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17 October 2017

## **MINERAL RESOURCE ESTIMATE FOR THE BAWDWIN LEAD-ZINC-SILVER-COPPER PROJECT - MYANMAR**

### **Highlights**

- Maiden Mineral Resource estimate reported under JORC Code 2012 edition.
- Total Inferred Mineral Resources of **41.4 Mt at 7.5% Pb, 3.5% Zn, 0.33% Cu and 178g/t Ag** at a cut-off of 2.0% Pb.
- Estimate based on 56,008 metres of historical underground sampling supported by a diamond drilling program of 21 holes for 2,965.6 metres and a channel sampling programme in the shallow open pit of 43 channels for 669 metres.
- Mineral Resource represents the extensive mineralised 'halo' around the high-grade lodes that were historically mined underground.
- Drilling and channel sample results announced to ASX on 17 September 2017 highlight the extensive high-grade mineralisation that occurs within the halo zone.
- The Mineral Resource estimate provides the key input to the ongoing Scoping Study to assess an open-pit mine development strategy at Bawdwin and provide a basis for Myanmar Government permitting.

**Myanmar Metals Limited** (ASX: MYL) ("MYL" or "the Company") is pleased to advise that it has received the results of the Mineral Resource estimate completed by CSA Global. As previously reported, MYL holds an option with Win Myint Mo Industries Co. ("WMM"), the Myanmar company that holds the 38 km<sup>2</sup> Mining Concession at Bawdwin.

The estimate is based on extensive historical channel sampling of underground exploration cross cuts supported by new diamond drilling and channel sampling data collected in 2017. The maiden JORC Code 2012 compliant Mineral Resource estimate highlights the potential of

the Bawdwin Project to be redeveloped as a large-scale mining operation. The forthcoming Scoping Study will further assess this potential.

**Myanmar Metals Limited’s Chairman, John Lamb, commented:**

*“This initial resource of over 40 million tonnes with excellent grades puts the project, the Company and its partners in a great position to confidently move ahead with economic evaluation and Myanmar Government permitting of a new mine development.*

*This resource estimate clearly demonstrates the potential of the Bawdwin deposit but it only represents the remnant high-grade and surrounding low-grade mineralisation from historical mining.*

*There is great potential via future exploration programs to extend the open pit and underground areas of the three known lodes and to discover new lodes. In other words, this resource represents only the beginning of the new Bawdwin story.”*

**Bawdwin Mine Background**

Mining of silver at Bawdwin dates back at least the 15th Century. Development of a large underground mine by Burma Corporation commenced in 1914 including development of the 2.4-kilometre Tiger Tunnel and 520-metre-deep Marmion Shaft. The Tiger Tunnel at the No. 6 Level provided mine drainage and ore haulage with the Marmion Shaft providing haulage from the No. 12 Level. The mine exploited three high-grade lodes, the China, Shan and Meingtha lodes. The current underground mine consists of 13 levels at approximate 40-m intervals and is free-draining through the Tiger Tunnel.

Annual production before WW2 reached about 0.5 Mt of high-grade silver, lead, and zinc-rich ore. Ore was railed to the lead smelter at Namtu, 15 miles from Bawdwin, where lead, antimony and silver were recovered while zinc was sold in concentrate. The mine and smelter were destroyed in the war but re-opened in 1951. The mine was nationalised in 1963. Production fell progressively, reflecting depleting resources and lack of investment in development and exploration. An open pit was developed in the 1970s to exploit lower grade mineralisation but suffered from poor recoveries. All mining ceased in 2008.

Records of mining, surveying, and sampling were kept meticulously at the mine on hard-copy level and floor plans and associated survey and assay ledgers. WMM engaged Australian-led Myanmar-based Geological Services Company, Valentis Services Limited (“Valentis”), to capture this hard-copy data between November 2016 and June 2017. All data for the 12 levels has now been captured with partial capture from intermediate floor plans. This has allowed 3D modelling of mined stopes, mineralisation and geological contacts, as well as capture of historical assay data into a Microsoft Access database.



Figure 1. Location map for the Bawdwin Project

During its years of underground production, the primary exploration method at Bawdwin was via driving exploration cross-cuts into the footwall and hangingwall of the main lodes. Most underground exploration occurred above the No. 6 level, with drives at intervals of 20 to 60 metres extending from 20 to 100 metres from the main lodes and with some drives extending up to 200 metres. Underground exploration was limited from the No. 7 to 12 levels. The

cross cuts were geologically mapped and channel sampled for assaying at the mine laboratory.

Limited exploration at Bawdwin was completed as part of Government-supported programmes by the UN (UNSFP 1962-64), Canada (CIDA, 1973-74), Germany (BGR, 1973-1976), and Australia (AMDEL, 1985-87). Drill testing of the main mineralised zone and halo was very limited, the most significant being the 10 CIDA drill holes testing the halo mineralisation at the China Lode. The UN programme included limited underground drilling, however, all drilling programmes suffered from poor recoveries. The collar locations for the historical drilling have been acquired but assay results have not yet been obtained.



*Figure 2. Bawdwin pit looking north with the Marmion Shaft on the west side of the pit (Aug 2017)*

### **2017 Exploration Programme**

In 2016, WMM commissioned Valentis to manage a programme of mapping, channel sampling and diamond drilling. A total of 435 channel samples were collected from accessible cleaned faces in the open pit, comprising 47 individual channels for 1,790.8 metres. Twenty-one (21) diamond drill holes (including two partial redrills) for 2,965.6 metres were completed between February and June 2017 by Titeline Valentis Drilling Myanmar. The current open pit at Bawdwin is approximately at the base of the partial oxidation and channel sampling largely sampled fresh sulphide mineralisation.

Drill collar and channel sampling data and results were reported in MYL's ASX release dated 13 September 2017. Drilling and channel sampling results returned extensive intersections

of high to moderate grade lead, zinc, copper and silver mineralisation. The results confirmed extensive mineralisation in the hangingwall and footwall of the mined China (*Figure 4*), Shan and Meingtha lodes, in particular in the footwall relay zone of the China Lode linking to the offset Shan Lode.

### Bawdwin Mineral Resource Estimate

As part of the evaluation of the Bawdwin Project under the WMM option, CSA Global was retained by MYL to assess the geology and resources of the project, to complete a Mineral Resource estimate and to undertake an initial scoping study on open-pit development on the deposit. To comply with the 2012 edition of the JORC Code, CSA Global has completed a review of the geology of the project and compiled a Table 1 as required by the JORC Code (*see Appendix*).

This JORC Code 2012 compliant Inferred Mineral Resource estimate for the Bawdwin deposit was completed in October by CSA Global and is provided in Table 1 below.

Area	Oxidation	Tonnage ('000 t)	Pb (%)	Zn (%)	Cu (%)	Ag (ppm)
Shan	Transition	657	3.3	0.2	0.75	84
	Fresh	14,811	8.1	3.5	0.42	184
	<b>Total</b>	<b>15,468</b>	<b>7.9</b>	<b>3.4</b>	<b>0.43</b>	<b>180</b>
China	Oxide	67	9.0	1.1	0.27	140
	Transition	1,539	5.6	1.4	0.57	147
	Fresh	18,866	7.4	4.1	0.20	177
	<b>Total</b>	<b>20,472</b>	<b>7.3</b>	<b>3.9</b>	<b>0.23</b>	<b>174</b>
Meingtha	Oxide	8	2.1	0.1	0.23	164
	Transition	222	5.7	1.1	0.16	198
	Fresh	5,264	7.2	2.8	0.43	181
	<b>Total</b>	<b>5,494</b>	<b>7.1</b>	<b>2.7</b>	<b>0.42</b>	<b>182</b>
Total	Oxide	75	8.3	1.0	0.27	142
	Transition	2,418	5.0	1.1	0.58	134
	Fresh	38,941	7.7	3.7	0.32	180
<b>Total</b>		<b>41,434</b>	<b>7.5</b>	<b>3.5</b>	<b>0.33</b>	<b>178</b>

*Table 1: Bawdwin Inferred Mineral Resource Estimate (2% Pb cut-off)*

A summary of the information used in the resource estimation follows:

### ***Drilling and Channel Sampling***

The Mineral Resource estimate is based largely on historical underground channel sampling but with support from the 2017 programme of diamond core drilling and channel sampling in the open pit. The historical sampling was completed systematically and routinely during the period of active mining at Bawdwin and samples were assayed by wet chemical methods at the mine laboratory. There are no records of QAQC procedures or analyses. Access to the sampled drives is no longer possible so check sampling cannot be undertaken. The data and associated documentation are considered adequate to support reporting of an Inferred Mineral Resource.

Additional information regarding sampling and analysis is provided in **JORC Table 1** which is attached to this ASX release.

### ***Geological Interpretation***

The Bawdwin deposit is hosted within an Early Ordovician volcanic and intrusive complex termed the Bawdwin Volcanic Centre. This comprises coarse volcanoclastic tuffs of the Bawdwin Volcanic Formation that interfinger with calcareous sediments of the Pangyun Formation, both intruded by co-magmatic rhyolite porphyry bodies.

The Bawdwin deposit is a structurally controlled massive to disseminated sulphide deposit hosted largely within the Bawdwin Tuff and to a lesser extent within the Pangyun Formation sediments and rhyolitic porphyry. The main controlling Bawdwin Fault zone comprises a complex northwest-trending, southwest-dipping, array of faults, splays and relays. Massive mineralisation occurs in dilational structural zones as veins and breccias, with semi-massive to disseminated sulphide mineralisation and stockwork sulphide veining occurring in the intervening silicified lithic breccia (Bawdwin Tuff).

Sulphide mineralisation at Bawdwin is characterised by argentiferous galena, sphalerite, and pyrite together with smaller amounts of chalcopyrite, covellite, tetrahedite, gersdorffite, and cobaltite. Copper mineralisation occurs with lead and zinc but also separately where it can be associated with nickel and cobalt. Sulphides are generally coarse grained in massive lodes and when disseminated in altered tuff.

The historically-mined China, Meingtha and Shan lodes lie along 4 km of strike of the Bawdwin Fault zone, with offsets by later faults. The mined lodes were probably not uniform zones of massive sulphide but zones of mineralised structures and intervening strongly mineralised breccias and stockworks. The most extensive 'halo' mineralisation is up to 150 metres wide

in the footwall of the main China Lode. This encompasses mined stopes in the footwall of the China Lode and is characterised by high-grade veins, breccias, stockworks and shear zones and extensive zones of disseminated mineralisation associated with silicification of the lithic breccia host (Bawdwin Tuff). The zone is interpreted to reflect a relay zone extending north towards the Shan Lode where it is poorly tested by underground sampling and drilling.

A 3D model developed by Valentis included the Bawdwin Tuff, major faults, high-grade “lode” mineralisation and lower-grade “halo” mineralisation. The model was reviewed by CSA Global and the high-grade zones were re-modelled based on interpretation of level-plan geological and assay data, supported by recent drilling. The model was also supported by open-pit mapping and channel sampling.

### ***Cut-off Grades***

Classical statistical analysis was carried out twice for the mineralised zones. The first study was carried out to meet the following objectives:

To determine a cut-off grade for interpretation of mineralisation

To assess grade distribution characteristics.

Review of the histograms and probability plots indicate that a 3.5% Pb cut-off grade is suitable for interpretation of the high-grade lodes and 0.5% Pb for mineralised halos.

### ***Estimation Methodology***

The historical underground data and modern diamond drilling and pit mapping were used to develop a new interpretation of the Bawdwin deposit using Micromine software. Wireframes of the major lodes were developed based on plan view interpretation for all developed underground levels. Additionally, all wireframes were adjusted to include the results of 2017 diamond drilling and open pit channel sampling.

Major individual base metal lodes were modelled using a nominal 3.5% Pb cut-off. A “halo” zone of mineralisation enveloping the lodes was modelled with a nominal 0.5% Pb cut-off.

Volume block models were created within each defined mineralisation domain. All models were flagged according to mineralisation type and wireframe name. This flagging was subsequently used to interpolate grades separately for each body and to exclude “contamination” with grades from adjacent models. After flagging, the models for each



mineralisation type were combined. Therefore, the values of some blocks were updated (overwritten) during integration. The blocks above the topographic surface were then removed.

Lead, silver, zinc and copper grades were interpolated into the empty block model using ordinary kriging (OK). A “parent block estimation” technique was used. The OK process was performed at different search radii until all cells were interpolated. The search radii were determined following evaluation of the semivariogram parameters.

### ***Classification Criteria***

The Mineral Resource has been classified in accordance with guidelines contained in the JORC Code 2012 Edition. The Inferred Mineral Resource classification is based on drill hole sampling, open pit channel and historical underground channel sampling. Existing data is believed to be sufficient to imply but not verify geological and grade continuity due to the absence of QAQC information for the historical underground data. The Inferred classification has considered all available geological and sampling information and the classification level is considered appropriate.

### **Bawdwin – Next Steps**

The maiden Mineral Resource estimate in accordance with the JORC Code 2012 Edition provides the key input to the Scoping Study on development of an open cut mine at Bawdwin. The study results together with geological interpretation that is currently underway will inform the Myanmar Government permitting process and decisions on the next phase of work at Bawdwin. This is expected to include a significant drilling programme scheduled to commence in the first half of 2018.

### **For More Information:**

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### **Forward Looking Statements**



*The announcement contains certain statements, which may constitute “forward –looking statements”. Such statements are only predictions and are subject to inherent risks and uncertainties, which could cause actual values, results, performance achievements to differ materially from those expressed, implied or projected in any forward-looking statements.*

### **Competent Person Statements**

*The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the ‘JORC Code’) sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves. The Information contained in this announcement has been presented in accordance with the JORC Code.*

*The information in this report that relates to Geology and Exploration Results is based, and fairly reflects, information compiled by Dr Neal Reynolds, who is a Member of the Australian Institute of Geoscientists. Dr Reynolds is employed by CSA Global Pty Ltd, independent resource industry consultants. Dr Reynolds 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’. Dr Reynolds consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*The information in this report that relates to Mineral Resources is based, and fairly reflects, information compiled by Mr Serikjan Urbisnov, who is a Member of the Australian Institute of Geoscientists. Mr Urbisnov is a full-time employee of independent, resource industry consultancy CSA Global Pty Ltd.*

*Mr Urbisnov 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’. Mr Urbisnov consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

# APPENDIX: JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<p><b>Sampling techniques</b></p>	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g 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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The 2017 evaluation programme at Bawdwin included diamond core drilling and systematic channel sampling in the open pit.</li> <li>• The diamond core drilling was completed from February to June 2017 using PQ, HQ and NQ triple tube diameter coring. A total of 21 diamond core drill holes were completed, of which two were redrills, for a total of 2965.6 metres.</li> <li>• Drill core was geologically logged, cut and then ½ core samples sent to Intertek Laboratories for sample preparation in Yangon, Myanmar and then analysis in Manila, Philippines. The sample interval was nominally 1 metre or to geological and mineralisation boundaries.</li> <li>• Channel sampling in the open pit sampling was completed as part of a surface geological mapping programme in late 2016. Systematic channel sampling was completed by a team of Valentis and Win Myint Mo geologists over most of the available open pit area wherever clean exposure was accessible. A total of 435 samples were collected from 47 channels totalling 1790.8 metres.</li> <li>• Samples were typically 1.5m in length or to geological and mineralisation boundaries. Approximately 3kg of representative sample was systematically chipped from cleaned faces. Samples were despatched to Intertek Laboratories for sample preparation in Yangon, Myanmar and then analysis in Manila, Philippines.</li> <li>• The underground sampling data is an extensive historical data set that was completed as part of mine development activities. The data set comprises systematic sampling from development drives, cross cuts, ore drives and exploration drives. This data date largely from the 1930s until the 1980s and utilised consistent sampling and analytical protocols through the mine history. Sampling consisted of 2-inch (5cm) hammer/chisel cut continuous channels sampled at 5 feet (1.5m) intervals at waist-height along both walls of across-strike drives and across the backs of strike drives. Sample weights were around 5 pounds (2.3kg) were analysed at the Bawdwin Mine site laboratory using chemical titration methods. Results were recorded in ledgers. Averaged results from each wall of the exploration cross-</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<p>cuts were recorded on the level plans.</p> <ul style="list-style-type: none"> <li>• Drilling was completed by Titeline Valentis Drilling Myanmar ('TVDM') using two Elton 500 drill rigs. Drilling is a combination of triple tubed PQ, HQ and NQ diameter diamond coring. Holes were typically collared in PQ, then reduced to HQ around 50m, and later to NQ if drilling conditions dictated. Holes ranged from 63.4 metres to 260.1 metres depth.</li> <li>• Attempts were made to orientate the core but the ground was highly fractured and broken with short drilling runs. Obtaining consistently meaningful orientation data was very difficult.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• To maximise core recovery, triple tube PQ, HQ and NQ core drilling was used, with the drilling utilising TVDM drillers experienced in drilling difficult ground conditions. Drill penetration rates and water pressure were closely monitored to maximise recovery.</li> <li>• During the diamond drilling the length of each drill run and the length of sample recovered was recorded by the driller (driller's recovery). The recovered sample length was cross checked by the geologists logging the drill core and recorded as the final recovery.</li> <li>• Core recoveries were variable and often poor with a mean of 80% and a median of 87%, with lowest recoveries in the 10 to 30% range. Low recoveries reflect poor ground conditions and previously mined areas. Core recoveries were reviewed and two intervals were excluded due to very poor recovery.</li> <li>• At present, no relationships between sample recovery and grade bias due to loss/gain of fines or washing away of clay material has been identified. It is assumed that the grade of lost material is similar to the grade of the recovered core.</li> <li>• For channel chip sampling, every effort was made to sample systematically across each sample interval with sampling completed by trained geologists.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All diamond core samples were geologically logged in a high level of detail down to a centimetre scale. Quantitative logging for lithology, stratigraphy, texture, hardness, RQD and defects was conducted using defined logging codes. Colour and any other additional qualitative comments are also recorded.</li> <li>• The 2016 open pit channel rock samples were systematically geologically logged and recorded on sample traverse sheets.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>All drill core and open pit sampling locations were digitally photographed.</li> <li>The underground sampling data has no geological logging, however geological mapping was completed along the exploration drives and is recorded on level plans. Historical plan and section geological interpretations have been used in these areas to assist in geological model development.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>All core was half-core sampled. Most core was cut using an electric diamond saw and some more friable intervals were split manually. All core for sampling was pre-marked with the cut line, and only the left-hand side of the core was sent for assay to maintain consistency.</li> <li>The core sampling intervals were generally at one metre intervals which were refined to match logged lithology and geological boundaries. A minimum sample length of 0.5m was used.</li> <li>No sub-splitting of the open pit chips samples was undertaken. Sample lengths ranged from 1 to 2m (typically 1.5m). Sample intervals were refined to match geological boundaries.</li> <li>The historical underground samples do not appear to have been sub-split.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Valentis diamond drilling and open pit channel samples were all sent to Intertek Laboratories in Yangon for sample preparation.</li> <li>All samples were dried and weighed and crushed to in a Boyd Crusher. A representative split of 1.5kg was then pulverised in a LM5 pulveriser. A 200-gram sub-sample pulp was then riffle split from the pulverised sample. The crusher residue and pulverised pulp residue were stored at the Yangon laboratory.</li> <li>Sample pulps were sent to the Intertek analytical facility in Manila, Philippines where they were analysed using ICP-OES – Ore grade 4 acid digestion. Elements analysed were Ag, Fe, Cd, Co, Ni, Pb, Cu, Mn, S and Zn.</li> <li>Quality Control (QAQC) samples were submitted with each assay batch (certified reference standards, blanks and duplicate samples). Laboratory inserted QAQC samples were also analysed. All assay results returned were of acceptable quality based on assessment of the QAQC assays.</li> <li>The underground data was assayed by the Bawdwin mine laboratory</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<p>on site. Bulk samples were crushed in a jaw crusher, mixed, coned and quartered. Two 100g samples were then dried and crushed in a ring mill to approximately 100 mesh. Two 0.5-gram homogenised samples were taken for lead and zinc titration using Aqua Regia (Pb) and Nitric acid (Zn). RSG inspected the laboratory in 1996 and noted it to be “clean, and great pride is taken in the conditions and quality of the work”. The laboratory remains operational and CSA Global’s review in 2017 reached similar conclusions to RSG. Results for Zn and Pb were reported to 0.1%.</p> <ul style="list-style-type: none"> <li>• There is no QAQC data for the historical underground sampling data.</li> <li>• All diamond drill core samples were checked, measured and marked up before logging in a high level of detail.</li> <li>• The diamond drilling, sampling and geological data were recorded into standardised templates in Microsoft Excel by the logging/sampling geologists.</li> <li>• Geological logs and associated data were cross checked by the supervising Project Geologist</li> <li>• Laboratory assay results were individually reviewed by sample batch and the QAQC data integrity checked before uploading.</li> <li>• All geological and assay data were uploaded into an Access database.</li> <li>• The Access database was loaded into Micromine databases. This data was then validated for integrity visually and by running systematic checks for any errors in sample intervals, out of range values and other important variations.</li> <li>• All drill core was photographed with corrected depth measurements before sampling.</li> <li>• No specific twin holes were drilled; however, two daughter holes were inadvertently cut due to challenging drilling conditions during re-entry through collapsed ground. The daughter holes intersected mineralisation of very similar tenor and grade to the parent hole.</li> <li>• Historical underground sampling data was captured off hard copy mine assay level plans. These plans show the development drives on the level along with the sampling traverse locations and Ag, Pb, Zn and Cu values. This process involved the systematic digital scanning of the various mine assay level hard copy plans, along with manual data entry of the assay intervals and assay results by Project</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Geologists and assistants. Co-ordinates of sampling traverse locations were scaled off the plans (in the local Bawdwin Mine Grid). Data was collated into spreadsheets and then uploaded into Micromine. Sampling traverses were loaded as horizontal drillholes. The channel samples were systematically visually checked in Micromine against the georeferenced mine assay plans. The data was further validated by running systematic checks for any errors in sample intervals, out of range values and other important variations. Any data that was illegible or could not be accurately located was removed from the database. Underground channel sample databases were made for the Shan, Chin and Meingtha Lodes and associated mine development. These were later uploaded into a master Access database.</p> <ul style="list-style-type: none"> <li>• There is no access to the underground sampled drives so check sampling has not been undertaken.</li> </ul>
<p><b>Location of data points</b></p>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The diamond drilling and pit mapping and channel sampling all utilised UTM WGS84 datum Zone 34 North.</li> <li>• All diamond drill holes and pit mapping sampling traverse locations were surveyed using a Differential Global Positioning System (DGPS). The DGPS is considered to have better than 0.5m accuracy.</li> <li>• All diamond drill holes have downhole surveys. These were taken using a digital single shot camera typically taken every 30 metres.</li> <li>• Historically the underground and open pit mines operated in a local survey grid, the 'Bawdwin Mine Grid'. This grid is measured in feet with the Marmion Shaft as its datum. A plane 2D transformation was developed to transform data between the local Bawdwin Mine Grid and UTM using surveyed reference points.</li> <li>• Historical mine plans and sections were all georeferenced using the local Bawdwin Mine grid. The outlines of stopes, underground sample locations, basic geology and other useful information was all digitised in the local mine grid. This was later translated to UTM for use in geological and resource modelling.</li> <li>• The historical underground channel sampling data is scaled off historical A0 paper and linen mine plans which may have some minor distortion due to their age.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>The underground sampling locations were by marked tape from the midpoint of intersecting drives as a reference. They appear to be of acceptable accuracy.</li> <li>Historically within the mine each level has a nominal Bawdwin grid elevation (in feet) which was traditionally assumed to be the elevation for the entire level. It is likely that these levels may be inclined for drainage so there is likely to be some minor differences in true elevation (&lt;5 metres)</li> <li>The topography used for the estimate was based on a GPS drone survey completed by Valentis. This is assumed to have &lt;1 metre accuracy and it was calibrated against the Bawdwin Mine UTM survey of the open pit area and surveyed drill hole collars. This survey is of appropriate accuracy for the stage of the project.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The diamond drill holes completed at the open pit are spaced on approximately 70 metre spaced sections and were designed to provide systematic coverage along the strike/dip of the China lode. Three drill holes were drilled at the Meingtha Lode on 50 metre spaced sections and two holes drilled at the Shan Lode on 100 metre spaced sections.</li> <li>The open pit sampling was done on accessible berms and ramps. These traverses range from 10 metres to 30 metres apart.</li> <li>The historical underground samples are generally taken from systematic ore development cross cuts. These are typically on 50 to 100 feet spacings – 15 metres to 30 metres. Strike drives along mineralised lodes demonstrate continuity</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill holes were generally drilled on 065 azimuth (true) which is perpendicular to the main north and NNE striking lodes. Holes were generally inclined at -50 degrees to horizontal.</li> <li>The open pit channel sampling sample traverses were orientated perpendicular to the main trend of mineralisation where possible. However due to the orientation of the pit walls in many areas, sampling traverse are at an oblique angle to the main mineralised trend.</li> <li>Underground sampling data consists largely of cross strike drives which are orientated perpendicular to the steeply dipping lodes. The data set also contains sampling from a number of along-strike ore drives. These drives are generally included within the modelled lodes</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>which have hard boundaries to mitigate any smearing into neighbouring halo domains.</p> <ul style="list-style-type: none"> <li>The drilling orientation is not believed to have caused any sampling bias.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill core was taken twice daily from the drill rig, immediately following completion of day shift and night shift respectively.</li> <li>Core was transported to the core facility where it was logged and sampled.</li> <li>Samples were bagged and periodically sent to the Intertek laboratory in Yangon for preparation. All samples were delivered by a Valentis geologist to Lashio then transported to Yangon on express bus as consigned freight. The samples were secured in the freight hold of the bus by the Valentis geologist. The samples collected on arrival in Yangon by a Valentis driver and delivered to the Intertek laboratory.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Integrity of all data (drill hole, geological, assay) was reviewed before being incorporated into the database system.</li> <li>No external reviews have been completed</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Bawdwin Mine is in NE Shan State, Myanmar</li> <li>The project owner is Win Myint Mo Co. Ltd (“WMM”) who hold a Mining Concession which covers some approximately 38 square kilometres.</li> <li>WMM has a current Production-sharing Agreement with the Myanmar Government.</li> <li>Myanmar Metals holds an exclusive six-month option agreement with WMM, which can be extended to 12 months, under which it can acquire an 85% interest in the Project from WMM subject to approval by the Myanmar government</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Bawdwin Mine was operated as an underground and open pit base metal (Pb, Zn, Ag, Cu) mine from 1914 until 2009.</li> <li>The only modern study on the mine was completed by Resource Service Group (RSG) in 1996 for Mandalay Mining. RSG compiled</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>the historical underground data and completed a JORC (1995) Mineral Resource estimate. The digital data for this work was not located and only the hardcopy report exists</p> <ul style="list-style-type: none"> <li>• The Bawdwin deposit is hosted in volcanic (Bawdwin Tuff), intrusive (Lo Min Porphyry) and sedimentary (Pangyun Formation) rocks of late Cambrian to early Ordovician age.</li> <li>• The historical mine was based on three high-grade massive Pb-Zn-Ag-Cu sulphide lodes, the Shan, China and Meingtha lodes. These lodes were considered to be formed as one lode, and are now offset by two major faults the Hsenwi and Yunnan faults.</li> <li>• The major sulphides are galena and sphalerite with lesser amounts of pyrite, chalcopyrite, covellite, gersdorffite, boulangerite, and cobaltite amongst other minerals.</li> <li>• The lodes are steeply-dipping structurally-controlled zones and each lode incorporated anastomosing segments and footwall splays.</li> <li>• The lodes occur within highly altered Bawdwin Tuff which hosts extensive stockwork and disseminated mineralisation as well as narrow massive sulphide lodes along structures. This halo mineralisation is best developed in the footwall of the largest China Lode.</li> <li>• The main central part of the mineralised system is approximately 2 km in length by 400m width, while ancient workings occur over a strike length of about 3.5 km</li> <li>• The upper portion of the China Lode was originally covered by a large gossan which has been largely mined as part of the earlier open pit. The current pit has a copper oxide zone exposed in the upper parts, transitional sulphide mineralisation in the central areas and fresh sulphide mineralisation near the base of the pit</li> <li>• The Bawdwin deposit is interpreted as a structurally-controlled magmatic-hydrothermal replacement deposit emplaced within a rhyolitic volcanic centre</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• All collar and composite data are provided in tables in the body of the document or as Appendices</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>o <i>dip and azimuth of the hole</i></li> <li>o <i>down hole length and interception depth</i></li> <li>o <i>hole length.</i></li> <li>• <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Length-weighted composites have been reported based on lower cut-off criteria that are provided in the composite tables, primarily 2.5% Pb or 50 g/t Ag. Additional composites based on cut-off of 4% Zn or 0.5% Cu have been reported to highlight zinc &amp; copper-rich zones.</li> <li>• No top-cut has been applied. The Bawdwin deposit includes extensive high grade massive sulphide lodes that constitute an important component of the mineralisation; top-cuts will be applied if appropriate during estimation of mineral resources</li> <li>• Composite incorporate a maximum of 2 metres internal waste</li> <li>• Metal equivalents are not reported here.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes were orientated at an azimuth perpendicular to the main orientation of mineralisation with a dip at about 40-50° from the dip of mineralisation; reported drill composite intercepts are down-hole intervals, not true widths</li> <li>• Channel sampling was at variable orientation dependent on the orientation of pit faces; reported drill composite intercepts are down-hole intervals, not true widths</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Diagrams that are relevant to this release have been included in the main body of the document.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Results have been reported for all drill holes and channels to the cut-off criteria provided</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential</i></li> </ul>	<ul style="list-style-type: none"> <li>• All relevant data have been reported</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>deleterious or contaminating substances.</i>	
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The details of additional work programmes will be determined by the results of the Mineral resource estimate and Scoping Study that are currently underway.</li> <li>• It is envisaged that a substantial drilling program will be undertaken to improve confidence in the Mineral Resource and to test extension targets, supported by geology, geochemistry and geophysics</li> </ul>

### 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
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>• <i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i></li> <li>• <i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All historical underground drive sampling data was compiled into an Access database.</li> <li>• Diamond drilling and open pit sampling data was also compiled into an Access database.</li> <li>• Data was imported into Micromine tables and drilling/underground sampling databases constructed. These were validated in Micromine for inconsistencies, overlapping intervals, out of range values, and other important items.</li> <li>• All data was visually checked.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Neal Reynolds, a director of CSA Global, conducted site visits to the project area in August and October 2017. Although drilling was not underway, drill collars were observed and checked and drill core was examined and mineralisation in the open pit was observed. The historical systematic documentation of mining and exploration development, sampling and assaying was confirmed, and the assay laboratory was visited.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Bawdwin Mine has a long underground and open pit mining history. The geological interpretation used for the resource estimate is based on historical sectional and plan underground geology interpretations and recent open pit mapping and new diamond drilling information. Stopped areas were also modelled and these provide a useful guide to the geometry and orientation of the major lodes. This data has been used to create a wireframed 3D model of geology, structure and mineralisation.</li> <li>• Underground and open pit channel sampling, drill hole assay results have formed the basis for the geological interpretation.</li> <li>• The major lodes were modelled in Micromine primarily in plan view and additionally in section view to integrate drill hole data. 3.5% Pb cut-off grade was applied for interpretation of the</li> </ul>

Criteria	JORC-Code Explanation	Commentary
	<ul style="list-style-type: none"> <li><i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>major lodes.</li> <li>Surrounding the major lodes, a “halo” zone was modelled based on 0.5% Pb cut-off grade and represents an alteration envelope around the high-grade lodes</li> <li>No alternate interpretations have been considered as the overall geometry of the mineralisation is generally well understood</li> <li>The grade and to a lesser degree lithological interpretation forms the basis for the modelling.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>The currently interpreted mineralisation of the Bawdwin area extends for approximately 1.8 km along a 325° northwest strike. The dip angle of the zone varies from -70 degrees to -90 degrees with most common dip angle at -80 degrees. The zone extends from surface to 475m below the surface.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. Sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> </ul>	<ul style="list-style-type: none"> <li>Grade estimation was by ordinary kriging (OK) using Micromine 2016.1 software. The interpretation was extended perpendicular to the corresponding first and last interpreted plan levels to the distance equal to a half distance between the adjacent underground levels.</li> <li>CSA Global carried out the reported Mineral Resource estimate in September – October 2017.</li> <li>The OK estimate was completed concurrently with two check Inverse Distance Weighting (IDW) estimates. The OK estimate used the parameters obtained from the modelled variograms. The results of the check estimates correlate well.</li> <li>No deleterious or non-grade variables were estimated.</li> <li>The block model was constructed using a 5 m E x 10 m N x 10 m RL parent block size, with sub-celling to 1 m E x 2 m N x 2 m RL for domain volume resolution. The parent cell size was chosen on the basis of the general morphology of mineralised zones and in order to avoid the generation of large block models. The sub-cell size was chosen to maintain the resolution of the mineralised zones. The sub-cells were optimised in the models where possible to form larger cells.</li> <li>The search radii were determined by means of the evaluation of the semivariogram parameters.</li> <li>The first search radius was selected to be equal to the block size dimensions to use the grades from the workings that intercepted the block. The second search radius was selected to be equal to two thirds of the semivariogram long ranges in all directions. Model cells that did not receive a grade estimate from the first interpolation run were used in the next interpolation with greater search radii equal to full long semivariogram ranges in all directions. The model cells that did not receive grades from the first three runs were then estimated using radii incremented by the full long semivariogram ranges. When model cells were estimated using radii not exceeding the five full semivariogram ranges, a restriction of at least three samples from at least two drill holes was applied to increase the reliability of the estimates.</li> </ul>

Criteria	JORC-Code Explanation	Commentary
<b>Estimation and modelling techniques (continued)</b>	<ul style="list-style-type: none"> <li>• Any assumptions about correlation between variables.</li> <li>• Description of how the geological interpretation was used to control the resource estimates.</li> <li>• Discussion of basis for using or not using grade cutting or capping.</li> <li>• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>• No selective mining units were assumed in this estimate.</li> <li>• No strong correlations were found between the grade variables estimated.</li> <li>• Grade envelopes were defined for Pb based on 3.5% Pb grade to define high grade lodes and 0.5% Pb for the “Halo” zone. Hard boundaries between the grade envelopes were used to select sample populations for grade estimation.</li> <li>• Statistical analysis to determine top cut grade values was carried out separately for each element (Pb, Zn, Cu, Ag) and separately for high grade lodes and the “Halo” zone.</li> <li>• Validation of the block model included comparison of the block model volume to the wireframe volume. Grade estimates were validated by statistical comparison with the drill data, visual comparison of grade trends in the model with the drill data trends, and by using a second interpolation technique.</li> <li>• No reconciliation data is available.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>• The tonnages are estimated on a dry basis</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>• A 2% Pb cut-off grade was used to report the Mineral Resource.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>• 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</li> </ul>	<ul style="list-style-type: none"> <li>• A Scoping Study including a pit optimisation is currently assessing the open pit development opportunity at Bawdwin. It is expected that deeper parts of the deposit will be amenable to underground mining.</li> </ul>



Criteria	JORC-Code Explanation	Commentary
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>It is assumed that Pb, Zn, Cu and Ag sulphide mineralisation can all be economically extracted using conventional flotation methods. These were all produced historically at the Bawdwin Mine and Namtu Smelter Complex.</li> <li>The oxide and transitional portions of the resource represent a minor proportion of the total resource. The historical Pb-oxide concentrator plant had difficulties in treating the mixed sulphide/oxide ores (Pb recoveries of 30%).</li> <li>A modern metallurgical test work program is required.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>Suitable sites for waste dumps are located in the neighbouring ER Valley.</li> <li>The Pangyun creek that flows on the margins of the deposit will require a diversion for a large open pit</li> <li>Ore processing sites are undergoing further evaluation but there are possible options to pump a slurry to Namtu along a pipeline following the old railway line to a new processing plant.</li> </ul>



Criteria	JORC-Code Explanation	Commentary
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>• <i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li>• <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</i></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A total of 625 bulk density measurements were taken from a suite of mineralised and un-mineralised drill core using conventional water immersion techniques.</li> <li>• The bulk density of mineralisation increases with sulphide content and hence Pb, Zn and Cu metal grade.</li> <li>• For mineralised lodes and halo mineralisation bulk density has been estimated using a formula which assumes Pb is present as galena, Zn is present as sphalerite and Cu is present as chalcopyrite, with the remainder of the rock is gangue. The estimated values were calibrated against the measured densities from drill-core.</li> <li>• Based on the bulk density measurements a density of 2.0 was used for oxide ore, 2.2 for transitional ore, 2.40 for un-mineralised Bawdwin Tuff and 2.40 for Lo Min Porphyry.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Inferred Mineral Resource classification is based on the evidence from the available drill hole and channel sampling. This evidence is sufficient to imply but not verify geological and grade continuity.</li> <li>• The Inferred classification has considered all available geological and sampling information, and the classification level is considered appropriate for the current stage of this project.</li> <li>• The open pit mapping and diamond drilling all have been carried in accordance with modern industry best practice standards and have QAQC data to support the assay data. The historical underground sampling has no assay QAQC. The data quality is acceptable for the classification of Inferred.</li> <li>• The overall structure of the major lodes is well understood from the underground data and open pit mapping.</li> <li>• The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>

Criteria	JORC-Code Explanation	Commentary
<b>Audits or reviews.</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>Internal audits were completed by CSA Global which verified the technical inputs, methodology, parameters and results of the estimate.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li><i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation</i></li> </ul>	<ul style="list-style-type: none"> <li>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource to an Inferred classification as per the guidelines of the 2012 JORC Code.</li> <li>The statement refers to global estimation of tonnes and grade.</li> </ul>