



### 29<sup>th</sup>January 2015

### **COMPANY SNAPSHOT**

#### **Board of Directors**

Alan Senior Non-Executive Chairman

Gary Lethridge Managing Director

Brian Dawes Non-Executive Director

Karen Gadsby Non-Executive Director

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### **Capital Structure**

**Shares on Issue:** 131,538,627 (TLM)

**Options on Issue:** 6,250,000 (Unlisted)

ASX: TLM

# Quarterly Activities Report December 2014

### **Highlights**

### Sinclair Nickel Project Acquisition

- Talisman enters into agreement with Xstrata Nickel Australasia Operations Pty Ltd during the Quarter to acquire the Sinclair Nickel Project for \$8M, plus a deferred \$2M payment, contingent upon a recommencement of mine production.
- Sinclair is an advanced nickel sulphide project with extensive, near-new infrastructure and outstanding exploration potential.
- Acquisition completion is anticipated to take place in early February.

### **Sinclair Nickel Exploration**

 Whilst awaiting acquisition completion, an initial assessment of the Stirling and Skye near mine Prospects, plus the Delphi Prospect, were commenced with a view to defining and confirming potential exploration drill targets.

### Exploration activity included:

- o a review of high-priority historical geophysical data by Newexco; and
- o 3-dimensional geological modelling of the Stirling and Skye Prospects; &
- o a geological and geophysical review of the Delphi Prospect.

### **Doolgunna Copper-Gold Projects – JV with Sandfire Resources**

- Ongoing or completed exploration activities undertaken by Sandfire during the Quarter include:
  - extensive aircore drilling programs across the project including Homer, Monty, Central Corridor and Southern Volcanics;
  - high-powered ground and down-hole electro-magnetic surveys ongoing across the prospective sequences; &
  - detailed low-level litho-chemical analysis of current and historical drill samples.
- Exploration activities are expected to assist Sandfire in generating robust DeGrussa-style exploration targets at Springfield for potential drill testing in 2015.

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## Sinclair Nickel Project

### Transaction Update

As announced on 20 October 2014, Talisman Nickel Pty Ltd, a wholly owned subsidiary of Talisman Mining Limited, has entered into a binding Sale and Purchase Agreement with Xstrata Nickel Australasia Operations Pty Ltd (XNAO), a subsidiary of Glencore, to acquire 100% of the Sinclair Nickel Project.

Consideration for the acquisition of the Sinclair Nickel Project consists of:

- a cash payment of \$8 million payable at completion of the transaction; and
- a deferred payment of \$2 million triggered by production recommencing within 6 years of transaction completion.

(For further transaction details refer to Talisman's ASX Announcement dated 20 October 2014 - *Talisman to Acquire Sinclair Nickel Project* and Talisman's September 2014 Quarterly Activities Report).

Talisman continues to liaise with Xstrata Nickel Australasia Operations Pty Ltd to facilitate completion of its acquisition of the Sinclair Nickel Project. Completion of the acquisition is currently anticipated to take place in early February.

### **Project Overview**

The Sinclair Nickel Project is an advanced nickel sulphide project with extensive, near-new and well-maintained infrastructure and significant exploration potential.

Sinclair is located in the prolific Agnew-Wiluna Greenstone Belt in WA's North-eastern Goldfields, one of the world's premier nickel provinces with over 9 million tonnes of reported contained nickel metal.

The project offers a number of exploration and resource definition opportunities including:

- the potential to confirm an extension of the Sinclair nickel deposit along strike and beyond the end of
  existing mining development, where historical drilling has identified nickel sulphide mineralisation for a
  further 1km;
- other immediate near-mine targets within the Stirling and Skye ultramafic channels, located adjacent to and below the Sinclair deposit; and
- a highly prospective 300km<sup>2</sup> tenement package that hosts extensive ultramafic rock packages and numerous nickel sulphide drill targets all of which are located within a 30km radius of the mine.

### **Exploration Activities**

Until the Sinclair Nickel Project tenements are transferred to Talisman Nickel post acquisition completion, Talisman is unable to undertake active on-ground exploration or other activities.

However, during the Quarter, Talisman proactively commenced a series of desktop exploration activities focused upon identifying potential exploration drill targets to assist in exploration planning.

### Near Mine Exploration Potential

### Skye and Stirling Prospects

The **Skye** and **Stirling** Prospects comprise two additional mineralised ultramatic channels, which have been identified in drilling to the south and directly beneath the main Sinclair ore body in close proximity to the Sinclair underground mine development (see *Figure 1*).



The Skye and Stirling Prospects show strong similarities to the Sinclair ore body, with massive nickel sulphides associated with at least two positions at the base of a complexly folded high-MgO ultramafic body. Both prospects contain drilling on a 50m x 20m pattern at their near-surface positions, but are largely untested down-plunge and to the north beneath Sinclair (see *Figure 1*).

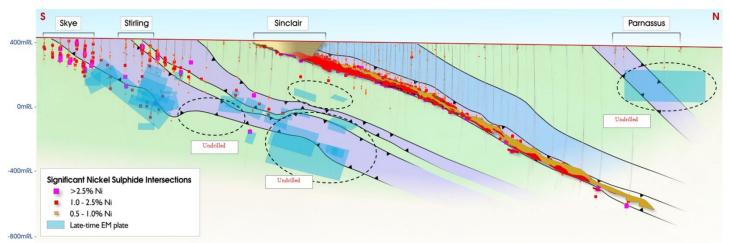


Figure 1: Longitudinal projection showing Stirling, Skye ultra-mafic channels, nickel sulphide intercepts, late-time EM plates in close proximity to the existing Sinclair Mine infrastructure and areas not tested by drilling.

During the December Quarter, Talisman engaged external consultants to assist with the next steps of exploration at the Skye and Stirling Prospects, with a view to defining and confirming potential drill targets.

This work is planned to include the creation of a three-dimensional geological model for the Stirling and Skye prospects and a review of high-priority historical geophysical data in this near-mine area.

### Geophysical Review of Priority EM Conductors

The massive nickel sulphide mineralisation at Skye and Stirling shows good down-plunge continuity with a strong electromagnetic (EM) response. Importantly, several strong late-time EM conductors remain to be tested for thicker and/or higher grade mineralisation beneath the Sinclair deposit (see *Figure 1*).

Talisman has engaged nickel geophysics specialists Newexco to review and validate high-priority EM targets, and to identify possible massive nickel sulphide targets relative to previous mineralised drill-holes.

### 3D Geological Modelling

In conjunction with the geophysical review, Talisman has also engaged geological consultants SRK to assist with the development of robust three dimensional models of the key rock types, mineralization and controlling structures at both Skye and Stirling.

The development of this integrated three dimensional geological model is intended to enable Talisman to better constrain ore-bearing positions and to assist in facilitating accurate drill hole targeting at Skye and Stirling (and Sinclair).

### Next Steps

By using a combination of the refined three dimensional geological and geophysical models Talisman intends to develop potential exploration drill targets designed to test optimal mineralised positions along the Skye and Stirling mineralised channels.



### **Delphi Prospect**

The Delphi Prospect and surrounding area hosts the southern continuation of the prospective Sinclair Ultramafic channel and has historically returned several nickel sulphide intersections in limited drilling over a strike length of at least 8km (see *Figure 2*).

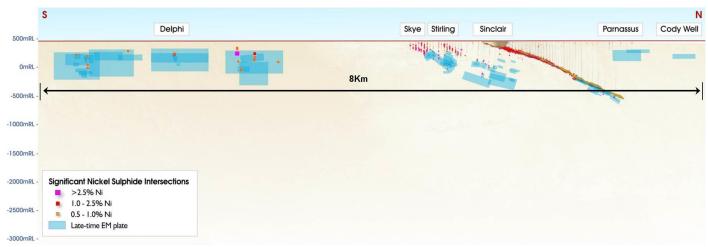


Figure 2: Sinclair Trend longitudinal projection showing 8km of strike extent, late-time EM plates and historical mineralised intercepts.

The widespread distribution of heavily disseminated, stringer and, in some places, massive nickel sulphides highlights the prospectivity of the area, and Talisman is prioritising exploration activities at Delphi prospect accordingly.

During the Quarter, Talisman commenced reviewing the Delphi prospect data, whilst Newexco were engaged to review geophysical data at the prospect.

The objective of this combined review is to develop systematic exploration programmes to gather further geological and geochemical data and to potentially test existing electro-magnetic targets away from mineralised drill-holes at Delphi.

### Sinclair Nickel Deposit

The Sinclair deposit comprises an elongated body of massive and heavily disseminated sulphide mineralisation with a shallow plunge of around 20 degrees to the north (see *Figure 3*).

The underground operation mined the deposit to around 445m below surface and offers a near-mine nickel sulphide exploration opportunity within the down-plunge extensions of the Sinclair ore body.

Nickel mineralisation at Sinclair continues down-plunge beyond the current underground mine infrastructure and has been identified in drilling for a further 1km along strike from the end of actual mining development.

Talisman engaged a consultant during the Quarter to evaluate whether there is any potential for JORC code (2012) compliant resource estimates, based upon existing historical drilling, for both:

- the Sinclair deposit mine area; and
- the Sinclair deposit northern extension.

This evaluation and estimate work is on-going at this time and the initial work highlights the following.





Due to the complexity of the Sinclair ore body, definition drilling needs be closely-spaced in order to better define higher-grade shoots associated with tight folding and remobilised massive sulphide.

It is considered that the existing historical broadly-spaced drilling traverses across the mine extension position are wide enough apart to miss significant high-grade massive sulphide mineralisation.

This has been demonstrated by the four northern-most drill traverses which intersected high-grade mineralisation with grades greater than 2.5% Ni over widths of up to 6.34m and evidence that underground mining in some of the final mining levels yielded significant increases in mineralised volume compared with the geological model (as defined by surface diamond drilling).

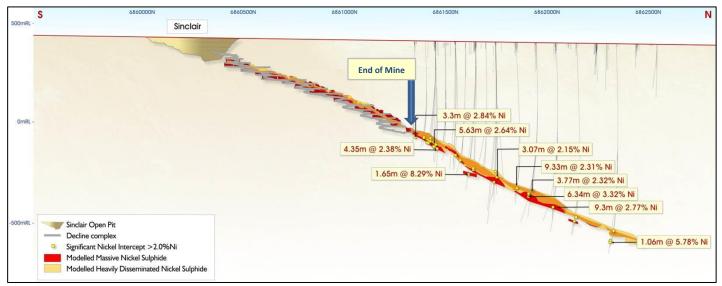


Figure 3: Sinclair Nickel deposit longitudinal projection with mine development showing mineralised Ni drill intercepts greater than 2% Ni beyond the limit of existing mine development (previously reported to ASX on 20 October 2014 – Talisman to Acquire Sinclair Nickel Project)

Given the above, it is possible that a JORC-code compliant resource may not be possible at this time for the Sinclair deposit extension. However, this is likely to change in the future with further successful infill drilling.

The Sinclair deposit also comprises a second lens of heavily disseminated and matrix nickel sulphide mineralisation along a sub-parallel embayment structure immediately to the east of the current Sinclair mine development.

Further resource evaluation work is required to better define structurally-complex domains for this mineralisation in order to determine its resource potential.

In addition, the recent review of the underground drilling and mining data has indicated the presence of high grade remnant (unmined) massive sulphide mineralisation along the Sinclair main lode from beneath the open pit to the end of the underground development.

Talisman is currently working on preparing revised underground stope and mineralisation wireframe models in order to quantify and assess the validity of potentially accessing this mineralisation and thereby enabling inclusion of this mineralisation within a future JORC compliant resource estimate.





### **Doolgunna Copper-Gold Projects (Farm-in JV with Sandfire Resources)**

Talisman has an extensive portfolio of high-quality VMS copper-gold exploration projects in the Bryah Basin region of Western Australia. Leading Australian copper producer Sandfire Resources NL (ASX: SFR) is funding active exploration at these projects as part of a joint venture farm-in. Sandfire has the right to earn up to a 70% interest in Talisman's Doolgunna Projects by spending \$15 million on exploration over five-and-a-half years.

Talisman's Doolgunna Projects comprise the **Springfield**, **Halloween** and **Halloween West Projects** (see *Figure 4*), which abut Sandfire's DeGrussa-Doolgunna tenements and contain extensions of the volcanic rock package which hosts the DeGrussa VMS deposits.

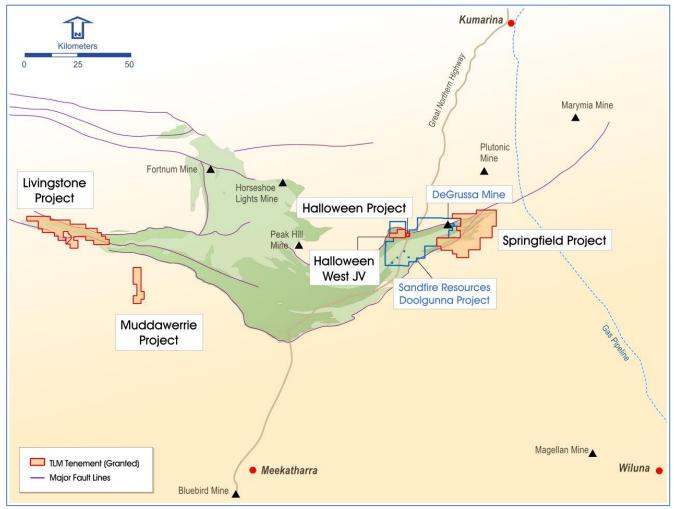


Figure 4: Talisman Mining Ltd Springfield, Halloween, Livingstone and Muddawerrie Project locations

Preliminary observations from the initial phases of exploration at the Springfield Project have delivered significant geological encouragement, confirming that the Springfield project contains interpreted extensions of the volcanic rock package which hosts the DeGrussa VMS deposits.

During the December Quarter, exploration continued with detailed Aircore (AC) drilling across the Homer (DeGrussa) and Southern Volcanic Trends with 278 holes drilled for 16,780m for a total of 21,099m for the calendar year (see *Figure 5*).



Geological units encountered included sediments, mafic volcanic sediments, dolerites and basalts, which are interpreted to be consistent with the geology encountered along the DeGrussa corridor on Sandfire's tenements.

Final assay results for the geochemical AC drilling are pending and a detailed interpretation of the geochemical and geological information will begin early in the first half of 2015 once all results have been returned, validated and integrated with historic Talisman drill hole data.

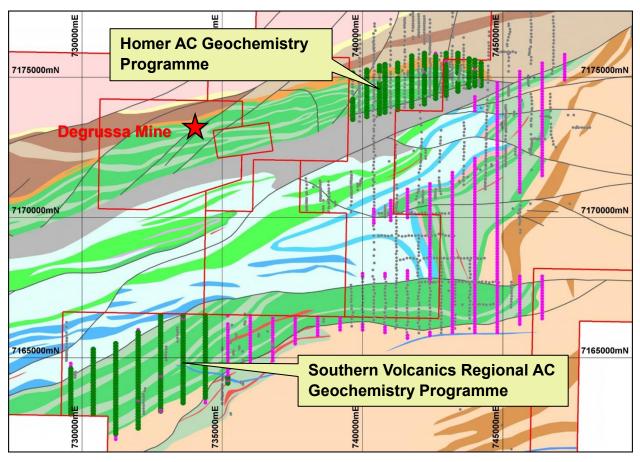


Figure 5: Springfield Project interpreted geology showing regional Aircore drill holes; completed holes in green and holes to be drilled in March 2015 Quarter in magenta.

To assist with future modelling and interpretation, 1,137 pulp samples have been re-assayed using lowdetection multi-element Laser Ablation ICP-MS analysis techniques to identify potential Degrussa-like lithochemical signatures. Samples were taken from the fresh rock interface in historical Talisman drilling as well as samples from the recent Sandfire drill holes.

Analysis and interpretation of the data will continue in the first half of 2015 as the final assays are received and subsequently integrated/ processed with the historical lithochemical data.

High-powered down-hole DHEM (down-hole electromagnetic surveying) and FLEM (fixed-loop electromagnetic surveying) are key tools in VHMS exploration, and these geophysical techniques have proven to be successful in the DeGrussa environment. Accordingly, they are being extensively deployed across the prospective stratigraphy at the Springfield Project.





At the end of December, the first two phases of FLEM surveys, consisting of twenty four high-power FLEM loops (each 1,200m by 1,000m), had been completed covering the northern extension of the DeGrussa Formation at Homer as well as the Central Volcanic Corridor and the Monty Prospect (see *Figure 6*).

The third and fourth phases of the regional FLEM program will re-commence in early January 2015 and will comprise 25 loops encompassing a large proportion of the Southern mafic volcanic succession (see *Figure 6*). This work program is ongoing and may be completed in the March Quarter 2015.

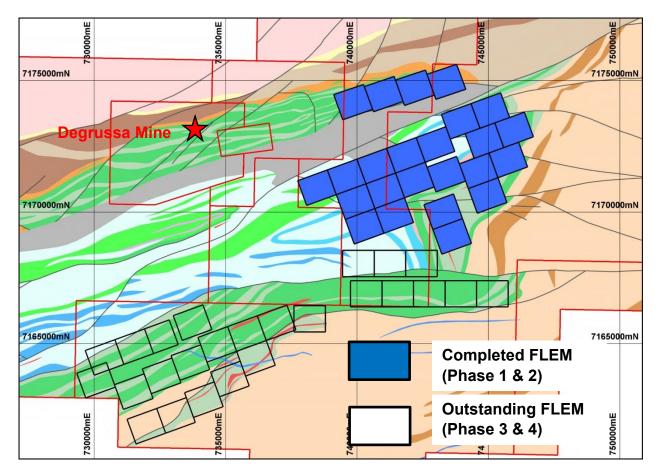


Figure 6: Springfield Project interpreted geology with Fixed Loop Electromagnetic (FLEM) survey locations; completed surveys in blue.

In addition to the ground EM surveys a total of 20 RC and diamond drill holes were re-surveyed during the December Quarter using high-powered (100A) Fluxgate downhole EM technology.

Both the ground FLEM and DHEM data are currently being assessed by geophysical consultants *Newexco* and will be integrated with the new geochemical and geological data to identify Degrussa-style copper-gold targets for drilling.





### Looking Forward

Ongoing work by Sandfire at the Springfield Project in the first half of the 2015 calendar year is designed to continue to allow for holistic geological, geophysical and geochemical targeting across the entire prospective Narracoota mafic volcanic sequences at Springfield.

These programmes include:

- Completion of first pass regional aircore programmes across the prospective mafic volcanics;
- Continued high-powered FLEM surveying with Phases 3 & 4 scheduled to be completed in the March Quarter 2015;
- Detailed validation and interpretation of the exploration data incorporating geochemical AC drilling, DHEM, FLEM, and low-level multi-element analysis;
- Commencement of infill (400m x 400m) FLEM surveys over regional EM anomalies; and
- Commencement of follow-up diamond drilling of EM targes arising from FLEM surveys.

It is anticipated that the integration and assessment of the final data from these multi-disciplined exploration campaigns will assist Sandfire in generating robust DeGrussa-style exploration targets at Springfield.

### **Murchison Exploration Projects**

### Livingstone Project (TLM 80%)

The Livingstone Project is located approximately 130km to the north-west of Meekatharra and covers an area of 208 km<sup>2</sup>. The Project straddles the western extension of the prospective Bryah Basin at the northern margin of the Yilgarn Craton. A major mineralized shear zone traverses the entire Project with widespread gold intercepts returned by historical drilling programs over a strike length of more than 31km.

In general, this large and extensively mineralised structure has not been subject to historic systematic exploration.

Work by Talisman in 2013/14 identified a coherent 1.8km long Ni-Cu-PGE-in-soil anomaly associated with a prominent ovoid, magnetic body at the Kerba Prospect, thought to be related to a mafic-ultramafic intrusion along a major cratonic margin structure.

This geological setting is interpreted to be prospective for Voisey's-Bay style magmatic Ni-Cu-PGE sulphide mineralization in Proterozoic mafic-ultramafic intrusive rocks.

No field work was conducted during the Quarter.





### Muddawerrie Gold Project (TLM 80%)

The Muddawerrie Project is located approximately 100km north-west of Meekatharra in the Murchison Region of Western Australia (see Appendix 1). The Project covers an area of approximately 52km<sup>2</sup> and comprises a prospective Archaean greenstone belt with significant potential to host high-grade, banded iron formation (BIF) and mafic-hosted shear zone gold deposits, similar to those at Mt Magnet and Southern Cross.

Extensive geological mapping, prospecting and soil sampling work by Talisman has identified at least six areas of interest associated with sheared banded-iron formations and/or basalt horizons cross-cut by a series of NW and NE-trending faults.

No fieldwork was completed during the Quarter; however the Company has received granted Permits-of-Work for potential future follow-up drilling.

### Shelby and Milgun Projects (TLM – Surrendered in December 2014)

The Shelby Project is located along the interpreted northern margin of the Bryah Basin approximately 30km north of the Horseshoe Lights Copper-Gold Mine (see Appendix 1). The Milgun Project is located approximately 20km north west of the Shelby Project and covers a potential northern outlier of the Bryah Basin (see Appendix 1).

Following a technical review undertaken during the December Quarter, and in light of the recent acquisition of the Sinclair Nickel Project, the Shelby and Milgun Projects were interpreted to be of a lower prospectivity and consequently of low priority to the Company.

Consistent with the Company's focus on minimising non-core expenditure the Shelby and Milgun tenements were relinquished during the Quarter.

### Killara Project (TLM – Applications withdrawn in December 2014)

# The Killara Project is located approximately 75kms north of Meekatharra (see Appendix 1) and comprises three large tenements covering an area of 370 sq km over the northern margin of the Yerrida Basin.

Following a technical review undertaken during the December Quarter, and in light of the recent acquisition of the Sinclair Nickel Project, the Killara Project was interpreted to be of a lower prospectivity and consequently of low priority to the Company.

Consistent with the Company's focus on minimising non-core expenditure the applications for the Killara tenements were withdrawn during the Quarter.









## CORPORATE

At the end of the Quarter, Talisman held cash of **\$14.815 million.** 

Following the resignation of Graeme Cameron as an executive director during January 2015, Talisman has recently appointed Graham Leaver, a geologist with twenty years dedicated nickel sulphide experience, to the role of Exploration Manager.

Mr Leaver has historically worked at both Jubilee Mines NL and Xstrata Nickel Australasia. In 2005, he was part of the Jubilee Mines exploration team that discovered the Sinclair nickel deposit. Subsequently, whilst employed by Xstrata Nickel Australasia, he was Geology Manager at Sinclair and then Exploration Manager for the Cosmos Nickel Mine (which also included exploration responsibility for Sinclair).

### **ENDS**

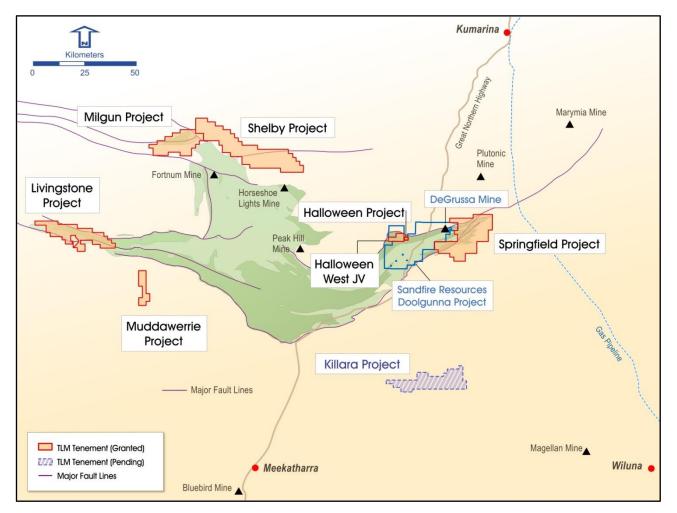
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### **Competent Persons' Statement**

Information in this ASX release that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Graham Leaver, who is a member of the Australian Institute of Geoscientists. Mr Leaver is a full time employee of Talisman Mining Ltd and has sufficient experience which is relevant to the style of mineralisation and types of deposit 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 Leaver consents to the inclusion in this report of the matters based on information in the form and context in which it appear.







NOTE: As at 31 December 2014, the Shelby and Milgun project tenements held by Talisman at the start of the December 2014 Quarter had been surrendered and the Killara tenement applications withdrawn.









### Appendix 2 – Talisman Mining Tenement Schedule as at 31 December 2014

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	W.Australia					
E52/2275	6	63%	63%	-	-	JV and Farm-in - Sandfire Resources Ltd
HALLOWEEN	W.Australia					-
P52/1241	(200 HA)	100%	100%	-	-	Sandfire Resources Ltd
LIVINGSTONE	W.Australia					
E52/2565	15	80%	80%	-	-	Zebina Minerals Pty Ltd
E52/2566	31	80%	80%	-	-	Zebina Minerals Pty Ltd
E52/2593	24	80%	80%	-	-	Zebina Minerals Pty Ltd
P52/1423	(195 HA)	100%	100%	-	-	
E52/2931	2	100%	100%	-	-	
MILGUN	W.Australia					
E52/2281	41	100%	100%	-	100%	
E52/2708	21	100%	100%	-	100%	
MUDDAWERRIE	W.Australia					
E51/1447	17	80%	80%	-	-	Zebina Minerals Pty Ltd
SHELBY	W.Australia					
E52/2499	42	100%	100%	-	100%	
E52/2500	36	100%	100%	-	100%	
E52/2519	3	100%	100%	-	100%	
E52/2628	29	100%	100%	-	100%	
E52/2629	9	100%	100%	-	100%	
E52/2634	19	100%	100%	-	100%	
SPRINGFIELD	W.Australia					
E52/2282	70	100%	100%	-	-	Sandfire Resources Ltd Sandfire
E52/2313	14	100%	100%	-	-	Resources Ltd
E52/2466	14	100%	100%	-	-	Sandfire Resources Ltd
KILLARA	W.Australia					
E51/1643	68	0%	0%	-	Withdrawn	
E51/1662	29	0%	0%	-	Withdrawn	
E51/1663	23	0%	0%	-	Withdrawn	



### Appendix 2 – Talisman Mining Tenement Schedule as at 31 December 2014 (Continued)

	Location and	Interest at	Interest	Acquired	Surrendered	Joint Venture
Project/Tenement	blocks	Beginning	at End	during	during	Partner/Farm-
	(Area)	Quarter	Quarter	Quarter	Quarter	In Party
SINCLAIR NICKEL PROJECT	W.Australia					
E36/650	16	0%	0%*	0%*	-	
E37/538	6	0%	0%*	0%*		-
E37/903	13	0%	0%*	0%*	-	-
E37/1012	5	0%	0%*	0%*		_
L36/198	(103.10 HA)	0%	0%*	0%*		
L30/190	(83.90 HA)	0%	0%*	0%*		_
M36/444	(568 HA)	0%	0%*	0%*		_
M36/445	(973 HA)	0%	0%*	0%*	-	*Talisman entered
M36/446	(843 HA)	0%	0%*	0%*		into a binding
10130/440	(04311A)	078	0 78	078	-	agreement to
M37/362	(981.50 HA)	0%	0%*	0%*	-	acquire the Sinclair Nickel
M37/383	(841.75 HA)	0%	0%*	0%*	-	Project and
M37/384	(536.70 HA)	0%	0%*	0%*	-	associated
M37/385	(926.85 HA)	0%	0%*	0%*	-	tenements from
M37/386	(983.80 HA)	0%	0%*	0%*	-	<ul> <li>Xstrata Nickel Australasia</li> </ul>
M37/424	(891 HA)	0%	0%*	0%*	-	Operations on 21
M37/426	(505 HA)	0%	0%*	0%*	-	October 2014.
M37/427	(821 HA)	0%	0%*	0%*	-	
M37/590	(120.05 HA)	0%	0%*	0%*	-	
M37/692	(136 HA)	0%	0%*	0%*	-	As at 31
M37/735	(959 HA)	0%	0%*	0%*	-	December 2014
M37/816	(818.40 HA)	0%	0%*	0%*	-	the acquisition remains subject to
M37/818	(806.50 HA)	0%	0%*	0%*	-	Ministerial
M37/819	(380.18 HA)	0%	0%*	0%*	-	Consent and as
M37/1063	(604 HA)	0%	0%*	0%*	-	such the transfer of title had not
M37/1089	(574 HA)	0%	0%*	0%*	-	taken place at the
M37/1090	(478 HA)	0%	0%*	0%*	-	end of the
M37/1126	(603 HA)	0%	0%*	0%*	-	December 2014
M37/1127	(603 HA)	0%	0%*	0%*	-	quarter.
M37/1136	(986 HA)	0%	0%*	0%*	-	
M37/1137	(850 HA)	0%	0%*	0%*	-	
M37/1148	(44.78 HA)	0%	0%*	0%*	-	
M37/1168	(190 HA)	0%	0%*	0%*	-	
M37/1223	(675 HA)	0%	0%*	0%*	-	
M37/1275	(1,961 HA)	0%	0%*	0%*	-	
P37/7228	(61.57 HA)	0%	0%*	0%*	-	
P37/7233	(116.01 HA)	0%	0%*	0%*	-	









### Appendix 3 – JORC Table 1

# Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down-hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Sampling techniques employed at the Sinclair project include saw cut diamond drill core (DD) samples and reverse circulation (RC) rock chip samples.</li> <li>Diamond core is HQ and NQ2 size, and was sampled on geological intervals (0.2 m to 2 m), cut into half (NQ2) or quarter (HQ) core to give sample weights under 3 kg. RC drill samples were collected using a cone or riffle splitter for each metre drilled. Composite samples were taken on occasion via a second sampling chute and collected into calico bags.</li> <li>Sampling was guided by XNAO protocols and QAQC procedures as per industry standard.</li> <li>All drill samples were crushed, dried and pulverised (total prep) to produce a sub-sample for analysis by four acid digest with an ICP-MS or AAS finish.</li> <li>All drilling referenced in this report were drilled by XNAO between 2005 and 2012.</li> <li>Sampling techniques employed by Sandfire on the Doolgunna Project include Air Core (AC) sample collected using spear techniques for both composite and single metre samples.</li> <li>Sampling is guided by Sandfire DeGrussa protocols and QAQC procedures as per industry standard.</li> <li>RC and AC sample size reduction is completed through a Boyd crusher to -10mm and pulverised via LM5 to nominal -75µm. Pulp size checks are completed.</li> <li>Pulp samples are fused into a glass bead by the combination of 0.4g of assay sample plus 9.0g flux XRF analysis. A 40g and 0.15g assays charges are used for FA and mixed acid digest respectively.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Surface diamond drilling (DD) on the Sinclair project employed both HQ and NQ2 diameter holes using conventional wireline, wedging and directional drilling techniques as appropriate.</li> <li>All drill core was routinely orientated where possible at nominal 6m intervals using an EzyMark core orientation system</li> <li>Reverse Circulation (RC) drilling at Sinclair utilised face sampling configurations with a nominal hole diameter of 5 3/8"</li> <li>Sandfire Air Core (AC) drilling is completed using industry standard practices with a blade bit.</li> </ul>

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Drill sample recovery	<ul> <li>Method of recording and assessing of and chip sample recoveries and resu assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists betwee sample recovery and grade and whe sample bias may have occurred due preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>and recorded in the Sinclair Datashed database. Core photography shows overall recoveries &gt;95</li> <li>XNAO Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths were checked against the depth given on the core blocks and rod counts were routinely carried out by the drillers.</li> <li>For RC drilling the volume of sample material collected is</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 costec channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>mineralisation, alteration, structure, weathering, colour and other primary features of the rock samples.</li> <li>Logging both qualitative and quantitative depending on the field being logged</li> <li>All drill holes are logged in full to end of hole.</li> <li>DD core is routinely photographed digitally.</li> <li>Sandfire geological logging is completed for all holes and is</li> </ul>

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Sub-sampling techniques and sample preparation	techniques and samplewhether quarter, half or all core taken.If non-core, whether riffled, tube	<ul> <li>XNAO diamond core is HQ and NQ2 size, sampled on geological intervals (0.2 m to 2 m), sawn in half (NQ2) or quarter (HQ) core to give sample weights under 3 kg.</li> <li>XNAO RC drill samples were collected using a cone or riffle splitter for each metre drilled. Composite samples were taken on occasion via a second sampling chute and collected into calico bags. The majority of RC samples were dry.</li> <li>XNAO samples were submitted to ALS Chemex for preparation. The sample preparation follows industry best practice where all drill samples are crushed and split to 1kg then dried, pulverized and (&gt;85%) sieved through 75 microns to produce a 25g/30g charge for 4-acid digest with an ICP-MS or AAS finish.</li> <li>Field duplicates are routinely taken for both DD core and RC chip samples. XNAO procedures include a minimum of one duplicate per 25 samples</li> <li>Sample size is appropriate for nickel mineralisation.</li> </ul>
		<ul> <li>produced from 1m drilling and weights average approximately 3kg. In certain locations after composite samples are received additional sampling at 1m intervals may be completed.</li> <li>Sandfire sample preparation at UltraTrace in Perth involves the original samples being 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.</li> <li>Sandfire has protocols that cover auditing of sample preparation at the laboratories and the collection and assessment of data to ensure accurate steps in producing representative samples for the analytical process. Key performance indices include contamination index of 90% (that is 90% blanks pass); Crush Size index of P95-10mm; Grind Size index of P90-75µm and Check Samples returning at worse 20% precision at 95% confidence interval and bias of 5% or better.</li> <li>Duplicate analysis is routinely completed.</li> <li>The sample size is appropriate for the VHMS and Gold mineralisation styles.</li> </ul>

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assay data and laboratory tests For han para ana moo fact Nat ado dup ano acc	technique is considered partial or total.	<ul> <li>All XNAO drill samples were submitted to ALS Laboratories in Perth for multi-element analysis using a 25g charge with a 4- 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>XNAO 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 25 with a minimum of 2 per batch. OREAS and Geostats standards were selected on their grade range and mineralogical properties.</li> <li>All drill assays were required to conform to the XNAO procedural QAQC guidelines as well as routine laboratory QAQC guidelines.</li> <li>All QAQC controls and measures were routinely reviewed and reported on a monthly, quarterly and annual basis. Historic results for all standards and duplicates indicate most performing well within the 2 standard deviation limit.</li> <li>Lab checks (repeats) occurred at a frequency of 1 in 25. These alternate between both the pulp and crush stages.</li> <li>5% of all pulps were routinely submitted monthly to Genalysis Laboratories in Perth for Umpire Sampling.</li> </ul>
		<ul> <li>Sandfire samples submitted to Ultra Trace in Perth 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>Sandfire DeGrussa QAQC protocol is considered industry standard with standard reference material (SRM) submitted on regular basis with routine samples.</li> <li>Sandfire insert SRMs and blanks at a minimum of 5% frequency rate. A minimum of 2% of assays are routinely resubmitted as Check Assays and Check Samples through blind submittals to external and primary laboratories respectively. Adhoc umpire checks are completed annually.</li> </ul>

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Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent of alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, da storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data</li> </ul>	<ul> <li>programme.</li> <li>XNAO logging and sampling Data was captured and imported using Maxwell's LogChief or Micromine Field Marshall software.</li> <li>All XNAO drillhole, sampling and assay data is stored in a SQL server (Datashed) database. Assay data is reviewed via</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used locate drill holes (collar and down- ho surveys), trenches, mine workings ar other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>XNAO drillholes were initially located by hand held GPS or mine surveyors. All hole collars were surveyed using RTK-GPS on completion.</li> <li>The majority of XNAO drilling has been down hole surveyed using industry standard north seeking gyro techniques. Where a gyro survey has not been completed, down hole</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Explora Results.</li> <li>Whether the data spacing and distribution is sufficient to establish th degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> </ul>	<ul> <li>a nominal 50m x 20m spacing, stepping out to 100m/200m line spacing north of 6861750N. Drill spacing at Stirling, Sky and Delphi prospects ranges from 50m to 200m line spacing in localised areas as appropriate.</li> <li>Sandfire AC drilling across the Homer / Degrussa trend is spaced on a nominal 250m x 100m pattern, and a nominal</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possis structures and the extent to which this known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>in order to reflect the true width of stratigraphy.</li> <li>Sandfire exploration holes are oriented to achieve high angles of intersection. Diamond drilling is used as required to determine structural orientations in regional programs.</li> </ul>

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Sample security	The measures taken to ensure sample security.	<ul> <li>XNAO samples were stored at the Sinclair Nickel Mine Site prior to submission under the supervision of senior staff. Samples were transported to ALS Perth by an accredited courier service.</li> </ul>
		<ul> <li>Sandfire samples are prepared onsite under the supervision of Sandfire Geological staff.</li> <li>Sandfire samples are transported to the Perth Ultra Trace laboratory by Toll IPEC or Nexus transport companies in sealed bulka bags, or to the onsite laboratory by company personnel.</li> <li>The laboratories receipt received samples against the sample dispatch documents and issues a reconciliation report for every sample batch.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	XNAO database was audited annually by an external consultant to ensure compliance.
		The Sandfire sampling techniques and data collection     processes are of industry standard and have been subjected

### **Section 2 Reporting of Exploration Results**

### (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<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>The XNAO diamond and RC drilling is located within tenements M37/1275, M37/818, M37/1223 and M37/818.</li> <li>Tenements are subject to a binding Sale and Purchase Agreement whereby Talisman Nickel Pty Ltd (a wholly owned subsidiary of Talisman Mining Limited) is contracted to acquire a 100% interest in these tenements and form part of the Sinclair Nickel Project.</li> <li>There are no known Native Title Claims over the Sinclair Nickel Project.</li> <li>All tenements are in good standing and there are no existing known impediments to exploration or mining.</li> <li>AC drilling by Farm-in partner Sandfire is on tenements E52/2313 and E52/2282. These leases are part of Talisman's 100% owned Springfield Project, 150km north-east of Meekatharra, WA. These tenements fall within the Department of Conservation-managed Doolgunna pastoral lease.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>All Springfield tenements are current and in good standing.</li> <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> <li>The Sinclair Nickel Deposit was discovered in 2005 by Jubilee Mines NL drill testing a ground EM anomaly.</li> <li>Exploration work on has included diamond, RC and Aircore drilling, ground and downhole EM surveys, soil sampling, geological interpretation and other geophysics (magnetics, gravity).</li> <li>Exploration work at Springfield completed prior to Talisman's tenure included geochemical soil and rock chip sampling combined with geological mapping. Some targeted RC drilling was completed over gold and diamond targets.</li> </ul>

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Geology	Geology • Deposit type, geological setting and style of mineralisation.	<ul> <li>The Sinclair project lies within the Archean aged Norseman- Wiluna Greenstone Belt.</li> <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>Talisman's 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.</li> <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>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul> <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> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </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</li> </ul>	<ul> <li>Detailed drill hole information is not included with this report. General locations of the AC drilling is indicated in Figure 2. No drilling results are being reported and it is not considered material to this report.</li> <li>Drill hole information will be included in future reports when appropriate.</li> </ul>
Data aggregation methods	<ul> <li>case.</li> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No drilling intersections reported.

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Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	No drilling intersections reported.
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.	<ul> <li>Appropriate maps with scale are included within the body of the accompanying document.</li> <li>No drilling intersections reported.</li> </ul>
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The accompanying document is considered to represent a balanced report.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Other exploration data collected is not considered as material to this document at this stage. Further data collection will be reviewed and reported when considered material.
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>	Further work is contingent on the outcomes of current drilling and ground electromagnetic surveys.