Mineral Resource Update at the Sorby Hills Lead-Silver-Zinc Project

Pacifico Minerals Limited (ASX: PMY) ('**Pacifico**' or the '**Company**') is pleased to provide an updated Mineral Resource Estimate ('**MRE**') for the Sorby Hills Project following integration of Phase III drilling and a comprehensive review of its geological and analytical data base at its 75% owned Sorby Hills Lead-Silver-Zinc Project ('**Sorby Hills**' or the '**Project**').

HIGHLIGHTS

- **7.1 million tonnes at 6.1 % Pb equivalent*** (4.3% Pb, 57g/t Ag) and 0.4% Zn classified as **Measured Resources.**

- **20% increase in** contained lead in the **Measured & Indicated** (M & I) resource category **to 20.8 million tonnes at 4.9 % Pb equivalent** (3.6% Pb, 40g/t Ag) over the previous MRE.

- Overall, **19% increase in contained Silver (54.8 million ounces)** including a **28% increase in the M & I category (26.8 million ounces).**

- Overall, **9% increase in contained lead to 44.0 million tonnes at 4.5% Pb equivalent** (3.3% Pb, 38g/t Ag) and 0.5% Zn over previous MRE.

- A significantly higher degree of confidence in the geological and **mineralisation model an invaluable tool when targeting orebody extensions** going forward.

- **Optimised Pre-Feasibility Study to include new pit optimizations** using the significantly upgraded resource classifications.

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* Zinc grades have not been included in the Pb equivalent calculation at this stage. See appendix 1.

Managing Director, Simon Noon, commented: "*We're truly excited to be able to announce a very significant update of the Mineral Resource Estimate for the Sorby Hills Lead-Silver-Zinc Project. On the back of our last round of drilling and meticulous examination of historic information, Pacifico has made a major step forward and established significant confidence in the geological and resource model which is expected to have a flow on effect on the upcoming Optimised PFS.*"

UPDATED MINERAL RESOURCE ESTIMATE SUMMARY

Following our Phase III drilling program and an in-depth review of both historic and recently acquired data, Pacifico engaged independent mining industry consultants CSA Global Pty Ltd to verify the data and its interpretation and undertake an updated MRE for the Sorby Hills Lead-Silver-Zinc Project, located in Western Australia. The Mineral Resource is reported in accordance with the guidelines of the JORC Code (2012 Edition).

The scope of work included:

- Update the previous Mineral Resource Estimates for all deposits to include recent drilling results;
- Update geological and mineralisation models, based on revised interpretations provided by Pacifico's technical team;
- Validation of the drill hole database;
- Review of quality control data;
- Statistical analyses of lead, silver, and zinc;
- Construction of a block model incorporating key geological, structural and mineralogical features;
- Grade interpolation, density calculation and block model validation;
- Classification of the Mineral Resource;
- Compilation of a Mineral Resource report; and
- Peer review of the Mineral Resource block model and Mineral Resource report.

RESOURCES

The updated Sorby Hills MRE for the lead domains (excluding the Zn dominated Alpha Deposit - refer Figure 1) is presented in Table 1 and is reported above a cut off grade of 1.0% Pb and after a 2% "geological loss" factor to account for voids and cavities in the ore zone. The Alpha Zn Deposit MRE is reported in Table 2, above a cut off of 1.0% Zn. The Global Mineral Resource is reported by deposit in Table 3 and then again, by various cut-off grades (Pb%) in Table 4.

The Mineral Resource is classified as a combination of Measured, Indicated and Inferred resources with geological and sampling evidence sufficient to assume geological and grade continuity within the modelled 3D shapes. Classification of the MRE was carried out considering the geological understanding of the deposit, quality of the sampling, density data, and drillhole spacing.

Table 1. Sorby Hills Mineral Resource. Reported from blocks where Pb > 1.0% (Pb domains only).

JORC Classification	Tonnes (Mt)	Pb %	Zn %	Ag g/t	Pbeq%	Pb eq Metal (Mt)
Measured	7.1	4.3	0.4	57	6.1	0.43
Indicated	13.7	3.3	0.4	31	4.3	0.59
Inferred	23.4	3.0	0.5	36	4.2	0.98
Total	44.1	3.3	0.5	38	4.5	1.99

Note: Tonnes and grade are rounded. See Appendix 1 for Pb equivalent calculation.

Table 1. Sorby Hills Mineral Resource. Reported from blocks where Zn > 1.0% (Alpha Deposit Zn domains only).

JORC Classification	Tonnes (Mt)	Pb %	Zn %	Ag g/t
Measured	-	-	-	-
Indicated	1.7	0.3	2.5	21
Inferred	3.4	0.5	2.9	31
Total	5.1	0.5	2.7	28

Note: Tonnes and grade are rounded.

Table 2 Sorby Hills Mineral Resource (as reported October 2019). Reported from blocks where Pb > 1% (except Alpha Zn deposit, Zn>1.0%).

JORC Classification	Tonnes (Mt)	Pb %	Zn %	Ag g/t	Pbeq%	Pb eq Metal (Mt)
Measured	-	-	-	-		
Indicated	16.6	3.8	0.4	39	5.1	0.85
Inferred	19.4	3.6	0.6	38	4.8	0.93
Total	36.0	3.7	0.5	39	5	1.78

Note: All pods reported against a Pb cut-off grade of 1% except Alpha Pod (Zn domains) which is reported using a Zn>1% cut off grade. Tonnes and grade are rounded. See Appendix 1 for Pb Equivalent calculation.

Table 3 Sorby Hills Mineral Resource by Deposit. Reported from blocks where Pb > 1.0% (except Alpha Zn deposit, Zn>1.0%).

Deposit	Classification	Tonnes (Mt)	Pb %	Zn %	Ag g/t
A	Measured	0.0	0.0	0.0	0
	Indicated	0.0	0.0	0.0	0
	Inferred	0.6	6.1	1.2	32
	Sub-Total	0.6	6.1	1.2	32
B	Measured	0.5	4.3	0.3	24
	Indicated	1.3	4.2	0.3	24
	Inferred	0.0	0.0	0.0	0
	Sub-Total	1.8	4.3	0.3	24
Omega	Measured	4.2	4.3	0.4	45
	Indicated	9.2	3.2	0.4	29
	Inferred	2.5	3.0	0.6	23
	Sub-Total	15.8	3.5	0.4	32
Norton	Measured	2.4	4.3	0.3	83
	Indicated	2.2	3.4	0.5	38
	Inferred	16.0	2.5	0.4	30
	Sub-Total	20.6	2.8	0.4	37
Alpha Pb	Measured	0.0	0.0	0.0	0
	Indicated	1.0	2.8	0.6	50
	Inferred	1.0	3.4	1.4	85
	Sub-Total	2.0	3.1	1.0	67
Beta	Measured	0.0	0.0	0.0	0
	Indicated	0.0	0.0	0.0	0
	Inferred	3.3	4.6	0.4	61
	Sub-Total	3.3	4.6	0.4	61
All Pb Deposits	Measured	7.1	4.3	0.4	57
	Indicated	13.7	3.3	0.4	31
	Inferred	23.4	3.0	0.5	36
	Sub-Total	44.1	3.3	0.5	38
Alpha Zn	Measured	0.0	0.0	0.0	0
	Indicated	1.7	0.3	2.5	21

| | Inferred | 3.4 | 0.5 | 2.9 | 31 |
| | Sub-Total | 5.1 | 0.5 | 2.7 | 28 |

Table 4 Sorby Hills Mineral Resource. Reported from blocks where Pb > nominated cut-off grade (Pb domains only).

Cut-off Grade Pb %	JORC Classification	Tonnes (Mt)	Pb %	Zn %	Ag g/t
1	Measured	7.1	4.3	0.4	57
	Indicated	13.7	3.3	0.4	31
	Inferred	23.4	3.0	0.5	36
	Total	44.1	3.3	0.5	38
1.5	Measured	6.9	4.4	0.4	58
	Indicated	12.7	3.4	0.4	32
	Inferred	19.8	3.3	0.5	38
	Total	39.3	3.5	0.5	40
2	Measured	6.4	4.6	0.4	61
	Indicated	11.0	3.7	0.4	35
	Inferred	15.6	3.7	0.6	41
	Total	32.9	3.9	0.5	43
2.5	Measured	5.7	4.9	0.4	64
	Indicated	8.9	4.0	0.5	37
	Inferred	11.6	4.2	0.6	46
	Total	26.2	4.3	0.5	47

Note: Tonnes and grade are rounded.
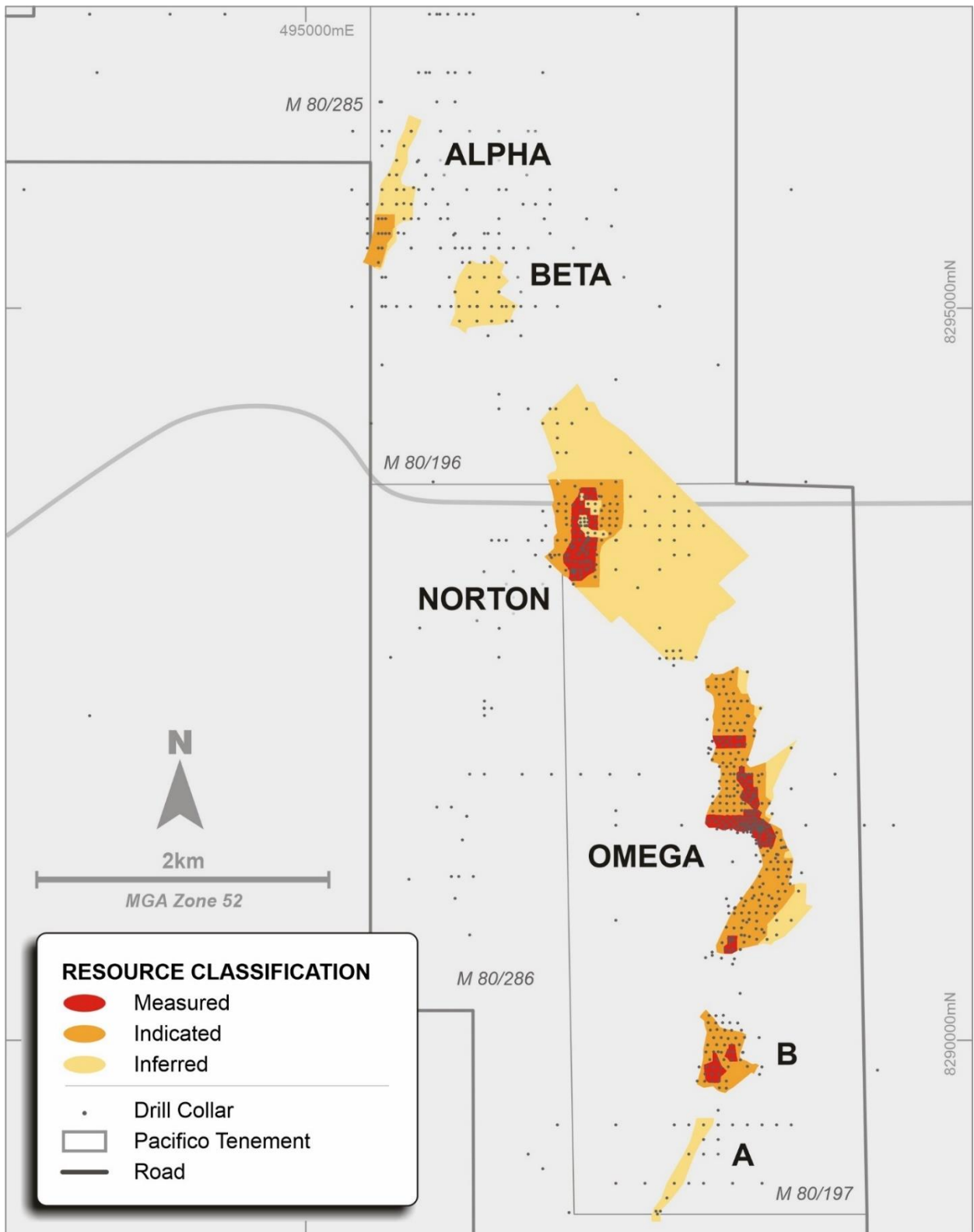
Figure 1. Surface projection of Mineral Resource block model coloured by classification.
Red = Measured, Orange= Indicated, Yellow = Inferred. Drill collars as used in the Mineral Resource Estimate.

BACKGROUND

Phase III drilling completed in late 2019 and reported by Pacifico in early 2020 (ASX Announcement 30 January 2020) targeted and tested several parameters of the deposit with a view to raise the confidence in the interpretation of the geological and mineralisation models. Furthermore, the Company undertook to review and integrate the inherited historic and recent geological information such as gamma downhole data, gravity survey and detailed geological interpretations dating back to the 1970's and 1980's. From this data review emerged highly detailed and robust geology and mineralisation models. The fundamentally different approach to geological interpretation included a higher degree of recognition of localised rock variations, facies and thickness variations, structural measurements, strike variation of the target horizon along of the Pincombe Inlier basement high, and correlation with gravity data. A 3D graphic visualisation of Sorby Hills local geology and mineral resource is shown in Figure 2.

SIGNIFICANCE AND IMPLICATION OF THE UPDATED MRE

The revised MRE is expected to have a material and positive bearing on the Optimised Pre-Feasibility Study in progress. Firstly, the updated Resource will likely allow for the conversion of a significant portion of the M&I Resources to Probable and Proven Reserves. Secondly, the new interpretation has resulted in a simpler ore body geometry which is more continuous. The inclusion of the updated resource is expected to delay the Optimised Pre-Feasibility Study completion date by approximately 3 weeks (now July 2020).

The tonnage/grade/metal content (Figure 3) shows that the mineralisation is only marginally susceptible to a significant change in cut-off grade. At an increase of the cut-off grade for Pb to 2.0% Pb the M & I resource retains nearly 92% of the metal content despite a drop in the tonnage by 21%. This demonstrates the impressive robustness of the project.

With regards to exploration and resources expansion, a combination of detailed geological and facies models along with gravity data has proven to be a powerful tool in reconciling the location of known mineralisation and exposing new mineralisation targets to be defined for future testing. The gravity data also provides context for such areas as the "Wildcat Target" which was tested in our Phase III drilling program where a small number of shallow step-out drill holes confirmed continuity of mineralisation over an area of 130m by 70 m. The drill holes intersected a thick zone of mineralisation commencing within 5m of the surface. Importantly, on the basis of this data, the Wildcat Target can be interpreted as an extension of the Norton Deposit. A tightening of the drill hole spacing in this area is now high priority and may lead to additional mineralisation discovery.

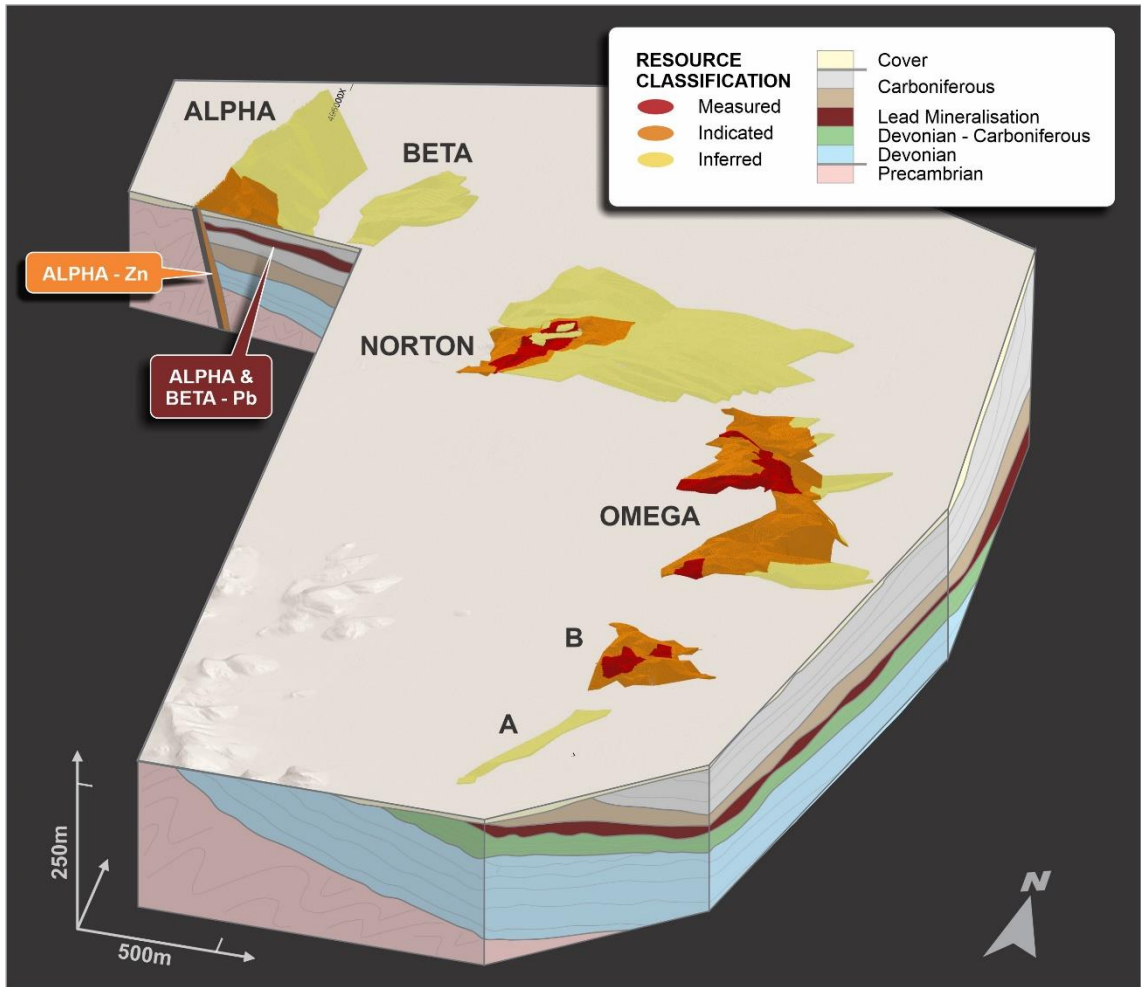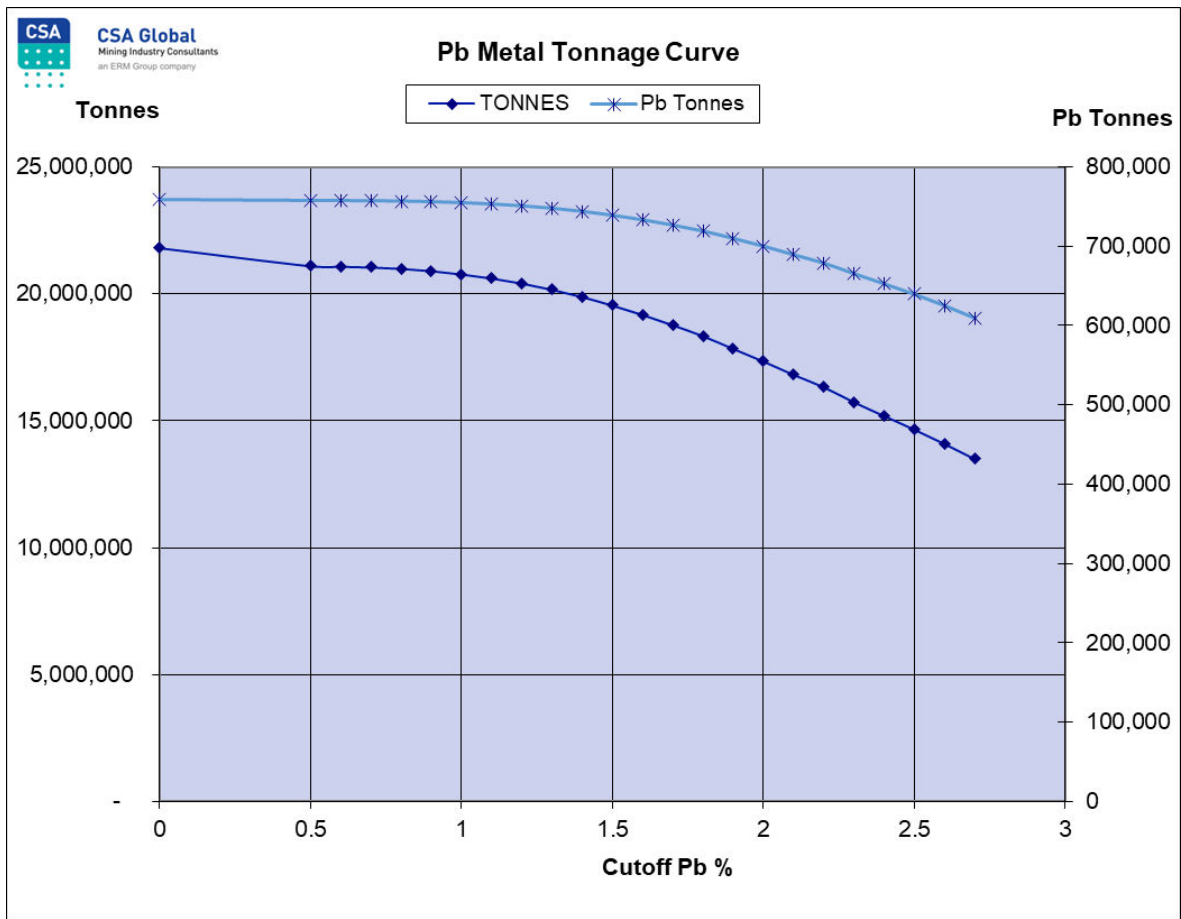*Figure 2. 3D illustration of strata-bound mineralisation at a 0.5% Pb cut off.*

Figure 3. Sorby Hills Mineral Resource. Grade/tonnage graph for M&I mineral classification classes showing that the metal content in the M&I category more resilient to change in cut off grade.

This announcement was approved for release to the market by the Board of Pacifico Minerals Limited.

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ABOUT PACIFICO MINERALS LIMITED
Pacifico Minerals Limited ('**Pacifico**') (ASX: PMY) is a Western Australian based development and exploration company. The Company is currently focused on advancing the Sorby Hills Lead-Silver-Zinc Joint Venture project in WA. Pacifico owns a 75% interest in the Joint Venture with the remaining 25% (contributing) interest held by Henan Yuguang Gold & Lead Co. Ltd.

ABOUT HENAN YUGUANG GOLD AND LEAD CO LTD

Henan Yuguang Gold and Lead Co., Ltd was established in 1957 by the government of Jiyuan City which is in Henan Province in North China. In July 2002, HYG (exchange code: 600531) was listed on the Shanghai Stock Exchange (SSX). Current ownership is approximately 29.61% by Jiyuan City. HYG is the largest lead smelting company and silver producer in China and has been among the Top 500 Chinese enterprises and Top 500 China manufacturing enterprises for the last five consecutive years. The main products produced by HYG are electrolytic lead, gold, silver and copper which are all registered at LME and LBMA respectively. In 2017, HYG produced 415,100 tonnes of electrolytic lead, 110,000 tonnes of copper, 958 tonnes of silver, 7,383 kg of gold and achieved sales of about US$2,684 million. HYG's plants are largely modern, focussed on development of industrial technology and are environmentally friendly. Its recently refurbished lead smelting plant has achieved full automation. More information can be found on the HYG website; http://www.yggf.com.cn/en/.

COMPETENT PERSON STATEMENT AND JORC INFORMATION

The information in this report that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr David Williams, a Competent Person, who is an employee of CSA Global Pty Ltd and a Member of the Australian Institute of Geoscientists (#4176). Mr Williams has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr Williams consents to the disclosure of information in this report in the form and context in which it appears.

FORWARD LOOKING STATEMENTS

Certain statements in this document are or maybe "forward-looking statements" and represent Pacifico's intentions, projections, expectations or beliefs concerning among other things, future exploration activities. The projections, estimates and beliefs contained in such forward-looking statements necessarily involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Pacifico, and which may cause Pacifico's actual performance in future periods to differ materially from any express or implied estimates or projections. Nothing in this document is a promise or representation as to the future. Statements or assumptions in this document as to future matters may prove to be incorrect and differences may be material. Pacifico does not make any representation or warranty as to the accuracy of such statements or assumptions.

Appendix 1: Equivalent Calculation Table 1

The contained metal equivalence formula is based on the published London Metal Exchange closing metal prices of 29 May 2020.

- Lead Price US$ 1,615.50/t;

- Silver Price US$ 17.87/oz;

- Lead recovery of 93.5% (weighted average of oxide/transition and fresh recoveries)

- Silver recovery of 83.7% (weighted average of oxide/transition and fresh recoveries)

It is Pacifico's opinion that all elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold. The formula used to calculate lead equivalent grade is:

$MetalEq \ (percent) = G_{pri} + (G_{pri} \times [\sum_i R_i S_i V_i G_i]/(R_{pri} S_{pri} V_{pri} G_{pri}))$

where R is the respective metallurgical metal recovery rate, S is the respective smelter return rate, V is metal price/tonne or ounce, and G is the metal commodity grade for the suite of potentially recoverable commodities (i) relative to the primary metal (pri)

Metal equivalents are highly dependent on the metal prices used to derive the formula. Pacifico notes that the metal equivalence method used above is a simplified approach. Only preliminary metallurgical recoveries are available. The metal prices are based on average LME prices of 29 May 2020 and do not reflect the metal prices that a smelter would pay for concentrate nor are any smelter penalties or charges included in the calculation.

Owing to limited metallurgical data, zinc grades are not included at this stage in the lead equivalent grade calculation.

Appendix 2: Estimate Summary ASX Listing Rule 5.8.1

GEOLOGY AND GEOLOGICAL INTERPRETATION

The Sorby Hills Pb – Ag – Zn deposit can be classified as a carbonate-hosted lead-silver (zinc) type deposit, a sub-type of the Mississippi-Valley-type (MVT) deposits. The mineralisation is largely stratabound and hosted mainly in a "transition facies" between the Knox Sediments (hanging wall) and Sorby Dolomite (footwall), consisting of reworked dolomite clasts hosted within graphitic siltstone matrix which is typically developed between a massive dolomite unit and the overlying bioclastic dolomitic siltstones. All strata generally dip shallowly, but variably to the east, southeast and northeast.

The Late Devonian/Early Carboniferous host rock succession was transgressively deposited over the flanks of a Precambrian basement-high (Pincombe Inlier) that extended into the Burt Range Sub-basin which is part of the southern Bonaparte Basin.

The mineralisation is located predominantly in the uppermost part of the breccia interval, immediately below a regional aquiclude, which appears to have restricted upwards fluid migration. The main Pb mineralisation interval is Zn-poor with Zn commonly located lower in the stratigraphy or within fault breccias near the faulted basin margin.

The mineralisation consists of seven discrete carbonate hosted Pb-Ag-Zn deposits (previously referred to as pods): A – H, Beta and Alpha deposits. The deposits form a curvi-linear north-trending belt extending over 7 km, sub parallel to the eastern margin of the Precambrian Pincombe Inlier.

The deposits average 7–10 m in thickness, are generally less than 1 km long and 100 to 500 m wide. Mineralisation is often thicker and/or higher grade in areas of thick breccia development and areas of increased depth to the top of the footwall Sorby Dolomite.

The geological models and Mineral Resource estimates for all zones of mineralisation were updated as part of this current scope of work. The A, Alpha and Beta deposits have not been recently drilled but were subjected to a re-interpretation of the stratigraphy following a detailed review of historic drill hole information concerning lithology, facies, and mineralisation style. The interpretation work was extended to include down-hole gamma data for stratigraphy correlation between the historic and recent drill holes.

Lithostratigraphic domains were modelled representing the base of the Knox formation (hangingwall unit) and the footwall Sorby Dolomite, and these assisted with the interpretation of the mineralisation domains. Weathering profiles for the base of complete oxidation and top of fresh rock were interpreted and modelled.

Drill hole traces were loaded into Datamine software to assist with the interpretation of mineralisation domains, which were based upon a lower Pb limit of 0.5%. Some internal dilution was accommodated, generally where two or less adjacent samples of grade Pb<0.5% were encountered in a zone of mineralisation with Pb>0.5%. Mineralisation domains were interpreted for the Zn mineralisation in the Alpha deposit based upon a lower Zn limit of 1% Zn.

The Omega deposit (previously referred to as C, D, E and F deposits) represents a corridor of mineralisation with strike extent of 1,800 m and a maximum plan width of 350 m. Sectional interpretations of the mineralisation were combined into wireframe solids. Domains were extrapolated to the typical drill spacing beyond the last fence of drill holes supporting the interpretations. A single wireframe solid was constructed capturing the Pb mineralisation, for each of the deposits. A single Zn domain was also modelled for the Alpha deposit.

DRILLING TECHNIQUES

Drilling is a mixture of reverse circulation (RC) and diamond (DD) core with sampling predominantly at 1 m intervals. Hole spacing is generally 25 m (north) by 25 m (east) in the B, Omega and I deposits, and up to 50 m by 50 m in the other deposits.

The MRE is supported by samples collected from RC and DD (HQ) drilling, with holes drilled over a time span between the 1970s and late-2019. RC drilling was sometimes used to pre-collar holes completed with DD tails. Many of the historical holes (pre-dating 2007) are known to have quality assurance issues and these holes were excluded from the MRE.

A total of 497 drill holes intersect the mineralisation domains, with 144 drilled by Pacifico since 2018. A total of 161 holes are historical but were retained based upon acceptable quality control results.

SAMPLING AND SUB-SAMPLING TECHNIQUES

During the 2018 and 2019 drilling programs, RC sampling was conducted at 1 m intervals for the entire length of the hole. All the samples from RC pre-collars and RC holes were scanned with a portable XRF (Olympus InnovX Delta) for an indication of lead concentration. Intervals were selected for assaying from XRF readings above 0.3% Pb. An additional metre sample was taken above and below this interval. 2 x 2 kg samples were collected from each RC metre using a rig mounted cone-splitter. The booster compressor was used on the rig to maintain consistently dry samples. After splitting of the sample, one sample was sent to the laboratory for analysis, and the other stored in the Kununurra facility.

For the 2018 and 2019 drilling campaigns, core was cut in half at the core shed in Kununurra using a diamond saw. Mineralised HQ DD core was sampled at different intervals to reflect lithological boundaries, but within length limits of between 0.5 m and 2 m. Half core samples were collected and placed in pre-numbered calico bags. Samples were placed into heavy duty plastic bags and sealed for transport to the laboratory.

For drilling conducted prior to 2018, DD core was typically sampled at regular 1 m intervals. Some core was sampled at different intervals to reflect lithological boundaries. Various core diameters were used including BQ, NQ and HQ. RC sampling was conducted typically at 1 m intervals for the entire length of the hole. Core was cut in half at site using a diamond saw. Half core samples were collected and placed in pre-numbered calico bags. Samples were collected by the project geologist and geo-technician and placed into poly-weave bags for transport to the laboratory.

From 2O07 through 2010, RC samples were collected at 1 m intervals using a trailer-mounted cone splitter attached to the drilling rig. A 2–3 kg of split material for each metre was collected in a calico bag to be submitted for assay.

SAMPLE ANALYSIS METHOD

For samples collected during the 2018 and 2019 drilling programs, samples were assayed to accepted industry standards at the Intertek-Genalysis nationally certified laboratory in Darwin. Multi-acid digestion of pulverised sample was followed by ICP-OES or an equivalent assay technique.

For drilling campaigns completed prior to 2018, drill samples were assayed to accepted industry standards at nationally certified laboratories such as ALS, SGS and Genalysis. Multi-acid digestion of pulverised sample was followed by ICP-AES or an equivalent assay technique.

Appropriate quality assurance and quality control measures were implemented for all stages of drilling which support the MRE. Certified Reference Materials, blanks and field duplicates were used to monitor the accuracy and precision of sampling and sample analyses, with results within acceptable tolerance limits.

ESTIMATION METHODOLOGY

A block model with block sizes of 10 m (X) x 10 m (Y) x 5 m (Z) was constructed. The block sizes are approximately half the most dense drill spacing, which generally supports an Measured and Indicated classification. Blocks and drill sample data were flagged according to the geological and mineralisation envelopes. Drillholes were sampled at 1 m intervals and the drill samples were accordingly composited to 1 m lengths for most deposits, with the exception of the A and Beta deposits, where samples were composited to 2 m lengths. Composited sample data were statistically reviewed to determine appropriate top-cuts, with top-cuts applied for Pb, Zn and Ag where appropriate.

Sample populations for Pb, Zn and Ag were split by mineralisation domains as supported by statistical analysis of assay data. The top cut and composited drill samples were input into variogram modelling. Moderate relative nugget effects were modelled for these in the primary zone. Major variogram directions were modelled in the plane of the vein towards the north-east.

Grades for Pb, Zn, Ag, S and Fe were interpolated for all the grade variables by ordinary kriging. Blocks were estimated using a search ellipse of 125 m (major) x 125 m (semi-major) x 5 m (minor) dimensions, with a minimum of 5 and maximum of 25 samples from a minimum of four drillholes. Search radii were increased, and the minimum number of samples reduced in subsequent sample searches if cells were not interpolated in the first two passes. Cell discretization of 5 x 5 x 1 (X, Y, Z) was employed.

The Mineral Resource block model is an update to the Mineral Resource reported in October 2019, with updated geological interpretations for all deposits.

A review of the Company's density was undertaken in light of the revised geological model. The revised approach to density recognises the lithological differences and assigns a base-density factor to all primary rock types as well as to the weathering zones. The base values are modified by the density contribution from the principal sulphide minerals, galena, pyrite and sphalerite. The overall impact on tonnes is not material but is thought to be a more accurate representation of the density distribution.

Density test work was carried out on mineralised and un-mineralised DD core samples obtained during 2018 and 2019 drilling programs. Core segments were measured using either the water immersion (Archimedes) technique for both wax coated and non-coated material and using the calliper method. There was a very strong correlation between the two methods. A total of 389 measurements were taken using the water immersion technique and these results were used to derive a base density value.

The following formula was derived and used to calculate the bulk density for each block in the block model, where Pb, Zn and Fe are the estimated block grades, and BD is the base density value assigned to a combination of each of the lithostratigraphic and weathering domains. This formula is an update to the formula used in the previous Mineral Resource estimate and is considered to be a more accurate representation of the distribution of density through the rock mass.

$$\text{Density} = 100/((100\text{-Pb\%-Zn\%-Fe\%})/ \text{BD}) + \text{Pb}/11.35 + \text{Zn}/7.14 + \text{Fe}/7.87)$$

The host rock sequences exhibit a natural porosity related to mineralisation, which is not uniform in its distribution and sometimes not always recognisable during visual inspection of the diamond drill core. The spatial distribution of the density data throughout the deposit do not fully capture the distribution of the porosity and therefore a cautionary tonnage adjustment factor was applied during the final grade-tonnage reporting stage. The final tonnage estimates were reduced by 2% globally to account for the visually estimated porosity levels.

MINERAL RESOURCE CALCULATION

The Mineral Resource is classified as a combination of Measured, Indicated and Inferred in accordance with guidelines contained in the JORC Code. The Mineral Resources were classified based upon drill hole spacing, quality of sampling and sample analyses, quantity of density measurements, and the relative confidence in the geological interpretation. This upgrade to the Mineral Resource is supported by a high level of confidence in the

geological interpretations, and substantial improvement to the robustness of the density model, both of which are key in supporting the Measured classification for the first time at the project.

A drill spacing of equal to or less than 25 m (north) by 25 m (east) was used to initially define the Measured volumes and a drill spacing of equal to or less than 50 m (north) by 50 m (east) was used to initially define the Indicated volumes. Polygons were digitised around the appropriate volumes and the resource classification assigned to the block model. Inferred volumes are based upon a drill spacing of 50–100 m (northing) by 50–100 m (easting). Figure 1 shows the classification of the Mineral Resource. The A and Beta pods are wholly classified as Inferred.

CUT OFF GRADES

Pacifico have carried out recent mining studies supporting a cut-off grade of 1% Pb, and this has consequently been used to report the Mineral Resource.

MODIFYING FACTORS

It is assumed any future mining will be by open cut methods.

Flotation recoveries of up to 95.4% Pb and 94.4% Ag were obtained and the testwork indicated that a final concentrate grade of 62% Pb can be produced. Metallurgical testwork for the current Prefeasibility Study is complete.

No other modifying factors were considered during the preparation of the MRE.

REASONABLE PROSPECTS HURDLE

The Competent Person believes there are reasonable prospects for eventual economic extraction of the Mineral Resource. A pre-feasibility study is currently in progress, with results to date showing an initial 8-year mine life at a 1.5 Mtpa mining rate. The project is located near the town of Kununurra and is easily accessible by road during the dry season. The project is serviced with power and water.

Appendix 3: JORC Table 1

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *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.*	• During the 2018 and 2019 drilling programs: 　• RC sampling was conducted at 1 m intervals for the entire length of the hole. 　• All the samples from RC pre-collars and RC holes were scanned with a portable XRF (Olympus InnovX Delta) for an indication of lead concentration. Intervals were selected for assaying from XRF readings above 0.3% Pb. An additional metre sample was taken above and below this interval. 　• Mineralised HQ diamond core was sampled at different intervals to reflect lithological boundaries, but within length limits of between 0.5 m and 2.0 m. • For drilling programmes conducted prior to 2018, diamond core was typically sampled at regular 1 m intervals. Some core was sampled at different intervals to reflect lithological boundaries. Various core diameters were used including BQ, NQ and HQ. RC sampling was conducted typically at 1 m intervals for the entire length of the hole. • A total of 596 samples (inclusive of blanks, standards and duplicates) were submitted for assay analysis for the Pacifico 2019 Phase 3 campaign • The sampling methodology is considered representative and appropriate for the sediment replacement style of mineralisation at Sorby Hills.
Drilling techniques	• *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).*	• Drilling methods used in the 2018 and 2019 drill programs were Rotary, RC and HQ diamond drilling. RC drilling was also used to pre-collar some holes with planned end of hole depth greater than 80 m, which were then completed with diamond tails. • Rotary open hole drilling in 2019 was only employed for diamond hole collars, and was not sampled • Samples taken by historical open hole drilling are not used in the Mineral Resource estimation. • A total of 1,325 drill holes are in the database, with 546 holes drilled prior to 2007. Of these, 353 holes were retained due to these holes having acceptable quality assurance to us in the Mineral Resource. An additional 374 holes were drilled in the period 2007 to 2018. The Phase III program of late 2019 comprises 49 RC holes for 3,265 m.

- The drill hole database for the Sorby Hills project area for A, B, Omega, H, I, J, Alpha and Beta deposits since its discovery in 1971 comprises 1,325 surface drill holes for a total of 125,378.2 m of drilling.
- Reference has been made in the announcement to 11 previous drilling campaigns at Sorby Hills prior to the drilling campaign reported in this announcement. A summary of the drilling campaigns is provided below:

	Drill Hole Series	Drilling Methods	Year
1	DDH1-DDH65	Diamond coring with unspecified pre-collar (mud rotary)	1972-1973
2	R1 -R29	Rotary Percussion (some open hole RC)	Unknown
3	FDH1 -FDH89	Conventional RC using VPRH rig	1974
4	WBS1001 -W8S1157	Mud rotary and RAB pre-collars with diamond tail	1975
	WBS2000-WBS2159	Conventional RC using VPRH rig (possibly some open hole)	1975
	WBS3000 -WBS3039	Rotary (probably open hole)	1975
5	WBS4000 -WBS4205	Rotary (Mostly open hole some conventional RC)	1976-1979
6	WBS5000 -WBS5095	Mud rotary pre-collars diamond tails	1978-1979
7	WBS6000 -WBS6057	Some RAB some mud rotary pre-collars with diamond tails	1980
	WBS7000 -WBS7035	RAB and conventional RC	1980
8	CSHDD001-CSHDD029	Diamond coring with open pre-collar (mud rotary)	2007
9	ISHDD001-ISHDD006	Diamond coring with open pre-collar (RC)	2010
	ISHRC001-ISHRC047	Conventional RC using T685WS Schramm rig	2010
	DSHRC001-DSHRC024	Conventional RC using T685WS Schramm rig	2010
	CSHRC001-CSHRC024	Conventional RC using T685WS Schramm rig	2010
	IPRC001-IPRC004	Conventional RC using T685WS Schramm rig	2010
	DSHDD001-DSHDD002	Diamond coring with open pre-collar (RC)	2010
10	KSHRC002-KSHRC100	Conventional RC	2011
11	AB, ACD, AF, AI series	RC and HQ diamond tails	2018 - 2019
12	Phase III 2019	RC	2019

Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*
	• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*
		• For the 2018 and 2019 drill programs, drill recovery for HQ diamond core was acceptable with recoveries better than 97% through the mineralised zones. RC bags collected at site were subject to a visual relative volume estimate. Estimated relative volumes were mostly at 100% Through use of an auxiliary compressor and booster with the RC rig most samples were collected dry. There was an occasional wet sample when there was excessive water flow pressure.
		• Core recovery for diamond drilling completed post-2007 but prior to 2018 averaged 91.3% with most core loss occurring in the regolith at <30 m depth. Core recovery in the mineralised zone was variable due to local fracturing and weathering along discrete fault zones, however, most recoveries exceeded 95%. Diamond core through the mineralised zone is typically NQ diameter.
		• From 2007 through 2010, to maintain sample integrity, each RC bag collected from the cyclone was weighed with the weight in kilograms and relative moisture content recorded. Bag weights were generally consistent with the average bag weighing 25 kg however poor sample recoveries (<20 kg) are noted in the initial 10 m of alluvial cover.
		• For the 2019 Phase III drill program:
		    RC bags collected at site were subject to a visual relative volume estimate, and later weighed. Estimated relative volumes were mostly at 100% through mineralisation and bag weights were consistent at around 23 kg.
		    Through use of an auxiliary compressor and booster with the RC rig most samples were collected dry. There was an occasional wet sample when there was excessive water flow pressure.
		• Poor sample recoveries (<20 kg) are noted locally in the initial 10-15 m of alluvial/clay pan cover.

Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*
	• *The total length and percentage of the relevant intersections logged.*
		• For the 2018 and 2019 drilling campaigns:
		  • RC chips were logged at the drill rig.
		  • Diamond drill core was logged at a secure facility in Kununurra, where it is also stored.
		  • All core was logged in detail. Core was processed with orientation lines and metre marks. Recoveries and RQD's were recorded. All core trays were photographed.
		• For the 2007 to 2011 drilling programs, logging was conducted on A3 paper log sheets with hole ID, rock code, rock formation, colour, texture, breccia type, structure, grain size, weathering and alteration recorded. Visual estimates as mineral percentage (sphalerite, galena, pyrite) and style of mineralisation were also recorded.
		• Structural measurements of stratigraphy and fault orientations were made where the ori-marks and orientation lines were of sufficient confidence.
		• For the 2019 Phase III drill program:
		  • RC chips were logged at the rig at Sorby Hills including indications of bulk lithologies, sedimentary textures, colours and visual estimates of mineralisation.
		  Photographic records of the RC chip trays were also collected.
		  • 100% of the Phase III drilled 3,625 m have been logged.

Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*
		• For the 2018 and 2019 drilling campaigns:
		  • Core was cut in half at the core shed in Kununurra using a diamond saw. Half core samples were collected and placed in pre-numbered calico bags. Samples were placed into heavy duty plastic bags and sealed for transport to the laboratory.
		  • 2 x 2 kg samples were collected from each RC metre using a rig mounted

	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*
	• *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.*
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*
		cone-splitter. The booster compressor was used on the rig to maintain consistently dry samples. One sample was used to be sent to the laboratory for analysis if selected, and the other stored in the Kununurra facility.
		• Samples from RC holes into mineralisation were scanned with a portable XRF for an indication of qualitative lead concentration. 1 m intervals were selected to be sampled of above 0.3% Pb as indicated by the pXRF. An additional metre sample was taken above and below this interval.
		• In the occurrence of a drill hole having separate mineralised intervals, additional assay samples may have been selected for continuity of data where the gap between mineralised intervals was small (e.g. less than ~5 m).
		• For drilling campaigns pre-2018:
		   • Core was cut in half at site using a diamond saw. Half core samples were collected and placed in pre-numbered calico bags. Samples were collected by the project geologist and geo-technician and placed into poly-weave bags for transport to the laboratory.
		   • From 2007 through 2010, RC samples were collected at 1 m intervals using a trailer-mounted cone splitter attached to the drilling rig. 2–3 kg of split material for each metre was collected in a calico bag to be submitted for assay.
		   • In 2011 drilling samples were not split off the drill rig because of the possibility of water ingress clogging up the cyclone and cone splitter when hitting a cavity. Drilling was suspended when water/wet sample encountered, and the hole dewatered prior to recommencement of drilling. Instead, a PVC pipe spear was used to obtain approximately 2–3 kg of sample from a representative cross section of the entire 1 m sample. KBL considered this to be the best means of sample collection avoiding potential for contamination within a sample splitter.
		   • In 2011, using an Olympus Innov-X portable XRF analyser at the rig, readings over 1% lead, 1% zinc and/or 20 ppm silver were regarded as anomalous and were sampled at 1 m intervals with at least 2 m either side (regardless of XRF reading) also collected as individual metre samples. Samples with lower, background, metal levels were amalgamated into 4 m composite intervals.
		   • For all sampling, the sample sizes are considered to be appropriate to the grain size of the material being sampled.

Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*
		• For the 2018 and 2019 drilling programs:
		   • Samples were sent to the nationally certified Intertek-Genalysis in Darwin for preparation and analysis. Duplicates, blanks and standards were inserted at regular intervals. Multi-acid digestion of pulverised sample was followed by ICP-OES or an equivalent assay technique.
		   • Drill core and rock chip samples were assayed to accepted industry standards at the Intertek-Genalysis laboratory in Darwin. Multi-acid digestion of pulverised sample was followed by ICP-OES or an equivalent assay technique.
		   • Certified Ore Grade Base Metal Reference Material was provided by Geostats Pty Ltd. The standards selected covered a range of lead and silver concentrations and there is good agreement between the Pb and Ag assays, and the mean values provided with the reference standards.

	• *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.*	For the standards the assayed values were within half of one standard deviation and more commonly below the mean suggesting that grade overestimation is not a significant problem in the dataset.
		• Duplicates and blanks were also included in all sample despatches and results are considered as acceptable by the Competent Person and by Pacifico and the drill samples are considered to be suitable to support the Mineral Resource estimate.
		• All 596 results from the Phase III laboratory assay tests have all been received and reviewed (pertinent results reported in this announcement). QAQC indicates results are within acceptable limits.
		
		• For drilling campaigns pre-2018:
		  • Drill core and rock chip samples were assayed to accepted industry standards at nationally certified laboratories such as ALS, SGS and Genalysis. Multi-acid digestion of pulverised sample was followed by ICP-AES or an equivalent assay technique.
		  • Samples from the 2007 and 2010 drilling program were submitted to the laboratory and analysed using the ME–ICP 61 (multi-element–inductively coupled plasma) technique. The method involves a four-acid digest of the sample followed by measurement by ICP-AES (inductively coupled plasma–atomic emission spectrometry) for a suite of 34 elements. Where assays were in excess of 1% lead or zinc, an additional ore grade analysis was made using the ME–OG 62 (multi-element–ore grade) method, which gives a more accurate analysis for high-grade material.
		  • Samples from the more historical drill programs were dispatched to an external laboratory, either SGS Sydney or ALS Brisbane. The samples were crushed to 100% passing 80 mesh and then digested in a mixture of nitric, perchloric and hydrofluoric acids. The digested samples were analysed using atomic absorption spectroscopy (AAS). Several check samples were sent to other labs to assess the analytical accuracy and these show excellent correlation. Samples taken from 1975 onwards are accepted as representative of the mineralisation present at Sorby.
		  • During post-2007 drilling, standards were inserted at least every 30 samples in the stream, consisting of Certified Ore Grade Base Metal Reference Material provided by Geostats Pty Ltd. The standards selected covered a range of lead and silver concentrations and there is good agreement between the Pb and Ag assays, and the mean values provided with the reference standards. For the standards the assayed values were typically within one standard deviation and more commonly below the mean suggesting that grade overestimation is not a significant problem in the dataset.
		  • Duplicates and blanks were included in the 2010 drilling but not the 2011 drilling.
		  • Check-samples sent to umpire laboratories in 2010 showed good agreement between ALS and Genalysis laboratories.

Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	• QAQC and data downloaded from the assay laboratory was checked by an independent third party to confirm accurate transposing of sample number assay results with respective drill hole intervals. • Geological logs were entered digitally into data entry drill log templates in MS Excel.

	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Assay certificates were received from the analytical laboratories and imported into the drill database. • No adjustment was made to the data. • In 2007, 14 twin holes were drilled using HQ diamond core into Beta Pod, I Pod, D Pod and C Pod, to enable an assessment of the oxide and sulphide mineralisation within the deposit and also test the three historic drilling methods. The results from the twin holes display very poor grade and thickness correlation with the historic holes. The data suggested that a high degree of grade variability exists within the deposit and there is evidence of grade smearing in the open hole and RC assay data. Many historical holes were excluded from the Mineral Resource estimate on the basis of these results, and other observations made at the time of drilling. • Two twinned holes were drilled in the 2010 drilling campaign at I pod, to test repeatability of drill results and compare drilling methods. The assay results showed close correlation of Pb, Zn and Ag grades in one of the twins (drilled 1.5 m apart) but only close correlation for Ag and Zn in the second. Sporadic mineralisation of this nature comprising veins, pods and vughs is observed in drill core.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The 2018 and 2019 drill hole collars were accurately surveyed using a DGPS by a registered surveyor and recorded in GDA94 Zone 52. It was concluded early in the 2018 program that the drill rig affected the downhole compass to a depth of at least 60 m. A down hole Reflex gyro survey instrument was employed in the 2018 and 2019 drill programs (drill hole dips of 60 and 70 degrees) to measure the dip and azimuth of the holes with readings taken every 30 m. • Post-2007 and pre-2018 drill hole collars have been accurately surveyed by DGPS. Drill hole collar co-ordinates have been recorded in GDA 94 grid in the KBL Mining drilling database. • Pre-2007 drill hole collars have been accurately surveyed in local grid. Drill hole collar co-ordinates have also been converted to GDA94 Zone 52 grid as recorded in the KBL Mining drilling database. • Over 95% of drill holes are vertical with 90% having no down-hole surveys. • An analysis of the trajectory of vertical holes accompanied drilling in 2010. Down-hole surveying of dip and azimuth for diamond holes was conducted using a single shot, Eastman down-hole camera. Holes drilled from surface were surveyed at 15 m to minimise interference from the rig and every 30 m after that to the end of hole. RC hole orientations were surveyed using a single shot Pathfinder down-hole electronic camera. Holes were surveyed at 6 m below surface and every 30 m after that to the end of hole. As a result of this work, it was determined that most of the diamond drill holes remained relatively vertical with very little down-hole deviation with dip consistently between 88° and 90°. As expected, there was a slight deviation with holes lifting towards the west, perpendicular to the plane of bedding which dips gently towards the east. Most RC holes remained close to vertical with little down-hole deviation, dipping consistently between 87° and 90°. There was a slight deviation with RC holes lifting towards the southwest. • As the drilling intersecting the deposits is concentrated within 140 m of surface (mostly <70m from surface), a small deviation in hole azimuth and dip of vertical holes would not introduce significant uncertainty as to the sample location.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing, and distribution is sufficient to*	• Hole spacing varies but drilling is mostly completed on a 50 (E-W) metre by 50 (N-S) metre drill pattern. • Infill drilling has achieved a closer spacing in many parts of the main D, E deposit (Omega Central) area.

	establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • *Whether sample compositing has been applied.*	• The data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and classifications applied. • Sample compositing was not carried out.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• It is not considered that there is a significant sampling bias due to the orientation of sampling in relation to structure. • Most holes in 2019 were drilled at 60 deg to the west (270 deg), to better sample both shallow and steeply dipping structures considered significant to the mineralisation.
Sample security	• *The measures taken to ensure sample security.*	• Samples are stored and processed at a secure facility in Kununurra. All samples obtained in 2018 and 2019 were taken by Pacifico personnel to the truck depot in Kununurra and placed on a pallet and sealed for transport direct to the Intertek-Genalysis laboratory in Darwin. • Samples obtained 2007 to 2010 were sent via road to Genalysis Laboratories in Perth, Western Australia using a local transport courier from Kununurra. On delivery, a sample receipt notice was forwarded to acknowledge receipt of samples by the lab.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Independent geologists have reviewed the sampling protocols in the field, the import of assay results from the laboratory online access system and the data management within excel spreadsheets and the Access database in recent periods. • The historical drilling (pre-2007) has been reviewed on several occasions by previous and current property owners, with many of the historical holes deemed to have poor quality assurance, and therefore not to be used for Mineral Resource estimation.

Section 2 Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along*	• Pacifico Minerals Ltd acquired a 75% interest in the Sorby Hills lead-silver project in Western Australia on 5 October 2018. Yuguang (Australia) Pty Ltd and wholly owned subsidiary of Henan Yuguang Gold & Lead Co. Ltd (HYG) owning the remaining 25%. The Sorby Hills Project comprises five mining leases (M80/196-197 and M80/285-287), all of which are currently held jointly between Sorby Hills Pty Ltd (75%) and Yuguang (Australia) Pty Ltd (25%). | Tenement	Area (km2)	Granted	Expiry | |---|---|---|---|
M80/196	9.99	22/01/1988	21/01/2030
M80/197	9.95	22/01/1988	21/01/2030	

M80/285	5.57	29/03/1989	28/03/2031
M80/286	7.89	29/03/19 89	28/03/2031
M80/287	8.15	29/03/19 89	28/03/2031

- The Mining Leases are centred at coordinates 128°57'E, 15°27'N.
- The project area is approximately 50 km north-northeast of the township of Kununurra and covers a total area of 12,612.40 hectares (ha).
- Native title has not been granted over the area. The Mining Leases were granted prior to the High Court acknowledging Native Title and therefore native title has been extinguished over the MLs.
- The project area lies adjacent to proposed Goomig Range Conservation Park.
- Tenure is in good standing until 2030 (in some cases, out to 2031). M80/286 & M80/197 have a current cultural clearance access agreement in place; for the remaining mining tenements normal cultural clearance plans would be required. No mining agreement has been negotiated.

Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• The Sorby Hills area has been systematically explored by numerous companies since 1971. Prominent amongst these were ELF Aquitaine (1973-1981) with various JV partners (SEREM, St Joe Bonaparte & BHP), BHP (1981-1988), in JV with Triako; and CBH/Kimberley Metals/KBL Mining. • Previous work included, geologic mapping, soil geochemistry, airborne and ground geophysics and extensive drilling campaigns.
Geology	• Deposit type, geological setting and style of mineralisation.	• The Sorby Hills mineralisation is classified as Mississippi Valley Type (MVT) implying replacement of carbonate-host rocks by Pb-Ag-Zn-Fe sulphides. Recent geological assessment has refined this to a sediment replacement system, with mineralisation focused on the contact between the lower Knox Sediments and the upper Sorby Dolomite. • The Sorby Hills mineralisation consists of a number of carbonate-hosted Pb-Ag (Zn) deposits (previously referred to as pods): A–J, Beta East, Beta West and Alpha historically delineated on the basis of 0.5% Pb over 3 m geological cut off. Anomalous mineralisation extend well beyond the limits of the delineated deposits. The deposits form a curvi-linear north-south belt extending over 7 km, sub parallel to the eastern margin of the Precambrian Pincombe Inlier and within the Carboniferous Burt Range Formation of the Bonaparte Basin. • The mineralisation is largely stratabound and hosted mainly in Transitional facies on the contact between Knox Sediments and Sorby Dolomite and in dolomitic breccia which is typically developed at the contact of a crystalline dolomite unit and overlying dolomitic bioclastic siltstone which generally dips shallowly to the east. • The deposits average 7–10 m in thickness, are from 2 km long and 100 to 500 m wide. There is some structural control to the mineralisation, with higher grade zones associated with faulting. Mineralisation is often thicker and/or of higher grade in areas of strong brecciation. • The Sorby Hills primary mineralisation is typically silver and lead-rich with moderate to high pyrite (FeS_2) content and generally low amounts of sphalerite (ZnS). Galena (PbS) occurs as massive to semi-massive crystalline replacement lenses often found in the more argillaceous units, and as coarse to fine disseminations or as open-space fill in fractures, breccias and vughs. Sphalerite precipitation typically predates galena and occurs as colloform open-space fill. It is typically more abundant at the lateral fringes of and below the lead mineralisation. Silver values tend to increase as the

			lead content increases and is generally assumed to be closely associated with the galena in the form of tetrahedrite and tennanite.
			• The upper portions of the deposits are often oxidised and composed of a variable mix of cerussite ($PbCO_3$) and galena. Cerussite has also been observed deeper in the deposits where faults, fractures and or cavities have acted as conduits for meteoric waters. The extent to which secondary lead minerals exist through the deposit has not been systematically documented; however, it is possible that other lead-oxide minerals may be present.

Drill hole Information	• *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:*
	  o *easting and northing of the drill hole collar*
	  o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  o *dip and azimuth of the hole*
	  o *down hole length and interception depth*
	  o *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
			• A report has been prepared by the registered surveyor as to the accuracy of the DGPS surveying undertaken at the drill collars.
			• The drill hole database for the Sorby Hills project area for A, B, Omega, H, I, J, Alpha and Beta deposits since its discovery in 1971 comprises 1,325 surface drill holes for a total of 125,378.2 m of drilling.
			• The Mineral Resource estimate is based upon the results from all drilling from 2007 onwards, and a selection of historical holes which meet the Competent Person's quality assurance standards.

Data aggregation methods	• *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.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent*		• No aggregated exploration data is reported here.

	values should be clearly stated.	
Relationship between mineralization widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• The stratabound mineralisation at Sorby Hills generally dips gently to the east and drilling intercepts are typically close to true width.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• All plan view, cross-sectional and long sectional diagrams accurately reflect coordinates. Where there is a vertical exaggeration in the long section then this is clearly stated.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Exploration results are not reported here, refer to previous company announcements (e.g. 30th January 2020) for further detail.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Since the discovery of Sorby Hills base metal deposit in 1971 considerable geological information concerning the mineralisation and its host has been compiled. Similarly, numerous geochemical soil surveys and geophysical surveys have been conducted across the tenement package. This information is well documented in company annual reports and can be readily accessed via the WA DMIRS website. • Extensive metallurgical test work on drill core samples from the Sorby Hills deposit was carried out in the laboratories of the Technical Services Department of Mount Isa Mines Limited, Mount Isa in the late 1970s and early 1980s. • Subsequently, CBH Resources commissioned AMML to carry out a test work program to confirm the results of the Mount Isa Mines work and investigate the replacement of sodium cyanide (NaCN), used as a depressant for iron pyrite and zinc sulphide, by alternative reagents. The results of this work appeared in Report 0034-1 dated 8 August 2008. Further test work was carried out by AMML for Sorby Management, following the change in ownership of the Sorby Hills project. The results appeared in Report 0194-1 dated 24 Oct 2011. • A first stage of metallurgical testwork commissioned by Pacifico Minerals was reported 17 July 2019 (ASX Announcement). It confirmed the higher recoveries that can be obtained from this style of carbonate replacement mineralisation. Flotation recoveries

		of up to 96% Pb and 95% Ag were obtained and the testwork indicated that a final concentrate grade of 65%Pb can be produced. Outstanding results were also obtained to upgrade the ores prior to flotation by heavy liquid separation and by ore sorting.
		• In its recent review of the geological setting Pacifico extracted and reviewed the historic geological logs which were commonly supported by down-hole gamma logs for stratigraphic correlation and detailed geological descriptions
		• In addition, previously unutilised gravity survey data (CBH 2012) was used to review the subsurface controls on mineralisation. It was concluded that mineralisation was associated with the transition from gravity lows to gravity highs. The gravity lows are interpreted to represent thicker clastic facies and paleaochannel fills which show a direct linear correlation with basement lineaments.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further drill campaigns are planned to target significant but wide-spaced intercepts in the Inferred resource category as well as tightening the data density in the Indicated category for conversion of Indicated resources to Measured status. There will be an additional need for metallurgical drilling and possibly geotechnical drilling. • Regarding exploration, a number of conceptual targets based on gravity data may be drill test as well as the ground-gravity survey itself expanded. • Pacifico also considers using the gamma-gamma probe to further refine the density / porosity data base.

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, e.g. transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Sorby Hills drill hole data was imported from spreadsheets into an MS Access database, which was validated for any errors such as overlapping sample intervals or collar surveys located outside the bounds of the project area. Hand drawn drill hole logs are stored in scanned digital form. • Data validation checks are routinely run when data is interpreted in 3D visualization and modelling software. • A cross-check of historical Omega deposit area collar coordinates in the database against original drill hole plans in WA Department of Mines and Petroleum reports was performed in 2011 and no errors found.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• CSA Global consultants conducted site visits as part of 2007 and 2010 drilling campaigns and were involved with earlier resource estimates at Sorby Hills. The Competent Person has relied upon the opinions and recorded observations of the CSA Global consultants as to the quality of the sampling, location of project and local infrastructure, and the local geology. A site visit is planned once COVID-19 travel restrictions are lifted. • The Competent Person responsible for the Mineral Resource estimates is of the opinion that this work has all been completed in line with industry best practice and to an appropriate standard for the Mineral Resource reported.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and*	• The geological models for the B, Omega, Norton, Alpha and Beta deposits were re-interpreted for this MRE update, based upon recent drill sample data and a better geological understanding of geological controls to mineralisation. Lithostratigraphic and weathering models were interpreted for the same deposits. • The A deposit was re-interpreted based upon the inclusion of several historical drill

	• *of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	holes, previously suppressed but now deemed to have sufficient quality assurance to warrant their inclusion. The geological interpretation is currently broadly similar to the models used in previous Mineral Resources. • There is a high level of confidence in the geological interpretation of the mineral deposits. • The geological interpretation involved interpreting the litho-stratigraphic models, followed by mineralisation and then weathering models. Historical and recent drill logs and gamma probe logs were reviewed and information interpreted from these assisted with the geological interpretations and lifted the confidence in the geology models. • Geological observations from the 2018 and 2019 drilling programs has refined the geological models for the B, Omega, Norton, Alpha (Pb and Zn zones) and Beta deposits. • The mineralised zones were treated having hard boundaries during grade estimation. The weathering profiles were treated as soft boundaries. • There is some structural control to the mineralisation, with higher grade zones located near faults. • Mineralisation is often thicker and/or of higher grade in areas of strong brecciation.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The global Mineral Resource has a strike length of 5,000 m and plan widths of between 100 m and 500 m. The southern deposits (A to F) vary in depth from 10 m below surface to 170 m below surface. The Norton deposit is flat lying to shallow dipping to the east, and typically sits at a depth of 80 m below surface. The Alpha (Pb zone) and Beta deposits are relatively flat-lying. The Alpha (Zn) is a steeply dipping domain.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model*	• Datamine Studio RM was used for the geological modelling, block model construction, grade interpolation and validation. • A block model with block sizes 10 m (X) x 10 m (Y) x 5 m (Z) was constructed. Sub-celling was used. The block sizes are approximately half the tightest drill spacing, which generally supports an Indicated classification. Blocks were flagged according to the geological and mineralisation envelopes. • Drill sample data were flagged by the mineralisation, lithostratigraphic and weathering domain envelopes, with variables MINZON, LITH and WEATH used. Drillholes were sampled at 1 m intervals and the drill samples were accordingly composited to 1 m lengths for all deposits except for the A and Beta deposits which used a 2 m composite length. Composited sample data were statistically reviewed to determine appropriate top-cuts, with top-cuts applied for Pb, Zn and Ag where required. Log probability plots were used to determine the top-cuts, and the very high-grade samples were reviewed in Datamine by the Competent Person to determine if they were clustered with other high-grade samples. • Sample populations for Pb, Zn, and Ag were split by mineralisation domains, as supported by a statistical analysis of assay data. • The composited drill samples were input into variogram modelling. Normal scores variograms were selected for modelling because they presented the best structured variograms for the assays. Downhole and directional variograms were modelled for Pb, Zn and Ag, using data from the most populated domains. Moderate relative nugget effects were modelled, with short ranges generally 70 - 100 m for Pb associated with sills of up to 90% of the population variance. Long ranges were modelled in excess of 200 m. Major variogram directions exhibited a shallow plunge varying between north east and south east. • Grades were interpolated for Pb, zn and Ag by ordinary kriging, and Fe and S by inverse distance squared. Local dip variations honoured by using Datamine's Dynamic Anisotropy functionality. Blocks were estimated using a search ellipse of 125 m (major) x 125 m (semi-major) x 5 m (minor) dimensions, with a minimum of 5 and maximum of

	interpolation, the block size in relation to the average sample spacing and the search employed. • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	25 samples from a minimum of four drillholes per cell interpolation. Search radii were increased, and the minimum number of samples reduced in subsequent sample searches if cells were not interpolated in the first two passes. Cell discretization of 5 x 5 x 1 (X, Y, Z) was employed. • Grades were estimated into the waste domains using inverse distance squared. • The Mineral Resource is an update of the October 2019 Mineral Resource estimate (reported on 31st October 2019), with updated geological interpretations for the B, Omega, Norton, Alpha and Beta deposits based upon results from the 2018 and 2019 drilling, and a review of historical and more recent drill sample logs and gamma probe results. • Zn and Ag were interpolated into the mineralisation domains and metallurgical testwork are in progress to gain further understanding of their recoveries. • The interpolated grades were validated by way of review of cross sections (block model and drill samples presented with same colour legend); swath plots, and comparison of mean grades from de-clustered drillhole data.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A reporting cut-off grade of 1% Pb is used to report all Mineral Resources except for the Alpha (Zn) deposit, which is reported above a cut-off grade of 1% Zn. Pacifico have carried out recent mining studies supporting a cut-off grade of 1% Pb.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• No mining factors are assumed for the Mineral Resource deposit. The majority of the deposits are amenable for open pit extraction, as shown by the Pre-feasibility study currently in progress.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for*	• No metallurgical factors were assumed in the Mineral Resource estimate. • Flotation recoveries of up to 95.4% Pb and 94.4% Ag were obtained and the testwork indicated that a final concentrate grade of 62% Pb can be produced. Metallurgical testwork for the current Prefeasibility Study is complete. • For mineralisation hosted in oxide and transitional weathering domains, recoveries of

	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.	84% (Pb) and 94.4% (Ag) were achieved from flotation testwork. • For mineralisation hosted in the fresh rock domain, recoveries of 95.4% (Pb) and 81.5% (Ag) were achieved.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• No environmental factors were assumed in the Mineral Resource estimate. • A hydrogeological site investigation is ongoing as part of the current Prefeasibility Study.
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* *Discuss assumptions for bulk density estimates used in the evaluation process of the*	• Bulk densities were calculated for each block. • A review of the Company's density was undertaken in light of the revised geological model. The revised approach to density recognises the lithological differences and assigns a base-density factor to all primary rock types as well as to the weathering zones. The base values are modified by the density contribution from the principal sulphide minerals, galena, pyrite and sphalerite. The overall impact on tonnes is not material but is thought to be a more accurate representation of the density distribution. • Density test work was carried out on mineralised and un-mineralised DD core samples obtained during 2018 and 2019 drilling programs. Core segments were measured using either the water immersion (Archimedes) technique for both wax coated and non-coated material and using the calliper method. There was a very strong correlation between the two methods. A total of 389 measurements were taken using the water immersion technique and these results were used to derive a base density value. • The following formula was derived and used to calculate the bulk density for each block in the block model, where Pb, Zn and Fe are the estimated block grades, and BD is the base density value assigned to a combination of each of the lithostratigraphic and weathering domains. This formula is an update to the formula used in the previous Mineral Resource estimate and is considered to be a more accurate representation of the distribution of density through the rock mass.

different materials.		• Density = 100/((100-Pb%-Zn%-Fe%)/ BD) + Pb/11.35 + Zn/7.14 + Fe/7.87)			
		• The following base density values (t/m^3) were used:			

Weathering and Stratigraphic Unit	Sorby Dolomite	Transitional Breccia	Knox Formation
Oxide	2.4	2.4	2.4
Transitional	2.7	2.55	2.54
Fresh	2.8	2.73	2.63

• A transported clay horizon sitting above the Alpha and part of the Omega deposit was assigned a density value of 2.4

• Further drilling programs will continue to collect density data.

• The host rock sequence exhibits a natural primary dissolution porosity related to mineralisation but this is not uniform in its distribution and not always recognisable during visual inspection of the diamond drill core. The spatial distribution of the density data throughout the deposit do not fully capture the distribution of the porosity and therefore a cautionary tonnage adjustment factor was applied during the final grade-tonnage reporting stage. The final tonnage estimates were reduced by 2% globally to account for an empirically determined unaccounted porosity percentage in the mineralisation.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1. • The Mineral Resources were classified based upon drill hole spacing, quality of sampling and sample analyses, quantity of density measurements, and the relative confidence in the geological interpretation. This upgrade to the Mineral Resource is supported by a high level of confidence in the geological interpretations, and substantial improvement to the robustness of the density model, both of which are key in supporting the Measured classification for the first time at the project. • Data quality and confidence in the geological interpretation support the classification. Perimeters for Measured, Indicated and Inferred volumes were used to assign classification values (RESCAT: 1 = Measured, 2 = Indicated, 3 = Inferred, 4 = unclassified). • The Measured Mineral Resource is supported by regular drill pattern spacing of 25 m (EW) x 25 m (NS), or less. • The Indicated Mineral Resource is supported by regular drill pattern spacing of 50 m (EW) x 50 m (NS), or less. • The Inferred Mineral Resource is supported by regular drill pattern spacing of 50-100 m (EW) x 50-100 m (NS). • Waste blocks are recorded as unclassified (RESCAT=4) • The final classification strategy and results appropriately reflect the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource estimate was internally peer reviewed by CSA Global prior to release of results to Pacifico. CSA Global reviewed the data collection, QAQC, geological modelling, statistical analyses, grade interpolation, bulk density measurements and resource classification strategies.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the*	• Relevant tonnages and grade above nominated cut-off grades for Pb and Zn are provided in this report. Tonnages were calculated by filtering all blocks above the cut-off grade and sub-setting the resultant data into bins by mineralisation domain. The volumes of all the collated blocks were multiplied by the dry density value to derive the tonnages. • The Mineral Resource is a local estimate, whereby the drill hole data was geologically

	Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	domained above nominated cut-off grades.	