

## Redmoor Resource Update Delivers: Inferred Mineral Resource Tripled and Grade Increased by 17%

ASX Release | 14 February 2019

New Age Exploration Limited (ASX:NAE) is pleased to announce the results of an updated mineral resource estimate for its Redmoor Tin-Tungsten Project in the UK, undertaken through its 50% owned joint venture vehicle, Cornwall Resources Limited ("CRL"). The updated Mineral Resource Estimate has been completed by external consultants Geologica (UK), following the completion of CRL's successful 12-hole 2018 diamond drilling program, aimed at expanding the Redmoor resource.

## Highlights

- Updated Inferred Mineral Resource of 11.7 Mt @ 0.56% WO<sub>3</sub>, 0.16% Sn, 0.50 % Cu (1.17% Sn Eq or 0.82% WO<sub>3</sub> Eq)<sup>3</sup> defined within parallel high-grade zones within the Sheeted Vein System (SVS) using a break even cut-off grade of 0.45% Sn Eq<sup>1</sup>.
- This represents a tripling of the contained metal (now 137kt Sn Eq) compared with the previous March 2018 Mineral Resource estimate (45kt Sn Eq).
- The 1.17% Sn Eq updated Inferred Mineral Resource grade, reported at a 0.45% break-even cut-off grade, is 17% higher than the previous March 2018 Mineral Resource estimate (4.5Mt @ 1.0% Sn Eq).
- Included within the Inferred Mineral Resource is 10.2Mt at 1.26% Sn Eq at a 0.65% Sn Eq total cost cut-off grade, reinforcing the potential to economically mine the resource.
- Continuity of the SVS which hosts the high-grade zones now confirmed over a strike length in excess of 1,000 m and for some 650 m down dip. Ore body geometry appears likely to be amenable to underground mining.
- Redmoor now ranks as the 2nd highest grade undeveloped tin or tungsten Mineral Resource in the world on a grade basis.
- On a contained metal basis, the Redmoor Mineral Resource now ranks the (No. 1) largest undeveloped tin or tungsten underground mining project in the world.
- The majority of the Redmoor deposit remains open down-dip and to the west, where an Exploration Target has been defined in addition to the resource.
- Initial metallurgical testwork program underway at Wardell Armstrong International, Cornwall.

- Mining study to commence shortly aimed at identifying optimal project development path.
- CRL's shareholders will then consider the next steps in the work program aimed at advancing the project towards PFS completion.

NAE Director Joshua Wellisch commented "The updated Redmoor Inferred Mineral Resource further establishes the project as a deposit of global significance. The 1.17% Sn Eq resource grade places the project in an outstanding competitive position relative to other new tin and tungsten projects around the world. The result of the resource update is consistent with the increased grades seen through the 2018 drill program and provides an extremely strong base on which the project will be advanced from this year".

## Introduction

#### **2018 DRILLING PROGRAM**

In June 2018, CRL began a drilling program aimed at further increasing the tonnage and grade of the Redmoor high-grade tin-tungsten-copper resource within the Sheeted Vein System at its Redmoor Project, which previously stood at an Inferred Resource of 4.5 Mt @ 1.0% Sn Eq.<sup>2, 3</sup>

A total of twelve holes were drilled from June to December 2018, for a total of 7,370 m. Every hole intersected mineralisation as targeted in the high-grade zones within the Sheeted Vein System (SVS).

#### REDMOOR GEOLOGY OVERVIEW

#### **Sheeted Vein System (SVS)**

The SVS is a body in which numerous closely-spaced sub-parallel veins carry high-grade tin, tungsten and copper mineralisation. The SVS strikes at approximately 070° and dips at approximately 70° to the north. The SVS has a strike continuity of over 1,000 m with a thickness of approximately 100 m, and a variable known dip extent (250 – 650 m). The SVS is open down-dip over much of its length. Within this volume are a series of discrete high-grade zones, sub-parallel to the overall SVS envelope. The 2018 drilling successfully tested and expanded this high-grade material.

Distribution of the various metals demonstrates zonation within the structure. Tin is richer in the western parts, tungsten to the east and at depth and copper is typically richer higher in the system. All metals overlap to some degree.

#### **INFERRED RESOURCE UPDATE**

In January and February 2019, following receipt of the final assays of the 2018 drill program, a resource update was completed by CRL's resource consultant Paul Gribble of Geologica (UK) and is reported here. Mr Gribble is Cornwall based and has extensive knowledge of tin, tungsten and copper vein deposits in SW England and worked at South Crofty tin mine for more than 7 years. Mr Gribble currently acts as an independent resource consultant for clients which include Barrick Gold.

<sup>2</sup> NAE Announcement, 20 March 2018 – Redmoor 2018 Resource Update

<sup>3</sup> Equivalent metal calculation notes; Sn(Eq)% = Sn%\*1 + WO3%\*1.43 + Cu%\*0.40. WO3(Eq)%= Sn%\*0.7+WO3%+Cu%\*0.28.Commodity price assumptions: WO3 US\$ 33,000/t, Sn US\$ 22,000/t, Cu US\$ 7,000/t. Recovery assumptions: total WO3 recovery 72%, total Sn recovery 68% & total Cu recovery 85% and payability assumptions of 81%, 90% and 90% respectively. See 'Note on calculation of Sn equivalent values and supporting recovery data' later in this document for further information.

#### **BASIS OF RESOURCE ESTIMATE**

The updated Mineral Resource Estimate, is based upon:

- 1. Development of updated geological interpretations for the SVS based on results from the 2017 and 2018 drilling programs and further analysis of historical data. 3D wireframe interpretations have been completed for a total of ten discrete high-grade zones within the SVS;
- 2. Drilling completed on a varied drilling spacing (approximately 100 by 80 m) to date over the high-grade zones within the SVS;
- 3. Statistical and continuity analyses of the assay and density data obtained during the above programme;
- **4.** Interpolation of the assay data into 3D block models produced for the high-grade zones using ordinary kriging;
- 5. The basis for eventual economic extraction of the Resource was application of parameters from a preliminary underground mining study at the deposit, from which the cut-off grades applied were sourced; and
- 6. Reporting of an updated Mineral Resource according to the guidelines as set out in the JORC Code.

All assays are based on continuous drill core samples from SWM drilling and CRL's 2017 and 2018 drilling programs. The intercepts used in the resource are provided in Appendix 2. A minimum mining width of 2m was then applied to the intercepts that were then composited for the statistical and estimation work.

#### UPDATED INFERRED MINERAL RESOURCE STATEMENT

The updated Inferred Mineral Resource February 2019 for the Redmoor Project, is shown in Table 1 Error! Reference source not found.below.

Tonnage WO<sub>3</sub> Sn Cu SnEq<sup>2</sup> WO3Eq<sup>2</sup> Cut-off (SnEq%) % % % % % (Mt) >0.45 < 0.65 0.18 0.21 0.30 0.58 0.41 1.5 >0.65 10.2 0.62 0.16 0.53 1.26 0.88 **Total Inferred Resource** 11.7 0.56 0.16 0.50 0.82 1.17

Table 1 - Redmoor Inferred Mineral Resource Estimate

A cut-off grade of 0.45% was applied in reporting the Mineral Resource, based on a mining study carried out by Consultants Mining One in 2018, which defined a break-even cut-off grade of 0.45%. This study also defined an indicative total cost cut-off grade of 0.67%; a rounded grade of 0.65% has been applied above to demonstrate the effect on tonnage and grade of applying such the higher total cost cut-off grade. Doing this increases grade to 1.26% Sn Eq and tonnage reduces to 10.2 Mt. A grade-tonnage curve is shown in Figure 1 below.

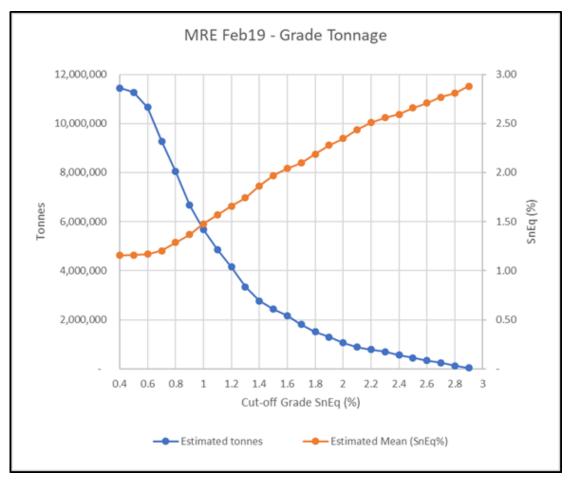


Figure 1 - Redmoor February 2019 Inferred resource: Grade – tonnage curve

The following notes should be read in conjunction with the table of Mineral Resources above:

- 1. Resource classification is based on preliminary economic concepts derived in the Mining One study in April 2018 for underground extraction, giving guidance for concepts of eventual economic extraction and the cut-off grades described in the narrative.
- 2. The entire Mineral Resource above a cut-off grade of 0.45% SnEq is in the Inferred Resource category. A very small tonnage (<0.05 Mt) within the estimate is excluded from the Resource being below that cut-off grade.
- 3. Rounding has been applied as required by reporting guidelines.
- **4.** Tonnage and grade are in metric units.
- 5. Estimation of WO3%, Sn% and Cu% was completed using Ordinary Kriging.
- 6. SnEq% was derived using the formula  $Sn(Eq)\% = Sn\%*1 + WO_3\%*1.43 + Cu\%*0.40$ .  $WO_3Eq\%$  was derived using the formula:  $WO_3(Eq)\% = Sn\%*0.7+WO_3\%+Cu\%*0.28$ . Commodity price assumptions:  $WO_3$  US\$ 33,000/t, Sn US\$ 22,000/t, Cu US\$ 7,000/t. Metallurgical recovery assumptions: WO3 recovery 72%, Sn recovery 68% & Cu recovery 85% and payability assumptions of 81%, 90% and 90% respectively. Recovery and payability assumptions are taken from preliminary studies. See 'Note on calculation of Sn equivalent values and supporting recovery data' later in this document for further information.
- 7. Bulk density was derived from in excess of 1500 determinations from the 2017 and 2018 diamond drilling programmes. Length weighted averages were calculated for each of the high-grade zones and that density applied to each high-grade zone.
- 8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

#### **COMPARISON WITH MARCH 2018 RESOURCE STATEMENT**

The updated Redmoor High Grade Inferred Mineral Resource estimate of 11.7 Mt @ 1.17% SnEq compares with the 2018 Inferred resource of 4.5 Mt @ 1.00% SnEq. On a contained metal basis, this represents a tripling in the size of the high-grade resource compared with 2018. At the 0.45% break-even cut-off grade used, the Updated Inferred Mineral Resource also has an increased grade of 1.17% Sn Eq compared with the 2018 mineral resource (1.0%). At a 0.65% total cost cut-off grade, the updated Mineral Resource grade would increase to 1.26%, for a reduced tonnage of 10.2Mt.

This increase in size and grade of the updated mineral resource is due to the strongly positive results of all holes drilled in 2018. The results provided confirmation of the geological model which projected the interpreted high-grade zones along strike and down dip, resulting in the increase in tonnes and grade described above. As a result, a significant proportion of the Exploration Target that was identified at the time of the March 2018 Mineral Resource estimate has been converted to Mineral Resource in this work.

#### **EXPLORATION TARGET**

The March 2018 mineral resource statement also included an Exploration Target of 4-6Mt at a grade of 0.9-1.3% Sn Eq<sup>1</sup>. Following completion of the 2019 resource update, a similar Exploration Target has been defined, in addition to the Inferred Mineral Resource, in accordance with the guidelines for such set out in the JORC Code, as shown in Table 2 below.

Table 2 - Redmoor 2019 Exploration Target

Description	Tonnage (Mt)	SnEq%
High Grade Exploration Target	4-8 Mt	1.0 – 1.4

It should be noted that this Exploration Target estimate is conceptual in nature; there has been insufficient exploration to define a high-grade Mineral Resource in this volume and it is uncertain if further exploration will result in the determination of a Mineral Resource.

This slightly increased Exploration Target grade compared with the 2018 Exploration Target grade reflects the higher grades intersected in the 2018 drilling program, which it is anticipated will continue to be seen as deeper parts of the deposit are tested. The majority of the deposit remains open down-dip and along strike to the west where further potential exists and remains largely untested.

The Blogsters prospect, around 900 m to the west of, and directly on strike with the Redmoor deposit, is known to have been mined in the early 20th century. Whilst not included in the Mineral Resource or Exploration Target above, Blogsters provides evidence of exploration potential for further strike extension of the SVS which remains to be tested.

#### BENCHMARKING REDMOOR

A comparison with other tin and tungsten deposits around the world is shown in Figure 2 below.

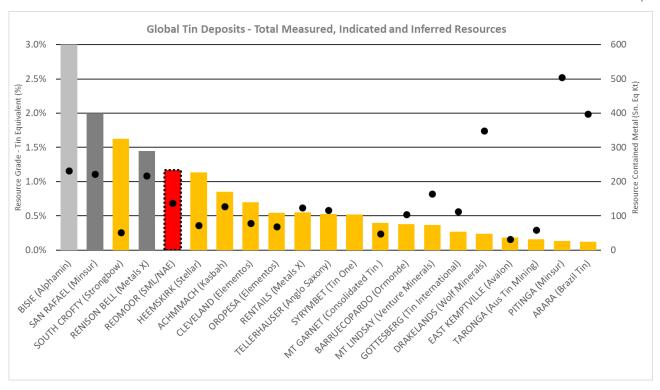


Figure 2 - Comparison of Redmoor with other deposits; Sn Eq basis.

On a Sn Eq grade basis using this benchmarking data, Redmoor ranks as the 2nd highest grade known undeveloped tin or tungsten Mineral Resource in the world.

On a contained metal basis, the Redmoor Mineral Resource now ranks the (No. 1) largest undeveloped tin or tungsten underground mining project in the world.

## Work program

#### MINING STUDY

As a result of the successful completion of the resource update, CRL have requested a number of mining consultancies to provide proposals for a preliminary mining study. The successful consultant is expected to commence work during March, the results of which study will be used to inform the optimal development strategy for the project and the work program over the coming year.

#### METALLURGICAL TESTWORK

An initial ore characterisation and heavy media separation testwork program on Redmoor ore is now well advanced at Wardell Armstrong International's Wheal Jane, Cornwall facility. This is expected to be completed during February 2019, enabling CRL to add to the existing metallurgical database with the aim of better identifying any critical metallurgical issues for the project at an early stage.

#### **NEXT STEPS**

Following this encouraging resource estimate, the shareholders are reviewing the best route for advancement of the project towards a pre-feasibility study. This work program will be informed by the results of the mining and metallurgical studies, which will define operating parameters for the future project and thus enable future infill drilling and metallurgical work to be optimised.

# NOTE ON CALCULATION OF SN EQUIVALENT VALUES AND SUPPORTING RECOVERY DATA

For convenience, significant intercepts and resource grades are expressed in terms of a calculated tin equivalent value (Sn Eq), and tungsten equivalent value (WO<sub>3</sub> Eq) as well as their constituent Sn, Cu, WO<sub>3</sub> contents. Equivalent metal calculation formula;  $Sn(Eq)\% = Sn\%*1 + WO_3\%*1.43 + Cu\%*0.40$ .  $WO_3(Eq)\% = Sn\%*0.7+WO_3\%+Cu\%*0.28$ .

Commodity price assumptions: WO<sub>3</sub> US\$ 33,000/t, Sn US\$ 22,000/t, Cu US\$ 7,000/t.

Recovery assumptions:  $WO_3$  recovery 72%, Sn recovery 68% & Cu recovery 85% and payability assumptions of 81%, 90% and 90% respectively

The metallurgical recoveries used are directly derived from testwork that was carried out by South West Minerals from 1980 to 1985 through South West Metallurgical Services (SWMS); Penzance, Cornwall U.K, and by Robertson Research International (RRI); North Wales. This work was further reviewed for NAE by metallurgical consultants DevLure (Pty) in October 2015, and provides a basis for the recoveries assumed.

The company and Geologica are of the opinion, as a result, that all three elements of tin, copper, and tungsten, have reasonable potential to be recovered and sold.

The Redmoor deposit has a strong tin content in the upper levels and the area has historically been mined for tin and copper. At deeper levels a strong tungsten character is dominant. It is therefore considered appropriate to provide both tin and tungsten equivalent values.

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## COMPETENT PERSON'S STATEMENT

The information in this announcement that relates to the Mineral Resource Estimate is based on information compiled and/or reviewed by Paul Gribble C.Eng., a Fellow of the Institute of Materials, Minerals and Mining (FIMMM), and who is Principal Geologist of Geologica UK (Geologica). Paul Gribble 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'. Paul Gribble is also a Competent Person "as defined in the "Note for Mining and Oil & Gas Companies" which form part of the AIM Rules for Companies". Paul Gribble has reviewed and consented to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

## FORWARD LOOKING STATEMENTS

This report contains "forward-looking information" that is based on the Company's expectations, estimates and forecasts as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, objectives, performance, outlook, growth, cash flow, earnings per share and shareholder value, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses, property acquisitions, mine development, mine operations, drilling activity, sampling and other data, grade and recovery levels, future production, capital costs, expenditures for environmental matters, life of mine, completion dates, commodity prices and demand, and currency exchange rates. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as "outlook", "anticipate", "project", "target", "likely", "believe", "estimate", "expect", "intend", "may", "would", "could", "should", "scheduled", "will", "plan", "forecast" and similar expressions. The forward-looking information is not factual but rather represents only expectations, estimates and/or forecasts about the future and therefore need to be read bearing in mind the risks and uncertainties concerning future events generally.

## **APPENDIX 1**

## JORC CODE, 2012 EDITION - TABLE 1

## **Section 1: Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	The results announced here are from diamond drill core samples. Core was aligned prior to splitting and halved using a core saw, based on geological boundaries, typically of 1m sample length, and up to 2.5m in less mineralised zones. Sections that did not appear mineralised were not sampled.  Drilling was orientated where possible to intersect the target as closely as possible to perpendicular. The deposit contains multiple different mineralisation sets, and so for this reason and limitations of access, not all holes comply with this.  Previous drilling  The previous exploration results are based on a diamond core surface drilling programme undertaken by SWM between 1980 and 1983 as well as historical data collected from reports and memos relating to underground operations and recording sampling carried out when mining was active.  The drilling was orientated to intersect the mineralisation at high angles with the exception, in many cases, of Johnson's Lode as this dips in the opposite direction to the other lodes and SVS. The holes were sampled for assaying and density measurements.
Drilling techniques	• Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	<ul> <li>All drilling was carried out by diamond core drilling, of HQ to NQ diameter (63.5-47.6mm).</li> <li>Core was oriented through the majority of the core drilled, using a Reflex ACT III system.</li> <li>2017 drilling</li> <li>All drilling was carried out by diamond core drilling, of HQ3 to BTW diameter (61-42mm).</li> <li>Core was generally oriented within the mineralised zone, using a Reflex ACT II system.</li> <li>Previous drilling</li> <li>All historic drillholes were completed using</li> </ul>

Criteria	JORC Code explanation	Commentary
		The holes were primarily orientated to intersect the northerly dipping vein system from the north.
		Recoveries were generally good through mineralisation, and typically better than 90%. Recoveries were measured for each run drilled, normally within 24 hours of the hole being drilled.      Voids where encountered were clearly logged as such.      Other than where an area may have been mined, as mentioned above, no negative relationship was seen between recovery and mineralisation.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Recoveries were generally good through mineralisation, and typically better than 90%. Recoveries were measured for each run drilled, normally within 24 hours of the hole being drilled.</li> <li>Triple Tube drilling was used where possible given available equipment and core diameter, to enable precise definition of recovery.</li> <li>Voids where encountered were clearly logged as such.</li> <li>Other than where an area may have been mined, as mentioned above, no negative relationship was seen between recovery and grade.</li> </ul>
		Previous drilling  All historic drillholes were completed using HQ, NQ or BQ diamond core. Core recovery was recorded on the logs and the results suggest that the core recovery was relatively high, typically ranging from 80% to 100%, the higher losses being in areas of poor ground. Geologica and CRL are not aware of specific measures taken to reduce core loss but where excessive losses were experienced holes were re-drilled. There is no apparent relationship between core loss and grade in holes used for resource estimation.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	All drill core was digitally logged for lithology, veining, mineralisation, weathering, geotechnical characteristics, and structure.      All core was photographed and referenced to downhole geology using Micromine software.      Voids where encountered were clearly logged as such.

Criteria	JORC Code explanation	Commentary
		Previous drilling  Detailed geological core logging and recording of the features of the core was undertaken as part of the historic drilling campaign and these logs remain available for review.  Mineralogical descriptions are qualitative but detailed. Details of all relevant intersections are separately noted.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Sawn half core was used for all samples submitted to the laboratory. The remaining half core is preserved in the core trays as a record.</li> <li>The routine sample procedure is always to take the half core to the left of the orientation line looking down the hole.</li> <li>The halved samples were submitted to ALS Loughrea laboratory. There, samples, typically in the range 3-7kg were dried and finely crushed to better than 70 % passing a 2 mm screen. A split of up to 250 g, later increased to 1,000g, was taken and pulverized to better than 85 % passing a 75 micron screen.</li> <li>Copies of internal laboratory QC validating that the targeted particle size was being achieved were received.</li> <li>5% of samples were re-assayed as coarse reject duplicates.</li> <li>Once assay results are received, the results from duplicate samples are compared with the corresponding routine sample to ascertain whether the sampling is representative.</li> <li>Sample sizes are considered appropriate for the style and type of mineralisation, if halved core is used.</li> <li>Previous drilling</li> <li>Historic drill core was typically sampled at 2 m intervals, using either half core ('split core') analysis or geochemical chip sampling. The remaining half core (relating to split core analysis) was stored for reference. No details are available with regards quality control procedures in general.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable</li> </ul>	Analysis by method ME-ICP81x was carried out using a sodium peroxide fusion for decomposition and then analysed by ICP-AES for 34 elements, including Sn, Cu, and W. The upper and lower detection limits are considered acceptable for the target elements of Sn, Cu, and W. A limited number of samples were also analysed for silver by method Ag-ICP61.

Criteria	JORC Code explanation	Commentary
	levels of accuracy (i.e. lack of bias) and precision have been established.	<ul> <li>Where grades by method ME-ICP81x exceed 0.5% W, an additional assay for high grade W by method ME-XRF15b was subsequently carried out. These results replace relevant W values for ME-ICP81x and have been utilised for the resource estimation.</li> <li>The laboratory shared their internal QC data on blanks, pulp duplicates and standards. CRL also inserted 5% each of blanks, standards and coarse duplicates, as a further control.</li> <li>While there was some spread in the repeatability of the 2017 coarse rejects the results are acceptable and to industry guidelines; CRL's blanks show no significant contamination issues and the assays of the laboratory standards, which cover a range of metal values for each of Sn, Cu, W, show no bias subject to the protocol above being used.</li> </ul>
		<ul> <li>Historic drill core was typically sampled at 2 m intervals, using either half core ('split core') analysis or geochemical chip sampling. The remaining half core (relating to split core analysis) was stored for reference. No details are available with regards quality control procedures in general.</li> <li>No information is available on the laboratory sample preparation and analysis and quality control programmes used for the historic drilling.</li> <li>Verification sampling was previously completed by SRK* and CRL, under which samples were prepared at SGS Cornwall and assayed at the Wheal Jane laboratory. SRK visited these facilities and reviewed the sample preparation and assaying process. The assaying process involves crushing, splitting, milling and homogenization. XRF and Atomic Absorption Spectroscopy (AAS) were conducted on the samples. SRK considered the laboratory to be working in accordance</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	with accepted industry standards.  2018 drilling  Geologica UK has reviewed the assay results included in this release and completed a 100% validation check of the 2018 drilling database against laboratory analysis certificates.  2017 drilling  SRK received copies of CRL's database and laboratory analysis certificates and reviewed the significant intersections.

Criteria	JORC Code explanation	Commentary
		<ul> <li>No twinned holes have been drilled as part of the current programme.</li> <li>SRK visited the CRL site and audited data entry and verification procedures. Data is automatically backed up off-site.</li> <li>Within significant intercepts, values at detection limits were replaced with 0.5 of the detection limit value. Where duplicate assays exist for the same interval a straight average is taken.</li> </ul>
		<ul> <li>SRK was supplied with scanned historical drill logs which have been entered into a Microsoft Excel database.</li> <li>SRK completed a number of checks on the raw data and data entry process and applied corrections where necessary. Based on the verification work completed, SRK is confident that the compiled excel database is an accurate reflection of the available historic drilling data.</li> <li>Whilst further verification work is required to add confidence to the database, SRK considered that the check sampling undertaken confirms the presence of anomalous grades for the primary elements assayed, and that the 2017 drilling confirms these.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All collar positions, together with a location map are presented in the release dated 23 January 2019.</li> <li>Planned collar locations were recorded as six-figure grid references, together with RL values in metres, in the British National Grid (OSGB) coordinate system. These were surveyed using a real-time corrected DGPS operated by a professional survey company, 4D Civil Engineering Surveying Ltd (4D-CES). Final pick —up of actual hole positions is completed on completion of each site; variation from planned positions is generally &lt;5 m.</li> <li>Downhole surveys were conducted using the Reflex EZ-Trac system, as a minimum every 50m downhole. Aluminium extension rods were used to minimise magnetic error.</li> <li>Initial collar set up was conducted using an optical sighting compass, at least 10m from the rig, for azimuth, and an inclinometer on the rig for inclination.</li> <li>2017 drilling</li> <li>Collar locations were recorded as six-figure</li> </ul>

Criteria	JORC Code explanation	Commentary
		metres, in the British National Grid (OSGB) coordinate system. These were surveyed using a real-time corrected DGPS operated by a professional survey company.  Downhole surveys were conducted using the Reflex EZ-Trac system, as a minimum every 50m downhole. Aluminium extension rods were used to minimise magnetic error.  Initial collar set up was conducted using an optical sighting compass, at least 10m from the rig, for azimuth, and an inclinometer on the rig for inclination.
		Previous drilling  Historic drillhole logs present collar locations as six-figure grid references in British National Grid (OSGB) coordinate system. In the absence of RL data, SRK projected collars on to (2005) Lidar topographic survey data.  Downhole surveys were typically recorded using either acid tube test or single shot survey camera, with readings taken at approximately every 50 m.  Historic plans of the drilling and drillhole traces have been digitized and show a good correlation with the above.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The programme aimed to extend previously identified mineralisation.</li> <li>Data spacing is typically 100-150m apart, and locally less.</li> <li>Data spacing provides an acceptable degree of geological and grade continuity for Mineral Resource estimation in the Inferred category.</li> <li>Samples were composited to 2m for continuity analysis and estimation.</li> <li>The programme aimed at extending and improving continuity of previously identified mineralisation.</li> <li>The data spacing varies depending on the target, within the SVS this is 100-150m apart, and often less.</li> <li>Compositing was applied in order to calculate intersected width equivalents, on an interval length weighted-average basis.</li> <li>Previous drilling</li> <li>The drillholes and sample intersections are typically some 100-150m apart in the main lodes and lode systems of interest which has provided a reasonable indication of continuity of structure for the SVS, Johnson's Lode and</li> </ul>

Criteria	JORC Code explanation	Commentary
		the Great South Lode. All individual sample assays remain available.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Drillholes in the programme target the SVS and as secondary targets ancillary lodes such as Kelly Bray lode.     In order to minimize impact on local residents, some holes were drilled oblique to the mineralisation.     Notwithstanding this, the SVS mineralisation is interpreted to be a broad tabular mineralised zone. The orientation of the drilling is believed to be appropriate for the evaluation of this geometry as presently understood.  2017 drilling     Drillholes in the programme targeted the SVS, Johnson's Lode, Great South Lode, and Kelly Bray Lode, each of which has different dips.     Some holes hit more than one of the above, and therefore could not be perpendicular to all mineralisation.     In order to minimize impact on local residents, some holes were drilled oblique to the mineralisation.     Notwithstanding this, the SVS mineralisation is interpreted to be a broad tabular mineralised zone with an internal plunge component. The orientation of the drilling is believed to be appropriate for the evaluation of this geometry as presently understood. It is recommended that this be further assessed during subsequent drilling.     Intercepts are reported as apparent thicknesses except where otherwise stated. The data spacing varies depending on the target, within the SVS this is 100-150m apart, and often less.  Previous drilling     The drillholes and sample intersections are typically some 100-150m apart in the main lodes and lode systems of interest which has provided a reasonable indication of continuity of structure for the SVS, Johnson's Lode and the Great South Lode. All individual sample assays, and some of the drill core, remain available.     The drillholes were orientated to intersect the SVS and Great South Lode at intersection angles of between 45 and 90 degrees. Two or three holes were though often drilled from one site to limit the number of drill sites needed and also the intersection angles with Johnson's Lode are shallower then ideal due to the different orientation of this structur

Criteria	JORC Code explanation	Commentary
		Full intersections are however available in all cases so there should be no material bias and the differences between intersected and true lode widths has been accounted for in SRK's evaluation procedures.
Sample security	• The measures taken to ensure sample security.	<ul> <li>All core is stored at CRL's secure warehouse facility and halved core retained.</li> <li>Samples are catalogued, ticketed, weighed, securely palletized, and dispatched by courier to the laboratory, where sample receipt is confirmed by email.</li> <li>ALS is an internationally accredited laboratory.</li> <li>Previous drilling</li> <li>No information is available on sample security for the historic drilling.</li> <li>The majority of the core boxes which had been stored in a dry container on racks remain intact though some of the core has been mixed up and core markers displaced over time and these had to be re-arranged appropriately.</li> <li>SRK is satisfied that the verification resampling programmes undertaken by SRK and CRL utilised industry best practices for Chain of Custody procedures.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Geologica visited CRL's operations and facility in August 2018 and conducted an audit of logging and sampling procedures. No significant concerns were identified.     Geologica are based in Cornwall and verified sampling through the 2018 drilling program on an ongoing basis.  2017 drilling     SRK visited CRL's operations and facility in June 2017 and conducted an audit of logging and sampling procedures. No significant concerns were identified.  Previous drilling     SRK is unaware of any reviews or audits which may have been completed other than those undertaken by SRK itself.

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.  The security of the tenure held at the time of	The Project is located immediately south of the village of Kelly Bray and approximately 0.5km north of the town of Callington in Cornwall in the United Kingdom.  In October 2012, NAE Resources (UK) Limited acquired a 100% interest in the Redmoor Tin-Tungsten Project

Criteria	JORC Code explanation	Commentary
	reporting along with any known impediments to obtaining a licence to operate in the area.	through an Exploration License and Option Agreement with the owner of mineral rights covering a large area of approximately 23km² that includes the Redmoor Project. The Exploration License was granted for an initial period of 15 years with modest annual payments. On 14 November 2016, NAE Resources (UK) Limited changed its name to Cornwall Resources Limited (CRL).
		CRL also has the option to a 25 year Mining Lease, extendable by a further 25 years which can be exercised at any time during the term of the Exploration License. The Mining Lease permits commercial extraction of the minerals subject to obtaining planning and other approvals required and is subject to a 3% Net Smelter Return royalty payable to the mineral right owner once commercial production has commenced. CRL also has a pre-emptive right over the sale of the mineral rights by the vendor. Surface land access for exploration drilling and mining over some of the Redmoor deposit is also included in these agreements.
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	South West Minerals (SWM) conducted exploration, including drilling, in the area from 1980 to 1986. The area was the subject of underground development and processing from the 18 <sup>th</sup> century to around 1946.  Geologica are unaware of any exploration undertaken by parties other than South West Minerals (SWM).
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	The geology of the Redmoor Project is typical of other established mining areas of Cornwall. Tin, tungsten and metal sulphide mineralisation is spatially related to granite intrusions which have caused mineral containing fluids to transport and deposit tin, tungsten and copper bearing minerals along fractures and faults in surrounding rocks.  At Redmoor the mineralisation occurs both in discrete
		veins (lodes) and within a stockwork and sheeted zone of numerous closely spaced quartz veins known as the Sheeted Vein System (SVS).
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>Drillhole collar data including position, RL, azimuth, inclination, and length is provided in the release dated 24 January 2019.</li> <li>2017 drilling         <ul> <li>Drillhole collar data including position, RL, azimuth, inclination, and length were reported in the releases dated 7 September, 1 November, and 11 December 2018.</li> <li>Depths of intercepts were reported in the releases dated 7 September, 1 November, and 11 December 2018.</li> </ul> </li> <li>Figures previously presented in the 26 November 2015 announcement show the relative location and orientation of the drilling completed by SWM.</li> </ul>

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Weighted average intercepts were calculated using sample weighting by length of sample interval.</li> <li>No high cut was thought to be appropriate.</li> <li>Intervals were constructed to reflect average mineralisation of more than 0.5% Sn equivalent. Internal dilution is accepted where a geological basis is thought to exist for reporting a wider package, for example within the SVS.</li> <li>Previous drilling         <ul> <li>These are geologically rather than cut-off defined and all composited grades reported are length weighted assays without cutting.</li> </ul> </li> <li>For each of 2017 and previous drilling, results are expressed in Sn equivalent and WO<sub>3</sub> equivalent values. The assumptions for this calculation are:         <ul> <li>Metal</li> <li>Price</li> <li>Payability</li> <li>Recovery</li> <li>\$1</li> <li>\$22,000/t</li> <li>90%</li> <li>85%</li> <li>W \$330/mtu (APT)</li> <li>81%</li> <li>72%</li> </ul> </li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>The SVS mineralisation is interpreted to be a broad tabular mineralised zone with an internal plunge component, which is currently being evaluated.</li> <li>The orientation of the drilling is believed to be appropriate for the evaluation of this geometry as presently understood. It is recommended that this be further assessed during subsequent drilling.</li> <li>Intercepts are reported as apparent thicknesses except where otherwise stated.</li> <li>Previous drilling</li> <li>Full intersections are available in all cases so there should be no material bias and the differences between intersected and true lode widths were accounted for in consultant SRK's evaluation procedures.</li> </ul>
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Appropriate maps, plans, sections and other views of the interpreted mineralisation are included in the announcement.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The announcement presents all of the salient exploration data that supports the results presented and where summarised is done so in such a way as to convey all of the results in a balanced manner.

Criteria	JORC Code explanation	Commentary			
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All relevant new information has been presented in the announcement.			
Further work	<ul> <li>The nature and scale of planned further work         (e.g. tests for lateral extensions or depth         extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of         possible extensions, including the main         geological interpretations and future drilling         areas, provided this information is not         commercially sensitive.</li> </ul>	The announcement summarises the geological and other work currently underway and planned and the current considerations regarding the potential of the licence area.			

<sup>\*</sup> SRK acted as CP to CRL until August 2018, following which Geologica UK progressively assumed this role as the 2018 work proceeded.

**Section 3: Estimation and Reporting of Mineral Resources** 

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	Geologica has checked all assay and collar data supplied by CRL and is satisfied that the data does not contain significant errors nor has it been corrupted.  In compiling the historic drillhole data, all historic drillhole logs and assay results were previously manually checked against the digital database.  During the 2017 and 2018 drill phases, the drillhole database was validated in Micromine on a regular basis by CRL. Upon receipt of the data, Geologica validated the drillhole database through standard validation checks of all analysis data in Microsoft Excel and subsequently through import via the Seequent Leapfrog Geo ("Leapfrog") and MicroMine drillhole data validation routines. This checks for any overlapping intervals, from depths > to depths, duplicate locations, out of place non-numeric values, missing collar and survey data, any down-hole intervals that exceed the max collar depth etc.
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	Geologica visited the Project on a regular basis throughout, and following, the 2018 drill program.  The purpose of the 2018 site visits was to inspect the new drill core intersections, and the quality of drilling, sampling and logging procedures put in place by CRL as well as to ensure a rigorous and supported geological interpretation was being applied.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> </ul>	The wireframes used to constrain the block model and grade interpolation were constructed based on CRL and Geologica's understanding of the geology and

Criteria	JORC Code explanation	Commentary
	<ul> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling</li> </ul>	mineralisation of the Redmoor deposit, as described in earlier sections.  Namely, the resource model reflects the interpretation
	Mineral Resource estimation.  The factors affecting continuity both of grade and geology.	of a sheeted vein system package, with high grade lenses defined separately within this wider package, reflecting areas of elevated mineralisation, relating to zones of more intense and closely-spaced quartz veining.
		Detailed downhole structural data collected by CRL was used to guide the orientation of the SVS and to assist in determining how/if to connect the high grade lenses.
		The high-grade lenses described are limited to identified high grade zones within the SVS that can be correlated (parallel to the trends identified in the downhole vein structural data) between at least three drillholes, with a maximum drillhole spacing of 150 m.
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 Mineral Resource comprises 10 largely parallel, high grade lenses, which dip at between ~60-80° towards between ~325-340°N. As modelled, the lenses vary between 100 and 400 m in down-dip extent and have along-strike extents of between 50 and 600 m. The down-dip and along-strike extents of the total package of high grade lenses, as modelled, are ~600 m and ~1,000 m respectively.  The lenses are modelled between 35 m and 690 m below surface. The individual zones vary up to 18m in
		thickness; the mean thickness of each individual zone varies between 3 and 10m. Zone widths vary throughout the deposit with a general trend to narrower (but higher grade) widths with depth.
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> </ul>	Geological (wireframe) modelling was conducted in MicroMine, based on the geological understanding and rationale described in earlier sections. Namely, the model comprises high-grade lenses, constrained within a wider modelled sheeted vein system ("SVS"), which is terminated in the east by the modelled "Kit Hill Granite" The sheeted vein system and high-grade lenses were modelled using Micromine. The SVS, which constrains the high-grade lenses and broadly delimits the extent of mineralization, was modelled based on a loose cut-off of 0.5% SnEq and a notional minimum mining width of 2m. The high-grade lenses were modelled based on selected intervals within the SVS determined to be distinctly higher grade in either Sn, W or Cu than the surrounding material and showing acceptable spatial geological continuity.
	In the case of block model interpolation, the block size in relation to the average sample	

#### Criteria JORC Code explanation Commentary spacing and the search employed. The high-grade lens geological wireframes described • Any assumptions behind modelling of selective above were used as solid domain boundaries in the minina units. resource estimation process. • Any assumptions about correlation between variables. The drillhole database was coded by the geological • Description of how the geological model and, within the high-grade lenses, composited to interpretation was used to control the 2m, with flexible compositing rules such that all resource estimates. composites on each drillhole intersection are the same • Discussion of basis for using or not using length, which may be between 1.5 m and 2.5 m. This is grade cutting or capping. to avoid short remnant composites, which may have a • The process of validation, the checking significant impact on the estimate given the thin nature process used, the comparison of model data of the high-grade lenses. to drill hole data, and use of reconciliation data if available. Prior to grade interpolation, an initial statistical analysis was undertaken on the drill data in Snowden Supervisor ("Supervisor"). Capping of composited assay grades within the high-grade lenses was not deemed necessary. Block modelling and grade estimation was undertaken in MicroMine 18.0 A parent block size of 35 m \* 10 my \* 15 mz was chosen, based on the average drillhole spacing and the highly anisotropic, sheeted nature of the mineralization. Continuity analysis (variography) of all composites of the high grade lenses was completed. All samples were used as there are insufficient samples within individual zones to generate meaningful variograms. The study indicated ranges of around 200m along strike, 180m down dip and cross strike of around 20m for Cu, Sn and $WO_3$ . Grade interpolation in the high-grade lenses was completed using Ordinary Kriging (OK) The high grade lens estimation was informed by all of the composite samples using a search of 215m (strike), 180m (dip) and 25m (cross strike). This method was used to increase the number of informing samples available for estimation predicated on the assumption that mineralisation of the high grade lenses was coeval. The minimum and maximum number of points for estimation of a block was derived from Kriging neighbourhood analysis. A small volume of blocks was not estimated using the methods described above. These blocks were estimated using Inverse Distance Weighting (IDW) with relaxed sample requirements. The estimated block model was satisfactorily validated by visual inspection of block grades in comparison with drillhole data, comparison of the block model statistics, swath plots and histograms of informing samples vs. estimated grade. Moisture Whether the tonnages are estimated on a dry All tonnages are reported as dry tonnages. basis or with natural moisture, and the

Criteria	JORC Code explanation	Commentary			
	method of determination of the moisture				
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	A break even cut-off grade of 0.45%, as derived in a 2018 mining scoping study by consultants Mining One, has been applied.			
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.	Geologica has assumed mining will be undertaken using underground mining methods using a decline access and has applied likely mining parameters for the purpose of determining the cut-off grades given above.			
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.	CRL has commissioned a preliminary metallurgical review which has suggested a likely processing circuit and recovery factors and operating costs based on two phases of laboratory scale metallurgical testwork on composited drill core samples commissioned by SWM. Geologica has reviewed the metallurgical review commissioned by CRL and this has given Geologica confidence that the mineralisation can be treated to recover tin, tungsten and copper and has provided input to the above cut-off calculations.			
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	Geologica is unaware of any environmental factors which would preclude the reporting of Mineral Resources.			
Bulk density	<ul> <li>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.</li> <li>The bulk density for bulk material must have</li> </ul>	Historical measurements for density were carried out using Archimedean principles for consolidated fresh core and volumetric determinations on loose granular material.			

Criteria	JORC Code explanation	Commentary
	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 values were calculated based on weights of small pieces of core (10-15cm), with wax coating used for (competent) weathered core samples. These were carried out extensively across the orebody and provide a wide dataset.  Based on density determinations carried out by CRL in 2017 and 2018, Geologica has applied individual density values to the separate lenses, ranging from 2.81 g/cm³ to 3.16 g/cm³. This is considered reasonable for the purposes of reporting an Inferred Mineral Resource.
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	Data quality, drillhole spacing, geological confidence and the interpreted continuity of grades controlled by the mineralisation domains have allowed Geologica to classify the majority of the deposit in the Inferred Mineral Resource category.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Geologica is unaware of any reviews or audits which may have been completed other than those completed by SRK.
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	Geologica has assigned the majority of the deposit in the Inferred Mineral Resource category based on the drillhole spacing, quality of data and confidence in the continuity of geology and mineralisation. While it has been assumed that the high grade zones will be able to be selectively mined to a cut-off and while the accuracy of the estimated block grades is limited, the contiguity of the blocks above this grade has given Geologica confidence that this should be possible.  The estimate is a global estimate. As an Inferred Resource, confidence interval/limit work is inappropriate at this time.

#### **APPENDIX 2**

#### TABLE OF COMPOSITED INTERCEPTS USED IN 2019 RESOURCE ESTIMATE

Please see previous releases for drillhole positions and orientations; 2018 drillhole positions previously presented in full in release dated 23 January 2019. The table below shows a single continuous composite of each zone intercept taken from wireframe modelling and taking into account minimum mining width of 2m.

BHID	FROM (M)	ТО (M)	TRUE THICKNESS (M)	CU (%)	SN (%)	WO3 (%)	SNEQ (%)	ZONE CODE
CRD007	194.30	203.03	2.00	0.21	0.26	0.04	0.41	HG05
CRD007	245.67	260.43	2.22	0.61	0.33	0.32	1.04	HG04
CRD009	230.75	243.30	7.16	0.39	0.06	0.24	0.57	HG02
CRD009	257.52	261.58	2.28	0.13	0.07	0.41	0.71	HG01
CRD009	265.90	283.44	9.73	0.88	0.19	0.11	0.70	HG03
CRD009	317.45	327.00	5.20	0.92	0.30	0.61	1.54	HG07
CRD010	113.32	124.45	9.67	0.50	0.02	0.25	0.57	HG01
CRD012	120.86	124.07	2.87	0.19	0.01	0.42	0.68	HG01
CRD013	275.55	278.98	2.73	0.13	0.11	0.44	0.80	HG04
CRD013	298.74	306.15	5.86	0.88	1.14	0.44	2.12	HG07
CRD013	364.56	368.30	3.25	0.47	0.01	0.19	0.47	HG12
CRD014	144.46	163.98	15.46	0.32	0.11	0.50	0.95	HG02
CRD014	190.28	195.19	3.85	0.46	0.06	0.29	0.66	HG07
CRD015	296.00	305.23	6.77	0.30	0.51	0.12	0.81	HG04
CRD015	319.00	327.02	5.85	0.16	0.66	0.34	1.21	HG05
CRD015	343.74	350.37	4.80	0.48	0.44	0.57	1.44	HG06
CRD016	233.27	244.27	7.26	0.58	0.02	0.19	0.53	HG02
CRD016	256.27	259.27	1.97	1.44	0.04	0.34	1.09	HG01
CRD016	292.35	305.51	8.54	0.35	0.02	0.69	1.15	HG03
CRD016	314.98	325.90	7.09	0.44	0.05	0.18	0.48	HG07
CRD017	182.61	197.95	10.64	0.60	0.16	0.31	0.85	HG02
CRD017	228.50	231.45	2.04	0.36	0.01	0.63	1.04	HG01
CRD018	357.17	367.17	6.82	1.45	0.05	0.54	1.40	HG07
CRD019	443.10	446.10	2.26	0.06	0.01	0.56	0.83	HG09
CRD019	457.10	467.10	7.48	0.39	0.04	0.63	1.10	HG02
CRD019	467.10	471.10	2.98	0.18	0.03	1.01	1.54	HG01
CRD019	510.05	514.05	2.91	0.13	0.01	3.30	4.77	HG03
CRD019	537.55	541.55	2.85	0.17	0.02	0.72	1.11	HG07
CRD020	298.13	301.13	2.25	2.45	1.55	0.06	2.62	HG04
CRD020	320.12	325.12	3.74	0.26	0.09	0.33	0.67	HG07
CRD020	365.57	367.57	2.32	0.23	0.02	3.84	5.60	HG12
CRD021	533.32	537.56	2.02	0.03	0.02	3.92	5.63	HG09
CRD021	644.63	658.84	6.83	0.09	0.01	0.86	1.27	HG02
CRD021	670.02	677.67	3.66	0.06	0.01	1.08	1.58	HG01
CRD022	405.00	416.00	7.94	0.43	0.11	0.55	1.07	HG09
CRD022	419.25	437.35	13.05	0.63	0.16	0.66	1.35	HG02
CRD022	447.84	451.84	2.88	1.64	0.04	0.01	0.71	HG01
CRD022	490.04	494.24	3.01	2.30	0.09	0.64	1.93	HG07

BHID	FROM (M)	то (M)	TRUE THICKNESS (M)	CU (%)	SN (%)	WO3 (%)	SNEQ (%)	ZONE CODE
CRD023	667.10	680.79	5.39	0.21	0.01	0.99	1.51	HG02
CRD023	685.59	690.59	1.99	0.13	0.01	0.56	0.85	HG07
CRD024	499.42	505.63	3.36	0.41	0.02	0.97	1.57	HG09
CRD024	559.62	573.56	7.43	0.11	0.02	0.86	1.29	HG02
CRD024	583.95	589.95	3.18	0.51	0.01	2.05	3.14	HG01
CRD024	614.62	618.62	2.11	0.57	0.02	0.46	0.91	HG03
CRD025	277.15	292.15	8.13	0.85	0.02	0.42	0.96	HG02
CRD025	306.72	311.56	2.59	0.53	0.03	0.72	1.27	HG01
CRD025	331.92	337.24	2.86	0.30	0.01	0.26	0.49	HG03
CRD025	369.97	374.97	2.65	0.33	0.06	0.13	0.38	HG07
CRD026	491.60	498.24	3.92	0.09	0.01	0.51	0.77	HG09
CRD026	518.60	528.91	5.99	0.33	0.01	0.84	1.34	HG02
CRD026	537.00	542.00	2.89	0.13	0.06	2.37	3.50	HG01
CRD027	430.43	450.02	8.49	0.51	0.45	0.12	0.83	HG05
CRD027	477.05	483.98	2.96	0.29	0.17	0.15	0.49	HG08
CRD028	459.41	465.97	4.00	0.55	0.03	2.63	4.01	HG09
CRD028	493.16	505.17	7.21	0.52	0.03	1.26	2.04	HG02
CRD028	519.12	523.12	2.38	0.69	0.05	0.40	0.89	HG01
CRD028	543.61	551.60	4.73	0.07	0.01	2.71	3.90	HG03
CRD029	523.45	528.45	2.01	0.27	0.32	0.07	0.53	HG10
CRD029	538.88	555.74	6.52	0.52	0.28	0.71	1.51	HG05
CRD029	561.74	568.44	2.49	0.76	0.33	0.04	0.69	HG08
CRD030	465.80	469.80	2.44	0.89	0.06	0.05	0.48	HG09
CRD030	489.60	497.60	4.85	0.33	0.18	0.23	0.65	HG02
CRD030	503.80	511.01	4.35	0.49	0.32	0.18	0.77	HG01
CRD030	575.25	580.23	2.90	0.59	0.03	0.31	0.71	HG07
CRD031	383.37	387.38	1.98	0.57	0.06	0.20	0.57	HG09
CRD031	394.40	399.40	2.34	0.39	0.09	0.52	0.99	HG02
CRD031	412.60	418.30	2.65	2.37	0.09	1.37	3.00	HG01
CRD031	537.95	548.04	4.50	0.24	0.05	2.01	3.02	HG07
CRD032	658.33	664.91	2.35	0.10	0.00	0.97	1.43	HG09
RM80_05B	358.00	372.26	9.17	0.57	0.71	0.30	1.37	HG05
RM80_05B	380.00	384.65	2.85	0.28	0.20	0.49	1.02	HG06
RM80_05C	364.00	378.00	8.20	0.17	0.19	0.02	0.28	HG05
RM80_05C	384.55	392.00	4.09	0.24	0.15	0.22	0.55	HG06
RM80_06	141.00	144.00	2.11	0.00	0.57	0.01	0.58	HG05
RM80_09	188.00	216.00	4.96	0.24	0.14	0.25	0.60	HG03
RM80_09	234.00	252.00	2.64	0.86	0.10	0.12	0.60	HG01
RM80_14	196.00	208.73	8.81	0.71	0.06	0.59	1.19	HG02
RM80_14	236.10	239.29	2.12	0.84	0.04	0.86	1.61	HG01
RM80_14	269.73	276.00	3.74	0.48	0.02	0.63	1.12	HG03
RM80_14	290.55	294.00	2.03	0.58	0.22	0.24	0.79	HG07
RM80_15	208.00	214.00	3.94	0.44	0.41	0.30	1.01	HG05
RM80_15	242.00	264.00	13.41	1.19	1.06	0.20	1.83	HG06
RM80_15	322.00	324.20	2.08	1.88	0.16	0.87	2.16	HG12
RM80_16B	364.00	374.00	5.75	0.29	0.25	0.08	0.48	HG05

BHID	FROM (M)	TO (M)	TRUE THICKNESS (M)	CU (%)	SN (%)	WO3 (%)	SNEQ (%)	ZONE CODE
RM80_17	206.00	210.00	2.77	0.18	0.02	0.40	0.66	HG01
RM80_18	482.00	504.00	4.80	0.69	0.11	0.40	0.95	HG07
RM82_19	186.00	190.00	3.30	0.60	0.22	0.12	0.63	HG02
RM82_21	216.00	222.00	3.60	0.24	0.12	0.20	0.51	HG02
RM82_21	232.00	236.00	2.31	0.56	0.37	0.08	0.71	HG01
RM82_21	240.00	253.47	7.52	0.75	0.16	0.35	0.96	HG03
RM82_21	272.00	276.00	2.08	0.25	0.01	0.23	0.43	HG07
RM82_22	460.00	464.84	1.93	1.40	0.07	0.05	0.70	HG09
RM82_22	474.00	482.00	3.10	0.65	0.09	0.46	1.01	HG02
RM82_22	500.00	506.00	2.13	0.35	0.17	0.01	0.32	HG01
RM82_23	332.00	336.00	2.94	0.11	0.24	0.26	0.65	HG08
RM82_24	468.00	484.00	2.04	0.32	0.42	0.12	0.71	HG10
RM82_24A	384.00	388.00	1.92	0.11	0.25	0.02	0.32	HG10
RM82_24A	398.00	410.00	4.97	0.06	0.66	0.02	0.71	HG05
RM82_24A	426.00	438.00	4.74	0.19	0.34	0.14	0.61	HG08
RM82_30	146.00	160.00	12.77	0.49	0.05	0.30	0.68	HG02
RM82_30	170.00	174.00	3.61	0.48	0.03	0.19	0.49	HG01