

11 February 2021

## Boab Metals to investigate Sorby Hills Project expansion with high impact Phase V drilling program

Boab Metals Limited (ASX: BML) (“**Boab**” or the “**Company**”) is pleased to announce plans for a Phase V drilling program with the express objective of investigating the potential to expand the proposed processing capacity at its 75% owned Sorby Hills Lead-Silver-Zinc Project (“**Sorby Hills**” or the “**Project**”), located in the Kimberley Region of Western Australia.

### HIGHLIGHTS

- **The Sorby Hills Pre-Feasibility Study detailed a high-value, low-risk operation** processing 1.5Mtpa from 4 open pit deposits over a 10-year mine life, generating a pre-tax NPV<sub>8</sub> of A\$303M, 46% IRR, ~1.6 year payback period and C1 costs of US\$0.40/lb payable Pb (including US\$0.27/lb payable Pb Silver credits) (ASX release 25 August 2021).
- Results from the recently completed **Phase IV drill program have revealed significant opportunities to materially increase the mining inventory at Sorby Hills.**
- **Phase V program will include up to 6,000m of high impact drilling** with the primary objectives of the program being to:
  - **materially increase the mining inventory at Sorby Hills** for immediate incorporation into the Definitive Feasibility Study mine plan and;
  - **investigate the potential to increase the processing plant capacity at Sorby Hills** to further reduce unit operating costs and enhance project value.
- **Drilling is scheduled to commence in April 2021 at the conclusion of the wet season.**

**Boab Managing Director Simon Noon stated:** “Over the last 2 ½ years Boab Metals has carried out four drilling campaigns and completed about 20,000m of drilling. This work has progressively and systematically expanded the Mineral Resource at Sorby Hills. In particular, the results of the recently completed Phase IV drill program have revealed a range of low-risk opportunities to materially expand the mining inventory at Sorby Hills.

*With almost A\$15M cash on hand, Boab is well placed to undertake a high impact drilling program with the primary aim of extracting maximum value from the Sorby Hills deposit ahead of developing the Definitive Feasibility Study mine plan.”*

**Managing Director**

Simon Noon

**Company Secretary**

Jerry Monzu

**Directors**

Gary Comb (Chairman)

Richard Monti

Andrew Parker

**Registered Office**

Level 1

105 St Georges Terrace

Perth WA 6000

**Telephone**

+61 8 6268 0449

**ASX Code** BML

**ABN** 43 107 159 713

## Project Update

Boab's Pre-Feasibility Study ("PFS") confirmed that Sorby Hills is 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, and Proved and Probable Reserves of 13.6Mt at 3.6% Pb, and 40g/t Ag.

**The current Sorby Hills Mineral Resource is a function of Boab's demonstrated ability to efficiently increase Resource size and confidence with each drilling program.**

Since acquiring the Project in 2018, Boab has, across three drilling campaigns, increased Resource tonnage by 50% and approximately tripled the contained metal classified as Measured and Indicated (Figure 1). The growth in the Sorby Hills Mineral Resource has been achieved primarily through systematic tightening of the drill hole spacing, through a gradual step-out from the areas of known mineralisation, by following up historically untested targets and, by progressively demonstrating the linkage between what were previously considered isolated pods of mineralisation.

**Most importantly, Boab has converted Resource growth into a high-quality mining inventory with the Sorby Hills PFS underpinned by 50% Proven and 50% Probable Reserves.**

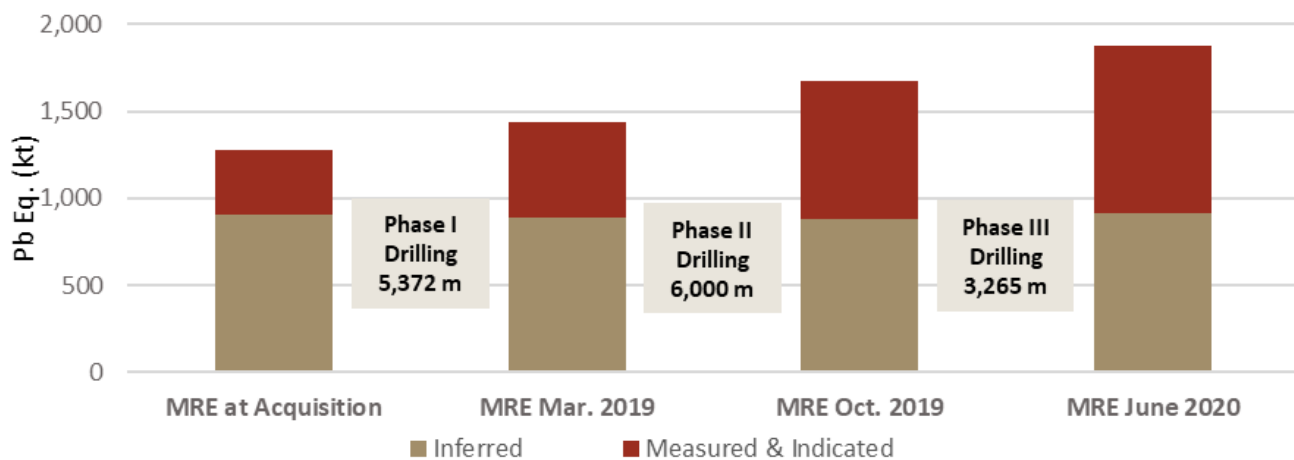


Figure 1: Sorby Hills Mineral Resource growth since 2018, reported using a Pb cut-off of 1.0%

Since completing the PFS, Boab has completed the Phase IV drilling program of 4,803m. The program was designed to primarily advance the Project toward Definitive Feasibility Study ("DFS") status by generating material for metallurgical and geotechnical testwork. As such, the bulk of drilling meters (3,340m) were apportioned to these objectives. The balance of the Phase IV drilling was targeted at Resource extensions and brown-fields exploration targets (~1,460m).

**Assay results from the final Phase IV drilling have confirmed up and down-dip extensions of mineralisation outside the current Mineral Resource envelope and open pit designs (Figures 2 and Figure 3). Furthermore, the results have revealed significant opportunities to materially increase the mining inventory at Sorby Hills through additional targeted drilling.**

Data and results from the Phase IV drilling program are presently being incorporated into an updated Mineral Resource estimate.

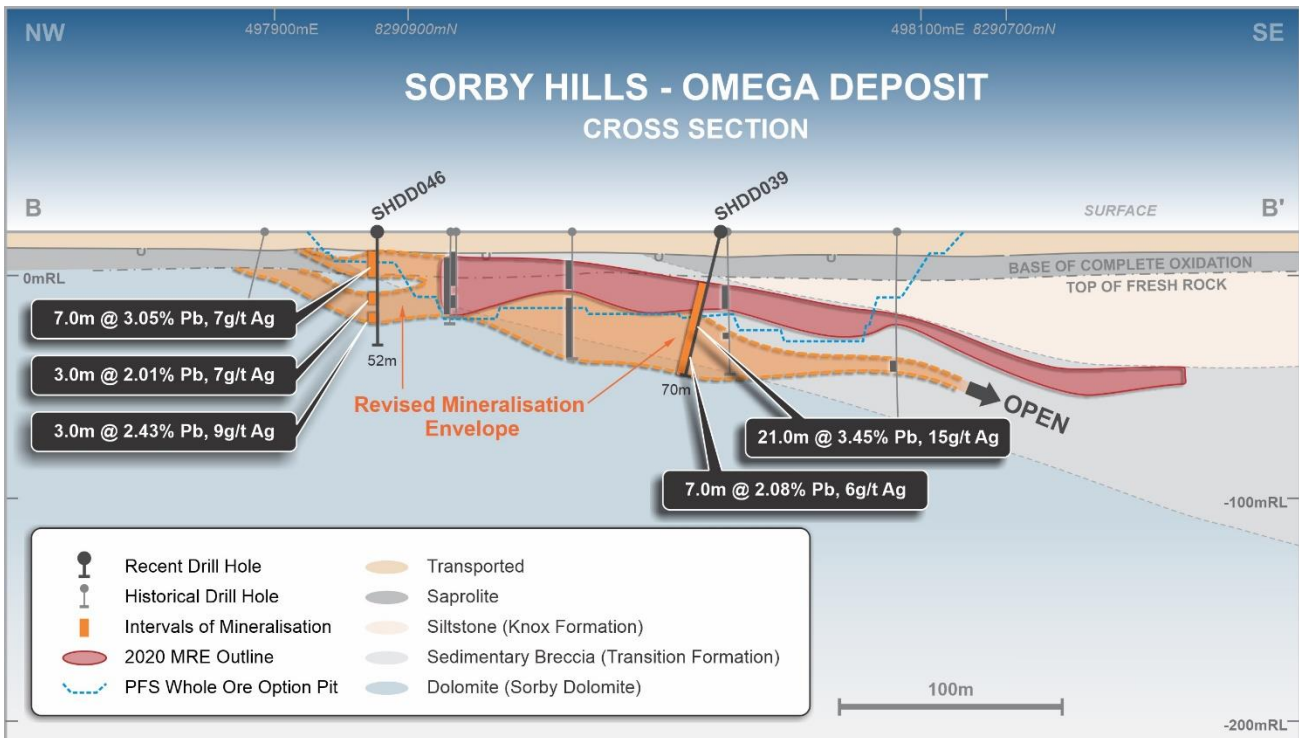


Figure 2: Cross section through the Omega Deposit showing the intersected mineralisation and assay results in SHDD046 in the area outside of the current Resource and open pit design (ASX release 8 February 2021).

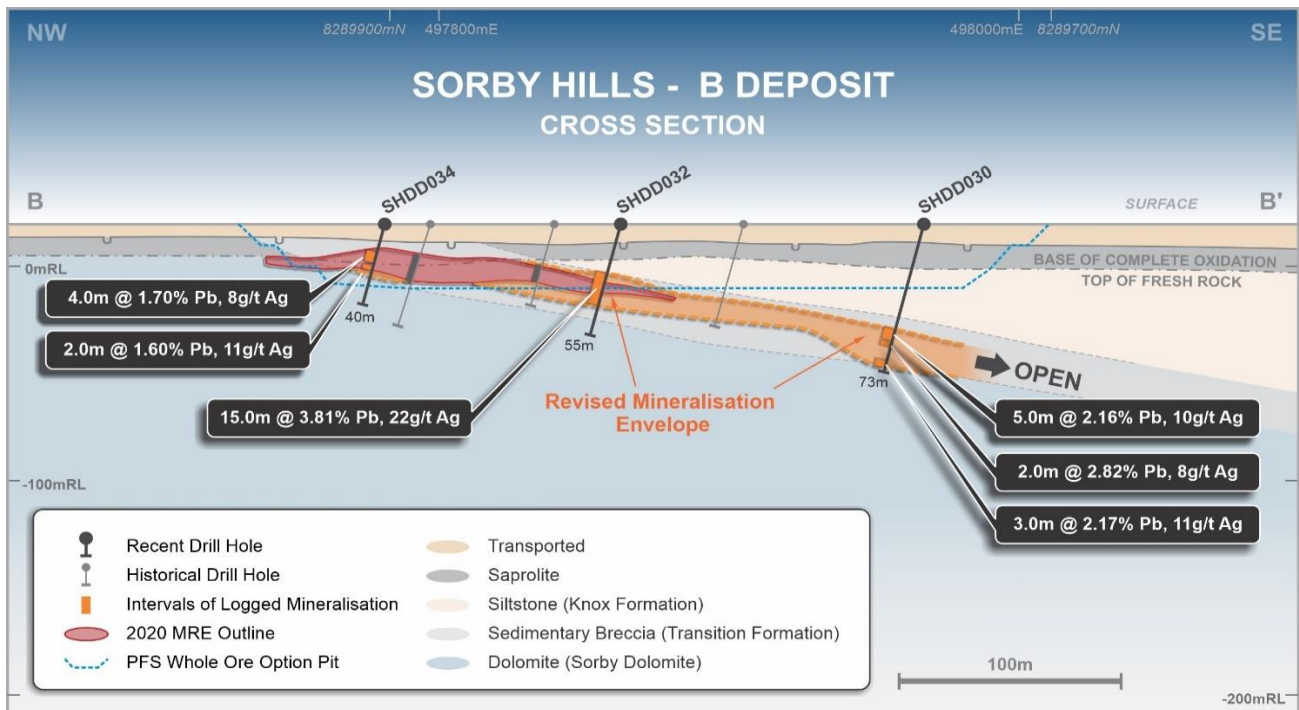


Figure 3: Cross section through the B Deposit showing observed mineralisation and assay results in the newly completed drill holes SHDD030, SHDD032 and SHDD034 relative to the current Resource envelope and B-Deposit open pit design (ASX release 21 January 2021).

## Planned Phase V Drilling Program

On the back of positive results from the Phase IV drilling program, Boab has formed the view that a significant opportunity exists to materially expand the Sorby Hills mining inventory.

With nearly A\$15M cash on hand and metallurgical and geotechnical drilling now complete, **the Company is well positioned to invest in a high impact drilling program to maximise the value extracted from the Sorby Hills deposit for the purpose of the DFS.**

The Phase V drilling program will comprise up to 6,000m and, in addition to zones of mineralisation identified adjacent to the current open-pit designs, will target underexplored mineralisation pods, satellite exploration targets and possible extensions of known mineralisation trends.

**The results of the Phase V drill program will dovetail with those of the ongoing DFS Metallurgical program (ASX release 1 February 2021) and act as inputs to an investigation into the potential to expand the currently proposed processing capacity at Sorby Hills.**

Key benefits of an expanding processing capacity may include:

- lower capital costs per tonne of Concentrate production capacity; and
- lower operating costs per tonne of Concentrate produced,

leading to more robust project economics including:

- a shorter payback period;
- higher operating margins and stronger operating cash flows; and
- increased value for Boab shareholders.

Phase V drilling will also include the drilling of targets resulting from the gravity data interpretation over EL 80/5317 (**Eight Mile Creek**) which is expected to be completed in March. These targets can include structural and stratigraphic locations. **EL 80/5317 has not been drill tested before**, however the tenement covers the continuation in southward strike of the Burt Range Sub-basin and as such is highly prospective for exploration.

## Previous Drilling Results

Previous exploration drilling at Sorby Hill has delivered exceptional results. Notable highlights from the Phase I to IV exploration programs have included (Figure 4):

ASX release 14 February 2019

- AI010: **10.0m at 6.6%Pb, 53g/t Ag from 82m**
- AI011: **12.3m at 5.5% Pb and 42g/t Ag from 90m**
- ACD046: **20.0m at 7.3% Pb and 56g/t Ag from 11m**
- AF005: **11.7m at 10.8% Pb and 105g/t Ag from 75.7m**
- AF048: **7.3m at 6.7% Pb and 99g/t Ag from 110.7m**

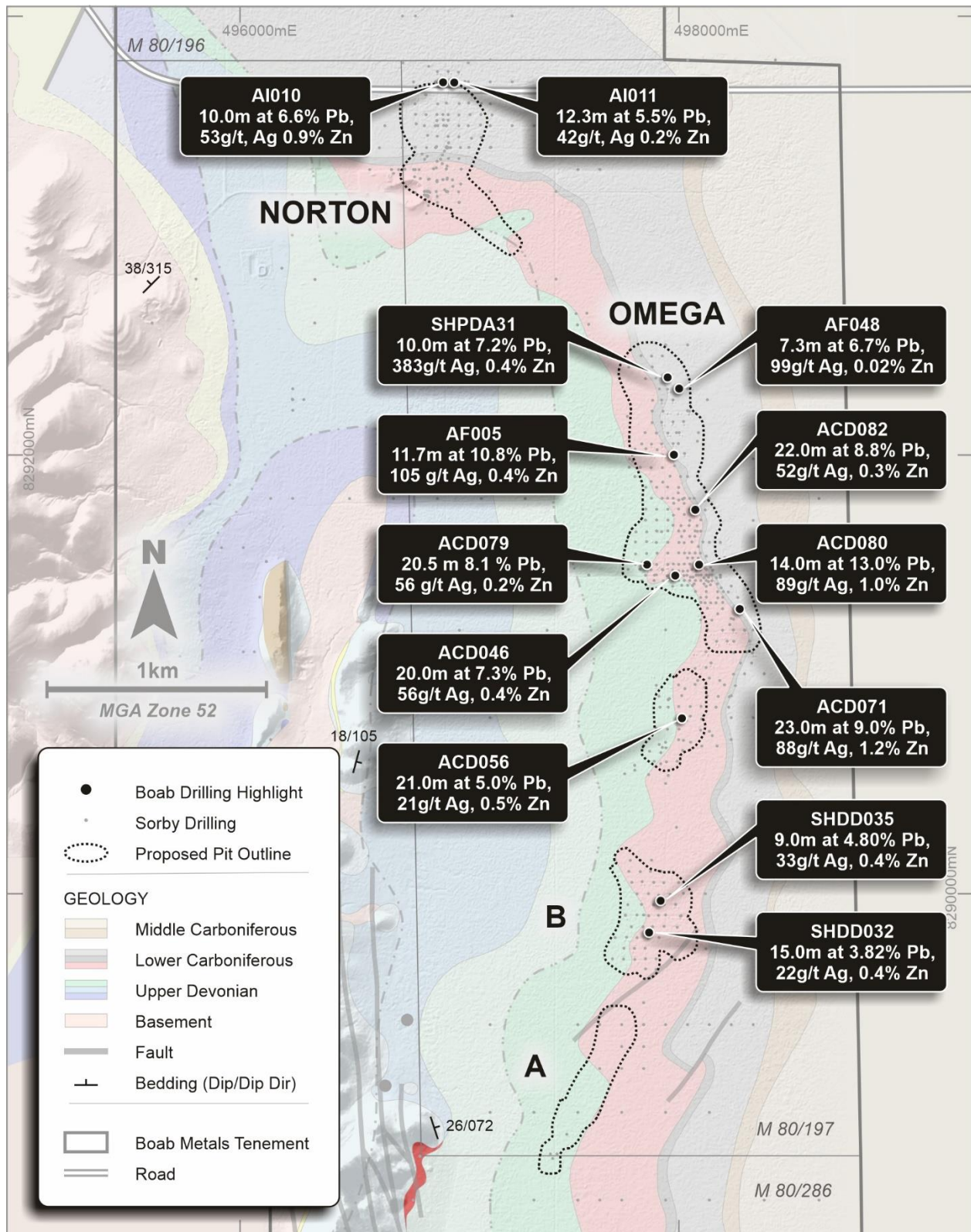


Figure 4: Notable drilling results from the previous from Phase I – IV drilling programs

ASX release 14 August 2019

- ACD080: **14.0m at 13.0% Pb and 89 /t Ag from 24m**
- ACD071: **23.0m at 9.0% Pb and 88g/t Ag from 59m**
- ACD050: **11.0m at 6.9% Pb and 26g/t Ag from 29m**

ASX release 12 September 2019

- ACD082: **22.0m at 8.8% Pb and 52g/t Ag from 68m**
- ACD079: **20.0m at 7.9% Pb and 56g/t Ag from 16m**

ASX release 30 January 2020

- SHPDA31: **10.0m at 7.16% Pb and 383g/t Ag from 110m**

ASX release 21 January 2021

- SHDD032: **15.0m at 3.82% Pb, 22g/t Ag, 0.4% Zn**
- SHDD035: **9.0m at 4.80% Pb, 33g/t Ag, 0.4% Zn**

## Project Timeline

The Phase V drilling program is scheduled to commence in April at the conclusion of the 2021 wet season and will take approximately 3 months to complete. The results of the Phase V drilling program will be incorporated into an updated Mineral Resource estimate that will support the Sorby Hills DFS.

The inclusion of the Phase V drilling program will result in an adjustment to the development timeline to allow enough time to fully assess and incorporate the results into the ongoing DFS.

**The additional drilling is not expected to delay commencement of project construction which is currently scheduled to begin in Q2 2022 at the conclusion of the wet season (Figure 5).**

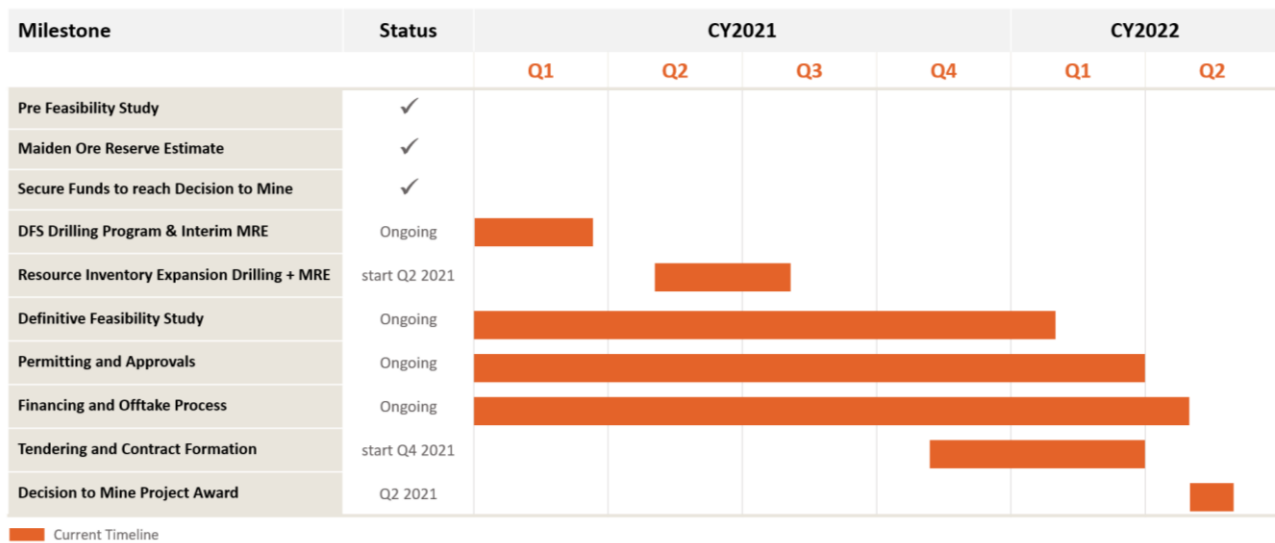


Figure 5: Sorby Hills development timeline

**The Company looks forward to providing further updates on the Phase V drilling program and the Sorby Hills DFS as the Project advances towards a Decision to Mine.**

---

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

**FOR FURTHER INFORMATION, PLEASE CONTACT:**

**Simon Noon Managing Director**

Phone: **+61 (0)8 6268 0449**

Email: [info@BoabMetals.com](mailto:info@BoabMetals.com)

---

## **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.

## **About Henan Yuguang Gold and Lead Co Ltd**

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

## APPENDIX 1

Table 1: Key Life of Mine Metrics

Item	Unit	Base Case
<b>Economic Assumptions</b>		
Lead Price	US\$/t	2,095
Silver Price	US\$/oz	21.10
Exchange Rate	A\$:US\$	0.70
<b>Physicals</b>		
Life of Mine (LOM)	Years	9.9
Mined Ore	kBCM	5,161
Strip Ratio	Waste : Ore (BCM)	8.0x
Processed Tonnes	kt	14,760
Processed Lead Grade	%	3.63%
Processed Silver Grade	g/t	39.5
Lead Recovery	%	93.3%
Silver Recovery	%	80.3%
Recovered Lead	kt	500.2
Recovered Silver	Moz	15.1
Concentrate Produced	kdmt	806.8
Payable Lead	kt	475.2
Payable Silver	Moz	14.3
<b>Cash Flow</b>		
Lead Revenue	A\$M	1,422.3
Silver Revenue	A\$M	431.1
<b>Gross Revenue</b>	<b>A\$M</b>	<b>1,853.3</b>
Royalties	A\$M	(69.5)
TC/RC & Transport	A\$M	(290.3)
<b>Net Revenue</b>	<b>A\$M</b>	<b>1,493.6</b>
On Site Operating Costs	A\$M	(746.3)
<b>Net Operating Cash Flow</b>	<b>A\$M</b>	<b>747.3</b>
Upfront Capital Cost	A\$M	(182.8)
- Mining Pre-Production	A\$M	(24.3)
- Process Plant Incl. EPC Fee	A\$M	(105.4)
- Infrastructure	A\$M	(20.5)
- Owners Costs	A\$M	(13.1)
- Contingency	A\$M	(19.6)
Sustaining Capital Costs	A\$M	(32.2)
<b>Net Project Cash Flow (Pre-Tax)</b>	<b>A\$M</b>	<b>532.3</b>
<b>Value Metrics</b>		
<b>Pre-Tax NPV<sub>8</sub></b>	<b>A\$M</b>	<b>303.4</b>
<b>Pre-Tax IRR</b>	<b>%</b>	<b>46%</b>
<b>Pre-Tax Payback Period<sup>#</sup></b>	<b>Years</b>	<b>1.6</b>

# Payback calculated from first production



Table 2: Mineral Resource Estimate. Reported above a cut-off of 1% Pb (Pb domains only)

Deposit	Measured				Indicated				Inferred				Total			
	Mt	Pb (%)	Ag (g/t)	Zn (%)	Mt	Pb (%)	Ag (g/t)	Zn (%)	Mt	Pb (%)	Ag (g/t)	Zn (%)	Mt	Pb (%)	Ag (g/t)	Zn (%)
A	-	-	-	-	-	-	-	-	0.6	6.1	32	1.2	0.6	6.1	32	1.2
B	0.5	4.3	24	0.3	1.3	4.2	24	0.3	-	-	-	-	1.8	4.3	24	0.3
Omega	4.2	4.3	45	0.4	9.2	3.2	29	0.4	2.5	3.0	23	0.6	15.8	3.5	32	0.4
Norton	2.4	4.3	83	0.3	2.2	3.4	38	0.5	16.0	2.5	30	0.4	20.6	2.8	37	0.4
Alpha	-	-	-	-	1.0	2.8	50	0.6	1.0	3.4	85	1.4	2.0	3.1	67	1.0
Beta	-	-	-	-	-	-	-	-	3.3	4.6	61	0.4	3.3	4.6	61	0.4
<b>Total</b>	<b>7.1</b>	<b>4.3</b>	<b>57</b>	<b>0.4</b>	<b>13.7</b>	<b>3.3</b>	<b>31</b>	<b>0.4</b>	<b>23.4</b>	<b>3.00</b>	<b>36</b>	<b>0.5</b>	<b>44.1</b>	<b>3.3</b>	<b>38</b>	<b>0.5</b>

Notes: 1. The information is extracted from the report entitled "Mineral Resource Update Sorby Hills Pb-Ag-Zn Project" released on 2 June 2020 and is available to view on [www.boabmetals.com](http://www.boabmetals.com).  
2. Tonnes and grade are rounded.

Table 3: Sorby Hills Ore Reserves Statement

Deposit	Proved			Probable			Total Ore Reserve				
	Tonnes (Mt)	Pb (%)	Ag (g/t)	Tonnes (Mt)	Pb (%)	Ag (g/t)	Tonnes (Mt)	Pb (%)	Pb (kt)	Ag (g/t)	Ag (Moz)
B	0.6	3.7	20	1.3	3.4	20	1.8	3.5	60	20	1
Omega	4.1	4.1	43	5.5	3.1	29	9.6	3.6	340	35	11
Norton	2.1	4.0	82	0.2	3.5	48	2.2	4.0	90	79	6
<b>Total</b>	<b>6.8</b>	<b>4.1</b>	<b>53</b>	<b>6.9</b>	<b>3.2</b>	<b>28</b>	<b>13.6</b>	<b>3.6</b>	<b>490</b>	<b>40</b>	<b>18</b>

Notes: 1. Ore Reserves are a subset of Mineral Resources.  
2. Ore Reserves are estimated using a lead price of US\$2,095/tonne and silver price of US\$21.10/ounce and USD/AUD exchange rate of 0.7.  
3. Ore Reserves are estimated using a cut-off grade of 1.5% Pb.  
4. The above data has been rounded to the nearest 100,000 tonnes, 0.1% lead grade and 10,000 lead tonnes, 1g/t silver grade and 1,000,000 silver ounces. Errors of summation may occur due to rounding.

## Competent Person Statement and JORC Information

The information in this release that relates to Exploration Results is based on information prepared by Dr Simon Dorling. Dr Dorling is a member of the Australasian Institute of Geoscientists (Member Number: 3101). Dr Dorling has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Dorling consents to the inclusion in the release of the matters based on their information in the form and context in which it appears.

The interpretations and conclusions reached in this announcement are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for absolute certainty. Any economic decisions which might be taken on the basis of interpretations or conclusions contained in this announcement will therefore carry an element of risks.

## Compliance Statements

Information included in this presentation relating to Mineral Resources, Ore Reserves, Production Targets and Financial Forecasts has been extracted from the Mineral Resource Estimate dated 2 June 2020 and the Pre-Feasibility Report and Ore Reserve Statement dated 25 August 2020, both available to view at [www.boabmetals.com.au](http://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 either the Mineral Resource Estimate or 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 Mineral Resource Estimate or the Ore Reserves Statement.

## Equivalent calculations

**Lead Price** US\$2,095/t and **Silver Price** US\$21.1/oz;

**Lead Equivalent Calculations:** Silver recovery of 80.3% (weighted average of oxide and fresh Ag recoveries) and Silver Payability rate of 95%.

**Silver Equivalent Calculations:** Lead recovery of 93.3% (weighted average of oxide and fresh Pb recoveries) and Lead 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:

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

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

Metal equivalents are highly dependent on the metal prices used to derive the formula. 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.