19 November 2021

Sorby Hills DFS Metallurgical Testwork Results

Boab Metals Limited (ASX: **BML**) ("**Boab**" or the "**Company**") is pleased to present the results of the Definitive Feasibility Study ("**DFS**") Metallurgical Testwork Program undertaken on its 75% owned Sorby Hills Lead-Silver-Zinc Project ("**Sorby Hills**", or the **"Project**") located in the Kimberley Region of Western Australia.

HIGHLIGHTS

- **Comprehensive DFS Metallurgical Testwork program undertaken at Sorby Hills.**
- **Some 1,420kg of core recovered from 35 HQ diamond drill holes completed during the Phase IV and V drill program 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:**
    - **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.**
- **Results complement and build upon an extensive body of metallurgical data from previous phases of testwork undertaken by Boab and others at Sorby Hills.**

Boab Managing Director and CEO Simon Noon stated:

"The Metallurgical Testwork Program represents a substantive body of work that, together with the results of extensive previous testwork, will form a sound basis for our DFS Process Plant design criteria at Sorby Hills.

We are pleased with the results we have achieved. The recovery uplift resulting from separated ore versus blended ore processing is particularly encouraging and we anticipate adopting this approach will have a positive impact on the Project economics.

With the DFS metallurgical testwork program largely complete, we are now able to advance Process Plant design at pace. We look forward to providing updates on this workstream as it progresses".

DFS Metallurgical Testwork Program

The DFS Metallurgical Testwork Program was launched on the back of a successful Phase IV drilling program with the primary objective of delivering robust results to underpin the Sorby Hills DFS Process Plant design criteria.

A total of 35 HQ diamond drill holes (Figure 1) included in the Phase IV and V drilling were located for the purpose of collecting information for the DFS Metallurgical Testwork Program. From these holes, approximately 1,420kg from 399m of half core was collected, combined and composited into Variability Samples, Schedule Composites and Master Composites.

Samples and Composites were utilised for a range of testwork including: Flotation, Comminution, Mineralogy, Heavy Liquid Separation ("**HLS**"), Tailings Thickening, Concentrate Filtration and Concentrate Analysis. The DFS Metallurgical Testwork Program builds upon a significant body of previous metallurgical testwork undertaken by Boab since acquiring Sorby Hills in 2018 and others dating back to 1979.

Sample Selection

The Sorby Hills Pre-Feasibility Study ("**PFS**") included an approximately 10-year mining schedule that comprised 83% Fresh Ore and 17% Oxidised Ore and a process design whereby sequential flotation was employed to recover metal from an ore feed schedule comprising a blend of Fresh Ore and Oxidised Ore.

The DFS testwork program was designed to investigate and compare processing Oxidised Ore and Fresh Ore using both blended and separated ore processing strategies.

Master Oxide, Fresh and Blended composites were produced for initial flotation optimisation.

A total of 28 samples exhibiting a range of head grades, mineralogical compositions and source locations were prepared as Variability Samples.

Scheduled based composites were made to represent the PFS mine schedule for years 1-2, 3-4 and 5+, for each of the Oxidised, Fresh and Fresh-Oxidised Blend ore types.

Lower grade sample material was selected for HLS testing.

Table 1: DFS Metallurgical Testwork Program - Sample Summary

Test Type	Variability Tests	Composites Tests
Flotation	28	3 x Schedule plus 3 Master (each Fresh, Oxidised and Blend)
Comminution	18	3 x Schedule
HLS	13	2

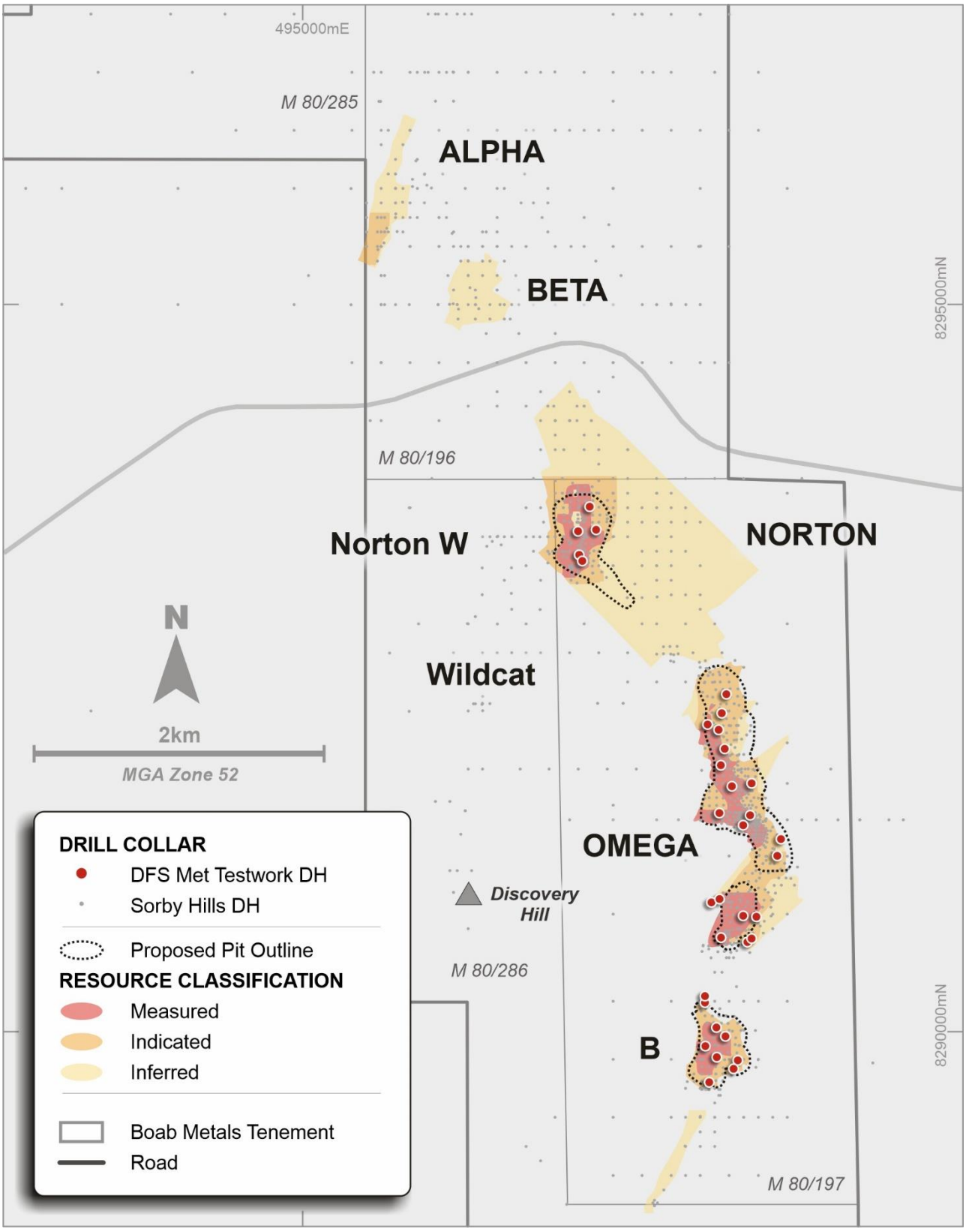

Figure 1: Distribution of DFS Metallurgical drill holes across the Sorby Hills deposit.

Flotation Testwork

Metal recoveries adopted for economic modelling for the PFS comprised Lead: 94.9% (Fresh Ore) and 84% (Oxidised Ore) and Silver: 78.2% (Fresh Ore) and 94.4% (Oxidised Ore).

Table 3 presents a summary of the final Sorby Hill DFS Flotation performance estimates.

Recovery estimates are based on the Schedule Composite test results, and for the specific deposit estimates, the average Variability Sample test performance for that deposit. These results incorporate modifications based on Locked-Cycle testwork to account for closed circuit performance estimation and, in the case of separate Oxidised and Fresh Ore only recoveries, adjustments to account for operational inefficiencies associated with campaign style processing.

The separate flotation of Oxidised and Fresh Ore delivers an uplift in recovery over the Life of Mine versus the sequential treatment of an Oxidised / Fresh Ore Blend adopted in the Sorby Hills PFS and is anticipated to have a positive impact on Project economics.

Whilst the extensive variability testwork has identified the recovery achieved at Norton was less than that at other deposits, superior results in selected Norton Variability Samples suggests the poorer results are spatially constrained and that the higher performing ore within Norton can be prioritised.

Table 2: Sorby Hills DFS Final Flotation Performance Estimates

Sample	Feed Grade		Con. Grade		Recovery	
	%Pb	g/t Ag	%Pb	g/t Ag	%Pb	%Ag
Oxidised Ore Only						
PFS Schedule Y1-2	5.14	42	62.3	520	89.9	92.4
PFS Schedule Y3-4	4.03	44	60.3	686	85.5	88.3
PFS ScheduleY5+	5.15	86	67.3	1,262	79.9	89.3
Norton	8.93	168	66.0	1,305	85.6	89.9
Fresh Ore Only						
PFS Schedule Y1-2	4.53	61	66.9	816	95.1	86.3
PFS Schedule Y3-4 excl. Norton	3.27	19	64.3	330	95.1	84.8
PFS Schedule Y5+	4.04	32	68.5	479	95.1	83.9
B Pit	2.89	16	65.7	326	95.1	83.9
Omega, Omega South	4.31	43	66.2	599	95.2	87.0
Norton	4.24	72	56.9	966	78.1	77.9
Blended Ore						
PFS Schedule Y1-2	4.59	55	62.9	703	91.0	85.6
PFS Schedule Y3-4	3.50	25	59.9	372	83.1	72.5
PFS Schedule Y5+	4.12	36	60.7	504	92.6	89.2
Norton	4.98	86	62.6	1,076	76.6	75.8

The recoveries summarised in Table 2 above will be key inputs into the DFS mine design and Sorby Hills Reserve evaluation.

Concentrate Analysis

A comprehensive assay was undertaken on Lead-Silver Concentrate produced from each locked cycle test. The results of these assays have been provided to potential offtakers as part of the ongoing tender for the right to Boab's share of the Sorby Hills Lead-Silver concentrate production. These results have once again confirmed the high quality and high grade of the Lead-Silver concentrate to be produced from the Sorby Hills project.

HLS Testwork

The PFS identified DMS as an opportunity to enhance low grade ore prior to milling and flotation to allow processing of ore that otherwise would be deemed uneconomic. The DFS Metallurgical Testwork Program further explored this concept.

Table 3: Summary DMS Performance Estimate

Estimate	Recovery			Upgrade Ratio	
	Mass %	Pb %	Ag %	Pb x	Ag x
Oxidised Ore DFS	32	77	83	2.4	2.6
Fresh Ore DFS	33	76	70	2.3	2.1
Average DFS	**33**	**76**	**72**	**2.3**	**2.2**
PFS (Average)	**30**	**81**	**73**	**2.7**	**2.4**

The DFS Oxidised Ore Pb recovery performance estimate is below that used in the 2020 PFS, while the Ag recovery is higher. However, the estimated DFS Fresh Ore performance is lower than that of the PFS for both Pb and Ag. Furthermore, a high observed variability in mass recovery response creates difficulties in plant design (e.g. highly variable stream flows) and in plant operation (difficulty controlling to target parameters). This is believed to be a result of variable gangue density, which is due to its variable shale content.

While the financial result for the DMS option in the 2020 PFS indicated a similar NPV compared with Base Case non-DMS, the DFS testwork results for the DMS option have demonstrated a reduced recovery and highlighted additional process design and operation risk.

Therefore, the DMS option is not recommended and will not be considered further within this DFS.

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 (0)8 6268 0449**

Email: 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.

Compliance Statement

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.

Table 1: DFS Test Work Drill Hole Collars, Test Work & Locations Details

HOLE ID	Phase	mE	mN	RL	Depth	Mining Period	Test Work	Deposit
SHMD001	IV	498089	8291492	20.0	60.3	2	FV, CV	Omega
SHDD002	IV	498041	8291423	19.9	39.3	2	FV, CV	Omega
SHDD003	IV	498277	8291212	19.9	90.5	2	FV, CV	Omega
SHMD004	IV	498302	8291327	19.8	129.6	2	CV	Omega
SHDD005	IV	497877	8291507	20.0	39.5	2	FV, CV	Omega
SHDD008	IV	497964	8291691	19.9	90.8	2	CV	Omega
SHDD009	IV	498099	8291711	19.9	99.8	2	CV	Omega
SHDD010	IV	497887	8291836	20.1	45.8	4	FV	Omega
SHDD011	IV	497914	8291950	20.1	60.9	4	FV, CV	Omega
SHMD015	IV	497872	8292080	20.1	84.7	5	FV	Omega
SHDD017	IV	497894	8292195	20.0	116.8	4	FV, CV	Omega
SHDD018	IV	497926	8292325	20.1	111.7	4	FV	Omega
SHMD022	IV	496912	8293284	20.5	65.2	4	CV	Norton
SHMD023	IV	496933	8293242	20.4	63.6	4	FV	Norton
SHMD024	IV	496904	8293447	20.4	99.7	5	FV, CV	Norton
SHMD043	IV	498070	8290618	19.6	75.8	5	CV	Omega Sth
SHDD026	IV	496983	8293616	20.6	120.4	5	FV	Norton
SHDD029	IV	497807	8289653	19.5	66.8	4	FV	B pit
SHDD030	IV	497975	8289745	19.6	72.7	4	FV, CV	B pit
SHDD031	IV	498005	8289804	19.6	120.5	4	FV, CV	B pit
SHDD032	IV	497859	8289826	19.6	54.8	4	FV, CV	B pit
SHDD034	IV	497781	8289902	19.7	39.8	4	FV	B pit
SHDD035	IV	497919	8289969	19.6	63.6	4	FV, CV	B pit
SHDD036	IV	497857	8290030	19.7	42.7	4	FV, CV	B pit
SHDD038	IV	497888	8290649	19.7	36.6	5		OMEGA Sth
SHDD039	IV	498042	8290799	19.6	69.8	5	FV, CV	OMEGA Sth
SHDD040	IV	498132	8290793	19.7	60.4	5		OMEGA Sth
SHDD042	IV	498099	8290642	19.6	81.5	5		OMEGA Sth
SHMD050	IV	497028	8293457	20.5	105.7	5	FV, CV	Norton
SHMD075	V	497795	8292117	20.3	75.6		CV	Omega
SHMD095	V	497778	8290202	19.7	38.7	4	CV	B pit
SHMD100	V	497822	8290892	20.0	36.6	5	CV	Omega Sth
SHMD101	V	497879	8290915	19.9	48.8	5	CV	Omega Sth
SHMD103	V	497778	8290246	19.7	36.4	4	CV	B pit

APPENDIX: 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	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• The DFS metallurgical test work utilised diamond drill cores predominantly from the Phase IV (2020). Phase V (2021) diamond drilling campaigns contributed additional Oxide comminution variability samples. • Phase IV provided the bulk of test work material. During the first step, diamond cores from the Phase IV 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 meters in the hanging wall and footwall. The analytical results from this sampling informed the section of ½ core sample intervals for the test work. A ¼ core was retained for geological reference. • During the Phase V diamond drilling program (from May to July 2021), ½ core sampling was conducted at 1m intervals with the occasional sample slightly longer or shorted depending proximity to lithological boundaries for the entire length of the logged mineralised zone including several meters in the hanging wall and footwall. The analytical results from this sampling informed the section of ½ core sample intervals for the additional test work. • The original 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 0.5m and 2.0m. • Metallurgical Samples: The testwork reported above was undertaken on 17 composite samples (3 comminution, 2 HLS and 12 flotation), and 59 variability samples (18 comminution, 13 HLS and 28 flotation) made up from the 2020 and 2021 diamond drill hole program undertaken by Boab. The drill hole locations are shown in Figure 1. • The majority of the samples were composites of ½ HQ diameter diamond drill core from selected mineralised zones of the resource drilling. 11 of the 28 flotation variability samples were composites of ¼ core. • A total of 1,421kg of sample from 399m over 35 HQ diamond holes was taken into the testwork program. • Minimum sample interval used was 2m, but generally sample intervals matched the ore type and grade boundary, reflecting the likely mining method, excavating using open pit methods. • The selected core samples bagged according to the hole number and metallurgical sample interval plan in Kununurra and then transported in 200L

Criteria	JORC Code Explanation	Commentary

		drums ALS Metallurgy in Balcatta , Perth where the sample preparation and metallurgical testwork was conducted
		• Metallurgical samples were selected with the aim to satisfy the following conditions:
		  ○ Ore that would be mined, i.e. within the 2020 PFS pit shells
		  ○ Reflect the main oxidation types and lithologies, particularly the more oxidised cerussite ores and the fresh galena ores
		  ○ Select grades in line with the PFS mine schedule, with some variability around it to examine variability response
		  ○ Allow for spatial representivity (i.e. spread of depth and along strike where possible)
		  ○ Ensure sample intervals to reflect the mining method if possible (i.e. continuous samples through drill core)

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).*	• The drilling method used in the Phase IV and V drill programs is HQ3 (triple tube) diamond drilling with some drill holes started with a mud rotary pre collar that is not recovered. • Both programs are completed.
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.*	• All drill cores are assessed for core recoveries. There is generally a + 95% recovery through the zone of mineralisation.
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.*	• Diamond drill core was logged at a secure facility in Kununurra during 2020 and in Boab's exploration camp during 2021. All cores are stored in a shed in Kununurra. Since April 2021 mineralised intervals are stored in a refrigerated sea container. • All core is logged in detail. Core was processed with orientation lines and metre marks and RQD. Recoveries and RQD's were recorded. • Structural measurements of stratigraphy and fault orientations were made where the ori-marks and orientation lines were of sufficient confidence.

Criteria	JORC Code Explanation	Commentary
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 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.*	• Core is first being cut in half at the core shed then one half quartered in Kununurra using a diamond saw. 1/4 core samples are collected and placed in pre-numbered calico bags. Samples were placed into heavy duty plastic bags and sealed for transport to the laboratory.
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.*	• All batches of samples have been sent to Intertek-Genalysis in Darwin for preparation and analysis. Duplicates, blanks and standards inserted at regular intervals. • Drill core will be 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 equivalent assay technique • 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. • Blanks were also included in all sample despatches.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Geological logs were handwritten on A3 and A4 paper log sheets and digitally entered into data entry templates in MS Excel and entered into an Access database. • Assay certificates were received from the analytical laboratories and imported into the drill database. • No adjustments were made to the assay data.

Criteria	JORC Code Explanation	Commentary
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.*	• Accurately surveyed using a DGPS by a registered surveyor and recorded in GDA94 Zone 52 will be conducted at the end of the program. • All drill holes are surveyed down hole on completion of the drill hole with a Reflex Gyro tool every 30 m. • The initial siting of the drill hole position is based on planned coordinates from the 3D data base and GPS positioning in the field
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.*	• No specific spacing has been applied as this program target metallurgical test material within the orebody; the spacing between new and existing drill holes can range from a minimum of 25m to 50m spaced collars. • Most drill holes are angled holes drilled in the Boab 2020 and 2021 drilling programs will be imported into the Sorby Hills database and standard geostatistics will be performed to determine the grade and continuity and assess the appropriate resource category to classify based on drill hole spacing and grade continuity. • Most holes drilled at 60-70 deg to the west (270deg), to better sample both shallow and steeply dipping mineralised structures considered significant to the mineralisation.
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 structure. • Holes drilled at 60° and 70° to the west (270°) and vertically, to better sample both shallow and steeply dipping mineralised 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 or at the Company's field facility. All samples are 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.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• To be undertaken.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownersh including agreements or material issues with thi parties such as joint ventures, partnerships, overridir royalties, native title interests, historical site wilderness or national park and environment 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.*	• 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) (see Table 2 below), all of which are currently held jointly between Sorby Hills Pty Ltd (75%) and Yuguang (Australia) Pty Ltd (25%). ***Sorby Hills Tenement Summary*** **Tenement** / **Area (km²)** / **Granted** / **Expiry** M80/196 / 9.99 / 22/01/1988 / 21/01/2030 M80/197 / 9.95 / 22/01/1988 / 21/01/2030 M80/285 / 5.57 / 29/03/1989 / 28/03/2031 M80/286 / 7.89 / 29/03/1989 / 28/03/2031 M80/287 / 8.15 / 29/03/1989 / 28/03/2031 E80/5317 / 217 / 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). • Native title has not been granted over the area. The Mining Leases were granted prior to the High Court acknowledging Native Title and therefore native title has been extinguished over the MLs. • The project area lies adjacent to proposed Goomig Range Conservation Park. • Tenure is in good standing until 2030 (in some cases, out to 2031. M80/286 & M80/197 have a current cultural clearance access agreement in place; for the remaining mining tenements normal cultural clearance plans would be required. No mining agreement has been negotiated.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Sorby Hills area has been systematically explored by numerous companies since 1971. Prominent amongst these were ELF Aquitaine (1973-1981) with various JV partners (SEREM, St Joe Bonaparte & BHP), BHP (1981-1988), in JV with Triako; and CBH/Kimberley Metals/KBL Mining. • Previous work included, geologic mapping, soil geochemistry, airborne and ground geophysics and extensive drilling campaigns.

Criteria	JORC Code Explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• 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 sediment replacement system, with mineralisation focused on the contact between the upper Knox Sediments and the lower Sorby Dolomite. • 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. • The bulk of the mineralisation is largely stratabound and hosted mainly on the contact between Knox Sediments and Transition Facies overlying the Sorby Dolomite. The Transition Facies consists of meter scale interbedded dolomite breccias alternating with silty dolomites and crystalline dolomite units. The strata generally dips shallowly to the east. • During the course of the Phase V drilling program mineralisation associated with a network of structurally controlled veins and breccias was tested and confirmed. This style of mineralisation is now modelled as a separate ore zone compared to the stratabound mineralisation. Its location associated with structure may suggest a genetic correlation which can serve as a guide to future targeting. • 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. • 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.

Criteria	JORC Code Explanation	Commentary

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *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.*
		• 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.
		• 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 1445 surface drill holes for a total of about 135,378.2 m of drilling.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No aggregated exploration data is reported here. • Not applicable
Relationship between mineralisation 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.

Criteria	JORC Code Explanation	Commentary
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Maps and cross-sectional and long sectional diagrams reflect the current level of survey accuracy and coordinates.
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.*	• Add drill holes will be reported once they have been DGPS surveyed

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.
		• Prior to this 2021 DFS level metallurgical testwork, the following major metallurgical testwork programs have been undertaken on drill core samples from Sorby Hills
		  ○ MIM PFS testwork, 1979-
		  ○ CBH Resources/Kimberly Metals PFS testwork, 2008-12
		  ○ Pacifico Minerals PFS testwork 2019-20.

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 planning to undertake an initial stratigraphic drill hole on the Exploration license E80/5317.