

29 October 2019

## Europa Metals Ltd

(“Europa Metals”, the “Company” or the “Group”) (AIM, AltX: EUZ)

### **Updated JORC Resource – Total Resource increased by 12% to 18Mt @ 7.4% ZnEq including first reported Indicated Resource of 2.7Mt @ 8.9% ZnEq, Toral Zn, Pb, Ag Project Spain**

The Company is pleased to announce a first Indicated resource of 2.7 million tonnes (“Mt”) @ 8.9% zinc equivalent (“ZnEq”) and a 12% increase in total resource from the JORC (2012) Mineral Resource estimate update at the 100% owned Toral zinc, lead and silver project in Spain. The size and grade of the Indicated resource has exceeded management expectations following a comprehensive update of the resource model utilising a series of new data sets defined on the Toral project.

#### **Highlights:**

- Updated independent JORC (2012) Indicated and Inferred mineral resource estimate obtained from Addison Mining Services Limited for the Toral lead-zinc-silver project, which incorporates data obtained from:
  - 101 diamond (including wedges) and 4 reverse circulation (“RC”) drill holes totalling 56,949.50 metres; and
  - 19 underground channels for 18.75 metres,which were utilised as the input database for geological modelling and resource estimation.
- Indicated resource of approximately 2.7Mt @ 8.9% ZnEq (including lead (“Pb”) credits) and 32g/t silver (“Ag”), at a 4% cut-off.
- 12% increase in the total resource tonnes to approximately 18Mt (at 7.4% ZnEq with Pb credits and 24 g/t Ag), at a 4% cut-off.
  - 30% increase in contained tonnes of zinc to approximately 830,000 tonnes
  - 12% increase in contained tonnes of lead to approximately 570,000 tonnes
  - 8% increase in contained ounces of silver to approximately 14 million ounces
- Resource model substantially enhanced, incorporating fault mapping and the 2018 surface work, together with new data from the Company’s 2018 and 2019 diamond and RC drilling campaigns.
- The Indicated resource and new resource model will be reviewed alongside the metallurgical, geotechnical and hydrogeological works going forward as elements for inclusion in a Pre-Feasibility Study (“PFS”) in order to build upon the initial scoping study economics (announced on 10 December 2018) which were based on the previous JORC (2012) resource, namely:
  - US\$33 million CAPEX for a proposed 450ktpa design capacity plant (including associated auxiliary costs) with a US\$25 per tonne OPEX mining cost utilising mechanised cut and fill over a 15 year mine life at a 4% Eq (PbAg) cut off.
- Europa Metals’ team is currently analysing the updated model in order to identify new key targets both within and outside the defined resource.
- Preliminary metallurgical testwork being undertaken by Wardell Armstrong LLP to test potential concentrate products and metals processing methods is on schedule for completion during Q4 2019.

Europa Metals, the European focused lead, zinc and silver developer, is pleased to announce the results of an updated independent mineral resource estimate prepared in accordance with JORC (2012) for its 100% owned Toral lead-zinc-silver project in northern Spain (“Toral” or the “Toral Project”), which has produced, at a 4% cut-off, a first JORC (2012) compliant Indicated resource estimate of approximately 2.7Mt at 8.9% ZnEq (including Pb credits) and a 12% increase in the total Toral resource to approximately 18Mt.

The Board views this resource update as being a significant step forwards for the overall project programme from the initial conceptual Scoping Study based on Europa Metals' work conducted at Toral in 2017-2018 and the previous Inferred-only resource estimate announced on 10 December 2018.

The upgraded resource estimate follows the processing of assays from the Company's 2018 and 2019 diamond drilling campaigns into a new resource model. It also reflects the findings from a 2018 surface mapping programme, analysis of faulting structures and increase in bulk density measurements, and incorporated data obtained from the 2018 and 2019 RC and diamond drilling campaigns, combined with the historic core re-logging.

The update has been prepared and reported in accordance with JORC (2012 revision) by Addison Mining Services Limited ("AMS").

### **Implications of the resource update and new resource model for the Toral Project**

The size and grade of the Indicated resource exceeds management expectations and forms a significant cornerstone from which to progress towards a PFS, with further mine planning work to incorporate the Indicated resource, metallurgical testwork and new engineering components.

The update has also seen a significant reinterpretation of the resource and subsurface conditions at Toral. Elements such as the impact of fault structures on the known mineralisation are now being better understood. Consequently, new drilling targets within the updated resource area are now being generated with the aim of further increasing the confidence levels in the Toral resource estimate in a cost-effective manner going forwards. The progression in geological and structural understanding is also significant in terms of determining new areas of interest to the East and below the current resource for potential future expansion of the resource area.

### **Laurence Read, Executive Director of Europa Metals, commented:**

*"Today's resource update containing approximately 2.7Mt of Indicated Resource at 8.9% ZnEq (including Pb credits) and a 12% increase in the total resource to 18Mt at 7.4%, using a 4% cut-off, is, in our view, the most significant development for the Toral Project to date. The Indicated resource significantly exceeds our expectations and this update has enabled the team, working alongside AMS, to pull together the findings from a whole series of independent workstreams to form, not just a new resource estimate, but a new resource model that better demonstrates the subsurface conditions and controls at Toral.*

*"The project now has contained metal estimates of 830,000 tonnes of zinc, 570,000 tonnes of lead and 14 million ounces of silver, whilst maintaining highly robust mineable grade. The results will form a major part of a first mining plan for a PFS but will also, importantly, inform our approach to enhancing the current mineable area and selectively assessing new prospective areas for future resource upgrade and expansion.*

*"The considerable work undertaken over the last 24 months at Toral, moving from a maiden JORC resource estimate through to a Scoping Study and today's resource upgrade, has been highly cost efficient and effective. We are enhancing our understanding of this valuable lead, zinc and silver project and building our confidence levels in terms of resource size and quality, in-situ metal and potential future product quality. Going forwards, I look forward to announcing further progress in due course with respect to our stakeholder engagement process for a development application, metallurgical testwork results and the next stage of resource drilling."*

### **Myles Champion, Technical Director of Europa Metals, further commented:**

*"The activities undertaken over the last 12-18 months, such as re-logging and mapping, have all been important pieces of work and have allowed the team to build up a knowledge database which has been effectively utilised to guide and influence the updated resource model.*

*"The increase in the overall tonnage is good to see as it demonstrates the ability to grow Toral. The bonus has been enhancing our knowledge gained from such workstreams culminating in a limited diamond drilling programme this year that has been highly cost effective. We are delighted to announce an increase in the confidence level for the resource over a portion of the high-grade area of Toral to the Indicated category.*

*"I look forward to the next stage of planning that progresses Toral towards a PFS."*

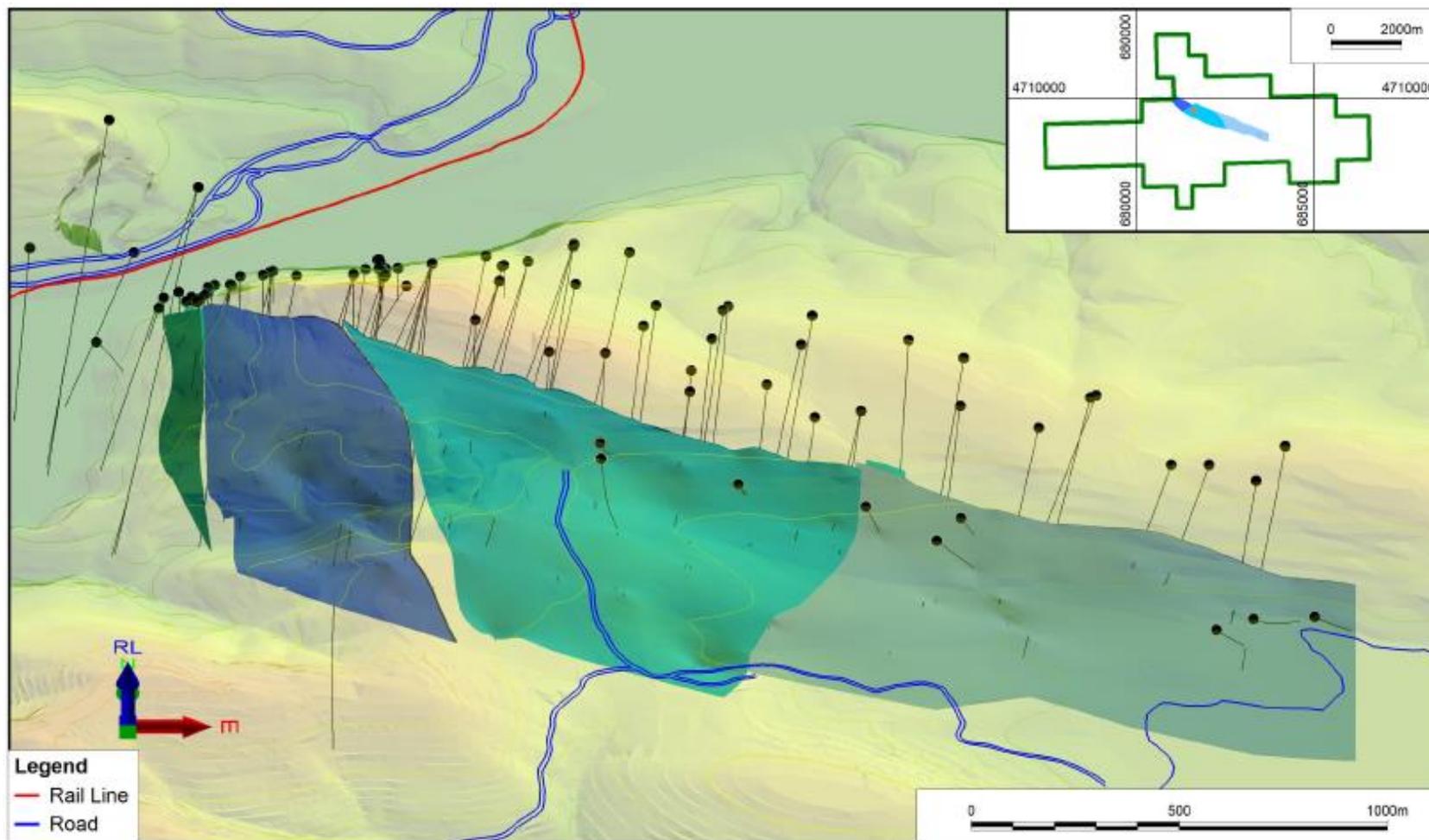
### **Revised inputs from new drilling, historic re-logging work, mapping and analysis**

Europa Metals has completed two drilling campaigns between September 2018 and August 2019. The first campaign consisted of four RC holes for 1,109m (2 infill and 2 step-out exploration holes) and the second consisted of six diamond holes and one wedge daughter hole for 3,857.3m ranging in depth from 299m to 761.3m. The diamond drill holes targeted the high-grade areas in the block model with a view to increasing the confidence and the resource category for that area.

The updated mineral resource estimate as of 25 October 2019 for the Toral deposit comprises, at a 4% cut-off:

- An Indicated resource of approximately 2.7Mt @ 8.9% Zn Equivalent (including Pb credits), 5% Zn, 4.2% Pb and 32g/t Ag
  - Including 130,000 tonnes of zinc, 110,000 tonnes of lead and 2.8 million ounces of silver
- An Inferred resource of approximately 16Mt @ 7.2% Zn Equivalent (including Pb credits), 4.5% Zn, 2.9% Pb and 22g/t Ag
  - Including 690,000 tonnes of zinc, 450,000 tonnes of lead and 11 million ounces of silver
- Total resources of approximately 18Mt @ 7.4% Zn Equivalent (including Pb credits), 4.5% Zn, 3.1% Pb and 24g/t Ag
  - Including 830,000 tonnes of zinc, 570,000 tonnes of lead and 14 million ounces of silver

Refer to Figure 1: Long section Toral block model and mineralisation wireframes, looking north:



*Figure 1: Wireframes October 2019 including fault modelling with drill holes*

This latest update compares favourably with the previously reported mineral resource estimate, announced on 10 December 2018 (which had an effective date of 29 October 2018), which contained the following tonnes and grade at a 4% cut-off:

- Inferred resources of approximately 16Mt @ 7.5% Zn Equivalent (including Pb and Ag credits), 3.9% zinc, 3.1% Pb and 24g/t silver\*

- Approximately 640,000 tonnes of zinc, 510,000 tonnes of lead and 13 million ounces of silver\*

\*Zn Eq (PbAg)% is the calculated Zn equivalent incorporating silver credits as well as lead;  $Zn\ Eq\ (PbAg)\% = Zn + Pb \cdot 0.96 + Ag \cdot 0.022$ . Zn equivalent calculations were based on 3-year trailing average price statistics obtained from the London Metal Exchange and London Bullion Market Association giving an average Zn price of US\$2,500/t, Pb price of US\$2,100/t and Ag price of US\$17/oz.

Since the compilation and publication of Europa Metals' first JORC (2012) resource estimate, the Company's geological team has been undertaking several important workstreams and internal projects over the course of the last 12-18 months in order to improve our geological understanding of the Toral deposit.

The 2018 re-logging exercise of previously drilled historic core stored at the national Lithoteca in Peñarroya has proven to be most beneficial in not only significantly increasing the quantity and quality of bulk density measurements, but also increasing the understanding of the geological environment, controls on mineralisation and providing basic structural data.

Another workstream completed over the course of late 2018/early 2019 was detailed surface geological mapping which has now been tied into the database to provide further data and guidance on structural influences within the confines of the Toral deposit.

The findings from such work have now been incorporated into the new resource, providing better delineated geological boundaries and for the first time defining a structural framework which has been integral in building the updated resource model (refer to Figures 2 and 3 via the link below).

Figure 2: Mineralisation wireframes, looking north.

Figure 3: Mineralisation wireframes with major fault surfaces.

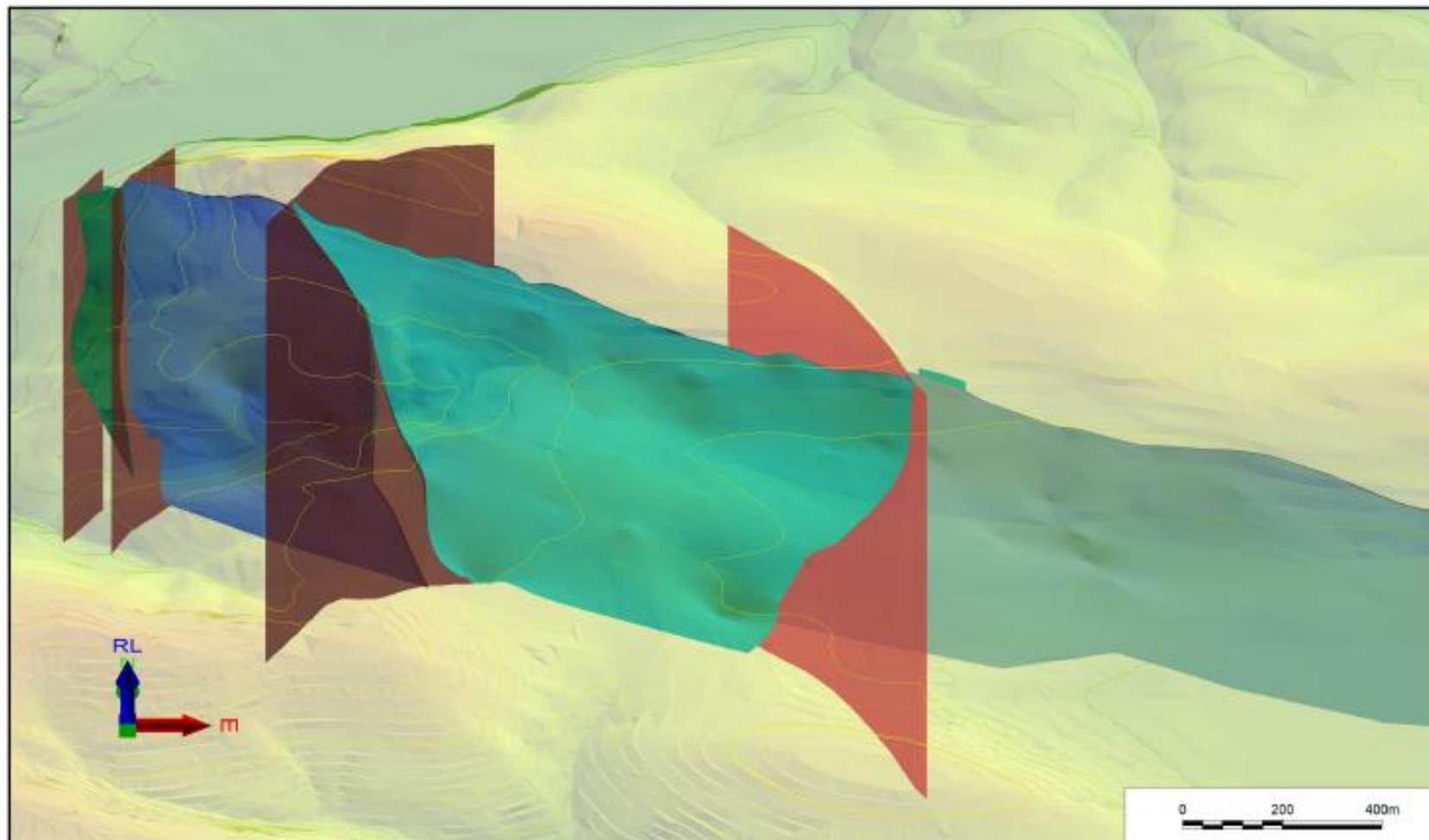


Figure 2: Wireframes showing faulting

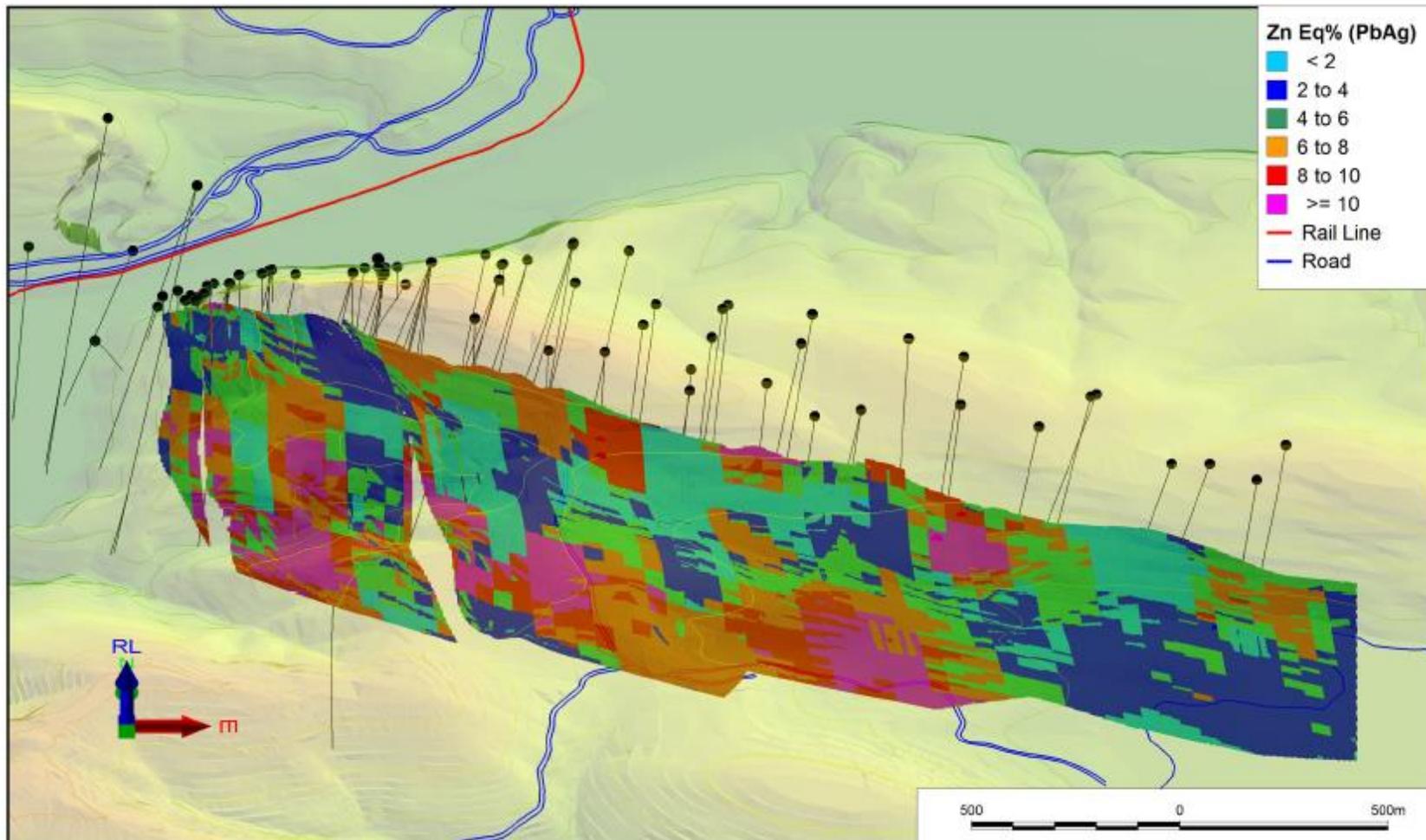


Figure 3: Block Model view with drill holes - October 2019 JORC (2012) resource update

### Updated JORC (2012) Inferred and Indicated Mineral Resource Estimate

Further to the recent RC and diamond drilling conducted between September 2018 and August 2019, the Company commissioned AMS to complete an updated mineral resource estimate in September 2019. The updated mineral resource estimate is based on all the available historical data from four drilling campaigns conducted on licence number 15.199 (namely, the 1972 - 1984 Peñarroya-Adaro campaign, the 2006 - 2008 Lundin Mining campaign and the Europa Metals 2016 - 2017 campaign and RC and diamond drilling conducted from September 2018 to August 2019), along with underground channel sampling results from the numerous adits.

The updated mineral resource estimate has been reported in accordance with the guidelines of the JORC (2012) code.

### Block model

The Inferred and Indicated resource for the Pb-Zn-Ag mineralisation located on the Toral Project's licence area has been estimated at various cut-offs (as set out in Table 1 below). The Company reviewed the new block model along with its appointed geological consultants, AMS, and concluded that a 4% ZnEq (PbAg) cut-off was appropriate utilising estimated mining parameters typical for similar types of project and mineralogy, and an historical three-year trailing average for metals prices, which, although conservative, was deemed appropriate at this stage in the project's development.

Zn Price Used:	US\$2,780/t	US\$/lb1.263
Pb Price Used:	US\$2,200/t	US\$/lb1.00
Ag Price Used:		US\$16.4/oz

The resource update has identified potentially economic mineralisation ranging from surface to approximately 1,100m below surface. The new block model currently extends for a strike length of 3,600m and is still open to the east and west along strike and also at depth where it has not yet been closed off.

Cut-Off Zn Eq (PbAg)%	Tonnes (Millions)	Density	Zn Eq (Pb)%	Zn Eq (PbAg)%	Zn %	Pb %	Ag g/t	Contained Zn Tonnes (000s)	Contained Pb Tonnes (000s)	Ag Troy Oz (Millions)
<b>Indicated</b>										
6	2.1	3	10	11	6	4.7	35	120	100	2.4
5	2.3	2.9	9.6	10	5	4.5	34	130	100	2.6
<b>4</b>	<b>2.7</b>	<b>2.9</b>	<b>8.9</b>	<b>9.5</b>	<b>5</b>	<b>4.2</b>	<b>32</b>	<b>130</b>	<b>110</b>	<b>2.8</b>
3	3.0	2.9	8.3	8.9	5	3.9	31	140	120	2.9
<b>Inferred</b>										
6	11	2.9	8.4	8.9	5	3.5	26	550	360	8.8
5	12	2.9	7.9	8.4	5	3.2	24	610	400	9.7
<b>4</b>	<b>16</b>	<b>2.9</b>	<b>7.2</b>	<b>7.6</b>	<b>5</b>	<b>2.9</b>	<b>22</b>	<b>690</b>	<b>450</b>	<b>11</b>
3	18	2.9	6.7	7.1	4	2.7	21	740	480	12
<b>Total</b>										
6	13	2.9	8.7	9.2	5	3.7	28	670	460	11
5	15	2.9	8.2	8.6	5	3.4	26	740	510	12
<b>4</b>	<b>18</b>	<b>2.9</b>	<b>7.4</b>	<b>7.9</b>	<b>5</b>	<b>3.1</b>	<b>24</b>	<b>830</b>	<b>570</b>	<b>14</b>
3	21	2.9	6.9	7.3	4	2.9	22	880	600	15
<b>Transitional Oxide Material Total</b>										
4	3	2.9	5.8	6.3	3	3.2	27	87	97	2.6
<b>Unweathered Fresh Rock Total</b>										
4	15	2.9	7.8	8.2	5	3.1	23	740	470	11

**Table 1:** Summary of Inferred mineral resources for the Toral property reported at a 4.0% Zn equivalent cut-off grade (including Pb and Ag credits) and estimated grade and tonnages at the various cut-off grades. Figures are rounded to reflect the accuracy of the estimate and as such totals may not cast.

**Notes:**

- No mineral reserve calculations have been undertaken. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
- Numbers are rounded to reflect the fact that an Estimate of Resources is being reported as stipulated by JORC 2012. Rounding of numbers may result in differences in calculated totals and averages. All tonnes are metric tonnes.
- Zn equivalent calculations were based on 3 year trailing average price statistics obtained from the London Metal Exchange and London Bullion Market Association giving an average Zn price of US\$2,780/t, Pb price of US\$2,200/t and Ag price of US\$16.4/oz. Recovery and selling factors were incorporated into the calculation of Zn Eq values. It is the Company's opinion that all the elements included in the metal equivalents calculation (Zinc, Lead and Silver) have a reasonable potential to be recovered and sold.
- Zn Eq (PbAg)% is the calculated Zn equivalent incorporating silver credits as well as lead and is the parameter used to define the cut-off grade used for reporting resources (Zn Eq (PbAg)% =  $Zn + Pb \cdot 0.935 + Ag \cdot 0.018$ ).
- Zn Eq is the calculated Zn equivalent using lead credits and does not include silver credits (Zn Eq =  $Zn + Pb \cdot 0.935$ ).
- The mineral resource estimate set out above for the zinc, lead and silver mineralisation in the Toral project area is based on a 3D geologic model and wireframe restricted block model that integrated the exploration work on the Toral project up to 30 September 2019. The block model used uniform cell size of 50x4x50m to best suit the orientation of the mineralisation and sample spacing. The block model was rotated by 20° in plan view to best match the trend of mineralisation. Sub cells were applied to better fit the wireframe solid models and preserve accurate volume as much as possible. Cells were interpolated at the parent block scale using an ordinary kriging.

7. Top cuts were applied to the composite assay grades for 20% Zn, 17% Pb and 125 g/t Ag, any value above the top cut value was reduced to that grade.
8. The Indicated and Inferred mineral resource category for the Toral lead-zinc-silver project set out in Table 1 (at cut-off grades >4% Zn Equivalent) comply with the resource definitions as described in the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC)
9. The tonnes and grades reported at a cut-off grade of 3% Zn equivalent are below the economic cut-off grade of 4% and as such should not be considered mineral resources, they are shown here for comparison purposes only.

Figure 4 showing AMS' resource block model for Toral as a 3D view looking north, by Zn equivalent grade:

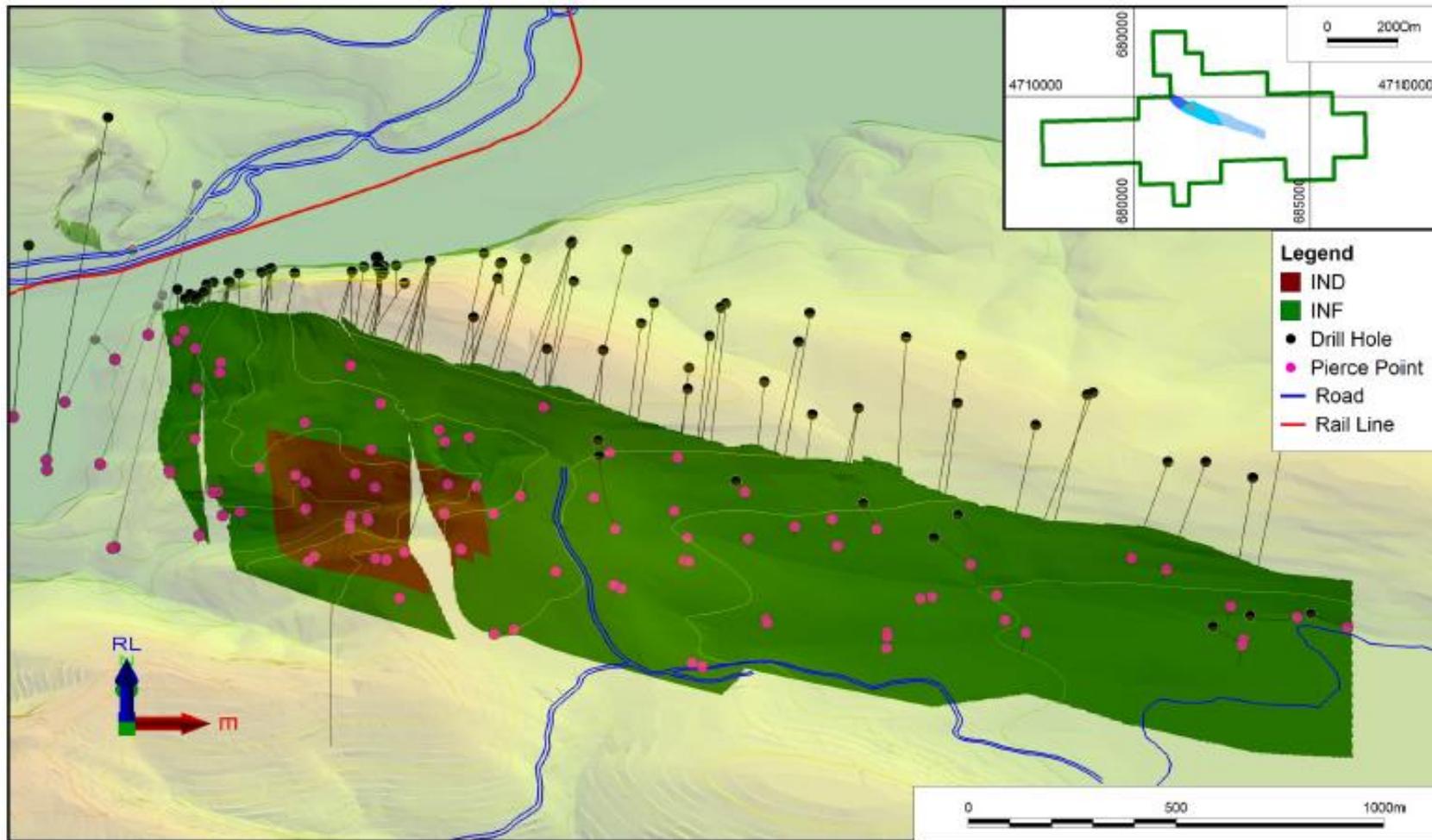


Figure 4: Resource category differential- Indicated/inferred

Figure 5: showing AMS' resource block model for Toral as a 3D view looking north, by resource category:

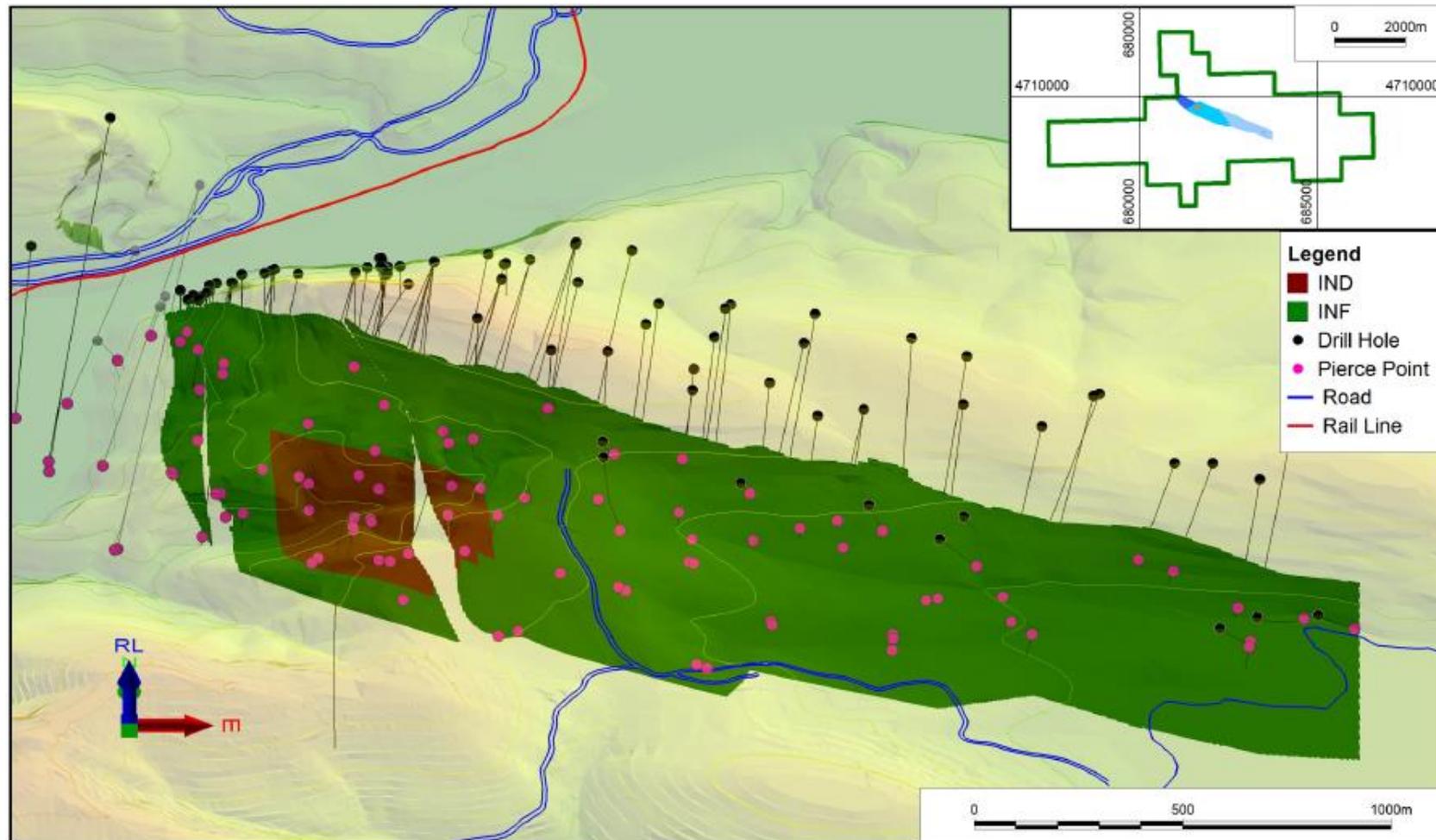


Figure 5: Resource categorisations; indicated and inferred

### Summary of updated resource estimate and reporting criteria

In accordance with the JORC Code (2012) reporting guidelines, a summary of the material information used to estimate the updated mineral resource is set out below.

### Geology and geological interpretation

The Toral Project is a traditional polymetallic (lead-zinc-silver) deposit, which is hosted over 6km of strike length of the prospective Lower Cambrian Vegadeo Limestone formation, that is regionally mineralised along more than 40km of its extent. The deposit represents a carbonate hosted, structurally controlled deposit type, demonstrating fault-controlled contact, vein, carbonate replacement and breccia styles of mineralisation situated close to and along the boundary between footwall slates and hanging wall limestones and dolomites. Sub-ordinate lead-zinc-silver mineralisation also occurs wholly within the hanging wall limestones and dolomites, approaching the contact with the slates.

Historic drill hole re-logging undertaken in 2018 has provided improved geological, structure, alteration and weathering/oxidation information, which has been incorporated into the interpreted geological and mineralised models for the updated resource estimates. Surface mapping and remote data interpretation by Europa Metals has allowed the development of an interpreted fault model, also incorporated into the updated geological and mineralised models used in the updated mineral resource estimate.

### Weathering

The weathering profile was observed throughout the drill holes and historic shallowly emplaced horizontal adits. In general, observations on weathering and oxidation at Toral suggests a poorly developed or truncated profile, with minimal oxidation not much developed below 30 metres from surface, with the majority of the country rock being unweathered or showing only fractured controlled weathering and oxidation

in the form of Fe oxide joint tarnishing and fracture infill. Weathering and oxidation within the deeper main parts of the mineralised zone is interpreted as partial, being fracture controlled with less than 10% weatherable minerals weathered and/or oxidised. A weathering surface was interpreted at the moderately oxidised-partially weathered/fracture controlled weathered boundary to sub-divide the moderately oxidised 'transitional' zone material and -10% weathered 'fresh' material below. Due to the strong lithological and structure control, an observed trough is developed at the transitional-fresh boundary along the main structure, interpreted through the drill hole logging of weathering. The accuracy of the surface at this stage is suitable for application and use in the reporting of Inferred and Indicated resources.

### **Bulk density**

The resource database contains 2,373 bulk density measurements, with a total of 177 within the mineralised wireframe.

The mean for the mineralised domain transitional zone is 2.75 g/cm<sup>3</sup> and the mean for mineralised domain fresh material is 2.85 g/cm<sup>3</sup>. A broad linear relationship between Pb+Zn grade and bulk density was identified from scattergrams and the formula  $2.75 + 0.02(\text{Pb}+\text{Zn}\%)$  used to estimate block density within the block model.

### **Drilling techniques and hole spacing**

The updated mineral resource estimate includes new information from six surface collared diamond holes and one wedge hole and 4 new RC holes drilled across two campaigns in 2018 and 2019.

A total of 101 diamond drill holes (including wedge) for 55,840.5m and 4 RC drill holes for 1,109 metres totalling 56,949.50 metres, and 19 underground channels for 18.75 metres were used as the input database for geological modelling and resource estimation.

Drill core diameter was PQ, HQ, NQ2, NQ and BQ depending upon depth. Tube type is unknown for the historic Peñarroya drilling, whilst the triple tube method was used for the historic Lundin Mining and Europa Metals' drilling campaigns.

The 2018 and 2019 diamond core has been orientated. No orientation has been performed on the historic drill core.

Drill and UG channel sample data spacing across the current resource area ranges from approximately 50-100m x 50-100m centres within the most densely tested area situated in the NW, stepping out to approximately 200m x 200m within the mid-section and 100-200m x 500m in the SE.

The distribution of drill holes and UG channel sampling, supported by surface and underground mapping, is sufficient to establish the degree of geological and grade continuity appropriate for a JORC (2012) Inferred and Indicated classification of resources.

### **Sampling and sub-sampling techniques**

The four main phases of historic exploration drilling and sampling are:

- 1972-1984 Peñarroya-Adaro: diamond drill core method was used to obtain samples for geological logging and sampling. Geological and analytical data is recorded on hardcopy. Selective sampling method was employed around areas of interest. Sampling intervals measure approximately 1m, half core sent for analysis, with half core retained for reference. Exact details on core processing, sampling techniques and analytical methods are unclear, however subsequent explorers, Lundin Mining, sent the majority of the Peñarroya core pulp reject samples to ALS Chemex for multi element re-analysis by ICP.
- 2006-2008 Lundin Mining: diamond drill core method was used. Core logging completed on hardcopy. Selective sampling method was employed around areas of interest. Sampling intervals measure approximately 1m, half core sent for analysis, with half core retained for reference. Samples typically 1m half core, with samples prepared at the then Lundin Laboratory in Suecia, then shipped to ALS Chemex Vancouver for multi-element analysis by ICP. Half core samples reduced to -400 microns and 100g sub-sample taken for analysis. Multi-element re-analysis of available Peñarroya diamond drill hole pulp reject samples completed at ALS Chemex Vancouver using ICP.
- 2016-2017 Europa Metals: diamond drill core and underground cut channel sampling methods used to obtain samples for geological logging and sampling. Geological and analytical data is recorded on hardcopy. Selective sampling method was employed around areas of interest. Sampling intervals measure approximately 1m, half core sent for analysis, with half core retained for reference. Samples sent to ALS Seville for preparation and multi-element analysis by ICP. Half core samples reduced to -400 microns and 100g sub-sample taken for analysis.

- 2018-2019 Europa Metals: diamond drill core and RC chips used to obtain samples for geological logging and sampling. Geological and analytical data is recorded on paper and later digitised. Selective sampling method was employed around areas of interest. Sampling intervals measure approximately 1m, half core and RC riffle splits sent for analysis, weighing approximately 2-3kg, with half core and chip sub-samples retained for reference. Samples were sent to ALS Seville for preparation and multi-element analysis by ICP. Half core and RC samples were reduced to -400 microns and 100g sub-sample taken for analysis.

### **Diamond recovery**

A total of 11,484 core recovery measurements exist in the database for the drilling with average recovery of 81%. The average recovery for the Company's diamond drilling is 95%. Core recovery is measured over run lengths.

### **Cut-off grades**

The Inferred and Indicated resource for the Pb-Zn-Ag mineralisation located on the Toral property, licence number 15.199, has been estimated at various cut-offs. For the Toral deposit resource, the economic cut-off was determined by calculation of block revenue factors based on Zn equivalent calculations derived from an historical three-year trailing average for Zn, Pb and Ag prices. Indicative mining and processing costs typical of the region and deposit type were applied along with typical mining recovery and dilution factors and metallurgical recovery factors identified by laboratory studies and production at comparable deposits and accepted by AMS.

For reporting in compliance with JORC (2012) an economic cut-off grade of 4% Zn equivalent (including Pb and Ag credits) was selected considering the aforementioned factors and allowing for some increase in commodity prices to define resources with a reasonable prospect of eventual economic extraction now or in the near future. Resources are reported as follows:

The updated mineral resource estimate as of 25 October 2019 for the Toral lead-zinc-silver deposit comprises:

- An Indicated resource of approximately 2.7Mt @ 8.9% Zn Equivalent (including Pb credits), 5% Zn, 4.2% Pb and 32g/t Ag
  - Including 130,000 tonnes of zinc, 110,000 tonnes of lead and 2.8 million ounces of silver
- An Inferred resource of approximately 16Mt @ 7.2% Zn Equivalent (including Pb credits), 4.5% Zn, 2.9% Pb and 22g/t Ag
  - Including 690,000 tonnes of zinc, 450,000 tonnes of lead and 11 million ounces of silver
- Total resources of approximately 18Mt @ 7.4% Zn Equivalent (including Pb credits), 4.5% Zn, 3.1% Pb and 24g/t Ag
  - Including 830,000 tonnes of zinc, 570,000 tonnes of lead and 14 million ounces of silver

### **Estimation methodology**

AMS verified new primary analytical data via cross reference against original lab certificates. The database for use as input for mineral resource modelling and estimation has also been validated and verified by AMS. Micromine 3D geological modelling and estimation software was used for import, validation and QC verification assessment, 3D solid modelling, geostatistics and block model grade estimation and block model reporting. Data checks include checks for overlapping and missing intervals, drillhole trace errors, missing survey data, lithology and collars.

As with previous resource estimates completed by AMS (in 2017 and 2018) wireframe solid models were created for each domain based on a mineralisation threshold of approximately 0.2% for Zn and Pb (approximately 0.4% Zn+Pb). Analysis of Zn and Pb grades in cross section and in scatter plots showed a strong relationship and no requirement to model Zn and Pb separately was identified. Ag showed a strong correlation with Pb and was estimated within the Zn/Pb mineralised domain.

The updated wireframes were generated using Micromine's implicit vein modelling functionality and incorporated major fault boundaries to better honour offsets in the structure and preserve thicknesses between intercepts. Interpretation of the mineralised domains was guided by geological interpretation of the deposit incorporating structural and lithological boundaries and surface expression in topographical data and outcrop mapping.

To the north west the mineralised models are truncated by the licence boundary and are extended approximately 10m past the south easterly most drill hole which was mineralised but contained sub-economic grades (3m at 2.4% ZnEq). The structure remains open to the south east.

Down dip the model was extrapolated approximately 50-200m below the deepest sample in the north west and central zones, and approximately 400m below the deepest sample in the SE zone with consideration of depths tested along strike to the NW. Extents of extrapolation are considered appropriate for the level of information, deposit type, strike and depth extents tested, observed and geostatistical grade continuity and the assigned resource classification.

A uniform cell block model of 50mE, 4mN, 50mZ was restricted to the wireframes using block factors. The block model was rotated by 20° in plan view to best match the trend of mineralisation. The uniform model and 2m sample composites for the mineralised domain were then flattened to a constant vertical plane striking 110° to account for fault offsets, improve variography and grade mapping. Thickness was preserved in the flattening process and no lateral stretching was applied.

Block model interpolation and extrapolation for Zn, Pb and Ag was completed using directional variograms for each element in the flattened space at the uniform block scale. Ordinary kriging was used, and a multiple pass kriging neighbourhood used at increasing radii to prevent smearing of high grades. The block model was then sub blocked to the mineralised wireframes in real space to best honour thickness and volume.

Top cuts were applied to the composite assay grades for 20% Zn, 17% Pb and 125 g/t Ag, any value above the top cut value was reduced to that grade.

Figures 6 and 7 showing grade tonnage curves, tonnage based on Zn equivalent with Pb and Ag credits, are available at:

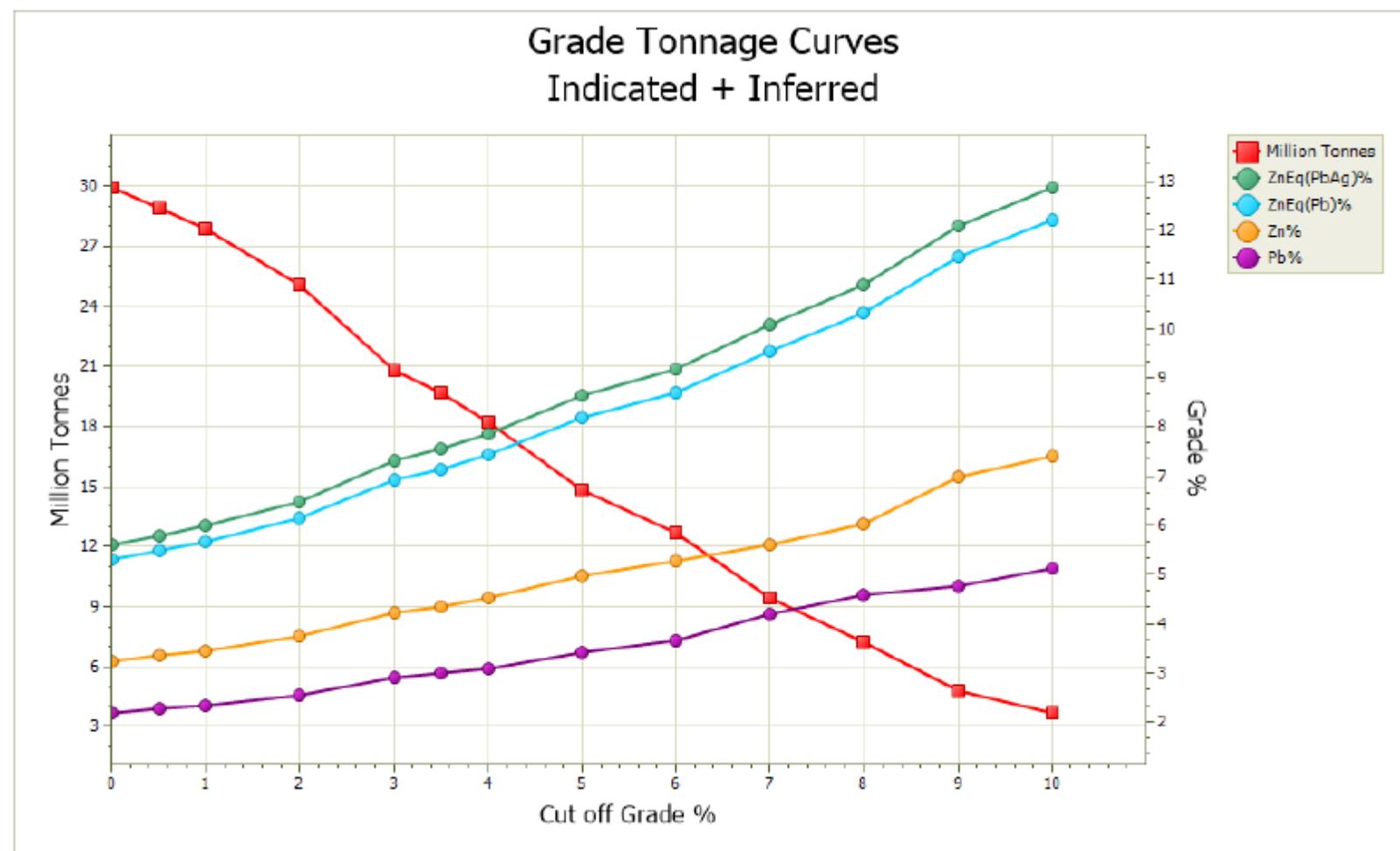


Figure 6: Grade tonnage curves indicated and inferred resource category

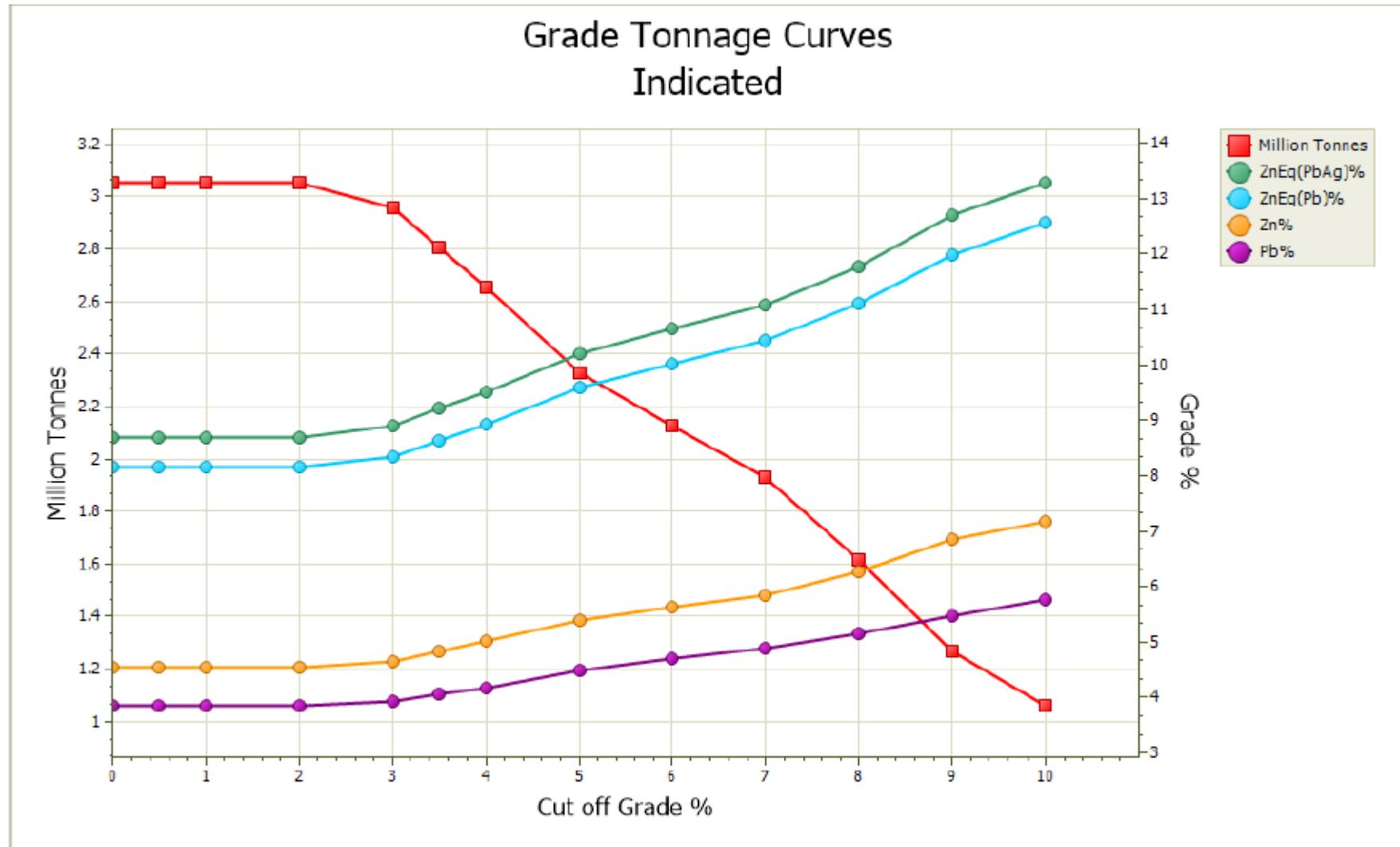


Figure 7: Grade tonnage curves indicated resource category

#### Classification criteria

The portion of the Toral deposit defined by drilling, underground development and channel sampling, has been classified as an Inferred and Indicated Mineral Resource in accordance with the JORC Code (2012) guidelines based on a combination of drill spacing, geological confidence, grade continuity, previous mining and the quality control standards achieved.

#### Mining and metallurgical methods and parameters

Based on the orientations, thickness and depths to which the ore body has been modelled, as well as the estimated grade, underground mining is the intended mining methodology.

#### Comparison with previous Mineral Resource estimate

The updated mineral resource estimate compares favourably with the previously reported Inferred-only mineral resource estimate, announced on 10 December 2018, which provided the following tonnes and grade:

Previous Resource Estimation Results Announced in December 2018
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Cut-Off Zn Eq (PbAg)%	Tonnes (Millions)	Density	Zn Eq (Pb)%	Zn Eq (PbAg)%	Zn %	Pb %	Ag g/t	Contained Zn Tonnes (000s)	Contained Pb Tonnes (000s)	Ag Troy Oz (Millions)
<b>Total</b>										
6.0	9.6	2.8	8.6	9.3	4.7	4	30	450	390	9.1
5.0	13	2.8	7.7	8.3	4.3	3.5	26	570	450	11
<b>4.0</b>	<b>16</b>	<b>2.8</b>	<b>7</b>	<b>7.5</b>	<b>3.9</b>	<b>3.1</b>	<b>24</b>	<b>640</b>	<b>510</b>	<b>13</b>
3.0	19	2.8	6.4	6.9	3.7	2.9	22	700	550	14
<b>Transitional Oxide Material</b>										
4	1.5	2.4	5	5.6	2.4	2.7	27	36	42	1.3
<b>Unweathered Fresh Rock</b>										
4	15	2.8	7.2	7.7	4.1	3.2	24	610	470	11

*Notes:*

- No mineral reserve calculations were undertaken. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
- Numbers are rounded to reflect the fact that an Estimate of Resources is being reported as stipulated by JORC 2012. Rounding of numbers may result in differences in calculated totals and averages. All tonnes are metric tonnes.
- Zn equivalent calculations were based on 3 year trailing average price statistics obtained from the London Metal Exchange and London Bullion Market Association giving an average Zn price of US\$2,500/t, Pb price of US\$2,100/t and Ag price of US\$17/oz. Recovery and selling factors were incorporated into the calculation of Zn Eq values. It is the Company's opinion that all the elements included in the metal equivalents calculation (Zinc, Lead and Silver) have a reasonable potential to be recovered and sold.
- Zn Eq (PbAg)% is the calculated Zn equivalent incorporating silver credits as well as lead and is the parameter used to define the cut-off grade used for reporting resources ( $Zn\ Eq\ (PbAg)\% = Zn + Pb \cdot 0.96 + Ag \cdot 0.022$ ).
- Zn Eq (Pb)% is the calculated Zn equivalent using lead credits and does not include silver credits. It is displayed here for comparison purposes ( $Zn\ Eq\ (Pb)\% = Zn + Pb \cdot 0.96$ ).
- The mineral resource estimate set out above for the zinc, lead and silver mineralization in the Toral project area is based on a 3D geologic model and wireframe restricted block model that integrated the exploration work on the Toral project up to 20 September 2018. The block model used uniform cell size of 50x2x50 m to best suit the orientation of the mineralisation and sample spacing. The block model was rotated by 20° in plan view to best match the trend of mineralization. Sub cells were applied to better fit the wireframe solid models and preserve accurate volume as much as possible. Cells were interpolated at the parent block scale using an ordinary kriged interpolation technique with a single search ellipsoid orientated to the interpreted strike, dip and pitch of mineralization.
- No top cutting was applied to Zn or Pb grades due to the upper detection limit of the data being 30%. High-grade outlier values for Ag were capped ("top-cut") at 200 ppm (g/t) based on the data distribution and statistics.
- The Inferred mineral resource category for the Toral lead-zinc-silver project set out in the above table (at cut-off grades >4% Zn Equivalent) comply with the resource definitions as described in Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC)
- The tonnes and grades reported at a cut-off grade of 3% Zn equivalent are below the economic cut-off grade of 4% and as such should not be considered mineral resources, they are shown here for comparison purposes only.
- The tonnages and grades reported at a cut-off grade of 3% Zn equivalent are below the economic cut-off grade of 4% and as such should not be considered mineral resources, they are shown here for comparison purposes only.

The updated resource estimate announced herein is positive both in terms of defining resources of increased confidence and resource classification, as well as in terms of additional tonnages.

- An Indicated resource of approximately 2.7Mt @ 8.9% Zn Equivalent (including Pb credits) and 32g/t Ag
- 12% increase in total resources tonnes to approximately 18Mt (at 7.4% Zn equivalent with Pb credits and 24 g/t Ag)
- 30% increase in contained tonnes of zinc to approximately 830,000
- 12% increase in contained tonnes of lead to approximately 570,000
- 8% increase in contained ounces of silver to approximately 14 million ounces

The positive differences between the previous and current model are attributed to a combination of the following factors:

- Increased data density through recent drill campaigns;

- Use of controlled Implicit Modelling method for mineralised solid model generation;
- Incorporation of new interpreted structural models in mineralised model generation;
- Increased number of bulk density determinations which has enabled the use of variable bulk density; and
- Updated geostatistics and flattening of the structure for grade interpolation and improved grade mapping.

### **Metallurgy and engineering works**

- As a separate workstream, Europa Metals is progressing the requisite engineering studies to advance the information needed to develop a PFS;
- A hydrogeological conceptual study is currently being drafted by external company CRS-Ingeniería. The conceptual study results are expected during Q4 2019;
- Geotechnical works have been initiated with a review of the data by an external company and samples being selected for test work; and
- Metallurgical testwork by Wardell Armstrong LLP is progressing in line with management's expectations. Results from floatation and concentrate test work are expected during Q4 2019.

### **Competent Person's statement**

*The updated Total resource estimate was prepared by Mr J.N. Hogg, MSc, MAIG Principal Geologist for AMS, an independent Competent Person within the meaning of the JORC (2012) code and Competent Person under the AIM guidance note for mining and oil & gas companies. The updated resource estimate was completed by Mr R. J. Siddle, MSc, MAIG Senior Resource Geologist for AMS and a Competent Person. Mr Hogg has reviewed and verified the technical information that forms the basis of, and has been used in the preparation of, the updated mineral resource estimate and this announcement, including all analytical data, diamond drill hole logs, QA/QC data, density measurements, and sampling, diamond and RC drilling and analytical techniques. Mr Hogg consents to the inclusion in this announcement of the matters based on the information, in the form and context in which it appears. Mr Hogg has also reviewed and approved the technical information in his capacity as a Qualified Person under the AIM Rules for Companies.*

*Additionally, Mr Hogg confirms that AMS is not aware of any information or data that materially affects the information contained within the Company's previous announcements referred to herein.*

For further information on the Company, please visit [www.europametals.com](http://www.europametals.com) or contact:

#### **Europa Metals Ltd**

Dan Smith, Non-Executive Director and Company Secretary (Australia)  
T: +61 417 978 955

Laurence Read, Executive Director (UK)  
T: +44 (0)20 3289 9923

#### **Strand Hanson Limited** (Nominated Adviser)

Rory Murphy/Matthew Chandler  
T: +44 (0)20 7409 3494

#### **Turner Pope Investments (TPI) Limited** (Joint Broker)

Andy Thacker/Zoe Alexander  
T: +44 (0)20 3657 0050

#### **Brandon Hill Capital** (Joint Broker)

Jonathan Evans/Oliver Stansfield  
T: +44 (0)20 3463 5000

#### **Sasfin Capital Proprietary Limited** (a member of the Sasfin group)

Sharon Owens  
T (direct): +27 11 809 7762

*The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulation (EU) No. 596/2014.*

#### **Notes to Editors:**

#### **Economic highlights from selected conceptual development scenario**

Estimated economic forecasts for Toral based on the current level of work (+/-30%) from the December 2018 Scoping Study comprise:

- US\$110 million net present value (NPV) using a discount rate of 8%;
- 24.4% internal rate of return (IRR);
- Estimated US\$33 million CAPEX for a proposed 450ktpa design capacity plant, including associated auxiliary costs, with infrastructure being situated near portal entrance on the north side of the deposit;
- Estimated total CAPEX of US\$110 million;
- US\$25 per tonne indicative OPEX processing cost at steady state conditions;
- US\$36 per tonne indicative OPEX mining cost utilising mechanised cut and fill; and
- 15-year production plan, with significant potential for extension.

#### **Basis for announcing economics**

The factors that lead the Company to believe that it has a reasonable basis for announcing a production target and forecast financial information are detailed in the Scoping Study and can be summarised as follows:

Three conceptual underground mining development and production scenarios were considered and developed throughout the Scoping Study, resulting in the identification of a preferred scenario, highlights from which are set out below:

- decline ramp access to the north of the deposit, targeting mine production within the higher-grade core towards the centre of the planned mining blocks;
- entry to mine via a principal decline reaching various levels;
- series of internal mining inclined ramps constructed to access levels;
- mechanised cut and fill (MCAF) mining method proposed;
- 4x4 metre mine standard development size;
- a ventilation raise would be drilled (raise-bored) to provide both adequate ambient conditions, underground and a second, emergency means of access/egress into the mine;
- ore transported to a flotation process plant by conveyor or haul truck from the mine and crushed to a suitable product for milling;
- milled ore floated by standard flotation technology to provide lead and zinc concentrate, with silver probably reporting to the lead concentrate for sale as a combined product; and
- 4% Zn Eq cut-off used with potential for mine life extension.

#### **Glossary of technical terms:**

“Ag”	silver;
“g”	grammes;
“g/t”	grammes per tonne;

“ICP”	inductively coupled plasma;
“Inferred resource”	that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes;
“Indicated resource	that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit;
“JORC”	the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, as published by the Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia;
“JORC (2012)”	the 2012 edition of the JORC code;
“m”	metre;
“Mineral Resource”	a concentration or occurrence of material of economic interest in or on the earth's crust in such form and quantity that there are reasonable and realistic prospects for eventual economic extraction. The location, quantity, grade, continuity, and other geological characteristics of a Mineral Resource are known, estimated from specific geological evidence and knowledge, or interpreted from a well-constrained and portrayed geological model;
“Mt”	million tonnes;
“oz”	troy ounce;
“Pb”	lead;
“QA/QC”	quality assurance/quality control;
“Zn”	zinc.

## APPENDIX: Table 1 (JORC 2012)

### Section 1 Sampling techniques and data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <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>	<p>Historic and recent diamond drill core and underground cut channel sampling. Three main phases of exploration drilling and sampling:</p> <p>1972 - 1984 Peñarroya – Adaro. Diamond drill core method was used to obtain samples for geological logging and sampling. Geological and analytical data is recorded on hardcopy. Selective sampling method was employed around areas of interest. Sampling intervals measure approx. 1m, half core sent for analysis, with half core retained for reference. Exact details on core processing, sampling techniques and analytical methods are unclear, however subsequent explorers Lundin Mining sent the majority of Peñarroya core pulp reject samples to ALS Chemex for multi element re-analysis by ICP.</p> <p>2006 - 2008 Lundin Mining. Diamond drill core method was used. Core logging completed on paper. Selective sampling method was employed around areas of interest. Sampling intervals measure approx. 1m, half core sent for analysis, with half core retained for reference. Samples typically 1m half core, with samples prepared at the then Lundin Laboratory in Switzerland, then shipped to ALS Chemex Vancouver for multi-element analysis by ICP. Half core samples reduced to -400 microns and 100g sub-sample taken for analysis. Multi-element re-analysis of available Peñarroya DDH pulp reject samples completed at ALS Chemex Vancouver using ICP.</p> <p>Europa Metals. Diamond drill core, RC chips and underground cut channel sampling methods used to obtain samples for geological logging and sampling. Geological and analytical data is recorded on hardcopy. Selective sampling method was employed around areas of interest. Sampling intervals measure approx. 1m, half core sent for analysis, with half core retained for reference. Samples sent to ALS Seville for preparation and multi-element analysis by ICP. Half core and RC samples reduced to -400 microns and 100 g sub-sample taken for analysis.</p>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<p>A total of 101 diamond and 4 RC (1109) drill holes (inc. wedges) for 56,949.50 metres, and 19 underground channels for 18.75 metres were used as the input database for geological modelling and resource estimation.</p> <p>Drill core diameter was PQ, HQ, NQ and BQ depending upon depth. Tube type is unknown for Peñarroya drilling, double tube method was used for Lundin and diamond EUZ campaigns.</p> <p>EUZ 2019 diamond core was orientated using the reflex ACT III.</p>
Drill sample recovery	<ul style="list-style-type: none"> <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>	<p>Total core recovery, solid core recovery, Rock Quality Designation (RQD) and fracture frequency were recorded on hardcopy tables for the diamond drilling.</p> <p>A total of 11,484 core recovery measurements exist in the database for EUZ drilling with average recovery of 81%. The average for the Europa diamond drilling is 95%.</p> <p>There are 273 recovery measurements within the mineralised wireframes and statistical assessment suggests a possible slight negative bias exists between recovery and grades, with higher recovery returning slightly lower average grades</p>
Logging	<ul style="list-style-type: none"> <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> </ul>	<p>Selected intervals representing areas of interest were logged in the Peñarroya drill holes. All Lundin and EUZ holes were logged in their entirety. The historical Peñarroya core was re-logged by EUZ geologists in 2018 in its entirety where the core was available.</p> <p>Core logging was recorded on paper logs, using a combination of printed graphic log templates (Peñarroya, Lundin), and paper (EUZ).</p> <p>DH lithology, alteration, mineralisation and structural observations were recorded by variable interval based on characteristic similarities and change boundaries.</p> <p>Summary interval information was input to Excel, comprising single code field and codes to describe logged lithology, alteration, mineralisation and major structure for the interval.</p> <p>Graphic and schematic logs were produced for all drilling.</p> <p>Lundin and EUZ core was routinely photographed.</p> <p>Drill core and RC logging is considered satisfactory for the level of study and resource class.</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <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 sub-sampling 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>	<p>The sub-sampling techniques and sample preparation details are not known for the Peñarroya drill core. Lundin and EUZ core was cut by core saw and half core submitted for analysis. Underground channels were cut by angle grinder/circular saw. A channel approximately 7 cm wide and 5 cm deep to obtain 2-3 kg sample.</p> <p>Sample collection, sample size, preparation and analysis are considered appropriate for the mineralogy and deposit type.</p> <p>Samples are considered representative of the in-situ material collected.</p> <p>QAQC sample insertion procedures were not employed during the historical Peñarroya drill campaigns. Lundin Mining completed limited quarter core field duplicate insertion and selected pulp re-assay by external lab. EUZ conducted a QC program of inserting quarter core and RC split field duplicates, course blank and pulp blank material, external standards, selected pulp repeats and submission of pulp rejects for umpire lab analysis. ALS internal QC exists for Peñarroya re-analysis, Lundin and EUZ sample batches.</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <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 levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<p>Historical Peñarroya assaying and laboratory procedures are unknown. Commercial laboratories ALS Chemex Vancouver and ALS Seville (ISO9001:2008) were used for Lundin and EUZ drill core respectively and EUZ underground channel sample analysis. Multi-element analysis, including Pb, Zn, Cu, Ag by ICP-MS were completed on all samples. Over limits samples were re-analysed using ore grade methods of determination. Sample analytical techniques are considered in line with industry standard for this style of mineralisation. QC sample insertion procedures were not employed during the historical Peñarroya drill campaigns. However, Lundin re-analysis of Peñarroya drill core pulp rejects does allow for comparison of original and pulp duplicate analysis results for verification purposes. Lundin Mining completed limited quarter core field duplicate insertion and pulp reject re-analysis. No external standards. EUZ conducted a QC programme of inserting quarter core field duplicates, course blank and pulp blank material, standards, selection of pulp repeats and submission of pulp rejects for umpire lab re-analysis. ALS Chemex and ALS Seville internal QC exists for the Peñarroya Lundin re-analysis, Lundin core and EUZ core and channel sample batches. No significant issues were identified in the QC data. The nature and quantity of QC data, procedures employed, level of accuracy and precision are considered acceptable for the assigned resource classification. The quality of assay data and laboratory tests is acceptable for the resource classification for this deposit. No geophysical tools, spectrometers or handheld XRF instruments were used in the exploration and resource work.</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> <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>	<p>Paper recorded drill hole logging data is transferred to Access, imported into Micromine 3D geological modelling software for validation. DGPS collar and survey excel data, and lab analytical data transferred from lab.csv, to Excel and imported to Micromine 3D geological modelling software. Geological data from gallery is observed and reported by geologists and mining engineers. There has been no verification twin drilling carried out. All analytical data generated from Lundin re-analysis and Lundin core samples, EUZ core and channel samples for use as input to estimation have been verified by cross reference against lab assay certificates, re-import and re-building of the project analytical database. 2018-2019 lab certificates were verified and checked against database assays. No adjustment to the analytical data was considered necessary, other than conversion to zinc equivalents for reporting purposes, following industry best practice. Raw analytical data remained unchanged.</p>
Location of data points	<ul style="list-style-type: none"> <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>	<p>Lundin and EUZ drill collars were surveyed using a Geomax 35 high-precision DGPS device Accuracy +/-3cm. Downhole survey measurements taken using Reflex Maxibore downhole survey tool. Peñarroya drill hole collar locations were measured off plans and sections, located on the ground and picked up using Geomax 35 high-precision DGPS device. Accuracy +/-5 m. Peñarroya drill hole dip and azimuth measured from historical plans, cross sections and longitudinal section. Accuracy +/-5 m. Old workings were surveyed using Lieca Disto tmx310 survey device. Co-ordinate grid system used is European Terrestrial Reference System 1989 UTM Zone 29. Topographic DTM taken from 5 m resolution Lidar data MDT05-Lidar, from government mapping and survey association Plan Nacional de Ortofotografía Aérea (PNOA).</p>

Criteria	JORC Code explanation	Commentary
		2018 /19 drill collar locations were surveyed using a Geomax Zenith 35 DGPS device with sub-centimetre accuracy. Both RC and diamond downhole surveys were completed at 5m regular intervals using a REFLEX GYRO™ tool.
Data spacing and distribution	<ul style="list-style-type: none"> <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>	<p>Drill and UG channel sample data spacing across the current resource area ranges from approximately 50-100mx50-100m centres within the most densely tested area towards the NW, stepping out to approximately 200mx200m within the mid-section, and 100-200x500m in the SE.</p> <p>The distribution of drillholes, UG channel sampling, supported by surface and underground mapping is sufficient to establish the degree of geological and grade continuity appropriate for JORC (2012) Inferred and Indicated classification of resources.</p> <p>Length weighted averages including internal waste were applied for reporting of exploration results.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<p>Drilling is angled to intercept mineralised structures at high angle, as close to perpendicular to dip and strike as practicable.</p> <p>No sample bias is introduced by drilling orientation.</p>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<p>Historical Peñarroya sample security protocols are not available.</p> <p>Lundin/EUZ drill core is transported from site to logging facility in securely covered core boxes by the Lundin/EUZ geologists.</p> <p>Core logged and sampled in secure facility.</p> <p>Samples are bagged in plastic bags and labelled with individual sample numbers, sample name and sample location. Each bag is sealed to avoid loss and contamination. Plastic bags are placed in dry weave bags.</p> <p>Samples are delivered to laboratory by courier in secured boxes/bags.</p>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<p>Numerous site visits have been conducted to the Toral Project and core processing facility in Ponferrada (licence number 15.199), the latest between the 12th and 15th of August 2019 by Mr Lewis Harvey (Senior Consultant - Addison Mining Services).</p> <p>Data has also been reviewed on multiple occasions by AMS staff as it is received from the laboratory and on submission of databases from EUZ.</p> <p>Findings were satisfactory.</p>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<p>Toral exploration permit number 15.199 (also referred to as Permiso de Investigacion), is located approximately 400 km northwest of Madrid, within the Province of León, Autonomous Community of Castile and León.</p> <p>Licence 15.199 covers an area of 20.29km<sup>2</sup>.</p> <p>Exploration licence 15.199 is owned by Europa Metals Iberia., a wholly owned subsidiary of Europa Metals Limited. The licence was renewed on November 14<sup>th</sup> 2017 for a period of 3 years.</p>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>1972-1984 – Peñarroya-Adaro. 55 drill holes, 36 wedge drill holes.</p> <p>1992-1995 – Geominera. Data re-evaluation.</p> <p>2005-2008 – Lundin Mining. 7 drill holes.</p> <p>2009-2011 – Goldquest Mining. Soil and rock geochemistry. Historic gallery mapping. Data evaluation. NI43-101 Mineral Resource Estimate</p> <p>2012-2015 – Portex Mining Corporation. Geological mapping. Data re-evaluation.</p> <p>2015-2016 – Goldquest Iberica S.L. Soil and rock geochemistry. Geological mapping.</p> <p>2016-2017 – Goldquest Iberica S.L. (Europa Metals Limited). 6 drill holes. Historic gallery mapping and sampling. Data re-evaluation and interpretation.</p>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>The Toral project is located in the Southwestern part of the regional West Asturian Leonese Zone (WALZ), a major tectono-stratigraphic unit of the Hercynian Orogeny.</p> <p>The mineralisation at Toral is considered as structurally controlled carbonate hosted Pb-Zn type. Shear and thrust fault controlled mineralisation within favourable carbonate lithology and favourable contrasting contacts between carbonates and shales.</p>

Criteria	JORC Code explanation	Commentary
		Styles of mineralisation are boudinage drusy quartz vein, replacement breccia, disseminated clots associated with silica, carbonate and chlorite alteration. Main metallic minerals are Sphalerite, Galena, Pyrite, Chalcopyrite and silver.
Drill hole Information	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>	Drilling: Number of drillholes used: 105 Collar East: 679962mE - 684690mE Collar North: 4708494mN - 4710598mN Collar RL: 410mRL - 7543mRL Azimuth: 000° - 3445° Dip: -87° - -40° Length: 35.40m – 1285.3m Interception depth: 580mRL – -407mRL UG Channels: Number of channels: 19 Collar East: 680917mE – 682607mE Collar North: 4709161mN – 4709996mN Collar RL: 447mRL – 693mRL Azimuth: 010° - 313° Dip: -24° - 19° Length: 0.25m – 4.25m
Data aggregation methods	<ul style="list-style-type: none"> <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>	No top cuts were applied to the Zn and Pb data for reporting of exploration results. However, Lundin and EUZ samples were limited to analytical method upper detection limits of 30% for Zn, Pb A top cut of 200 ppm was applied to Ag assay data. Data aggregation or Grade Compositing rules for the reporting of exploration drill and channel significant results were minimum width 1m, minimum average grade 0.5% ZnEq, maximum allowable internal waste of 2m. Zn equivalent calculations were based on 3 year trailing average price statistics obtained from the London Metal Exchange and London Bullion Market Association giving an average Zn price of US\$2,780/t, Pb price of US\$2,200/t and Ag price of US\$16.4/tOz. Recovery and selling factors were incorporated into the calculation of Zn Eq values. It is the Company's opinion that all the elements included in the metal equivalents calculation (Zinc, Lead and Silver) have a reasonable potential to be recovered and sold.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <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>	Mineralisation is interpreted as sub-vertical to steeply dipping to the NE. Angled drilling is sub-perpendicular to +/- 20° oblique to mineralisation. True thickness of mineralisation ranges from approximately 90%-60% downhole interval length.
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	Appropriate scaled diagrams are included within the AMS Toral JORC (2012) Resource Statement and Technical Report.
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	All available exploration data for the Toral deposit area has been collected and reported. Representative data from all drillings have been reported.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>No geophysical works have been completed.            Geological mapping and solid geology map generation completed.            Structural interpretation and 3D modelling completed.            Soil geochemical surveys demonstrate strong coherent Zn in soil anomalism coincident with interpreted controlling structures.            No geotechnical or bulk sample test work completed to date.            Work is currently being carried out on metallurgical testing at Wardell Armstrong's laboratory. The results are currently pending.</p>
Further work	<ul style="list-style-type: none"> <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>	<p>Surface drilling and trenching works testing open strike extent to the SE and NW and infill drilling within current resource limits to increase confidence and resource class.</p>

### Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <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>	<p>Analytical data is paired by query with sampling data via sample number. AMS has cross referenced the analytical database with laboratory certificates.</p> <p>Micromine 3D geological modelling and estimation software used for import, validation and QAQC verification assessment.            Data checks include checks for overlapping and missing intervals, dh trace errors, missing survey data, lithology and collars.</p>
Site visits	<ul style="list-style-type: none"> <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>	<p>The Competent Person for the resource estimation is Mr. James Hogg. Mr Hogg's, last site visit was completed between the 4<sup>th</sup> and 5<sup>th</sup> of December 2019.            The last site visit by AMS was completed between the 12<sup>th</sup> and 15<sup>th</sup> of August 2019 by Mr Lewis Harvey (Senior Consultant - Addison Mining Services).            Site visits have not identified any major issues relating to the reporting of mineral resource.</p>
Geological interpretation	<ul style="list-style-type: none"> <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> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<p>Based upon the level of available information, geological and deposit complexity, interpretation of the main lithological boundaries and controls to mineralisation are considered satisfactory and appropriate for the assigned resource class. Fault modelling is simplified and further refinement will improve the models accuracy moving forward.            Drillhole lithological and analytical information, prospect scale surface geological mapping, underground mapping and sampling, location of underground workings were used in geological interpretation. Mineralization is modelled as a continuous unit within the major fault units, however it is anticipated some smaller scale faulting and offset post mineralization will be present which is not accounted for in modelling.            Alternative interpretations infer potential thrust repeats and potential for additional parallel mineralised zones. However, at the level of information this interpretation remains unsupported by drill data and conceptual in nature.            Geological model was used to guide the interpretation and continuity of Zn-Pb mineralised domains.            Post mineralisation transfer faults are interpreted to affect continuity by minor offset.            Grade continuity is currently interpreted to be slightly greater down dip forming "shoots". Faulting effects geological continuity on a local scale (50-100 m) perpendicular to the strike on mineralization.</p>

Criteria	JORC Code explanation	Commentary
Dimensions	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>Mineralisation is encountered at surface and based on current testing, extends to approximately 1,100 m below the surface. Mineralisation is currently tested across a 3,600 m strike length, the orientation of mineralisation zone is approximately 110 degrees, averaging approximately 3.5 m in thickness and ranging from ~2m to ~5.5 m.</p>
Estimation and modelling techniques	<ul style="list-style-type: none"> <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> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> </ul>	<p>Wireframe restricted block models were interpolated by ordinary kriging and are considered by the competent person appropriate for the resource estimate.</p> <p>To the north west the mineralized models are truncated by the licence boundary and are extended approximately 10 m past the south easterly most drillhole which was mineralized but contained sub-economic grades (3 m at 2.4% ZnEq). The structure remains open to the south east. Down dip the model was extrapolated approximately 50-200m below the deepest sample in the north west and central zones, and approximately 400m below the deepest sample in the SE zone with consideration of depths tested along strike to the NW. Extents of extrapolation are considered appropriate for the level of information, deposit type, strike and depth extents tested, observed and geostatistical grade continuity and the assigned resource classification.</p> <p>A uniform cell block model of 50 mE, 4 mN, 50mZ was restricted to the wireframes using block factors. The block model was rotated by 20° in plan view to best match the trend of mineralisation. The uniform model and 2 m sample composites for the mineralized domain were then flattened to a constant vertical plane striking 110° to account for fault offsets, improve variography and grade mapping. Thickness was preserved in the flattening process and no lateral stretching was applied.</p> <p>Block model interpolation and extrapolation for Zn, Pb and Ag was completed using directional variograms for each element in the flattened space at the uniform block scale. Ordinary Kriging was used, and a multiple pass kriging neighbourhood used at increasing radii to prevent smearing of high grades. A maximum of 2 composite samples per drillhole were allowed and up to 8 composites total. Search passes were 100 along strike and 200 down dip with a minimum of 2 drillholes, the same radii with 1 drillhole, then 300 x300 with minimum 2 drillholes and finally 450 x450 1 minimum drillhole. The block model was then sub blocked to the mineralized wireframes in real space to best honour thickness and volume.</p> <p>The estimates has been reconciled against pervious AMS estimates and differences accounted for and described in the text.</p> <p>It is the opinion of the company that Ag will be recovered along with Pb and a credit payed on refining.</p> <p>No estimation of deleterious elements has been made at this time and it is anticipated this will be conducted on completion of a block model which is to be used for PFS.</p> <p>The block size of 50 m is typically 1/3 to 1/5 of the drill spacing with greater and lesser spacing in areas of more sparse and more dense drilling.</p> <p>Wireframe models included minimum anticipated mining width of ~2m.</p> <p>As with previous resource estimates completed by AMS (2017, 2018) wireframe solid models were created for each domain based on a mineralisation threshold of approximately 0.2% for Zn and Pb (approximately 0.4% Zn+Pb). Analysis of Zn and Pb grades in cross section and in scatter plots showed a strong relationship and no requirement to model Zn and Pb separately was identified. Ag showed a strong correlation with Pb and was estimated within the Zn/Pb mineralised domain.</p> <p>The updated wireframes were generated using Micromine's implicit vein modelling functionality and incorporated major fault boundaries as vertical planes. Interpretation of the mineralised domains was guided by geological interpretation of the deposit incorporating structural and lithological boundaries such as footwall slate contacts and surface expression in topographical data and outcrop mapping.</p> <p>Top cuts were applied to the composite assay grades for 20% Zn, 17% Pb and 125 g/t Ag, any value above the top cut value was reduced to that grade. Capping was based on analysis of Histograms and cumulative sums.</p> <p>The block model was validated visually in long section and cross section to inspect assay grades vs block grades, particular attention was given to areas of low grade that may be influenced bu higher grade samples within search radii. The mean values including declustered mean of the input data were compared against the output data along with comparison of histograms.</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	
Moisture	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	Tonnages are estimated on a dry basis.
Cut-off parameters	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<p>An economic cut off grade of 4% Zn equivalent including Pb and Ag credits was used. <math>(Zn\ Eq\ (PbAg)\% = Zn + Pb \cdot 0.935 + Ag \cdot 0.018)</math>. As determined in the AMS scoping study 2018. Relative recoveries and selling costs were taken into account.</p> <p>Zn equivalent calculations were based on 3 year trailing average price statistics obtained from the London Metal Exchange and London Bullion Market Association giving an average Zn price of US\$2,780/t, Pb price of US\$2,200/t and Ag price of US\$16.4/Oz.</p>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>• <i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></li> </ul>	<p>Assumed mining methods are based upon a review of methods of extraction, cost and performance on similar type deposits. Summary of mining and processing costs used in determination of economic cut off. Mechanized Cut and fill mining method assumed.</p> <p>Total Mining Processing and Rehab cost estimated at 76\$/t. Mining recovery and dilution assumed at 93% and 5%.</p>
Metallurgical factors or assumptions	<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>	<p>Assumed processing methods are based upon a review of methods of extraction, cost and performance of similar type deposits.</p> <p>Assumed metallurgical recoveries are Zn 87.5%, Pb 92.5% and 80% Ag. Assumed concentrate selling factors are Zn 85%, Pb 95%, Ag 90%</p>
Environmental factors or assumptions	<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</i></li> </ul>	No assumptions are made on environmental factors other than the cost to back fill waste tailings.

Criteria	JORC Code explanation	Commentary
	<p><i>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></p>	
Bulk density	<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>	<p>The bulk density was calculated using the Archimedes method weighting the samples in air and water using a Kern precision balance.</p> <p>The resource database contains 2,373 bulk density measurements. There are 177 measurements within the mineralised wireframe.</p> <p>The mean for the mineralised domain transitional zone is 2.75 g/cm<sup>3</sup> and the mean for mineralised domain fresh material is 2.85 g/cm<sup>3</sup>. A broad linear relationship between Pb+Zn grade and Bulk Density was identified from scattergrams and the formula <math>2.75 + 0.02(\text{Pb}+\text{Zn}\%)</math> used to estimate block density within the block model.</p>
Classification	<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>	<p>The classification of Indicated resources was based on identification of blocks which had been interpolated during the first kriging search with a minimum of 2 drillholes and radii 100 along strike and 150 down dip. All blocks meeting this criteria were considered but were reduced to a single area to avoid isolated "spots" and to include the area with most recent and most reliable drilling and greatest kriging efficiencies over a consistent area. The area was smoothed to make a consistent unit.</p> <p>All other blocks were classified as Inferred resources.</p> <p>The result reflects the quality and quantity of data, geostatistical analysis of correlation and relationship between mineralised samples (semi-variography) and the Competent Person's view of the deposit. The semi-variography reflects the sample density.</p>
Audits or reviews	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<p>The AMS 2018 resource estimate has not been audited at the time of writing..</p>
Discussion of relative accuracy/ confidence	<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</i></li> </ul>	<p>It is the CP's opinion that the level of confidence is consistent with the level of Indicated and Inferred categorised mineral resources.</p> <p>Geostatistical assessment of confidence limits such as conditional simulation of grades has not been conducted at this time.</p> <p>Interpretation of the thickness and therefore volume of the mineralization along with bulk density have the greatest effect on the contained metal. Further work to increase the confidence in density estimations is recommended.</p> <p>Kriging neighbourhood and the control of higher grade samples and preventing them from over smoothing is also important in producing a realistic estimate.</p> <p>The estimate is a local estimate to the 50 m block scale, however the data density is too sparse to allow modelling of selective units inside of the 50 m panel scale. As with all kriged estimates there is a degree of smoothing.</p> <p>There are no historical production records from the deposit.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></p> <ul style="list-style-type: none"><li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li></ul>	