ASX Code: "THR"

5 February 2019

THOR MINING PLC

Registered Numbers:
United Kingdom 05276 414
Australia 121 117 673

Registered Office:
58 Galway Avenue
MARLESTON, SA, 5035
Australia

Ph: +61 8 7324 1935
Fx: +61 8 8351 5169

Email:
corporate@thormining.com

Website:
www.thormining.com

Twitter
@ThorMining

Enquiries: Mick
Billing Executive
Chairman Thor
Mining PLC
+61 8 7324 1935

Nominated Advisor
Colin Aaronson
Grant Thornton
+44 (0) 20 7383 5100

AIM & ASX Listings:
Shares: THR

Directors:
Michael Billing
David Thomas
Alastair Middleton
Richard Bradey

Key Projects:
- **Tungsten**
  Molyhil NT
  Pilot Mountain USA
- **Copper**
  Kapunda SA

Company Announcements Office
ASX Securities Limited,
20, Bridge Street,
Sydney, N.S.W. 2000

EXTENSIVE TUNGSTEN MINERALISATION CONFIRMED – BONYA SAMARKAND DEPOSIT

The Board of Thor Mining Plc ("Thor") (AIM, ASX: THR) is pleased to announce that the Company has confirmed extensive tungsten mineralisation (including high grade zones) from the first stage of exploration at the Samarkand deposit, one of thirteen known tungsten deposits within the Bonya project.

The Bonya tenement is held jointly (THR; 40%) with Arafura Resources Limited (ASX:ARU; 60%) adjacent to the Molyhil mine project in the Northern Territory of Australia. Thor Mining is the joint venture (JV) operator.

Highlights:
- Samples collected via systematic sampling program, in December 2018, from trenches excavated across the deposit more than 40 years ago.
- Better intercepts include;
  - **Trench 1: 7 metres at 6,670ppm (0.667%) WO_3 and 3 metres at 3,073ppm (0.307%) WO_3**
  - **Trench 2; 3 metres at 2,711ppm (0.271%) WO_3**
  - **Trench 3; 3 metres at 2,039ppm (0.203%) WO_3**
- Deposit outcrops at surface extending more than 500 metres and is open ended.
- Traditional owner and regulatory clearance for a drill program at Bonya are in progress, and we hope to be licensed to commence drilling, this month;
- The proposed drill programme will enhance our knowledge of the extent of mineralisation and is an important next step for the Bonya project.

Mick Billing, Executive Chairman, commented:

"Samarkand is just one of what we believe will be series of satellite tungsten and copper deposits within economic trucking distance of Molyhil, thus making the case for Molyhil development even more compelling."

"We now have confirmed tangible evidence of extensive surface outcropping tungsten mineralisation at Bonya, including mineralisation extending in excess of 500 metres of strike at Samarkand."

"These initial results demonstrate proof of surface outcropping tungsten mineralisation extending in excess of 500 metres strike length at the Samarkand deposit."

"Current indications are that Bonya tungsten mineralisation is coarse grained and may be amenable to low cost pre-concentration by x-ray ore sorting and treatment at the Molyhil processing plant."

"Our discussions and negotiations with potential partners continue with regard to Molyhil project level offtake and investment."

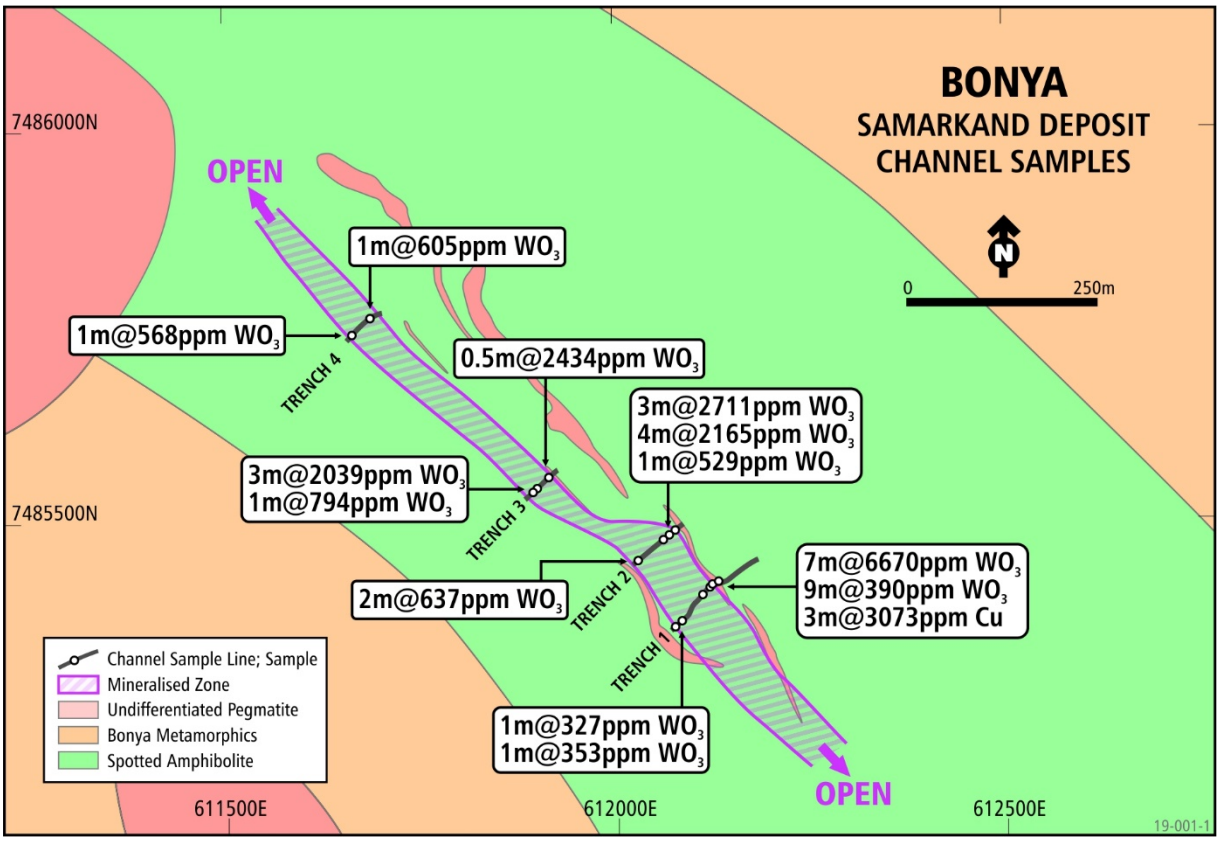

Figure 1: Samarkand channel sample location plan.

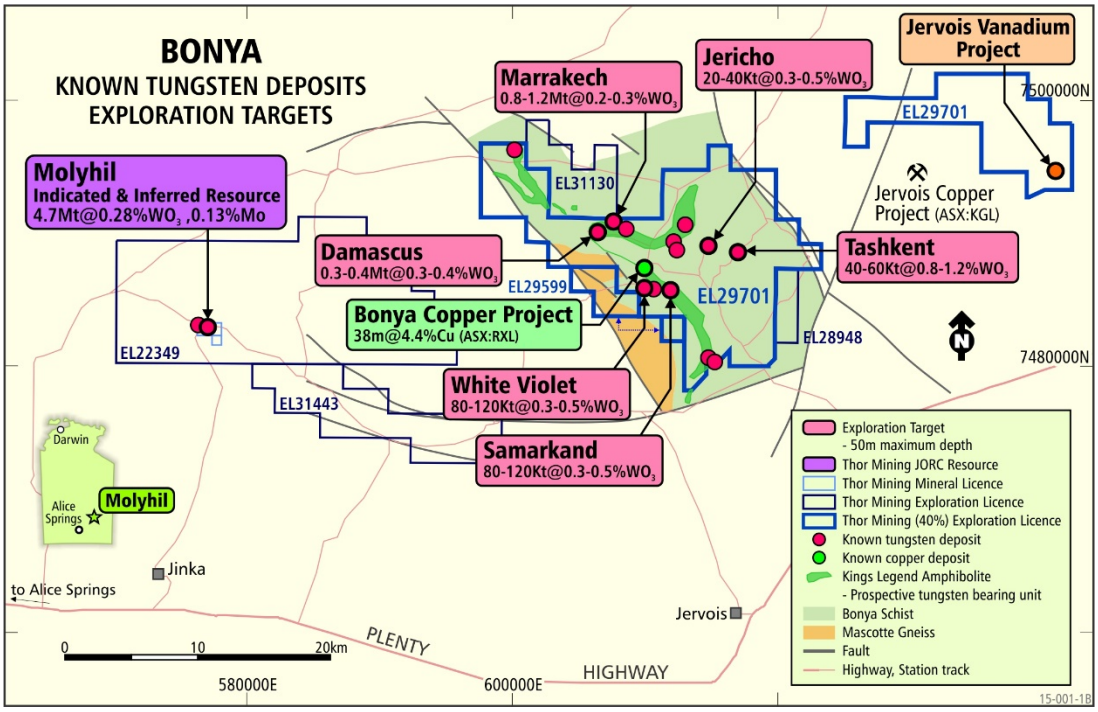

Figure 2: Bonya Project location plan.

Summary of Exploration Results

Table 1: Summary of assay results

Trench Number	From Easting GDA94	From Northing GDA94	To Easting GDA94	To Northing GDA94	Interval m	WO3 ppm	Cu ppm
1	612134	7485425	612127	7485420	9	390	-
1	612124	7485417	612119	7485414	7	6670	-
1	612120	7485415	612118	7485413	3	-	3073
1	612110	7485406	612109	7485404	1	327	
1	612084	7485373	612083	7485372	1	353	
1	612074	7485365	612073	7485364	1	290	
2	612026	7485448	612027	7485449	2	637	
2	612059	7485476	612062	7485478	3	2711	
2	612067	7485482	612070	7485484	4	2165	
2	612075	7485488	612076	7485489	1	529	
3	611895	7485538	611897	7485539	3	2039	
3	611898	7485541	611899	7485542	1	794	
3	611914	7485557	611915	7485558	0.5	2434	
4	611659	7485737	611660	7485738	1	568	
4	611685	7485760	611686	7485761	1	605	

Geology and geological interpretation

Samarkand is one of several tungsten deposits within the Bonya Range and is located approximately 350km ENE of Alice Springs and approximately 30km east of Thor's 100% owned Molyhil deposit.

The geological setting of the Samarkand tungsten deposit comprises steeply north east dipping meta-sedimentary rocks of the Kings Legend Amphibolite formation with multiple local pegmatite intrusions (Figure 1). Tungsten mineralisation is typically coarse grained occurring as discrete scheelite crystals dispersed preferentially within select lithologies within the formation. The rocks are interpreted to have been hydrothermally altered during the mineralisation event, and then strongly regionally metamorphosed to amphibolite grade.

Sampling techniques and spacing

Continuous channels of chip samples were collected along historically excavated bulldozer trenches cross cutting the zone of mineralisation. One metre interval samples were collected by hand using hand tools and where necessary assisted with diamond saw. All sample locations were photographed and GPS locations recorded for channels end points.

The historic channels provided good in-situ rock exposures for an estimated 60 - 70% of the entire mineralised sequence. As some parts of the mineralised sequence were not exposed and not adequately sampled, the samples are therefore not considered suitable for future resource estimation.

An additional 20% QAQC samples were inserted comprising certified standards, blanks, field repeats and splits.

Sample analysis method

All samples were sent to NAGROM laboratory in Perth for assay. The samples were sorted and dried. Primary preparation involved weighing and crushing the whole sample. A subsample was split off for pulverising to produce a sub 75µm pulp for analysis.

A sub-sample of each pulp underwent a mixed four acid digest with an ICP – OES/MS analysis.

All samples with initial assay results exceeding 200 ppm tungsten underwent subsequent peroxide fusion digest with ICP – MS analysis.

Internal laboratory QA uses CRM's, blanks, splits and replicates, along with 10% repeats.

For further information, please contact:

THOR MINING PLC
Mick Billing Executive Chairman
+61 8 7324 1935

Competent Person's Report
The information in this report that relates to exploration results is based on information compiled by Richard Bradey, who holds a BSc in applied geology and an MSc in natural resource management and who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Bradey is an employee of Thor Mining PLC. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Richard Bradey consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Updates on the Company's activities are regularly posted on Thor's website www.thormining.com, which includes a facility to register to receive these updates by email, and on the Company's twitter page @ThorMining.

About Thor Mining PLC

Thor Mining PLC (AIM, ASX: THR) is a resources company quoted on the AIM Market of the London Stock Exchange and on ASX in Australia.

Thor holds 100% of the advanced Molyhil tungsten project in the Northern Territory of Australia, for which an updated feasibility study in August 2018[1] suggested attractive returns.

Thor also holds 100% of the Pilot Mountain tungsten project in Nevada USA which has a JORC 2012 Indicated and Inferred Resources Estimate[2] on 2 of the 4 known deposits. The US Department of the Interior has confirmed that tungsten, the primary resource mineral at Pilot Mountain, has been included in the final list of Critical Minerals 2018.

Thor is also acquiring up to a 60% interest Australian copper development company Environmental Copper Recovery SA Pty Ltd, which in turn holds rights to earn up to a 75% interest in the mineral rights and claims over the resource[3] on the portion of the historic Kapunda copper mine in South Australia recoverable by way of in situ recovery.

Thor has a material interest in Hawkstone Mining Limited, an Australian ASX listed company with a 100% Interest in a Lithium project in Arizona, USA.

Finally, Thor also holds a production royalty entitlement from the Spring Hill Gold project[4] of:

- *A$6 per ounce of gold produced from the Spring Hill tenements where the gold produced is sold for*

up to A$1,500 per ounce; and

- *A$14 per ounce of gold produced from the Spring Hill tenements where the gold produced is sold for amounts over A$1,500 per ounce.*

Notes

- [1] Refer ASX and AIM announcement of 23 August 2018
- [2] Refer AIM announcement of 22 May 2017 and ASX announcement of 23 May 2017
- [3] Refer AIM announcement of 10 February 2016 and ASX announcement of 12 February 2018
- [4] Refer AIM announcement of 26 February 2016 and ASX announcement of 29 February 2017

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• A combination of hand dug and machine cut channels were employed. • Channel end locations were picked up by handheld GPS. Tape measured sample boundaries were marked out along each channel. Each sample channel was photographed. Sampling protocols and QAQC are as per industry best practice procedures. • Channels were oriented to cross cut mineralisation.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• A single channel 100 to 150mm wide was dug along each trench to collect samples. • Variation in rock hardness will have resulted in variation of size between samples and within individual samples. Samples were weighed however the assay results are not considered suitable for resource estimation.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• The trenches samples provided only 60 – 70% of in-situ geology exposure
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• Sample channels were photographed but not logged

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Whole samples were sent for analysis with an additional 20% QAQC samples. • Inconsistencies in the sampling methodology and field practice will have introduced far larger errors than by sample preparation. • The samples are considered adequate to provide indication of presence of mineralisation rather than to quantify it.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The analytical technique comprised an initial assay by four acid digest followed by peroxide fusion on samples with elevated tungsten. The laboratory technique is considered total. • Internal laboratory control procedures involve duplicate assaying of randomly selected assay pulps as well as internal laboratory standards. All of these data were reported to Thor and analysed for consistency and any discrepancies.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Sample results are consistent with field observations. • No holes have been twinned at this stage. • Primary data was recorder using field note books and GPS digital memory. • Tungstate (WO_3) grades are reported – these are determined by multiplying tungsten assays by 1.26107.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• A hand held GPS has been used to determine collar locations at this stage. • The grid system is MGA_GDA94, zone 53 for easting and northing.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Continuous channels were sampled across the entire mineralised interval. Channels were spaced are various intervals along strike length from 170 to 600 metres. • This data will not be used to estimate a resource.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The channel orientation is appropriate and not considered to present any bias or mis-representation.
Sample security	• *The measures taken to ensure sample security.*	• No specific measures were taken to ensure sample security
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits undertaken.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Samarkand deposit is located within Exploration License EL29701 in the Northern Territory. Thor has recently acquired a 40% interest in EL29701. Arafura Resources Limited retain a 60% interest. • The tenements are in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration involved mapping and rock chip sampling of outcrops and shallow RAB drilling dating back to the 1970's.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The geological setting comprises contact metamorphic skarn hosted scheelite mineralisation. The mineralised horizons retain their original sedimentary geometry on the western limb of a regional scale south east plunging synform.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Drill hole Information</td><td>

A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:

easting and northing of the drill hole collar
elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
dip and azimuth of the hole
down hole length and interception depth
hole length.

If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.

</td><td>

Significant mineral intercepts are summarised in the following table and in table 1 within the text of this announcement
Easting and northing co-ordinates are provided for the beginning and end of each mineralised interval. No significant mineralisation was detected between these intervals.

<table>
<tr><th>Trench Number</th><th>From Easting GDA94</th><th>From Northing GDA94</th><th>To Easting GDA94</th><th>To Northing GDA94</th><th>Interval m</th><th>WO3 ppm</th><th>Cu ppm</th></tr>
<tr><td>1</td><td>612134</td><td>7485425</td><td>612127</td><td>7485420</td><td>9</td><td>390</td><td>-</td></tr>
<tr><td>1</td><td>612124</td><td>7485417</td><td>612119</td><td>7485414</td><td>7</td><td>6670</td><td>-</td></tr>
<tr><td>1</td><td>612120</td><td>7485415</td><td>612118</td><td>7485413</td><td>3</td><td>-</td><td>3073</td></tr>
<tr><td>1</td><td>612110</td><td>7485406</td><td>612109</td><td>7485404</td><td>1</td><td>327</td><td></td></tr>
<tr><td>1</td><td>612084</td><td>7485373</td><td>612083</td><td>7485372</td><td>1</td><td>353</td><td></td></tr>
<tr><td>1</td><td>612074</td><td>7485365</td><td>612073</td><td>7485364</td><td>1</td><td>290</td><td></td></tr>
<tr><td>2</td><td>612026</td><td>7485448</td><td>612027</td><td>7485449</td><td>2</td><td>637</td><td></td></tr>
<tr><td>2</td><td>612059</td><td>7485476</td><td>612062</td><td>7485478</td><td>3</td><td>2711</td><td></td></tr>
<tr><td>2</td><td>612067</td><td>7485482</td><td>612070</td><td>7485484</td><td>4</td><td>2165</td><td></td></tr>
<tr><td>2</td><td>612075</td><td>7485488</td><td>612076</td><td>7485489</td><td>1</td><td>529</td><td></td></tr>
<tr><td>3</td><td>611895</td><td>7485538</td><td>611897</td><td>7485539</td><td>3</td><td>2039</td><td></td></tr>
<tr><td>3</td><td>611898</td><td>7485541</td><td>611899</td><td>7485542</td><td>1</td><td>794</td><td></td></tr>
<tr><td>3</td><td>611914</td><td>7485557</td><td>611915</td><td>7485558</td><td>0.5</td><td>2434</td><td></td></tr>
<tr><td>4</td><td>611659</td><td>7485737</td><td>611660</td><td>7485738</td><td>1</td><td>568</td><td></td></tr>
<tr><td>4</td><td>611685</td><td>7485760</td><td>611686</td><td>7485761</td><td>1</td><td>605</td><td></td></tr>
</table>
</td></tr>
<tr><td>Data aggregation methods</td><td>

In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.
Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.
The assumptions used for any reporting of metal equivalent values should be clearly stated.

</td><td>

All average grades have been calculated with length weighting as appropriate
Up to 2m of internal dilution allowed.
High grade intervals internal to broader zones of mineralisation are reported as included intervals.
No metal equivalent values have been used or reported.

</td></tr>
<tr><td>Relationship between mineralisation widths and intercept lengths</td><td>

These relationships are particularly important in the reporting of Exploration Results.
If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.
If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg ‘down hole length, true width not known’).

</td><td>

All intercepts are close to perpendicular to the interpreted plane of mineralisation.
No adjustment for intercept widths has been made

</td></tr>
<tr><td>Diagrams</td><td>

Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being

</td><td>

Refer to Figures and Tables in the text.

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

Criteria	JORC Code explanation	Commentary
	reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
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.*	• All significant intersections have been reported above a cutoff of 200 ppm WO_3
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.*	• Further access to this deposit for any subsequent and ground disturbing exploration activities is subject to traditional owner approval.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Drilling is warranted and planned subject to traditional owner approval.