

8 November 2023

## Drilling Results Confirm a Significant Intercept at the Keep Seismic Target

Boab Metals Limited (ASX: **BML**) ("**Boab**" or the "**Company**") is pleased to report assay results including a material intercept from the 1<sup>st</sup> drill hole at the Keep Seismic Target from the Phase VII drilling program at its 75% owned Sorby Hills Lead-Silver-Zinc Project ("**Sorby Hills**" or "**the Project**"), located in the Kimberley Region of Western Australia.

### HIGHLIGHTS

- **Drilling of the "Keep Seismic Target" intercepts significant base metal mineralisation.**
  - **SHSD\_185: 9.55 m @ 5.10% PbEq (2.59% Pb & 2.26% Zn) and 17.6 g/t Ag from 242.55 m**
  - **Incl. 3.12 m @ 13.43% PbEq (6.37% Pb & 6.36% Zn) and 26.5 g/t Ag from 245.36m**
- **Intercepts of the exceptional grade and composition at the Norton Ore body:**
  - **SHSD\_171: 11.05 m @ 17.63% PbEq (10.98% Pb & 189 g/t Ag) from 81.95m**
  - **SHSD\_174: 11.60 m @ 20.23% PbEq (8.78%Pb & 325 g/t Ag) from 74.40m**
- **Metallurgical test work now underway to establish uniformity of the Norton deposit metallurgy with other ore domains of the Sorby Hills deposit.**
- **Significant exploration drill hole intercepts:**
  - **SHSD\_164: 6m @ 9.92% PbEq (3.92% Pb & 170g/t Ag) from 101m**
  - **SHSD\_183: 2m @ 6.85% PbEq (4.43% Pb & 69g/t Ag) from 103m**
  - **SHSD\_184: 2.8m @ 3.84% PbEq (3.17%Pb & 19g/t Ag) from 129m**

### **Boab Managing Director and CEO, Simon Noon, stated:**

*"We are very excited to confirm that the drill hole at the Keep Seismic Target has intersected zinc-lead sulphide mineralisation between 242 and 257m as was anticipated. This is an outstanding success given the conceptual nature of the target and its location in an area, and at a depth where no mineralisation has been intersected before. The location of the drill hole sits around 2 km away from the closest ore reserves at Sorby Hills and will be a catalyst for further exploration within our mining tenements.*

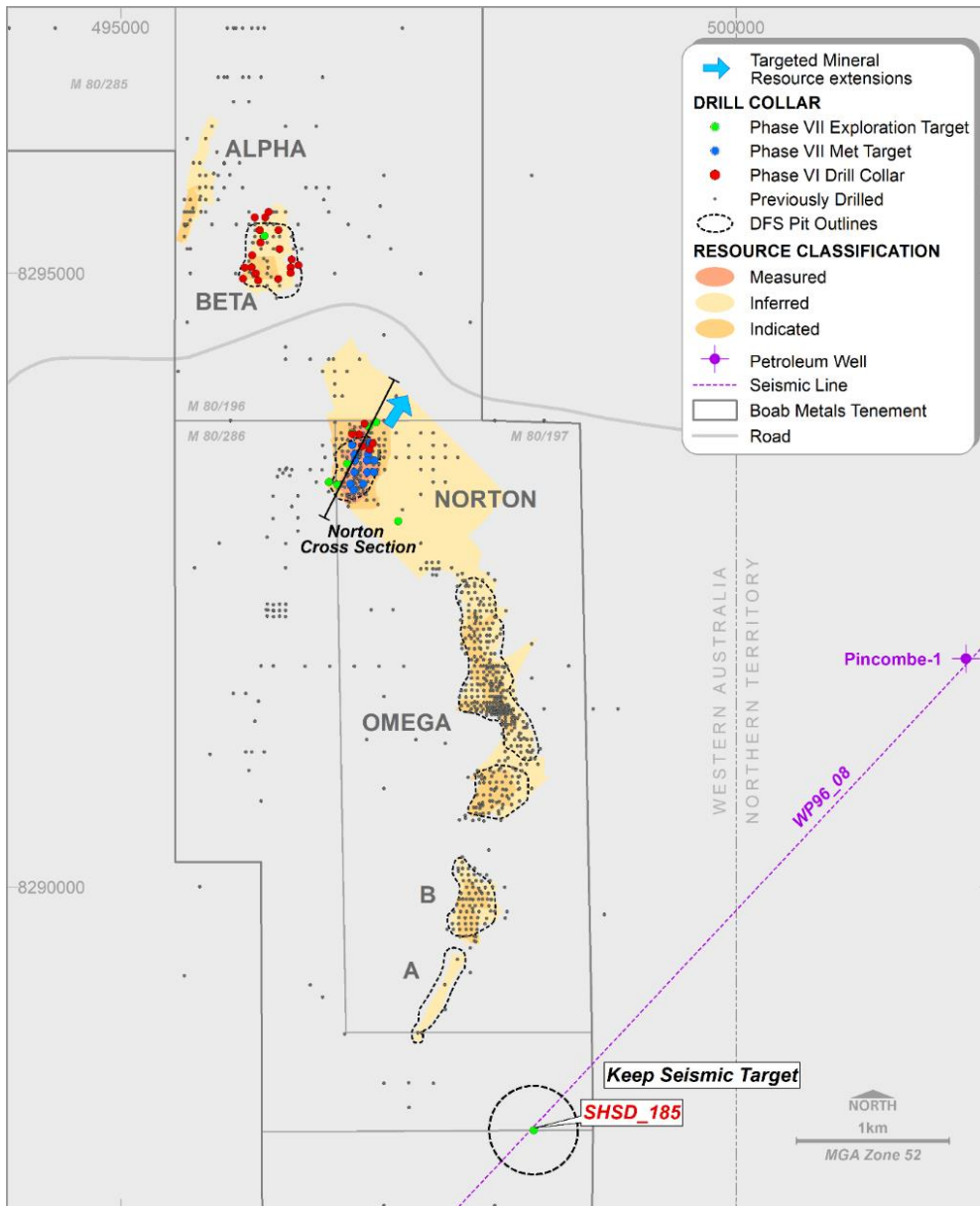
*It is clear there is more to be discovered at Sorby Hills. The step-out drill holes at Norton and at Beta also confirmed the continuity of mineralisation.*

In conjunction with our 2023 drill program, Boab continues to advance toward a final investment decision on the Sorby Hills Project with preferred EPC contractor GRES firming up Front End Engineering & Design work whilst discussions with financiers is ongoing”.

### Phase VII Program Details

The Phase VII drilling program concluded with the completion of 22 drill holes for 2,634 (an additional 24% of metres than originally planned). Of the total program, 1,433 m across 13 holes were drilled for a metallurgical purpose with another 1,200m across 9 holes drilled for resource/reserve expansion and exploratory objectives.

Collar locations for all the completed drill holes are shown below in **(Figure 1)**.



**Figure 1: Plan view of the Sorby Hills Project showing the locations of completed drill holes for Phase VII with respect to previous drilling, the Mineral Resource and DFS open pit outlines.**

## Exploration and Resource Extension Drilling

The resource extension/exploratory drilling targeted the periphery of the known mineralisation, areas of lower confidence in the ore distribution and a conceptual target.

### **KEEP SEISMIC TARGET**

The highlight of the 1<sup>st</sup> drill hole into the conceptual target is:

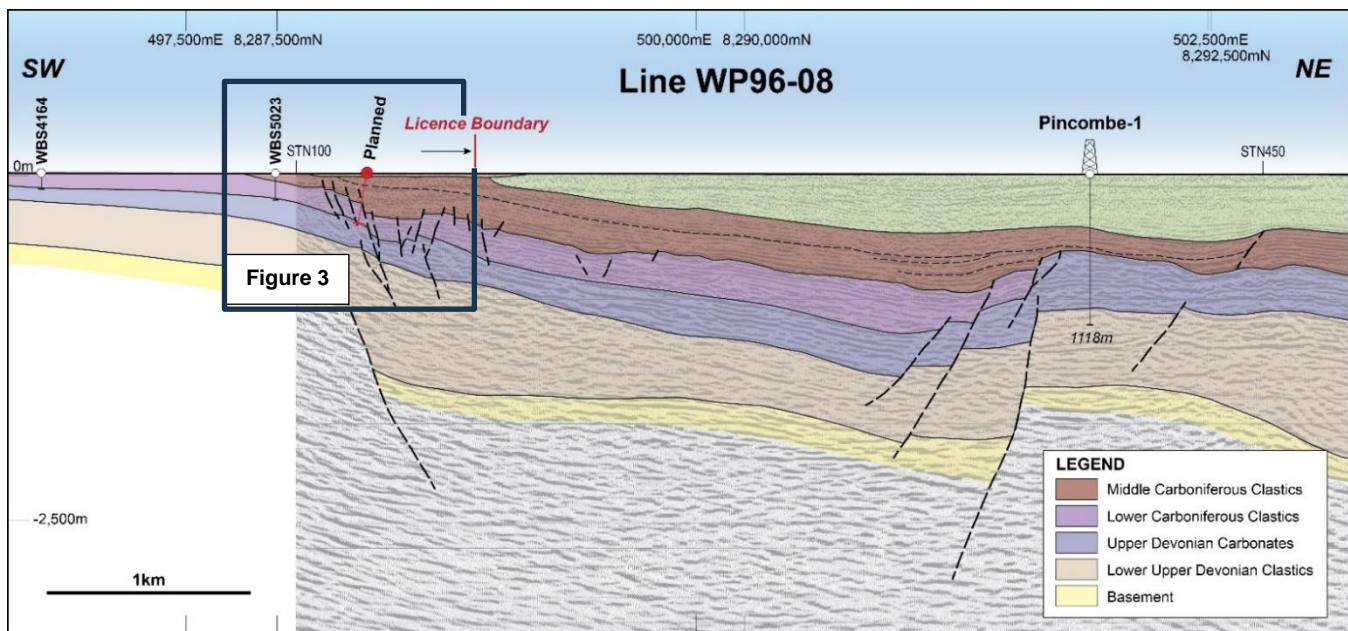
- **SHSD\_185: 9.55 m @ 5.10% PbEq (2.59% Pb & 2.26% Zn) from 242.55 m**  
**Incl. 3.12 m @ 13.43% PbEq (6.37% Pb & 6.36% Zn) and 26.5 g/t Ag from 245.36m**

As announced in October 2023, the interpretation of seismic data from petroleum exploration across the Burt Range Sub-Basin resulted in a conceptual drill target – the Keep Seismic Target. A 306.5m deep drill hole was successfully drilled into the target's depth range.

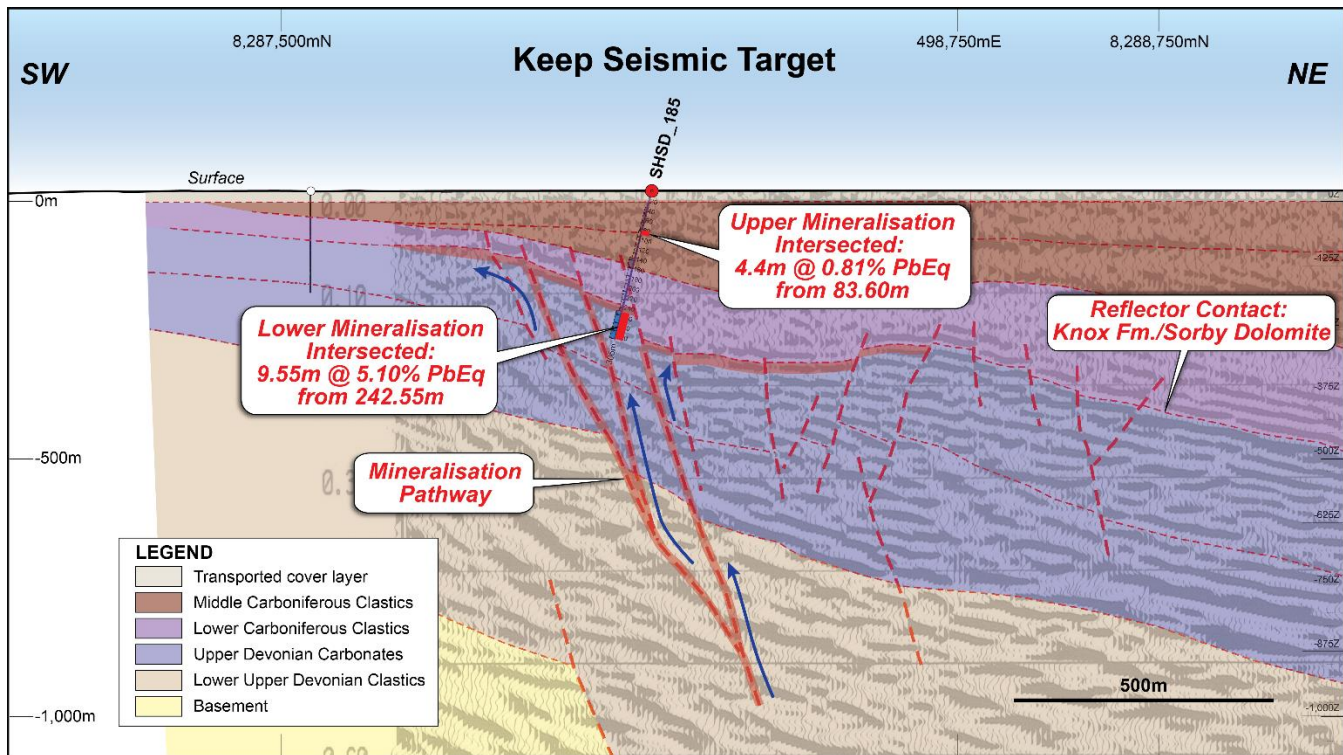
Seismic line WP96-08 traverses the project area about 2 km south of B-Deposit and shows the reflectors of the Devonian-Carboniferous sedimentary strata gradually dip to the east and affected by a series of extensional faults (**Figures 2 and 3**) leading into a half-graben structure flanked on the eastern side by a reef covered basement high which was targeted by the Pincombe No 1 petroleum well, drilled in 1996.

SHSD\_185 was aimed at testing the potential for a mineralised feeder fault system, which can be seen in the seismic data, and the potential for stratiform mineralisation at the Knox Formation/Sorby Dolomite interface (**Figure 3**).

The drill hole intersected the base of the Knox Formation at about 224.6m and was terminated at a depth of 306.5m within massive Sorby Dolomite after intersecting **two intervals** of mineralisation (**Figure 3**).



**Figure 2: Interpreted NE-SW trending seismic line WP\_96-08 image showing the location of the Pincombe No 1 oil well and the conceptual structural target within M80/287 & 289.**



**Figure 3: Close up view of section and geological interpretation of SHSD\_185 and seismic line WP\_96-08.**

The **upper interval of mineralisation** was intersected at the base of the impermeable Milligan's Shales which is part of the Middle Carboniferous sediments, from a down-hole depth of 82.5 m for about 4.5 m. It consists of disseminated and thin bands of massive sulphide minerals and veins of galena (PbS), marcasite (FeS<sub>2</sub>) and sphalerite (ZnS) immediately below the shale.

The following mineralisation interval was encountered:

- **SHSD\_185: 4.40 m @ 0.81% (0.67% Pb & 0.13% Zn) and 11 g/t Ag from 83.6 m**
  - **Incl. 0.40m @ 2.50% (2.17% Pb & 0.33% Zn and 18.0 g/t Ag from 83.6m**

While not ore-grade, the significance of this intercept lies within its stratigraphic position and the fact that it is "top loaded" meaning that the metal-bearing fluids were expelled from the deeper part of the basin upwards and outwards and were restricted in their path by the impermeable shale horizon. This stratigraphic position is the host position of the Sandy Creek zinc deposit at Boab's Manbarrum Project located on the eastern side of the Burt Range Basin in the Northern Territory.

The **lower mineralisation interval** - the primary target - was intersected from 242.5 m over an interval length of about 15 m with intermittent intervals of massive colloform and intergrown sphalerite and disseminated coarse crystalline galena as can be seen in (**Figure 4**) with the lowermost massive sphalerite band located at 266.2 m. Within the 15 m envelope of mineralisation a composite mineralisation interval was intersected:-

- **SHSD\_185: 9.55 m @ 5.10% PbEq (2.59% Pb & 2.26% Zn) from 242.55 m**
- Incl. 3.12 m @ 13.43% PbEq (6.37% Pb & 6.36% Zn) and 26.5 g/t Ag from 245.36m**



The mineralisation has a Zn:Pb ratio of about 1:1, whereas for most part the mineralisation at Sorby Hills has a Zn:Pb ratio of about 1:10. This demonstrates that a different part of the Burt Range Basin mineralisation system has been intersected. The spatial chemical variation is consistent with the timing and sequencing of mineral precipitation as indicated by a gradual colour change in the sphalerite bands up-hole and the late crystallisation of galena (**Figure 4**). This suggests that in the deeper parts of the basin, it is possible that more zinc-rich mineralisation may be encountered.

The intersected mineralisation is predominantly cyclic, stratabound (sub-parallel with a layering of the rock formation), and of a replacement-type nature with potential lateral continuity that needs to be dill tested.

A fault breccia was intersected at a depth of ~ 251.3 m which showed evidence of zinc and lead sulphide mineralisation suggesting a possible feeder structure. In the context of the seismic line interpretation, there is a 300 – 400 m wide zone with multiple faults interpreted that could have acted as feeder structures. It is possible that drill hole SHSD\_185 stopped short of intersecting the entire width of the fault zone (**Figure 3**).

Boab is of the view that the initial analytical and geological results at the Keep Seismic Target are a major exploration success, demonstrating not only proof of concept but more importantly the potential of several kilometres of thick sedimentary rocks of the Burt Range Basin to be the source of significantly more base metal mineralisation.

These intercepts open a wider spectrum of settings for the targeting of mineralisation and highlight the exploration upside of Boab’s land holding in the Burt Range Basin.

The Company will now aim to build up its knowledge through the seismic data around the Keep Prospect. Follow up work will be designed and planned as a priority.

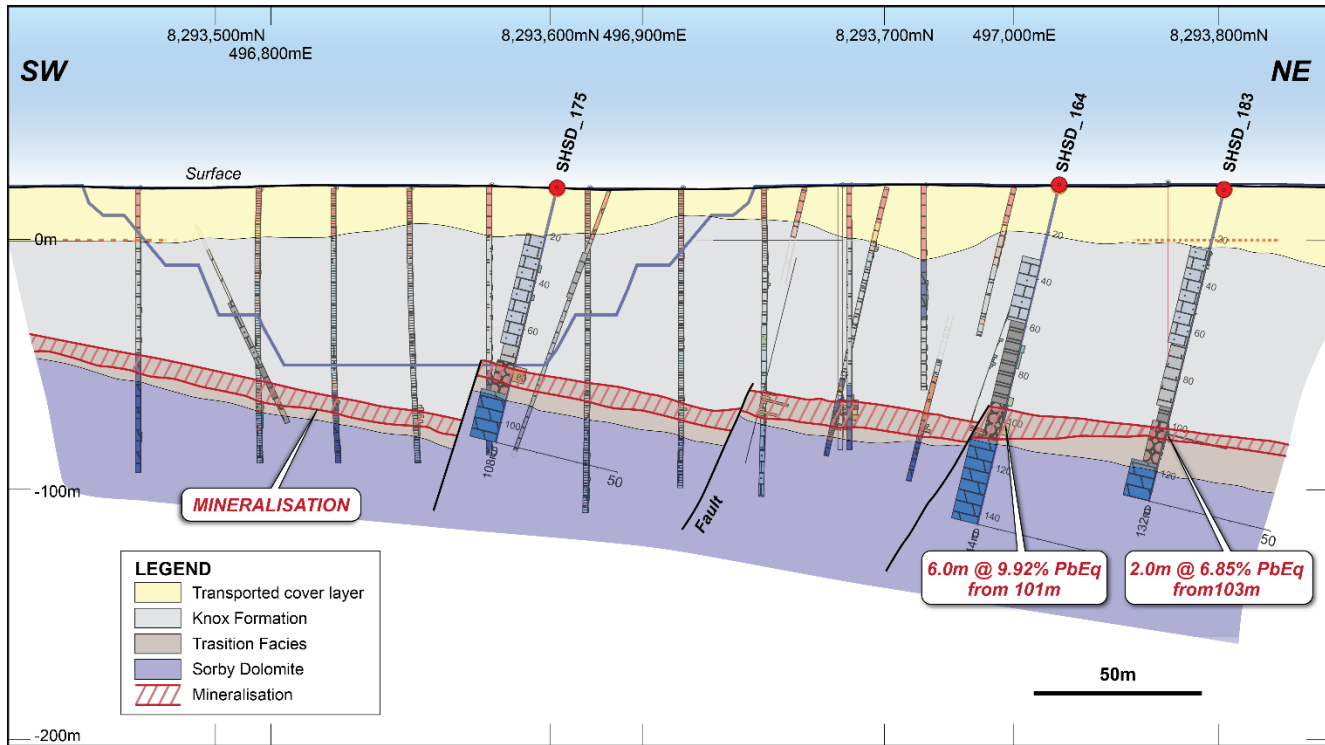
**Figure 4: Close up photograph of drill core interval 245.3m to 246.1m showing colloform massive sulphides (low-iron sphalerite = cream coloured & galena = blue grey).**

### **NORTON NORTH AND BETA DRILLING**

Exploration success was encountered on the northern periphery of the Norton deposit with drilling of holes SHSD\_164 and SHSD\_183 (**Figures 1 & 5**). The drill holes intersected mineralisation at the target depth of approximately 100 m down hole and add to the confidence of continuity of mineralisation in this area. The mineralisation remains open to the north. Both holes intersected partially oxidised and massive galena mineralisation. The partly oxidised nature of mineralisation at Norton North is indicative of weathering along a set of faults to the northwest.

The following mineralisation intervals were encountered:

- **SHSD\_164: 6m @ 9.92% PbEq (3.92% Pb & 170g/t Ag) from 101m (down hole)**
- **SHSD\_183: 2m @ 6.85% PbEq (4.43% Pb & 69g/t Ag) from 103m (down hole)**



**Figure 5: Cross section of the northern extension drilling at Norton (see Figure 1 for location).**

SHSD\_184 was drilled at the western periphery of the **Beta deposit** to test the continuity of mineralisation. The hole intersected one noteworthy interval of mineralisation at around 129 m below surface. While the mineralisation has not been closed off its width has decreased notably.

- **SHSD\_184: 2.80 m @ 3.84% PbEq (3.17% Pb & 19 g/t Ag) from 129.0 m (down hole)**

The remaining exploration drill holes at Norton, intersected mineralisation but at grades below reporting guidelines.

### Metallurgical Drilling

The metallurgical portion of the program was underpinned by the prospect of spatially restricting or revising upwards the recovery factors of ore from Norton and to provide additional core upon which further test work can be undertaken. A positive result could lead to a material increase in the overall metal recovered from the Norton deposit.

The ore grade intervals encountered testify to the robustness of the Norton mineralisation with its clean low-iron and high silver values within the mineralisation envelope.

Over and beyond its main purpose, the metallurgical portion of the drill program has also confirmed the geometry and grade of mineralisation at Norton at a depth and over a width consistent with the Sorby Hills Resource model.



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

**FOR FURTHER INFORMATION, PLEASE CONTACT:**

**Simon Noon**

**Managing Director & CEO**

Phone: **+61 8 6268 0449**

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

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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 HenanYuguang 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.

**Compliance Statements**

The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves.

The information 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.

Information included in this Announcement relating to Mineral Resources has been extracted from the Mineral Resource Estimate dated 17 December 2021, 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 the Mineral Resource Estimate and that all material assumptions and technical parameters underpinning the estimates, 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.

**Table 1 - Drill Hole Collar Locations and Assay Status**

HOLE ID	mE	mN	RL	Depth	Dip	Azimuth	Assays	Prospect
SHSD_164	497015.01	8293749.61	20.77	144.50	-70	270	Received	Resource
SHSD_165	496891.50	8293705.83	20.88	126.50	-70	270	Received	Resource
SHSD_166	497023.40	8293627.07	20.83	137.20	-70	270	Received	Metallurgy
SHSD_167	497017.07	8293515.44	20.63	126.50	-70	270	Received	Metallurgy
SHSD_168	497062.02	8293474.33	20.64	120.00	-70	270	Received	Metallurgy
SHSD_169	496999.74	8293477.70	20.65	120.50	-70	270	Received	Metallurgy
SHSD_170	496837.20	8293450.11	20.65	126.50	-70	270	Received	Resource
SHSD_171	496904.50	8293475.10	20.71	120.50	-70	270	Received	Metallurgy
SHSD_172	496896.42	8293517.13	20.81	117.50	-70	270	Received	Metallurgy
SHSD_173	496763.80	8293280.62	21.17	78.50	-70	270	Received	Resource
SHSD_174	496899.69	8293396.36	20.55	99.50	-70	270	Received	Metallurgy
SHSD_175	496892.72	8293593.61	20.78	108.50	-70	270	Received	Metallurgy
SHSD_176	497001.04	8293391.09	20.63	111.50	-70	270	Received	Metallurgy
SHSD_177	497051.91	8293379.99	20.73	102.50	-70	270	Received	Metallurgy
SHSD_178	496975.16	8293285.89	20.63	102.50	-70	270	Received	Metallurgy
SHSD_179	496862.15	8293296.15	20.63	90.50	-70	270	Received	Metallurgy
SHSD_180	496889.87	8293239.00	20.56	75.50	-70	270	Received	Metallurgy
SHSD_181	496687.25	8293306.61	20.63	69.50	-70	270	Received	Resource
SHSD_182	497259.84	8292970.75	20.37	72.20	-70	270	Received	Resource
SHSD_183	497070.85	8293784.31	20.93	132.50	-70	270	Received	Norton Extra
SHSD_184	496164.87	8295304.41	21.54	144.50	-70	315	Received	Beta Extra
SHSD_185	498354.00	8288018.00	20.00	306.50	-70	270	Received	Keep Seismic Target



**Table 2 - Intercept Table (intercepts have been calculated using a 1% Pb cut off, maximum 2 m consecutive dilution and total max. 4 m internal dilution and minimum thickness of 2 m)**

HOLE ID	Depth From	Depth To	Thickness	Pb Eq. %	Ag ppm	Pb_ %	Zn_ %
<b>Exploration Drilling</b>							
SHSD_164	101	107	6	8.66	170.19	3.92	0.05
SHSD_165	101.1	104	2.9	2.43	17.52	1.94	0.24
SHSD_180	25.4	28.55	3.15	1.48	13.99	1.09	0.01
SHSD_180	46.2	49.65	3.45	7.45	111.67	4.34	0.72
SHSD_182	21.2	23.2	2	1.26	2.4	1.19	0.41
SHSD_183	103	105	2	6.34	68.55	4.43	0.41
SHSD_184	129	131.8	2.8	3.70	18.97	3.17	1.71
<b>SHSD_185</b>	242.55	252.1	9.55	4.12	17.6	2.59	2.26
including	245.36	248.48	3.12	8.83	44.49	6.37	6.36
<b>Metallurgical Drilling</b>							
SHSD_167	94.1	99.5	5.4	5.25	30.17	4.41	0.02
SHSD_168	97.8	105	7.2	4.26	46.36	2.97	1.4
SHSD_169	90.2	92.9	2.7	4.38	51.26	2.95	0.01
SHSD_169	95.7	99.4	3.7	1.68	21.53	1.08	0.11
SHSD_171	81.95	93	11.05	16.24	188.71	10.98	0.45
SHSD_174	74.4	80.5	6.1	4.87	68.26	2.97	0.18
SHSD_174	81.15	86	4.85	36.47	690.1	17.24	0.1
SHSD_176	71.43	74.5	3.07	4.68	50.96	3.26	1.4
SHSD_176	80.25	82.9	2.65	11.50	81.11	9.24	0.04
SHSD_177	82.7	88.7	6	3.61	39.63	2.51	0.03
SHSD_178	53.6	58.2	4.6	3.11	26.81	2.36	0.43
SHSD_179	53.5	56.1	2.6	7.68	55.38	6.14	0.78

## Appendix 1 – Metal Equivalent Calculation Method

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

- Lead Price US\$2,253/t;
- Lead recovery of 91% (weighted average of oxide and fresh Pb recoveries);
- Lead Payability rate of 95%;
  
- Silver Price US\$27.4/oz;
- Silver recovery of 82% (weighted average of oxide and fresh Ag recoveries); and
- Silver Payability rate of 95%.
  
- Zinc Price US\$2500.0/t;
- Zinc recovery of 91%, and
- Zinc 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:

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

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.

# JORC Code 2012 Edition - Table 1

## Section 1 Sampling Techniques

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

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>For the sonic/diamond drilling program (from June to August 2023), sampling was not conducted in the field. After geological logging the cutting/sampling intervals were determined and marked. The drill core destined for sampling has been shipped to ALS laboratories in Perth for cutting and sampling. The sampling process will be supervised by Boab geologists.</li> <li>The Sonic pre-collars were geologically logged but not samples. The diamond core intervals were geologically logged by a geologist and assessed for visible mineralisation. Where necessary samples were also scanned with a portable XRF (Olympus InnovX Delta) for an indication of qualitative lead concentration. About 45% of all samples have been submitted to the laboratory.</li> <li>The sampling methodology to be undertaken at ALS laboratories 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.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>The drilling method used in the Phase VII 2023 drill program is sonic pre collars until bedrock was reached followed by diamond drilling (DD).</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul style="list-style-type: none"> <li>The sample (core) recovery is between 98 and 100% for most of the core drilling including the mineralised intervals. There were very few occasions where broken ground conditions were encountered where the core loss due to core grinding was encountered.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>• Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	
Logging	<ul style="list-style-type: none"> <li>• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul style="list-style-type: none"> <li>• The DD core was logged at the rig at the temporary work site at Sorby Hills. The core geotechnically, geologically, structurally and mineralogically logged on site and photographed.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• ¼ core samples will be analysed first for metallurgical drill holes and ½ core for the remaining drill holes.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument</li> </ul>	<ul style="list-style-type: none"> <li>• All samples will be sent to ALS Laboratories in Perth for preparation and analysis. Duplicates, blanks and standards inserted at regular intervals.</li> <li>• All samples will be assayed to accepted industry standards at the ALS Laboratories in Perth. Multi-acid digestion of pulverised sample was followed by ICP-OES or equivalent assay technique.</li> <li>• 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</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p><i>make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <ul style="list-style-type: none"> <li><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<p>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.</p> <ul style="list-style-type: none"> <li>Duplicates and Blanks were also included in all sample despatches.</li> </ul>
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Geological logs were digitally entered into data entry templates in MS Excel and entered into an Access database.</li> <li>Assay certificates were received from the analytical laboratories and imported into the drill database.</li> <li>No adjustments were made to the assay data.</li> </ul>
<p><i>Location of data points</i></p>	<ul style="list-style-type: none"> <li><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>Accurately surveyed using a DGPS by a registered surveyor and recorded in GDA94 Zone 52 will be conducted at the end of the program.</li> <li>All drill holes are surveyed down hole on completion of the drill hole with a Reflex Gyro tool every 30 m.</li> <li>The initial siting of the drill hole position is based on planned coordinates from the 3D data base and GPS positioning in the field</li> </ul>
<p><i>Data spacing and distribution</i></p>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The spacing between new and existing drill holes can range from a minimum of 50 m to 25 m spaced collars.</li> <li>Most drill holes at the Norton Deposit are inclined at -70 degrees to the west holes.</li> <li>One hole drilled at Beta at -70 deg to the northwest (315deg), and at the Keep Seismic Target -70 to the west to better sample both shallow and steeply dipping mineralised structures considered significant to the mineralisation.</li> </ul>
<p><i>Orientation of data in relation to geological structure</i></p>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is</i></li> </ul>	<ul style="list-style-type: none"> <li>It is not considered that there is a significant sampling bias due to structure.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<i>Sample security</i>	<p data-bbox="367 186 976 243"><i>considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p> <ul data-bbox="315 259 976 292" style="list-style-type: none"> <li data-bbox="315 259 976 292">• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul data-bbox="1050 259 1953 349" style="list-style-type: none"> <li data-bbox="1050 259 1953 349">• Cores trays are stored and processed at a secure facility at site. All samples taken by Boab personnel to the truck depot in Kununurra and placed on pallets for transport direct to ALS Laboratory in Perth.</li> </ul>
<i>Audits or reviews</i>	<ul data-bbox="315 373 976 430" style="list-style-type: none"> <li data-bbox="315 373 976 430">• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul data-bbox="1050 373 1323 406" style="list-style-type: none"> <li data-bbox="1050 373 1323 406">• To be undertaken.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code Explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>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 &amp; Lead Co. Ltd (HYG) owning the remaining 25%. The Sorby Hills Project comprises five mining leases (M80/196-197 and M80/285-287) (see Table 2 below), all of which are currently held jointly between Sorby Hills Pty Ltd (75%) and Yuguang (Australia) Pty Ltd (25%).</li> <li>In addition, Boab has 100% ownership over the Eight Mile Project which is immediately south of the Sorby Project area.</li> </ul>

**Table 2: Sorby Hills Tenement Summary**

Tenement	Area (km <sup>2</sup> )	Boab Ownership %	Granted	Expiry
M80/196	9.99	75%	22/01/1988	21/01/2030
M80/197	9.95	75%	22/01/1988	21/01/2030
M80/285	5.57	75%	29/03/1989	28/03/2031
M80/286	7.89	75%	29/03/1989	28/03/2031
M80/287	8.15	75%	29/03/1989	28/03/2031
E80/5317	217	100%	05/03/2020	04/03/2025

- The Mining Leases are centred at coordinates 128°57'E, 15°27'N.
- The project area is approximately 50 km north-northeast of the township of Kununurra and covers a total area of 12,612.40 hectares (ha).
- 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;

Criteria	JORC Code Explanation	Commentary
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<p>for the remaining mining tenements normal cultural clearance plans would be required. No mining agreement has been negotiated.</p> <ul style="list-style-type: none"> <li>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 &amp; BHP), BHP (1981-1988), in JV with Triako; and CBH/Kimberley Metals/KBL Mining.</li> <li>Previous work included, geologic mapping, soil geochemistry, airborne and ground geophysics and extensive drilling campaigns.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Sorby Hills mineralisation is regarded as having many features typical of Mississippi Valley Type (MVT) deposits. Recent geological assessment has refined this to a carbonate-replacement system, with the bulk of the mineralisation focused on the contact between the Lower Knox Sediments and the Upper Sorby Dolomite. However, at the Beta deposit the mineralisation is hosted in the hanging wall of the Knox Formation and within the Lower part of the Upper Formation, specifically withing graphitic fossiliferous carbonate rocks.</li> <li>The Sorby Hills mineralisation consists of 7 discrete and partly amalgamated carbonate-hosted Ag Pb Zn deposits (previously referred to as pods): A-J, Beta East, Beta West and Alpha. 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.</li> <li>The bulk of the mineralisation is stratabound and hosted mainly on the contact between Knox Sediments and Sorby Dolomite and in dolomitic breccia which is typically developed at the contact of a crystalline dolomite unit and overlying dolomitic siltstone which generally dips shallowly to the east.</li> <li>However, during the course of this work program at least one drill hole drilled deeper into the footwall also indicated a zone of intense hydrothermal breccia type of mineralization. While this style of mineralisation is sporadically referenced in the past its geometry is yet to be defined; its location in the hanging wall of a structure may suggest a genetic correlation which can serve as a guide to future targeting.</li> <li>The stratabound 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.</li> </ul>



Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>The Sorby Hills primary mineralisation is typically silver and lead-rich with moderate to high pyrite (FeS<sub>2</sub>) 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.</li> <li>The upper portions of the deposits are often oxidised and composed of a variable mix of cerussite (PbCO<sub>3</sub>) 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.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>A report will be prepared by the registered surveyor as to the accuracy of the DGPS surveying undertaken at the drill collars once the survey is completed.</li> <li>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 about 1,409 surface drill holes for a total of about 133,673 m of drilling.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of</li> </ul>	<ul style="list-style-type: none"> <li>No aggregated exploration data is reported here.</li> <li>Not applicable</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p><i>high grades) and cut-off grades are usually Material and should be stated.</i></p> <ul style="list-style-type: none"> <li>• <i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>• The stratabound mineralisation at Sorby Hills generally dips gently to the east.</li> <li>• The reported mineralised intervals 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.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Maps and cross-sectional and long sectional diagrams reflect the current level of survey accuracy and coordinates.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Add drill holes will be reported once they have been DGPS surveyed</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density,</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p><i>groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• A first stage of metallurgical testwork commissioned by Boab Minerals was reported 17 July 2019 (ASX Announcement). It confirmed the higher recoveries that can be obtained from this style of carbonate replacement mineralisation. Flotation recoveries of up to 96% Pb and 95% Ag were obtained and the testwork indicated that a final concentrate grade of 65%Pb can be produced. Outstanding results were also obtained to upgrade the ores prior to flotation by heavy liquid separation and by ore sorting.</li> </ul>
<p><i>Further work</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Further drill campaigns are planned to follow up newly identified mineralised zones and conceptual targets, 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.</li> <li>• The Company is also assessing the results from the initial stratigraphic/structural drill targeting on the Exploration license E80/5317 for addition drilling.</li> </ul>