probable Ore Reserve category. The Ore Reserve estimate and Mine Plan is detailed in Table 4 and Table 5.

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)[6]	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 4: 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)[6]	Contained Gold (oz)[6]
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 5: Ore Reserve estimate and Mine Plan for the Monty deposit (30% basis)

See Appendix 1 to this announcement for further detail on the Monty Mineral Resource, Ore Reserve and Mine Plan.

[6] Figures rounded to the nearest thousand

Given the overall project parameters, copper distribution, development access and resource extraction, priority was placed on targeting the higher grade and higher tonnage Lower Zone. The Mine Plan selected for the Feasibility Study thus excludes the Upper Zone as this plan meets the Feasibility Study primary objective of maximising the net present value of the project whilst minimising project risk. However, the Probable Ore Reserve estimate includes the Upper Zone given this material has marginally positive economics. The underground grade control drilling will provide considerable clarity and assistance with the determination of the final mining schedule and potential extraction of the Upper Zone will be reassessed post project implementation as part of this process.

Of the maiden Monty Indicated Mineral Resource estimate[ii] of 1.04Mt at 9.3% Cu, 88% of the tonnes and 82% of the contained copper metal converts to estimated Probable Ore Reserves. Factors constraining a higher resource-to-reserve conversion include the narrowness of some sections of the Monty deposit, stacked lenses with varying separation and other geochemical considerations. Given these dynamics, the resource-to-reserve conversion is considered by Talisman to represent a strong result.

Mining

The underground mining method to be used at Monty will be longitudinal long-hole open stoping. Multiple panels will be opened and mined in a bottom up configuration. Stope designs are based on an inter-level spacing of 20m (i.e. stope vertical heights of 15m) (see Figure 6). Backfilling of the stopes will be through a combination of cemented aggregate fill (CAF) and uncemented rock fill (RF). CAF sill pillars have been located to facilitate maximising sustainable production.

In-situ stress has not been measured but has been estimated to be low-to-moderate based on the measured stress field at the nearby DeGrussa mine. Rock strengths are moderate-to-strong. The mine will be accessed by a 1-in-7 gradient decline and all ore and waste rock will be hauled to surface. Mining is planned to be conducted via contractor.

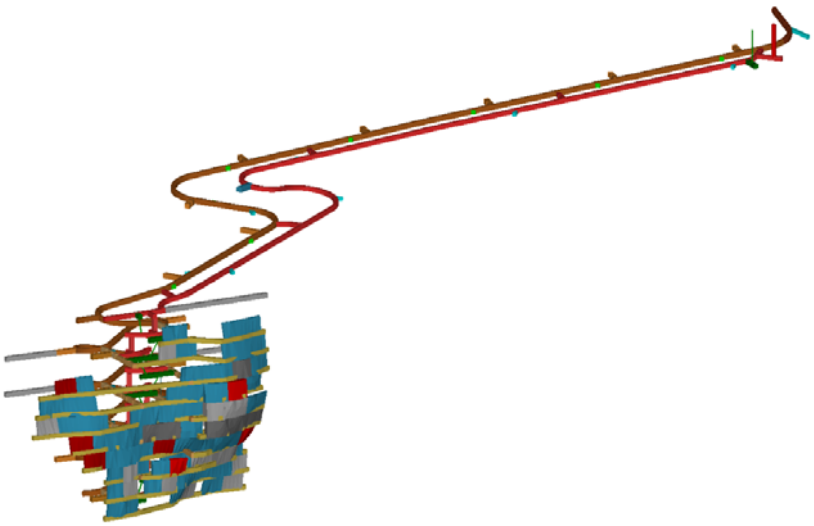


Figure 6: 3D schematic of Monty decline and mine design

The ventilation circuit will comprise the decline as intake and a single exhaust shaft. The main surface exhaust fan will comprise twin axial fans in parallel located on a shaft sunk from surface to approximately 40m.

The mine will be dewatered by staged permanent pumping stations. Each station will be equipped with sufficient pumping capacity to accommodate groundwater and rainfall inflows anticipated during the life of the mine.

The Monty mining schedule shows an operating life of 42 months, including 12 months of pre-production development, and a maximum mining rate of approximately 0.4Mtpa (100% basis, see Figure 7). Forecast total mined ore is 796kt (100% basis). Total forecast vertical development is approximately 510m and total lateral development approximately 10,100m.

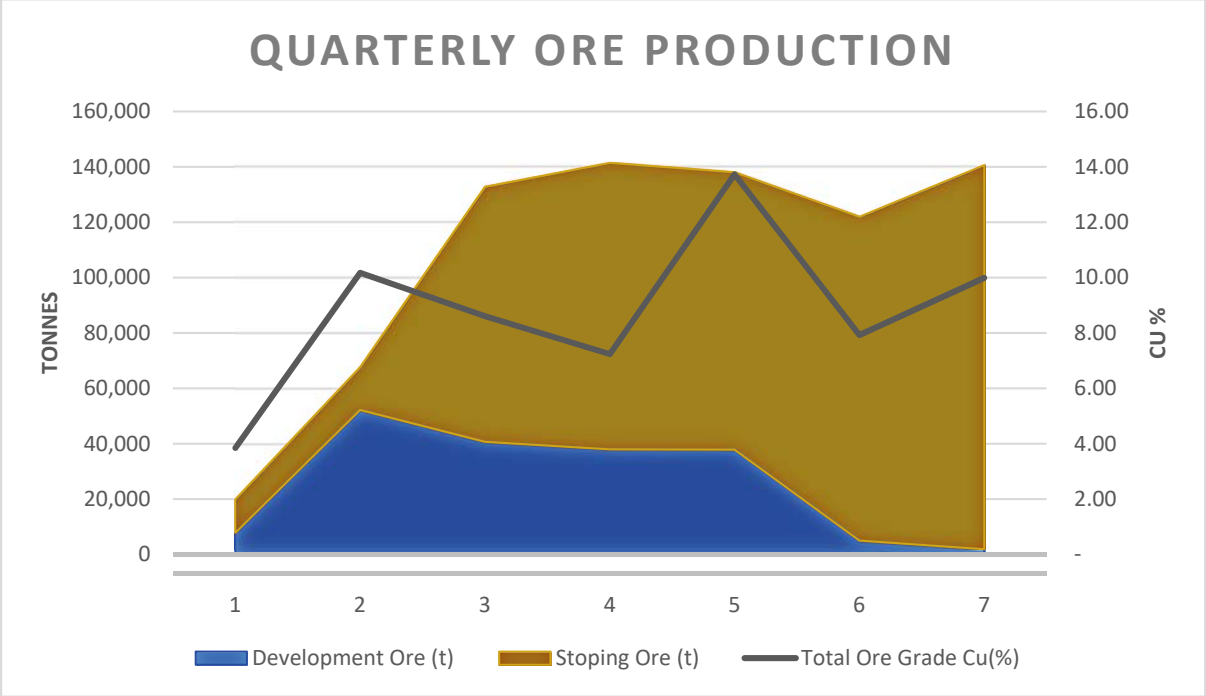


Figure 7: Mine Plan Monty mining schedule within Monty Feasibility Study

Haulage

Following an assessment of potential processing options for Monty ore, the preferred and chosen option for both Joint Venture partners was utilisation of the nearby DeGrussa processing facility.

Following mining, extracted underground ore will be hauled to a surface ROM pad located at Monty. Ore will then be hauled to the DeGrussa ROM pad by road train using a new 14km haul road.

The road trains will pass over a dedicated weighbridge located adjacent to the DeGrussa ROM pad. The weighbridge will be used to effect payments to the haulage contractor as well as Sandfire payments to Talisman for ore purchases under the OSPA.

Metallurgy and processing

Given the selected ore processing route, all metallurgical and processing testwork was performed based on treatment through the DeGrussa processing facility.

Monty ore is planned to be blended with DeGrussa ore prior to treatment through the existing DeGrussa concentrator. Monty ore is similar in composition to the nearby DeGrussa orebodies, with the following salient features that differentiate it from DeGrussa ore:

- The sulphide grain size is coarser than DeGrussa with less fine intergrowths.
- The iron sulphides are almost exclusively pyrite (as opposed to a variable combination of pyrite and pyrrhotite that complicates treatment).
- The proportion of chalcopyrite to iron sulphides in the Monty deposit is approximately double that of DeGrussa requiring less selective flotation practices indicating higher recoveries are achievable.
- The relative levels of deleterious minerals in the ore are proportionately less than DeGrussa, reducing the risk of such minerals impacting on copper recovery.
- Areas of bornite are encountered within the orebody and flotation kinetics of this mineral are traditionally slower than chalcopyrite, adding some risk to recovery when treating these areas.

Comprehensive comminution and flotation testwork was undertaken on the Monty deposit. The comminution testing included SMC, work index and abrasion testing.

The SMC test work program and bond ball mill work index test results indicated that the ore and waste for both Monty and DeGrussa are essentially the same. As the deposit transitions from the Upper Zone to the predominant Lower Zone the rougher recovery and concentrate grade outcomes improve significantly. As expected, regrind improved the recovery of both copper and gold.

The Feasibility Study forecasts life-of-mine average recoveries from Monty ore of 92.8% for copper, 54.1% for gold and 69.8% for silver.

The throughput rate for the DeGrussa processing facility has been set at 1.6Mtpa for the purposes of the Feasibility Study. Monty ore will be processed as delivered at DeGrussa (after blending) to a maximum of approximately 0.4Mtpa.

Table 6 outlines the key physical operating outcomes from the Feasibility Study on a Talisman 30% attributable basis.

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

Sandfire plans to decrease mining rates at DeGrussa to match total plant throughput capacity of 1.6Mtpa. The mine plans at DeGrussa and Monty have been scheduled to avoid the creation of a mine production tail. This alignment of production profiles between the two mines ensures the DeGrussa plant is expected to be fully utilised over the relevant period.

To provide for the higher grade of the Monty ore contribution, DeGrussa's concentrate capacity will be expanded to enable up to 400ktpa of concentrate to be produced (compared to current capacity of 285ktpa).

Concentrate product resulting from the treatment of blended Monty/DeGrussa ore is planned to be handled, transported and shipped using existing Sandfire practices, processes and standards.

Preliminary test work has indicated that potential may exist for Monty ore to be amenable to upgrading via ore sorting. More definitive test work will require larger samples that can only be sourced once ore mining activities commence.

Infrastructure

Infrastructure requirements to support the Monty mining operation include: a 14km haul road connecting Monty to the DeGrussa processing facilities, site earthworks and drainage, box cut development, buildings, water treatment, communications, fuel storage and modifications to the DeGrussa plant. A dedicated Monty ore weighbridge will be located adjacent to the DeGrussa ROM pad.

Other facilities to be established at Monty include: mining offices, fuel storage, service facilities for underground mining equipment, power, water treatment, explosives storage and communications.

A number of existing infrastructure and/or services already established at DeGrussa will be utilised to provide synergies to the Joint Venture.

Environment and approvals

Broader stakeholder consultation has included local shire, native title claimants, Departments of Environmental Regulation, Parks and Wildlife, Mines and Petroleum (including Environmental and Safety sections) and Water.

The proposed development of Monty does not require a separate Commonwealth environmental assessment, nor does the project require assessment by the Office of the Environmental Protection Authority (WA).

The **MLA** for Monty lodged with the West Australian Department of Mines and Petroleum in July 2016 was approved on 30 March 2017.

Following grant of the Mining Lease, the Joint Venture will submit applications for final development and environmental approvals, including the Mining Proposal and Works Approval, which will facilitate the commencement of development activities. These applications are well advanced and receipt of final approvals is currently anticipated in the September quarter 2017.

Monty is located wholly within the registered Yugunga-Nya Native Title Claim area and the terms of an existing Land Access Agreement between the Yugunga-Nya and Sandfire will remain largely the same and apply to Monty.

All areas of the proposed development have been surveyed in accordance with the Aboriginal Heritage Act 1972 (WA) and any areas of significance have been noted and plotted on development plans.

Mining/Exploration Joint Venture and Ore Purchase and Sale Agreements

To this point the Springfield Joint Venture has been governed by a Farm-In Letter Agreement signed between Talisman and Sandfire on 20 December 2013. This Farm-In Letter Agreement has now been superseded by three executed agreements: an **EJVA**, an **MJVA** and an **OSPA**.

The EJVA replaces the Farm-In Letter Agreement to cover the ongoing exploration activities of the Joint Venture on the Joint Venture tenements and outlines the rights and obligations of the Joint Venture parties. In addition, it provides a mechanism to progress future mineral discoveries, including the pathway for utilising the existing MJVA or entering into a new mining joint venture agreement.

The MJVA establishes the rights and obligations of the Joint Venture parties relating to activities associated with the development, mining and ultimate decommissioning of mineral discoveries. The development and mining of Monty will operate under the terms of this MJVA.

The OSPA provides for the sale of Talisman's share of Monty ore to Sandfire at the point of its delivery to a dedicated weighbridge near the ROM ore pad at the DeGrussa plant.

Key terms of the OSPA include:

- Application to all of Talisman's share of ore mined from the Monty deposit (including extensions to mineralisation in the near-Monty vicinity).
- Head grades will initially be calculated directly from the independently prepared block model once grade control drilling is completed. The agreed grade will be finalised once the stope void is surveyed. Grade control drilling will be on a 10m x 10m basis and the calculations will be carried out by an independent third party expert.
- Calculated metal head grades are multiplied by delivered ore tonnes to arrive at calculated metal-in-ore quantities.
- Calculated payable metal quantities are derived by multiplying metal-in-ore quantities by net metal payabilities. Net metal payabilities represent agreed life-of-mine metal recovery formulas multiplied by fixed agreed life-of-mine metal payabilities. Recoveries are based on metallurgical test-work and are a function of the copper to sulphide ratio of ore mined, whilst payabilities represent typical percentages seen in global copper concentrate sales contracts. Net metal payabilities under the OSPA are 89% for copper, 50% for gold and 45% for silver.
- Talisman's gross ore sale revenue per tonne of delivered Monty ore is derived by multiplying calculated payable metal produced by average London Metals Exchange (**LME**) or London Bullion Market Association (**LBMA**) prices. Net ore sale revenue per tonne of delivered ore

results from the subsequent subtraction of the Ore Treatment Fee (**OTF**) and an amount equivalent to forecast government and native title royalty payments.

- The OTF is approximately A$211 per tonne of delivered Monty ore and represents the aggregate of:
  - a charge to recognise the use of DeGrussa plant and infrastructure
  - an estimated ore processing operating cost;
  - expected general and administrative costs; and
  - forecast product concentrate haulage, shipping and smelting costs.
- Certain components of the OTF are subject to annual indexation. Copper smelter treatment and refining charges are pegged to annual industry determined benchmarks.
- Average LME or LBMA prices (as appropriate) are based on the month of ore delivery with physical payment occurring in the month following delivery.

By agreeing metal recovery calculations and fixing payabilities, the OSPA has the highly beneficial effect of removing any financial exposure of Talisman to fluctuations in final metal recoveries achieved by Sandfire from Monty ore processing and final metal payabilities achieved on product concentrate produced from Monty ore by Sandfire.

Capital costs

The construction of Monty will be managed by the Sandfire Projects group. Major scopes of work will be formally tendered. Certain items may be sole sourced on the basis of consistency with existing DeGrussa operations to take advantage of common spares and familiarity with equipment.

The capital cost estimate for Monty, including contingency, is outlined in Table 7. Pre-production capital is defined as all costs incurred prior to the scheduled commencement of first ore production. Sustaining capital is defined as the life-of-mine capital required to sustain the operation after the commencement of first ore production.

Total estimated pre-production capital cost for the development of Monty is A$72.5M (100% basis). Talisman's share of total estimated pre-production capital cost is A$21.8M. This delivers an outstanding and globally attractive pre-production capital intensity of approximately A$2,500 (approx. US$2,000) per tonne of annual copper (in concentrate) production capacity.

Capital item	100% basis (A$M)	Talisman's share - 30% basis (A$M)
Surface infrastructure	32.8	9.9
Underground mine development	31.6	9.5
Underground mine infrastructure	8.1	2.4
Total pre-production capital	**72.5**	**21.8**
Sustaining capital	18.4	5.5
Closure costs	3.2	1.0
Total capital cost	**94.1**	**28.3**

Table 7: Monty total capital cost estimate

Surface infrastructure includes bulk earth works and drainage, boxcut, buildings, equipment, communications, reticulation of services, modifications to the DeGrussa processing plant to accommodate Monty ore, and project management overheads. Underground mine development includes the portal, initial decline development and pre-production lateral underground workings. Underground mine infrastructure includes the ventilation shaft and escape-way, ventilation fan and underground HV distribution and substations.

Forecast life-of-mine sustaining capital totals A$18.4M (100% basis). Talisman's share of forecast life-of-mine sustaining capital is A$5.5M.

Operating costs

The life-of-mine total operating cost estimate for Monty attributable to Talisman is outlined in Table 8.

Operating item	A$M	A$/t ore
Underground mining	28.8	120.5
Ore transport to DeGrussa	1.4	5.8
Ore Treatment Fee (OTF)	50.4	211.0
Joint Venture management fee	0.2	1.0
Royalties	8.1	34.0
Total notional operating cost	**88.9**	**372.3**

Table 8: Monty total operating cost estimate (Talisman 30% attributable basis)

Forecast underground mining and ore transport costs have been built up from a number of sources including underground contract mining rates as provided by the incumbent DeGrussa contractor (Byrnecut), ore transport and road maintenance rates from a request for proposal process and price estimates from incumbent DeGrussa contractors for the supply of consumables and services.

The OTF is as per the OSPA (approx. A$211 per tonne ore delivered). Certain components of the OTF are subject to annual indexation. Copper smelter treatment and refining charges are pegged to annual industry determined benchmarks.

Table 9 outlines the estimated life-of-mine notional C1 (operating cash) and notional AISC[7] costs for Monty per pound of payable copper metal (total 43.8Mlbs) on a Talisman attributable basis. AISC is defined as the operating cash cost of production (net of by-product credits) plus royalties, sustaining capital and closure costs but exclusive of any finance costs or corporate overhead allocation.

Operating item	A$M	A$/lb payable Cu
Underground mining	28.8	0.65
Ore transport	1.4	0.03
Ore Treatment Fee (OTF)	50.4	1.15
Sandfire management fee	0.2	0.01
Gold and silver credits	(12.3)	(0.28)
Notional C1 Op. cash cost (excl. royalties)	**68.5**	**1.56**
Royalties – gov't and native title	8.1	0.19
Sustaining capital	5.5	0.13
Closure costs	1.0	0.02
Total Notional AISC	**83.1**	**1.90**

Table 9: Monty forecast cash cost and AISC per pound payable copper metal (Talisman 30% attributable basis)

[7] C1 and AISC are calculated on the basis of notionally including the OSPA Ore Treatment Fee as a production cost. AISC as defined as the operating cash cost of production (net of by-product credits) plus royalties and sustaining capital and closure costs but exclusive of any finance costs or corporate overhead allocation

Economic evaluation

Table 10 outlines the commodity price and exchange rate assumptions utilised to undertake the financial assessment component of the Feasibility Study. These assumptions reflect the price and exchange rate forecasts adopted by the Study Manager, Sandfire, in finalising the Feasibility Study.

Commodity / FX	Units	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Copper	US$/t	5,539	6,031	6,196	6,119	5,899
Gold	US$/oz	1,310	1,398	1,375	1,374	1,296
Silver	US$/oz	17.95	19.14	18.84	18.83	17.75
A$/US$	USc	0.733	0.730	0.725	0.720	0.715

Table 10: Forecast commodity price and exchange rates utilised for the Monty Feasibility Study

Table 11 outlines the key financial parameters and forecast returns from the Feasibility Study on a Talisman attributable basis.

Financial parameters (Talisman 30% basis)	Units	FS Mar 2017
Forecast copper price (LOM avg)	US$/t	6,118
Forecast gold price (LOM avg)	US$/oz	1,369
Forecast A$/US$ (LOM avg)	USc	0.723
Total gross revenue	A$M	181
Total cash operating costs (incl. OTF & royalties)	A$M	89
Pre-tax operating cashflow	A$M	92
Pre-production capital cost	A$M	22
LOM sustaining capital cost	A$M	5
Ungeared, pre-tax free cashflow	A$M	64
Notional C1 Op. cash cost (excl. royalties)	A$/lb pay Cu	1.56
Notional All-in-sustaining-cost (AISC)	A$/lb pay Cu	1.90
Pre-tax NPV (8% discount rate, real)	A$M	46
Pre-tax IRR	%	78
Payback period (from first production)	months	17
Ore reserve life - to - payback period	x	1.8
NPV / pre-production capex	x	2.1

Table 11: Monty Feasibility Study Financial Return Outcomes (Talisman attributable basis)

With its strong expected margins, Monty is forecast to yield more than A$64M in forecast ungeared pre-tax free cash flow (30% basis), inclusive of all capital expenditure. This delivers a pre-tax Net Present Value (**NPV**) of A$46M (30% basis) at a real 8% discount rate. The forecast pre-tax internal rate of return (**IRR**) is 78%.

Table 12 shows the sensitivity of the Monty NPV estimate to variations in forecast copper price and AUD:USD exchange rate.

Measure	Units	FS Investment Case	FS Spot Case	FS Upside Case
Copper Price	US$/t	6,118	5,712	7,500
Exchange rate	AUD:USD	0.723	0.747	0.750
Free Cash flow - ungeared pre tax	A$M	64	47	93
NPV$_8$ (Pre tax)	A$M	46	33	69
IRR (Pre tax)	%	78	60	104
Notional C1 Cost	A$/lb Cu	1.56	1.58	1.54

Table 12: Monty Feasibility Study Financial Return Sensitivity (Talisman 30% attributable basis)

Springfield Joint Venture exploration upside potential

The Monty deposit is the first significant discovery in the Doolgunna region outside of the DeGrussa complex of deposits, which have hosted more than 660kt of contained copper and 790koz of contained gold (see Sandfire ASX announcement 16 May 2013). In combination with the DeGrussa complex, Monty provides proof of concept for the potential of the Doolgunna region to host multiple deposits or clusters of high-grade VMS deposits.

As illustrated in the world class Noranda VMS mining camp, VMS mineralisation can and does occur at multiple stratigraphic levels within a prospective sequence (see Figure 8). The emerging Bryah Basin VMS camp now demonstrates that there are multiple prospective VMS horizons, with the DeGrussa, Horseshoe Lights and now the Monty VMS deposits all interpreted to be at different stratigraphic levels within the same prospective volcanic and sedimentary rock sequence (see Figure 9).

The spatial distribution of the known deposits and other VMS occurrences identified to date across the Bryah Basin emphasises the size of the mineralising system responsible for the formation of these high-grade deposits, and further highlights the considerable prospectivity of the region.

With an estimated resource grade of 9.4% Cu, nearly double the copper grade of the DeGrussa deposit, the Monty deposit represents a separate mineralising event within the Doolgunna region and the Bryah Basin. The spectacular bornite mineralisation within Monty is not seen at DeGrussa and further demonstrates the diversity of the ore forming systems in these exceptionally high value and prospective mining districts.

While the variation in grade, deposit size, and the ore forming minerals of these high value deposits adds exploration upside to the region it also adds exploration complexity, as an exploration technique targeting one deposit style, may not be the most appropriate for finding another.

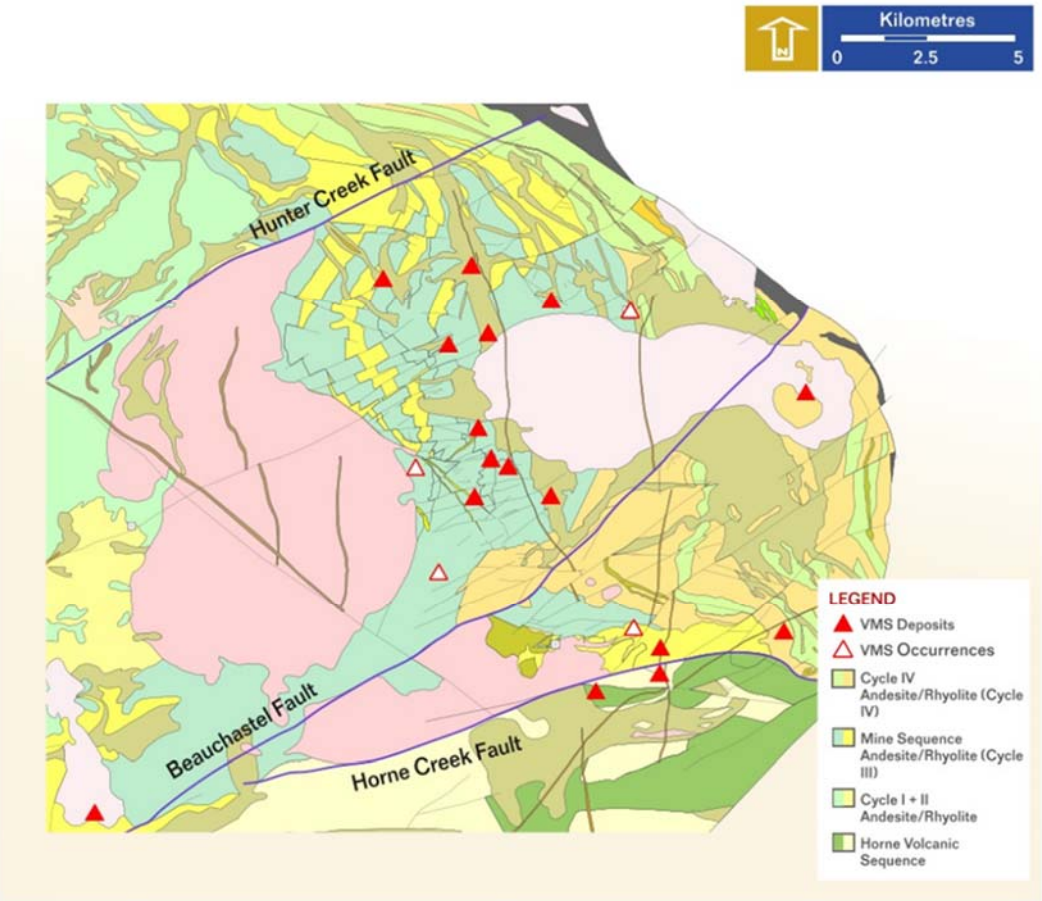


Figure 8: Simplified geology of the Noranda VMS mining camp illustrating distribution of VMS deposits and occurrences across the prospective Cycle III stratigraphic sequence (*after Gibson and Galley 2007*).

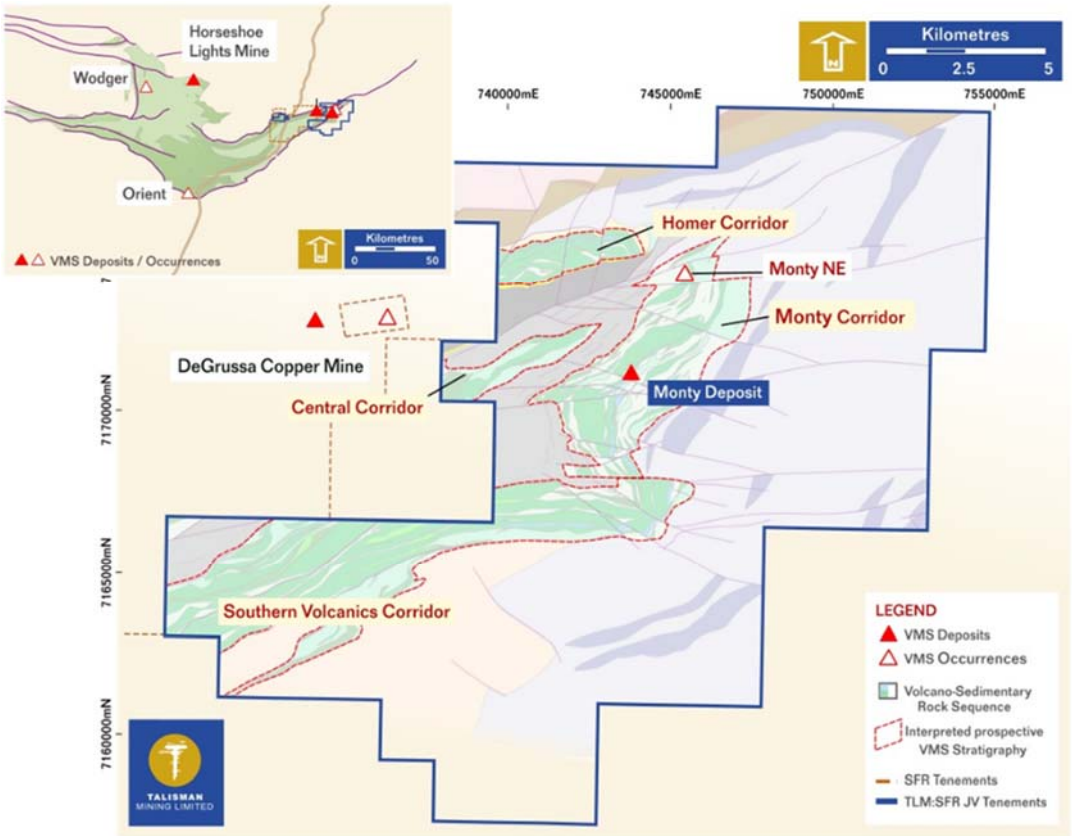


Figure 9: Simplified geology of the Bryah Basin VMS mining camp illustrating distribution of VMS deposits and occurrences across the prospective Karalundi stratigraphic sequence.

RC and diamond holes provide platforms for DHEM testing. Effectiveness of DHEM is dependent on many factors, and its estimated off hole coverage is influenced by the size and nature of mineralisation and the continuity of any potential conductive body of mineralisation. As such Talisman believes the DHEM undertaken to date on the Joint Venture tenements to be a useful tool for searching for larger DeGrussa style orebodies within a 100 to 200 metres radius of a surveyed drill hole, but it has reduced effectiveness and coverage for smaller, fractured mineralised bodies such as Monty or a Monty repeat.

Talisman believes that understanding deposit scale geology and structure in the Monty region is crucial to unlocking the location of potential new lenses, fault-displaced extensions to the known mineralisation or entirely new discoveries within the Joint Venture tenements.

Since the discovery of the Monty deposit in mid-2015, the focus of the Joint Venture has been on defining the immediate extent of the known Monty deposit and establishing a robust Mineral Resource estimate. A total of 93% of all diamond drill holes drilled by the Joint Venture have been devoted to these tasks. As a result, RC and diamond drilling outside of the currently defined mineralisation envelope at Monty is limited, with just over 5,200 metres of diamond drilling undertaken outside of this envelope. Talisman believes that significant untested potential remains to discover additional mineralisation around Monty both laterally and at depth.

Drilling of three deep diamond holes (circa 1,400m) around Monty is planned to commence in April and is included in the approved A$2.2M June 2017 budget period (*100% basis*). These holes are set to test the immediate vicinity of the known Monty deposit (see Figure 10) and will also provide additional DHEM platforms to test within zones that could potentially be accessed from the proposed Monty mine infrastructure.

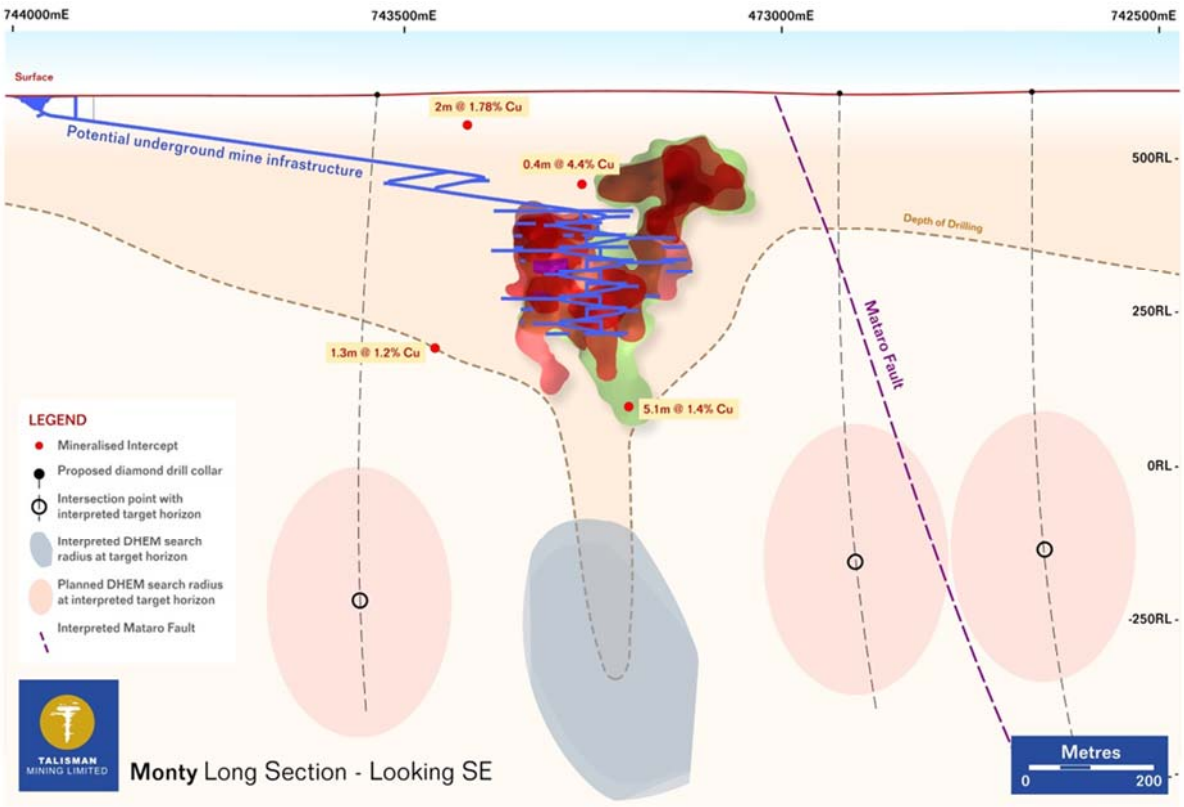


Figure 10: Monty deposit projected long section with locations of proposed deep diamond DHEM platform holes.

The Monty deposit sits within the 8km interpreted Monty Trend (see Figure 11) which has been subject to targeted RC/diamond drilling and DHEM but represents only a limited stratigraphic package within the wider prospective Monty Corridor. Talisman believes considerable potential remains to increase the areas of known mineralisation with further systematic exploration.

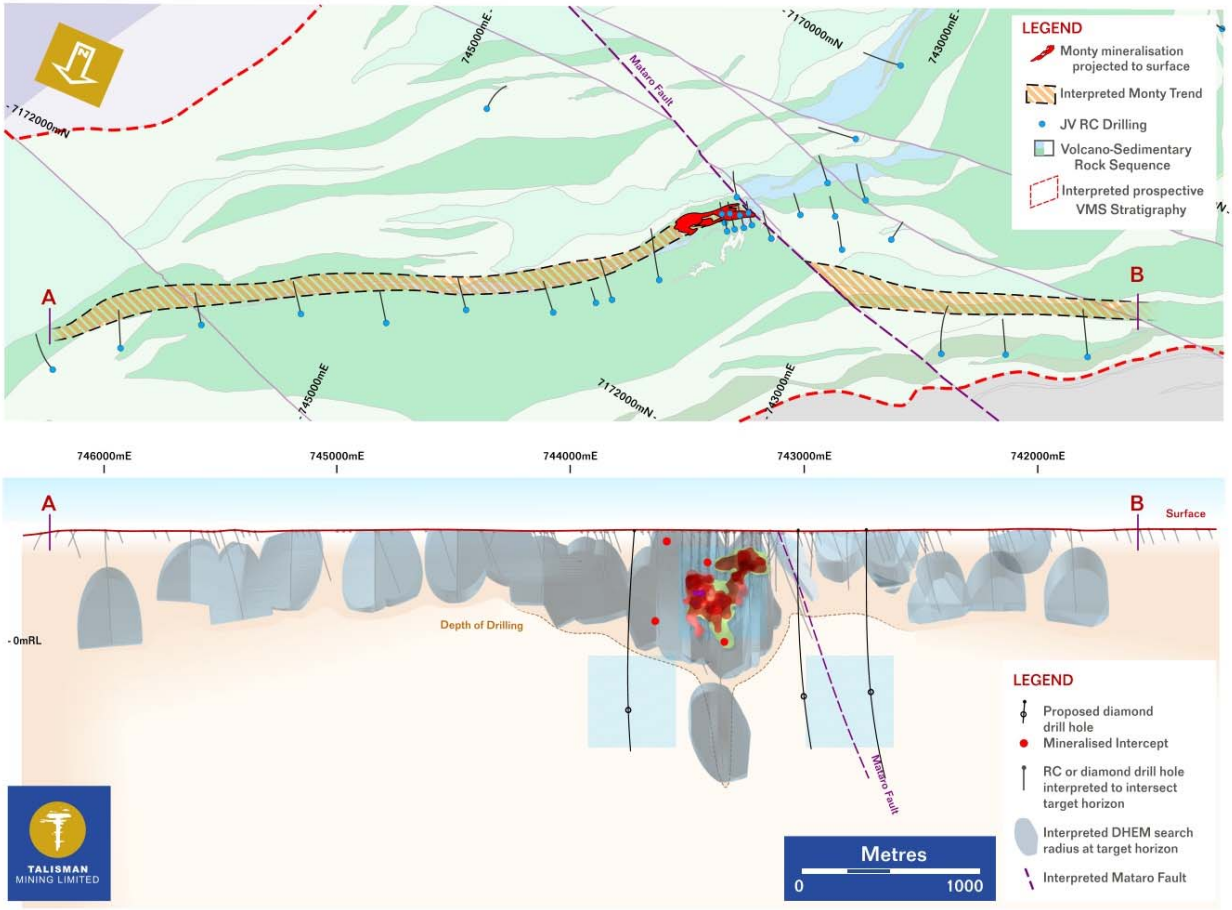


Figure 11: Plan and projected long section illustrating the targeted Joint Venture RC drilling and DHEM testing of the interpreted Monty Trend unit within the wider prospective geological sequence at the Springfield Joint Venture.

In addition to these deep diamond drill holes, the approved A$2.2M June 2017 quarter budget includes additional selective, targeted RC drilling along the Monty Trend, along with a parallel trend to the south east and infill drilling around specific anomalies identified in the regional first pass aircore drilling. Additional surface geophysical data will be collected over Monty and Monty NE, following reprocessing of previously collected Induced Polarisation data.

At a wider regional level the relative sparsity of advanced exploration is a pronounced feature across the broader Joint Venture tenements. Only the 8km Monty Trend and a similar trend along the Homer Corridor have been the subject of targeted RC/diamond drilling and DHEM by the Joint Venture.

These areas represent only two interpreted VMS trends within the wider interpreted prospective corridors. The majority of the remaining prospective geological sequence has been subject to only air-core drill coverage and limited, isolated RC drill holes (see Figure 12) by the Joint Venture.

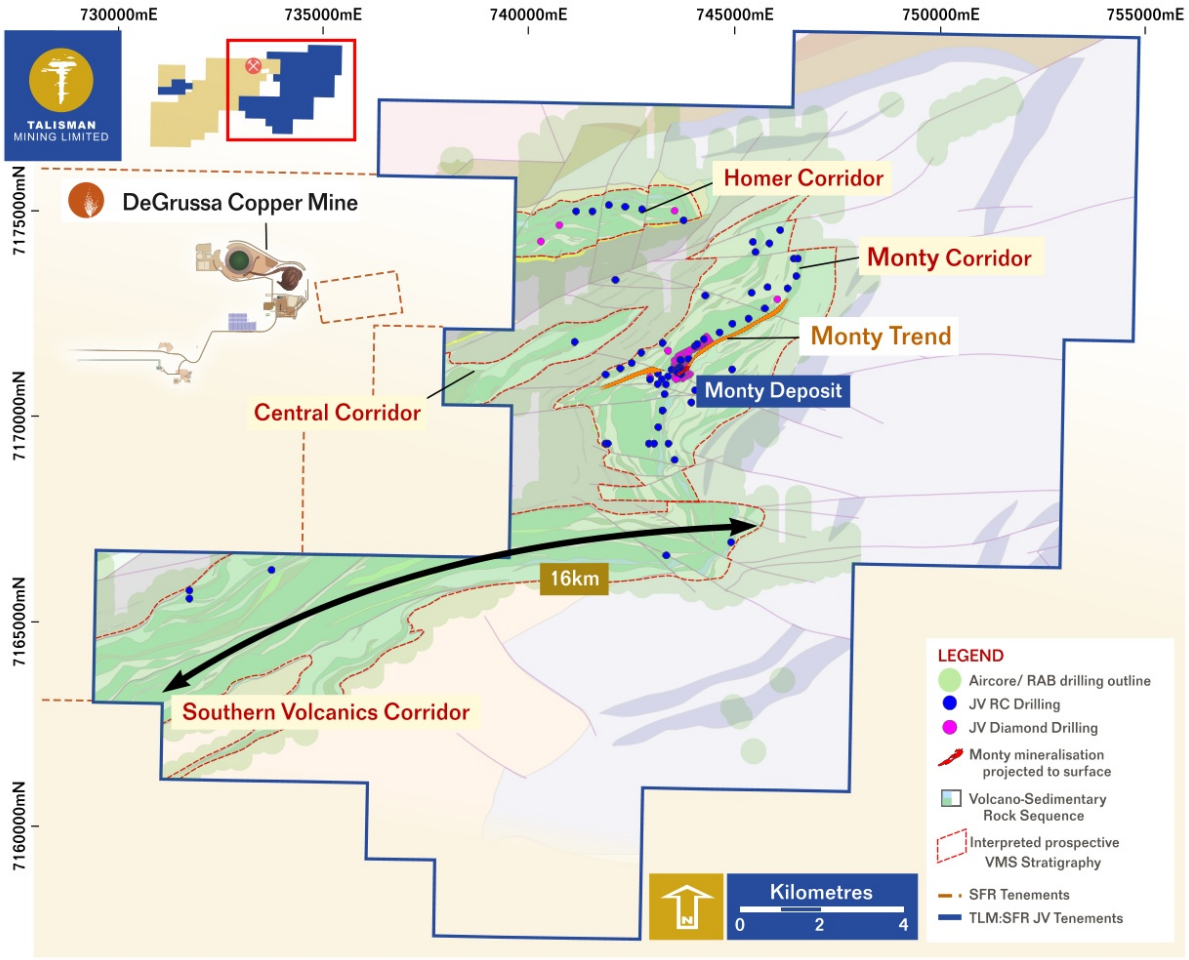


Figure 12: Geological Plan showing the prospective Monty, Central, Homer.

The Southern Volcanics Corridor is one such area. It has been subject to first pass 400m line spaced air-core drilling, which has only recently been completed, but limited to only five RC drill holes by the Joint Venture to date. Talisman believes this 16km corridor represents a high priority for the next phase of systematic exploration by the Joint Venture.

In addition to the planned deep diamond drill holes and work within the Monty Corridor, the approved A$2.2M June 2017 quarter budget includes infill aircore drilling within the Southern Volcanic Corridor.

ENDS

For further information, please contact:
Dan Madden – Managing Director on
+61 8 9380 4230

For media inquiries, please contact:
Michael Vaughan – Fivemark Partners
on +61 422 602 720

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 (Springfield) with Sandfire Resources NL (Sandfire) (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 recently completed in March 2017. The Feasibility Study highlighted the strong technical and financial viability of Monty.

Talisman also holds 100% of the Sinclair Nickel Project (Sinclair) 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 290km^2 tenement package covering more than 80km of strike in prospective ultramafic contact within a 35km radius of existing processing plant and infrastructure.

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. Forward-looking 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.

Competent Person's Statements

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.

---

[i] *Subject to the below, information in this ASX release that relates to Ore Reserves is based on, and fairly represents, information and supporting documentation prepared by Mr Neil Hastings, who is a member of the Australasian Institute of Mining and Metallurgy. Mr Hastings is a full-time employee of Sandfire Resources NL 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 Hastings consents to the inclusion in this ASX release of the Ore Reserves and the supporting information, and the matters based on that information, in the form and context in which it appears.*

Information in this ASX release that relates to the relevant part of the Ore Reserves and which also specifically relates to Talisman Mining Limited (being its 30% share of the Monty Ore Reserve and the financial impact on Talisman resulting from the application of the MJVA and OSPA agreements) is based on, and fairly represents, information and supporting documentation prepared by Mr Benjamin Wilson, who is a member of the Australasian Institute of Mining and Metallurgy. Mr Wilson 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 Wilson consents to the inclusion in this ASX release of the matters based on that information in the form and context in which it appears.

[ii] *Information in this ASX release that relates to the Monty JORC Mineral Resource estimate is information previously published by Sandfire Resources NL ("Sandfire") and is available on the Sandfire and ASX websites (see announcement "Maiden High-Grade Mineral Resource for Monty VMS Deposit: 99,000t of Copper and 55,000oz of Gold", dated 13 April 2016 (Sandfire Announcement)). For full details of the Monty Resource estimate, including the Competent Person's Statement related to the estimation of the Monty Mineral Resource, please refer to the Sandfire Announcement.*

Talisman confirms that it is not aware of any new information or data that materially affects the information included in the Sandfire Announcement, and that all material assumptions and technical parameters underpinning the estimates in the Sandfire Announcement continue to apply and have not materially changed and confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original Sandfire Announcement.

Appendix 1: JORC Tables Sections 1, 2 & 4

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut 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 ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation 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 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 sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• 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 air-core (AC) sample collected using spear techniques for both composite and single metre samples. • Sampling is guided by Sandfire DeGrussa protocols and QAQC procedures as per industry standard. • RC and AC sample size reduction is completed through a Boyd crusher to -4mm and pulverised via LM5 to nominal -75µm. Pulp size checks are completed. • 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. • Samples are assayed using Mixed 4 Acid Digest (MAD) 0.3g charge and MAD Hotbox 0.15g charge methods with ICPOES or ICPMS. • Fire Assay is completed by firing 40g portion of the sample with ICPMS finish.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• Sandfire drilling is completed using industry standard practices. RC drilling is completed with a face sampling hammer of nominal 140mm size, AC drilling is with a blade bit and diamond drilling is completed using NQ2 size coring equipment. • All drill collars are surveyed using RTK GPS. • All core, where possible is oriented using a Reflex ACT II RD orientation tool. • Downhole surveying is undertaken using a gyroscopic survey instrument.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• 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 98%. • 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. • Samples are routinely weighed and captured into a central secured database. • No indication of sample bias with respect to recovery has been established.
Logging	• *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.*	• 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

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	codes. Data is imported into the central database after validation in LogChief™. • Logging is both qualitative and quantitative depending on field being logged. • All drill-holes are logged in full. • All cores are digitally photographed and stored.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *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.*	• 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. • RC samples are split using a cone or riffle splitter. A majority of RC samples are dry. On occasions that wet samples are encountered they are dried prior to splitting with a riffle splitter. • AC samples consist of 5m composite spear samples produced from 1m. Additional 1m sampling may be completed depending on the results from the 5m composites samples. • 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 75µm. • RC and AC samples are Boyd crushed to -4mm and pulverised using LM5 mill to 90% passing 75 µm. • Sample splits are weighed at a frequency of 1:20 and entered into the job results file. • 1:20 grind quality checks are completed for 90% passing 75µm criteria using wet sieving technique to ensure representativeness of sub-samples. • Sampling is carried out in accordance with Sandfire protocols as per industry best practice. • The sample size is appropriate for the VHMS and Gold mineralisation styles.
	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.*	• 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 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.

Criteria	JORC Code explanation	Commentary
		• 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.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Significant intersections have been verified by alternate Talisman personnel. • 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. • The primary data is always kept and is never replaced by adjusted or interpreted data.
Location of data points	• *Accuracy and quality of surveys used to locate drill-holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Sandfire DeGrussa Survey team undertakes survey works under the guidelines of best industry practice. All surface drilling is accurately located using RTK-GPS. • For the Springfield project MGA94 Zone 50 grid coordinate system is used. • Topography control was established from aerial photography using series of survey control points.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Infill drilling at Monty is based on a nominal 30m x 40m grid. • 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 • Exploration drill spacing outside of the Monty Mineral Resource is not sufficient to estimate Mineral Resources. • No sample compositing has been applied to the exploration results.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• At Springfield, no significant orientation based sampling bias is known at this time. • The drill holes may not necessarily be perpendicular to the orientation of the intersected mineralisation.
Sample security	• *The measures taken to ensure sample security.*	• 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.
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 interests, historical sites, wilderness or national park and environmental settings.* • *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.*	• Sandfire Resources NL and Talisman Mining Limited have formed the Springfield Joint Venture (Springfield JV) which covers Talisman's Doolgunna Project tenements (E52/2282, E52/2313, E52/2466, E52/3423, E52/3424, E52/3425, E52/3466, E52/3467, P52/1528, E52/2275, ML52/1071). • Sandfire and Talisman hold a 70%:30% interest respectively in the (unincorporated) Joint Venture, with the exception of tenement E52/2275 where interests of approximately 81%:19% respectively are held. • Both parties are contributing proportionately to expenditure. • Sandfire Resources NL has been appointed as the Joint Venture Manager. • All tenements are current and in good standing. • The Doolgunna Project tenements are currently subject to a Native Title Claim by the Yugunga-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.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Exploration work at the Doolgunna Project 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.
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.

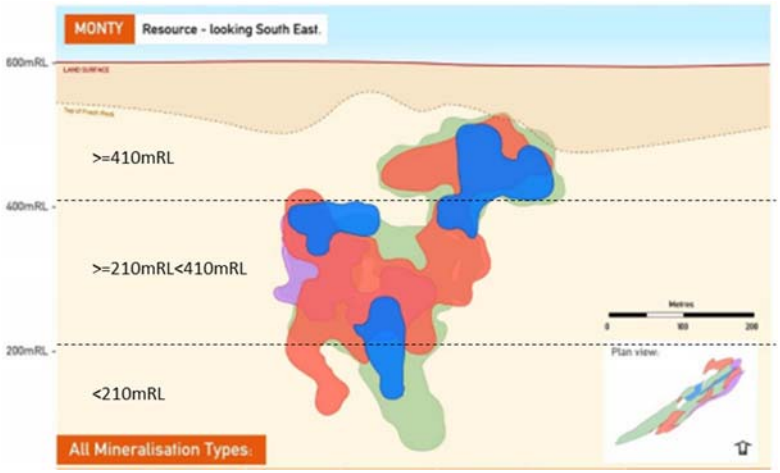
Drill-hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill-holes:*
	  • *easting and northing of the drill-hole collar*
	  • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill-hole collar*
	  • *dip and azimuth of the hole*
	  • *down hole length and interception depth*
	  • *hole length.*
	• *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 Competent Person should clearly explain why this is the case.*
		• No new drill hole information is provided in this report

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Significant intersections reported from the Doolgunna 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. • Cu grades used for calculating significant intersections are uncut. • 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 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.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.* • *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').*	• Drill-hole intercepts relating to the Doolgunna Project in this release are reported as both down-hole intersection widths and estimated true width intersections. • 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.
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; potential deleterious or contaminating substances.*	• 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
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Planned exploration across the Doolgunna Project area includes both surface and down-hole geophysical techniques and reconnaissance and exploration drilling with Diamond, Reverse Circulation and air-core drilling techniques.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in preceding sections where relevant, also apply to this section.)

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td rowspan="2">Mineral Resource estimate for conversion to Ore Reserves</td><td>• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</td><td>• The Underground Ore Reserve estimate is based on the Monty deposit Mineral Resource estimate as at the 31 March 2016. This estimate does not contain a Measured Mineral Resource therefore only the Indicated Mineral Resource is available for conversion to an Ore Reserve. The Indicated Mineral Resource constitutes 99% of the total Monty deposit Mineral Resource estimate tonnes and 98% of the total contained copper. The remainder is classified as Inferred Mineral Resource.
• A vertical percentage split of tonnage and contained copper of the Indicated Mineral Resource by RL is tabulated below.
<table>
<tr><th>Name</th><th>RL</th><th>Tonnes (%)</th><th>Contained Copper (%)</th></tr>
<tr><td>UZ</td><td>>=410mRL</td><td>22</td><td>11</td></tr>
<tr><td>LZ</td><td>>=210mRL<410mRL</td><td>72</td><td>87</td></tr>
<tr><td>LZ</td><td><210mRL</td><td>6</td><td>2</td></tr>
</table>


The estimation and reporting of the Monty deposit Mineral Resources is outlined in a SFR ASX Announcement, dated 13 April 2016.</td></tr>
<tr><td>• Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</td><td>• Mineral Resources reported are inclusive of Ore Reserves.</td></tr>
<tr><td rowspan="2">Site visits</td><td>• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</td><td>• The Competent Person for this Ore Reserve statement is a full-time employee of Sandfire Resources NL (SFR), is based in Perth, and undertakes regular site visits.</td></tr>
<tr><td>• If no site visits have been undertaken indicate why this is the case.</td><td>• Site visits are undertaken as described above.</td></tr>
</table>

Criteria	JORC Code Explanation	Commentary
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.*	• A feasibility study was completed between June 2016 and April 2017.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• The cut-off parameters used to determine the project Ore Reserves are based on 100% project ownership. JV charges and fees are also considered. Three copper only cut-off grades have been calculated as economic cut-offs in the determination of the Ore Reserves. These are based on study estimated costs, revenues, mill recoveries and modifying factors. The cut-off values are: • Full cost cut-off grade (4.9% Cu) – is based on all operating costs associated with the production of copper metal. • Stope incremental cut-off grade (3.2% Cu) - considers material below the full cost cut-off that is accessible, and • Development cut-off grade (2.4% Cu) – considers material that has to be mined in the process of gaining access to fully costed economic material.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).*	• Ore Reserves have been estimated by generating detailed mining shapes that take account of cut-off grade criteria and geometric complexity for all areas that contain Indicated Mineral Resources. This also includes requirements for access development. Internal stope dilution has been designed into the mining shapes and interrogated. External stope dilution and mining recovery factors have been applied post geological model interrogation to generate final diluted and recovered material that is then reassessed against final Project cut-off grade criteria.
	• *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.*	• The Monty project is a time constrained project that requires its mining life to align with the processing life of the nearby DeGrussa mine. To minimise extraction risk and provide production capacity and flexibility the Ore Reserve requires to be accessed as early as practical. Development priority is given to accessing the Indicated Massive Sulphide Resource located between 210mRl and 410mRL. • A deep weathering profile in the vicinity of the deposit has impacted on the selection of the location of the portal boxcut and subsequent decline pathway. Boxcut and decline development are located to provide early access to fresh rock in order to minimise orebody access timing risk. • The mining method selected is long-hole open stoping (LHOS) with fill. Primary fill material will be Cemented Aggregate Fill (CAF) with unconsolidated rock fill (RF) used where consolidated fill is not required. This method allows for total extraction where economic and provides good extraction flexibility with variable geometry and ground conditions. • An overhand mining sequence has been selected employing multiple mining panels. CAF sill pillars will be established to create mining panels. Strategic CAF rib pillars will be used to manage local stope and mining panel ground stability. • The overhand sequence provides an opportunity to complete grade control drilling prior to accessing the orebody. • The selected mining method is considered appropriate for the nature of the defined Mineral Resources and surrounding host rock. Experienced gained at the nearby DeGrussa underground mine has been adopted where applicable as extraction is expected to occur under comparable conditions.

Criteria	JORC Code Explanation	Commentary
	• *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.*	• Both the boxcut and near surface decline locations have been assessed via specific diamond drilling programs and subsequent geotechnical assessment. • A 40m long primary surface ventilation raise is planned to be established in close proximity to the planned decline pathway. Geotechnical parameters for this raise have been derived from the nearby boxcut and decline geotechnical assessments. • No *in situ* stress measurements have been undertaken. The stress field has been estimated to be low to moderate, supported by the measured stress field at DeGrussa, which is located approximately 10 km west of the Monty Project. • Stope and development geotechnical parameters have been derived from core logging of dedicated geotechnical and metallurgical diamond drillholes, resource diamond drill holes, rock strength testing data and a structural model. • Stope stability (size) has been assessed using the industry accepted empirical stability chart method. This method is suitable to provide indicative stope stability assessments but reliable stability forecasts require local scale rock mass information. The method has known published limitations but is considered appropriate for this mine design in the manner in which it has been applied. • Stope size in the UZ is constrained because of the influence of rock fracturing and oxidation associated with the Arneis Fault. This fault runs sub-parallel to and in and out of the UZ mineralisation. The level of confidence in stope performance in this zone is considered low. • Rock mass conditions in the LZ are considered to be fair to very good with mineralisation geometric complexity a primary influence on stope size. • Grade control drilling requirements have been determined via the use of conditional simulation techniques. A drill hole spacing grid of 10m x 10m has been assumed.
	• *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).*	• The Monty deposit Mineral Resources as at the 31 March 2016 was used as the basis for stope and development design. No modifications were made to this model for mine design and stope optimisation purposes.
	• *The mining dilution factors used.*	• Internal stope dilution tonnage (waste material contained within the designed stope shape) has been captured via the stope design process and is variable dependent on the geometry of the mineralisation to be extracted. The geometry of the Monty deposit varies both on strike and dip with multiple lodes present. Internal stope dilution tonnage therefore varies and ranges from 0% to 90% with an average of 17%. Internal stope dilution is at zero grade. • An external dilution factor (external to the stope shape) is also applied to stopes to account for blasting practices and expected local ground conditions. The UZ is impacted by the Arneis Fault that runs sub-parallel to and in and out of the mineralisation therefore a larger factor has been used compared to the LZ where ground conditions are better and are not impacted by a significant structure. The LZ uses a 3% external dilution tonnage factor at zero grade. The UZ uses a 33% external dilution tonnage factor at an average grade of the Halo Mineral Resource that envelops the massive sulphide.
	• *The mining recovery factors used.*	• A mining recovery factor of 95% is applied to all diluted stopes.

Criteria	JORC Code Explanation	Commentary
	• *Any minimum mining widths used.*	• A minimum mining width of 3.0m has been used which takes account of the selected equipment fleet, productivity requirements and the nature of the mineralisation.
	• *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.*	• No Inferred Mineral Resources are included in the Ore Reserves. The Monty deposit contains an Inferred Mineral Resource that constitutes less than 1% of the total mineral resource tonnage. Its inclusion in the LOM plan and subsequent impact on economic viability is negligible.
	• *The infrastructure requirements of the selected mining methods.*	• The selected mining method requires the following infrastructure: o Orebody access, including boxcut, and egress development drives and raises o Orebody intake and return air ventilation development drives and raises o Surface primary ventilation exhaust fans o Underground service water and compressed air supply and dewatering system o Underground communications system o Underground power reticulation o Crushing and screening facilities and a surface batch plant for shotcrete and CAF backfill supply o Surface explosive storage

Criteria	JORC Code Explanation	Commentary
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• The Ore Reserve estimate is based on an operating 1.6 Mtpa concentrator plant producing a 24.5% copper-concentrate that contains gold and silver. The ore from Monty will be treated subject to the terms of an Ore Sale and Purchase Agreement. • The Monty orebody is a volcanogenic massive sulphide similar in composition to the nearby DeGrussa orebodies. • The DeGrussa plant will operate at 1.6 Mtpa and Monty will comprise up to 25% of the ore presented to the plant. • The level of testwork is considered adequate as a result of adopting a processing blend strategy and using the existing DeGrussa concentrator plant flowsheet. The testwork completed focused on: o Understanding the comminution properties and how these properties affect the DeGrussa milling circuit achieving 1.6Mtpa at a primary grind of 45µm o Performing flotation variability testing using the DeGrussa geometallurgical flowsheet to assess the robustness of this flowsheet on natural variations within the Monty ore o Investigate the resultant concentrate specifications in order to determine the quality of the concentrate. • Flotation testwork was based on a total of eleven quarter core and half core diamond drill holes that were selected to cover the deposit with respect to spatial variability, ore variability, ore mineralogy and waste types. Composites were created to reflect full ore zones plus adjacent waste. • Comminution testwork included SMC, Bond Ball Work Index and abrasion testing. Seven large diameter PQ diamond drill holes were drilled to provide the samples. These holes were drilled “twinning” some of the geological significant areas determined from geotechnical drilling. In particular, in relation to known structural controls, grade ranges, mineralogy and waste characteristics. • Testwork on the Monty ore has shown that flotation and comminution characteristics of the ores are similar to DeGrussa ore and Monty can be treated at DeGrussa with high recoveries. • Cu, Au and Ag recovery algorithms have been used in the determination of the Ore Reserve estimate. • Elevated levels of bismuth, mercury, selenium and tellurium in concentrate have been reported from some of the bornite zone composites. Blending of ore from this zone requires a lower percentage (<10%) to manage the risk of penalties. • No bulk sample or pilot scale testwork was undertaken as ore will be treated at the existing DeGrussa concentrator plant with Monty ores having similar flotation and comminution characteristics to DeGrussa ores.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• Monty will require a number of environmental approvals, including Mining Proposal (Mining Act), Works Approval and Environmental Licence (EP Act), Native Vegetation Clearing Permit (EP Act), Groundwater Licence (DoW Licence to Take Water). • No separate Commonwealth environmental assessment will be required, nor will the project require assessment by the Office of the Environmental Protection Authority (WA). • All the necessary studies required to complete the various applications have been completed and reported. Other reports completed include the Mine Closure Plan.

Criteria	JORC Code Explanation	Commentary
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• Monty will utilise existing infrastructure and services installed to support mining operations at DeGrussa. The main items includes: o Access road from the Great Northern Highway o Raw water system and borefield o Accommodation village o Aerodrome o Assay laboratory o Core farm o External communication connections o Underground heavy mobile equipment workshop o Mine workers change room facilities o DeGrussa ROM pad • Infrastructure requirements specific to Monty include: o A 14km access road to Monty that will connect the Monty mine to the DeGrussa ROM pad o Site earthworks including laydown areas, PAF waste rock storage, ore stockpile, diversion drains and bunds, water storage and event ponds o Mining offices, muster/crib room, toilets and first aid treatment; o Fuel storage and dispensing; o Service facilities for underground mining equipment; o Power generators and power distribution; o Waste water treatment plant with spray fields; o Communications tower; o Crushing facilities, batchplant and CAF mixing.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Capital and operating costs have been derived from first principles. Quantity information was derived from detailed design and factored from similar works. Cost information primarily supplied from: o Existing DeGrussa contractors, and o DeGrussa historical costs • Monty ore will be subject to an ore treatment fee, as part of an Ore Sale and Purchase Agreement. The fee structure is outlined in the body of the announcement as agreed between Sandfire Resources NL (SFR) and Talisman Mining Ltd (TLM). • No allowances have been made for deleterious elements. • Exchange rates are based on ANZ bank December 2016 forecasts and vary over the life of the mine. The average weighted LOM AU$:US$ exchange rate is 0.72. • Land freight and port charges are based on existing contracts. Sea freight charges based on Braemar indices. TC / RC based on benchmark. • Monty is subject to Government Royalties. Rates for Government Royalties are: o Copper is 5.0% of net revenue o Gold is 2.5% of net revenue o Silver is 2.5% of net revenue

Criteria	JORC Code Explanation	Commentary
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• Commodity prices are based on the ANZ bank December 2016 forecast and vary over the life of the mine. Average weighted LOM values are: o Copper price: 6126 US$/t o Gold: 1366 US$/oz o Silver: 18.72 US$/oz
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• Monty ore will be sold to SFR to be processed at DeGrussa into a copper concentrate containing gold and silver. • SFR is a copper concentrate producer selling into global market for custom concentrates. • Pricing is fundamentally on value of contained metals the main metal being copper with gold and small silver credits. • SFR produces a clean concentrate, low in deleterious elements. • SFR relies upon independent expert publications (CRU, Wood Mac, Metal Bulletin) and other sources (bank reports, trader reports, conferences, other trade publications) in forming a view about future demand and supply and the likely effects of this on both metal prices and concentrate prices. • SFR concentrate is sold by competitive tender.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• The economic evaluation has been completed on a 100% project ownership basis, including estimated JV charges and fees, and excludes tax considerations. The evaluation has not considered the commercial position of the respective JV parties. • Cost inputs as outlined in Costs section with the exclusion of corporate overheads, exploration expenditure, project financing or interest charges and cost escalation. • Revenue inputs as outlined in the Revenue factors section. • The project is considered to be economically robust. The project is most sensitive to copper price, copper grade and exchange rate. Individual variations in copper price (-20%), average copper grade (-15%) and exchange rate (+10%) all produce positive economic outcomes.
Social	• *The status of agreements with key stakeholders and matters leading to social license to operate.*	• Monty is located wholly within a registered Native Title Claim. An agreement (LAA) exists between the claimants and SFR and the claimants have agreed to amend the existing LAA.

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td>Other</td><td>

To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:
Any identified material naturally occurring risks.
The status of material legal agreements and marketing arrangements.
The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.

</td><td>

The owner and proponent of Monty is an Unincorporated Joint Venture between SFR and TLM. SFR holds a 70% interest in the Joint Venture and is the manager while TLM holds the remaining 30%. The Joint Venture is based on three agreements, namely:

Exploration JV Agreement (EJVA);
Mining JV Agreement (MJVA); and
Ore Sale and Purchase Agreement (OSPA).

All three agreements have been signed.
All areas of the proposed development have been surveyed in accordance with the Aboriginal Heritage Act 1972 (WA) and any areas of significance have been noted and plotted on development plans.
The Mining Lease M52/1071 over the Monty Project covers all mining and support infrastructure required before being transported to the DeGrussa for processing. Miscellaneous License L52/170 is for Monty Haul Road and other infrastructure such as pipelines and power lines, as required.

<table>
<tr><th>Tenement</th><th>Area (ha)</th><th>Area (km2)</th><th>Holder(s)</th><th>Application Date</th><th>Grant Date</th></tr>
<tr><td>M52/1071</td><td>1,642</td><td>16.42</td><td>SFR - TLM</td><td>13-Jul-16</td><td>31-Mar-17</td></tr>
<tr><td>L52/170</td><td>246.48</td><td>2.46</td><td>SFR - TLM</td><td>10-Nov-16</td><td>17-Feb-17</td></tr>
</table>
</td></tr>
<tr><td>Classification</td><td>

The basis for the classification of the Ore Reserves into varying confidence categories.
Whether the result appropriately reflects the Competent Person's view of the deposit.
The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).

</td><td>

Underground Ore Reserves have been derived from a mine plan that is based on extracting the 31 March 2016 Mineral Resources. Probable Ore Reserves have been derived from Indicated Mineral Resources after consideration of all modifying factors.
The Ore Reserve classification appropriately reflects the competent person's view of the deposit.
The 31 March 2016 Mineral Resource does not contain any Measured Mineral Resources.
Unmodified Massive Sulphide Indicated Mineral Resources comprise 191,000 tonnes at 7.7% Cu for 14,800 tonnes of contained copper. These are generally located at the extremities of the defined orebody where the mineralisation narrows. Underground diamond drilling programs will target these areas during operations.

</td></tr>
<tr><td>Audits or reviews</td><td>

The results of any audits or reviews of Ore Reserve estimates.

</td><td>

The Ore Reserve has been internally reviewed. Modifying factors have been externally peer reviewed by:

AMC Consultants Pty Ltd - Mining, geotechnical, geohydrology
Battery Limits Pty Ltd - Metallurgical
Mintrex Pty Ltd - Surface Infrastructure
Integrate Sustainability Pty Ltd - Environment

No fatal flaws were identified in the modifying factors by the external peer reviewers.

</td></tr>
</table>

Criteria	JORC Code Explanation	Commentary
Discussion of relative accuracy / confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The project is considered robust with the Ore Reserve copper grade of 8.6% Cu significantly higher than the full cost cut-off grade of 4.9% Cu. Approximately 19% of the Ore Reserve tonnes which contains 8% of the Ore Reserve contained copper tonnes falls between the development incremental cut-off copper grade of 2.4% Cu and the full cost cut-off grade of 4.9% Cu. • There has been an appropriate level of consideration given to all modifying factors to support the declaration and classification of Ore Reserves. • No statistical or geostatistical procedures were carried out to quantify the accuracy of the Ore Reserve. • There is a lower level of confidence associated with the geotechnical parameters adopted to derive the Ore Reserves located in the UZ (>=410mRL) compared to those adopted for the LZ (<410mRL). This area is impacted by rock fracturing and oxidation associated with the Arneis Fault. This fault runs sub-parallel to and in and out of the UZ mineralisation that forms part of the Ore Reserve. This structure will negatively impact on stope performance in this zone. The zone is marginally economic therefore is sensitive to changes in the key economic inputs e.g. copper price, copper grade. The UZ contains approximately 15% of the Ore Reserve tonnes and 8% of the Ore Reserve contained copper.