

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<p>Sampling Techniques</p>	<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are</i></p>	<p>All relevant sampling has been from conventional drilling diamond (DDH), Reverse Circulation (RC) and Open hole percussion (PERC) drilling methods by three main operators, The Hemerdon Mining and Smelting Ltd. and AMAX Exploration Joint Venture (AMAX) between 1976-1983, Wolf Minerals Limited (Wolf) between 2008 to 2018 and Tungsten West plc (Tungsten West) from 2019 to present.</p> <p>AMAX Exploration AMAX utilized 3 m composites for 90% of their core (with 1 m composites making up 10%). RC samples were taken from drill cuttings, the exact collection method used has not been recorded but the methodology is understood to mirror that of PERC sampling (see below). 1m sample lengths have been used. PERC samples were collected using a venturi cyclone every 3 m producing ~50 kg of material. This was dried, crushed to <5 cm and split by cone splitter to produce two 10 kg samples, one was dispatched for assay and the other stored for reference. Samples were not taken below the water table.</p> <p>Wolf Minerals Wolf 2008 Drilling utilized 3 m composites for 90% of their core (with 1m composites making up 10%), (see Drilling techniques). 2014 geotechnical & 2016 Ore Body Variability (OBV) drilling utilized 5 m lengths, 2018 resource definition drillcore was sampled to lithology (average length of 1.2 m). A minor amount of HQ3 core (4.5%) was whole core sampled due to mass requirements for metallurgical test work. RC samples were collected utilising two methods dependent on the drilling rig used. 84% of samples have been collected using a ProgadeX cyclone and cone splitter, whereas 16% were collected by spearing individual 1 m sample piles. In both scenarios a 5 m composite length was used with a twin sample collected every 25 samples.</p>

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	<p><i>Material to the Public Report.</i></p> <p><i>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 (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>PERC drilling samples were collected utilising two methodologies unique to the drilling campaigns (See Drilling techniques). 2014 to 15 grade control samples were collected at 5 m intervals in a tray at the collar, the drill spoil sample cone was quartered and samples in order to produce a 5.5 kg sample for assay. Twin samples were taken every 40 samples. 2016 to 2018 grade control samples have been taken over 10 m intervals by spear from the drill spoil sample cone to produce a 2.5 kg sample for assay. Field Duplicate samples were taken every 25 samples.</p> <p>Tungsten West</p> <p>TUNGSTEN WEST diamond core utilized 5 m samples lengths unless the interval fell over a lithological boundary, (see Drilling techniques). Full core sampling has been used to reduce the variability of samples presented to the lab as calculated utilising Gy's theory of sampling. RC samples were taken using a ProgradeX cyclone and cone splitter. A 5 m composite length has been used with a twin sample collected every 25 samples.</p> <p>The drill bits in all drilling techniques employed by all operators contain tungsten carbide in their composition, so the potential for contamination of samples was previously assessed by Wolf Minerals:</p> <p>By conducting a drilling and sampling programme in granite known to be barren of tungsten, using the same drill rig, drill bit and sampling technique in the 2014 to15 grade control program. The results showed no contamination was present.</p> <p>Material originating from an external 3rd party quarry was cleaned and sampled from the RC rig Cyclone prior to the 2017 resource definition program. No contamination was present.</p> <p>In addition, TUNGSTEN WEST have used pieces of Tungsten Carbide Drill button to deliberately 'salt' known blank material to assess the potential impact on results – the impact was discerned to be negligible.</p>
<p>Drilling techniques</p>	<p><i>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-</i></p>	<p>AMAX Exploration</p> <p>AMAX drilling was completed in 5 phases between 1976 and 1980 and included DDH, RC and air-flush PERC drillholes. A total of 532 drillholes for 25,400 m comprised of 416 PERC drillholes (8,022 m), 39 RC drillholes (3,596 m) and 77 HQ DDH drillholes (13,782 m) has been drilled</p> <p>The drillholes have been drilled on a 50 x 50 m pattern orientated with respect to the mineralised sheeted vein system at an azimuth of 170°. Drillhole inclination is typically –60° for DDH and vertical (-90°) for PERC and RC. Most of the DDH drillholes were drilled to sea level (0 RL) for an average depth of 179 m, PERC drillholes averaged 20 m in depth and RC drillholes 92 m in depth.</p>

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	<p><i>sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<p>Wolf Minerals Wolf drilling consisted of several drilling campaigns that can be summarised as follows: 2008 Resource Definition, Geobore S + HQ DDH, 7 drillholes for 1,094.1 m. 2013-14 Geotechnical PQ3 + HQ3 DDH, 38 drillholes for 1,989 m, 6 angled drillholes were oriented using Reflex ACT2 tool. 2014-15 Grade Control, Open hole hammer PERC, 953 drillholes for 23,277.35 m. 2016 Ore Body Variability (OBV) PQ3 DDH, 10 drillholes for 590.02 m, drillholes were oriented using Reflex ACT2 tool. 2017 Resource Definition, RC face sampling bit, 66 drillholes for 4,475 m, drillholes were oriented using Reflex ACT2 tool. 14 PERC drillholes for 404.87 m. 2016-2018 Production Grade Control, Open hole hammer Blastholes, 5,418 drillholes for 57,034.22 m. 2018 Resource Definition, HQ3 DDH 7 drillholes for 2,092.74 m, angled holes oriented using Reflex ACT2 tool. RC face sampling bit, 19 drillholes for 2,990 m.</p> <p>Tungsten West Tungsten west drilling consists of the following campaigns: 2020 Northern extension, Geobore S, HQ3 + NQ3 DDH, 1 drillhole for 376.45 m, drillhole oriented using Reflex ACT3 tool. 2020 Southern extension, HQ3 + NQ3 DDH, 3 drillholes for 451.09 m. RC face sampling bit, 27 drillholes for 2,430 m, all drillholes oriented using Reflex ACT3 tool.</p>
<p>Drill sample recovery</p>	<p><i>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</i></p>	<p>Diamond Drilling DDH sample recovery by AMAX, Wolf Minerals and Tungsten West has been assessed using standard industry practice of measuring the recovered core and comparing to the drill run length to assess the percentage recovered. Actual DDH recovery figures for AMAX DDH shows an overall average recovery of 98.9%. Wolf drilling varied by campaign between 83.7% (2008 resource definition) and 98.8% (2018 resource definition) with an overall average of 92.0%. Wolf DDH drilling used large core diameter and triple tube coring techniques to maximize sample recovery. Programmes drilled in kaolinised ground had poorer recoveries than those with a higher fresh rock component.</p>

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	<p><i>recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>Tungsten West DDH utilised Geobore S for Northern Extension drilling to collar the hole and then reduced to HQ3 and subsequently NQ3 to maximise recovery. In the Southern Extension area ground conditions were excellent and generally only 6m of HQ3 was used to collar before reverting to NQ3. Overall recovery for Tungsten West diamond drilling is 96.4%.</p> <p>RC & PERC Drilling</p> <p>RC and PERC sampling recoveries have been assessed for AMAX, Wolf Minerals and Tungsten West drillhole data based on the recovered size of the sample return pile and the theoretical 100% recovery of the RC and PERC drilling based on the drill barrel diameter and run length. Recoveries noted to be below the standard were flagged in the sampling record to allow cross-checking against assay results. Wolf recoveries are considered to be good with the 2018 resource definition RC drilling achieving a 95% overall recovery. Tungsten West 2020 RC drilling returned 90% recovery.</p> <p>Sample recovery of RC drilling is good and so no measures to improve sample recovery have been required, PERC drilling was generally only sampled above the water table to ensure sample representivity. However statistical analysis of wet sample data by Wolf showed good correlation with dry samples.</p> <p>Statistical analysis performed during Wolf Minerals ownership showed no correlation between poor sample recovery and grade, and as such no sample bias is believed to be present.</p>
<p>Logging</p>	<p><i>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,</i></p>	<p>All AMAX, Wolf Minerals and Tungsten West drilling has been geologically logged in its entirety. The majority of AMAX and all Wolf and Tungsten West DDH drillholes have been geotechnically logged by a Geologist, with the 2014 Geotechnical DDH program also being logged by a geotechnical engineer.</p> <p>Diamond drilling has been logged to a high resolution based on lithological boundaries/domains whereas RC and PERC drilling has been logged from chips corresponding to the sample interval, generally 3 m for AMAX. Wolf RC logging was linked to the drilling rig used and was governed by the sample resolution produced. For 84% of data this was in 5 m intervals and for the remaining 16% this was in 1 m intervals. Blastholes (PERC) were logged over a 10 m interval length. Tungsten West RC logging was based on sample intervals and undertaken on 5 m composites.</p> <p>AMAX logs contain detailed written rock descriptions, Wolf Minerals and Tungsten West logs use a series of geological codes to describe lithology, colour, variant, oxidation state, mineralisation, alteration and structure. Tungsten West logs also include in depth vein logging on DD holes.</p>

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	<p><i>channel, etc) photography. The total length and percentage of the relevant intersections logged.</i></p>	<p>SRK UK consultants re-logged 88% of AMAX DDH core in 2007 (all that was available at the time) for Wolf Minerals' 2008 MRE. Wolf subsequently re-logged 22% of these AMAX logs using the Wolf lithology codes.</p> <p>Available AMAX DDH core was photographed by SRK in 2007. All core re-logged by Wolf has also been photographed (both wet & dry). All Wolf DDH core and RC sample piles/chip trays were photographed.</p> <p>All Tungsten West DD holes used in the 2020 mineral resource estimate and the 2018 half core remainder from holes WDD-18-06, 08, and 10 had additional high-resolution logging through Geoteck's "BoxScan" system which takes detailed line photography, structural, mineralogical and geochemical measurements of the core.</p> <p>All logging is qualitative, although quantitative data is recorded where appropriate. Lithology codes have numeric codes assigned to assist in data analysis.</p> <p>The geological logging is high resolution, detailed and consistent; exceeding the requirements for resource estimation purposes. It has been used successfully for both mining and metallurgical studies.</p>
<p>Sub-sampling techniques and sample preparation</p>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise</i></p>	<p>AMAX Sample Preparation</p> <p>The majority of AMAX DDH core has been cut, with half core sent for analysis, although several holes subsequently had a further ¼ core sampled.</p> <p>Primary Sample splitting techniques for RC and PERC drilling techniques are outlined in the Sampling techniques section. All samples were dried at the relevant laboratory prior to sub sampling taking place.</p> <p>AMAX samples taken during the 1976 to 1980 period have been assayed by three analytical companies: Robertson Research International, Huntings Technical Surveys Ltd and Alfred H. Knight Ltd. Most of the DDH core assaying has been completed by Alfred H. Knight.</p> <p>AMAX sampling and sample preparation procedures were under the direction of Prof. Michel David, a respected geostatistician, providing support that the procedures conform to best practice at the time.</p> <p>AMAX sample preparation for the DDH core samples included the following steps: 3 m long samples were cut in half, with one half retained, the other crushed to -1/2" The sample was further crushed down to 1.7-3.0 mm before being riffle split to 1 kg. Coarse rejects have been retained. Pulverisation in a Tema Mill down to 850 µm. The sample was then split to a 250 -300 g subsample and milled (Tema Mill) to 250 µm.</p>

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	<p><i>representivity of samples.</i></p> <p><i>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.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>Finally, the sample was split into 3 packets of about 80 g each for analysis.</p> <p>Wolf Minerals Sample Preparation</p> <p>Wolf 2008 DDH core was initially half core sampled for assay and the remainder used for metallurgical test work. 2014 and 2016 Wolf DDH has been half cored if PQ3 or whole core sampled if HQ3 as part of metallurgical (Ore Body Variability) test work due to sample mass required. All 2018 DDH was half core sampled with quarter core used for field duplicates at a frequency of every 1 every 20 m.</p> <p>Primary Sample splitting techniques for RC and PERC drilling techniques are outlined in the Sampling techniques section. All samples were dried at the relevant laboratory prior to sub sampling taking place.</p> <p>Wolf samples have been analysed by three laboratories specific to the drilling campaign: 2008 resource definition DDH samples were sent to Stewart Group OMAC (Now ALS) laboratories in Galway, Ireland and pulps were then re-analysed at NAGROM, Perth, Australia. 2014-15 grade control PERC samples were prepared at SGS Cornwall and pulps sent to SGS Lakefield, Canada for assay.</p> <p>2014 Wolf Geotechnical drillholes were assayed at Wheal Jane Laboratory, Truro, UK. All other Wolf samples were analysed at SGS Plymouth.</p> <p>2008 Wolf DDH samples were sent for assaying to the Stewart Group OMAC Laboratories in Loughrea (Ireland) and the other retained half was sent to Australia for metallurgical testing. The preparation of the samples included the following steps:</p> <p>Sample crushing to -2 mm by jaw crusher, Riffle splitting followed by pulverisation to 100 µm, XRF assaying.</p> <p>The 2014-15 Stage 1 grade control program samples were prepared at SGS Cornwall before being sent to SGS Lakefield for analysis. The preparation of the samples included the following steps: Preparation involved crushing through to -1 mm, pulverizing 500 g to 80% passing 75 µm, A 100 g charge was split for analysis and remainder returned for storage at the mine site.</p> <p>Samples from the Wolf 2014 Geotechnical drilling were assayed at Wheal Jane Laboratory, Truro, UK. The preparation of the samples included the following steps:</p> <p>Preparation involved crushing of half core samples of average 5 kg to 75% passing 2 mm, Subsequent splitting and sub-sampling of 100 to 150 g which was pulverised for analysis, Coarse duplicates and pulps were split at request at a frequency of one each per submission.</p>

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		<p>Samples from subsequent drilling campaigns have been assayed at SGS Plymouth, located on the mine site where preparation involved: Crushing to -2 mm and splitting out 500 g which was pulverised to 85% passing 75 µm, Coarse duplicates and pulps were split at request at a frequency of one each per submission.</p> <p>AMAX DDH core was resampled by SRK in 2007 (19.2% of total) and by Wolf between 2017 and 2018 (22% of total) for assaying of the remaining half DDH core. These re-assays have been used to provide support to the previous AMAX assay results, understand grade distribution, controls on mineralisation, and relationships to lithology. They do not form part of this 2020 MRE – the original AMAX assays were used for consistency.</p> <p>Tungsten West Sample Preparation Tungsten West DDH core has been full core sampled as outlined in the Sampling techniques section in order to ensure sample representivity. These samples have been assayed at the Tungsten West onsite geochemical laboratory facility, where preparation involved: Samples were dried before crushing. Jaw crushing to 75% passing 8 mm. Riffle splitting out 10 kg which was then secondary crushed to 75% passing 2 mm. Riffle splitting out 1 kg, which was then pulverised to 85% passing 75 µm. Primary and secondary coarse duplicates along with pulp duplicates were split at request at a frequency of one each per submission. Tungsten West RC samples were split on the rig as outlined in the Sampling techniques section. They were then assayed at the Tungsten West onsite geochemical laboratory facility, where preparation involved: Samples were dried before crushing. Crushed to 75% passing 2 mm Riffle splitting out 1 kg, which was then pulverised to 85% passing 75 µm. Coarse duplicates and pulp duplicates were split at request at a frequency of one each per submission.</p> <p>Overall Summary Geostatistical work by Tungsten West has established that AMAX and Wolf DD and AMAX RC suffers from a volume variance issue, whereby;</p>

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		<p>While the nature quality and appropriateness of sample preparation technique was robust and there were adequate procedures adopted for all sub-sampling stages, the primary sample sizes delivered to the laboratory were not appropriate for the grain size of the material being analysed due to the nuggety nature of mineralisation present, leading to an overall negative bias in the results.</p> <p>Measures taken to try to ensure that the sampling is representative of in-situ material collected through ¼ core sampling are considered inadequate due to the even smaller volume of material being presented for analysis.</p> <p>Tungsten West have therefore submitted full core for analysis to overcome this issue and as such the 2020 diamond drilling campaigns are unaffected.</p> <p>All AMAX and Wolf PERC and all Wolf and Tungsten West RC Drilling is considered to have been appropriately prepared and samples are considered representative and of appropriate sample size. Field twin (duplicate) samples for these campaigns are considered to be an adequate way to ensure that the sampling is representative of the in-situ material collected.</p> <p>This volume variance issue has been addressed through geostatistical adjustment of the affected campaigns as outlined in the Verification of sampling and assaying Section.</p>
<p>Quality of assay data and laboratory tests</p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors</i></p>	<p>AMAX Assaying</p> <p>The main assay techniques used by AMAX were atomic absorption and X-ray fluorescence. Quality control procedures for AMAX included Certified Reference Materials (CRMs referred to as “Worldwide controls”) in each batch, and 1 in 20 samples were re-assayed (check samples). Wolf Minerals reviewed available AMAX check sample analyses and deemed the data showed good correlation. The data shows a robust QA/QC protocol was in place at the time to validate the AMAX work and is considered to have been best practice for the time.</p> <p>The company’s QA/QC samples, in addition to laboratory QAQC checks, have indicated the assaying shows acceptable levels of accuracy and precision.</p> <p>Wolf Minerals Assaying</p> <p>Wolf 2008 resource definition DDH samples were assayed at OMAC (Ireland) using X-Ray Fluorescence borate fusion (XRF-BF). The pulps were later re-assayed at NAGROM (Perth) using XRF-BF and shown to have excellent reproducibility with the original assay results.</p> <p>The Wolf 2008 resource definition programme used two CRM’s and coarse blanks alongside lab duplicates to assess QAQC at OMAC, results of which were considered excellent. Re-assaying at NAGROM utilised three CRM’s and returned excellent reproducibility with the OMAC results.</p>

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	<p><i>applied and their derivation, etc.</i></p> <p><i>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.</i></p>	<p>Wolf 2014-15 Stage 1 grade control samples were analysed by both XRF-BF for WO₃ and Internal Standard XRF for Sn.</p> <p>The 2014-15 Stage 1 grade control program assayed at SGS Lakefield included 8% of the total submissions as QA/QC samples (2% blanks, 2% as CRM's, 2% Field duplicates and 2% Lab duplicates), performance was considered excellent throughout.</p> <p>Samples from the Wolf 2014 Geotechnical drilling were assayed at Wheal Jane Laboratory, Truro, UK using fusion / ICP-OES.</p> <p>All subsequent assaying from 2015 has been undertaken using XRF-BF at SGS Plymouth.</p> <p>All Wolf assaying since 2015 at SGS Plymouth has been undertaken under a strict QA/QC procedure that included the following:</p> <p>Field duplicate sample insertion every 25 samples, Coarse and pulp lab duplicates in every sample batch submission, Insertion of a blank or CRM every 10 samples, Umpire check assaying at an alternate laboratory every 15 samples.</p> <p>A combination of coarse and pulp blanks were used at random and 8 CRMs were used across the ore grade range, being sourced from 4 independent providers. Half of these were generated from material at Hemerdon in order to provide a matrix matched sample for analysis. In total 75% carried international certifications with 25% (half of the matrix matched material) being prepared independently by a 3rd party laboratory for Wolf but not carrying certification.</p> <p>The company's QA/QC samples, in addition to laboratory QA/QC checks, have indicated the assaying shows acceptable levels of accuracy and precision.</p> <p>Tungsten West Assaying</p> <p>All samples have been assayed using Olympus Vanta-VMR portable X-Ray Fluorescence analyser (pXRF).</p> <p>Analysis is undertaken only when the pXRF is docked in the Olympus Vanta workstation. The test work and reporting of results are carried out through REFLEX XRF CONNECT software. The read time for the first and second beam is set to 30 seconds each and the third is not used.</p> <p>Calibration of the factory settings is based on independent check assays undertaken at ALS Ireland and is set at the following factors:</p> <p>(WO₃ x 1.6344)-0.0202 (Sn x 1.3257)-0.0069 (K x *2.4534)+1.0084</p>

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		<p>A strict QAQC programme has been followed including the following steps: Insertion of CRMs of which 50% of the library is matrix matched material. Field duplicates inserted every 25 samples for RC samples. Coarse and pulp duplicates in every batch. Umpire check assays at 10% insertion rate at ALS, Ireland. Sieve testing taken for stage of size reduction every 25 samples. pXRF analysis repeats in every batch Blank samples inserted at one per batch for each size reduction stage Pulp blank material used for each batch presented for analysis</p> <p>Overall Summary All assay techniques used are deemed appropriate and fit for purpose The nature of the XRF assay technique used means that only a small amount of representative material is used for assay and as such the techniques should be considered partial. No geophysical tools have been used. While AMAX's data can only be assessed in retrospect, available data illustrates the work was undertaken to best practice. All Wolf and Tungsten West drilling campaigns produced robust QA/QC data and high confidence in the results for both precision and accuracy. QA/QC sample performance has been monitored by individual submission, requiring that all sample lots must pass a series of checks to be entered into the database, as well as bi-weekly reporting of QA/QC results to assess trends in the data.</p>
<p>Verification of sampling and assaying</p>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage</i></p>	<p>Grade distribution of the deposit is very narrow and therefore there are very few significant intersections that could skew the grade estimate. The AMAX dataset has been reviewed independently by SRK between 2007 and 2015 through a program of onsite re-logging and assaying. Statistical analysis has been undertaken on the data used in Mineral Resource estimates in 2008, 2009, 2010 and 2015. The Wolf 2008 drilling formed part of the latter three estimates and therefore was also reviewed by SRK. All Wolf data was peer reviewed by a minimum of three members of Wolf geology staff. Wolf had documented procedures in place for all data collection/handling. Technical staff were required to be signed off as being competent to perform tasks. Procedures have been reviewed annually to ensure they are up to date and competencies are reviewed accordingly. Wolf digital data was secured behind 4 firewalls and is backed up daily to two separate local back-ups with a third copied remotely.</p>

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	<p data-bbox="423 233 736 368"><i>(physical and electronic) protocols. Discuss any adjustment to assay data.</i></p>	<p data-bbox="759 233 2007 336">SGS Plymouth also stored hard copy assay data for 3 years and monthly digital back-ups of data were stored in a fireproof safe. All available SGS hardcopy data from Wolf Minerals is now held by Tungsten West.</p> <p data-bbox="759 336 2018 472">Tungsten West's IT strategy is cloud-first and partners with industry leaders for platform and point solutions. The partner selection process includes robust evaluation of capabilities including security, resilience, performance and scalability. All of Tungsten West's geological data is cloud-based.</p> <p data-bbox="759 472 2029 608">AMC (Australian Mining Consultants) independently reviewed primary data collection and results of the re-logging/sampling of AMAX core by Wolf in 2018. All procedures were found to be to best practice and QA/QC protocols and results deemed appropriate. These procedures were the same used for all primary data collection/entry/verification and storage at site.</p> <p data-bbox="759 608 1973 687">AMC have also reviewed Tungsten West's data collection and results associated with the 2020 drilling campaigns and deemed them appropriate.</p> <p data-bbox="759 687 1968 791">31 twin drillholes have been drilled as part of the Stage 1 grade control program, a further 8 drillholes are sufficiently close to be considered twins. The twinned drillholes show good grade correlation overall but due to volume variance issues this is not the case in close resolution.</p> <p data-bbox="759 791 1928 831">Tungsten West have carried out investigations into the variance experienced in these holes.</p> <p data-bbox="759 831 2018 967">An oxide conversion from W to WO₃ has been undertaken in data originally reported in W by multiplying the W grade by 1.2611. This was required for the 2008 resource definition and 2014-15 Stage 1 grade control datasets representing 22% of the total dataset. All remaining data was originally reported as WO3 and as such no oxide conversion has been made.</p> <p data-bbox="759 967 2029 1038">Mining Plus independently reviewed all the combined Wolf and AMAX data and analysed the QA/QC during the 2019 MRE which included a site visit.</p> <p data-bbox="759 1038 1995 1142">Factory setting pXRF data is reported by the Tungsten West laboratory with an adjustment made for WO3, Sn and K, using a factor gained from independent assays carried out at ALS Loughrea, with collaboration from Olympus. This adjustment has been reviewed by AMC and Mining Plus.</p> <p data-bbox="759 1142 2007 1361">Tungsten West have carried out an in-depth review of the data from each drilling campaign to analyse variability in grade using Gy's sampling theory. This work led to the adjustment of sample data for AMAX and Wolf DDH, and AMAX RC holes using calibration factors established from low variability datasets (namely Wolf RC data). This method has been 3rd party reviewed by AMC and Mining Plus who have been able to review the resource estimation procedure at each stage of development, and consider it appropriate although non-standard.</p>

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<p>Location of data points</p>	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>AMAX recorded collar locations both as British National Grid (BNG) and on a local drill grid. Incomplete records of the BNG grid were available. The AMAX BNG drilling grid was recreated in Mapinfo GIS software and the grid conversion tools used to generate BNG co-ordinates for all drillholes by applying the known conversion from local grid to BNG. A cross reference check between the calculated position and those collars that had original BNG co-ordinates showed an excellent correlation.</p> <p>All Wolf and Tungsten West drill holes have been professionally surveyed by survey contractors in BNG.</p> <p>AMAX DDH drillholes have been surveyed down-hole at approximately 10 to 15 m and then from 50 m routinely at nominal 50m intervals by Tropari.</p> <p>All Wolf DDH and RC drillholes have been down-hole surveyed using a Reflex ACT2 EZ-TRAC survey tool at 3 or 6 m intervals for DDH and 30 m intervals for RC. Due to magnetic interference with surveying inside steel rods azimuth data is not used for RC holes, however based on dip variance and comparison to other drillholes deviation is believed to be minimal.</p> <p>Tungsten West 2020 RC holes have been down-hole surveyed using a Reflex EZ-TRAC survey tool at 5 m intervals, Due to magnetic interference with surveying inside steel rods a 6 m stainless steel bottom assembly was utilised for drillholes in an attempt to allow the deepest azimuth reading to be utilised however only two holes were considered to have provided a valid result.</p> <p>Tungsten West 2020 DD holes have been down-hole surveyed using a Reflex EZ-TRAC survey tool at 6 m intervals</p> <p>Core has been orientated using a Reflex ACTIII orientation device.</p> <p>Original surface topography has been captured by a Tellus airborne LiDAR survey flown in July and August 2013 prior to surface works commencing at the mine in early 2014. The digital surface model used in resource work has a 5 m resolution. The mine site is surveyed monthly during mining operations utilizing airborne drone georeferenced ortho-mosaic imagery which provides a topographic surface with 1 m resolution and aerial imagery to 20 cm resolution.</p>
<p>Data spacing and distribution</p>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>Whether the data spacing and distribution is sufficient to establish the degree of geological</i></p>	<p>AMAX drilled on a 50 x 50 m spaced grid orientated at 170° from BNG North and drilled generally to sea level (ORL). DDH drillholes were inclined at -60° dip and RC and PERC drillholes were vertical (-90°).</p> <p>The Wolf Minerals 2008, 2014 & 2016 drill spacings, azimuths and dips varied based on the purpose of the program. The key drivers were contact definition, geotechnical and geo-metallurgical representivity.</p>

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	<p><i>and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.</i></p>	<p>Wolf 2017 RC resource definition drilling was spaced on 25 x 25 m within the starter pit design on the AMAX orientated grid, and between 75 and 100 m RL. Typically, drillholes were inclined at -65° dip.</p> <p>Wolf 2018 RC + DDH resource definition drilling was designed to infill the AMAX grid to approximately 50 x 25 m within the final pit design, as well as four drillholes drilled on 50 m spacings below the final design. Drillholes were also drilled to the AMAX drilling grid and were generally inclined at a -60° dip.</p> <p>Wolf PERC grade control drilling has been drilled vertically at an approximate 7.5 x 7.5 m spaced grid oriented to the strike of the granite contacts (34° from BNG north). Drillhole depth coverage averages 10 m below the current mining level.</p> <p>Tungsten West 2020 drilling programmes have been designed as extensional exploration along strike of the current deposit, to the north and the south. The holes are predominantly drilled at 170° from BNG North on a 50 x 50m grid and generally inclined between -50° and -80° dip to ensure spatial coverage at depth.</p> <p>Drill spacing is deemed suitable for the establishment of geological and grade continuity and is reflected in the Mineral Resource confidence categories.</p> <p>All drillhole data used in the Mineral Resource estimation is composited to 5 m to reflect the average sample length interval and to complement mining flitch (bench) height and block model dimensions.</p>
<p><i>Orientation of data in relation to geological structure</i></p>	<p><i>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</i></p>	<p>The AMAX oriented drilling grid has been established based on a detailed assessment and classification of vein orientations. Drillholes orientated in this manner are likely to intersect the dominant vein orientations and allow representative samples to be returned.</p> <p>All relevant Wolf Minerals and Tungsten West exploration and infill drilling was orientated to intersect veins in a representative manner.</p> <p>All 2018 and 2020 DDH core was orientated and structural data collected, which supports the drilling orientation used.</p> <p>There is not believed to be any sampling bias introduced by the orientation of drilling data.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>bias, this should be assessed and reported if material.</i></p> <p><i>The measures taken to ensure sample security.</i></p>	
Sample security	<p><i>The measures taken to ensure sample security.</i></p>	<p>AMAX core was stored on site which was curated for several years after work was ceased. As a consequence, the remaining DDH core samples were unsupervised until Wolf leased the site in 2007. The core library was inventoried, validated, and re-logged. A portion (19.2%) was re-sampled by SRK as a basis for the maiden JORC Mineral Resource in 2008. Subsequently it remained in its original location until site development activities in 2014 when it was moved to a local secure facility where it remained until TW acquired the site alongside DDH core and sample residues from subsequent campaigns. TW hold all core and sample residue in a secure onsite facility. AMAX reports, plans, logs, assay results and associated data was lodged at the time with local regulatory bodies and the British Geological Survey. Digital copies of originals were acquired from these sources by Wolf and retained by Tungsten west. All drillcore and RC samples from Wolf Minerals and Tungsten West are stored on site in a secure facility.</p>
Audits or reviews	<p><i>The results of any audits or reviews of sampling techniques and data.</i></p>	<p>SRK's work in 2007/8 involved a review of AMAX's work, inherited legacy DDH core and documented data which they deemed adequate to support previous MRE's including the 2015 update reported in accordance with the JORC Code 2012.</p> <p>On inheriting the dataset in 2014 the Wolf geology team undertook a complete audit of all previous data, prior to commencing production. While this led to multiple minor corrections to drillhole data they were not of significance to have any material effect on the Mineral Resource.</p> <p>The inherited dataset, alongside all subsequent data and systems generated by Wolf were the subject of multiple due-diligence reviews and audits between 2014 and 2018 by a range of technical personnel acting directly and indirectly for various institutions and comprising both independent consultants and several specialist companies. This includes but is not limited to:</p> <p>Resource Capital Funds: 2014 to 2018 Micon International: 2014 to 2018 Palaris: 2017 to 2018</p> <p>None of this work has highlighted any concerns over the sampling techniques or data.</p>

Criteria	JORC Code explanation	Commentary
		<p>AMC were asked to undertake an audit of sampling techniques and data management of AMAX core re-logging and sampling by Wolf in 2018 and concluded that work was to industry best practice.</p> <p>Mining Plus reviewed the data and previous auditing during the 2019 MRE.</p> <p>Mining Plus and AMC have reviewed all key mineral resource work throughout Tungsten West's tenure of the project including this current MRE.</p>

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	<p><i>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.</i></p> <p><i>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.</i></p>	<p>The site is currently owned by Tungsten West who are also current operators at the site which is retained on a care and maintenance status.</p> <p>Planning permission for mining from Devon County Council is granted and current.</p> <p>Operation of the Mineral Processing Facility (MPF) and the Mine Waste Facility (MWF) require permits to operate from the Environmental Agency. Both permit applications have been lodged and are being processed by the EA.</p> <p>Tungsten West has agreed a 2.25% Royalty payable to the Hemerdon Mineral Association (HMA) – representing original landowners of the site.</p> <p>There are no known impediments to obtaining a license to operate in the area.</p>
Exploration done by other parties	<p><i>Acknowledgment and appraisal of exploration by other parties.</i></p>	<p>Exploration of the deposit was first undertaken in 1915 to 1918 by Hemerdon Mines Ltd. by trial pitting and shaft sinking.</p> <p>Further trial pitting and shaft sinking was undertaken by the 'Hemerdon Syndicate' in 1936 to 37 and again by the Non-Ferrous Metals development Committee in 1941 (A British government body for development of critical resources during the war).</p> <p>The first modern exploration was undertaken by 'Hemerdon Mining and Smelting Ltd.' (HMSL) with a 45 drillhole percussion drilling program in 1976.</p>

Criteria	JORC Code explanation	Commentary
		<p>A joint venture between HMSL and AMAX Exploration UK was established and additional exploration was undertaken under the latter's technical guidance with a total 25,400 m of DDH, PERC and RC drilling being undertaken between 1979 and 1983 alongside surface mapping and trenching. A small underground trial mine was also established and used to provide feed for a pilot plant operation. Wolf Minerals undertook a 6 drillhole confirmatory drilling program in 2008. Subsequently drilling was undertaken as part of Wolf's production operations between 2014 and 2018.</p>
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Hemerdon deposit is a sheeted vein style deposit hosted primarily by the Hemerdon granite, a NNE-SSW trending quartz-mica granite dyke 1.6 km long, averaging 150 m wide and has been proven to a depth of 550 m below surface but remains open at this depth.</p> <p>The granite is hosted by an interbedded package of southerly dipping Devonian siltstones, mudstones, sandstones and volcanoclastics, which are intruded by mafic dykes and sills that vary between basaltic and gabbroic textures. These host rocks (Killas formation) also form part of the broader mineralised system. Mineralisation is hosted by a complex, multi-episodal, sheeted vein system consisting of quartz, quartz-feldspar and quartz greisen veins that host ferberite and secondary cassiterite mineralisation with minor sulphides.</p> <p>Veins are predominately shallowly north-westerly dipping but cross-cutting veins are common and can be sub-vertical in nature. Later stage mineralisation includes ENE-WSW orientated thin (cm scale) sub-vertical tourmaline-cassiterite mineralisation, particularly in the northern portion of the deposit, and NW-SE striking cm scale Fe mineralisation consisting of haematite and specularite in minor faults associated with Triassic 'cross-course' mineralisation.</p> <p>The deposit is also characterised by intense and variable kaolinisation in the upper 30 to 45 m of the deposit</p>
Drillhole Information	<i>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:</i>	<p>There is no reporting of exploration results in the resource estimation statement or Competent Person's report.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p>	<p>All relevant drillhole information relevant to the reporting of the mineral resource is outlined in Section 1 of this table and within the Competent Person's report.</p>
<p>Data aggregation methods</p>	<p><i>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.</i></p>	<p>There is no reporting of exploration results in the resource estimation statement or Competent Person's report WO₃ equivalent is calculated as $WO_3(Eq)\% = (WO_3\% * 1) + (Sn\% * 0.379)$ based on the following assumptions: Commodity Prices: WO₃: £50,000/t Sn: £25,000/t Recoveries: WO₃: 55.62% Sn: 32.84% Payability: WO₃: 78% Sn: 100% These figures align directly with those being used in the reporting of mineral reserves and as used in Tungsten West's Feasibility Study.</p>
<p>Relationship between mineralisation</p>	<p><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being</i></p>	<p>There is no reporting of exploration results in the resource estimation statement or Competent Person's report.</p>

Criteria	JORC Code explanation	Commentary
<i>widths and intercept lengths</i>	<i>reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	
<i>Diagrams</i>	<i>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.</i>	There is no reporting of exploration results in the resource estimation statement or Competent Person's report.
<i>Balanced reporting</i>	<i>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.</i>	There is no reporting of exploration results in the resource estimation statement or Competent Person's report.
<i>Other substantive exploration data</i>	<i>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.</i>	There is no reporting of exploration results in the resource estimation statement or Competent Person's report.
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling</i>	At the time of reporting the 2020 mineral resource there were still drilling results from Tungsten West's 2020 Northern and Southern Extension drilling programmes outstanding. Full analysis of the complete drilling dataset is required before further planned work is established. However, mineralisation is open in almost all directions and the following present valid future exploration targets for future drilling programmes: Within the Hemerdon granite to the north

Criteria	JORC Code explanation	Commentary
	<i>areas, provided this information is not commercially sensitive.</i>	<p>Within the Hemerdon granite to the south</p> <p>Within the Hemerdon granite at depth</p> <p>Within the host Killas to the east of the granite</p> <p>Within the host Killas to the west of the granite</p> <p>Historically worked lode structures within the immediate mine area</p>

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
<i>Database integrity</i>	<p><i>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.</i></p> <p><i>Data validation procedures used.</i></p>	<p>Original AMAX data was compiled from the written records and thoroughly checked for transcription errors by Wolf Minerals.</p> <p>SRK Exploration conducted a thorough review of the logging data as well as the historical assays. The final database itself was checked for overlapping samples, survey errors, transcription problems, etc.</p> <p>In 2015 Wolf audited and corrected all inherited AMAX and earlier data against original copies wherever possible.</p> <p>All Wolf data was transferred and loaded digitally wherever possible and these processes were governed by best practice procedures that staff were trained and signed off as competent to complete.</p> <p>Wolf utilised a series of data entry checks including drillhole validation procedures in Datamine software.</p> <p>Mining Plus validated the drilling data during the 2019 MRE</p> <p>All Tungsten West data is captured digitally and these processes are governed by best practice procedures that staff are trained and signed off as competent to complete.</p> <p>All Tungsten West data is validated in Datamine software and checked prior to use in resource estimation.</p>

Criteria	JORC Code explanation	Commentary
<p>Site visits</p>	<p><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></p> <p><i>If no site visits have been undertaken indicate why this is the case.</i></p>	<p>A Mining Plus geologist was unable to perform a site visit during the 2020 update MRE, due to COVID-19 travel restrictions. However, John Battista, Mining Plus CP for Reserves, was able to make a site visit in early 2020. Mining Plus has also relied on the site visits performed by James McFarlane, the Competent Person (CP) for Mining Plus UK Ltd.'s 2019 Mineral Resource Estimate.</p> <p>James McFarlane is currently employed as Managing Director at Tungsten West and is the CP for the 2020 resource update. He was previously employed by Wolf Minerals UK Limited between 05/01/15 and 12/10/18 (date of site closure) and oversaw all geological work undertaken during this period. As such the requirement for a specific site visit is negated by the knowledge gained of the deposit during this tenure, and the CP's ongoing presence on the Hemerdon site.</p>
<p>Geological interpretation</p>	<p><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></p> <p><i>Nature of the data used and of any assumptions made.</i></p> <p><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></p> <p><i>The factors affecting continuity both of grade and geology.</i></p>	<p>The Hemerdon granite is an intrusive dyke shaped body, and the key geological domain that governs the core portion of the Mineral Resource. Grade continuity and variability is controlled by the sheeted vein system which is interpreted in the MRE through the choice of estimation parameters. Confidence in interpretation and delineation of the extents of the granite used in the MRE is high.</p> <p>Alternative interpretations of the Hemerdon granite are unlikely to materially impact the MRE.</p> <p>The Hemerdon granite has been interpreted in cross section from available drillhole data and from mapped surface exposures and subsequently constructed into wireframes. Contacts were updated regularly by Wolf based on grade control drilling data and in-pit surveying of exposures using differential global positioning systems (DGPS).</p> <p>The remainder of the resource is contained within a mixed package of sedimentary rocks with minor mafic intrusives locally termed 'Killas'. These form the host lithologies to the Hemerdon Granite.</p> <p>Surface mapping and drillhole logging have produced a lithological model that accurately reflects the extents of these units within the resource area.</p>

Criteria	JORC Code explanation	Commentary
		<p>This work has shown that variation in these host rock lithologies does not affect distribution of WO₃ and Sn mineralization, with the later sheeted vein system observed to cross sub-units indiscriminately.</p> <p>Currently the mineral resource within the Killas portion of the resource is unconstrained by lithology, the key limiting factor being a lack of drilling/sample data.</p>
Dimensions	<p><i>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.</i></p>	<p>The granite portion of the MRE is constrained by the extents of the Hemerdon intrusive, it has a strike orientated NNE-SSW over a length of 1,600 m, is 150 m wide and extends to a known depth 550 m below surface.</p> <p>Variability in the granite dimensions is minimal, with the exception of a widening to the SSW in the area termed the 'Southern Extension' this area has been the focus of one of Tungsten West's recent drilling programmes which has confirmed the previous interpretation based on surface mapping and soil geochemistry.</p> <p>The Killas portion of the mineral resource forms as a halo around the Hemerdon granite of 300-600 m horizontally and to a known depth of 280 m below surface</p>
Estimation and modelling techniques	<p><i>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.</i></p> <p><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></p> <p><i>The assumptions made regarding recovery of by-products.</i></p>	<p>The MRE has been undertaken using Ordinary Kriging (OK) of WO₃, Sn and K into 21 different lithological domains using Datamine Studio RM software. Compositing has been undertaken within parent lithological domain boundaries at 5 m with a variable length of 2.5 m.</p> <p>Variography and Kriging Neighbourhood Analysis (KNA) was undertaken utilising Snowden Supervisor Software on a mineralogical domain basis where enough data is present. Domains with too few samples have grouped or borrowed variography.</p> <p>The Mineral Resource estimate has been validated using visual validation tools, mean grade comparisons between the block model and composite grade means and swath plots comparing the composite grades and block model grades by Northing, Easting and RL. In addition, the mined granite portion of the resource has been reconciled against available production records.</p> <p>Drill spacing varies by depth and lithology. In the granite the upper 70 m of the deposit 200 to 130 RL being grade control drilled to approximately 10 x 10 m</p>

Criteria	JORC Code explanation	Commentary
	<p><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></p> <p><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></p> <p><i>Any assumptions behind modelling of selective mining units.</i></p> <p><i>Any assumptions about correlation between variables.</i></p> <p><i>Description of how the geological interpretation was used to control the resource estimates.</i></p> <p><i>Discussion of basis for using or not using grade cutting or capping.</i></p> <p><i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i></p>	<p>within the current mine area. Below this to the 0RL drill spacing is approximately 25 x 50 m and below this is 50 x 150 m in the central portion of the resource to the -250 RL. To the south the deposit has been drilled on a 50 x 50m spacing to the 110 RL and 100 x 100 m spacing to the 0 RL. Outside of this drill coverage is minimal. In the Killas variable areas between 10 and 30 m at current ground level have been grade control drilled to 10x10 m, below this drill spacing is 50 x 100 m to the 0 RL, below which drill coverage is minimal. The parent block size is 12.5 m (X) by 12.5 m (Y) by 5 m (Z) and is based on the spacing used for the grade control model previously in use at the site. The parent block size is sub-celled to 2.5 m (X) by 2.5 m (Y) by 2.5 m (Z) to allow better definition along geological contacts</p> <p>Estimation has been performed into parent cells only.</p> <p>The maximum distance of interpolation theoretically possible from data points in the granite is 285 m based on the longest radius of the WO₃ ellipsoid (95 m) being tripled in the second pass ellipse. However, the dimensions of the granite domain that constrain the estimation mean that interpolation over this distance is curtailed by the geological extents of the granite. In the Killas the maximum distance of interpolation theoretically possible from data points is 255 m which is the longest axis of the pass 1 search ellipse, however Measured and Indicated classifications are governed by wireframe boundaries. Further passes are not included within the resource (see classification).</p> <p>Potassium (K) has also been estimated using the OK methodology and approach outlined for WO₃ and Sn due to its direct relationship with kaolinisation and the implications for density within the granite (see bulk density). K is not relevant for the Killas host rocks and so has not been estimated in this portion of the resource.</p> <p>The K dataset was sub-divided based on geologically defined domains illustrating kaolinised and fresh rock and used to define differing variography and parameters that are used respectively.</p> <p>Top cuts have been applied for all estimated elements based on statistical analysis of the respective datasets. For WO₃ the top cut has only been applied to the datasets that have proven to have a high sample variance and this has been done during the adjustment phase of the composited data. For Sn only</p>

Criteria	JORC Code explanation	Commentary
		<p>very minor top-cutting was deemed appropriate as a way to remove outliers and prevent local overestimation, the amount of cut samples had no impact on overall mean grade of the data.</p> <p>To avoid underestimation of K values, due to the known presence of minor zones of tourmalinisation that have values below the base value of the Hemerdon granite, a bottom cut was also applied. This is based on the normal distribution of the data (K is a rock forming element not associated with mineralisation) and to avoid underestimation of K values due to the inclusion of individual tourmanilised samples that would lead to a local underestimation of K and by extension bulk density (See Bulk Density)</p> <p>The main subdivision of domains is between the Hemerdon granite and the surrounding Killas. While the Killas is sub-domained internally based on mapped rock type, these are not used to control estimation of WO₃ and Sn. The granite is subdivided into the main body of the Hemerdon granite (G10 Zone) with a smaller outlying area to the immediate NE (G20 Zone). These two domains are only estimated by using holes located within the respective domain for all elements.</p> <p>In addition both the G10 and G20 domains are subdivided by the weathering surface representing the base of kaolinisation/top of fresh rock, this subdivision is used solely to subdivide the K estimation due to its relationship with kaolinisation. Further to this a zone of kaolinisation at depth delineated by drilling is also sub-domained for K estimation.</p> <p>A fault known as the 'F20 zone' is known to represent a grade boundary for WO₃ in the northern part of the granite, as such this area has also been sub-domained to allow the estimation to treat this fault as a hard boundary.</p> <p>This 2020 MRE is an evolution from initial estimates made by the Competent Person since early 2015 that have been continually developed and enhanced during the mine life, based on increasing geological knowledge and reconciliation with mill data. As such the current estimate has been developed utilising the significant amount of data and knowledge collated during this time. Sn has been recovered as a by-product of WO₃ production during all previous mining operations at Hemerdon and as such has been estimated independently as outlined above. It has a separate set of metallurgical parameters applied</p>

Criteria	JORC Code explanation	Commentary
		<p>which have been factored into the optimisation work undertaken on the deposit.</p> <p>The block size used in the MRE is 12.5 x 12.5 m in the X and Y dimension and 5m in the Z dimension. The choice of block size is based on grade control sample data spacing and the mining flitch height. The block size therefore relates to a selective mining unit.</p> <p>Correlation between all estimated elements varies due to the differing geological controls present. While minor Sn is associated with the WO₃ mineralisation, higher grades are a result of later stage events. K is controlled by meteoric weathering of the granite causing it to alter feldspar to kaolin, although there is a relationship between more heavily faulted zones and depth of kaolinisation.</p> <p>The geological interpretation of the Hemerdon granite was utilised to control the limits of the granite MRE. Availability of drillhole data defines the limit of the Killas MRE with no discernible geological controls on mineralization identified to date, with distance from the Hemerdon granite likely to be the key controlling factor.</p> <p>Over the course of the Wolf Minerals operation the pre-cursors to the current resource model have been scrutinised and audited multiple times, meaning that the raw data and techniques are considered to have been well validated. Over this period, these previous estimates were used to support life-of-mine (LOM) and short-term planning, and for grade control purposes. In this role, during reconciliation, it has shown a good correlation with the mill feed data throughout the Wolf operation and as such it is believed that the model can be considered robust and representative of the deposit.</p>
Moisture	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	All tonnages are estimated and reported on a dry basis and no determination of moisture has been made.
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	The cut-off grades of 0.064% WO ₃ EQ for the granite and 0.062% WO ₃ EQ for the Killas are based on economic input parameters and Metallurgical parameters

Criteria	JORC Code explanation	Commentary
		<p>that have been updated to reflect the work carried out for the 2022 FS. These were used to assess the mineral resource using Datamine NPV Scheduler software at a variety of economic scenarios and directly align with the work undertaken to define RPFEEE.</p> <p>A WO₃ Equivalent was utilised to allow Sn to contribute to the economics of a given cell as some areas of the deposit contain significantly higher than average Sn grades which can be a significant proportion of the cell's total metal contribution. These were used to assess the mineral resource using NPV Scheduler software at a variety of economic scenarios and directly align with the work undertaken to define RPEEE.</p> <p>Parameters used were: WO₃ MTU Price: US\$500 GBP £ to US \$ Exchange Rate: 1.15 WO₃ Payability: 78% WO₃ Royalty: 2.25% Granite WO₃ Recovery: 55.62% Killas WO₃ Recovery: 50.54% Granite Ore Mining Cost: £2.99 (including rehandle and D&B) Killas Ore Mining Cost: £4.22 (including rehandle and D&B) Granite Ore Processing Cost: £6.50 Killas Ore Processing Cost: £4.60 Granite G&A: 2.24 Killas G&A: 1.58</p>
Mining factors or assumptions	<i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining</i>	<p>As a recently operational mine the model utilises the known mining methods and associated information rather than using assumptions in this regard. The scale of the orebody and the bulk mining approach used means that any mining factors that affect the estimation of the mineral resource are considered negligible.</p> <p>Given that the forecast mine plan is to mine ore from both Hemerdon granite and Killas lithologies there is not likely to be any dilution or loss in the true sense as dilution or loss of one type will be counteracted in the other.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p>	
<p>Metallurgical factors or assumptions</p>	<p><i>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.</i></p>	<p>As a recently operational mine there is a huge amount of knowledge about the metallurgical performance of the Hemerdon granite, however it is notable that metallurgical challenges were in part responsible for the failure of the Wolf operation. As a result, Tungsten West have conducted a rigorous metallurgical review and a series of comprehensive test work programmes to establish a metallurgical flowsheet to support a restart of operations, This work is too detailed to summarise here but relies on a rebuild of the primary and secondary crushing and classification circuits and the integration of XRT Ore Sorting technology. This work is considered comprehensive enough to support Tungsten West's Feasibility Study.</p> <p>The Killas is less understood metallurgically but test work by Wolf Minerals to emulate the current gravity preconcentration circuits on XRT Ore Sorted material was capable of producing 'granite equivalent' preconcentrate and combined with other metallurgical and mineralogical studies is believed to represent reasonable prospects for eventual economic extraction.</p>
<p>Environmental factors or assumptions</p>	<p><i>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</i></p>	<p>As a recently operational mine the environmental factors and associated parameters are understood and so there are no assumptions in this regard. The site retains relevant environmental permits required for care and maintenance activities. Tungsten West are currently in the application process to re-instate the Environmental permit to operate the MWF and the permit for the MPF.</p> <p>Tungsten West is ISO 14001, 9001, 45001 and 50001 accredited for its environmental, health and safety management systems.</p> <p>There are not considered to be any factors that affect the MRE.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made</i></p>	
<p>Bulk density</p>	<p><i>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.</i></p> <p><i>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.</i></p>	<p>Hemerdon Granite The relationship between K% and kaolinisation via regression analysis was used to estimate density into the granite portion of the block model using the 467 samples taken between 2007 and 2017. This was previously used by Wolf Minerals to provide a high-resolution dataset suited to the complex and variable levels of kaolinisation present and reconciled well against measured mill feed tonnages. The 2020 Hemerdon granite density estimation was performed using the same method detailed in the 2019 MRE and has been shown to reconcile closely with tonnage data from the mill during operation by Wolf Minerals.</p> <p>Killas Formation Density measurements were taken in 2019 to 2020 by Tungsten West to define the densities of separate units identified within the Killas formation. The Killas units comprise five meta-sedimentary and meta-volcanic members, and seven mafic intrusive members. 361 total samples were taken, distributed throughout these sub-units. These were also classified by weathering state into Oxide (OX), Transitional (TR) or Fresh (FR). Each named member of the Killas formation was assigned a density, weighted by the proportion of each lithology it contains. These were also split by weathering state.</p>
<p>Classification</p>	<p><i>The basis for the classification of the Mineral Resources into varying confidence categories</i></p> <p><i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in</i></p>	<p>Mineral Resources have been classified based on consideration of the following key criteria: Sample Spacing The nature of the drilling method and campaign, namely analysis of; The influence of diamond or AMAX RC drilling (known to have a volume variance issue) on the block's estimate, The variance in grade between the calibrated and uncalibrated estimates.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p>	<p>Estimation efficiency, namely analysis of; The pass in which the blocks have been estimated, The minimum distance between samples, The number of samples used in the estimated, The kriging variance. From this data, wireframes have been generated that encompass contiguous zones of comparable parameters and used to code the block model with the corresponding confidence category for measured and indicated resources. Inferred resources are controlled by the pass of the search ellipse, being PASS=2 for the granite and PASS=1 for the Killas. The classification takes into account relative confidence in tonnage/grade estimations, the reliability of input data and the confidence in continuity of geology and metal values. The resource model was analysed using Datamine NPV scheduler software to assess the appropriateness of the confidence factors used. A \$500/MTU scenario produced a large pit shell that encompassed the main portion of the classified mineral resource. Analysis of the pit shell shows that 100% of the Measured Resource, 100% of the Indicated Resource, and 87% of the Inferred Resource is contained within the NPVS shell. Due to some of the inferred killas material sitting external to the main shell within 'satellite' pits only material contained within the main pit shell was reported as part of the 2022 MRE. As part of the 2021 Mineral Resource estimate an exploration target was proposed, this was defined as parts of both the granite and Killas Mineral Resource estimate that although exhibits geological and grade continuity, are considered to have insufficient drillhole/sample density to quantify the tonnages and grades being estimated. As such a range of tonnage and grade has been provided in keeping with the JORC 2012 guidelines. A reassessment of the Exploration Target was conducted as part of the 2022 MRE update but concluded the 2021 figures are suitable to remain unchanged. The aforementioned parameters have been developed over the competent person's tenure at the deposit and accurately reflect their view of the confidence distribution.</p>

Criteria	JORC Code explanation	Commentary
		<p>Stockpiles are included in the MRE and are categorised as Measured Resources. The Measured category was assigned to the stockpiles based on the high level of confidence of grade controlled and mined material with reconciled production values.</p>
<i>Audits or reviews</i>	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	<p>The block models that form the predecessors to this estimate have been the subject of multiple due-diligence reviews and audits between 2015 and 2018 by a range of technical personnel acting directly and indirectly for various institutions alongside consultants both independent and from several specialist companies. Feedback from this work has always been positive with no material concerns raised.</p> <p>AMC assisted in setting up and reviewing the original block model estimation parameters in 2015 and deemed they produced reliable estimates suited to the deposit and mineralization style. They also reviewed the model in 2017 and concluded that the geological work was conducted in a 'rigorous and appropriate manner'</p> <p>The 2019 MRE identified that the resource model under-reported expected grade vs the actual mined head grade.</p> <p>Further work by Mining Plus and Tungsten West identified that this was a sample size issue, with smaller samples (DDH) under-estimating WO₃ grade. In the 2020 report this has been accounted for by applying weighting factors based on the proportion of DDH:RC:PERC drilling.</p> <p>This work has also been independently reviewed throughout the study by AMC.</p>
<i>Discussion of relative accuracy/confidence</i>	<i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence</i>	<p>As the model used in the mineral resource estimate originates from the work and estimation techniques utilised at the Hemerdon Mine during its production period under Wolf Minerals accuracy is shown to be high. This is largely due to the excellent reconciliation that has been achieved over the LOM for WO₃, Sn, and K that contributes to the overall mineral resource estimate.</p> <p>Confidence in the estimate is directly related to sample density and the nature of the drilling method used.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>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</i></p> <p><i>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</i></p> <p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></p>	<p>Geostatistical review of the block model shows a strong relationship to sample data spatially and is therefore believed to be an accurate representation of the raw data.</p> <p>In addition, the updated mineral resource has been used to compare mined granite tonnages with production data which has shown an excellent correlation to the Wolf production between 2015 and 2018.</p> <p>The model is believed to represent an accurate portrayal of the Hemerdon deposit and in the Competent Person's view confidence in the estimate is high.</p>

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<p><i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i></p> <p><i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</i></p>	<p>An updated Mineral Resource block model produced by Tungsten West plc (TW) and reviewed by Mining Plus, updated January 2021, forms the basis for this Ore Reserve estimate.</p> <p>The Mineral Resources are reported inclusive of the Ore Reserve.</p> <p>Ore Reserves contained in stockpiles are reported as a separate item.</p>
Site visits	<p><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></p>	<p>A Site visit was undertaken by the Competent Person for Ore Reserves (Mr. Adriano Carneiro of Mining Plus (UK) Limited) in October 2022.</p>

Criteria	JORC Code explanation	Commentary
	<i>If no site visits have been undertaken indicate why this is the case.</i>	
Study status	<i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i>	A Feasibility Study relating to the re-start of mining at Hemerdon forms the basis of the Ore Reserves. Production at the mine by former owner, Wolf Minerals, started in mid-2015. Information gathered during the production period has been used, together with new information collated since the Wolf Minerals operations ceased in October 2018, to update and inform the current Ore Reserves.
Cut-off parameters	<i>The basis of the cut-off grade(s) or quality parameters applied.</i>	The Ore Reserve is reported above an economic WO ₃ Equivalent (WO ₃ Eq) cut-off grade of 0.0742% for Granite material and 0.0689% for Killas. WO ₃ Eq is used as the cut-off grade for reporting in order to appropriately account for the contribution that Tin makes to revenue earned from product sold. The Competent Person considers this method to be appropriate for Ore Reserves reporting. The WO ₃ Equivalent grade calculations are as follows: Granite: $WO_3Eq = WO_3 + (0.4942 * Sn)$ Killas: $WO_3Eq = WO_3 + (0.3794 * Sn)$ WO ₃ Equivalent grade calculation is based on the following parameters: WO ₃ Price: \$US34,000/tonne Sn Price: \$US25,000/tonne Exchange Rate GBP1=USD1.15 WO ₃ Recovery Granite 55.62% and Killas 50.54% Sn Recovery Granite 32.84% and Killas 24.12% WO ₃ Nett Price £22,305.46/tonne Sn Nett Price £20,326.63/tonne (the Nett Prices account for WO ₃ payability, Sn treatment charge, product transport costs and royalties)

Criteria	JORC Code explanation	Commentary
<p>Mining factors or assumptions</p>	<p><i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i></p> <p><i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i></p> <p><i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></p> <p><i>The mining dilution factors used.</i></p> <p><i>The mining recovery factors used.</i></p> <p><i>Any minimum mining widths used.</i></p> <p><i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></p> <p><i>The infrastructure requirements of the selected mining methods.</i></p>	<p>The resource model used for pit optimisation was updated by TW, with peer review by Mining Plus, in January 2021. This model is current and forms the basis of the latest Mineral Resource Statement issued by TW.</p> <p>The Ore Reserve has been estimated using an operational pit design derived from the results of an open pit optimisation study. The pit design has been modified to account for operational changes. The input parameters to the optimiser were updated in September 2022. These include the latest operational costs, processing data and marketing information.</p> <p>The mining method will be conventional drill-blast-load-haul open pit. This method was used during the mine's former operational phase between 2015 and 2018.</p> <p>The pit rim is constrained by a boundary based on a study to discern the 'reasonable grounds' for potential expansion external to the current planning permission boundary. Pit optimisation scenarios show that the optimal pit shell is confined by this boundary and that the pit would grow beyond the current planned size if this limitation were removed.</p> <p>TW completed an updated geotechnical study in August 2022. This recommended a set of domained pit wall configurations falling within an acceptable factor of safety. These have been used in the recent pit optimisation study and are the basis for detail pit design. The mining bench height is 5 m in the weathered zone for both Granite and Killas with 10 m bench heights in the transitional zone for both lithologies. The fresh killas has a bench height of 10 m and fresh granite has a bench height of 20 m. The zone of weathered material at depth in the granite known as MSGD 16 has a bench height set at 10 m. Face angles are 55 degrees in the weathered zones and 75 degrees below the weathered zone. Bench widths are set at 4 m in the weathered zones, 6 m in the transitional zones and 5 m and 8 m in the fresh zones for Killas and Granite lithologies respectively. MSGD 16 has a bench width of 4 m. A 25 m geotechnical bench is required at the base of the transitional zones with a further 25 m geotechnical bench every 100 vertical meters in the fresh rock.</p> <p>Grade control drilling will be achieved through blast-hole sampling. Assays are composited over the length of the hole for blast-holes (typically a 10m vertical interval). During the Wolf Minerals operation, grade and lithological correlation with</p>

Criteria	JORC Code explanation	Commentary
		<p>both the resource model and the original exploration drilling programme has been positive. This positive reconciliation has been the object of a significant geostatistical study by TW, Mining Plus and AMC Consultants and the current resource model goes some way to accounting for this historic discrepancy. Previous mining experience showed good reconciliation between the grade control model and actual Mineral Processing Facility (MPF) performance. Mining losses have been estimated to be 1% based on historical mining operations data. Granite is sampled within a drill hole and the preferred sample width is 5m to match the mining flitch height. Un-mineralised host granite between the very closely spaced sheeted veins therefore dilutes grade over the 5m sample, imparting an internal dilution. Operating dilution has been estimated as 0.56% through a study carried out by TW which is applied as the mining dilution factor in the optimization process. The main granite orebody (Hemerdon granite) averages 150m in width, as such no minimum mining widths have been used. Pushbacks have been limited to a minimum mining width of 30 metres, in accordance with the type of mining fleet envisaged.</p> <p>The MPF recovery and cost assumptions are taken from historic production data, modified to take account of proposed plant and operational improvements which will be implemented prior to re-start of the MPF. These assumptions are considered by the Competent Person from Ore Reserves to be reasonable and realistic. Drill and blast costs are based on agreements made with EPC-UK in May 2022. Load and haul mining costs are based on updated mining contract rates provided in April 2022 by the same experienced mining contractor that was incumbent during the Wolf Minerals mining period (2015-2018). The USD: GBP exchange rate and the WO3 and Sn prices were updated in September 2022 in line with forecast prices produced by TW and supported by marketing studies. Grade control, administration, sustainability, selling and marketing costs and royalties used in the optimisation are derived by TW based on proposed company structure going into the mining operation. A discount rate of 5% has been used in this update for cash flow calculation purposes.</p> <p>Inferred Mineral Resources were treated as waste for the purposes of pit optimisation and mine production schedule, for final limit assessment for Ore Reserve Estimation purposes.</p>

Criteria	JORC Code explanation	Commentary
		<p>The Hemerdon mine site retains all relevant infrastructure for the selected mining methods haul roads, laydown and workshop facilities and stockpiling and waste tipping locations. The relocation of the RoM Pad is planned to allow for direct tipping into a modular crushing unit with capacity to store material to cover the downtime of the mining fleet; and the installation of an explosives storage facility are proposed by TW to improve mining efficiency.</p>
<p>Metallurgical factors or assumptions</p>	<p><i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></p> <p><i>Whether the metallurgical process is well-tested technology or novel in nature.</i></p> <p><i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></p> <p><i>Any assumptions or allowances made for deleterious elements.</i></p> <p><i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i></p> <p><i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></p>	<p>The concentration of the granite ore is by conventional and proven crushing, ore-sorting, classification, dense medium separation, and fine gravity processes. Arsenic and Iron contaminants are removed from the preconcentrates by flotation and magnetic separation. A separate WO₃ and Sn concentrate is produced.</p> <p>The process design criteria are based on more than three years of production data from the Wolf MPF and are combined with updated and comprehensive crushing, classification, and beneficiation test work by TW.</p> <p>This has been used to define two metallurgical domains based on degree of kaolinisation of the granite termed 'mixed' and 'Based on the expected proportions of the Mixed and Fresh ores, the overall plant recovery for Granite material is assumed to be 55.62% for WO₃ and 32.84% for Sn.</p> <p>For the Killas material, based on a review of available testwork by TW, the metallurgical plant recovery is expected to be 50.54% for WO₃ and 24.12% for Sn.</p> <p>Arsenic and iron are considered deleterious elements and were managed under the Wolf operation by a grade control and ore blending strategy. Both elements are rejected preferentially from the beneficiation process by the ore sorting and gravity processes and the remaining elemental concentrations are reduced by flotation (for As) and magnetic separation (Fe) to produce saleable concentrate.</p> <p>Multiple bulk samples have been taken at Hemerdon however no single bulk sample can be considered representative of the deposit as a whole: AMAX developed and a trial underground mining and pilot plant processing operation in the early 1980's. Fresh granite</p>

Criteria	JORC Code explanation	Commentary
		<p>processed as part of this operation is deemed representative of future ore production.</p> <p>Wolf processed 5.8Mt of ore in the current MPF which was largely from kaolinised ore and as such only the latter part of the operation is considered representative of future ore production.</p> <p>Wolf also developed a pilot XRT ore sorting operation with processed 25.5Kt of granite and 1Kt of killas ores. This is believed to be representative of the Hemerdon ore's response to this technique.</p> <p>TW have taken bulk samples for beneficiation and pilot plant test work at the Geological Survey of Finland alongside crushing and screening test work on site. These samples are considered to be representative of fresh ore.</p> <p>No minerals are defined by specification at Hemerdon.</p>
Environmental	<p><i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i></p>	<p>Extensive studies were completed by previous operators of the project into the environmental impact of the operation the majority of which remain valid for the future operation of the project.</p> <p>The site was operated by Wolf under a full set of relevant environmental permits issued by the Environment Agency which TW is in the process of re-establishing. Namely these are the MPF, Mine waste facility (MWF) and a series of water abstraction and discharge permits.</p> <p>The MWF permit has been submitted and is currently in the pre-application process.</p> <p>TW have commissioned studies into both audible noise and extensive infrasound test work based on re-permitting requirements for the MPF.</p> <p>TW commissioned a comprehensive waste rock geochemistry study which concluded that all waste products from the operation are inert.</p> <p>TW have commissioned a re-design study of the MWF to align with the updated mine plan that considers all relevant environmental aspects in its design.</p> <p>The current stockpiles and the MWF are inspected regularly under Sections 32 and 33 of the UK quarry regulations and the latest inspections illustrate that they comply and pose no foreseeable risk to the environment.</p>

Criteria	JORC Code explanation	Commentary
Infrastructure	<i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i>	All infrastructure required for the processing and mining of ore is in place except for modifications to the MPF as outlined in the accompanying feasibility study which will be completed before the planned re-start of operations, including installation of new crushing and classification equipment and an ore sorting plant, alongside other more minor plant modifications.
Costs	<i>The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private.</i>	Mining costs are derived from drill and blast contract tenders and quoted rates from the load and haul mining contractor that will be providing the mining services for the re-started project. Process plant operating costs are based on historic costs with some modifications for operation and plant improvements. The costs for the removal of deleterious material are included in the operating costs. TW have provided exchange rates used in the study. Treatment and refining costs (i.e., payability) are based on historical costs and TW's discussion with off-takers. These discussions (which will relate to specification penalties etc.) are ongoing. Royalties of 2.50% for W and Sn have been agreed with the mineral lease holders. TW has forecasted capital items in its site business plan.
Revenue factors	<i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i>	Head grades are based on the block model generated by TW in January 2021. Revenue has been based on a WO3 price of USD340/MTU of Ammonium Paratungstate (APT) and a Sn price of USD25,000/t. An exchange rate of 1GBP=1.15USD has been used. These figures are representative of economic forecasts for the period.

Criteria	JORC Code explanation	Commentary
Market assessment	<p><i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></p> <p><i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></p> <p><i>Price and volume forecasts and the basis for these forecasts.</i></p> <p><i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i></p>	<p>Tungsten is a metal that, due to its unique properties, cannot be replaced in most of its applications, the worldwide demand for tungsten will grow with, at least, the growth rate of general economy.</p> <p>The main producer of tungsten is China with a share of 75 to 80% of worldwide supply. As there is a trend to diversify supply and a widely spread desire to be independent from China, the request for tungsten raw material from western producers is forecast to increase significantly over the next years.</p> <p>Some of the worlds existing tungsten mines have been operation for up to 110 years and their lifespan is coming to an (economic) end. Other existing mines are faced by sharply increasing mining costs. This is forecast to bring prices for tungsten concentrate higher.</p> <p>There is increasing global demand for clarity over supply for ESG reasons and a demand to reduce carbon footprint for end users, as such Hemerdon is well placed to provide clean, conflict free tungsten and tin to the global market. The concentrate quality, that Hemerdon will deliver, allows the usage in all applications for concentrate (for APT- and for Ferrotungsten- production).</p> <p>Previous operator of the project Wolf Minerals sold all of the concentrates produced to Global Tungsten & Powders (GTP) and Wolfram Bergbau und Hutten (WBH) and TW are in discussions with both parties amongst others regarding offtake. There is no reason to believe that sales of concentrates from the project cannot be resumed.</p>
Economic	<p><i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i></p> <p><i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></p>	<p>All material contained within the reserve is deemed to generate positive cash flow based on the economic input parameters.</p> <p>A life of mine plan has been generated from the 2022 pit designs. Review of the current TW financial model has shown that the LOMP yields a net positive cashflow and NPV.</p> <p>A sensitivity analysis of significant assumptions and inputs has been undertaken including mining costs, processing costs, APT price, exchange rate WO3 head grade and metal recoveries as part of this reserve statement and all sensitivities are believed to be within a reasonable tolerance for the stated reserve.</p>

Criteria	JORC Code explanation	Commentary
		<p>The financial modelling has included revenue from an aggregates which process rejects from the ore-sorting plant. The aggregates represents approximately 20% of the total revenue.</p> <p>The Competent Person confirms that the project does not rely on this aggregates material to have a positive cashflow/Net Present Value, and the project is still viable if this material is treated as waste.</p>
Social	<i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i>	To the best of the Competent Persons' knowledge all agreements with the Devon County Council and local landowners are in place and are current with all key stakeholders.
Other	<p><i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></p> <p><i>Any identified material naturally occurring risks.</i></p> <p><i>The status of material legal agreements and marketing arrangements.</i></p> <p><i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals.</i></p> <p><i>There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i></p>	TW is currently compliant with all legal and regulatory requirements and there is no reason to assume any further government or local council permits, licenses, or statutory approvals will not be granted in normal course of business, within the timeframe required by the LOMP.

Criteria	JORC Code explanation	Commentary
Classification	<p><i>The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p> <p><i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i></p>	<p>The Ore Reserves are reported as Proven and Probable categories as per JORC 2012 guidelines.</p> <p>It is the Competent Persons' opinion that the Ore Reserves reflect the deposit accurately given the current level of geological and geotechnical knowledge. This view is supported by recent production history data.</p> <p>No Measured material has been converted into Probable Ore Reserves. Only Indicated material has been converted to the Probable category.</p> <p>The stockpiles are wholly classified as measured within the mineral resources and as such are included within the Proven category. RoM pad ore will be used for commission therefore is not captured in the mine production schedule, but on financials.</p>
Audits or reviews	<p><i>The results of any audits or reviews of Ore Reserve estimates.</i></p>	<p>Independent review of work underpinning the Ore Reserves is currently being undertaken by third party consultants. Their optimisation work confirmed the ultimate and optimal pit used by Mining Plus as a basis for the final pit design that has resulted in this Ore Reserve Estimate.</p> <p>TW's geotechnical study into pit slope designs has been independently reviewed by SLR. The Ore Reserve has been peer reviewed internally and is in line with current industry standards.</p>
Discussion of relative accuracy/confidence	<p><i>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if</i></p>	<p>The Hemerdon Mine was in production from 2015 through to October 2018 and has over three years of historic process production data and costs.</p> <p>Mining costs are as per the current mining services contract that is in place. Most project capital costs to build the operation have been expended by Wolf Minerals. Some additional capital for plant modifications is planned by TW prior to re-start of operations.</p> <p>The Wolf Minerals grade control program (2015-2018) yielded good correlation between assay results and the grade control model on both an individual SMU basis. There was also excellent correlation between the model and the metal produced within the plant over weekly, monthly and annual periods. Both the grade control model and MPF production positively reconciled against the Wolf resource model. The current resource model developed by Mining Plus and TW includes geostatistical work that goes some way to account for this historic positive reconciliation.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></p> <p><i>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i></p> <p><i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></p>	<p>All modifying factors have been applied to the pit design and Ore Reserves calculation on a global scale as current local knowledge and data reflects the global assumptions.</p> <p>Excavation in the pit and geological mapping have supported the validity of the resource model to a high degree of confidence.</p>