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BOAB METALS LIMITED

Advancing the

# Sorby Hills Lead-Silver Project

## Toward a Final Investment Decision

13 October 2023

Boab Metals Limited ASX:BML

boabmetals.com

Delivering metals for a sustainable future

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Information included in this presentation relating to Exploration Results has been extracted from the ASX Announcements titled "Amended Drilling Announcement" dated 4 September 2023", "Assays Confirm Further Positive Outcome for Sorby" dated 23 January 2023, "High-Grade Lead-Silver Confirmed at Beta Deposit" dated 1 February 2022, and "Sorby Hills DFS Metallurgical Testwork Results" dated 19 November 2021 available to view at www.boabmetals.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in these announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the form in which they were first presented.

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Information included in this presentation relating to Ore Reserves, Production Targets and Financial Forecasts has been extracted from the Sorby Hills Definitive Feasibility Study and dated 19 January 2023, available to view at www.boabmetals.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the Ore Reserve Statement and that all material assumptions and technical parameters underpinning the estimates, production targets and financial forecasts continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the Ore Reserves Statement.

# Boab Metals Limited
# Corporate Summary

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## Capital structure (9 October 2023)

**Share Price**
A$0.10 / share

**Debt**
Nil

**Shares on Issue**
174 million shares

**Cash**
A$3.0 million (30 September 2023)

**Market Cap**
A$17.4 million

**Performance Rights**
8,300,000

## Top 4 Shareholders

| # | Holder Name | 9 October 2023 |
|---|---|---|
| 1 | Villiers Queensland PL | 8.74% |
| 2 | Zero Nominees Pty Limited | 4.33% |
| 3 | Citicorp Nominees Pty Limited | 3.38% |
| 4 | Brent Connolly | 2.52% |

## Share Price History

- **ASX-listed base and precious metals** developer and explorer.
- **Advancing toward Final Investment Decision** on Sorby Hills.
- Board & Management team with a **proven track record in development**.
- **Top 20 shareholders hold 36% of issued capital.**

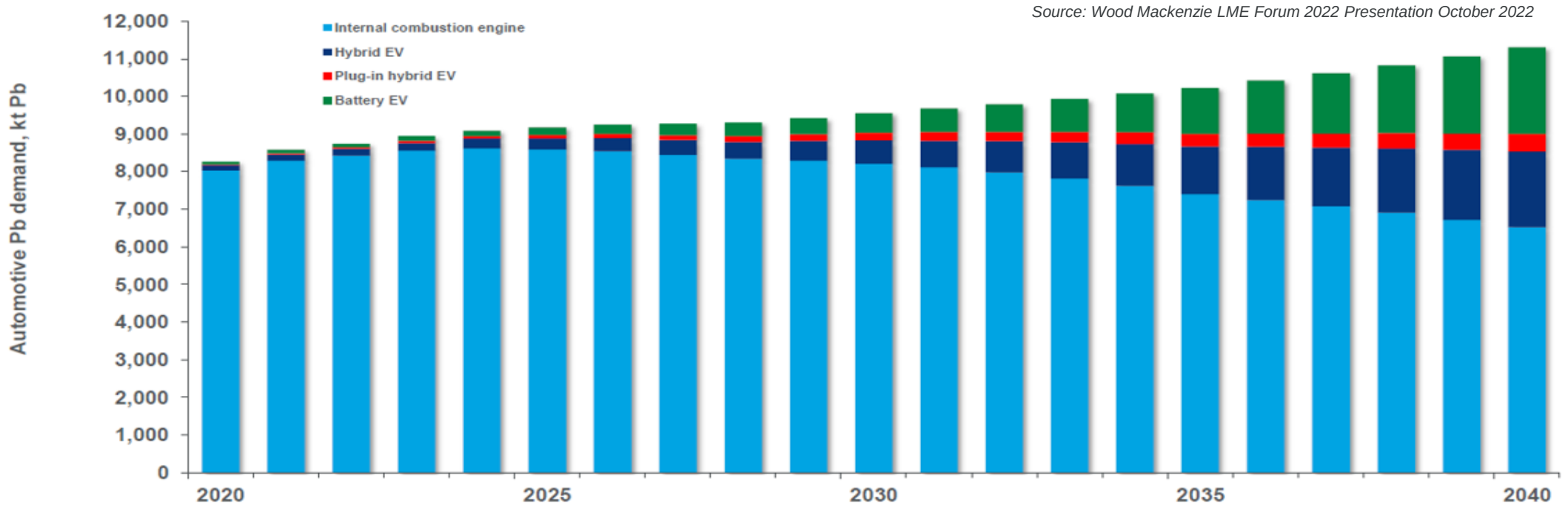
# Pb Lead

## The Proven Battery Metal

The primary component of the 12V batteries found in traditional and electric vehicles.

- **Demand growth** underpinned by **mature and emerging vehicle technologies.**
- Supported by **rapid growth** in utility and **renewable energy storage**[1].

1. www.batteryinnovation.org/resources/lead-battery-market-data/

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# Ag Silver

## The Most Conductive Metal on Earth

Ideal metal for use in solar cells and the electronic components of electric vehicles.

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- Silver's traditional role as a **storer of wealth** is complemented by its **increasing industrial demand.**
- The use of **Silver in solar cells has increased nearly 150%** (8.3% CAGR) to 127Moz over the past 10 years[1].
- Sorby Hills and Boab Metals offers **rare ASX exposure to Silver metal demand.**

1. www.silverinstitute.org/silver-supply-demand/

# Sorby Hills Project

## A near-term producer of Lead and Silver

- Located 50km **northeast of Kununurra** in the East Kimberley Region of Western Australia
- **High quality Mineral Resource with significant** near mine and greenfields **exploration upside**
- 150km by existing **sealed roads** to the **Wyndham Port**
- **Definitive Feasibility Study complete**
- **Conventional open pit** mining and **flotation** process plant producing a **high-grade Lead-Silver concentrate**
- Initial **production target** underpinned by **83% Reserves**
- **Heads of Agreement** to secure **clean energy** from the **Ord River Hydroelectric Plant**
- **Heads of Agreement with local shire** for **Kununurra-based accommodation facility** executed
- **Front End Engineering & Design** complete
- **Offtake** negotiations **nearing completion** and **Engagement with Financiers** ongoing
- Project advancing toward a Final Investment Decision

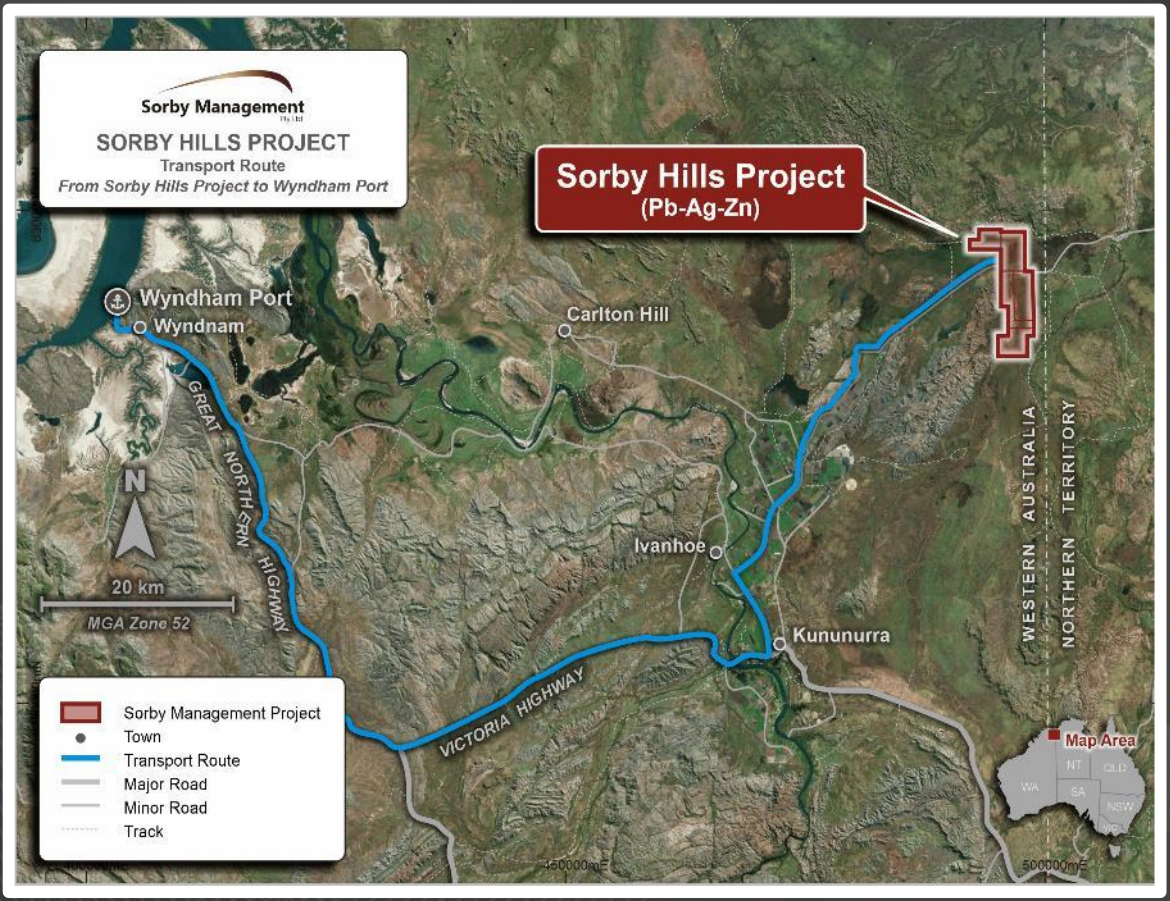


*Figure: Location of the Sorby Hills Project*

*1. See Slide 7 for Resource breakdown 2. See Appendix for Lead Equivalent calculation method*

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# Sorby Hills Project

## DFS results support progress toward a Decision to Mine[1]

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**A$245m pre-production Capex**
underpinned 75% by tendered pricing

**C1 cash cost US$0.39/lb payable Pb**
Incl. net Silver credit of US$0.38/lb payable Pb

**Average Annual Production**
103kt Lead-Silver concentrate
67kt Lead and 2.2Moz Silver

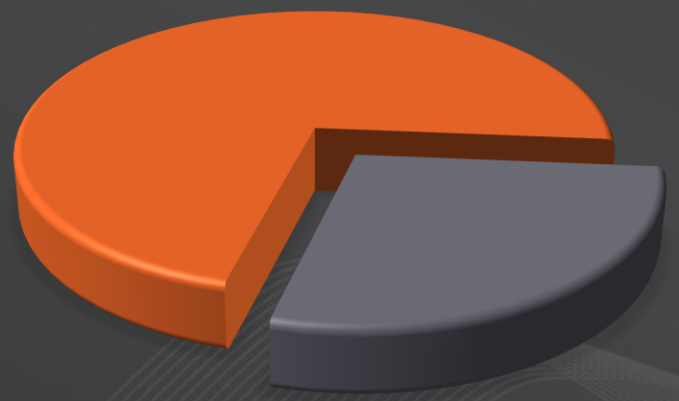
**2.25Mtpa**
8.5 Year Mine Life

**$NPV_8$ A$370m**
**IRR 35%**
Strong pre-tax economics

**A$1.0bn** Operating Cash Flow

**A$119m p.a.** Average EBITDA

**Lead**
543 thousand payable tonnes
A$1,790 Million Revenue



**Silver**
17.2 million payable ounces
A$692 Million Revenue

*1. See Appendix for Revenue Assumptions*

# Sorby Hills Project

## High Quality Mineral Resource Estimate

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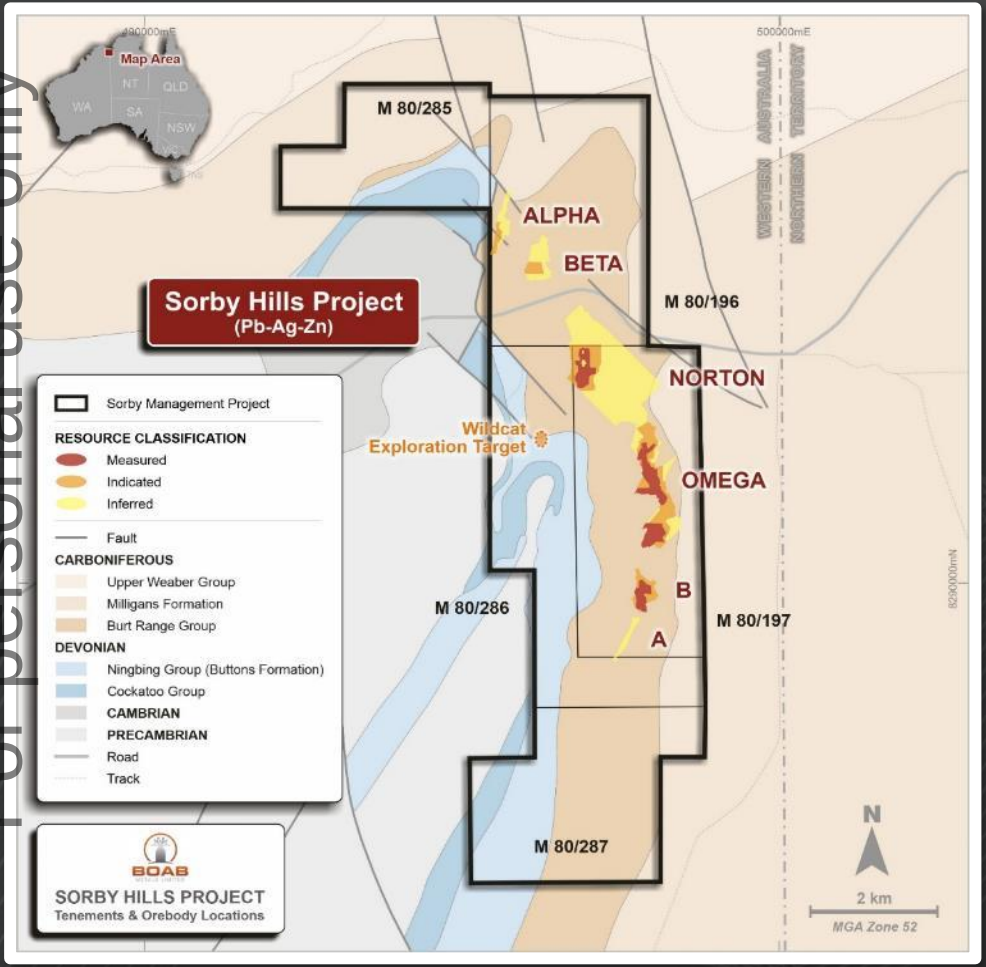



*Figure: Sorby Hills Resource relative to mining leases and local geology.*

| Deposit | Classification | Tonnes (Mt) | Grade Pb % | Grade Zn % | Grade Ag g/t | PbEq[1] % | Contained Metal Pb kt | Contained Metal Zn kt | Contained Metal Ag koz |
|---|---|---|---|---|---|---|---|---|---|
| A | Inferred | 0.6 | 5.3% | 1.0% | 23 | 6.1% | 31 | 6 | 427 |
| | **Sub Total** | **0.6** | **5.3%** | **0.1%** | **23** | **6.1%** | **31** | **6** | **427** |
| B | Measured | 1.4 | 3.8% | 0.3% | 19 | 4.5% | 52 | 4 | 859 |
| | Indicated | 1.3 | 3.4% | 0.3% | 21 | 4.1% | 44 | 4 | 862 |
| | **Sub Total** | **2.7** | **3.6%** | **0.3%** | **20** | **4.3%** | **97** | **8** | **1,720** |
| Omega | Measured | 8.5 | 3.3% | 0.4% | 37 | 4.6% | 279 | 32 | 9,995 |
| | Indicated | 5.8 | 3.5% | 0.4% | 34 | 4.7% | 205 | 25 | 6,331 |
| | Inferred | 2.9 | 2.7% | 0.4% | 26 | 3.6% | 76 | 13 | 2,414 |
| | **Sub Total** | **17.2** | **3.3%** | **0.4%** | **34** | **4.5%** | **566** | **71** | **18,948** |
| Norton | Measured | 2.8 | 4.1% | 0.3% | 75 | 6.7% | 112 | 9 | 6,668 |
| | Indicated | 2.1 | 3.2% | 0.5% | 38 | 4.5% | 68 | 11 | 2,617 |
| | Inferred | 16.2 | 2.5% | 0.5% | 27 | 3.4% | 402 | 75 | 14,039 |
| | **Sub Total** | **21.1** | **2.8%** | **0.4%** | **34** | **4.0%** | **590** | **96** | **24,090** |
| Alpha | Indicated | 0.7 | 2.6% | 0.5% | 41 | 4.0% | 18 | 4 | 923 |
| | Inferred | 0.8 | 3.6% | 1.2% | 86 | 6.6% | 27 | 9 | 2,052 |
| | **Sub Total** | **1.5** | **3.1%** | **0.9%** | **64** | **5.3%** | **45** | **13** | **2,975** |
| Beta | Indicated | 1.0 | 4.1% | 0.2% | 42 | 5.6% | 42 | 2 | 1,382 |
| | Inferred | 3.2 | 3.4% | 0.4% | 43 | 4.9% | 109 | 14 | 4,474 |
| | **Sub Total** | **4.2** | **3.6%** | **0.4%** | **43** | **5.1%** | **151** | **17** | **5,856** |
| **Total Resource** | **Measured** | **12.6** | **3.5%** | **0.4%** | **43** | **5.0%** | **444** | **45** | **17,521** |
| | **Indicated** | **11.0** | **3.4%** | **0.4%** | **34** | **4.6%** | **377** | **46** | **12,114** |
| | **Inferred** | **23.6** | **2.7%** | **0.5%** | **31** | **3.8%** | **645** | **117** | **23,406** |
| | **Total** | **47.3** | **3.1%** | **0.4%** | **35** | **4.3%** | **1,465** | **207** | **53,042** |

See ASX announcement 17 December 2021

*1. See Appendix for Lead Equivalent calculation method*

# Sorby Hills Project

## Production Target and Reserve Estimate

### DFS Production Target

| Pit | Total (Mt) | Waste (Mt) | ROM (Mt) | Pb (%) | Ag (g/t) | PbEq (%) | Strip Ratio |
|---|---|---|---|---|---|---|---|
| Pit A | 4.1 | 3.7 | 0.5 | 3.7 | 16.4 | 4.3% | 8.1 |
| Pit B | 14.8 | 12.6 | 2.3 | 3.2 | 17.4 | 3.8% | 5.5 |
| Omega South | 21.1 | 18.3 | 2.8 | 2.9 | 29.5 | 3.9% | 6.5 |
| Omega Main | 57.7 | 50.3 | 7.4 | 3.6 | 38.7 | 5.0% | 6.8 |
| Norton | 21.4 | 19.5 | 1.9 | 4.0 | 78.5 | 6.8% | 10.0 |
| Beta | 35.6 | 32.2 | 3.4 | 3.3 | 41.5 | 4.8% | 9.5 |
| **Total Production** | **154.8** | **136.5** | **18.3** | **3.4** | **38.8** | **4.8%** | **7.5** |

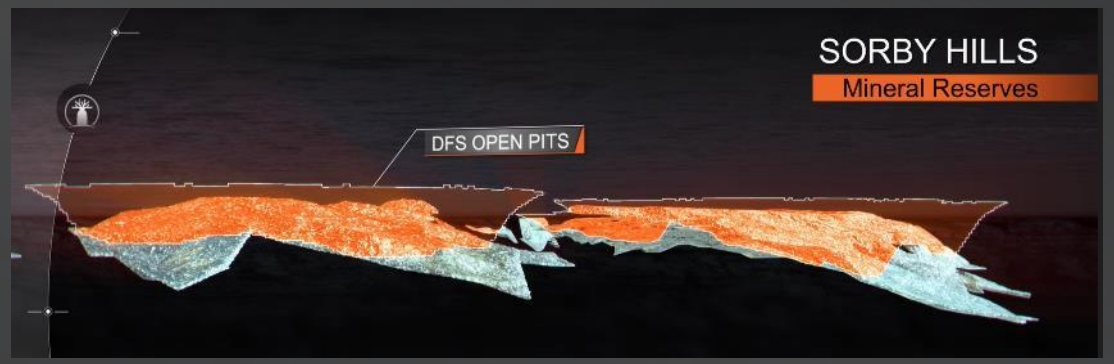
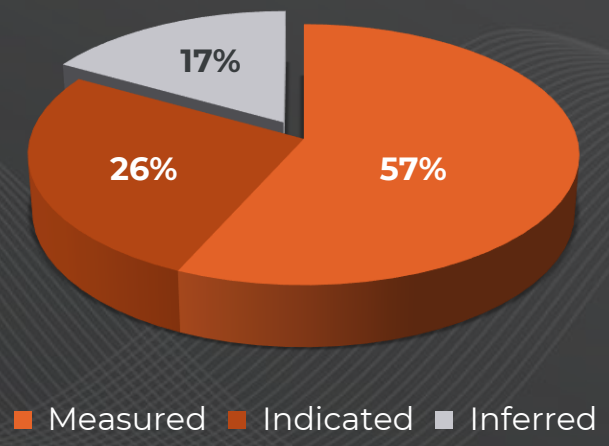



*Figure: DFS pit shells with respect to the Resource block model*

### Ore Reserve Estimate

| Ore Reserve Category | Ore (Mt) | Grade | | Contained Metal | |
|---|---|---|---|---|---|
| | | Pb (%) | Ag (g/t) | Pb (kt) | Ag (Moz) |
| Proved | 10.4 | 3.5% | 42 | 358 | 14.1 |
| Probable | 4.9 | 3.5% | 32 | 172 | 5.0 |
| **Total Ore Reserve** | **15.2** | **3.5%** | **39** | **531** | **19.1** |




Production Target underpinned 83% by Measured and Indicated Resources.

Including 95% Measured and Indicated Resources over the first 7 years of production.

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# Sorby Hills Project
## Process Flow Sheet

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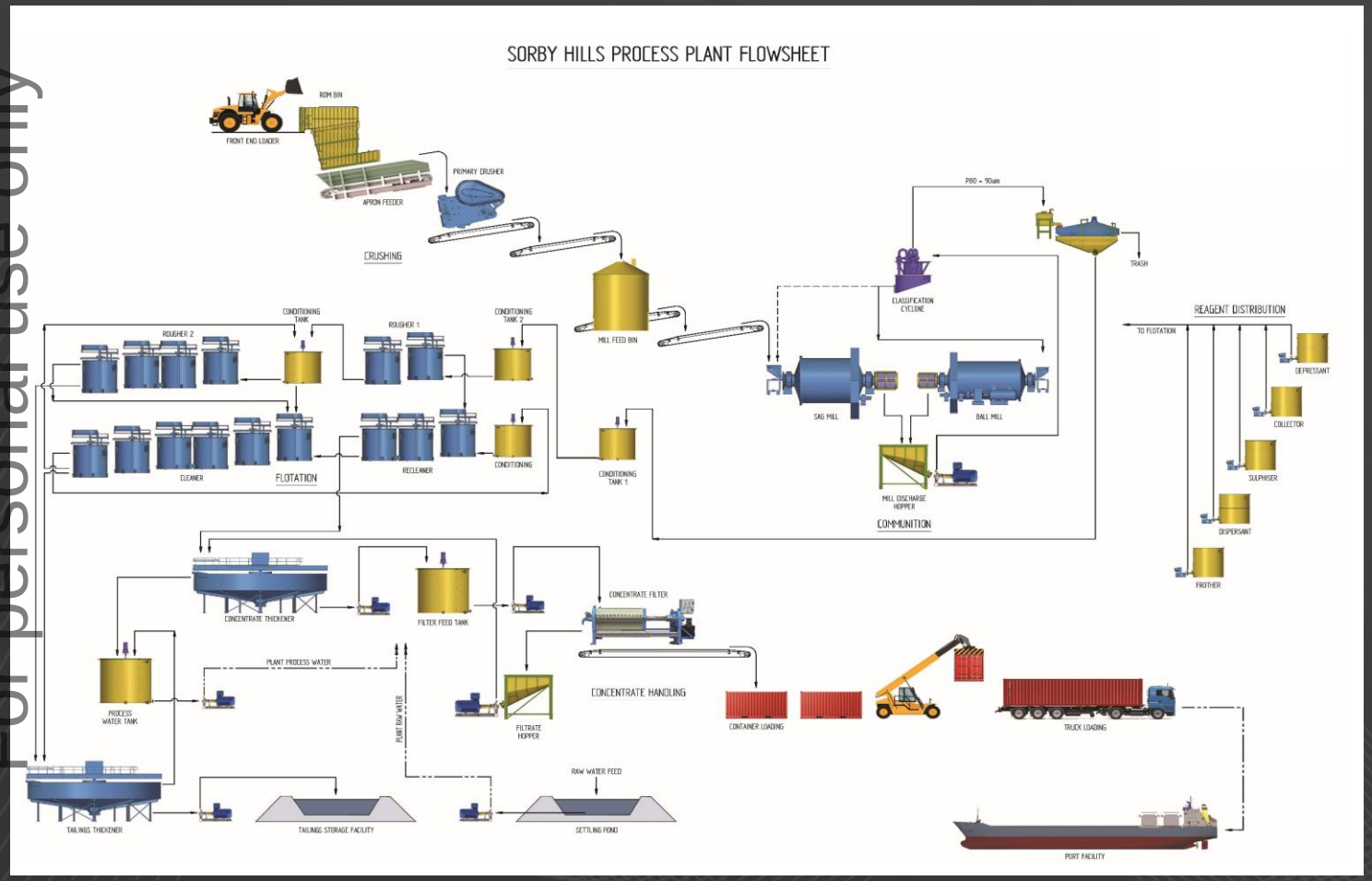


*Figure: Sorby Hills Process Flow Sheet. Conventional Crush Mill Float Process Plant*

- **Conventional Process Plant** design supported by extensive metallurgical testwork and process engineering.
- **GR Engineering Services ("GRES")** selected as **preferred tender** for Process Plant EPC.
- **Feed Capacity of 2.25Mtpa** (a 50% increase on that included in the Sorby Hills PFS).
- Average **103ktpa Lead-Silver Concentrate** production.

# Sorby Hills Project
## Path to Market

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**Agreement for Access** and Stevedoring Service executed with **Cambridge Gulf** with respect to **Wyndham Port**.

**Term extending to April 2034** with an **automatic rollover** on a 12-monthly basis.

Wyndham Port is located **150km by existing sealed** road from Sorby Hills.

Wyndham Port is the **only deep-water port between Broome and Darwin.**

Port operations and management are currently overseen by **Cambridge Gulf.**

**Concessional Loading application to reduce mine to port haulage costs.**

# Sorby Hills Project
## Project Optimisation Workstreams

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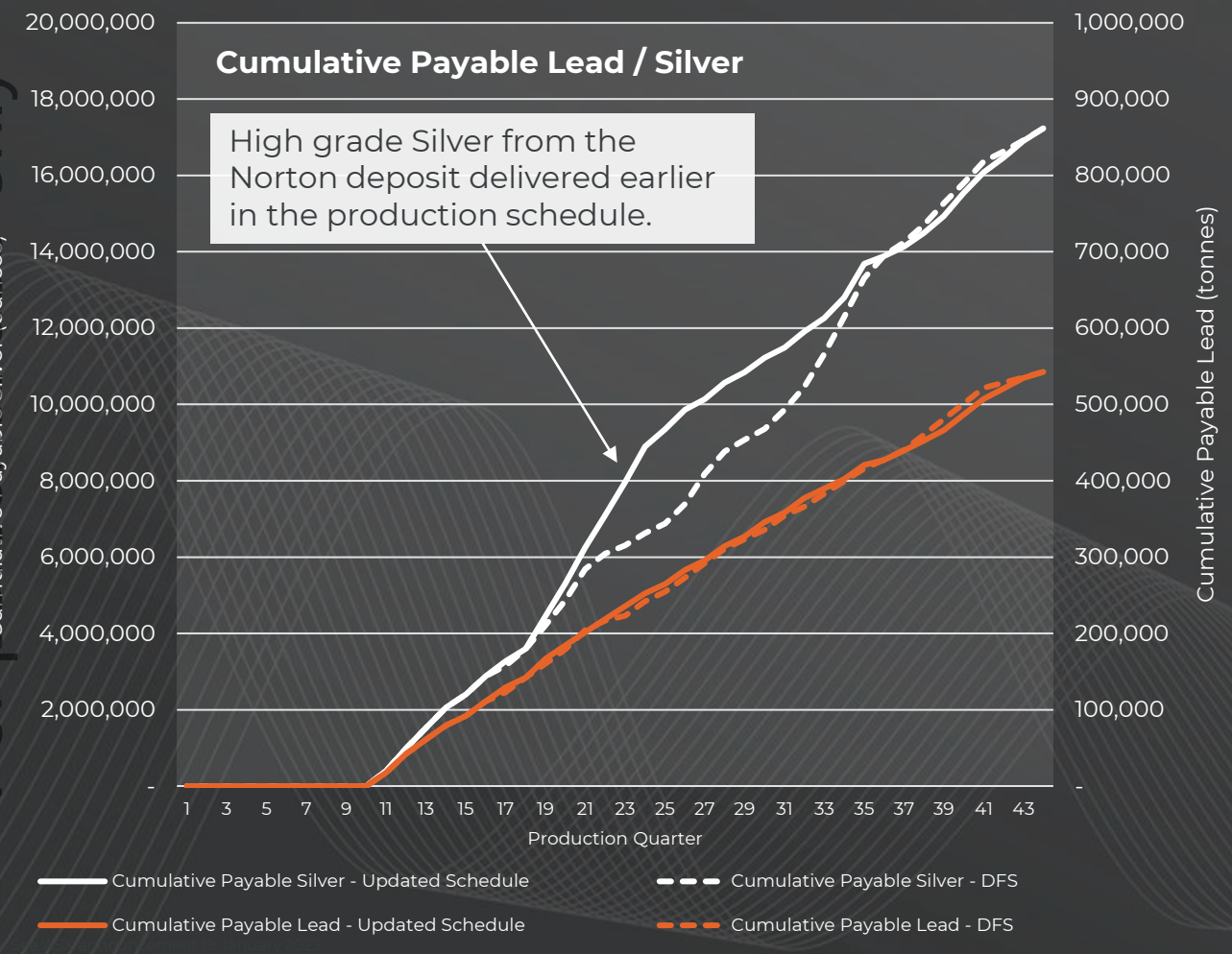
- Boab is undertaking a series of **Project Optimisation Workstreams** in conjunction with Front-End Engineering and Design ("**FEED**") to explore opportunities further improve Project economics ahead of a Final Investment Decision.

  1. **an updated tailings strategy** to allow for the higher-grade Norton deposit to be mined earlier thus bringing forward increased metal production and revenue;
  2. **completion of FEED** resulting in a more **detailed process plant design and optimised plant layout**;
  3. **updated tendered pricing for the process plant** from GR Engineering Services ("**GRES**") based on the FEED outcomes and current raw material and labour costs. **The update is a negligible change from the DFS pricing;**
  4. **additional metallurgical test work to refine conservative metal recoveries at the Norton Deposit** that were necessarily adopted for the DFS due to limited core availability at the time;
  5. **updated power strategy** that reduces, and possibly removes, the requirement for a fully sized diesel plant on-site generated back up on site, thus **further reducing power costs and exposure to diesel fuel price fluctuations**; and
  6. **updated tendered pricing for mining and bulk earthworks contracts**. The mining and bulk earthworks contracts were tendered for the DFS at the height of post COVID inflation. The Company is confident the **updated tenders will deliver more competitive pricing.**

- The results of the Project **Optimisation Workstreams will be incorporated into a FEED Study** with the intention that this study is **released to the market in Q1 2024.**

# Sorby Hills Project

## Updated Tailings Strategy to enhance Metal Production




- The DFS tailings strategy incorporated both above-ground tailings storage within an integrated waste landform ("**IWL**") and in-pit tailings deposition.
- Boab has determined that the footprint of the proposed IWL is sufficient to support additional raises that will provide capacity for approximately 6 years of above-ground tailings storage.
- The **updated strategy allows for higher grades from the Omega and Norton pits to be mined earlier** thus replacing the lower grade ore from the Omega South pit in the Mining Schedule

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# Sorby Hills Project

## Detailed Design and Optimised Plant Layout

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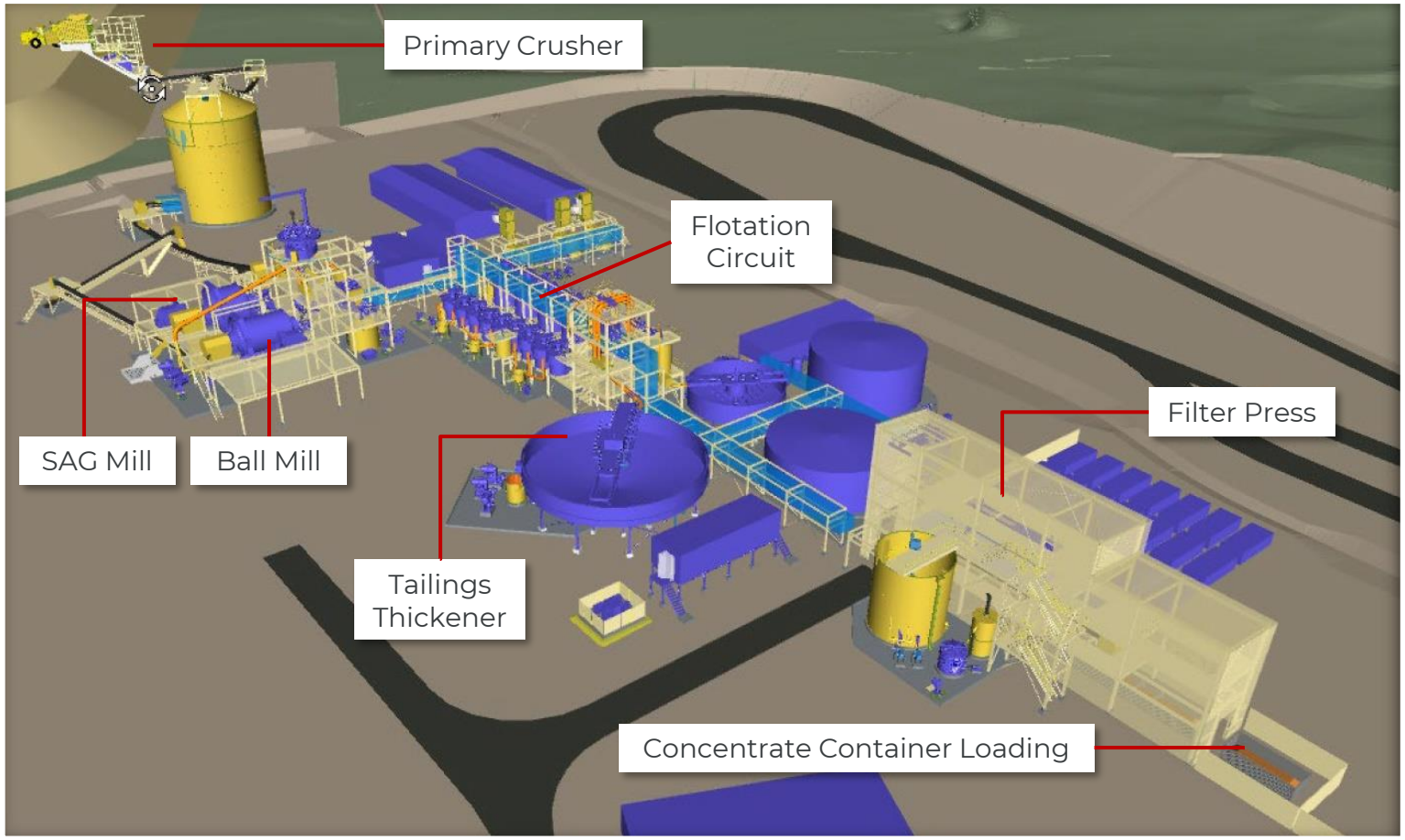


*Figure: 3D Model of the Sorby Hills Process Plant produce by GRES during FEED.*

- GRES has completed **FEED Workstreams**
- FEED output has resulted in:
  - **detailed plant design;**
  - **optimised site layout;**
  - the issue of tender packages for **long-lead items; and**
  - **updated EPC pricing consistent with EPC pricing adopted in the DFS.**
- Options to reduce costs have been identified by GRES.
- EPC Contract Award upon FID.

# Sorby Hills Project

## Metallurgical Testwork to enhance Metal Recoveries

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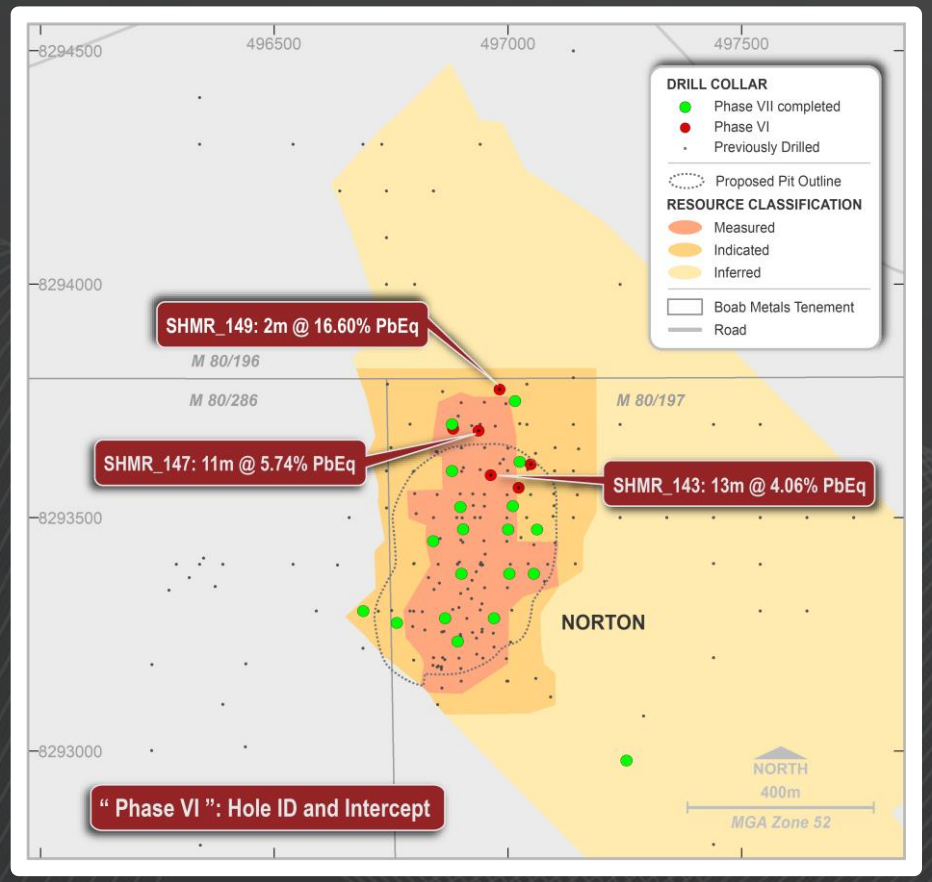


*Figure: Location of previous drilling and Phase VII drilling relative to an outline of the currently proposed Norton Deposit open pit design.*

- **Phase VII Drilling Program completed. Assay results targeted for late October / early November 2023.**
- **Metallurgical drill holes completed** at the Norton Deposit. New testwork will target a significant increase to the conservative metal recoveries adopted in the DFS.
- Testwork Program expected to be completed Q1 2024. If successful, this will allow reoptimistion of the Norton pit design to **increase mine life.**

**Summary of DFS metal recoveries**

| Ore Type | Avg. Pb Recovery | Avg. Ag Recovery |
|---|---|---|
| A Pit | 95% | 84% |
| B Pit | 94% | 84% |
| Norton | 78% | 78% |
| Omega | 93% | 70% |
| Beta | 90% | 87% |
| **Overall Average** | **91%** | **82%** |

# Sorby Hills Project
## Clean Power Solution

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- Heads of Agreement executed with **Horizon Power** with respect to a future **Power Purchase Agreement** for Sorby Hills.
- **Key Indicative Terms**
  - Delivery of firm power over a **10-year term** with a purchaser option to extend; and
  - **Cleaner, cheaper electricity sourced from Ord River hydroelectric plant** modelled to provide +90% of power to the Project.
- **Optimised solution being investigated whereby the need for diesel power back-up assumed in the DFS is reduced or potentially removed.**
- Opportunity to enhance the clean energy credentials of the Project with lower operating costs.

*Figure: Members of the Boab and Horizon Power teams on site at the Ord-Hydro Power station.*

# Sorby Hills Project

## Updated tenders to reprice key contract packages

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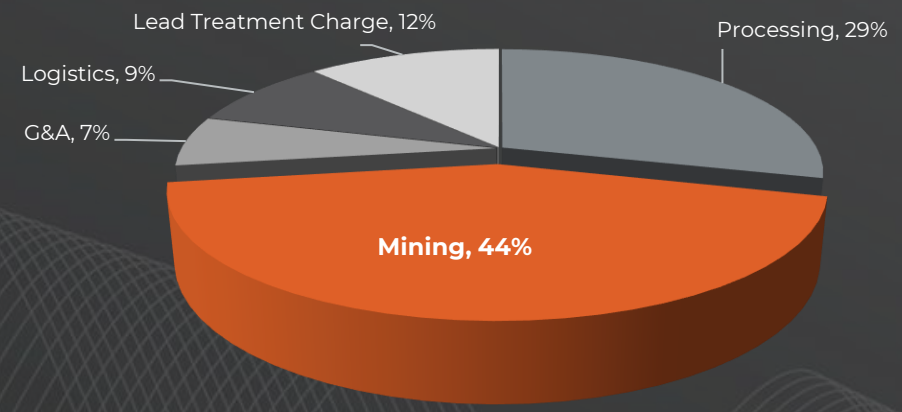
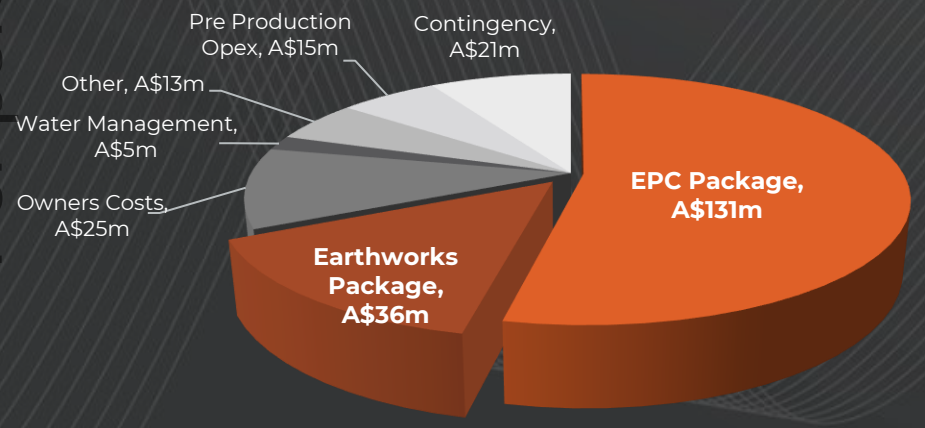
### DFS C1 Operating Costs (%)




### DFS Pre-production Capital Costs (A$m)




### Mining Costs

- Mining comprised 44% of the DFS Operating Costs.
- Tenders for the Mining Contract were received in 2022 during the height of post-COVID inflation.
- A refreshed mining tender based on the updated tailings strategy and mining schedule is ongoing.

### EPC and Earthwork Capital Costs

- Tendered EPC and Earthworks Packages comprised nearly 70% of the DFS Pre-Production Capex.
- Updated tendered pricing from GRES for the EPC Contract on the back of FEED has delivered a result consistent with the DFS.
- Retendering for the Earthworks Package based on an optimised site layout and bundling with the Mining Package is ongoing.

**The Company is confident the updated tender processes will deliver more competitive pricing.**

# Sorby Hills Project

## Near-term opportunity to upgrade Mineral Resource

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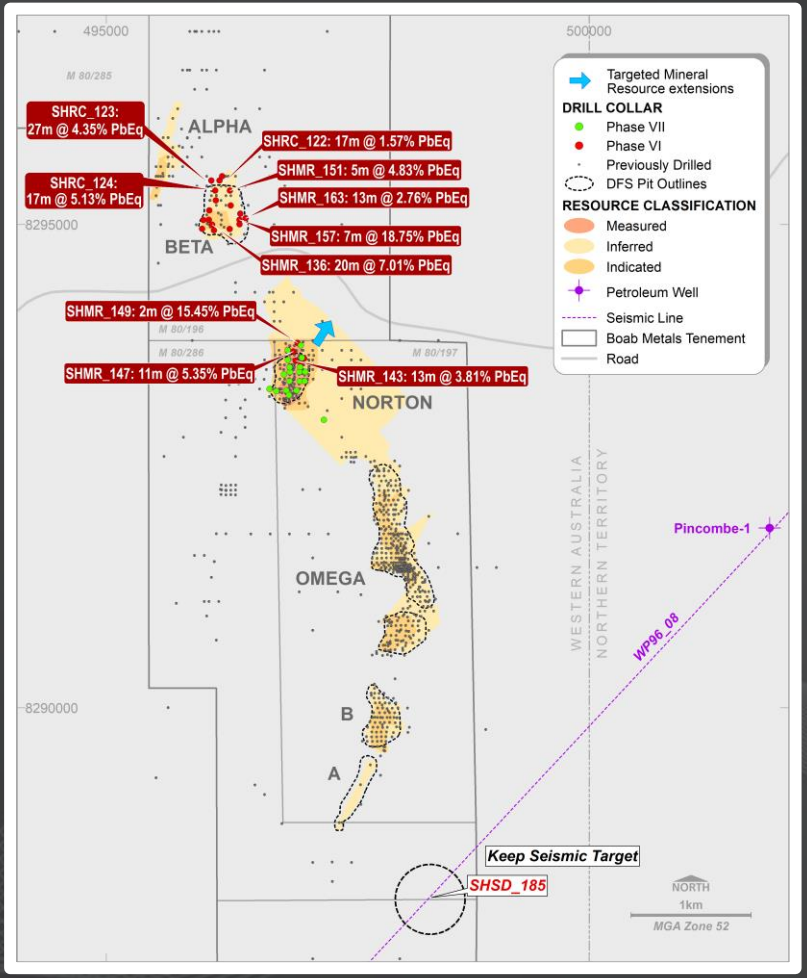
**Phase V – 15 holes not yet included in Mineral Resource Estimate**

- **SHRC_123** (Beta): **27m @ 3.47% Pb & 37g/t Ag from 34m:**
  - Incl. 3m @ 7.04% Pb & 95g/t Ag from 35m; 5m @ 5.60% Pb & 44g/t Ag from 45m; and 6m @ 4.50% Pb & 49g/t Ag from 55m.
- **SHRC_124** (Beta)**:** 17m @ 3.51% Pb & 46g/t Ag from 49m:
  - Incl. 8m @ 6.93% Pb & 90g/t Ag from 57m.
- **SHRC_129** (Wildcat): 6m @ 5.37% Pb & 21g/t Ag from 12m down hole.

**Phase VI – 28 holes not yet included in mineral Resource Estimate**

- **SHRC_157** (Beta): **7m @ 19.17% PbEq, (16.23% Pb & 82g/t Ag)** from 72m
  - Incl. 3m @ 41.38% PbEq, (35.26% Pb & 174g/t Ag) from 72m.
- **SHRC_136** (Beta): **20m @ 7.39% PbEq, (5.58% Pb & 52g/t Ag)** from 65m
  - Incl. 8m @ 13.86% PbEq, (10.49% Pb & 96g/t Ag) from 77m.
- **SHRC_151** (Beta): 5m @ 5.13% PbEq, (3.70% Pb & 41g/t Ag) from 45m.
- **SHRC_163** (Beta): 13m @ 2.90% PbEq, (2.26% Pb & 18g/t Ag) from 49m.
- **SHRC_149** (Norton): **2m @ 16.64% PbEq, (10.92% Pb & 163g/t Ag)** from 103m *(terminated in mineralisation).*
- **SHRC_147** (Norton): 11m @ 5.74% PbEq, (3.84% Pb & 54g/t Ag) from 86m.
- **SHRC_143** (Norton): 13m @ 4.06% PbEq, (2.82% Pb & 35g/t Ag) from 95m.
  - Incl. 5m @ 5.35% PbEq, (3.91% Pb & 41g/t Ag) from 95m.

**Phase VII (Assays Pending) – 21 holes not yet included in Mineral Resource Estimate**



# Sorby Hills Project

## Near-term opportunity to increase production target

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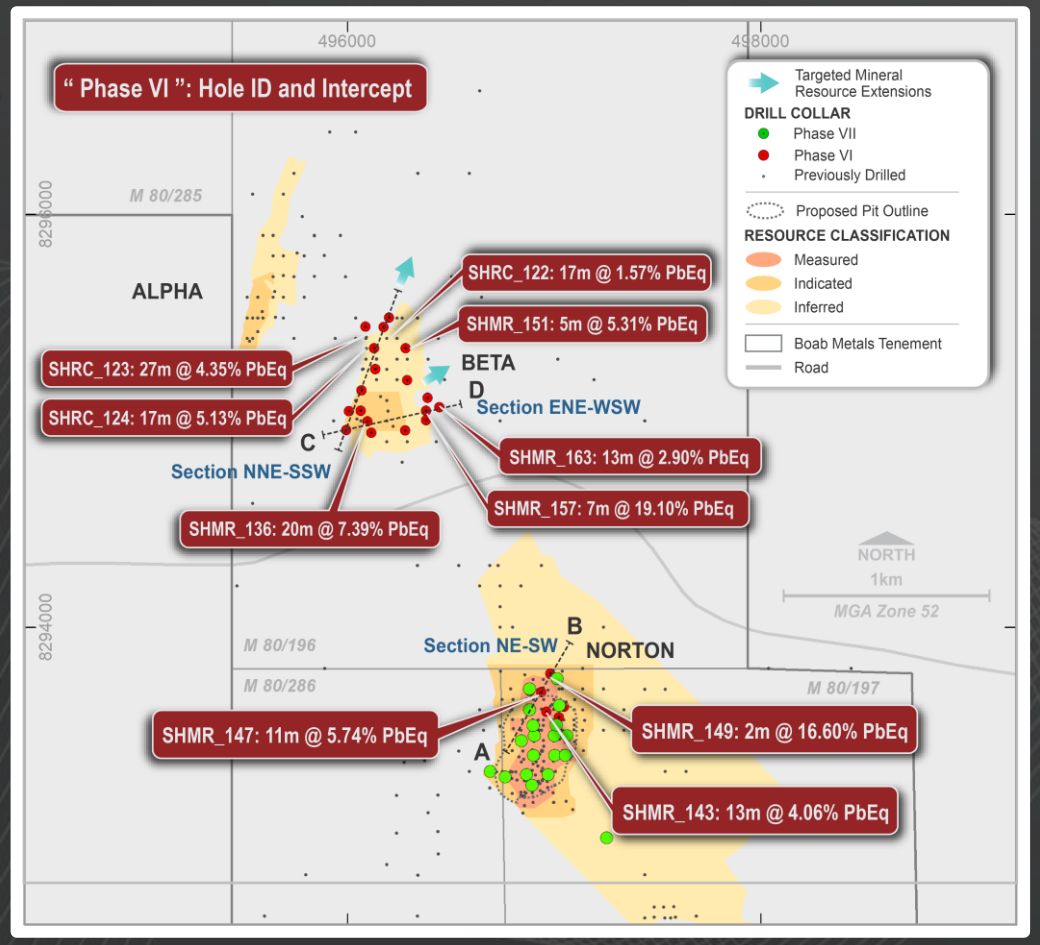


*Figure: Assay results from recent drill holes not yet included in Mineral Resource*

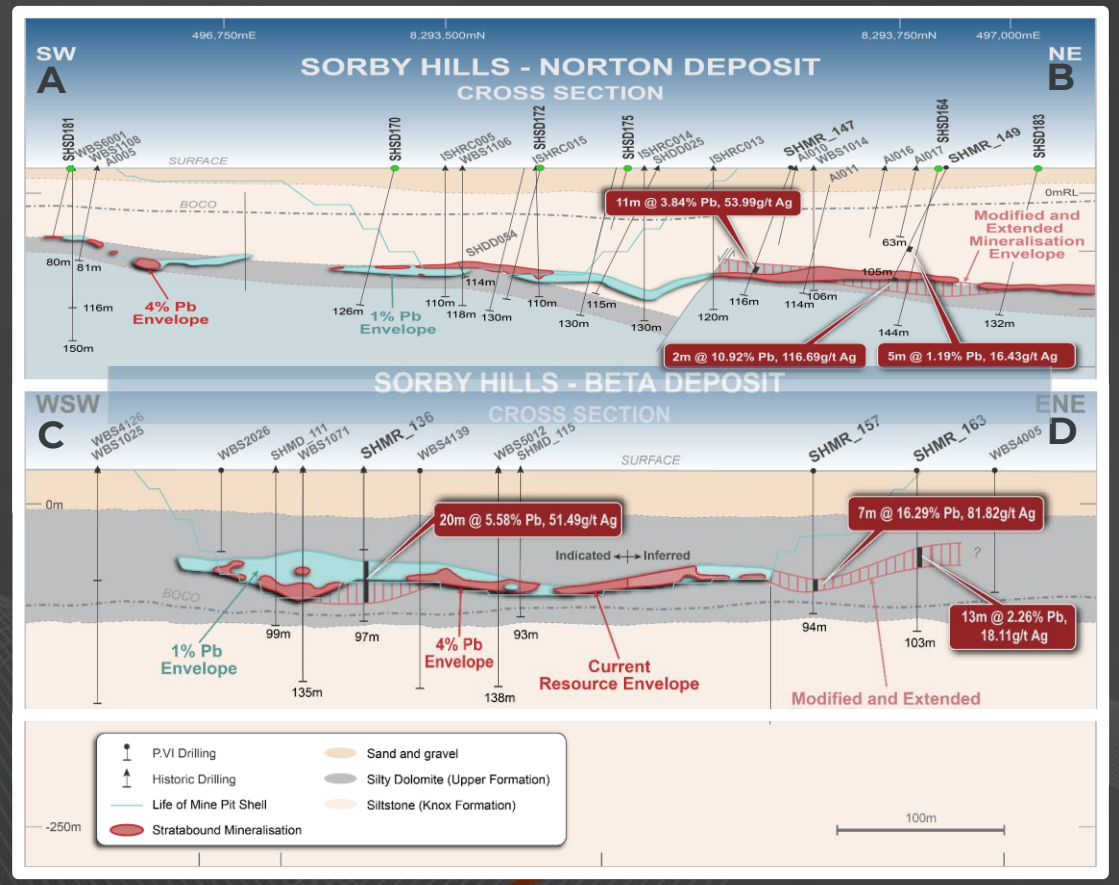


*Figure: Norton deposit cross Section showing the position of recently completed drill holes, intercepts and reinterpreted outline of the mineral resource envelopes and the current open pit outline.*

# Sorby Hills Project

## Progress towards a Final Investment Decision

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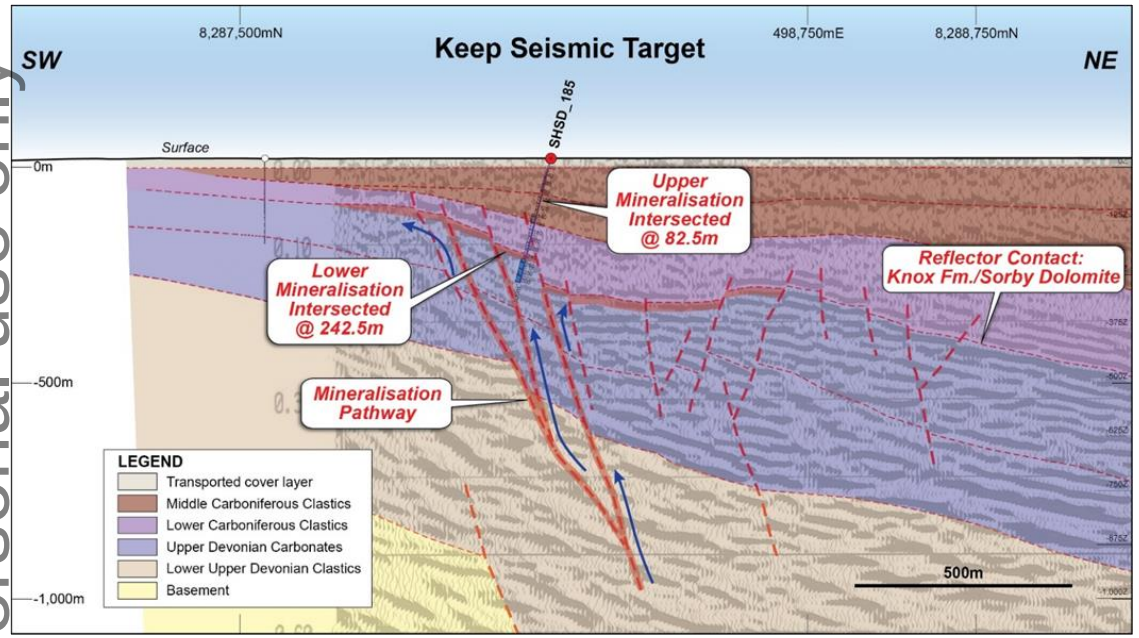
- **FEED Workstreams largely complete.**
- **Independent Technical due diligence largely complete.**
- **Optimisation Workstreams delivering positive results.**
- **Mining Leases granted**, **EPA Approval in place.**
- **Independent ESG status review** against global environmental standards including the **Equator Principles** complete**.**
- Boab has engaged **BurnVoir Corporate Finance** to arrange a **project finance** solution for the Sorby Hills Project.
- The Company is engaged with **Australian Government financing agencies, commercial banks, mining finance funds and offtakers** to secure a **fit for purpose project financing** solution that minimises shareholder dilution.
- **Advanced Stage Negotiations** with **Offtakers** including **international and domestic traders and smelters** to be concluded ahead of a Final Investment Decision.

*Figure: Vessel loading activities at Wyndham Port (Image courtesy of Cambridge Gulf).*

# Boab Metals Limited
## Strategic Growth Opportunities




*Figures: Section of Keep Seismic Target showing basin margin faults and favorable stratigraphic horizon. Massive replacement style sphalerite (ZnS) and galena (PbS)*

**Keep Seismic Target.**

- 1st drill hole potential discovery hole (**2 km south of existing Sorby Hills reserves**)
- Possible ***New Zone*** *with* scope for extensive development of mineralisation

**Intersected**

- **Upper Mineralised Zone:**:~5m of stratiform bands and disseminated mineralization from 82.5m
- **Lower Mineralised Zone:** ~14m of stratiform MVT zinc and lead sulphides bands and disseminated mineralization from 242.5m

**Assays Due**

- Late October/Early November

**Future**

- Aggressive drill program to test the potential for an economic mineral deposit.

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# Boab Metals Limited
## Strategic Growth Opportunities

**Boab owns a 100% interest the Eight Mile Creek - Exploration Licence E80/5317**

**Key highlights include:**

- ✓ Exploration Tenements covering **206 km²** of relatively underexplored tenure **immediately south of Sorby Hills.**
- ✓ 30km of along-strike geology, **highly prospective for deposits similar to Sorby Hills.**
- ✓ Structure and stratigraphic targets developed based on an interpretation of new gravity data, soil sampling and geological interpretation.
- ✓ **Scout drilling has confirmed the existence of a favourable stratigraphic setting and fluid traps** that may host mineralisation similar to that observed at Sorby Hills.
- ✓ **Intercepted anomalous mineralisation** including 9m at 220ppm Pb and about 100ppm Zn in EMRC_005 from 121m.
- ✓ The **success at the Keep Seismic Target has** opened the door for more bold exploration

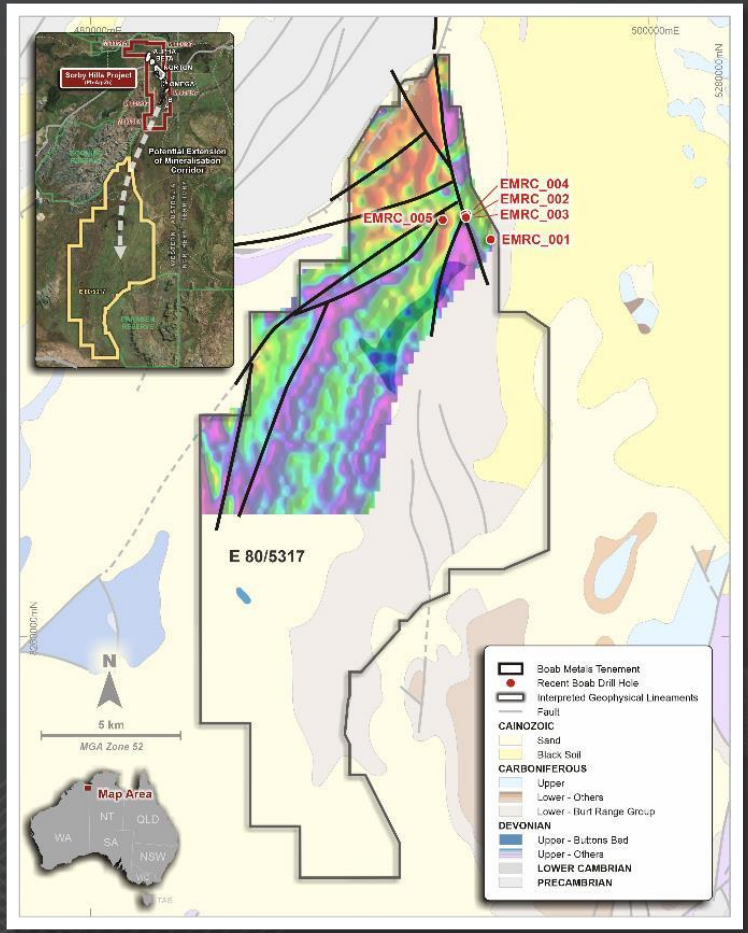


*Figure: Location of Eight Mile Creek Project relative to the Sorby Hills Projects.*

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# Boab Metals Limited
## Strategic Growth Opportunities

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**Boab owns a 100% interest in the Manbarrum Zinc-Lead-Silver Project**

**Key highlights include:**

- ✓ Manbarrum is strategically **located 25km east of the Sorby Hills Lead-Silver Zinc Project.**
- ✓ **Conceptual open pit mining studies completed by** CSA Global in 2018 identified the opportunity to improve project economics via toll treating at a future plant located at Sorby Hills.
- ✓ **Mineral Resources declared at two prospects** within the Manbarrum project area[1].
- ✓ 175km$^2$ of prospective tenements (including two granted mining leases) covering **geology genetically related to that found at Sorby Hills** allowing for an effective transfer of technical knowledge[2].

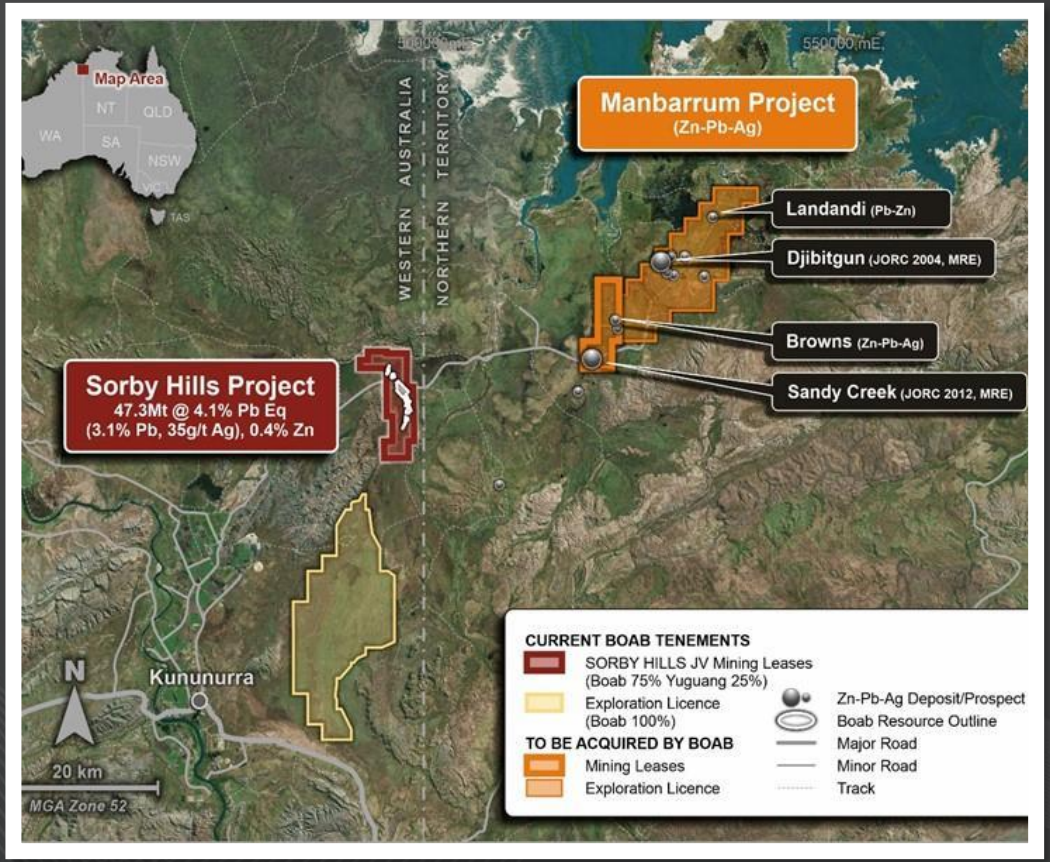


*Figure: Location of Manbarrum relative to the Sorby Hills and Eight Mile Creek Projects.*

[1] Refer to the Todd River Resources prospectus dated 4 April 2017
[2] Refer BML Announcement 21 July 2021

# Boab Metals Limited

## Establishing Deep Roots within the Community and supporting better outcomes

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**Boab is extremely proud to be the Naming Rights Sponsor of the Ord Valley Muster for 2023 and beyond.**

- Sense of community plays a key role in economic and social well-being of stakeholders across the east Kimberley Region.
- The Ord Valley Muster has been a highlight of the Kimberley community calendar for 20 years.

**Boab is an enthusiastic supporter and active contributor to the Teach Learn Grow program.**

- Boab Metals has been partnering with Teach Learn Grow (TLG) since 2021 in the delivery of their Rural Program which supports one-on-one tutoring and mentorship to students in East Kimberley schools.

**Images: Ord Valley Muster 2023 and Simon Noon - Managing Director/CEO with team at Teach Learn Grow, East Kimberley**

tlg
Teach Learn Grow

BOAB METALS
ORD VALLEY Muster
19-27 MAY 2023

# Boab Metals Limited

## Establishing Deep Roots within the Community and supporting better outcomes

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**Heads of Agreement** executed with the Shire of Wyndham and East Kimberley ("**SWEK**") for the construction and long-term lease of a new accommodation Facility located in Kununurra.

**Key Indicative Terms:**

- Boab to fund **pre**-construction work in return for securing a **10-year lease** for the facility with an option to extend for a further 5 years. **Pre-construction costs will be rebated** against leasing costs.
- **SWEK will fund** and oversee detailed design and **construction of the facility**.

**The agreement is further evidence of the synergies and significant economic opportunities between the Sorby Hills Project and the East Kimberley community.**

*Kununurra township of Kununurra in the east Kimberley region*

# Sorby Hills Joint Venture

## Boab (75% interest)
## Henan Yuguang Gold and Lead Co., Ltd (25% contributing interest)

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- Yuguang Gold and Lead Co., Ltd ("**Yuguang**") is **Asia's largest electrolytic lead producer** and China's largest Silver producer.[1]
- Initially invested in Sorby Hills Joint Venture in 2010.
- **Listed on the Shanghai Stock Exchange** (600531).
- **Market Capitalisation of A$1.3B.**[2]
- 3,600 Employees.[1]
- Yuguang Lead and Silver products are London Metal Exchange ("**LME**") and the London Bullion Market Association ("**LBMA**") registered.
- Committed to environmental protection and development through improvement and innovation.

1. www.yggf.com.cn
2. Based on AUD:RMB : 4.74

豫光金铅 YUGUANG GOLD & LEAD

# Sorby Hills Project

## Current focus and upcoming Share Price Catalysts

- **Continue engagement with potential financers.**
- **Release Assay Results** for the Phase VII Drilling Program.
- Receive **updated Mining and Bulk Earthworks contracts tenders** based on updated mining schedule and optimised site layout.
- **Receive EPA s45c amendment approval** and EPBC reconfirmation based on the updated Project design.
- Work with GRES and Horizon Power on an **enhanced power strategy** that reduces or removes need for diesel back-up on-site.
- Complete **metal recovery optimisation** and **potential open-pit enlargement** at the Norton deposit.
- Complete **Independent Technical Due Diligence** for Lenders.
- Incorporate Project Optimisation results into a **FEED Study.**
- **Secure credit approved offer(s) from debt financiers.**
- **Execute Offtake Agreement(s).**
- **Reach a Final Investment Decision.**

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Simon Noon – Managing Director & CEO

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# Thank **You**

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# Appendix

# Board and Management

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Board and Management with a **proven track record** in exploration and development

## Gary Comb
Chairman

Engineer with over 30 years' experience in the Australian mining industry, with a strong track record in successfully commissioning and operating base metal mines.

## Simon Noon
Managing Director and CEO

Experienced mining executive with a strong background in management, capital raising and operating JV's with mid to top tier miners in a variety of commodities.

## Richard Monti
Non-Exec. Director

Geologist with over 30 years' experience in technical, commercial, marketing and finance within the exploration and mining industry.

## Andrew Parker
Non-Exec. Director

Lawyer with significant experience in the exploration and mining industry. Wealth of expertise in corporate advisory, strategic consultancy and raising capital.

# Technical Team

**Paul Hewitt** – Project Director

Paul has over 25 years in providing senior project delivery leadership within the Energy and Resource sectors for process and non-process infrastructure projects, for the full lifecycle from study phase through to execution within Australia and Internationally.

**Richard Flanagan –** Project Engineer

Mining engineer with extensive experience across a wide range of commodities, including several world class Silver-Lead-Zinc deposits and covers management roles across feasibility studies, development, commissioning and operations.

**Simon Dorling -** Exploration Manager

Geologist with more than 26 years' experience in exploration, development and the mining of base metals, precious metals, energy minerals and industrial minerals.

# Sorby Hills Definitive Feasibility Study

## Capital Costs

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**Tendered Pricing for 75% of Capital Costs** to reduce the risk of pre-FID cost escalation.

**Process Plant EPC comprises:**

- $82.9M – Supply Cost
- $41.6M – Installation Cost
- $5.8M – Freight Cost

**A$20M Contingency.**

**A$21M Owner Costs** including operational readiness items such as critical spares and build-up of owner's team.

| Item | Pre-production (A$M) | Sustaining (A$M) | Total (A$M) |
|---|---|---|---|
| Early Works / Bulk Earthworks / Road Construction | 9.9 | 15.7 | **25.6** |
| Process Plant and Non-Plant Infrastructure (NPI) | 130.5 | - | **130.5** |
| Tailings Storage and Evaporation Pond | 18.0 | 1.9 | **19.9** |
| Mine Water Settling Pond & Water Storage Facility | 12.4 | 21.3 | **33.7** |
| Accommodation refurbishment | 4.1 | - | **4.1** |
| Communications | 0.9 | - | **0.9** |
| Fuel Tanks | - | 1.3 | **1.3** |
| Concentrate Transport & Containers | 7.9 | - | **7.9** |
| Owners Cost | 25.3 | 5.8 | **31.0** |
| Project Development Contingency | 20.9 | - | **20.9** |
| Pre-Production Operating Costs | 14.6 | - | **14.6** |
| Mine Closure | - | 9.3 | **9.3** |
| **Total** | **244.6** | **55.2** | **299.8** |

# Sorby Hills Definitive Feasibility Study

## Operating Costs

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Competitive **C1 cash cost of US$0.39/lb payable Pb** (including Silver Credits).

**~80% of Mining Costs underpinned by tendered pricing** with opportunities for further schedule and cost optimisation through the contracting process.

**Opportunity to reduce Process costs** through the optimisation of back-up power requirements.

**Opportunity to reduce Logistics costs** via application of concessional loading for road haulage.

| Item | Total (A$M) | Unit Costs | |
|---|---|---|---|
| | | A$/t ore | US$/lb payable Pb |
| Mining | 591 | 32.4 | 0.34 |
| Processing | 391 | 21.4 | 0.22 |
| G&A | 88 | 4.8 | 0.05 |
| Logistics | 121 | 6.6 | 0.07 |
| Lead Treatment | 159 | 8.7 | 0.09 |
| C1 Costs (ex Credits) | **1,351** | **73.9** | **0.77** |
| Net Silver Credits | (660) | (36.1) | (0.38) |
| **C1 Costs** | **690** | **37.8** | **0.39** |
| Royalties | 94 | 5.2 | 0.05 |
| Sustaining Capital | 55 | 3.0 | 0.03 |
| **AISC** | **840** | **46.0** | **0.48** |

*Unit Operating Costs based on 18.3Mt of Ore, 543kt of Payable Lead, average exchange rate of AUD:USD 0.68 and average Silver price of US$27.4/oz.*

# Sorby Hills Definitive Feasibility Study

## Life of Mine Physicals

| PHYSICALS SUMMARY | Unit | Total | FY23 | FY24 | FY25 | FY26 | FY27 | FY28 | FY29 | FY30 | FY31 | FY32 | FY33 | FY34 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ROM Mined | Mt | 18.3 | - | - | 2.1 | 2.1 | 2.3 | 2.5 | 1.9 | 2.2 | 1.8 | 3.3 | - | - |
| Waste Mined | Mt | 134.6 | - | - | 11.7 | 11.6 | 12.2 | 24.3 | 26.1 | 25.6 | 19.6 | 3.5 | - | - |
| % Measured | % | 56.7% | - | - | 89.7% | 66.7% | 63.3% | 89.4% | 59.5% | 45.9% | 66.0% | - | - | - |
| % Indicated | % | 26.5% | - | - | 10.3% | 33.3% | 36.7% | 9.7% | 37.3% | 50.7% | 2.3% | 28.6% | - | - |
| % Inferred | % | 16.8% | - | - | - | - | - | 1.0% | 3.2% | 3.4% | 31.7% | 71.4% | - | - |
| Lead Grade | % | 3.4% | - | - | 4.1% | 3.2% | 3.5% | 2.8% | 3.0% | 3.6% | 4.0% | 3.4% | - | - |
| Silver Grade | g/t | 39 | - | - | 38 | 28 | 39 | 23 | 38 | 42 | 64 | 42 | - | - |
| Processed Tonnes | Mt | 18.3 | - | - | 1.15 | 2.12 | 2.25 | 2.25 | 2.26 | 2.25 | 2.25 | 2.25 | 1.49 | - |
| Lead Grade | % | 3.4% | - | - | 5.6% | 3.6% | 3.6% | 2.9% | 2.9% | 3.6% | 3.6% | 3.8% | 2.0% | - |
| Silver Grade | g/t | 39 | - | - | 46 | 34 | 39 | 25 | 35 | 41 | 56 | 44 | 31 | - |
| Lead Recovery | % | 91.0% | - | - | 90.3% | 94.2% | 94.1% | 92.8% | 93.7% | 90.6% | 83.1% | 90.3% | 90.3% | - |
| Silver Recovery | % | 81.8% | - | - | 87.3% | 86.4% | 87.1% | 87.4% | 87.2% | 83.0% | 78.5% | 70.4% | 72.9% | - |
| Concentrate Produced | kt | 872 | - | - | 91 | 109 | 115 | 93 | 92 | 114 | 111 | 108 | 38 | - |
| Lead Grade | % | 65.5% | - | - | 63.9% | 65.6% | 65.7% | 66.1% | 65.5% | 63.8% | 59.8% | 72.3% | 70.4% | - |
| Silver Grade | g/t | 665 | - | - | 501 | 574 | 666 | 520 | 737 | 665 | 890 | 654 | 873 | - |
| Payable Lead | kt | 543 | - | - | 55 | 69 | 69 | 57 | 62 | 67 | 62 | 75 | 28 | - |
| Payable Silver | Moz | 17.2 | - | - | 1.3 | 1.9 | 2.2 | 1.4 | 2.1 | 2.1 | 3.0 | 2.1 | 1.1 | - |

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# Sorby Hills Definitive Feasibility Study

## Life of Mine Cash Flows

| FINANCIAL SUMMARY | Unit | Total | FY23 | FY24 | FY25 | FY26 | FY27 | FY28 | FY29 | FY30 | FY31 | FY32 | FY33 | FY34 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead Revenue | A$M | 1,789.7 | - | - | 177.1 | 223.9 | 227.2 | 187.0 | 206.2 | 221.5 | 205.6 | 248.7 | 92.4 | - |
| Silver Revenue | A$M | 691.7 | - | - | 49.1 | 73.4 | 87.3 | 57.2 | 86.7 | 86.7 | 122.5 | 85.2 | 43.7 | - |
| Total Revenue | A$M | 2,481.4 | - | - | 226.1 | 297.3 | 314.5 | 244.3 | 292.9 | 308.2 | 328.2 | 333.9 | 136.0 | - |
| Lead Treatment | A$M | (159.5) | - | - | (16.1) | (19.9) | (20.2) | (16.5) | (18.4) | (20.2) | (20.2) | (20.2) | (7.7) | - |
| Silver Refining | A$M | (31.6) | - | - | (2.3) | (3.4) | (4.0) | (2.6) | (3.9) | (3.9) | (5.6) | (3.9) | (2.0) | - |
| Royalties | A$M | (94.3) | - | - | (8.8) | (11.5) | (12.0) | (9.5) | (11.0) | (11.7) | (11.7) | (13.0) | (5.1) | - |
| Net Revenue | A$M | 2,196.1 | - | - | 198.9 | 262.5 | 278.3 | 215.6 | 259.6 | 272.3 | 290.6 | 296.8 | 121.3 | - |
| Logistics | A$M | (121.0) | - | - | (12.4) | (15.1) | (15.6) | (12.7) | (13.5) | (15.5) | (15.4) | (15.2) | (5.6) | - |
| Mining | A$M | (591.1) | - | - | (46.2) | (59.3) | (61.5) | (90.7) | (104.6) | (105.1) | (80.0) | (43.6) | (0.1) | - |
| Processing | A$M | (391.0) | - | - | (31.5) | (45.6) | (47.1) | (47.0) | (46.8) | (46.6) | (46.7) | (47.1) | (32.6) | - |
| G&A | A$M | (88.0) | - | - | (8.6) | (10.3) | (10.3) | (10.4) | (10.4) | (10.4) | (10.4) | (10.3) | (6.9) | - |
| Operating Cash Flow | A$M | 1,005.0 | - | - | 100.1 | 132.1 | 143.9 | 54.9 | 84.2 | 94.8 | 138.2 | 180.6 | 76.1 | - |
| Upfront Capex | A$M | (244.6) | (31.5) | (176.9) | (36.3) | - | - | - | - | - | - | - | - | - |
| Sustaining Capex | A$M | (55.2) | - | - | (35.7) | (6.8) | (2.0) | (0.1) | - | (1.3) | - | - | (5.0) | (4.3) |
| Net Cash Flow | A$M | 705.2 | (31.5) | (176.9) | 28.1 | 125.4 | 141.9 | 54.8 | 84.2 | 93.5 | 138.2 | 180.6 | 71.1 | (4.3) |
| Cumulative Cash Flow | A$M | | (31.5) | (208.4) | (180.3) | (54.9) | 87.0 | 141.8 | 226.0 | 319.5 | 457.7 | 638.3 | 709.5 | 705.2 |

| | | |
|---|---|---|
| $NPV_8$ | A$M | 369.7 |
| IRR | A$M | 35% |
| Average EBITDA | A$M | 119.4 |
| Operating Margin | % | 41% |

Revenue and Exchange assumptions were based on the Lead, Silver and A$:US$ Forward Curves as at 16th January 2023. Full details of the Prices assumptions are provided in the Appendix.

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# Metal Equivalent calculation

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

- Lead Price US$2,253/t; and
- Silver Price US$27.4/oz.

**Pb**

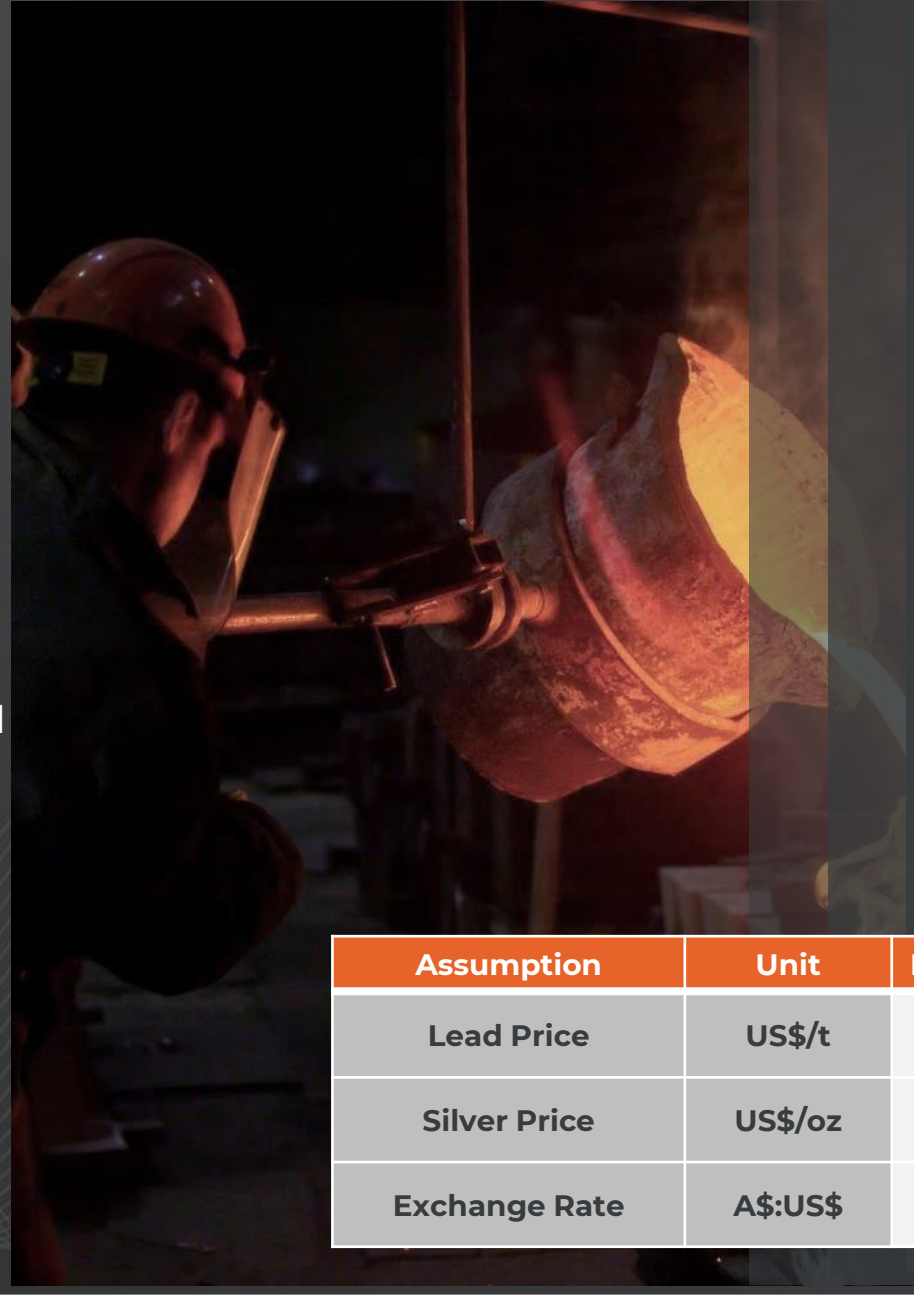
### Lead Equivalent Calculations

- Silver recovery of 82% (weighted average of oxide and fresh Ag recoveries); and
- Silver Payability rate of 95%.

**Ag**

### Silver Equivalent Calculations

- Lead recovery of 91% (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:

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

*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 DFS 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.

# Macroeconomic Assumptions

| Assumption | Unit | FY2023 | FY2024 | FY2025 | FY2026 | FY2027+ |
|---|---|---|---|---|---|---|
| Lead Price | US$/t | 2,259 | 2,268 | 2,269 | 2,254 | 2,251 |
| Silver Price | US$/oz | 24.8 | 25.8 | 26.4 | 27.3 | 27.5 |
| Exchange Rate | A$:US$ | 0.70 | 0.70 | 0.70 | 0.69 | 0.68 |

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