MAIDEN RESOURCE ESTIMATES – BONYA TUNGSTEN AND COPPER

Thor Mining Plc ("Thor") (AIM, ASX: THR) and Arafura Resources Limited ("Arafura") (ASX: ARU) are pleased to advise maiden mineral resource estimates for the White Violet and Samarkand tungsten and copper deposits at Bonya, adjacent to the Thor Mining Molyhil tungsten and molybdenum project.

The project is held in joint venture between Arafura (60%) and Thor (40%) with Thor acting as manager, and each party contributing to the cost according to their equity holding.

Highlights:

- **White Violet;**
  - Inferred Resources of 495,000 tonnes, grading 0.22% Tungsten Trioxide (WO_3) and 0.06% copper (Cu), containing 1,090 tonnes of WO_3, and 300 tonnes Cu.
- **Samarkand;**
  - Inferred Resources of 245,000 tonnes, grading 0.19% Tungsten Trioxide (WO_3) and 0.13 % copper (Cu), containing 465 tonnes of WO_3, and 320 tonnes Cu.
- Both deposits outcrop and remain open at depth, while Samarkand, in particular, shows potential for strike extension to the copper mineralisation.
- Each deposit considered amenable to open cut extraction for significant components of the resource.
- Both deposits situated in close proximity to the Thor Mining Molyhil tungsten and molybdenum project, and potentially therefore within economic trucking distance.

These resources add to previously announced Inferred Resources at **Bonya Copper** of 230,000 tonnes, grading 2.0% Cu, containing 4,600 tonnes Cu (ref Table B and announcement of 26 November 2018).

Mick Billing, Executive Chairman of Thor Mining, commented:

"These maiden resources are very significant when combined with the mining inventory of the nearby proposed Molyhil development."

"More work is required, to convert these inferred resources to, at least, Indicated classification, along with other technical, environmental, and social impact assessments, however we have taken very good first steps."

The Bonya project hosts additional known tungsten and copper deposits, and some high tenor copper strike extension at Samarkand. These will be tested in due course, and we expect that they will further contribute to the life and value of the greater Molyhil project."

Gavin Lockyer, Managing Director of Arafura Resources, commented:

"We are pleased to deliver the project's first tungsten resources at White Violet and Samarkand, and feel quietly confident the JV can build further value over time through the discovery and delineation of additional tungsten and/or copper resources."

Table A: Bonya Tungsten Mineral Resources (15 January 2020)

		Oxidation	Tonnes	WO$_3$		Cu	
				%	Tonnes	%	Tonnes
White Violet	Inferred	Oxide	25,000	0.41	90	0.16	40
		Fresh	470,000	0.21	980	0.06	260
Sub Total			**495,000**	**0.22**	**1,070**	**0.06**	**300**
Samarkand	Inferred	Oxide	25,000	0.11	30	0.07	20
		Fresh	220,000	0.20	430	0.13	290
Sub Total			**245,000**	**0.19**	**460**	**0.13**	**310**
Combined	Inferred	Oxide	50,000	0.26	120	0.14	60
		Fresh	690,000	0.21	1,410	0.08	550
Total			**740,000**	**0.21**	**1,530**	**0.09**	**610**

Notes:
- 0.05% WO$_3$ cut-off grade.
- Totals may differ from the addition of columns due to rounding.

Table B: Bonya Copper Mineral Resources (announced 26 November 2018)

	Oxidation	Tonnes	Cu	
			%	Tonnes
Inferred	Oxide	25,000	1.0	200
	Fresh	210,000	2.0	4,400
Total		**230,000**	**2.0**	**4,600**

Notes:
- 0.2% Cu cut-off grade.
- Totals may differ from the addition of columns due to rounding.
- The Company is not aware of any information or data which would materially affect this previously announced resource estimate, and all assumptions and technical parameters relevant to the estimate remain unchanged.
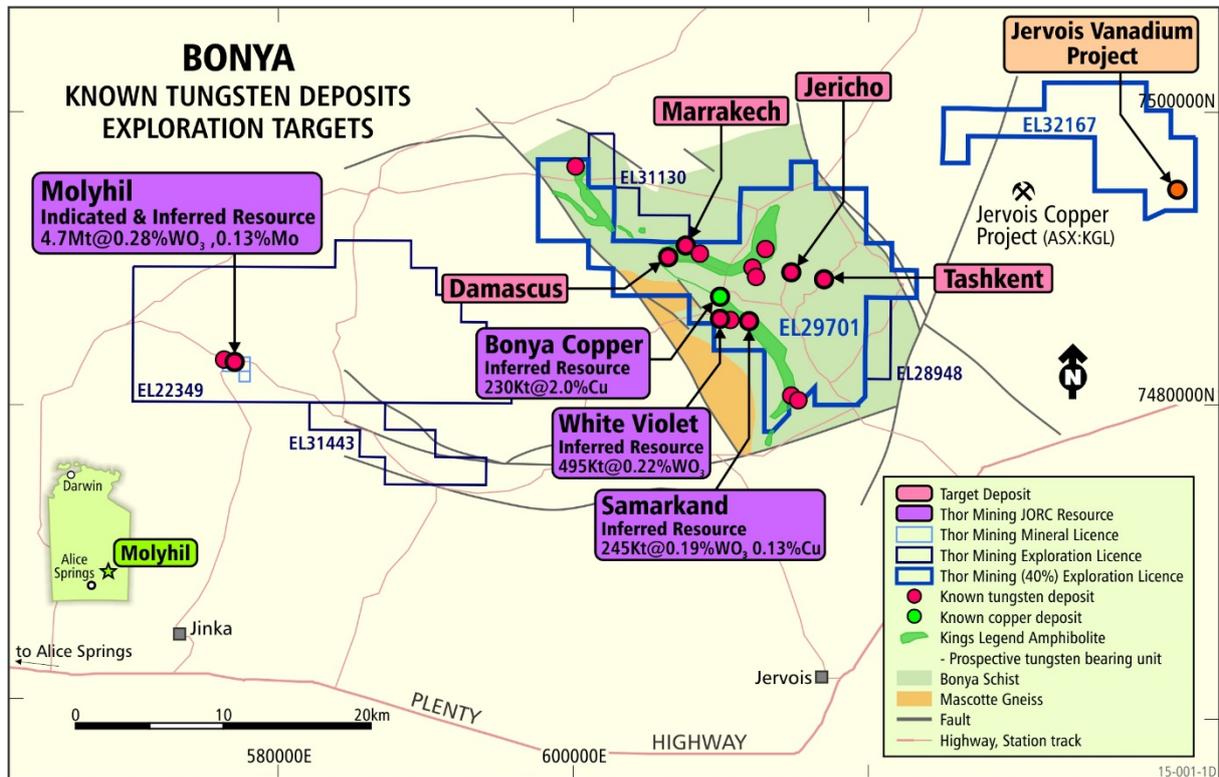
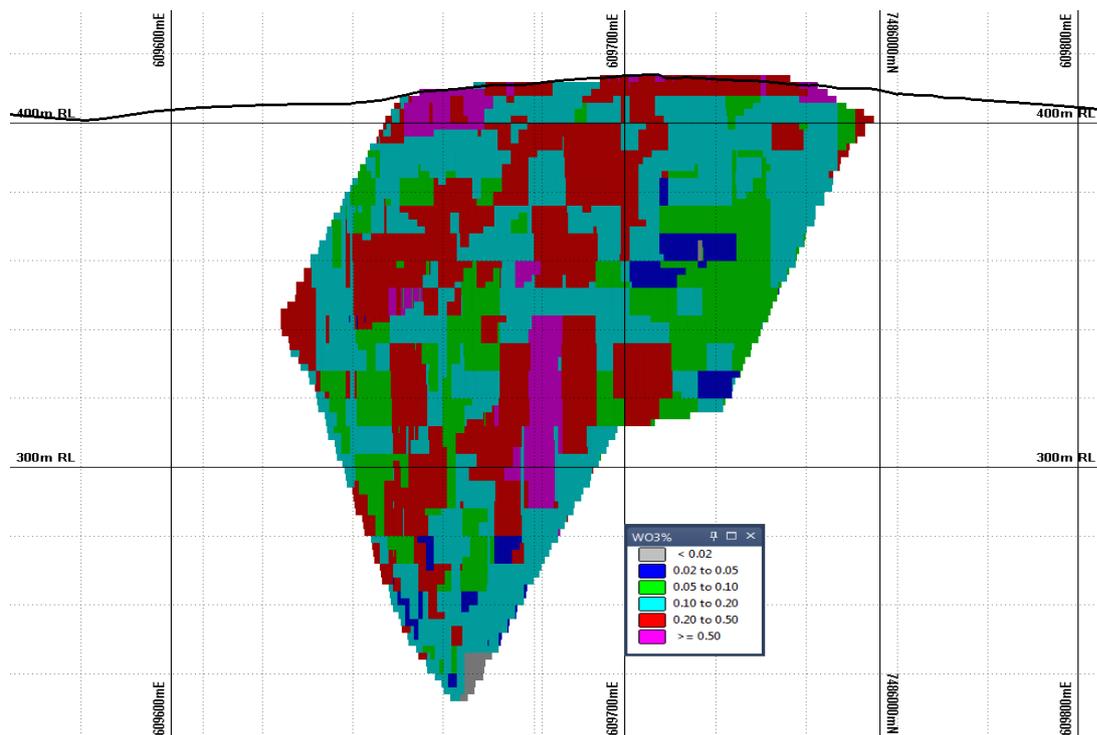*Figure 1: Map showing location of Bonya relative to the Molyhil mine project*

Figure 2 – Long section (looking north) of the populated White Violet block model. Block model is coloured according to WO₃ % grade.
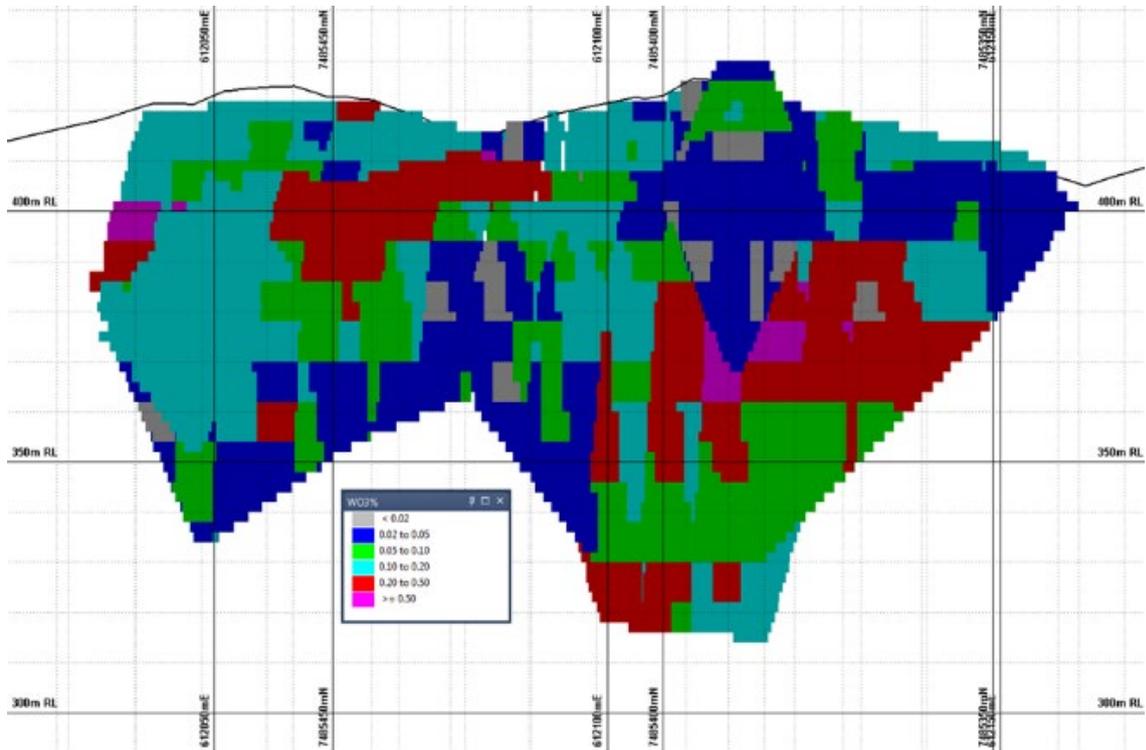
Figure 3 – Long section (looking north east) of the populated Samarkand block model. Block model is coloured according to WO$_3$ % grade.

Summary of Resource Estimate and Reporting Criteria (White Violet and Samarkand)

Geology and geological interpretation

The White Violet and Samarkand deposits are located approximately 350km ENE of Alice Springs and approximately 30km east of Thor's 100% owned Molyhil deposit.

Mineralisation at White Violet and Samarkand is interpreted as being hosted predominantly within metamorphic calc-silicate skarns and sheared hornfels associated with mafic intrusives, granites and pegmatites. The target deposits are analogous to the nearby Molyhil tungsten and molybdenum deposit which also contains some copper.

The tungsten mineralisation is predominantly scheelite and copper is most often present as chalcopyrite.

Drilling techniques and hole spacing

The drill hole database used for the mineral resource estimate (MRE) contains a total of 21 RC holes for 1,762.2m of drilling at White Violet and 17 RC holes for 1,202m of drilling at Samarkand.

The majority of holes have been drilled at angles of between 50 - 75° and approximately perpendicular to the strike of the mineralisation. Geological and assay data for all drill holes was used in the geological interpretation and MRE.

Sampling and sub-sampling

Samples from RC drilling were collected over an average 1m interval and submitted for assay. Barren zones were sampled as 4m composites. RC samples were homogenised and subsampled by either rotary or riffle splitting.

Sample analysis method

All samples were sent to Nagrom in Perth for preparation and analysis. The samples were sorted and dried. Primary preparation involved crushing the whole sample. The samples were split to obtain a sub-fraction which was then pulverized to 80% passing 75µm. For the April drilling, preliminary analysis was via mixed four acid digest and then ICP-OES. Samples with initial tungsten results >0.1% were then assayed via peroxide fusion and ICP-MS. For the October and November drilling all samples were analysed via peroxide fusion and ICP_MS. Internal laboratory QA uses CRM's, blanks, splits and replicates. A limited number of field standards, blanks and duplicates have all been applied in the QAQC methodology. Sufficient accuracy and precision have been established for the type of mineralisation encountered and is appropriate for QAQC in the Resource Estimation.

Cut-off grades

The current MRE for the White Violet and Samarkand deposits have been reported at a cut-off grade of 0.05% WO_3. Top cuts were applied as follows: White Violet, WO_3 – 1.5% Cu – 0.5%, Samarkand, WO_3 – 1.45% Cu – 1.5%.

Estimation methodology

Mineralisation wireframes were generated in Micromine software using drill hole data supplied by Thor. Resource data was flagged with unique mineralisation domain codes as defined by the wireframe and composited to 1m lengths.

At White Violet, grade continuity analysis was undertaken in Micromine software for WO_3 and Cu for the mineralised domain and variogram models were generated in all three directions. Parameters were used in the block model estimation. A block model with a parent block size of 8x4x8m with sub-blocks of 2 x 1 x 2m has been used to adequately represent the mineralised volume, with sub blocks estimated at the parent block scale.

At Samarkand, the data did not support the development of meaningful variograms. Grade estimation for WO_3 and Cu was completed using the Inverse Distance squared (ID2) technique. A block model with a parent block size of 4x8x8m with sub-blocks of 1 x 2 x 2m has been used to adequately represent the mineralised volume, with sub blocks estimated at the parent block scale.

Molybdenum (Mo) has not been estimated despite the fact that it can be an element of interest when considering tungsten deposits. The reason for this is that Mo levels are very low across both deposits. However, further work should be undertaken to better understand the distribution of Mo within the deposit.

Detailed downhole geophysics was collected from 15 drill holes across the two prospects. This included 2 sets of in-situ bulk density measurements (SSDG and BRDG). Both sets of data were collected at 0.01m intervals. The data was loaded into Micromine, composited to 1m intervals and averaged to provide an average bulk density down hole. The density varied down hole and it was clear that the mineralised skarn zones corresponded with elevated density values. This average 1m density data was paired up with the flagged composite assay file. As there was only data for some of the drill holes an average density was determined for the fresh and oxide mineralised domains for each deposit. At White Violet, a value of 3.16 g/cm^3 has been assigned to all fresh mineralisation and a value of 1.95 g/cm^3 to all oxidised mineralisation. At Samarkand, a value of 2.95 g/cm^3 has been assigned to all fresh mineralisation and a value of 2.60 g/cm^3 to all oxidised mineralisation.

There have been no direct measurements of any drill samples to confirm the accuracy or appropriateness of this calibration. However, the value for fresh mineralisation compares favourably with the densities reported for the nearby Molyhil tungsten deposit that is within the range of 2.78 – 3.5 g/cm^3 (based on an iron grade calibration).

Classification criteria

The resource classification has been applied to the MRE based on the drilling data spacing, grade and geological continuity, and data integrity. Both White Violet and Samarkand models have low levels of confidence in the estimation or potential impact of modifying factors and have been classified as **Inferred Mineral Resources** under JORC (2012)**.** The classification reflects the view of the Competent Person.

Mining and metallurgy

It has been assumed that the traditional open cut mining method of drill, blast, load and haul will be used. No other mining assumptions have been made.

No metallurgical recoveries have been applied to the Mineral Resource Estimate.

Eventual economic extraction

It is the view of the Competent Person that at the time of estimation there are no known issues that could materially impact on the eventual extraction of the Mineral Resource.

For further information, please contact:

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Competent Persons Statement

The information in this release that relates to the Estimation and Reporting of Mineral Resources has been compiled by Dr Graeme McDonald. Dr McDonald acts as an independent consultant to Thor Mining PLC on the Bonya Mineral Resource estimation. Dr McDonald is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience with the style of mineralisation, deposit type under consideration and to the activities undertaken 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" (The JORC Code). Dr McDonald consents to the inclusion in this report of the contained technical information relating to the Mineral Resource Estimation in the form and context in which it appears

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.

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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.*	Reverse Circulation drilling with face sampling hammer was used to obtain one metre interval samples. Subsamples of approximately 2-3kg were taken from each interval using riffle splitter for geochemical analysis. XRF subsamples and chip tray samples were collected, logged and photographed. Industry standard QAQC protocol was adopted with reference material inserted every fifth sample.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Reverse circulation drilling with 3.5 inch face sampling hammer.
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.*	Samples were weighed from a selection of holes to gauge sample recovery. Samples were consistently within the range of 15 to 20kg and consistent across different rock units.
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	Hole cuttings were logged geologically and photographed for the entire length of each hole. Mineralised and unmineralised zones were easily determined from geological observations and XRF determination.
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*	Subsamples for independent laboratory analyses were taken by riffle splitter. The majority of samples were dry. Wet samples were noted in the logs. Sample size of 2-3kg is appropriate for RC samples with a maximum particle size of 6mm.

Criteria	JORC Code explanation	Commentary
	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.	For preliminary XRF determination **not** to be used for resource estimation – a further subsample of 30g was taken which is not considered representative.
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.	Laboratory geochemical assay results have now been completed. Industry standard sample preparation finishing with sample pulverisation to 80% passing 75µm. with assay by peroxide fusion and ICP-MS. The technique is considered appropriate for the analyte suite. Industry standard QA/QC protocol is implemented in the assay process.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	Significant intersections reported correspond with visual indications in samples. No further independent verification has been undertaken.
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.	All hole collar locations were surveyed by licenced survey contractor for mineral resource estimation. North seeking gyro will be used for downhole survey. Grid system used is GDA94, zone 53.
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.	Drill holes are spaced at 40 metre centres on 25 metre spaced drill sections. This spacing is considered appropriate for resource estimation in this style of mineralisation. Sample compositing was undertaken in areas that were not mineralised.
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.	Hole orientations are appropriate for the orientation of target mineralised zones.
Sample security	• The measures taken to ensure sample security.	The project is located in a remote region. No unauthorised company personnel visited the site during operations. Assay samples were collected from each hole immediately after drilling. Samples were transported for safe storage at a base

Criteria	JORC Code explanation	Commentary
		camp before being securely packaged for transport to the laboratory. All submitted assay samples were receipted by the laboratory.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	None

Section 2 Reporting of Exploration Results

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 Bonya deposits are located on EL29701 jointly held by Arafura Resources Limited (60%) and Thor Mining PLC (40%) with Thor acting as manager. EL29701 is a mature exploration licence subject to ongoing biennial renewal.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Previous drilling was undertaken by Central Pacific Minerals NL in 1971 using open hole percussion with limited success. There are no complete records of the historic drilling.
Geology	• *Deposit type, geological setting and style of mineralisation.*	Contact metamorphic skarn hosted scheelite.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ▪ *easting and northing of the drill hole collar*
	  ▪ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ▪ *dip and azimuth of the hole*
	  ▪ *down hole length and interception depth*
	  ▪ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		This information was provided in THR ASX announcement 09/01/2020.

Data aggregation methods	• 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.	Where sample intervals vary, reported average grades are length weighted. No grades were cut. A 3-metre maximum waste width and cut-off grade of 0.08% WO_3 was used in determining aggregated mineralisation intervals. High-grade intervals were highlighted where WO_3 exceeded 1%. No metal equivalents were reported.
Relationship between mineralisation widths and	• 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	Mineralisation intercept angles are in the order of 60 degrees. Correction to true widths is in the order of 60 to 75% of drill widths. Estimated true widths were provided in THR ASX announcement 09/01/2020

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

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. • Data validation procedures used.	• A data check of source assay data and survey data has been undertaken and compared to the database. No translation issues have been identified. The data was validated during the interpretation of the mineralisation, with no significant errors identified. Some recommendations for database improvements have been made. • Data validation processes are in place and run upon import into Micromine to be used for the MRE. Checks included: missing intervals, overlapping intervals and any depth errors. • A DEM topography to DGPS collar check has been completed.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• No Site visits by the CP have been undertaken at this stage due to the current lack of field activity in the area.
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral	• The tungsten/copper mineralisation is predominantly within a calc-silicate skarn often bounded by mafic intrusive, granite and/or pegmatite. Mineralisation also appears to form outside of these main calc-silicate skarns in sheared hornfels and amphibolite. The primary tungsten bearing mineral is scheelite. The geological interpretation appears to be sound

Criteria	JORC Code explanation	Commentary
	Resource estimation. • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	and based on good field-based evidence and relationships. • Reverse circulation drill holes have been used in the MRE. Lithology, structure, alteration and mineralisation data has been used to generate the mineralisation model. The primary assumption is that the mineralisation is hosted within structurally controlled locations associated with a steeply dipping shear zone. • Due to the relatively close spaced nature of the drilling data and the preliminary nature of the project, no alternative interpretations have been considered at this stage. • The mineralisation interpretation is based on a WO_3 cut-off grade of 0.05% for White Violet and 0.01% for Samarkand. • A single grade domain has been identified and estimated at White Violet while 4 separate domains have been interpreted at Samarkand.
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.*	• At White violet the mineralised domain is up to 140m in length and width of approximately 20m. At Samarkand the zone of mineralisation is up to 190m in length and approximately 30m in width. • At both deposits the mineralisation outcrops and has been modelled to a depth of 180m below surface at White Violet and 115m below surface at Samarkand. • The mineralisation in both cases dips steeply at approximately 85 degrees to the south south west.
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 availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine*	• Grade estimation at White Violet for WO_3 and Cu was been completed using Ordinary Kriging (OK) into a single mineralised domain using Micromine software. Variography was been undertaken on the grade domain composite data. Variogram orientations are largely controlled by the strike and dip of the mineralisation. • Grade estimation at Samarkand for WO_3 and Cu was completed using the Inverse Distance squared (ID2) technique. • There have been no previous estimates at either deposit. A check estimate using an alternative estimation technique (ID2) was also undertaken at the White Violet deposit. • No assumptions have been made regarding recovery of any by-products. • The data spacing varies across the deposits but with a nominal drill hole spacing of 25 m by 10 m. A parent block size of 8m (X) by 4m (Y) by 8m (Z) with a sub-block size of 2m (X) by 1m (Y) by 2m (Z) has been used at White Violet to define the mineralisation. At Samarkand a parent block size of 4m (X) by 8m (Y) by 8m (Z)

Criteria	JORC Code explanation	Commentary

	drainage characterisation).
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
	• *Any assumptions behind modelling of selective mining units.*
	• *Any assumptions about correlation between variables.*
	• *Description of how the geological interpretation was used to control the resource estimates.*
	• *Discussion of basis for using or not using grade cutting or capping.*
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*
		with a sub-block size of 1m (X) by 2m (Y) by 2m (Z) was used. WO_3 and Cu estimated at the parent block scale.
		  ○ Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 16 samples into a search ellipse with a radius of 50m for White Violet and 60m for Samarkand, with samples from a minimum of two drill holes.
		  ○ Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 16 samples into a search ellipse with a radius of 120m for White Violet and 140m for Samarkand, with samples from a minimum of two drill holes.
		  ○ Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 16 samples into a search ellipse with a radius of 200m for White Violet and 250m for Samarkand, with samples from a minimum of one drill hole.
		• No selective mining units are assumed in this estimate.
		• WO_3 and Cu have been estimated within the mineralised domains. No correlation between variables has been assumed.
		• The mineralisation and geological wireframes have been used to flag the drill hole intercepts in the drill hole assay file. The flagged intercepts have then been used to create composites in Micromine. The composite length is 1 m in all data.
		• The influence of extreme sample distribution outliers in the composited data has been determined using a combination of histograms and log probability plots. It was decided that top-cuts need to be applied as follows: White Violet, WO_3 – 1.5% Cu – 0.5%, Samarkand, WO_3 – 1.45% Cu – 1.5%
		• Model validation has been carried out, including visual comparison between composites and estimated blocks; check for negative or absent grades; statistical comparison against the input drill hole data and graphical plots.

Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The tonnes have been estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• For the reporting of the Mineral Resource Estimate, a 0.05% WO_3 cut-off has been used at both White Violet and Samarkand in consultation with Thor.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and*	• It has been assumed that the traditional open cut mining method of drill, blast, load and haul will be used.

Criteria	JORC Code explanation	Commentary
	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.	• No other assumptions have been made at this time.
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.*	• No metallurgical recoveries have been applied. • It is assumed that processing would be undertaken at the proposed nearby processing facility at Thor's Molyhil project.
Environmental factors or assumptions	• *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. 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.*	• No environmental assumptions have been made during the MRE.

Criteria	JORC Code explanation	Commentary
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. • 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. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• There have been no direct measurements of any drill samples at the White Violet or Samarkand deposits. Detailed downhole geophysics was collected from 15 drill holes across the two prospects. This included 2 sets of in-situ bulk density measurements (SSDG and BRDG). Both sets of data were collected at 0.01m intervals. The data was loaded into Micromine, composited to 1m intervals and averaged to provide an average bulk density down hole. The density varied down hole and it was clear that the mineralised skarn zones corresponded with elevated density values. This average 1m density data was paired up with the flagged composite assay file. As there was only data for some of the drill holes an average density was determined for the fresh and oxide mineralised domains for each deposit. At White Violet, a value of 3.16 g/cm^3 has been assigned to all fresh mineralisation and a value of 1.95 g/cm^3 to all oxidised mineralisation. At Samarkand, a value of 2.95 g/cm^3 has been assigned to all fresh mineralisation and a value of 2.60 g/cm^3 to all oxidised mineralisation.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (ie 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). • Whether the result appropriately reflects the Competent Person's view of the deposit.	• The resource classification has been applied to the MR estimate based on the drilling data spacing, grade and geological continuity, and data integrity. • The classification takes into account the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity. • The classification reflects the view of the Competent Person.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• This Mineral Resource estimate has not been audited by an external party.
Discussion of relative accuracy/ confidence	• 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	• 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 relates to global estimates of tonnes and grade. • No production records have been supplied as part of the scope of works, so no comparison or reconciliation has been made. Historically, only a small amount of copper has been produced from shallow pits.

Criteria	JORC Code explanation	Commentary
	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 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.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	