BOAB METALS LIMITED

17 December 2021

Expanded Resource to Underpin Sorby Hills DFS

Boab Metals Limited (ASX: **BML**) ("**Boab**" or the "**Company**") is pleased to report a Mineral Resource update for its 75% owned Sorby Hills Lead-Silver-Zinc Project ("**Sorby Hills**", or the **"Project**") located in the Kimberley Region of Western Australia. The reported Mineral Resource incorporates results of the Phase IV and Phase V drilling programs and will underpin the Sorby Hills Definitive Feasibility Study ("**DFS**") Mining Inventory.

HIGHLIGHTS

- **A 5.6Mt increase (+78%) in Measured Resources** versus the Mineral Resource Estimate that underpinned the Sorby Hills Pre-Feasibility Study (PFS).
- **Inaugural 1.0Mt Indicated Resource reported for the Beta Deposit.** It is anticipated that the Beta Deposit will now form part of the Sorby Hills DFS Mining Inventory where previously it had been excluded.
- **Total Resources to 47.3Mt at 4.1% Pb Eq (3.1% Pb, 35g/t Ag) and 0.4% Zn containing 1.47Mt Pb, 53Moz Ag and 0.21kt Zn** representing a 14% increase in Measured and Indicated Resources to the PFS Resource, and 5% increase in Total Resources on the same basis.
- **Measured and Indicated Resources of 23.6Mt at 4.6% Pb Eq (3.5% Pb, 39g/t Ag) and 0.4% Zn containing 0.8Mt Pb, 0.1kt Zn and 30Moz Ag** representing a 14% increase versus the PFS Resource, and a 7% increase versus the April 2021 MRE.
- **Increase in Resource Quantity and Confidence expected to have a positive impact on the Sorby Hills Ore Reserve and DFS.**

Boab Managing Director and CEO, Mr Simon Noon stated:

"The updated Mineral Resource Estimate represents a significant milestone in the development of the Sorby Hills Project.

Following the strong economic results of the PFS, we embarked on a staged DFS drilling program that aimed to support a high quality metallurgical testwork program, improve confidence in geological modelling and in our resource with a view to maximising financing opportunities and investigate opportunities to expand the Project's production capacity.

Phase IV and V drilling programs have delivered on their objective and materially advanced the Sorby Hills Project. I am confident we will see these positive results flow to the DFS."

Background

Boab's Pre-Feasibility Study ("**PFS**") confirmed the Sorby Hills Project as a low-risk, high value project underpinned by a large near-surface Pb-Ag-Zn deposit comprising a Mineral Resource of 44.1Mt at 3.3% Pb, 38g/t Ag and 0.5% Zn (ASX release 2 June 2020), and Proved and Probable Reserves of 13.6Mt at 3.6% Pb, and 40g/t Ag (ASX release 25 August 2020).

On the back of the positive PFS results, a Phase IV drilling program was designed to primarily advance the Project towards DFS status. As such, the bulk of drilling metres (3,340m, 70%) were apportioned to collecting samples for metallurgical and geotechnical testwork. The balance of the program was targeted at increasing geological confidence via infill drilling and testing potential shallow Resource extensions to the south of the Omega deposit (~1,460m, 30%).

An interim Mineral Resource update incorporating the results of the Phase IV drilling was released in April 2021 (ASX release 6 April 2021) and delivered 44.9Mt at 3.2% Pb, 0.5% Zn and 37g/t Ag using a cut-off of 1% Pb.

Subsequently, a Phase V drilling program comprising an additional 59 diamond drill holes (5,284m) was completed with the objective of expanding the Sorby Hills Mining Inventory and supporting the opportunity to increase the 1.5Mtpa processing plant capacity proposed in the PFS.

Mineral Resource Update

The Mineral Resource Estimate presented in this announcement was undertaken by CSA Global Pty Ltd and upgrades the PFS Mineral Resource Estimate via the inclusion of results from the Phase IV and Phase V drilling programs (Figure 1).

The updated Mineral Resource Estimate comprises 47.3Mt at 3.1% Pb, 0.4% Zn and 35g/t Ag using a cut-off of 1% Pb. A comprehensive breakdown of the Mineral Resource by Resource classification and deposit is shown in Table 1. The updated estimate has resulted in an increase in Measured and Indicated Tonnes of 2.8Mt (14%), 65kt contained Lead (9%) and 3.0Moz contained Silver (11%) versus the Mineral Resource Estimate that underpinned the PFS and represents an increase of 5% Total Resources on the same basis.

Importantly, the update has seen the conversion of 5.6Mt of Indicated Resources to Measured Resources (an increase of 78% compared with the Mineral Resource Estimate that underpinned the Sorby Hills Pre-Feasibility Study) and the inaugural Indicated Resource of 1.0Mt being reported at the Beta Deposit.

It is anticipated that:

a) the increase in Measured Resources by 5.6Mt will likely lead to a significant increase in Proved Reserves and the quality of data feeding into open pit and process plant design criteria for the Sorby Hills DFS; and

b) the inaugural 1.0Mt of Indicated Resources reported at the Beta Deposit will be incorporated into the Sorby Hills mining inventory for the first time as part of the DFS.

The updated Mineral Resource Estimate follows the recently reported DFS Metallurgical Testwork Program results which provided confirmation of high metal recoveries and detailed input for the Process Design Criteria of the Sorby Hills processing plant (ASX release 19 November 2021).

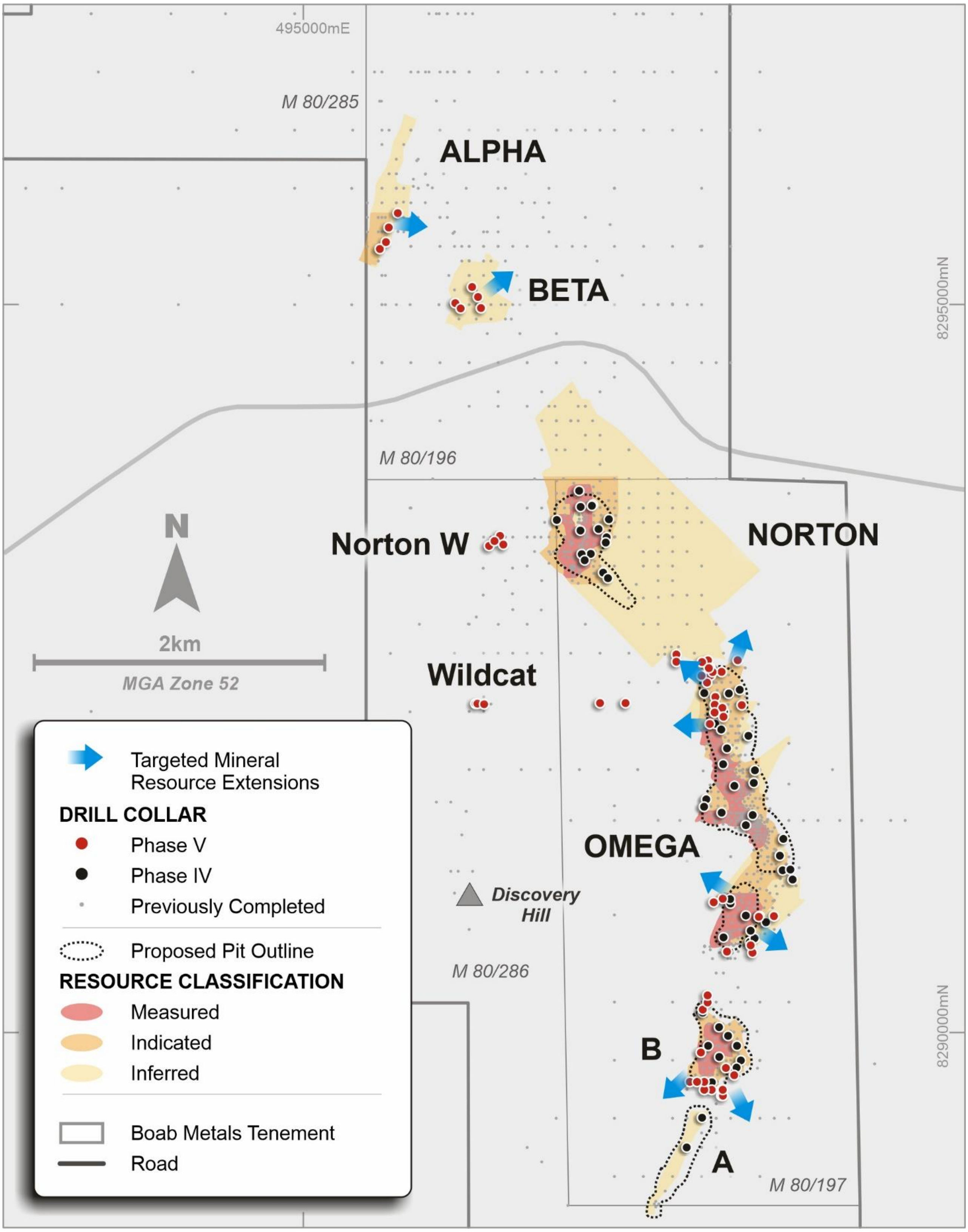

Figure 1 – Surface projection of Mineral Resource block model coloured by classification.
Red = Measured, Orange= Indicated, Yellow = Inferred. Drill collars as used in the Mineral Resource Estimate

Table 1: Updated Sorby Hills Mineral Resource Estimate – Pb Domains only.

Classification by Deposit	Mt	Grade				Contained Metal			
		Pb	Zn	Ag	Pb Eq.	Pb	Zn	Ag	Pb Eq.
		%	%	g/t	%	kt	kt	koz	kt
A									
Inferred	0.6	5.3%	1.0%	23	6.0%	31	6	427	35
Sub Total	**0.6**	**5.3%**	**0.1%**	**23**	**6.0%**	**31**	**6**	**427**	**35**
B									
Measured	1.4	3.8%	0.3%	19	4.3%	52	4	859	60
Indicated	1.3	3.4%	0.3%	21	4.0%	44	4	862	52
Sub Total	**2.7**	**3.6%**	**0.3%**	**20**	**4.2%**	**97**	**8**	**1,720**	**112**
Omega									
Measured	8.5	3.3%	0.4%	37	4.3%	279	32	9,995	366
Indicated	5.8	3.5%	0.4%	34	4.4%	205	25	6,331	259
Inferred	2.9	2.7%	0.4%	26	3.4%	76	13	2,414	97
Sub Total	**17.2**	**3.3%**	**0.4%**	**34**	**4.2%**	**566**	**71**	**18,948**	**730**
Norton									
Measured	2.8	4.1%	0.3%	75	6.2%	112	9	6,668	170
Indicated	2.1	3.2%	0.5%	38	4.3%	68	11	2,617	91
Inferred	16.2	2.5%	0.5%	27	3.2%	402	75	14,039	523
Sub Total	**21.1**	**2.8%**	**0.4%**	**34**	**3.8%**	**590**	**96**	**24,090**	**799**
Alpha									
Indicated	0.7	2.6%	0.5%	41	3.8%	18	4	923	26
Inferred	0.8	3.6%	1.2%	86	6.0%	27	9	2,052	44
Sub Total	**1.5**	**3.1%**	**0.9%**	**64**	**4.9%**	**45**	**13**	**2,975**	**71**
Beta									
Indicated	1.0	4.1%	0.2%	42	5.3%	42	2	1,382	54
Inferred	3.2	3.4%	0.4%	43	4.6%	109	14	4,474	148
Sub Total	**4.2**	**3.6%**	**0.4%**	**43**	**4.8%**	**151**	**17**	**5,856**	**202**
Total Resource									
Measured	12.6	3.5%	0.4%	43	4.7%	444	45	17,521	596
Indicated	11.0	3.4%	0.4%	34	4.4%	377	46	12,114	482
Inferred	23.6	2.7%	0.5%	31	3.6%	645	117	23,406	848
Total	**47.3**	**3.1%**	**0.4%**	**35**	**4.1%**	**1,465**	**207**	**53,042**	**1,925**

Note: Tonnes and Grade are rounded. Reported at a 1.0% Pb Cut-Off.
Discrepancy in calculated Contained Metal is due to rounding.
See Appendix 2 for Lead Equivalent calculation method.
Lead Equivalent calculation excludes Zinc.

Table 2: Sorby Hills Mineral Resource Estimate – Alpha Deposit Zn Domains only.

Classification by Deposit	Mt	Pb %	Zn %	Ag g/t	Pb kt	Zn kt	Ag koz
Alpha							
Indicated	2.1	0.3	2.8	22	6	59	1,485
Inferred	2.1	0.4	2.3	21	8	48	1,418
Sub Total	**4.2**	**0.5**	**2.5**	**22**	**15**	**107**	**2,971**

Note: Tonnes and Grade are rounded. Reported at a 1.0% Pb Cut-Off.
Discrepancy in calculated Contained Metal is due to rounding.

Geology and Geological Interpretation

The Sorby Hills mineralisation is classified as Mississippi Valley Type (MVT), implying replacement of carbonate and mixed carbonate siliciclasitc rocks by Pb-Ag-Zn-Fe sulphides. Recent geological assessment has refined this to a sediment-replacement system, with mineralisation focused within an interval below the base of the Knox Sediments and the Sorby Dolomite (Transition Facies).

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 largely stratabound and hosted mainly in the Transition Facies, an interval of about 20 to 25 m consisting of 1 to 2 m thick cyclic bedded, beds of massive dolomite, silty dolomite and clay matrix breccias in the immediate footwall of the Knox Sediments and the uppermost interval of the Sorby Dolomite. A massive micritic fossiliferous dolomite interval is located in the hanging wall. Strata generally dip shallowly, but variably to the east, southeast and northeast.

The mineralisation consists of seven discrete carbonate hosted Pb-Ag-Zn deposits: A, B, Omega, Norton, Beta and Alpha (Pb and Zn) 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 with sub-economic mineralisation linking all deposits. During the course of 2021 Boab demonstrated that late stage, sub-parallel structurally controlled zones of intense hydrothermal breccia-type of mineralization are located at Omega striking in a north-northwest direction. The controlling structures form a set of en-echelon right stepping extensional faults associated with halos of mineralised breccias.

The 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 lenses often found in the more argillaceous (silty) units, and as coarse to fine disseminations or as open-space fill in fractures, breccias and vughs. Sphalerite typically predates galena and occurs as colloform open-space fill. 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 throughout the deposit has been captured during core logging and has been verified systematically by calculating a sulphur deficiency factor based on multi-element analysis for each sample that includes an analysis for sulphur, lead, zinc and iron. While this method does not difference quantitatively between lead oxide minerals, crystallographic studies show that the dominant secondary lead mineral (>90%) is cerussite.

The deposits average 7 to 10m in thickness, are generally less than 1km long and 100 to 500m 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 the B, Omega, Alpha and Beta deposits were updated as part of this current scope of work, which were subject to recent drilling followed by a re-interpretation of the stratigraphy, following a detailed review of historic drill hole information concerning structure, lithology, facies, and mineralisation style.

Lithostratigraphic domains were modelled representing the base of the Knox Sediments (hanging wall 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 represents a corridor of mineralisation with strike extent of 1,800m and a maximum plan width of 350m. 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. The mineralisation at all deposits were mostly captured within single wireframe solids, with volumetrically minor footwall and fault hosted mineralisation domains modelled for Omega, and several hanging wall domains modelled for Norton. A single Zn domain was also modelled for the Alpha deposit.

Drilling Techniques

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

The Mineral Resource estimate is supported by RC and DD (HQ) drilling samples, with holes drilled over a time span between the 1970s and 2021. 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 Mineral Resource estimate. During this Mineral Resource update, a review of the recent DD drilling geology logs and sample assays have supported the inclusion of the historical “FDH” series of drilling, which exhibit similar tenor and down hole location of mineralisation compared to the adjacent diamond holes. These FDH holes were previously excluded from recent Mineral Resource estimates.

A total of 676 drill holes intersect the mineralisation domains, with 212 holes drilled by Boab since 2018. A total of 244 holes are historical but were retained based upon acceptable quality control results.

Sampling and Sub-sampling Techniques

For the 2018 to 2021 DD 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 0.5m and 1.5m. 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.

During the 2018 and 2019 drilling programs, RC sampling was conducted at 1m 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. Two x 2kg 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 drilling conducted prior to 2018, DD core was typically sampled at regular 1m 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 1m 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 2007 through 2010, RC samples were collected at 1m intervals using a trailer-mounted cone splitter attached to the drilling rig. A 2 to 3kg of split material for each metre was collected in a calico bag to be submitted for assay.

Historical (pre-2007) diamond holes were sampled at 1m intervals or to geological contacts. RC samples were collected at 2m intervals.

Sample Analysis Method

For samples collected during the 2018 to 2021 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 (including holes from historical programs), 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 since 2007, which support the Mineral Resource estimate. 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. The use of selected historical drill holes in the Mineral Resource estimate were supported by the quality of geological logging, gamma log traces, and comparison of tenor of grade and geological logs to adjacent, and more recently drilled holes.

Estimation Methodology

A block model with block sizes of 10m (X) x 10m (Y) x 5m (Z) was constructed. The block sizes are approximately half the most dense drill spacing, which generally supports a Measured or

Indicated classification. Blocks and drill sample data were flagged according to the geological and mineralisation envelopes. Drillholes were sampled at 1m intervals and the drill samples were accordingly composited to 1m lengths for most deposits, with the exception of the A and Beta deposits, where samples were composited to 2m 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 used for 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 variable dimensions, ranging from 100m (major) x 30m (semi-major) x 5m (minor) dimensions for Beta, to 60m (major) x 30m (semi-major) x 5m (minor) for Omega North, with a minimum of 8 and maximum of 24 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 March 2021, with updated geological interpretations for B, Omega, Alpha and Beta deposits.

Density testwork was carried out on mineralised and un-mineralised DD core samples obtained between 2018 and 2021. 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 978 measurements were taken using the water immersion technique and these results were used to derive a base density value, and applied to an algorithm based upon interpolated Pb, Zn and Fe grades.

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.

Density = 100/((100-Pb%-Zn%-Fe%)/ BD) + Pb/11.35 + Zn/7.14 + 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 DD 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 1% globally to account for the visually estimated porosity levels.

Mineral Resource Classification

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, the relative confidence in the geological interpretation, and the ‘slope of regression’ (SOR) outputs from the kriging grade interpolation. This upgrade to the Mineral Resource is supported by a high level of confidence in the geological interpretations in areas previously classified as either Indicated or Inferred, where recent diamond drilling has improved the confidence of the geological models, and the quality of the local block estimates.

A drill spacing of equal to or less than 25m (north) by 25m (east) was used to initially define the Measured volumes and a drill spacing of equal to or less than 50m (north) by 50m (east) was used to initially define the Indicated volumes. The block model was viewed in plan section, with blocks coloured by SOR (typically > 0.7) to assist this process. 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 to 100m (northing) by 50 to 100m (easting). Beta has been partially classified as Indicated for the first time. The A deposit is wholly classified as Inferred.

Cut-Off Grades

Boab have carried out recent mining studies supporting a cut-off grade of 1% Pb and 1% Zn, 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.

The 2020 PFS metallurgical and engineering studies confirmed high mineral recoveries via a conventional processing route to produce a high-quality concentrate. The PFS testwork confirmed average metal recoveries of 93.3% Pb and 80.3% Ag, for production of an average 62% Pb, 580 g/t Ag concentrate.

Dense media separation (DMS) beneficiation was demonstrated to be effective for upgrading of low-grade ore. The planned Definitive Feasibility Study (DFS) will explore this and the impact of potentially lowering mining and processing cut-off grades. Valuable minerals are adequately liberated at coarse grind size via SAG milling at P80 125µm. No regrinding is required to achieve concentrate grade and recovery. Sequential rougher flotation of oxide and fresh ore types, and two stages of subsequent cleaning, accommodates a range of ore types and ore blends.

Boab is currently preparing a DFS, due for completion in 2022.

No other modifying factors were considered during the preparation of the Mineral Resource estimate.

Reasonable Prospects Hurdle

The Competent Person believes there are reasonable prospects for eventual economic extraction of the Mineral Resource. The 2020 PFS results showing an initial 10-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 and wet seasons.

The Board of Directors have authorised this announcement for release to the market.

FOR FURTHER INFORMATION, PLEASE CONTACT:
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About Boab Metals Limited

Boab Metals Limited ("**Boab**", ASX: **BML**) is a Western Australian based exploration and development company with interests in Australia and South America. In Australia, the Company is currently focused on developing the Sorby Hills Lead-Silver-Zinc Joint Venture Project in WA. Boab owns a 75% interest in the Joint Venture with the remaining 25% (contributing) interest held by Henan Yuguang Gold & Lead Co. Ltd.

Sorby Hills is located 50km from the regional centre of Kununurra in the East Kimberley and has existing sealed roads to transport concentrate from site to the facilities at Wyndham Port, a distance of 150km. Established infrastructure and existing permitting allows for fast-track production.

Competent Person Statement

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.

Compliance Statement

Information included in this presentation relating to Ore Reserves, Production Targets and Financial Forecasts has been extracted from the Pre-Feasibility Report and Ore Reserve Statement dated 25 August 2020, available to view at www.boabmetals.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the Ore Reserve Statement and that all material assumptions and technical parameters underpinning the estimates, production targets and financial forecasts continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the Ore Reserves Statement.

Appendix 1: 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*
		During the 2020 (Phase IV) and 2021 (Phase V) diamond drilling programs:
		• Diamond core sampling was conducted at 1 m intervals for selected intervals of the hole.
		• 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.
		• During the drilling diamond drilling program (from September to November 2020), ¼ core sampling has been conducted at 1m intervals for the entire length of the logged mineralised zone including several metres in the hanging wall and footwall.
		• Drill core is scanned with a portable XRF (Olympus InnovX Delta) for an indication of qualitative lead and zinc concentration.
		• The sampling methodology undertaken is considered representative and appropriate for the carbonate hosted style of mineralisation at Sorby Hills and is consistent with sampling protocols in the past conducted by Boab.
		• Mineralised HQ diamond core is sampled at different intervals to reflect lithological boundaries, but within length limits of between 0.5 m and 1.5 m.
		
		• During the 2018 (Phases I and II – RC with some HQ diamond tails) and 2019 (Phase III - RC) 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 1.50 m.
		• For drilling programs 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 III campaign

	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.	• 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).*	• A total of 1,409 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 use in the Mineral Resource and are presented in Table C.. An additional 527 holes were drilled in the period 2007 to 2018. Refer to Table A.

Table A Drilling History

Hole type	Description	Historical	2007	2010	2011	2018 Phases I	2019 Phase III	2020	2021	Total holes	Total metres
AC	Air-core				1					1	34
DD	Diamond	295	29	10	-	28	60	46	52	520	63,744.23

Total holes / metres drilled	VPRH	RC	PERC	OHP	NR	MR
	Open-hole percussion	Reverse circulation	Percussion	Overhead percussion	No record	Mud rotary
881/ 93,018.69	89	26	302	85	40	44
29 / 3,411		-				
99 / 8,654		89				
109 / 5,766		108				
73 / 5,624		45				
120 / 9,119		60				
46 / 3556.4						
52 /						
1,409	89	328	302	85	40	44
129,514.58	4,791.3	22,673	20,585.5	8,848.6	6,078.95	2,759

- 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 1,409 surface drill holes for a total of 129,514.58 m of drilling.
- The drilling method used in the Phase IV and V drill programs is HQ3 diamond drilling with locally a rotary mud pre-collar, used to pre-collar some holes with planned end of hole depth greater than 80 m, which were then completed with diamond tails.
- 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 combination of vertical and angled holes were carried out. Generally, the hole azimuth was decided based on dip of strata. At Omega and B-deposit most angled holes were drilled about 70° to the west of west-northwest to account for a 20-25° dip to the east and east-southeast. • At Norton, the exploratory holes had an azimuth south-southwest, 70°. • All core from angled holes was oriented using a REFLEX tool. • A summary of the drilling campaigns is provided in Table B:

Table B Drilling Campaigns

Drill Hole Series	Drilling Methods	Year
DDH1-DDH65	Diamond coring with unspecified pre-collar (mud rotary)	1972-1973
R1 -R29	Rotary Percussion (some open hole RC)	Unknown
FDH1 -FDH89	Conventional RC using VPRH rig	1974
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
WBS4000 -WBS4205	Rotary (Mostly open hole some conventional RC)	1976-1979
WBS5000 -WBS5095	Mud rotary pre-collars diamond tails	1978-1979

		WBS6000 -WBS6057	Some RAB some mud rotary pre-collars with diamond tails	1980
		WBS7000 -WBS7035	RAB and conventional RC	1980
		CSHDD001-CSHDD029	Diamond coring with open pre-collar (mud rotary)	2007
		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
		KSHRC002-KSHRC100	Conventional RC	2011
		AB, ACD, AF, AI series	RC and HQ diamond tails	2018 - 2019
		Phase III 2019	RC	2019
		Phase IV and V	Diamond core (HQ3) with rotary mud pre-collars	2020, 2021
		Details of historical (pre-2007) holes used in the Mineral Resource are presented in Table C.		

Table C

Drillhole series	Year	Reason for Inclusion
DDH1 – DDH65	1972 - 1973	Diamond core – verified collar locations, some twinning with later holes, gamma-gamma traces for all corresponding to high quality geological logs
FDH1 to FDH89	1974	Suppressed in earlier MREs, but location and tenor of mineralisation is supported by adjacent, and recently drilled holes. These are not twinned holes per se but are a proxy and provide the CP with sufficient confidence for their inclusion.
WBJ5001 - 5003	1977-1981	Diamond core tails– verified collar locations, some twinning with later holes, gamma-gamma traces for all corresponding to high quality geological logs
WBS1001 – WBS1160	1975 - 1981	Mostly diamond core with occasional Rotary
WBS2026 – 2029; 2040 – 2047; 2055 – 2061; 2071 – 2073; 2081; 2099-2100; 2127-2128; 2148; 2151 – 2154; 2156; 2159	1975	Percussion with some diamond core tails Holes assessed on sectional basis, down hole location intersection and tenor of mineralisation assessed against adjacent recent holes. Existence of gamma traces a strong support for inclusion. High quality geological logs.
WBS3008 - 3018	1975	Percussion with some diamond core tails. Same comments as WBS2000 series.
WBS4002 – 4010; 4017-4025; 4027 – 4032; 4048-4053; 4090-4091; 4102; 4106; 4109-4112; 4114; 4121-4124; 4139-4142; 4154-4156; 4160; 4167-4170; 4172-4174; 4176-4177; 4183-4184	1975 to 1976	Percussion with some diamond core tails. Same comments as WBS2000 series
WBS5001 - 5099	1977 - 1981	Majority diamond core, some rotary. Same comments as WBS2000 series
WBS6002 - 6044	1978 - 1980	Majority diamond core, some rotary. Same comments as WBS2000 series

		WBS7003-7007; 7010 - 7035		Mostly no record of hole type, some RC present. Same comments as WBS2000 series

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 2020 & 2021Phase IV &V programs:
		  ▪ All drill cores are assessed for core recoveries. There is generally a + 95% recovery through the zone of mineralisation
		  • The core shows good integrity across the ore zones and no sampling bias is expected from the applied sampling method.
		  • 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.
		• For the Phase I to III 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.
		• 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.
		• 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 HQ 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.

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 Phase IV and V drill programs:
		  • Diamond drill core was logged at a secure facility in Kununurra, during 2020 and at the Boab Exploration camp facility which was permanently manned. All core is now stored in the Kununurra shed.
		  • 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.
		  • Structural measurements of stratigraphy and fault orientations were made where the ori-marks and orientation lines were of sufficient confidence.
		• For the Phase I to III drill programs:
		  • 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 have been logged. Core was processed with orientation lines and metre marks. Recoveries and RQD's were recorded. All core trays were photographed.
		  • Diamond drill core was logged at a secure facility in Kununurra, where it is also stored.
		• 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.
		For historical holes (pre-2007):
		• All historical holes were gamma probed (with the exception of the R series holes, and those holes which collapsed after drilling) and geologically logged, with the geological logs having recently been reviewed and are considered to be of high quality. The recent review of the historical gamma traces and geological logs have supported the decision to use many of the historical holes in the MRE (Table C above).

Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*
	• *For all sample types, the nature, quality and appropriateness of the sample preparation*
		For the 2020 and 2021 drill programs (Phases IV and V):
		  ▪ Core is cut in half then one half again in half to produce a quarter core sampled at the core shed in Kununurra using a diamond saw. Quarter 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.
		  ▪ Core is cut in half at the core shed in Kununurra using a diamond saw. Quarter 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 the 2018 and 2019 drilling campaigns (Phases I to III):
		  • 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

	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.*	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 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 historical holes (pre-2007): • The holes completed using only RC or RAB were sampled at 2 m intervals for the entire length of the hole. Where RC or RAB was used to drill the pre-collar, it was either sampled at 2 m intervals or not at all. Where mud rotary was used for the pre-collar, no samples were collected. It is not stated which sampling method was used to collect subsamples for analysis. • In the diamond core drillholes, some were sampled at regular 1 m intervals and others were sampled at various intervals to reflect lithological boundaries. It is stated in the 1978 Annual Report that half-core samples were taken; prior to this, the sampling

		method is unknown. Various core diameters were also used including BQ, NQ and HQ. It is not always stated on the log which diameter was used. 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.*
	• *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 Phase IV and V drilling programmes:
		  • All samples were sent to Intertek-Genalysis in Darwin for preparation and analysis. Duplicates, blanks and standards inserted at regular intervals.
		  • Drill core samples are being assayed to accepted industry standards at the Intertek-Genalysis nationally certified laboratory in Darwin. Four-acid digestion of pulverised sample material was followed by ICP-OES or equivalent assay technique and determination of 48 elements.
		  • 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 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 Boab and the drill samples are considered to be suitable to support the Mineral Resource estimate.
		  • All results have been reviewed. QAQC indicates results are within acceptable limits.
		• For the Phase I to III 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. 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. • 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. • 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. Historical drill programs: • Samples from the historical (pre-2007) 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.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of*	• 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. • Assay certificates were received from the analytical laboratories and imported into the drill database. • No adjustment was made to the data.

	primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • *Discuss any adjustment to assay data.*	• In 2007, 14 twin holes were drilled using HQ diamond core into Beta, Norton, and Omega, 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. • Phase IV diamond drilling carried out in 2020 has provided support for the inclusion of historical FDH series drill holes. Down hole location and tenor of mineralisation in the FDH holes is similar to adjacent diamond, and recent RC holes, therefore the Competent Person (Mineral Resources) supported their inclusion in the current Mineral Resource.
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 to 2021 (Phases I to V) 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, 2019 and 2020 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 were 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 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.*	• 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 B and Omega deposits, to a minimum of 25 m drill hole spacing, particularly in the southern and central areas. • 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 to 2021 (Phases III to V) 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 to 2020 were taken by Boab 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 laboratory.
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. Additional drilling has provided subsequent support for the inclusion of some of the historical holes.

Section 2 Reporting of Exploration Results

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td>Mineral tenement and land tenure status</td><td>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 with any known impediments to obtaining a licence to operate in the area.</td><td>Boab 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%).
<table>
<tr><th>Tenement</th><th>Area (km2)</th><th>Granted</th><th>Expiry</th></tr>
<tr><td>M80/196</td><td>9.99</td><td>22/01/1988</td><td>21/01/2030</td></tr>
<tr><td>M80/197</td><td>9.95</td><td>22/01/1988</td><td>21/01/2030</td></tr>
<tr><td>M80/285</td><td>5.57</td><td>29/03/1989</td><td>28/03/2031</td></tr>
<tr><td>M80/286</td><td>7.89</td><td>29/03/1989</td><td>28/03/2031</td></tr>
<tr><td>M80/287</td><td>8.15</td><td>29/03/1989</td><td>28/03/2031</td></tr>
<tr><td>E80/5317</td><td>217</td><td>05/03/2020</td><td>04/03/2025</td></tr>
</table>
The Mining Leases are centered 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.</td></tr>
<tr><td>Exploration done by other parties</td><td>Acknowledgment and appraisal of exploration by other parties.</td><td>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.</td></tr>
<tr><td>Geology</td><td>Deposit type, geological setting and style of mineralisation.</td><td>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</td></tr>
</table>

		Sediments and the upper Sorby Dolomite (Transition Facies). • The Sorby Hills mineralisation consists of a number of carbonate-hosted Pb-Ag (Zn) deposits (previously referred to as pods): A, B, Omega, Norton, Beta and Alpha, historically delineated on the basis of 0.5% Pb over 3 m geological cut off. Anomalous mineralisation extends 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, an interval of about 20 to 25 m consisting of 1 to 2 m thick cyclic bedded, beds of massive dolomite, silty dolomite and clay matrix breccias in the immediate footwall of the Knox Sediments and the uppermost interval of the Sorby Dolomite. • However, during the course of 2021 Boab demonstrated that late stage, sub-parallel structurally controlled zones of intense hydrothermal breccia-type of mineralization are located at Omega striking in a north-northwest direction. The controlling structures form a set of en-echelon right stepping extensional faults associated with halos of mineralised breccias. • 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 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 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. • 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*	• 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, Norton, Alpha and Beta deposits since its discovery in 1971 comprises 1,443 surface drill holes for a total of 136,576 m of drilling. • The Mineral Resource estimate is based upon the results from all drilling from 2007 onwards, and a

	the following information for all Material drill holes: ○ easting and northing of the drill hole collar ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ 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.*	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*	• No aggregated exploration data is reported here.

	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 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. • The reported mineralised interval are down holes length; the actual geometry of the hydraulic breccia type mineralisation is no know and there the down hole length is reported at face value; once further drilling is completed the actual geometry can be defined.
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*	• 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.

	be limited to a plan view of drill hole collar locations and appropriate sectional views.	
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. 28th September 2021) 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 Boab 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. • Recent metallurgical testwork is presented in Appendix 1, Section 3. • In its recent review of the geological setting Boab 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 paleo-channel 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 follow up newly identified mineralised zones, to expand and upgrade the Resource to higher confidence categories (i.e. from Inferred to Indicated Resource, and from Indicated Resource to Measured Resource), to aid in future Reserve estimates, and to delineate additional areas of potentially economic mineralisation. • The Company is also undertaking a regional gravity survey on the Exploration license E80/5317 to define regional structures for exploration targeting.

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.*	• A Sorby Hills drill hole database was exported from a Datashed 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. The database export tables were exported to csv files and prepared for loading into Datamine. • 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 were 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.*	• The Competent Person has been unable to conduct a current site visit due to domestic travel restrictions imposed by state governments, in response to the COVID-19 pandemic. • A CSA Global Principal Geologist represented the Competent Person by visiting the Project on 1st October 2021. Accompanying the CSA Global visit was Boab's Exploration Manager. The purpose of the site visit was to review the Sorby Hills deposit site, access and infrastructure, and assess the geology and mineralisation geometry, diamond core and RC chips. No drilling at Sorby Hills was ongoing during the site visit. • 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 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*	• The geological models for the B, Omega, Alpha and Beta deposits were re-interpreted for this Mineral Resource 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 in early 2021 based upon the inclusion of several Phase IV drill holes. The geological interpretation and quantity of drilling supports an Inferred Mineral Resource, which are only sufficient to imply but not verify geological and grade continuity. One mineralisation domain was modelled. • The mineralisation, weathering and lithological models for B deposit were updated based upon Phase V drilling. One mineralisation domain was modelled. • The mineralisation, weathering and lithological models for Omega were reviewed and updated, based upon Phase V drilling. DTMs for fault planes were updated and guided the geological interpretations. A set of 6 mineralisation domains were interpreted for the hydrothermal breccia zones, associated with faulting. The stratabound mineralisation is represented by 6 domains. • No Phase V drilling occurred at Norton. A review of previous geological models presented an opportunity to link the southern end of Norton with the northern end of Omega, with one continuous zone of Pb mineralisation now extending from the southern end of Omega to the northern end of Norton. • Norton comprises 4 mineralisation domains supporting the Mineral Resource.

Criteria	JORC Code explanation	Commentary
	and geology.	• The mineralisation, weathering and lithological models for Alpha (Pb and Zn) and Beta were updated based upon Phase V drilling. Alpha hosts a zone of Zn mineralisation which was targeted by Phase V drilling. Two Pb domains are interpreted at both Alpha and Beta. • 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. • Statistical analyses of the sample data, flagged by mineralisation, lithology and weathering domains, guided the decision-making processes for combining mineralisation domains for grade estimation purposes. Statistical analyses for Pb, Zn and Ag presented various options for combining or splitting populations • Selected B, Omega and Norton mineralised zones were treated as soft boundaries during grade estimation, with one single population of mineralisation extending from B deposit to Norton. 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, such as presented in the Transitional Facies lithological zone (located between the Sorby Dolomite and Knox Formation).
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 Omega) 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.*	• Datamine Studio RM was used for the geological modelling, block model construction, grade interpolation and validation. • Mineralisation domains from all deposits were re-estimated using a revised set of grade estimation parameter files. • 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 Measured and 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 and normal histograms 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.

Criteria	JORC Code explanation	Commentary
	• *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 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.*	• Sample populations for Pb, Zn, and Ag were either combined or split by mineralisation domains, as supported by a statistical analysis of assay data. • The composited and domained drill sample assays were input into variogram modelling. Log 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 to high relative nugget effects were modelled, with short ranges generally 70 - 200 m for Pb associated with sills of up to 80% of the population variance. Long ranges were modelled in excess of 200 m. Major variogram directions exhibited a shallow plunge varying between east and northeast. • Grades were interpolated for Pb, Zn, Ag, Fe and S by ordinary kriging. Local dip variations honoured by using Datamine's Dynamic Anisotropy functionality. Kriging Neighbourhood Analysis (KNA) was used to guide the selection of appropriate grade interpolation parameters. • Blocks were estimated using a search ellipse of variable dimensions, dependent upon the domain population. Ellipse dimensions (radii) varied between 70 m (major) x 50 m (semi-major) x 5 m (minor) and 60 m (major) x 30 m (semi-major) x 5 m (minor), for Pb grade populations within the B-Omega-Norton combined populations. The Alpha Zn domain employed a search domain with radii of 380 m (major) x 90 m (semi-major) x 10 m (minor). • Number of samples per sample populations used to interpolate a single block are dependent upon the domain population. A minimum of 8 and maximum of 24 samples was generally used, from a maximum of four samples per drillhole 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. • Fe and S grades were estimated into the entire model using ordinary kriging. Blocks located outside of the mineralisation domains were assigned a grade of 0 % for Pb and Zn, and 0 ppm for Ag. • The Mineral Resource is an update of the March 2021 Mineral Resource estimate, with updated geological interpretations for the B, Omega, Alpha and Beta deposits based upon results from the 2021 Phase V drilling. • 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.

Criteria	JORC Code explanation	Commentary
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. Boab 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 completed in 2020. A Feasibility Study is 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 eventual economic extraction to consider potential metallurgical methods,*	• No metallurgical factors were assumed in the Mineral Resource estimate. • A comprehensive metallurgical testwork programme has been undertaken at the project during 2020 and 2021. • Some 1,420 kg of core recovered from 35 HQ diamond drill holes completed during the Phase IV and V drill program was utilised for testwork including Flotation, Comminution, Mineralogy, Heavy Liquid Separation, Tailings Thickening, Concentrate Filtration and Concentrate analysis. Results reveal separate flotation of Oxidised and Fresh Ore will deliver significant uplift in metal recovery across the Life of Mine versus blended ore treatment. Flotation results confirm recoveries of:

Criteria	JORC Code explanation	Commentary
	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.	• up to 95%Pb (Fresh Ore) and 90%Pb (Oxidised Ore); and • up to 87%Ag (Fresh Ore) and 92%Ag (Oxidised Ore). Primary grind size, reagent regimes and residence times have been optimised ahead of finalising the Sorby Hills DFS Process Plant design criteria.
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.*	• Considerable surveys and investigations have been undertaken over the resource with respect to environmental impacts. • No environmental risks have been identified at this time. • It is expected that waste and tailings produced from the resource can be managed using standard mining engineering methods and do not pose a risk from an environmental standpoint.
Bulk density	• *Whether assumed or determined. If assumed,*	• Bulk densities were calculated for each block. • A review of the Company's density data was undertaken in 2020 during preparation of the May 2020

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.
• The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.
• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</td><td>Mineral Resource. 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 then modified by the density contribution from the principal sulphide minerals, galena, pyrite and sphalerite, as explained further below.
• Density test work was carried out on mineralised and un-mineralised DD core samples obtained during 2018 and 2019 drilling programs, with 389 measurements taken. A further 198 core segments were measured following the 2020 (Phase IV) programme, and 391 diamond core samples from the Phase V drilling, 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. The results were used to derive an updated base density value for the density algorithm applied to the Mineral Resource estimate.
• 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.
• 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:
<table>
<tr><th>Weathering and Stratigraphic Unit</th><th>Sorby Dolomite</th><th>Transitional Breccia</th><th>Knox Formation</th></tr>
<tr><td>Oxide</td><td>2.51</td><td>2.43</td><td>2.43</td></tr>
<tr><td>Transitional</td><td>2.68</td><td>2.55</td><td>2.54</td></tr>
<tr><td>Fresh</td><td>2.75</td><td>2.70</td><td>2.60</td></tr>
</table>
• 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 adjusted by applying globally a 1% tonnage reduction to the mineralisation based on an empirically determined global percentage of porosity in the mineralisation.</td></tr>
<tr><td>Classification</td><td>• The basis for the classification of the Mineral Resources into varying confidence categories.
• Whether appropriate account has been taken of all relevant factors</td><td>• 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, the relative confidence in the geological interpretation, and the ‘slope of regression’ (SOR) outputs from the kriging grade interpolation. This upgrade to the Mineral Resource is supported by a high level of confidence in the geological interpretations, and updates of the density model, both of which are key in supporting the Measured and Indicated classification.
• Data quality and confidence in the geological interpretation support the classification. Perimeters for</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	(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.*	Measured, Indicated and Inferred volumes were used to assign classification values (RESCAT: 1 = Measured, 2 = Indicated, 3 = Inferred, 4 = unclassified). • Classification perimeters for the B, Omega, Alpha and Beta deposits were adjusted to reflect the additional Phase V drilling. • The Measured Mineral Resource is supported by regular drill pattern spacing of 25 m (EW) x 25 m (NS), or less. • In addition, plan sectional views of the block model were colour coded by SOR, with regions demonstrating >0.6 SOR supporting the delineation of a Measured Mineral Resource. • 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 Boab. 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 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*	• The confidence is communicated through the classification applied to the Mineral Resource estimate. • The Mineral Resource is a local estimate, whereby each block in the block model has grades assigned.

Criteria	JORC Code explanation	Commentary
	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.*	

Appendix 2 – Metal Equivalent Calculation Method

The contained metal equivalence formula is based on the Sorby Hills PFS including:

- Lead Price US$2,095/t;
- Lead recovery of 93.3% (weighted average of oxide and fresh Pb recoveries);
- Lead Payability rate of 95%;
- Silver Price US$21.1/oz;
- Silver recovery of 80.3% (weighted average of oxide and fresh Ag recoveries); and
- Silver Payability rate of 95%.

It is Boab'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 (%) = $G_{pri} + (G_{pri} \times [\sum i\ R_i\ S_i\ V_i\ G_i\ ]/(R_{pri}\ S_{pri} V_{pri} G_{pri}))$

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. Boab notes that the metal equivalence method used above is a simplified approach. The metal prices are based on the PFS values adopted 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.