ASX Announcement

25 March 2015

Wolf Minerals Announces 34% Increase in Ore Reserves at Hemerdon Tungsten and Tin Project

Wolf Minerals reports 2012 JORC compliant Ore Reserves and Mineral Resource Estimate.

Specialty metals development company, Wolf Minerals Limited (**ASX: WLF, AIM: WLFE**) ("**Wolf**" or "**the Company**") is pleased to announce details of a major increase in the Ore Reserves at its wholly owned Hemerdon tungsten and tin project ("**the Project**") in Devon, in southwest England.

The new Ore Reserve is 35.7Mt at 0.18% WO_3 and 0.03% Sn (reported above a 0.05% W (0.063% WO_3) cut-off), and is a 34% increase on the previous Ore Reserve reported in the Definitive Feasibility Study (**"DFS"**) in 2011. It comes as a result of a six hole geotechnical drilling program which targeted the perimeter of the open pit, completed in Q4, 2014 (refer ASX announcement dated 1 December 2014).

Consistent with Wolf's expansion plans for the Project, the drilling program was designed to better understand the strength of the wall rocks with a view to steepening the final pit slope, resulting in a deeper open pit and increased Ore Reserves.

The program has been successful and concluded that the pit walls can be steepened. This has resulted in a new pit design that takes the pit floor approximately 65 metres deeper, increasing the Ore Reserves by 34% (detailed in Table 1 below). This equates to a 34% increase in mine life or around three years.

Wolf Minerals Limited
ASX: WLF AIM: WLFE

Capital Structure

807.8M ordinary shares
7.1M unlisted options

Mkt Cap @ 38.5c: ~A$311.0M
Mkt Cap @ 19.75p: ~£159.55M

Board of Directors

John Hopkins OAM
Non-Executive Chairman

Russell Clark
Managing Director

Ronnie Beevor
Non-Executive Director

Nick Clarke
Non-Executive Director

Chris Corbett
Non-Executive Director

Don Newport
Non-Executive Director

Michael Wolley
Non-Executive Director

Richard Lucas
Chief Financial Officer

Pauline Carr and Richard Lucas
Joint Company Secretaries

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***Table 1** - Table showing 2015 Ore Reserves compared to the previous 2011 DFS Ore Reserves*

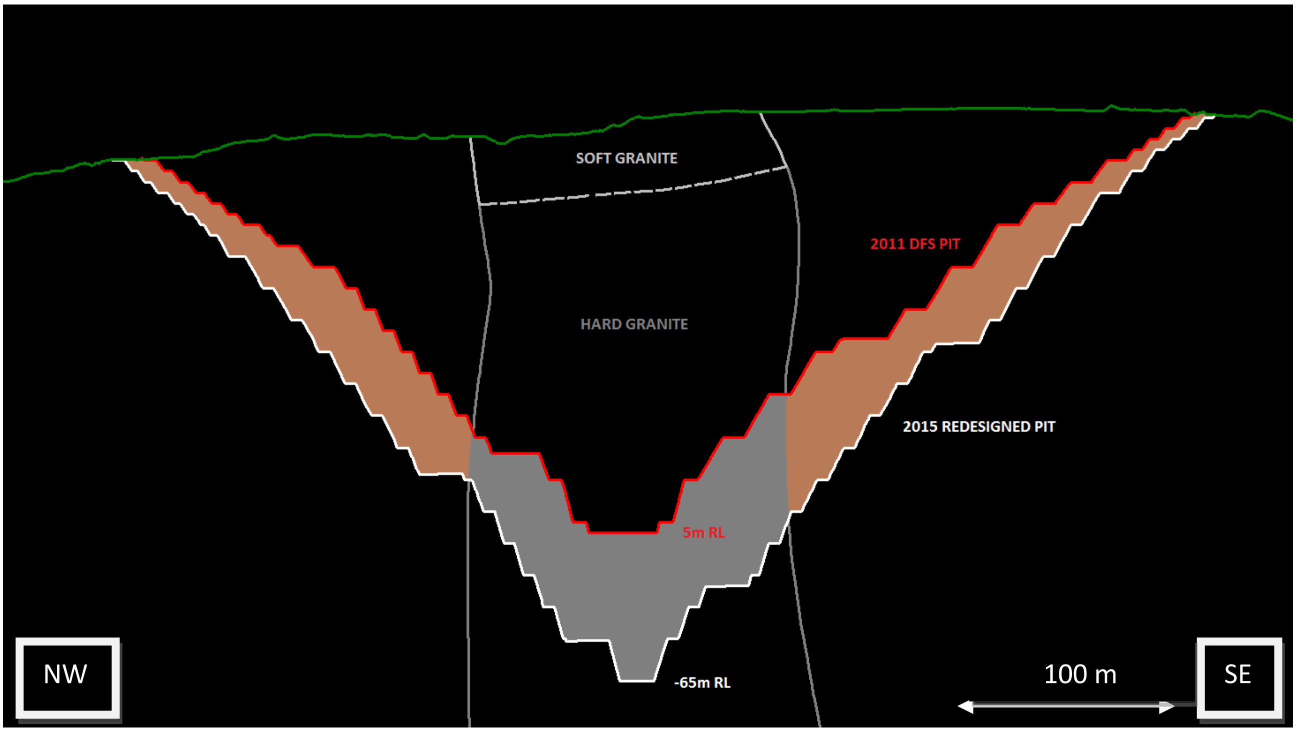
	Reserve Category	Tonnage (Mt)	WO_3 Grade (%)	Sn Grade (%)
2011 DFS	Proved	23.5	0.19	0.03
	Probable	3.2	0.18	0.03
	Total	**26.7**	**0.19**	**0.03**
2015 Update	Proved	27.9	0.19	0.03
	Probable	7.8	0.15	0.02
	Total	**35.7**	**0.18**	**0.03**

Commenting on the increased Ore Reserves, Russell Clark, Managing Director of Wolf, said:

"*This is very pleasing news. A 34% increase in the Ore Reserves, which has resulted from steepening the open pit walls within the existing planning permission boundary, is effectively an increase in mine life of 34% or around three years, assuming a five and a half day working week. This is the next stage of optimising the Drakelands Mine, and comes ahead of commencing operations at the new process plant. The Project remains on schedule and is fully funded and commissioning of some of the installed equipment has commenced, with a view to introducing ore into the plant in July 2015."*

The geotechnical report was prepared by Mr Ricky Collins of SLR Consultants. SLR has particular expertise in the geotechnical investigation, analysis and design of rock slopes of mines, tips, landfills and dams. Mr Collins is a Technical Director of SLR with over 25 years' experience with mine waste management and geotechnics, focusing on the stability analysis of both soil and rock slopes.

A typical cross section of the open pit is shown below, and shows the increased Ore Reserve that has resulted from steepening the pit walls.



The increase in pit depth is such that it extends into Inferred material below the bottom of the majority of the drill holes in the deposit. As such the current pit design includes granite mineralisation that cannot be reported as Ore Reserves under JORC 2012 guidelines. However, Wolf intends to undertake additional work to increase the confidence of the resource at depth, resulting in the potential to further increase the 2015 Ore Reserves detailed in Table 1 above and further extend the mine life.

The 2015 revised Ore Reserve is based on work done by Mr Rick Taylor, who is a Chartered Professional Member of The Australasian Institute of Mining and Metallurgy. Mr Taylor is a full time employee of Wolf Minerals Limited, and takes responsibility for the Ore Reserves. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC, 2012). Mr Taylor consents to the inclusion of Table 1 based on his information in the form and context in which it appears.

Summary of Information to Support Ore Reserve Estimates

Ore Reserve Estimate upgrades for the Hemerdon Project are supported by the JORC Table 1 (Section 4) document provided in Appendix 1 of this announcement and located at www.wolfminerals.com.au. The following summary of information for Ore Reserve Estimates is provided in accordance with Chapter 5.9 of ASX Listing Rules.

Economic assumptions

Economic viability is indicated by cash flow modelling for the full operation over the life of the mine that shows positive net present value with positive annual cash flows during production years. In some scenarios, cash flows may be negative over short periods when capital investments are planned which lead to increasing the net present value. Revenues are forecasted from scheduled tungsten and tin concentrate production, expected prices and anticipated foreign exchange rates.

Forecasted costs include mining and processing as well as all aspects of site support and corporate overhead including marketing and mine closure. A schedule of planned capital investment is also included for ongoing mine development and for sustaining the operation and its assets. Taxation modelling reflects applicable current tax laws including the treatment of capital investment and asset depreciation.

Criteria used for classification

The stated Proved and Probable Ore Reserves are derived from the Measured and Indicated Mineral Resources respectively, after consideration of all mining, metallurgical, social, environmental and financial aspects of the project. There are no Inferred Resources or unclassified materials included in the stated reserve numbers.

Mining method and mining assumptions, including mining recovery and mining dilution factors

The Ore Reserves have been calculated using a detailed final pit design derived from the results of an open pit optimisation study. These include the latest geotechnical pit slope angles, operational costs, processing data and marketing information. The open pit mining method was defined in the DFS and is still applicable. The orebody outcrops on surface over its entire strike length and within the current planning permission boundary (mining lease). No pre-strip or waste mining is necessary other than for infrastructure construction purposes.

No additional mining dilution or mining recovery factors have been applied to the pit optimisation as these are largely accounted in the Uniform Conditioning recoverable resource methodology used in the formulation of the current resource model.

Cut-off grades

Cut-off grades have been calculated based upon current and forecast revenue, costs and modifying factors predicted for a period of three years. The cut-off calculation includes all operating costs associated with the extraction, processing and marketing of ore material. Individual cut-off grades have been calculated for both weathered granite and fresh granite mineralised zones. In both cases a tungsten (W) cut-off has been applied which has been calculated by inclusion of tin credits.

Processing methods selected and other processing assumptions

The concentration of the granite ore is by traditional crushing, milling, dense medium separation and floatation processes. The plant design is based upon previous metallurgical test work and assumptions detailed in the DFS. The following metallurgical recovery factors have been applied:

Weathered granite: WO_3 – 57.6%, Sn – 65.0%
Fresh granite: WO_3 – 65.7%, Sn – 55.1%

The current grade control drilling has shown deleterious elements to be minimal in the granite ore but present along the granite contact. Provision has been included in the processing plant design for the removal of contaminants as required to produce concentrates to the required specification.

Estimation methodology

The resource model used for pit optimisation was developed by SRK Consulting (Perth Office) in 2010. This model is still current and forms the basis of the 2015 Mineral Resource Estimate stated below. The processing plant recovery and cost assumptions are taken from the DFS and are still applicable. Processing is due to commence in the 3rd quarter of 2015. Mining costs have been revised in line with the current mining services contract that has been in place since site construction commenced at the start of 2014. The US$:GBP exchange rate and the W and Sn metals prices were updated in line with the three year forecast. Grade control costs are actuals from the current grade control programme on site. Selling costs, marketing costs and royalties used in the optimisation have been agreed contractually. A discount rate of 8% has been used in this update for cash flow calculation purposes.

Material modifying factors

The material modifying factors applicable to mining are the mining dilution and metallurgical recovery detailed above. Excavation in the pit and geological mapping are supporting the validity of the resource model to a high degree of confidence.

The Project is in compliance with all its environmental and other regulatory requirements.

Minerals Resource Estimate – JORC 2012 Compliant

Wolf also provides a new Mineral Resource Estimate for the Hemerdon project. The previous Mineral Resource Estimate (401.4 million tonnes at 0.13% WO_3, 0.02% Sn), reported in the DFS of 2011, was compliant with the JORC 2004 code. The JORC code was updated in 2012 and Wolf now provides this revised Mineral Resource Estimate, compliant with the new code.

The revised Mineral Resource Estimate is detailed in Table 2 below:

***Table 2** – Hemerdon Project Mineral Resource Estimate, JORC 2012*

Mineral Resources	Tonnage (Mt)	WO_3 Grade (%)	Sn Grade (%)
Measured	39.9	0.18	0.02
Indicated	18.7	0.16	0.02
Subtotal: Measured + Indicated	**58.6**	**0.17**	**0.02**
Inferred	86.6	0.14	0.02
Total: Measured + Indicated + Inferred	**145.2**	**0.15**	**0.02**

It is reported above a 0.05% W (0.063% WO_3) cut-off and is based on work done by Mr Daniel Guibal, who is a Chartered Professional Fellow of The Australasian Institute of Mining and Metallurgy. Mr Guibal is employed by SRK Consulting and takes responsibility for the Mineral Resource Estimate. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC, 2012). Mr Guibal consents to the inclusion of Table 2 based on his information in the form and context in which it appears.

There has been no new data relevant to the resource since the 2010 estimation and the broader mineral inventory remains unchanged.

In order to establish the conformity of the current resource with JORC Code 2012, SRK prepared the Table 1 of the Code (Checklist of Assessment and Reporting Criteria), which shows that all aspects of the resource estimation were covered in 2010.

The reduction in resources is related to the "prospect for eventual economic extraction". The historic metallurgical testwork indicated that recovery of tungsten within the Killas (the meta-sedimentary rocks surrounding the granite body) was possible. However, no further testwork has been completed at this time. Accordingly, Wolf currently considers it prudent to exclude the Killas hosted mineralisation from the resources, to be revisited in the future. Therefore only the granite portion of the resource has been considered.

Once the mine is operational Wolf will look at the metallurgical opportunities available with the Killas, such that it may be available to be included in future Mineral Resource Estimates.

Summary of Information to Support Mineral Resource Estimates

Mineral Resource Estimate upgrades for the Hemerdon Project are supported by the JORC Table 1 (Sections 1 to 3) document provided in Appendix 1 of this announcement and also located at www.wolfminerals.com.au.The following summary of information for Mineral Resource Estimates is provided in accordance with Chapter 5.8 of ASX Listing Rules.

Geology and geological interpretation

The geology of the Hemerdon deposit comprises of a granite intruded into a series of weakly metamorphosed siltstones, locally called Killas. Associated with the intrusion of the granite are a series of greisen veins (quartz and mica) which contain cassiterite and wolframite. Although principally in the granite these veins also occur in the host Killas. Surficial weathering of the granite has altered the primary quartz, feldspar, muscovite assemblage to clay minerals, mainly kaolinite, and remnant quartz (weathered granite).

The 2010 geological model used a geological map and two geological sections from the 1980 feasibility study by AMAX combined with reviewed survey data, AMAX original logging from 45 diamond holes as well as the results of the 2008 drilling campaign.

A different geological interpretation, if used in the resource estimate, may affect the results of the resource estimate slightly, however, changes in interpretation are likely to translate into only small changes in the geological model (local changes in the contacts between lithologies).

Drilling techniques

The original AMAX drilling was completed in 5 phases and included diamond drilling (single tube and wireline), reverse circulation drilling and air-flush percussion drilling. There were 416 percussion holes (8,022 m), 39 Reverse Circulation holes (3,596 m) and 77 HQ diamond drillholes (13,782m), that is a total of 532 holes for 25,400 m. The holes were drilled on a 50 m x 50 m pattern orientated with respect to the mineralised sheeted vein system. Hole inclination was in general –60°. Most of the DD holes were drilled to a maximum of 20 -30 m below sea level.

In 2008, Wolf Minerals drilled 6 inclined diamond drillholes (1,064 m), dipping -60° and targeting essentially the contact granite-sediments (killas). This drilling confirmed results from the earlier Amax work.

Sampling and sample analysis method

The historical AMAX sampling and sample preparation procedures were under the direction and control of Professor. Michel David, a very reputable geostatistician,

Sample preparation for the diamond drill cores included the following steps: 3m long samples are cut in half, with one half retained, the other crushed to -1/2". The sample is further crushed down to 1.7-3.0mm before being riffle split to 1kg. Coarse rejects are retained. The next step is milling in a Tema Mill down to 850 µ. The sample is then coned and quartered to a 250 -300 g subsample which is milled (Tema Mill) to 250 µ. After this, the sample is split into 3 packets of about 80 g each for analysis. The main assay techniques used were atomic absorption and X-ray fluorescence.

The check samples from the retained ½ cores taken by SRK Exploration in 2007 were prepared with the same protocol, with the exception of the final milling which was 100 µ instead of 250 µ. Assaying was performed by SGS Laboratories.

Wolf undertook a limited amount of drilling (6 diamond holes) in 2008. Half 3m cores were used for bulk density measurements, sampled and sent for assaying to Stewart Group OMAC Laboratories in Loughrea (Ireland) and the other half was sent to Australia for metallurgical testing. The preparation of the samples included the following steps; sample reduction to -2 mm by jaw crusher, riffle splitting followed by milling to 100 µ, XRF assaying.

Criteria used for classification

The process used for classification is automatic. All 25 x 25 x 10 m blocks with regression slopes Z|Z* greater than 0.7 were classified as well estimated (S1). The classification is based on larger groups of blocks (125mX by 125mY by 30mZ) corresponding to meaningful production units.

A mathematical closing of S1 was performed: this was the basis of the definition of Measured + Indicated Resources (S1c). The results were manually edited to eliminate isolated blocks, as well as all blocks below RL -100 m. Blocks not classified as Measured or Indicated were classified Inferred.

Then within S1c, the blocks with a regression slope greater than 0.9 are chosen and smoothed through the same closing operation. After cleaning the resulting blocks are classified as Measured. The Indicated blocks are the ones belonging to S1c which are not classified as Measured.

Estimation methodology

The estimation technique for W is Uniform Conditioning using the specialised geostatistical software, Isatis. For Sn, Ordinary Kriging is used.

The various steps of the estimation are the following:

1) 309 drillholes are used, with 4,765 5 m composites, flagged by geology and weathering.
2) Declustering by 75 m x 75 m x 10 m cells. No top-cuts used, but restricted neighbourhood to limit impact of high values.
3) Variography of W and Sn within the three geological domains (granite, soft granite, killas). The continuity is generally good particularly in the granite, with maximum range around 500 m. Nevertheless nugget effect + short range structure represent over 60% of the total variability.
4) Block model based on 25 m x 25 m x 10 m panels. The panel sizes are chosen in relation to the average drilling density.
5) Ordinary Kriging estimation of panels, after neighbourhood analysis to optimise quality of kriging. Two kriging runs are used to fill the block model. In the first run up to 48 composites are used to estimate a panel, a topcut of 1% W (0.6% in the Killas) is applied to composites distant by over 8 m from the centroid of the panel being estimated.
6) Validation of Kriging results through statistics and swath plots. Quality of estimation of estimated panels measured by the slope of regression.
7) Uniform conditioning (UC) for 12.5 m x 12.5m x 5 m Selective Mining Units (SMU) for an open pit operation.

Currently there are no geostatistical estimations made on deleterious elements,

Cut off grades

Grade-tonnage curves were provided for a range of cut-offs. Optimal cut-off is determined from the mining studies.

Material modifying factors

The Drakelands Mine will be mined by open pit. The estimation method used (UC) takes into account the mining selectivity, based on an assumption of a 12.5 m x 12.5m x 5 m SMU. As a result the mining dilution and loss is incorporated in the resource.

Metallurgical tests by AMAX and in 2009 by GR Engineering Services indicate that a tungsten recovery of 57.6% can be achieved in the weathered granite and 65.7% for the fresh granite.

The mine is located within an environmentally sensitive area. Wolf engaged the Devon County Council early to update the existing 1986 planning permission. A modification order in January 2011 aligns the planning permission conditions to current ecological and environmental legislation. The project is in compliance with all its environmental and other regulatory requirements.

Definitions and Glossary

"DFS"	the definitive feasibility study relating to the Hemerdon Tungsten and Tin Project, the findings of which were published by the Company on 16 May 2011 and available for review at www.wolfminerals.com.au
"JORC Code 2012"	the Australasia Code for Reporting of Mineral Resources and Ore Reserves 2012 Edition which sets out the minimum standards, recommendations and guidelines for the Public Reporting of Exploration Results, Mineral Resources and Ore Reserves in Australasia.
"Inferred"	as defined in the JORC Code 2012, is that part of a mineral resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
"Indicated"	as defined in the JORC Code 2012, is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.
"Measured"	defined in the JORC Code 2012, as that part of a measured Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.
"Proved & Probable"	the economically mineable part of a Measured or Indicated mineral resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could be reasonably justified. Ore reserves are sub-divided in order of increasing confidence into Probable and Proved.

Competent Persons Statement

The information in this report that relates to Mineral Resources is based on information compiled by Mr Daniel Guibal, who is a Chartered Professional Fellow of The Australasian Institute of Mining and Metallurgy. Mr Guibal is employed by SRK Consulting and takes responsibility for the Mineral Resource Estimate. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC, 2012). Mr Guibal consents to the inclusion of his information in the form and context in which it appears.

The 2015 revised Ore Reserve is based on work done by Mr Rick Taylor, who is a Chartered Professional Member of The Australasian Institute of Mining and Metallurgy. Mr Taylor is a full time employee of Wolf Minerals Limited, and takes responsibility for the Ore Reserves. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC, 2012). Mr Taylor consents to the inclusion of his information in the form and context in which it appears.

ENDS

Russell Clark, Managing Director

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Attachment: Appendix 1 - JORC 2012 Table 1 Report

About Wolf Minerals

Wolf Minerals is a dual listed (ASX: WLF, AIM: WLFE) specialty metals company. With global demand for tungsten rising and future global production expected to be constrained, Wolf Minerals is developing the third largest global tungsten resource at its Hemerdon project, located in south west England. The Company has strong cornerstone investors and project finance and environmental permitting in place. Wolf has also secured all major contracts for the project, with GR Engineering appointed the EPC contractor and CA Blackwell being awarded the mining contract. Production is expected to commence in mid-2015.

Go to this link on the web site to see live streaming at the project site:

http://www.wolfminerals.com.au/irm/content/live-streaming-video.aspx?RID=326

APPENDIX 1 - JORC Code, 2012 Edition – Table 1 Report – Hemerdon Tungsten Deposit

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• The historical AMAX samples taken during the 1976-1980 period were assayed essentially by three analytical companies: Robertson Research International, Huntings Technical Surveys Ltd and Alfred H. Knight Ltd. Most of the diamond drill core assaying was done by Alfred H. Knight. • Sampling and sample preparation procedures were under the direction and control of Prof. Michel David, a very reputable geostatistician, • Sample preparation for the diamond drill cores included the following steps: 3m long samples are cut in half, with one half retained, the other crushed to -1/2". The sample is further crushed down to 1.7-3.0mm before being riffle split to 1kg. Coarse rejects are retained. The next step is milling in a Tema Mill down to 850 µ. The sample is then coned and quartered to a 250 -300 g subsample which is milled (Tema Mill) to 250 µ. After this, the sample is split into 3 packets of about 80 g each for analysis. • Main assay techniques are atomic absorption and X-ray fluorescence. • The check samples from the retained ½ cores taken by SRK Exploration in 2007 were prepared with the same protocol, with the exception of the final milling which was 100 µ instead of 250 µ. Assaying was performed by SGS Laboratories. • Wolf Minerals undertook a limited amount of drilling (6 diamond holes) in 2008. Half 3m cores were used for bulk density measurements, sampled and sent for assaying to Stewart Group OMAC Laboratories in Loughrea (Ireland) and the other half was sent to Australia for metallurgical testing. The preparation of the samples included the following steps; sample reduction to -2 mm by jaw crusher, riffle splitting followed by milling to 100 µ, XRF assaying.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• AMAX drilling was done in 5 phases and included diamond drilling (single tube and wireline), reverse circulation drilling and air-flush percussion drilling. There were 416 percussion holes (8022 m), 39 Reverse Circulation holes (3596 m) and 77 HQ diamond drillholes (13782m), i.e a total of 532 holes for 25400m. The holes were drilled

APPENDIX 1 - JORC Code, 2012 Edition – Table 1 Report – Hemerdon Tungsten Deposit

Criteria	JORC Code explanation	Commentary
		on a 50 m x 50 m pattern orientated with respect to the mineralised sheeted vein system. Hole inclination was in general –60°. Most of the DD holes were drilled to a maximum of 20 -30 m below sea level • As indicated above, in 2008, Wolf Minerals drilled through the local contractor Hydrock 6 inclined diamond drillholes (1064 m), dipping -60° and targeting essentially the contact granite-sediments (killas). • The holes do not appear to have been orientated • A trenching programme took place starting in 1978, to investigate the structure and the geometry of the sheeted vein system, Sixteen trenches were dug across the granite outcrop.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• For the AMAX samples no recovery information is available, but ½ cores of the diamond drilling were generally stored and are available for inspection. They are in variable condition after 30 years' storage, and were reviewed by SRK Exploration in 2007. The upper part of the granite is heavily kaolinised ("soft granite") and crumbling, but the use of relatively large diameter holes helped the recovery.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• In the 2008 drilling, one of the drill rigs (track mounted Casagrande C6) used a large diameter (102 mm) Geobore S core-barrel to improve recovery in the weathered kaolinised section of the orebody. • Recovery was excellent in the fresh material.
	• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• The AMAX documentation as well as the 2008 drilling do not suggest any relationship between sample recovery and grade. There is no indication of bias due to recovery issues.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• The exploration work by AMAX was conducted to a high standard, and paper logs were created for most holes. SRK Exploration relogged the diamond drillholes in 2007, at a time where the original AMAX logs were not available, and found no major issue. The original and revised logs were used to build the geological model, essentially by allowing to model the contacts between the relevant lithologies (granite/soft granite/killas).

APPENDIX 1 - JORC Code, 2012 Edition – Table 1 Report – Hemerdon Tungsten Deposit

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• The original logging was essentially qualitative, so was the logging of the 2008 campaign • In general, the holes were logged in their totality
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Sampling and sample preparation was described above under 'sampling techniques'. • Samples were dried before splitting. • It is considered that all sub-sampling and lab preparations are satisfactory for the intended purpose. • The AMAX sampling procedures were under the control of an expert geostatistician Prof Michel David and are considered as adequate for the purpose. • Details of the QA/QC procedures are described in the next paragraph. • The sample size (3m for the diamond drillholes) is considered as appropriate for the type of material being sampled.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their*	• The assaying techniques were described above under 'sampling techniques' • SRK did not have access to the parameters used by the laboratories, but the QA/QC programme results show that there was no major issue.

APPENDIX 1 - JORC Code, 2012 Edition – Table 1 Report – Hemerdon Tungsten Deposit

Criteria	JORC Code explanation	Commentary
	derivation, etc.	
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Quality control procedures for AMAX included standards ("Worldwide controls) in each batch and 1 in 20 samples was re-assayed ("check sample") • The 2007 resampling program of SRK exploration (891 samples) used the following QA/QC procedures: ➢ Standards: 2 certified Canadian Reference Materials obtained from the Canada centre for Mineral and Energy Technology were used: BH-1 with a nominal value of 0.422% W and MP-2 with nominal values of 0.65% W and 0.043%Sn. The results indicate a problem with BH-1. They are consistently lower than the nominal value 0.422% W, which suggests that this nominal value is wrong and more likely close to 0.414%. Another, less likely explanation (because of the consistency of the results) is that there is a systematic bias of about 2.5% in the laboratory. The variability of the results is quite acceptable, higher for field submissions than for laboratory ones, as expected. As for MP-2, for W, the results are mixed. While the precision looks reasonable for both Field and Laboratory standards, there might be a bias of about 1.5% in the laboratory results (The Field results are on average correct). For Sn, the accuracy looks reasonable, the precision is not as good as for W, with a number of values outside the 2 standard deviations interval. This may simply be a consequence of the low grade of the standard. ➢ Pulp and coarse duplicates: around 1 in 10 samples, either after initial crushing (coarse duplicates) or at the laboratory (pulp duplicates). The results are good for both duplicates, better for pulp duplicates as expected: no bias is apparent, and the precision is reasonable. • The 2008 programme used the same QA/QC procedures as the 2007 one with satisfactory results for both standards and duplicates. In addition, 1 in 50 samples was used for screen testing with over 90% passing 100 µ.

APPENDIX 1 - JORC Code, 2012 Edition – Table 1 Report – Hemerdon Tungsten Deposit

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	• In 2007, as already mentioned, SRK Exploration undertook a programme of relogging of all the AMAX diamond drillholes. 10 to 15% of the re-logged holes (891 samples taken from the remaining half cores of 16 drillholes) were then re-sampled and assayed. The re-sampled drillholes were selected so that all existing sections were represented if possible (i.e half cores could be found and were usable). The selected drillholes are: DDH1011 DDH1015 DDH1019 DDH1026 DDH1027 DDH1034 DDH1035 DDH1037 DDH1040 DDH1042 DDH1043 DDH1060 DDH1063 DDH1064 DDH1066 DDH1068 The sample preparation was similar to the original AMAX one with the exception of the final crushing to 100 µ instead of 250 µ. • Comparisons between the original AMAX assay results and the re-assays show poor correlation, particularly for higher grade values. The divergence in the higher grade data was confirmed by considering only grades less than 1% WO_3, which improved the correlation. A plausible explanation is that over time the higher grade remaining sections of the cores were taken for use as examples, so called niche sampling. Most of this is undocumented which means that these high grade samples are no longer accessible. • In order to get some more insight into the issue, it was decided to make comparisons by geological domain. To that effect, the original mostly 3m samples were composited downhole into 5m composites and comparisons between AMAX assays and re-assays were carried out within each geological domain. The composites show lower bias than the 3m samples, probably due to the smoothing of the high grades. Arbitrarily removing the 5% highest original composites for all geological domains, the bias is either reduced or reversed. For the Granite, where most of the resource can be found, the bias of the new composites changed from -5.6% to +2.1%. • It is therefore reasonable to accept that the new data are probably biased low, in particular where the original samples were high-grade. “Niche” sampling seems to have played a significant role in this result. • In conclusion, the logical course of action for the resource estimation was to ignore the new assay results and to work with the original

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Criteria	JORC Code explanation	Commentary
		values exclusively.
	• *The use of twinned holes.*	• No holes were twinned.(the re-logging and re-sampling of existing holes was considered a better approach at the time)
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• The AMAX and 2008 data are well documented, and stored in electronic format. The original AMAX data procedures are not known, but AMAX was a very reputable company.
	• *Discuss any adjustment to assay data.*	• No adjustment was made to assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• The original survey data by AMAX are available, so are the checks made by AMAX • In 2008, the drillhole collar survey was conducted by Paul Fassam Geomatics (chartered land surveyor). They validated the site datum using GPS, recorded the collar locations of the new exploration holes as well as the dip and dip direction of the holes. There was doubt about the reliability of the survey on one hole (WDD001), and for that reason this hole was not used in the resource estimation.
	• *Specification of the grid system used.*	• The project survey uses the National Grid and the Ordnance Datum Newlyn near Penzance in Cornwall. The AMAX study and design was based on a local grid. The data was transformed to the national Grid by Expedio, a geo-science information management company. The transformation was created by comparing known points in the local grid and the National Grid rather than relying on AMAX definitions of the local grid.
	• *Quality and adequacy of topographic control.*	• The topographic data appear adequate and reliable.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• No exploration results, resource drilling only.
	• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and*	• The data spacing and distribution (diamond drilling grids on average of 50m x 50 m) has been considered appropriate for the Mineral Resource estimation procedures and classifications applied to this

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Criteria	JORC Code explanation	Commentary
	classifications applied.	Hemerdon estimation by the external consultant doing the resource. See below in resource section for further information.
	• *Whether sample compositing has been applied.*	• Sample compositing to 5 m composites has been applied to the mostly 3 m samples, because 5 m is the assumed bench height in the study and the Selective Mining Units considered are 5 m high.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• The drillhole orientation is such that the majority of veins are intersected at approximately right angles, so no bias is likely to generated by the drilling
	• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• As indicated, the drillhole orientation is such that no sampling bias is generated by the drilling.
Sample security	• *The measures taken to ensure sample security.*	• For the historical data, sample security is not documented, but AMAX is a very reputable company, and there is no reason for suspecting security issues.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• SRK Exploration reviewed the AMAX drilling in 2007, and found no major issues.

Section 2 Reporting of Exploration Results

NOT APPLICABLE TO THIS RESOURCE UPDATE

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Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes* • *Data validation procedures used.*	• The database of the AMAX drilling was compiled from the written records and thoroughly checked for transcription errors. • More recent drilling data were captured electronically, and checked carefully. • SRK Exploration did a thorough review of the logging data as well as the historical assays. The final database itself was checked routinely for overlapping samples, survey errors, transcription problems, etc
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• SRK Exploration did a significant amount of work at Hemerdon, so that the competent person responsible for the resource estimate, Daniel Guibal, did not require a site visit, relying on the work of his SRK Exploration colleagues for the geological aspects of the resource estimation.
Geological interpretation	• *The use of geology in guiding and controlling Mineral Resource estimation.*	• The original 2008 model was essentially based on the simple geological map and two geological sections from the 1980 feasibility study by AMAX, combined with lithological logging information from 45 diamond holes • The geology of the Hemerdon deposit comprises of a granite intruded into a series of weakly metamorphosed siltstones, locally called Killas. Associated with the intrusion of the granite are a series of greisen veins (quartz and mica) which contain cassiterite and wolframite. Although principally in the granite these veins also occur in the host Killas. Surficial weathering of the granite has altered the primary quartz, feldspar, muscovite assemblage to clay minerals, mainly kaolinite, and remnant quartz. The geological modelling aimed to delimit the boundary of the granite and the depth of weathering (locally the weathered material is called soft granite). It was not considered viable to model individual greisen veins. Georeferencing of the geology plan and sections was completed in gOcad. The plan had coordinates marked on which were assumed to be the local Ordinance Survey (GB) grid. The sections has RL marked on but their

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Criteria	JORC Code explanation	Commentary
		lateral position and angle was estimated from drillhole positions marked on the sections. Granite-Killas contacts and Hard Granite-Soft Granite contacts were digitised from the sections and extracted from existing logging. These data were combined to form surfaces for the east and west granite contacts and base of weathering. • The final 2010 geological model used reviewed survey data, AMAX original logging as well as the results of the 2008 drilling campaign. • Granite contacts: The east and west granite contacts are well logged in the drilling. Each pierce point was digitised in LeapfrogTM. A series of interpretive data was also digitised to control the surfaces away from the data. Both data were then merged and a surface created. These surfaces were then snapped to the pierce points. A granite solid was created using the domain function and the resulting wireframe exported. • Hard – Soft granite: Inspection of the logging suggested this contact was highly complex. However, it appears that in capturing the original AMAX logging, any mention of kaolin resulted in a KGR logging code. In practice the hard – soft boundary represents the transition from completely kaolinised (i.e. crumbles in your hand) to more competent granite, even if the feldspars are partially kaolinised. It was decided to use the previous surface as a guide as this did not use the summary AMAX logging. The surface was constructed in the same way as the granite contacts and suitable domains created. • Weathering: To assist in mine planning two weathering surfaces were built. In a similar way to the kaolinised boundary the logging of weathering was highly subjective and therefore quite variable. A ‘smoothing’ approach was taken to these surfaces. Where contacts appear reasonable they were used, otherwise interpretive boundaries were digitised. Surfaces for ‘Base of Completely Oxidised’ and ‘Base of moderate Weathering’ were created. No surface for ‘top of fresh’ was created as significant numbers of holes ended in ‘slightly weathered’. The created surfaces were used to construct solids for the purposes of flagging the block model.
	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	• The current geological model appears fairly robust, as the contacts are generally well defined, the limit between soft and hard granite being the more subject to interpretation.

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Criteria	JORC Code explanation	Commentary
	• *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• See above • A different geological interpretation, if used in the resource estimate, may affect the results of the resource estimate slightly, however, changes in interpretation are likely to translate into only small changes in the geological model (local changes in the contacts between lithologies). • Grade Continuity can be affected by numerous factors, including drilling density, which is about 50 m x 50 m, nugget effect, itself linked to the sampling/assaying procedures and geological continuity, which is reasonably established at Hemerdon.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Hemerdon deposit extends over 1 km along strike, 600 m across and about 500m vertically
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	• The estimation technique for W is Uniform Conditioning using the specialised geostatistical software, Isatis. For Sn, Ordinary Kriging is used. The various steps of the estimation are the following: 1) 309 drillholes are used, with 4765 5 m composites, flagged by geology and weathering 2) Declustering by 75 m x 75 m x 10 m cells. No top-cuts used, but restricted neighbourhood to limit impact of high values. 3) Variography of W and Sn within the three geological domainjs (granite, soft granite, killas). The continuity is generally good particularly in the granite, with maximum range around 500 m. Nevertheless nugget effect + short range structure represent over 60% of the total variability 4) Block model based on 25 m x 25 m x 10 m panels. The panel sizes are chosen in relation to the average drilling density 5) Ordinary Kriging estimation of panels, after neighbourhood

Criteria	JORC Code explanation	Commentary
		analysis to optimise quality of kriging. Two kriging runs are used to fill the block model. In the first run up to 48 composites are used to estimate a panel, a topcut of 1% W (0.6% in the Killas) is applied to composites distant by over 8 m from the centroid of the panel being estimated 6) Validation of Kriging results through statistics and swath plots. Quality of estimation of estimated panels measured by the slope of regression 7) Uniform conditioning (UC) for 12.5 m x 12.5m x 5 m Selective Mining Units (SMU), which is a realistic assumption for a future Open Pit operation. .
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	• Previous resource estimates were performed in 2008 by SRK - Mr Daniel Guibal
	• *The assumptions made regarding recovery of by-products.*	• Both W and Sn grades are estimated
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	• Currently there are no geostatistical estimations made on deleterious elements,
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	• See above
	• *Any assumptions behind modelling of selective mining units.*	• See above
	• *Any assumptions about correlation between variables.*	• The correlation between W and Sn is poor
	• *Description of how the geological interpretation was used to control the resource estimates.*	• See above
	• *Discussion of basis for using or not using grade cutting or capping.*	• See above

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Criteria	JORC Code explanation	Commentary
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• See above
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The tonnage are estimated using a constant dry density per lithology, based on the average value of existing measurements: 2.50 for granite, 2.15 for soft granite and 2.85 for Killas
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Grade-tonnage curve are provided for a range of cut-offs. Optimal cut-off is determined from the mining studies.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Hemerdon will be mined by open pit • The estimation method used (UC) takes into account the mining selectivity, based on an assumption of a 12.5 m x 12.5m x 5 m SMU. As a result a large part of the mining dilution and loss is incorporated in the resource. Further dilution, not taken into account, would be due to the mining method itself: the geometry of the blocks is never perfectly regular, occasioning some mixing with the surrounding waste.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Metallurgical tests by AMAX and in 2009 by GR Engineering Services indicate that a tungsten recovery of 58% can be achieved in the soft granite and 66% for the granite. • Results of the metallurgical tests indicate that recovery of W in the Killas is very low (4%), which explains why the killas are excluded from the resources.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of*	• The future mine is located within an environment sensitive area. Wolf Minerals engaged the Devon County Council early to update the existing 1986 planning permission. A modification order in January 2011 aligns the planning permission conditions to current ecological

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Criteria	JORC Code explanation	Commentary
	potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	and environmental legislation. • Important aspects to be considered are noise, dust, vibration, discharge of surplus water, rainfall runoff, management of traffic movement and community consultation.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Density measured by immersion methods on all the samples collected in the 2008 drilling campaign.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The process used for classification is automatic. Firstly, all 25 x 25 x 10 m blocks with regression slopes Z|Z* greater than 0.7 were classified as well estimated (S1). This limit is somewhat arbitrary, but a Z|Z* greater than 0.7 indicates little conditional bias, thus a reasonable estimate, in SRK's opinion. • A classification based on individual blocks is nonsensical (potentially producing the "spotted dog effect" (Stephenson et al, 2006). The classification is based on larger groups of blocks (125mX by 125mY by 30mZ) corresponding to meaningful production units. • A mathematical closing of S1 was performed: this was the basis of the definition of Measured + Indicated Resources (S1c). The results were manually edited to eliminate isolated blocks, as well as all blocks below RL -100 m. Blocks not classified as Measured or Indicated were classified Inferred. • Then within S1c, the blocks with a regression slope greater than 0.9 are chosen and smoothed through the same closing operation. After cleaning the resulting blocks are classified as Measured. The Indicated blocks are the ones belonging to S1c which are not classified as Measured.

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Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• There has been no external audit of this mineral resource estimate by SRK.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• As mentioned, the classification is essentially based on the quality of kriging. • There is clearly more uncertainty at the individual panel level. • As current W recovery for the Killas is very low, there is a case for excluding the Killas from the resources, based on the “prospect for eventual economic extraction”. • No production statistics available – not an operating mine.

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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	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• The Ore Reserves estimate is based upon the Mineral Resource estimate carried out by Mr Daniel Guibal of SRK Consulting (Perth) in March 2015. • The Mineral Resources are reported inclusive of the Ore Reserves.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person is a full time employee of Wolf Minerals and is based permanently on site.
Study status	• *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.*	• Definitive Feasibility Study. The Mine infrastructure and Mill is currently under construction. Excavation of the open pit is underway.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• Cut-off grades have been calculated based upon current and forecast revenue, costs and modifying factors predicted for a period of three years. • The cut-off calculation includes all operating costs associated with the extraction, processing and marketing or ore material. • Individual cut-off grades have been calculated for both weathered granite and fresh granite mineralised zones. • In both cases a tungsten (W) cut-off has been applied which has been calculated by inclusion of tin credits.
Mining factors or assumptions	• *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).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design*	• Ore reserves have been calculated using a detailed final pit design derived from the results of an open pit optimisation study. The input parameters to the optimiser were updated from the Definitive Feasibility Study during January 2015. These include the latest geotechnical pit slope angles, operational costs, processing data and marketing information. • The mining method (open pit) was defined in the Definitive Feasibility Study and is still applicable. The orebody outcrops on surface over its

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Criteria	JORC Code explanation	Commentary
	issues such as pre-strip, access, etc.	entire strike length and within the current planning permission boundary (mining lease). No pre-strip or waste mining is necessary other than for infrastructure construction purposes.
	• *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.*	• The pit rim is constrained by the current planning permission boundary. Recent 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. • SLR consultants completed a six month geotechnical study in February 2015. 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 as the basis for detail pit design. Mining benches are 5m down to 20m below surface followed by 10m benches to 40m below surface. From 40m down the benches will be 15m. • An on-going grade control programme is currently underway with the first 4.5Mt of ore currently drilled out on a 12.5m x 12.5m grid and assays composited over 5m vertical intervals. To date, grade and lithological correlation with both the resource model and the original exploration drilling programme has been very good.
	• *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).*	• The resource model used for pit optimisation was developed by SRK Consulting (Perth Office) in 2010. This model is still current and forms the basis of the 2015 Resource Statement issued by Mr Daniel Guibal of SRK Consulting (Perth Office). • The processing plant recovery and cost assumptions are taken from the Definitive Feasibility Study and are still applicable. Processing is due to commence in the 3rd quarter of 2015. Mining costs have been revised in line with the current mining services contract that has been in place since site construction commenced at the start of 2014. The US$:GBP exchange rate and the W and Sn metals prices were updated in January 2015 in line with the three year forecast. Grade control costs are actuals from the current grade control programme on site. Selling costs, marketing costs, and royalties used in the optimisation have been agreed contractually. A discount rate of 8% has been used in this update for cash flow calculation purposes.
	• *The mining dilution factors used.* • *The mining recovery factors used.*	• No additional mining dilution or mining recovery factors have been applied to the pit optimisation as these are largely accounted in the Uniform Conditioning (UC) recoverable resource methodology used in the formulation of the current resource model.

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Criteria	JORC Code explanation	Commentary
	• *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	• A single "starter" pit and a final pit shell are planned. A minimum bench mining width of 50m has been used to optimise the size and shape of the Stage 1 pit. • The inferred resource material contained within the February 2015 detailed final pit design accounts for only 2.1% of the mineable ore. The financial viability of the project is not sensitive to the exclusion of such a small percentage of inferred material and for the purposes of this Ore Reserve Statement this material has been considered waste. • Infrastructure for the mining method is currently installed or being installed and has been accounted for in the project costing.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *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.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• The concentration of the granite ore is by traditional tried and tested crushing, milling, dense medium separation and floatation processes. Arsenic and Iron contaminants are removed from the pre-concentrates by roasting and magnetic separation. A separate WO3 and Sn concentrate will be produced. • The mill has been designed and is currently being constructed by GR Engineering Services. The design is based upon previous metallurgical test work and assumptions detailed in the DFS report and associated appendices. The following metallurgical recovery factors have been applied: Weathered granite: WO3 – 57.6%, Sn – 65.0%; Fresh granite: WO3 – 65.7%, Sn – 55.1%. • Grade control drilling has shown deleterious elements to be minimal in the granite ore but present along the granite contact. Arsenic and iron introduced to the mill in the form of mining dilution from this contact zone will be blended out to a minimum in the ROM feed and then, if required, removed by a roaster and magnetic separator. • A full scale processing plant has been designed by GR Engineering and is currently under construction on site. • Provision has been included in the processing plant design for the removal of contaminants as required to produce concentrates to the required specification.
Environmental	• *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.*	• Wolf Minerals have attained the required permits and planning permission to effectively operate the Drakelands Mine in accordance with its environmental assessment. • Permits have been attained for protected species disturbance, discharge of mine dewater, impoundment and abstraction of water,

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Criteria	JORC Code explanation	Commentary
		mineral processing and the construction and operation of the mine waste facility. The comprehensive design of the mine waste facility is regulated and incorporates material characterisation and hydrogeological assessments. • To the best of the competent person's knowledge all sites for waste rock and process tailings are compliant and their design and construction have complied with all environmental regulations, permits and recommendations.
Infrastructure	• *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.*	• All infrastructure required for the processing and mining of ore is either in place or is currently under construction.
Costs	• *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 derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* • *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.*	• All costs used in the generation of the Ore Reserve have been based upon current modeling of the life of mine plan and latest financial modeling. • Mining operating costs are based upon the current mining services contract. Processing costs were taken from the DFS having been developed by GR Engineering Services who are currently constructing the process plant on site. • Allowances for the cost of removing deleterious elements are included in the plant operating costs. • Exchange rates used have been sourced from current financial modeling data. • A revenue reduction factor for tungsten and tin has been applied which includes all transport costs and charges applicable to current marketing and off take agreements. • A revenue reduction factor of 4% of NSR has been applied to account for all royalties payable to investors and local land owners.
Revenue factors	• *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.*	• Head grades have been directly derived from the 2015 SRK Mineral Resource Estimate. • Revenue has been based upon a WO3 price of US$350/mtu and a Sn price of US$20,000/t. A USD:GBP exchange rate of 1.55 has been used. These figures are representative of available economic forecasts for the period considered.

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Criteria	JORC Code explanation	Commentary
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• World tungsten production is required to grow by around 3% per annum, rising from 80,000 tons in 2014 to 94,000 tonnes by 2019. • Production in China is expected to remain flat or drop slightly as domestic supply is constrained by production quotas and increased control over illegal mining. • World tungsten demand is expected to increase by around 4% per annum to around 95,000 tonnes by 2019. The market is expected to be relatively balanced between 2015 and 2018, but forecasting a transition to a growing deficit from 2019. Prices are expected to strengthen during this period. • Global Tungsten & Powders (GTP) and Wolfram Bergbau und Hutten (WBH) have signed offtake agreements accounting for 80% of tungsten production from the Drakelands Mine. These offtake agreements run for five years from September 2015 until November 2020. • Considerable interest has been shown for the remaining 20% of the tungsten concentrate from the existing off-takers and from potential new customers. • Test work has shown that the concentration of penalty elements such as sulphur, arsenic and antimony will all be within threshold limits. • Traxys Corporation has signed an agreement to purchase 100% of the tin concentrate. This agreement runs for five years from the date of first delivery of the concentrate and accounts for the entire annual production. • Pricing for the tin concentrate will be based upon the LME cash price at the time of release of final assay results.
Economic	• *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.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• No separate NPVs have been generated as part of the Ore Reserves determination, however all material contained within the reserve is deemed to generate positive cash flow based on the economic input parameters. • A life of mine plan has been generated from the 2015 pit design. Analysis of the LOM physicals within the current Wolf financial model has been shown to yield a net positive NPV.
Social	• *The status of agreements with key stakeholders and matters leading to social license to operate.*	• 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.

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Criteria	JORC Code explanation	Commentary
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. 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.*	• Wolf Minerals is currently compliant with all legal and regulatory requirements. To the best of the Competent Persons knowledge, there is no reason to assume any government or local council permits, licenses, or statutory approvals will not be granted prior to the scheduled commencement of production operations.
Classification	• *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.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• The Ore Reserves have been broken down into Proved and Probable categories as per JORC 2012 guidelines. • 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 grade control drilling results. • No Measured material has been converted into Probable Ore Reserves. Only Indicated material has been converted to Probable category.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• The Ore Reserve has been peer reviewed internally and is in line with current industry standards.
Discussion of relative accuracy/ confidence	• *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 local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific*	• The Ore Reserve has been completed to a DFS standard and as such, confidence in the resultant figures is high. • The Drakelands Mine is well into the construction phase and is due to enter full production in the 3rd quarter of 2015. • Mining costs are as per the current mining services contract that is currently in place. • Project capital costs are fully understood and well managed. • The difference between geostatistical methods used by SRK in the formulation of the 2015 Mineral Resource Estimate, namely Uniform Conditioning with an Information Effect, and Ordinary Kriging, differ in total grade and tonnage by approximately 1%. This is deemed an acceptable level of localised variation. • The current ongoing grade control programme has yielded good

Criteria	JORC Code explanation	Commentary
	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. • *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.*	correlation between assay results and both existing exploration drilling logs and the SRK resource model on an individual SMU basis. • 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. • Excavation in the pit and geological mapping are supporting the validity of the resource model to a high degree of confidence.

Section 5 Estimation and Reporting of Diamonds and Other Gemstones

NOT APPLICABLE