

### 31 October 2018

# September 2018 Quarterly Activities Report

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

- Sale of Talisman's interest in the Springfield Joint Venture to Sandfire Resources NL on 12 October 2018 resulting in **receipt of \$58.15 million in cash proceeds** (net of Taurus debt) and an **uncapped perpetual 1% Net Smelter Return Royalty**.
- Progression of **planned cash distribution of up to \$46.5 million to shareholders** through a potential dividend and capital return.
- Completion of a single diamond tail extension during the quarter to provide an additional DHEM platform along the Monty NE trend. No DHEM targets identified from subsequent DHEM survey.

#### Lachlan Cu-Au Project

- RC drilling commenced testing three separate target areas:
  - o Extensions to high-grade copper mineralisation and DHEM anomalies at Blind Calf;
  - o Cu-Zn-Pb auger geochemical anomaly at Noisy Ned; and
  - Strong IP geophysical anomaly at Cumbine.
- Completion of **nine RC holes at Noisy Ned** for 1,809 metres with assay results pending.
- Completion of **2,786 auger holes** and collection of **943 soil samples** testing for potential mineralised extensions to the Blind Calf and Mineral Hill corridors.

#### Sinclair Nickel Project

- Maiden Talisman Indicated and Inferred Resource of 720,000t @ 2.3% Ni for 16,200t of contained nickel<sup>1</sup>.
- Exploration Target between approximately 670,000t @ 2.0% Ni for 13,700t of contained nickel and 790,000t @ 2.5% Ni for 19,900t of contained nickel<sup>1</sup> based on extensional drilling of the down-plunge continuation of Sinclair mineralisation.
- Massive and disseminated nickel sulphides intersected in RC drilling at the Skye East Prospect with significant results including:
  - 4m @ 1.28% Ni from 16m downhole

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o 7m @ 3.54% Ni from 51m downhole *inc. 2m* @ 7.47% *Ni from 55m downhole* 

#### **Corporate**

• **Retirement of all debt** post quarter end following completion of Springfield JV transaction, including repayment of US\$13M to Taurus for project finance and working capital facility balances.

<sup>&</sup>lt;sup>1</sup> Refer Talisman ASX announcement "Sinclair Nickel - Talisman Maiden JORC Mineral Resource" dated 31 August 2018



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

On 8 August 2018 Talisman signed a conditional Share Sale Agreement with Sandfire Resources NL (**Sandfire**) for Sandfire to acquire Talisman A Pty Ltd (**Talisman A**), the subsidiary which holds Talisman's 30% interest in the Springfield Joint Venture (**Share Sale Agreement**).

Key terms of the Share Sale Agreement included:

- Talisman to receive net cash from Sandfire equal to \$72.3 million less the amounts to be paid at completion to Taurus (the Talisman group financier) by Sandfire on behalf of:
  - Talisman A, to repay debt owed at completion by Talisman A (to the extent Talisman A's cash reserves at completion are insufficient) under the Taurus loan facility (Loan Facility); and
  - Talisman, equal to the amount owed at completion by Talisman under the Taurus working capital facility announced on 28 June 2018 (**Working Capital Facility**).
- Sandfire to assume, via its acquisition of Talisman A, an amended form of the existing 2.25% gross revenue royalty held by Taurus over Talisman's 30% share of Monty production.
- Talisman A's budgeted capital contributions to the Springfield JV, including for Monty development, to be funded by Sandfire for the period from 5 June 2018 to completion.
- Talisman to retain an ongoing 1% Net Smelter Return royalty (**NSR Royalty**) payable on 100% of any copper and gold extracted from the Springfield JV tenure above the Monty mine plan (based on the Monty Feasibility Study released in April 2017).

The Proposed Transaction was conditional on Talisman shareholders approving the Proposed Transaction which occurred on 4 October 2018. The completion of the Talisman A Pty Ltd share sale transaction subsequently occurred on 12 October 2018.

As a result of the completion, Talisman received net proceeds of \$58.15 million from Sandfire, after the repayment of the Loan Facility and Working Capital Facility debts to Taurus, and the NSR Royalty.

#### Exploration

There were minimal exploration activities at the Springfield JV during the current quarter.

A review during the June 2018 quarter of all available surface and down-hole electromagnetic geophysical survey data (**DHEM**) completed by an independent consulting group identified one, low-confidence, single component DHEM anomaly which was modelled within the Monty NE trend, at the background noise limits of the survey equipment.

During the quarter diamond drilling was undertaken to extend existing historic drill hole, SPD017 to provide a DHEM platform adjacent and closer to the DHEM signal modelled in the geophysical data review. A DHEM survey undertaken during the quarter did not identify any DHEM conductors.





#### Lachlan Copper-Gold Project

#### **Reverse Circulation Drilling**

On 14 September 2018 Talisman commenced a reverse circulation (**RC**) drilling program testing multiple target areas at the Lachlan Cu-Au Project (**Lachlan Project**) in NSW (*Appendix 1*). Drilling will target a number of high priority areas including:

- DHEM geophysical targets associated with high-grade copper mineralisation identified in Talisman's maiden drilling campaign at the Blind Calf prospect;
- The Noisy Ned Cu-Zn-Pb geochemical anomaly highlighted by the recent auger drilling geochemical sampling program; and
- The Cumbine IP anomaly.

The program, which consists of an estimated **5,250m** of drilling in **24 holes** across the three target areas, commenced during the quarter at Noisy Ned. Previous auger drilling geochemical sampling has identified a strong, coherent Cu-Zn-Pb anomaly that extends for a strike length of more than 1 kilometre along the regionally significant Gilmore Suture fault zone<sup>2</sup>.

As at the end of the September quarter, nine of the planned holes were completed, for a total of 1,809m (*Figure 2 and Table 3*). Individual 1 metre samples have been submitted to ALS laboratories in Orange for processing. Assay results are pending.

Subsequent to the end of the quarter the RC drill rig moved to the nearby Cumbine Prospect to complete five holes on a further three traverses, where a historical IP geophysical survey had defined a large anomaly associated with historic anomalous surface sampling and shallow drilling<sup>3</sup>. Assay results are pending.



Figure 1: Logging RC drill chips at the Cumbine Prospect – Central region Lachlan Project

<sup>&</sup>lt;sup>2</sup> Refer Talisman ASX announcement "Lachlan Cu-Au Project Update - Cu-Zn-Pb Anomaly identified" dated 17 May 2018

<sup>&</sup>lt;sup>3</sup> Refer Talisman ASX announcement "NSW Lachlan Project Update - Drilling Commencement" dated 14 September 2018





Figure 2: Noisy Ned Prospect – Completed drill collar location plan





#### **Blind Calf Prospect**

Results from RC drilling completed in the previous June quarter<sup>4</sup> were received in the September quarter.

Best results (Table 5) included:

0	BCRC005:	7m @ 5.68% Cu, from 98m down-hole
	Inc.	4m @ 7.85% Cu from 100m down-hole;
0	BCRC006:	13m @ 5.71% Cu, from 129m down-hole
	Inc.	4m @ 11.06% Cu from 136m down-hole
0	BCRC007:	11m @ 4.78% Cu, from 127m down-hole
	Inc.	4m @ 8.40% Cu from 127m down-hole;

A follow-up drilling program comprising eight holes for an estimated 2,250m (*Figure 3*), commenced in late October 2018 to target the identified DHEM anomalies at depth, as well as providing a more systematic fence of RC drilling to extend the know mineralisation lodes at depth and along strike<sup>3</sup>.



Figure 3: Blind Calf long section showing historic drilling, and recent high-grade Intersections from Talisman drilling.

<sup>4</sup> Refer Talisman ASX announcement "Further High-Grade Cu Hits & New EM Conductors at Blind Calf" dated 5 July 2018





#### **Geochemical Sampling**

Talisman completed an extensive regional auger drilling and soil sampling program of 2,786 auger holes and collection of 943 samples to the northwest and southeast of the Blind Calf Prospect and the interpreted Mineral Hill corridor.

Results from the auger sampling have defined strong zinc-lead and copper anomalism with coincident gold (*Figure 4 and Figure 5*), highlighting a number of distinct target areas along interpreted regional scale NW-SE trending structures. These structures are known to be a major controlling feature in the region, as is seen at the Mineral Hill Mine (currently in care and maintenance) to the NW, and Talisman's own high-grade Blind Calf prospect where RC drilling is currently underway.



Figure 4: Lachlan Project southern region area<sup>5</sup> showing auger & historic geochemistry with identified Au anomalism

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<sup>&</sup>lt;sup>5</sup> Map shows the outline of the project tenements only, refer to Appendix 1 for detailed tenement boundaries





Figure 5: Lachlan Project southern region area<sup>5</sup> showing auger & historic geochemistry with identified Zn anomalism

The majority of the area tested with the auger drilling comprises pastoral cropping area, with a thin cover of soils (<1.5m), and little to no surface outcrop. The anomalous corridor SE of Mineral Hill, as defined by auger drilling geochemistry, contains abundant brecciated and gossanous iron rich/ manganese sub-outcrop, and numerous small historic mine workings.

Final gold assay results from the collected soil samples are pending.

Detailed assessment, field checking and ranking of these anomalies as well as planning of RC drill testing will be completed in the coming weeks, prior to the submission of work programs to the NSW Department of Planning and Environment. It is anticipated that this proposed RC drilling will be completed early in the first quarter of 2019.



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### Sinclair Nickel Project

Talisman announced the completion of a Mineral Resource Estimate (**MRE**) at its 100% owned Sinclair Nickel Project during the quarter. Resources are based on historic RC and diamond drilling completed by Xstrata Nickel Australasia Operations Pty Ltd (**XNAO**) and incorporate remnant nickel sulphide mineralisation adjacent to existing mine development, and extensional mineralisation continuing immediately down plunge of existing mine workings.

The MRE process resulted in a *JORC Indicated and Inferred Resource* of **720,000t** @ **2.3% Ni** for **16,200t** of contained nickel<sup>6</sup>.

JORC Category - Indicated									
Grade Cut-off (Ni %)	Tonnage	Ni %	Ni t						
0.5	370,000	2.0	7,400						
1.0	350,000	2.1	7,300						
1.5	250,000	2.4	6,000						
2.0	140,000	2.9	4,100						

The MRE is presented at a selection of grade cut-offs in Table 1 below.

JORC Category - Inferre									
Grade Cut-off (Ni %)	Tonnage	Ni %	Ni t						
0.5	1,080,000	1.6	17,200						
1.0	910,000	1.7	15,900						
1.5	460,000	2.2	10,200						
2.0	180,000	2.9	5,400						

Table 1: Sinclair Nickel Project - Mineral Resource Estimate Grade Cut-off

The MRE is based on a recently completed reinterpretation of the massive and disseminated/ stringer sulphide mineralisation at the Sinclair deposit by Talisman's geological team. The MRE was completed by an independent consultant, in conjunction with the Talisman team.

Nickel mineralisation at the Sinclair deposit continues beyond the current underground mine infrastructure and has been identified in drilling for a further 1,200m down-plunge from the end of previous mining development. The first 500m of this continuation has been drilled at a sufficient density to enable a JORC Inferred Resource classification (*Figure 6*).

Further to the north, the continuation of the Sinclair deposit down-plunge mineralisation has only limited drilling for a further 700m on a 100-200m spaced drill pattern (*Figure 6*), and this mineralisation forms an **Exploration Target** ranging between approximately **670,000t** @ **2.0% Ni** for **13,700t** of contained nickel and **790,000t** @ **2.5% Ni** for **19,900t** of contained nickel<sup>6</sup> (*Table 2*). The Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

<sup>&</sup>lt;sup>6</sup> Refer Talisman ASX announcement "Sinclair Nickel - Talisman Maiden JORC Mineral Resource" dated 31 August 2018



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Figure 6: Sinclair Nickel Project – Mineral Resource Estimate: Resource Classification.

		Explora	tion Target			
	Tonnage Ni % Ni					
Lower - 10%	670,000	2.0	13,700			
Upper +10%	790,000	2.5	19,900			

Table 2: Sinclair Nickel Project – Exploration Target approximate range

#### **Exploration**

#### Skye East

Activities for the September quarter included an RC drilling program of 1,010m of drilling across five traverses to test a new conceptual target at Skye East (*Figure 7*).

Seventeen shallow RC holes (*Table 4*) were completed at the eastern extent of previous drilling. The program was designed to test an untested zone to the east of Skye and interpreted potential dip extensions from limited historic drilling.

Drilling intersected massive sulphides in a number of holes (*Table 6*), with significant results including:

- SNRC045 4m @ 1.28% Ni from 16m down hole
- SNRC048 7m @ 3.54% Ni from 51m down hole

Inc.

2m @ 7.47% Ni from 55m down hole







Figure 7: Sinclair Nickel Project – Skye East contact position showing RC drilling

Drilling of two deeper RC drill holes commenced in October 2018 and assay results are pending. DHEM surveys will also be undertaken to further test this newly identified mineralised basal contact position at Skye East.





#### <u>Delphi</u>

Talisman also completed a six-hole RC program at 50m centres for a total of 318m (*Figure 8 and Table 4*) along a single traverse to the south of the Delphi Prospect located between 4km and 6km south of the Sinclair mine. Drilling intersected ultramafic and mafic rocks, confirming the continuation of the host package however did not intersect any sulphide mineralisation. Further assessment and interpretation of the results is required.



Figure 8: Sinclair Nickel Project – Delphi interpreted contact position showing RC drilling





### **Corporate**

#### Working Capital Facility

On 28 June 2018 Talisman entered into an agreement with Taurus for a US\$3 million working capital facility (Facility) to support Talisman's current exploration activities and general working capital.

The Facility was able to be repaid at Talisman's election without penalty. As at 12 October 2018 Talisman had drawn down US\$1.5 million of the Facility which was repaid from the proceeds of the sale of its share of the Springfield JV.

#### **Proposed Distribution to Shareholders**

As previously announced, Talisman is proposing to distribute to shareholders a substantial proportion of the cash available after completion of the Talisman A Pty Ltd share sale transaction.

In conjunction with its legal and tax advisers, Talisman is progressing its assessment of alternatives available for the form of the distribution, such as (non-exhaustively) a dividend, equal capital reduction or a combination of the two. As part of this process, Talisman is seeking a class ruling in relation to the tax treatment of a return of capital for shareholders from the Australian Taxation Office (ATO). Engagement with the ATO could only commence once the Talisman A Pty Ltd share sale transaction was completed and this process is now being expedited as fast as practically possible with the ATO. Additionally, following recent tax advice, a potential dividend is being analysed in conjunction with regulatory discussions regarding the potential capital return.

Talisman anticipates providing a further update on the type, terms and conditions and relevant timetables for the proposed cash distribution in the December quarter, once further details have been determined and in accordance with applicable regulatory requirements.

**Ends** For further information, please contact:

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### **About Talisman Mining**

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

Talisman holds 100% of the Sinclair Nickel Project located in the world-class Agnew-Wiluna greenstone belt in WA's north-eastern Goldfields. The Sinclair nickel deposit, developed and commissioned in 2008 and operated successfully before being placed on care and maintenance in August 2013, produced approximately 38,500 tonnes of nickel at an average life-of-mine head grade of 2.44% nickel. Sinclair has extensive infrastructure and includes a substantial 290km<sup>2</sup> tenement package covering more than 80km of strike in prospective ultramafic contact within a 35km radius of existing processing plant and infrastructure.

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

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

Information in this announcement that relates to Exploration Results and Exploration Targets is based on, and fairly represents information and supporting documentation complied 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 has reviewed the contents of this announcement and consents to the inclusion in this announcement of all technical statements based on his information in the form and context in which they appear.

#### **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. Any forward looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Talisman Mining Ltd does not undertake any obligation to update or revise any information or any of the forward looking statements in this announcement or any changes in events, conditions or circumstances on which any such forward looking statement is based.





#### Table 3: Drill-hole Information Summary, Lachlan Cu-Au Project

Details and co-ordinates of drill-hole collars completed during the September 2018 quarter:

Hole ID	Grid ID	Dip	Azi mut h	East (m)	North (m)	RL (m)	Hole Typ e	Max Dept h	Comment
NNRC0001	MGA94_Z55	-61 <sup>0</sup>	108 <sup>0</sup>	458531	6452218	291	RC	199	Noisy Ned
NNRC0002	MGA94_Z55	<b>-60</b> <sup>0</sup>	270 <sup>0</sup>	458430	6452203	284	RC	145	Noisy Ned
NNRC0003	MGA94_Z55	-61 <sup>0</sup>	287 <sup>0</sup>	458668	6452203	301	RC	217	Noisy Ned
NNRC0004	MGA94_Z55	<b>-60</b> <sup>0</sup>	101 <sup>0</sup>	458666	6452207	301	RC	205	Noisy Ned
NNRC0005	MGA94_Z55	-61 <sup>0</sup>	99 <sup>0</sup>	458542	6452299	296	RC	199	Noisy Ned
NNRC0006	MGA94_Z55	<b>-60</b> <sup>0</sup>	284 <sup>0</sup>	458635	6452294	298	RC	223	Noisy Ned
NNRC0007	MGA94_Z55	<b>-60</b> <sup>0</sup>	90 <sup>0</sup>	458638	6452295	298	RC	211	Noisy Ned
NNRC0008	MGA94_Z55	-61 <sup>0</sup>	102 <sup>0</sup>	458400	6452300	299	RC	211	Noisy Ned
NNRC0009	MGA94_Z55	<b>-60</b> <sup>0</sup>	90 <sup>0</sup>	458337	6452399	283	RC	199	Noisy Ned

#### Table 4: Drill-hole information summary, Sinclair Ni Project

Details and co-ordinates of drill-hole collars for RC drilling completed in September 2018 quarter:

Hole ID	Grid ID	Dip	Azim uth	East (m)	North (m)	Hole Type	Max Depth	Comment
SNRC032	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290735	6859497	RC	54	Skye East
SNRC033	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290711	6859500	RC	54	Skye East
SNRC034	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290684	6859502	RC	54	Skye East
SNRC035	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290657	6859502	RC	54	Skye East
SNRC036	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290682	6859397	RC	54	Skye East
SNRC037	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290654	6859400	RC	54	Skye East
SNRC038	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290658	6859301	RC	54	Skye East
SNRC039	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290633	6859296	RC	54	Skye East
SNRC040	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290704	6859397	RC	96	Skye East
SNRC041	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290656	6859197	RC	54	Skye East
SNRC042	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290631	6859199	RC	54	Skye East
SNRC043	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290605	6859201	RC	54	Skye East
SNRC044	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290681	6859306	RC	78	Skye East
SNRC045	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290655	6859102	RC	52	Skye East
SNRC046	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290636	6859102	RC	54	Skye East
SNRC047	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290681	6859202	RC	72	Skye East
SNRC048	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	290675	6859106	RC	64	Skye East
SNRC049	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	289400	6849425	RC	54	Delphi
SNRC050	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	289351	6849443	RC	54	Delphi
SNRC051	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	289301	6849421	RC	54	Delphi
SNRC052	MGA94_51	<b>-60</b> <sup>0</sup>	270 <sup>0</sup>	289241	6849431	RC	54	Delphi
SNRC053	MGA94_51	-60 <sup>0</sup>	270 <sup>0</sup>	289191	6840435	RC	54	Delphi
SNRC054	MGA94_51	<b>-60</b> <sup>0</sup>	270 <sup>0</sup>	289153	6849425	RC	48	Delphi





#### Table 5: RC drill-hole assay intersections for the Lachlan Cu-Au Project

Details of Blind Calf drilling intersections received by Talisman are provided below.

Calculation of intersections for inclusion into this table are based a nominal 1% Cu cut-off, no more than 3m of internal dilution and a minimum composite grade of 1% Cu.

Intersections relating to the Lachlan Cu-Au Project are reported as down hole intersections. True widths of the reported mineralisation are not known at this time.

Hole ID		Depth From	Depth To	Interval (down-hole)	Cu			
	_	(m)	( <i>m</i> )	(m)	(%)			
BCRC001		32	37 5		1.58			
BCRC002		No Significar	nt results					
BCRC003		97	101	4	2.04			
BCRC004		No significar	nt results					
BCRC005		98	105	7	5.68			
	Inc.	100	104	4	7.85			
	and	122	125	3	2.96			
BCRC006		129	142	13	5.71			
	Inc.	136	140	4	11.06			
BCRC007		127	138	11	4.78			
	Inc.	127	131	4	8.40			
NNRC001		Results pena	ling					
NNRC002		Results pena	ling					
NNRC003		Results pena	Results pending					
NNRC004		Results pending						
NNRC005		Results pending						
NNRC006		Results pena	ling					
NNRC007		Results pena	ling					
NNRC008		Results pena	ling					
NNRC009		Results pena	ling					





#### Table 6: RC drill-hole assay intersections for the Sinclair Nickel Project

Details of Sinclair RC drilling intersections received by Talisman are provided below.

Calculation of intersections for inclusion into this table are based a nominal 0.5% Ni cut-off, no more than 1m of internal dilution and a minimum composite grade of 1% Ni.

The listed intersections relating to the Sinclair Nickel Project are reported as downhole intersections. True widths of the reported mineralisation are not known at this time.

Hole ID	Depth From	Depth To	Interval (down- hole)	Ni	Cu	Со				
	(m)	(m)	(m)	(%)	(%)	(%)				
SNRC032	No Signij	ficant Inte	ercepts							
SNRC033	No Signij	ficant Inte	ercepts							
SNRC034	No Signij	ficant Inte	ercepts							
SNRC035	No Signij	ficant Inte	ercepts							
SNRC036	No Signij	ficant Inte	ercepts							
SNRC037	No Signij	ficant Inte	ercepts							
SNRC038	No Signij	ficant Inte	ercepts							
SNRC039	No Signij	ficant Inte	ercepts							
SNRC040	No Signij	ficant Inte	ercepts							
SNRC041	No Signij	ficant Inte	ercepts							
SNRC042	No Signij	ficant Inte	ercepts							
SNRC043	No Signij	ficant Inte	ercepts							
SNRC044	No Signij	ficant Inte	ercepts							
SNRC045	16	20	4	1.28	0.17	0.04				
SNRC046	No Signij	ficant Inte	ercepts							
SNRC047	No Signij	ficant Inte	ercepts							
SNRC048	51	58	7	3.54	0.47	0.09				
including	55	57	2	7.47	0.67	0.21				
SNRC049	No Signij	ficant Inte	ercepts							
SNRC050	No Signij	ficant Inte	ercepts							
SNRC051	No Significant Intercepts									
SNRC052	No Signij	No Significant Intercepts								
SNRC053	No Signij	ficant Inte	ercepts							
SNRC054	No Signij	ficant Inte	ercepts							







Appendix 1 Lachlan Copper- Gold Project tenure

i. As previously announced to the ASX<sup>7</sup>, Haverford Holdings Ltd (**Haverford**), a 100% owned subsidiary of Talisman, has entered into a Farm-In Agreement (**Farm-in**) with Bacchus Resources Pty Ltd (**Bacchus**) over certain Lachlan Cu-Au Project tenements.

In accordance with the terms of the Farm-in:

- Haverford can earn up to a 80% interest in the Bacchus Tenements (EL8547, EL8571, EL8638, EL8657, EL8658 and EL8680) by sole funding \$2.3M of on-ground exploration expenditure over four years; and
- Should Haverford earn an interest in the Bacchus Tenements, Bacchus is entitled to receive a 20% interest in the Haverford Tenements (EL8615, EL8659 and EL8677). Should Haverford not earn an interest in the Bacchus Tenements, Bacchus may elect to take a 20% interest in the Haverford Tenements.
- ii. As previously announced to the ASX<sup>8</sup>, Haverford has entered into a Farm-In Agreement (Farm-in) with Peel Mining Limited (ASX:PEX) over PEX's Mt Walton (EL8414) and Michelago (EL8451) Projects (collectively the Peel Tenements). In accordance with the terms of the Farm-in, Haverford can earn up to a 75% interest in the Peel Tenements by sole funding \$0.7M of on-ground exploration expenditure over five years.

<sup>&</sup>lt;sup>8</sup> Refer Talisman ASX announcement "AGM Presentation" 23 November 2017.



<sup>&</sup>lt;sup>7</sup> Refer Talisman ASX announcement "Further NSW Gold and Base Metals Tenure Secured" 09 January 2018.



### **APPENDIX 2**

Talisman's Tenement Holdings

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

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





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

Project / Tenement	Location and Blocks (Area)	Interest at Beginning of Quarter	Interest at End of Quarter	Acquired during Quarter	Surrendered during Quarter	Joint Venture Partner / Farm-In Party
LACHLAN PROJECT	NSW					
EL8615	(726km <sup>2</sup> )	100%	100%	-	-	Bacchus
EL8659	(373km <sup>2</sup> )	100%	100%	-	-	Resources Pty Ltd (right to 20%
EL8677	(193km <sup>2</sup> )	100%	100%	-		interest)
EL8414	(174km²)	0%	0%	-	-	Peel Mining Ltd (TLM earning up to 75%)
EL8547	(205km <sup>2</sup> )	0%	0%	-	-	
EL8571	(258km <sup>2</sup> )	0%	0%	-	-	Bacchus
EL8638	(192km <sup>2</sup> )	0%	0%	-	-	Resources Pty Ltd
EL8657	(134m <sup>2</sup> )	0%	0%	-	-	(TLM earning up to
EL8658	(256km <sup>2</sup> )	0%	0%	-	-	80%)
EL8680	(20km <sup>2</sup> )	0%	0%	-	-	
EL8718	(86km <sup>2</sup> )	100%	100%	-	-	N1/A
EL8719	(191km <sup>2</sup> )	100%	100%	-	-	N/A
OTHER	NSW			•		
EL8451	(276km <sup>2</sup> )	0%	0%	-	-	Peel Mining Ltd (TLM earning up to 75%)





#### **APPENDIX 3**

JORC Tables Section 1, 2 & 3

#### Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections) Criteria **JORC Code explanation** Commentary Nature and quality of sampling (e.g. cut Sampling Sampling techniques employed by Sandfire on the channels, random chips, or specific specialised techniques Doolgunna Project include half core sampling of NQ2 industry standard measurement tools Diamond Drill (DD) core, Reverse Circulation (RC) appropriate to the minerals under investigation, drilling samples collected by a cone splitter for single such as down-hole gamma sondes, or metre samples or sampling spear for composite handheld XRF instruments, etc.). These samples, and aircore (AC) sample collected using spear examples should not be taken as limiting the techniques for both composite and single metre broad meaning of sampling. samples. Sampling is guided by Sandfire DeGrussa protocols and Include reference to measures taken to QAQC procedures as per industry standard. ensure sample representivity and the appropriate calibration of any measurement RC sample size reduction is completed through a Boyd tools or systems used. crusher to -10mm and pulverised via LM5 to nominal -75µm. Pulp size checks are completed. Aspects of the determination of mineralisation Diamond core size reduction is through a Jaques jaw that are Material to the Public Report. In cases crusher to -10mm and all samples Boyd crushed to where 'industry standard' work has been done 4mm and pulverised via LM5 to nominal 90% passing this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m 75µm using wet sieving technique. samples from which 3kg was pulverised to Samples are assayed using Mixed 4 Acid Digest (MAD) produce a 30 g charge for fire assay'). In other 0.3g charge and MAD Hotbox 0.15g charge methods cases more explanation may be required, such with ICPOES or ICPMS. as where there is coarse gold that has inherent Fire Assay is completed by firing 40g portion of the sampling problems. Unusual commodities or sample with ICPMS finish. mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. Sampling techniques employed by Talisman at the Sinclair Nickel Project include saw cut diamond drill core (DD) samples in NQ2 size sampled on geological intervals (0.2 m to 2 m), cut into half (NQ2) core to give sample weights under 3 kg, Reverse Circulation (RC) drilling samples collected by a cone splitter for single metre samples or sampling spear for composite samples, and aircore (AC) sample collected using spear techniques for composite samples or collected by a riffle splitter for single metre samples. Sampling is guided by Talisman protocols and QAQC procedures as per industry standard Samples were crushed, dried and pulverised (total prep) to produce a 30g sub sample for analysis by four acid digest with an ICP/AES finish for base metals; and a 50g Fire assay with an AAS finish for gold Drilling at the Lachlan Copper-Gold Project (Lachlan Project) cited in this report was completed by Haverford Holdings, a wholly owned subsidiary of Talisman Mining l imited Sampling techniques employed at the Lachlan Project include 0 auger bottom of hole sampling. Reverse Circulation (RC) drilling samples 0 collected by a cone splitter for single metre samples or sampling scoop for composite samples



TALISMAN



Criteria	JORC Code explanation	Commentary
		<ul> <li>Sampling is controlled by Talisman protocols and QAQC procedures as per industry standard</li> </ul>
		<ul> <li>Auger samples were sieved on-site to minus 175µ and analysed for base metals on-site via Portable XRF ("PXRF"). Sieved samples were dispatched for analysis by aqua regia digest digest with an ICP/AES or AAS finish at ALS laboratories.</li> </ul>
		• RC samples were dried, crushed (where required), split and pulverised (total prep) to produce a sub sample for base metal analysis by four acid digest with an ICP/AES and a 50g sub sample for gold analysis by fire assay
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Sandfire drilling is completed using industry standard practices. RC drilling with a face sampling hammer of nominal 140mm size and diamond drilling is completed using NQ2 size coring equipment.</li> <li>All drill collars are surveyed using RTK GPS.</li> <li>All core, where possible is oriented using a Reflex ACT II RD orientation tool.</li> <li>Downhole surveying is undertaken using a gyroscopic survey instrument.</li> <li>Talisman drilling is completed using industry standard practices. RC drilling with a face sampling blade or hammer at the Sinclair Project.</li> <li>AC drill collars are located using handheld GPS</li> <li>Geochemical auger drill holes at the Lachlan Project were completed using auger drilling techniques.</li> </ul>
		RC drilling is completed with a face sampling hammer of nominal 140mm size
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the complete</li> </ul>	• Sandfire core is meter marked and orientated to check against the driller's blocks, ensuring that all core loss is taken into account. Diamond core recovery is logged and captured into the database with weighted average core recoveries of approximately 99%.
	<ul> <li>the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	• 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.
		<ul> <li>Samples are routinely weighed and captured into a central secured database.</li> </ul>
		No indication of sample bias with respect to recovery has been established.
		• Sinclair RC drilling recovery is good with sample quality captured in the database.
		No indication of sample bias with respect to recovery has been established
		<ul> <li>Lachlan Project auger sample recovery is generally good with no wet sampling in the project area</li> </ul>





Criteria	JORC Code explanation	Commentary
		<ul> <li>RC drill sample recovery is generally high with sample recoveries and quality recorded in the database.</li> </ul>
		<ul> <li>No known relationship exists between recovery and grade and no known bias exists</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Sandfire geological logging is completed for all holes and is representative across the ore body. The lithology, alteration, and structural characteristics of drill samples are logged directly to a digital format following standard procedures and using Sandfire DeGrussa geological codes. Data is imported into the central database after validation in LogChief<sup>™</sup>.</li> <li>Logging is both qualitative and quantitative depending on field being logged.</li> <li>All drill-holes are logged in full.</li> <li>All cores are digitally photographed and stored.</li> </ul>
		• Talisman logging records lithology, mineralogy, mineralisation, alteration, structure, weathering, colour and other primary features of the rock samples and is considered to be representative across the intercepted geological units.
		• Qualitative logging of the bottom-of-hole auger sampling is completed according to the nature, weathering and interpreted protolith of the sample.
		• RC logging records lithology, mineralogy, mineralisation, alteration, structure, weathering, colour and other primary features of the rock samples and is considered to be representative across the intercepted geological units.
		• RC logging is both qualitative and quantitative depending on the field being logged.
		All RC drill-holes are logged in full to end of hole
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> </ul>	<ul> <li>Sandfire DD Core orientation is completed where possible and core is marked prior to sampling. Half core samples are produced using Almonte Core Saw. Samples are weighed and recorded.</li> </ul>
	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>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.</li> </ul>
		<ul> <li>All samples are dried at 80° for up to 24 hours and weighed. DD Samples are then crushed through Jaques crusher to nominal -10mm. Second stage crushing uses Boyd crusher to nominal -4mm. Pulverising is completed using LM5 mill to 90% passing 75%µm. RC samples are Boyd crushed to -4mm.</li> </ul>
		<ul> <li>Sample splits are weighed at a frequency of 1:20 and entered into the job results file. Pulverising is completed using LM5 mill to 90% passing 75%µm using wet sieving technique.</li> </ul>





Criteria	JORC Code explanation	Commentary
		<ul> <li>1:20 grind quality checks are completed for 90% passing 75%µm criteria to ensure representativeness of sub- samples.</li> </ul>
		<ul> <li>Sampling is carried out in accordance with Sandfire protocols as per industry best practice.</li> </ul>
		The sample size is appropriate for the VHMS and Gold mineralisation styles.
		• Sinclair diamond core is HQ and NQ2 size, sampled on geological intervals (0.2 m to 1.2 m), cut into half (NQ2) or quarter (HQ) core to give sample weights under 3 kg Samples were selected to weigh less than 3kg to ensure total preparation at the pulverization stage.
		• Samples were submitted to ALS Chemex Laboratories for preparation. The sample preparation follows industry best practice where all drill samples are crushed and split to 1kg then dried, pulverized and (>85%) sieved through 75 microns to produce a 30g charge for 4-acid digest with an ICP-MS or AAS finish for base metals, and a 50g fire assay with an AAS finish for gold.
		• QAQC protocols for all diamond drill sampling involved the use of Certified Reference Material (CRM) as assay standards. The insertion ratio of CRM standards was 1 in 25 with a minimum of 2 per batch. OREAS and Geostats standards were selected on their grade range and mineralogical properties.
		<ul> <li>All QAQC controls and measures were routinely reviewed and reported on a sample submission, and drilling campaign basis.</li> </ul>
		<ul> <li>Duplicate samples were inserted at a frequency of 1 in 25, with placement determined by Ni grade and homogeneity.</li> </ul>
		Sample size is considered appropriate for nickel sulphide mineralisation
		<ul> <li>A single bottom of hole auger samples is collected from each location and sieved to minus 175µm on site at the Lachlan project.</li> </ul>
		• Sieved samples are analysed for base metals on-site via PXRF. Sieved samples were dispatched for wet chemical analysis by aqua regia digest with an ICP/AES or AAS finish.
		• RC samples were dried, crushed (where required), split and pulverised (total prep) to produce a sub sample for base metal analysis by four acid digest with an ICP/AES and a 50g sub sample for gold analysis by fire assay
		<ul> <li>QAQC protocols for all auger sampling involved the use of Certified Reference Material (CRM) as assay standards.</li> </ul>
		All QAQC controls and measures were routinely





Criteria	JORC Code explanation	Commentary
		reviewed.
		<ul> <li>Sample size is considered appropriate for low-level geochemical sample for base-metal and gold mineralisation</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>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.</li> <li>No geophysical tools are used in the analysis.</li> <li>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.</li> <li>Sinclair drill samples were submitted to ALS Chemex Laboratories in Perth for multi-element analysis using a 1g charge with a multi-acid digest and ICP-MS or AAS finish (OG62). Analytes include AI, Fe, Mg, Mn, S, Ti, Ag, As, Co, Cr, Cu, Ni, Pb, V, Zn, Zr.</li> <li>Samples are analysed for Au, by firing a 50g of sample with AAS finish</li> <li>QAQC protocols for all drill sampling involved the use of Certified Reference Material (CRM) as assay standards. The insertion ratio of CRM standards was 1 in 33 with a minimum of two per batch. OREAS and Geostats standards are selected on their grade range and mineralogical properties.</li> <li>All drill assays are required to conform to the procedural QAQC guidelines as well</li></ul>





<ul> <li>Verification of significant intersections by either independent or alternative company data, data entry procedures, data verification, data storage (physical and electronic) procedures.</li> <li>The verification of significant intersections by either independent or alternative company data.</li> <li>The verification of significant intersections by either independent or alternative company data.</li> <li>The verification of primary data, data entry procedures, data verification, data storage (physical and electronic) procedures.</li> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) procedures.</li> <li>Discuss any adjustment to assay data.</li> </ul>	Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying <ul> <li>The verification of significant intersections by elteronical samples.</li> <li>Sandfie primary data is captured on field tough book sate and year on the procedure so the intersections have been verified by alternized to the sate and tough book starts and the intersections and the sate and t</li></ul>			Portable XRF instruments are used only for qualitative field analysis. No portable XRF results are reported.
Verification of significant intersections by either independent or alternative company personnel.       • The verification of significant intersections by either independent or alternative company personnel.       • Significant intersections have been verified by alternate as evaluation routines and data is then imported into a secure central database.         • Verification of significant to assay data.       • The verification of significant intersections by alternate company personnel.       • Significant intersections have been verified by alternate secure central database.         • Discuss any adjustment to assay data.       • Sinclair significant intercepts have been verified by alternate company personnel.         • Discuss any adjustment to assay data.       • Sinclair significant intercepts have been verified by alternate company personnel.			analysis using a 1g charge with a multi-acid digest and ICP-MS or AAS finish (OG62). Analytes include AI, Fe,
<ul> <li>Verification of sampling and assaying</li> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The verification of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> <li>Sinclair significant intercepts have been verified by alternate company personnel</li> <li>Sinclair significant intercepts have been verified by alternate company personnel</li> </ul>			<ul> <li>Samples are analysed for Au, by firing a 50g of sample with AAS finish</li> </ul>
Verification of sampling and assaying <ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul> <li>Verification intersections by either procedures, data verification of secure central database.</li> <li>The use of twinned holes.</li> <li>Discuss any adjustment to assay data.</li> <li>Sinclair significant intercepts have been verified by alternative company personnel.</li> <li>Sinclair significant intercepts have been verified by alternative and base.</li> <li>The primary data is captured on field tough book approximation of primary data.</li> <li>Sinclair significant intercepts have been verified by alternative company personnel.</li> <li>Sinclair significant intercepts have been verified by alternative company personnel.</li> <li>Sinclair significant intercepts have been verified by alternative company personnel.</li> <li>Sinclair significant intercepts have been verified by alternative company personnel.</li>			<ul> <li>QAQC protocols for all drill sampling for the Lachlan Project involved the use of CRM as assay standards.</li> </ul>
<ul> <li>Verification of sampling and assaying</li> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>			QAQC guidelines as well as routine laboratory QAQC
<ul> <li>1 in 25.</li> <li>PXRF instrument Innovex Delta Gold is used for qualitative and semi-quantitative field analysis of bas metals in regolith geochemical samples.</li> <li>The PXRF instrument is routinely calibrated using a calibration standard. CRM samples are included at a frequency of 1:50 and field duplicate samples are included at a frequency of 1:50.</li> <li>No PXRF results are reported</li> <li>Verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> <li>Sinclair significant intercepts have been verified by alternate company personnel</li> </ul>			
verification of sampling and assaying       • The verification of significant intersections by either independent or alternative company personnel.       • Significant intersections have been verified by alternatisman personnel.         • The use of twinned holes.       • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.       • Significant intersect data.         • Discuss any adjustment to assay data.       • Sinclair significant intercepts have been verified by alternative company personnel.			
Verification of sampling and assaying       • The verification of significant intersections by either independent or alternative company personnel.       • No PXRF results are reported         • The use of twinned holes.       • Significant intersections have been verified by alternatisman personnel.         • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.       • Significant intersections and data is then imported into a secure central database.         • Discuss any adjustment to assay data.       • Sinclair significant intercepts have been verified by alternate company personnel			qualitative and semi-quantitative field analysis of base-
<ul> <li>Verification of sampling and assaying</li> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> <li>Sinclair significant intercepts have been verified by alternate company personnel.</li> <li>Sinclair significant intercepts have been verified by alternate company personnel.</li> </ul>			calibration standard. CRM samples are included at a frequency of 1:50 and field duplicate samples are
<ul> <li>sampling and assaying</li> <li><i>either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> <li>Sinclair significant intercepts have been verified by alternate company personnel.</li> <li>Sinclair significant intercepts have been verified by alternate company personnel.</li> </ul>			No PXRF results are reported
<ul> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> <li>Sinclair significant intercepts have been verified by alternate company personnel</li> </ul>	sampling and	either independent or alternative company	Significant intersections have been verified by alternate Talisman personnel.
<ul> <li>Discuss any adjustment to assay data.</li> <li>Sinclair significant intercepts have been verified by alternate company personnel</li> </ul>	assaying	<ul><li>The use of twinned holes.</li><li>Documentation of primary data, data entry</li></ul>	
alternate company personnel			<ul> <li>The primary data is always kept and is never replaced by adjusted or interpreted data.</li> </ul>
No twinned holes are being drilled as part of this			
program.			<ul> <li>No twinned holes are being drilled as part of this program.</li> </ul>
Logging and sampling data is captured and imported using Expedio Ocris software.			Eogging and camping data to captared and imported
in a SQL server (Datashed) database. Assay data is			in a SQL server (Datashed) database. Assay data is reviewed via DataShed, QAQCR and other customised software and databases. Datashed software has numerous validation checks which are completed at





Criteria	JORC Code explanation	Commentary
		Primary assay data is always kept and is not replaced by any adjusted or interpreted data.
		Significant intercepts for the Lachlan Project have been verified by alternate company personnel
		<ul> <li>Logging and sampling data is captured and imported using Ocris software.</li> </ul>
		<ul> <li>Assay data is downloaded directly from the PXRF machine, or uploaded directly from the CSV filed provided by the laboratory.</li> </ul>
		<ul> <li>Primary laboratory assay data is always kept and is not replaced by any adjusted or interpreted data.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill-holes (collar and down- hole surveys), trenches, mine workings and other</li> </ul>	Sandfire DeGrussa Survey team undertakes survey works under the guidelines of best industry practice. All surface drilling is located using RTK-GPS.
	locations used in Mineral Resource estimation.	<ul> <li>All drill collars are accurately surveyed using RTK GPS system within +/-50mm of accuracy (X, Y, Z).</li> </ul>
	<ul><li>Specification of the grid system used.</li><li>Quality and adequacy of topographic control.</li></ul>	<ul> <li>For the Springfield project MGA94 Zone 50 grid coordinate system is used.</li> </ul>
		Topographic control was established using LiDar laser imagery technology.
		• Historic drill collars locations were picked up by Sinclair Mine Surveyors, with an independent survey contract group to locate completed DD and RC drill collars, working under the guidelines of best industry practice.
		AC drill collars are located using handheld GPS
		• The coordinate system used is the Geocentric Datum of Australia (GDA) 1994. Coordinates are in the Map Grid of Australia zone 51 (MGA).
		<ul> <li>Sample locations for the Lachlan Project are collected using a handheld GPS. Saved data is downloaded directly into GIS mapping software</li> </ul>
		<ul> <li>Talisman RC drill collar locations are pegged using a hand-held GPS.</li> </ul>
		• The coordinate system used is the Geocentric Datum of Australia (GDA) 1994. Coordinates are in the Map Grid of Australia zone 55 (MGA).
Data spacing and	<ul> <li>Data spacing for reporting of Exploration Results.</li> </ul>	<ul> <li>Infill drilling at Monty is based on a nominal 30m x 40m grid.</li> </ul>
distribution	<ul> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications</li> </ul>	<ul> <li>Resource definition drill spacing and distribution of exploration results is sufficient to support Mineral Resource Estimation procedures. Refer ASX:SFR 13/04/2016 Maiden High Grade Mineral Resource for Monty VMS Deposit</li> </ul>
	<ul> <li>applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Exploration drill spacing outside of the Monty Mineral Resource is not sufficient to estimate Mineral Resources.</li> </ul>
		No sample compositing has been applied to the exploration results.





Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul> <li>Understand the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Drill spacing at Sinclair was nominally 200m x 25m.</li> <li>No mineral resource is being reported for the Sinclair Nickel Project.</li> <li>AC drill samples are collected in the field as 4 metre composite samples.</li> <li>Auger sample spacing at the Lachlan Project was nominally 300m x 50m.</li> <li>Drill spacing at the Lachlan Project varies depending on requirements</li> <li>No mineral resource is being reported for the Lachlan Project.</li> <li>No sample compositing has been applied.</li> <li>At Monty, no significant orientation based sampling bias is known at this time.</li> <li>The drill holes may not necessarily be perpendicular to the orientation of drilling at Sinclair is designed to intersect either geophysical targets or geological targets at high angle in order to best represent stratigraphy.</li> <li>No significant orientation based sampling bias are down-hole intervals, not true widths.</li> <li>The orientation of drilling at the Lachlan Project is designed to intersect either geophysical targets or geological targets are down-hole intervals, not true widths.</li> <li>No significant orientation-based sampling bias at Sinclair is known at this time. Drill-holes may not necessarily be oriented perpendicular to intersected stratigraphy or mineralisation. All reported intervals are down-hole intervals, not true widths.</li> <li>No significant orientation-based sampling bias at the Lachlan Project is known at this time. Drill-holes may not necessarily be oriented perpendicular to intersected stratigraphy.</li> <li>No significant orientation-based sampling bias at the Lachlan Project is designed to intersect either geophysical targets or geological targets or geological targets or mercessarily be oriented perpendicular to intersected stratigraphy.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>down-hole intervals, not true widths</li> <li>Appropriate security measures are taken to dispatch samples to the laboratory. Chain of custody of samples is being managed by Sandfire Resources NL. Samples are stored onsite and transported to laboratory by a licenced transport company in sealed bulker bags. The laboratory receipts received samples against the sample dispatch documents and issues a reconciliation report for every sample batch.</li> <li>Samples were stored at the Sinclair Nickel Mine Site prior to submission under the supervision of the Senior Project Geologist. Samples were transported to ALS Perth by an accredited courier service.</li> </ul>





Criteria	JORC Code explanation	Commentary
		<ul> <li>Lachlan Project samples are sieved on site and placed in bags in the field.</li> </ul>
		<ul> <li>Samples are transported to a field base camp and analyses for base metals via PXRF</li> </ul>
		<ul> <li>RC samples were stored on site at the Lachlan Project prior to submission under the supervision of the Senior Project Geologist. Samples were transported to ALS Chemex Laboratories Orange by an accredited courier service.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No external audits or reviews of the sampling techniques and data have been completed.</li> </ul>





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

Criteria		Commentary
Criteria Mineral tenement and land tenure status	<ul> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>Commentary</li> <li>Sandfire Resources NL and Talisman Mining Limited have formed a Joint Venture which covers Talisman's Doolgunna Project tenements (E52/2282, E52/2313, E52/2466, E52/2275).</li> <li>Sandfire and Talisman hold a 70%:30% interest respectively in the Joint Venture, with the exception of tenement E52/2275 where interests of approximately 81%:19% respectively are held.</li> <li>Both parties are contributing proportionately to expenditure.</li> <li>Sandfire Resources NL has been appointed as the Joint Venture Manager.</li> <li>All tenements are current and in good standing.</li> <li>The Talisman tenements are currently subject to a Native Title Claim by the Yungunga-Nya People (WAD6132/98). Sandfire currently has a Land Access</li> </ul>
		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.
		<ul> <li>The Sinclair Nickel Project is held 100% by Talisman Nickel Pty Ltd, a wholly owned subsidiary of Talisman Mining Ltd.</li> </ul>
		<ul> <li>There are no known Native Title Claims over the Sinclair Nickel Project.</li> </ul>
	All tenements are in good standing and there are no existing known impediments to exploration or mining.	
		<ul> <li>The Lachlan Project is held by Haverford Holdings Pty Ltd, a wholly owned subsidiary of Talisman Mining Ltd, and through Farm-in agreements with Peel Mining Ltd and Bacchus Resources Pty Ltd.</li> </ul>
		<ul> <li>There are no known Native Title Claims over the Lachlan Project.</li> </ul>
		<ul> <li>All tenements are in good standing and there are no existing known impediments to exploration or mining.</li> </ul>





	JORC Code explanation	Commentary
Criteria Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	• Exploration work at Springfield completed prior to Talisman's tenure included geochemical soil and rock chip sampling combined with geological mapping. Some targeted RC drilling was completed over gold and diamond targets.
		<ul> <li>The Sinclair Nickel Deposit was discovered in 2005 by Jubilee Mines NL drill testing a ground EM anomaly.</li> </ul>
		<ul> <li>M37/1275 hosts the Sinclair Nickel Mine which was operated by XNAO from 2007-2013 and produced approximately 38,500 tonnes of contained nickel metal.</li> </ul>
		• Exploration work on has included diamond, RC and aircore drilling, ground and downhole EM surveys, soil sampling, geological interpretation and other geophysics (magnetics, gravity).
		<ul> <li>The Lachlan Project has been subject to exploration by numerous previous explorers.</li> </ul>
		<ul> <li>Exploration work on has included diamond, RC and Air Core drilling, ground and down-hole EM surveys, soil sampling, geological interpretation and other geophysics (magnetics, gravity).</li> </ul>
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.
		<ul> <li>The principal exploration targets at the Doolgunna Projects are Volcanogenic Massive Sulphide (VMS) deposits located with the Proterozoic Bryah Basin of Western Australia.</li> </ul>
		<ul> <li>The Sinclair project lies within the Archean aged Norseman-Wiluna Greenstone Belt.</li> </ul>
		<ul> <li>The Sinclair Nickel Deposit is an example of an Archaean-aged komatiite-hosted nickel deposit, with massive nickel- iron sulphides hosted at or near the basal contact of high-MgO ultramafic lava channels with footwall basaltic volcanic and sedimentary rocks.</li> </ul>
		<ul> <li>The Lachlan Project lies within the Central Lachlan Fold belt in NSW.</li> </ul>
		<ul> <li>The Lachlan Project is considered prospective for epithermal style base-metal and precious metal mineralisation, orogenic mineralisation, and Cobar style base-metal mineralisation.</li> </ul>
Drill-hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following</li> </ul>	No New drilling information relating to the Springfield project is provided in the release.
	<ul> <li>information for all Material drill-holes:</li> <li>easting and northing of the drill-hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill-hole collar</li> <li>dip and azimuth of the hole</li> </ul>	<ul> <li>Drill hole information relating to the Sinclair Project is included In Table 4: Drill-hole Information Summary, Sinclair Ni Project.</li> </ul>



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Criteria	JORC Code explanation	Commentary
	<ul> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>Drill hole information relating to the Lachlan Project is included In Table 3: Drill-hole Information Summary, Lachlan Project.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Significant intersections reported from the Springfield Project are based on greater than 0.5% Cu and may include up to a maximum of 3.0m of internal dilution, with a minimum composite grade of 1.0% Cu.</li> <li>Cu grades used for calculating significant intersections are uncut.</li> <li>Minimum and maximum DD sample intervals used for intersection calculation are 0.3m and 1.2m respectively.</li> <li>RC reported intersections are based on regular 1m sample intervals.</li> <li>No metal equivalents are used in the intersection calculation.</li> <li>Where core loss occurs; the average length-weighted grade of the two adjacent samples are attributed to the interval for the purpose of calculating the intersection. The maximum interval of missing core which can be incorporated with the reported intersection is 1m.</li> <li>Significant intersections reported from the Sinclair Nickel Project are based on greater than 0.5% Ni and may include up to 1m of internal dilution, with a minimum composite grade of 1% Ni.</li> <li>Ni grades used for calculating significant intersections are uncut.</li> <li>A minimum diamond core sample interval of 0.15m and a maximum interval of 1m is used for intersections calculations subject to the location of geological boundaries.</li> <li>Length weighted intercepts are reported for mineralised intersections.</li> <li>No metal equivalents are used in the intersection calculations.</li> <li>Significant intersections reported from the Lachlan Project are based on greater than 1% Cu and may include up to 3m of internal dilution, with a minimum composite grade of 1% Cu.</li> <li>Cu grades used for calculating significant intersections are uncut.</li> </ul>



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Criteria	JORC Code explanation	Commentary
		<ul> <li>All results reported in this document have been derived from 1m split samples.</li> </ul>
		<ul> <li>Length weighted intercepts are reported for mineralised intersections.</li> </ul>
Relationship between mineralisation widths and	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill-hole angle is known, its</li> </ul>	<ul> <li>No New drilling information relating to the Springfield project is provided in the release.</li> <li>Drill-holes relating to the Sinclair Ni Project are</li> </ul>
intercept lengths	<ul> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>Differences relating to the sinclair for Project are reported as down hole intersections. True widths of reported mineralisation are not known at this time. (refer Table 6: Drill hole assay intersections for the Sinclair Ni Project).</li> </ul>
		<ul> <li>Drill-holes relating to the Lachlan Project are reported as down hole intersections. True widths of reported mineralisation are not known at this time. (refer Table 5: Drill hole assay intersections for the Lachlan Project).</li> </ul>
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill-hole collar locations and appropriate sectional views.	Appropriate maps with scale are included within the body of the accompanying document.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>The accompanying document is considered to represent a balanced report.</li> </ul>
Other substantive exploration data	<ul> <li>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</li> </ul>	Other exploration data collected from the Springfield Project is not considered as material to this document at this stage. Other data collection will be reviewed and reported when considered material.
	results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>This report includes results from recent Geophysical Surveys from the Lachlan Project. Results from these surveys are included in the body of this report</li> </ul>
		<ul> <li>Parameters for the Blind Calf Down Hole Electromagnetic (DHEM) Survey are provided below</li> <li>DigiAtlantis probe and HPTX70 transmitting at 130amps</li> </ul>
		<ul> <li>Figure eight loop (300mx300mx2) with a rapid turn- off time of 0.26ms</li> </ul>





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



### **Section 3 Estimation and Reporting of Mineral Resources**

Criteria	JORC Code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	<ul> <li>Drilling data used for the resource estimate is stored in a Datashed SQL database, provided to Talisman by XNAO.</li> <li>The database contains all relevant drill hole location, survey, geological and assay data, in addition to sample QAQC information including repeat samples, field and laboratory standards.</li> <li>Talisman has access to all original laboratory drill logs and assay reports. Random checks of sample, geology and assay data has been undertaken for the database as apart of Talisman's internal QAQC process.</li> </ul>
	Data validation procedures used.	<ul> <li>Data was further validated on import into Vulcan<sup>™</sup> mining software. Random checks of assay data from drill hole to database were completed.</li> </ul>
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	<ul> <li>The Competent Person for the resource estimate, Mr Brian Wolfe has not visited the Sinclair mine site.</li> </ul>
	• If no site visits have been undertaken indicate why this is the case.	<ul> <li>The Talisman employees responsible for the current mineralisation and geology interpretation were previous employees at the Sinclair Nickel Project and are extremely familiar with the geology and mineralization and it was felt little additional benefit would be gained by a site visit.</li> </ul>
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	• The confidence in the geological interpretation is considered good. The deposit is a massive to disseminated sulphide nickel deposit located in the Agnew-Wiluna Greenstone Belt.
	<ul> <li>Nature of the data used and of any assumptions made.</li> </ul>	<ul> <li>Data used includes numerous campaigns of diamond drilling (surface and underground) and RC drilling. Additionally, the database contains aircore and RAB surface drilling which was not utilized in the context of the underground resource.</li> </ul>
	• The effect, if any, of alternative interpretations on Mineral Resource estimation.	• The deposit is well constrained and predictable with clear boundaries which define the mineralised domains. Infill drilling has supported and refined the model and the current interpretation is thus considered to be robust. Mineralisation has been intersected to the north of the currently modelled area and this is of less certain continuity and of insufficient confidence to be included.





Criteria	JORC Code explanation	Commentary
	The use of geology in guiding and controlling Mineral Resource estimation.	<ul> <li>Geological controls and relationships were used to define sub-domains. Key features are massive sulphides present in a deformed lithological contact zone.</li> </ul>
	• The factors affecting continuity both of grade and geology.	<ul> <li>The Sinclair Nickel Project is a nickel deposit comprising massive to disseminated sulphide. The deposit has been defined on drilling to grade control spaced drilling and mining has been undertaken. Infill drilling has confirmed mineralisation models and the same style of mineralisation has been intersected in predictable locations to the north of the mined area.</li> </ul>
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource	<ul> <li>The Mineral Resource area has dimensions of 1,600 m (north) by 90 m (east) and up to 50 m thick (elevation).</li> </ul>
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	The Mineral Resource estimate was generated via Ordinary Kriging (OK). Mineralised domain interpretation was completed in-house by Talisman and further refined by the Competent Person. The interpretation was approximated to a lower cut-off grade of 1.0% Ni and areas of massive sulphide internal to this cut-off were also modelled. The interpretation was coded to the drill hole database and 1m length composites were generated within the mineralisation boundaries. Statistical evaluation was undertaken for Ni on the 1m composites and semivariograms were input in preparation for kriging of the 1m composite data. Hard boundaries were applied to the kriging. A search neighbourhood was applied parallel to the strike and dip with radii of 90m, 30m and 15m in the strike, down dip and across strike directions respectively. Sample counts for the estimates were set at a minimum of 6 and a maximum of 8. Any blocks not estimated in the first estimation pass were estimated in a second pass with expanded search neighbourhoods and relaxed sample limits (minimum 2) to allow the domains to be fully estimated. Extrapolation of the drillhole composite data is generally limited to approximately 50m down dip. No top cut has been applied to the data for the purposes of the OK nickel estimates.





Criteria	JORC Code explanation	Commentary
	• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	• Talisman have not undertaken any previously published resource estimates for the Sinclair deposit. Unpublished mineral inventory estimates undertaken by previous owners are available and compare well to this estimate
	The assumptions made regarding recovery of by-products.	No by-products are assumed.
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	<ul> <li>Other elements have been estimated and comprise Cu, Co, Cr, Fe, S, As and MgO.</li> </ul>
	<ul> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> </ul>	<ul> <li>The parent block size is 12.5mN x5mE x 2.5mRL, with sub-celling to 2.5mN x 1mE x 0.5mRL for domain volume resolution. The parent block size was chosen based on estimation methodology and also relates to a drill section spacing of 25m or less and an on-section drill spacing of approximately 10m or less. The search ellipse was oriented with axes rotated parallel to the mineralised bodies as previously described.</li> <li>Search ellipse dimensions were chosen to encompass several drillholes up and down dip to ensure an adequate quality of estimation</li> </ul>
	Any assumptions behind modelling of selective mining units.	Selective mining unit assumptions have not been considered
	<ul> <li>Any assumptions about correlation between variables.</li> </ul>	<ul> <li>Statistical investigation has been undertaken as relates to Ni grade and non-grade variables described above an also density measurements. Sufficiently correlated variables have been estimated together with Ni. Other non-correlated or inverse correlated variables have been estimated separately.</li> </ul>
	• Description of how the geological interpretation was used to control the resource estimates.	• The geological model domained the oxide, transitional and primary mineralization in addition to geological and structural zones. Ultimately only the fresh portion of the deposit was estimated therefore no consideration was given to these interpretations during the estimation.
	<ul> <li>Discussion of basis for using or not using grade cutting or capping.</li> </ul>	Top cutting of grades has not been determined necessary for the estimation of Ni grades at Sinclair.





Criteria	JORC Code explanation	Commentary
	• The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	• Swath plots have been used to determine the validity of block grades against input grades. Visual validation on a sectional and plan basis indicates good replication of input grades. Reconciliation data is available however has not been explicitly compared to the current model. Grade and tonnage depleted from the model approximately matches the published tonnage and grades of processed ore.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	<ul> <li>The tonnages are estimated on a dry basis.</li> </ul>
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied	• A 1.5% Ni cut-off grade was used to report the Mineral Resources. This cut-off grade is estimated to be the minimum grade required for economic extraction.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	<ul> <li>The Sinclair deposit was previously mined as an open pit and subsequently an underground operation employing bench stoping and rockfill (cemented and uncemented) methods.</li> <li>Where Mineral Resources are proximal to existing voids, an assessment of the status of these voids, the interaction of the Mineral Resources with these voids and their historical records have informed the likelihood of reasonable prospects for eventual economic extraction when considering their inclusion in this Mineral resource estimate.</li> <li>Little potential exists to expand the open pit operations and it is assumed that any future underground mining would continue based on that previously undertaken. The assumption with respect to mining methods will be the subject of further studies.</li> </ul>
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>The processing &amp; concentrate facility constructed in 2008 still remains on site and is in a state of operational suspension, with an active care &amp; maintenance program. This facility treated all ores previously mined from the Sinclair deposit and the metallurgical parameters from historic mining have been assumed as applicable to these Mineral Resources.</li> <li>The validity of these assumptions will be verified via future metallurgical testing programs.</li> </ul>





Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation.</li> <li>While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made</li> </ul>	recommencement of mining.
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	• Dry bulk densities were determined by the Archimedes principle (immersion) where possible and by the pycnometer method which does not give a true dry bulk density reading. An extensive database exists with both types of readings included.
	• The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit,	<ul> <li>Bulk density has been estimated via a polynomial regression formula based on the correlation between nickel grades and density. The formula is given as:- density = (-0.0066*Ni%) + (0.2685*Ni%) + 2.7836</li> </ul>
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• The bulk density values were assigned as described above. For host rock to the mineralization, densities were assumed to be 2.78t/m3.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories	<ul> <li>The Mineral Resource classification into Indicated and Inferred categories s based on good confidence in the geological and grade continuity. Areas within mine infrastructure and proximal to it have been classified as Indicated based on reasonable prospects of eventual extraction as described under 'Mining factors or assumptions'. Remaining material has been classified as Inferred to approximately 21,680mN. Paucity of drilling to the north of this precludes classification of grade estimates.</li> </ul>





Criteria	JORC Code explanation	Commentary
	• Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	<ul> <li>The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation.</li> <li>The validation of the block model shows good correlation of the input data to the estimated grades.</li> </ul>
	Whether the result appropriately reflects the Competent Person's view of the deposit.	<ul> <li>The Mineral Resource estimate appropriately reflects the view of the Competent Persons.</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>No audits or reviews have been initiated on the Sinclair Nickel Project Mineral Resource Estimate.</li> </ul>
	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource 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 resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate	• The relative accuracy of the Mineral Resource Estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.
	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	<ul> <li>The statement relates to global estimates of tonnes and grade.</li> </ul>
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available	<ul> <li>Production data is available however has not been exhaustively compared against the estimate. A global comparison is approximately correct.</li> </ul>

