

## Hawsons Declares 2.3Bt Probable Ore Reserve Estimate and Completes the Pre-Feasibility Study

Hawsons Iron Ltd (**Hawsons** or the **Company**) is pleased to announce the declaration of a Probable Ore Reserve Estimate and the results of the Pre-Feasibility Study (**PFS**) on the 100% owned Hawsons Iron Project (**Project**), located in the Braemar region of New South Wales.

### Highlights

- **2.3Bt Ore Reserves Estimate declared**
  - PFS supports the reporting of a JORC compliant Probable Ore Reserve Estimate for the Project of 2,300Mt at an average grade of 11.7% DTR and 16.7% total iron.
- **PFS Completed**
  - The independently prepared PFS for the Project has defined a robust project development strategy based on producing up to 12Mtpa of +68% Fe, magnetite concentrate with a Life of Mine of 26 years, based only on the Company's 2,300Mt Ore Reserve;
  - The outcomes of the PFS resulted in positive technical and financial outcomes and support the development potential of the Project in the current iron price environment;
  - The PFS results provide Hawsons the confidence to advance the Project towards a full Feasibility Study and also provide a clear road map of upside opportunities to pursue.
- **Project Physicals**
  - Production target of 257 million tonnes (**Mt**) of magnetite concentrate over 26 year mine life;
  - Average magnetite concentrate grade of 68.6%;
  - Production target limited to Probable Ore Reserves only.
- **Project Economics**
  - Pre-tax IRR of 10.93%;
  - Pre-tax NPV<sub>8</sub> of \$AU 1,360M at a product price of \$US140/t and an AU/US exchange rate of \$0.65/\$1.00;
  - Approximate payback period of 13.5 years from commencement of Engineering, Procurement, and Construction Management (**EPCM**) and 10.5 years from first concentrate production;
  - Undiscounted Life of Mine revenue of \$AU 55.2B and cumulative pre-tax cashflows of \$AU 13.1B;
  - Total initial capital of \$AU 4.96B for mine development, processing, and infrastructure over 2 construction stages:
    - \$AU 3.91B Phase 1 production; and
    - \$AU 1.05B deferred for 4 years post-production (Phase 2).
  - C1 cost of \$US 49.34 and CFR cost of \$US 89.94 per dry metric tonne (**dmt**).
  - Total Project funding requirement of \$AU 4.427B



Following previous work on the [Dry Processing Circuit](#), the Company undertook a PFS with the following goals:

- Establish an Ore Reserve to demonstrate Hawsons Resources are economically viable;
- Assess the economic viability of the Project, based solely on the Ore Reserves, using the revised dry processing approach;
- Highlight risks and opportunities to be addressed in future works and studies; and
- Determine the forward works plan.

The Company is pleased to report Pre-Feasibility Study resulted in positive outcomes for all the above goals:

- Declaration of 2,300Mt JORC-compliant (2012) Probable Ore Reserve Estimate at an average grade of 11.7% DTR and 16.7% total iron. The Probable Ore Reserve Estimate, summarised in Table 5 in the Executive Summary, is for open cut mining, feeding a 100Mtpa processing plant at the Hawsons Project site. The Ore Reserve Estimate is based on the [latest Mineral Resource model updated in June 2024 and reported by HIO on 24 June 2024](#).
- The PFS demonstrates the economic viability of the Project, using a 26 year mine plan utilising only Ore Reserves, based on the current iron ore premium pricing, excluding premiums attributable to direct iron reduction (**DRI**) feed;
- The PFS identified key risks to be focused on as part of the full Feasibility Study and highlighted a number of opportunities that may have a material positive impact on the Project's metrics.
- A forward works plan for the coming year was also established and includes:
  - Confirmatory / optimisation test work at scale;
  - Completion of viability works on byproduct extraction;
  - Undertake further drilling to potentially expand and upgrade portions of the Mineral Resource to the Measured and Indicated Resource categories;
  - Complete large representative sample collection suitable for Vertical Roller Mills pilot work;
  - Optimisation works on waste management materials handling;
  - Commencement of the Feasibility Study; and
  - Environmental and permitting advancements to align with development timelines.

An Executive Summary of the Pre-Feasibility Study, prepared by Inmett Projects an independent expert, follows this announcement.

**Hawsons Chair, Jeremy Kirkwood, commented:**

*Completion of this detailed PFS is a significant milestone for the Company representing over 15 months of extensive work by a number of well regarded consultants. The results of the PFS confirm that Hawsons Iron is a very large, but ultimately straight forward, mining and mineral processing project which can produce a high grade, low impurity iron concentrate. Utilizing existing processing technologies which take advantage of Hawson's 'soft' ore and augmented existing infrastructure, Hawsons can deliver around 10-12 Mtpa of product to meet growing international demand for DRI feedstock and ultimately for 'greener' steel.*



Reflecting on the scale of the project, the upfront capital cost of A\$3.9 billion and construction period of 4 years is consistent with other similar projects and the C1 costs also compare favourably. The Board recognizes this funding requirement is, *prima facie*, a challenging one. However its confidence in achieving it is underpinned by the many favourable characteristics of the project including location, availability of water, power and transport, size and consistency of the resource and the support of experienced financiers, Cutfield & Freeman.

The Board welcomes the opportunity to now share the PFS with those parties that have patiently waited on its completion including shareholders, strategic investors, Government entities and financiers. Planning is under way to commence the final Feasibility Study in 2026 with some interim work being done to finalise the scope of the Feasibility Study. In particular this includes establishing the viability of a number of options (refer to the "Opportunities" section in the attached report). The potential positive impact of these options on the project economics warrants that this work is undertaken before the DFS commences.

On behalf of the Board, I would like to thank the HIO team (including our consultants), for their efforts in delivering this positive and comprehensive report on time and budget. The systematic and auditable approach implemented, demonstrates the technical maturity required for advancing one of Australia's largest magnetite discoveries toward commercial production.

**Hawsons Managing Director, Tom Revy, commented:**

Over the last 15 months, the Company has implemented a number of strategic changes that have substantially reduced both capital exposure and operational complexity. The Company eliminated the previously planned hydrometallurgical facility, opting instead for a 100% dry primary comminution circuit which has resulted in improved project environmental and economic outcomes; power was reduced by over 30% while water requirements fell by 60-70%.

The opportunities to further materially enhance outcomes (refer to Opportunities within the Executive Summary) have been identified and will be the focus of an accelerated interim program ahead of the commencement of the final Feasibility Study in 2026.

The plan for the Feasibility Study will be to expand the Reserve by infill drilling and to also include a significant portion of remaining Mineral Resources thereby potentially adding to the final life of mine period.



## Cautionary Statement

The Pre-Feasibility Study is based on the material assumptions outlined in this announcement regarding geology, metallurgy, processing, mining, capital and operating costs, and market conditions, and the availability of funding. While the Company considers that all of the material assumptions are based on reasonable grounds and have been developed with due diligence and based on available information, they remain subject to further refinement through additional exploration, technical studies, and economic assessments. Accordingly, there is no certainty that the material assumptions will prove to be correct or that the conclusions or outcomes presented in the Pre-Feasibility Study will be realised.

To achieve the range of outcomes indicated in the Pre-Feasibility Study, funding of approximately \$AUD 4.43B will likely be required. Investors should note that there is no certainty that the Company will be able to raise that amount of funding when it is required. It is also possible that such funding may only be available on terms that may be dilutive to, or otherwise affect the value of, Hawsons' shares. It is also possible that the Company could pursue other 'value realisation' strategies to provide alternative funding options including project finance, sale of a portion of the Project, the formation of a joint venture arrangement, or strategic arrangements with offtakers and the execution of such strategies would materially reduce the Company's ownership of the Project.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Pre-Feasibility Study.

## Mineral Resource Estimate – Hawsons Iron Deposit

*The information in this announcement relating to the Mineral Resource estimate and the Exploration Results for the Project is extracted from the Company's announcement '[Hawsons Drilling Program and Resource Update Completed](#)' dated 24 June 2024.*

*The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in respect of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the original market announcement 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 original market announcement.*

*The information in this announcement which includes the Executive Summary that relates to the Mineral Resource estimate underpinning the Ore Reserve for the Project is based on information compiled by Mr Simon Tear, a Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Tear is a director of H & S Consultants Pty Ltd. Mr Tear has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code"). Mr Simon Tear consents to the inclusion in this announcement of the Mineral Resource estimate in the form and context in which it appears.*

## Ore Reserve – Hawsons Iron Deposit

*The information in this announcement which includes the Executive Summary relating to the reported Ore Reserves is based on, and fairly represents, information prepared by Mr John Wyche. The Ore Reserve estimate underpinning the Production Target for the Project has been prepared by Mr Wyche in accordance with the JORC Code. Mr Wyche is a Competent Person, a Fellow of the Australasian Institute of Mining and Metallurgy and a consultant of Australian Mine Design and Development Pty Ltd (AMDAD). Mr Wyche has sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking, to qualify as a Competent Person as defined in the JORC Code. Mr Wyche consents to the inclusion of the information in this announcement in the form and context in which it appears.*

ASX: HIO  
17 December 2025



## Forward-Looking Statements

This Announcement includes "forward-looking statements" within the meaning of securities laws of applicable jurisdictions. These forward-looking statements include, but are not limited to, statements regarding capacity, future production and grades, projections for sales growth, estimated revenues and reserves, targets for cost savings, projected capital expenditures, future cash flow and debt levels, the outlook for minerals prices, the outlook for economic recovery and trends in the trading environment and Hawsons' future expectations. Readers can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "continue," "could," "estimate," "expect," "forecast," "intend," "may," "plan," "potential," "predict," "project," "risk," "should," "will" or "would" and other similar expressions.

Hawsons has concluded that it has a reasonable basis for making the forward-looking statements contained in this announcement, including the Production Target and forecast financial information based on the Production Target. The basis for such conclusion is detailed throughout this announcement and all material assumptions, including the JORC modifying factors, upon which the forward-looking statements are based are disclosed in this announcement. However, forward-looking statements involve known and unknown risks, uncertainties and other factors that are, in some cases, beyond Hawsons' control. By their nature, forward-looking statements involve risks and uncertainties as they are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this announcement, are considered reasonable but which may not occur.

Forward-looking statements are subject to various factors which may cause Hawsons' actual results, performance, production or achievements to differ materially from those expressed or implied by the forward-looking statements (and from past results, performance or achievements). These factors include, but are not limited to, the failure to complete and commission the mine facilities, processing plant and related infrastructure in the time frame and within estimated costs currently planned, variations in global demand and price for magnetite, fluctuations in exchange rates between the U.S. Dollar and the Australian Dollar, uncertainty in the estimation of mineral resources and ore reserves, the failure of Hawsons' suppliers, service providers and partners to fulfil their obligations under construction, supply and other agreements, the inherent risks and dangers of mining exploration and operations in general, environmental risks, unforeseen geological, physical or meteorological conditions, natural disasters or cyclones, changes in government regulations, policies or legislation, breach of any of the contracts through which the Company holds property rights, defects in or challenges to the Company's property interests, uninsured hazards, industrial disputes, labour shortages, political and other factors, the inability to obtain additional financing, if required, on commercially suitable terms, reliance on key personnel and the retention of key employees, and global and regional economic conditions. Readers are cautioned not to place undue reliance on forward-looking statements.

The information concerning possible production in this announcement is not intended to be a forecast. They are internally generated goals set by the board of directors of Hawsons. The ability of the Company to achieve any targets will be largely determined by the Company's ability to secure adequate funding, implement mining plans, resolve logistical issues associated with mining and enter into any necessary off-take arrangements with reputable third parties. Although Hawsons believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties, and no assurance can be given that actual results will be consistent with these forward-looking statements.

Hawsons has no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this announcement, except where required by law or the ASX Listing Rules.

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### Pre-Feasibility Study and Ore Reserves Material Assumptions and Modifying Factors

The material assumptions and modifying factors that form the basis of the PFS and the Ore Reserves, the Production Target derived from the PFS, and the forecast financial information derived from the Production Target, are referenced in the below table.

The Company's evaluation of the Project is at an early stage, and although there are reasonable grounds for these assumptions, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the PFS will be achieved.

Material Assumption / Modifying Factor	Cross-References <i>(click on page number to jump to section)</i>	
	Executive Summary	Appendix 1
Mineral Resource Estimate model (including grade cut-off)	Pages 4-5 and 10	Pages 16 - 23
Mineral tenement and land tenure	Pages 2 and 8	Page 12
Metallurgical factors	Pages 13 – 15	Pages 31 - 34
Mining factors	Pages 10 – 12	Pages 26 – 31
Economic assumptions	Page 22	Pages 40 - 44
Cost factors and assumptions	Pages 19 – 21	Pages 37 - 39
Site infrastructure factors	Pages 16 – 18	Page 36
Environmental and Social factors	Pages 8 and 31	Pages 34 – 36 and 41 - 42
Regulations, Permits, Licences and Approvals factors	Page 8	Pages 34 – 35



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**2025**

# **PRE-FEASIBILITY STUDY**

## **EXECUTIVE SUMMARY**

This Executive Summary has been prepared by Inmett Projects as Project Manager of the Hawsons Iron Project and represents a compilation of information and data provided by independent third party contractors / consultants (refer to PFS Contributing Experts table on page 3)

**HAWSONS**

**ASX:HIO**



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The Pre-Feasibility Study (**PFS**) for the Hawsons Iron Project has defined a robust project development strategy based on producing up to 12Mtpa of +68% Fe magnetite concentrate, with a Life of Mine of 26 years, based only on the Project's 2,300Mt Ore Reserve.

The PFS demonstrates the Project has solid economics, with:

- JORC compliant Ore Reserve for the Project of 2,300Mt at an average grade of 11.7% DTR and 16.7% total iron;
- Pre-tax IRR of 10.93%;
- Pre-tax NPV<sub>8</sub> of \$AU 1,360M at a price of \$US 140/t conc (\$AU 215/t) and an AU/US exchange rate of \$0.65/\$1.00-reflecting current prices;
- Approximate payback period of 13.5 years from commencement of Engineering, Procurement, and Construction Management (**EPCM**) and 10.5 years from first concentrate production;
- Undiscounted Life of Mine revenue of \$AU 55.2B and cumulative pre-tax cashflows of \$AU 13.1B;
- Initial capital costs of \$AU 3,911M;
- Long-term C1 cash costs of \$AU 75.91/t concentrate.

Mineral Resource Estimate (**MRE**) for the Project total 4,415Mt at 11.4% DTR (cut-off grade 4% DTR), with 55% of the Resource classified as Measured and Indicated (ASX announcements 24 June 2024).

The Ore Reserve for the Project of 2,300Mt at an average grade of 11.7% DTR, has been defined in accordance with paragraph 36 of the JORC Code, 2012 Edition.

The project development timeline is as follows:

- Years 1 – 3: Engineering and Construction of non-processing infrastructure and processing trains 1 and 2
- Years 4 – 7: Phase 1 concentrate production ramping up to around 66Mtpa
- Year 7: Construction of processing train 3
- Year 8 onwards: Phase 2 production of 100Mtpa

Ore is processed via dry crushing, grinding and magnetic separation producing a rougher magnetite concentrate. This rougher concentrate is then processed in a wet grinding, magnetic separation and elutriation circuit, and filtered to produce a +68% Fe magnetite product for transport via rail and ship to customers. The Hawsons magnetite product is expected to be in high demand as feed stock to green steel production markets.

Land access and purchase agreements are progressing with final land requirements to be finalised during the Feasibility Study.

HIO continues to engage with the Broken Hill Local Aboriginal Land Council (**BHLALC**) as well as the Wilyakali and have developed such methodologies to include, consultation, communication and collaboration with all Registered Aboriginal Parties (**RAPs**) on all aspects of the Project's development.

During the PFS, the completion of additional site data collection, technical studies and commercial activities have improved the Project's scope definition, reduced development risk and further refined the capital and operating cost estimates.

Metallurgical testwork defining the current process flowsheet has been completed in 2025 and is continuing into 2026. This current focus on testwork is supplemented by extensive testwork programs since 2010. The current and planned programs are to further optimise the flowsheet and metallurgical design parameters.

To significantly reduce upfront capital expenditure, the Project's path to market uses predominately existing public infrastructure.

The Project Execution Plan has been matured during the PFS into a robust strategy for the development of the Project. This plan includes completion of a Feasibility Study and associated technical studies, and development approval for New South Wales and South Australia. This work is to be completed in parallel with Project financing.

Following the PFS, Hawsons intends to complete a Feasibility Study (**FS**) to further improve the level of project definition sufficient to allow approval of project execution and to support subsequent funding activities. This FS will support the finalisation of an Environmental Impact Statement (**EIS**) to enable development approval from the NSW Government, Development Consent.

Based on the positive outcomes of the Reserves-focused PFS, Hawsons is well placed to become a new iron ore producer through the development of the Hawsons Iron Project producing 10.9Mtpa of +68% Fe magnetite concentrate, with attractive operating costs and a 26 year Life of Mine.

# THE PROJECT

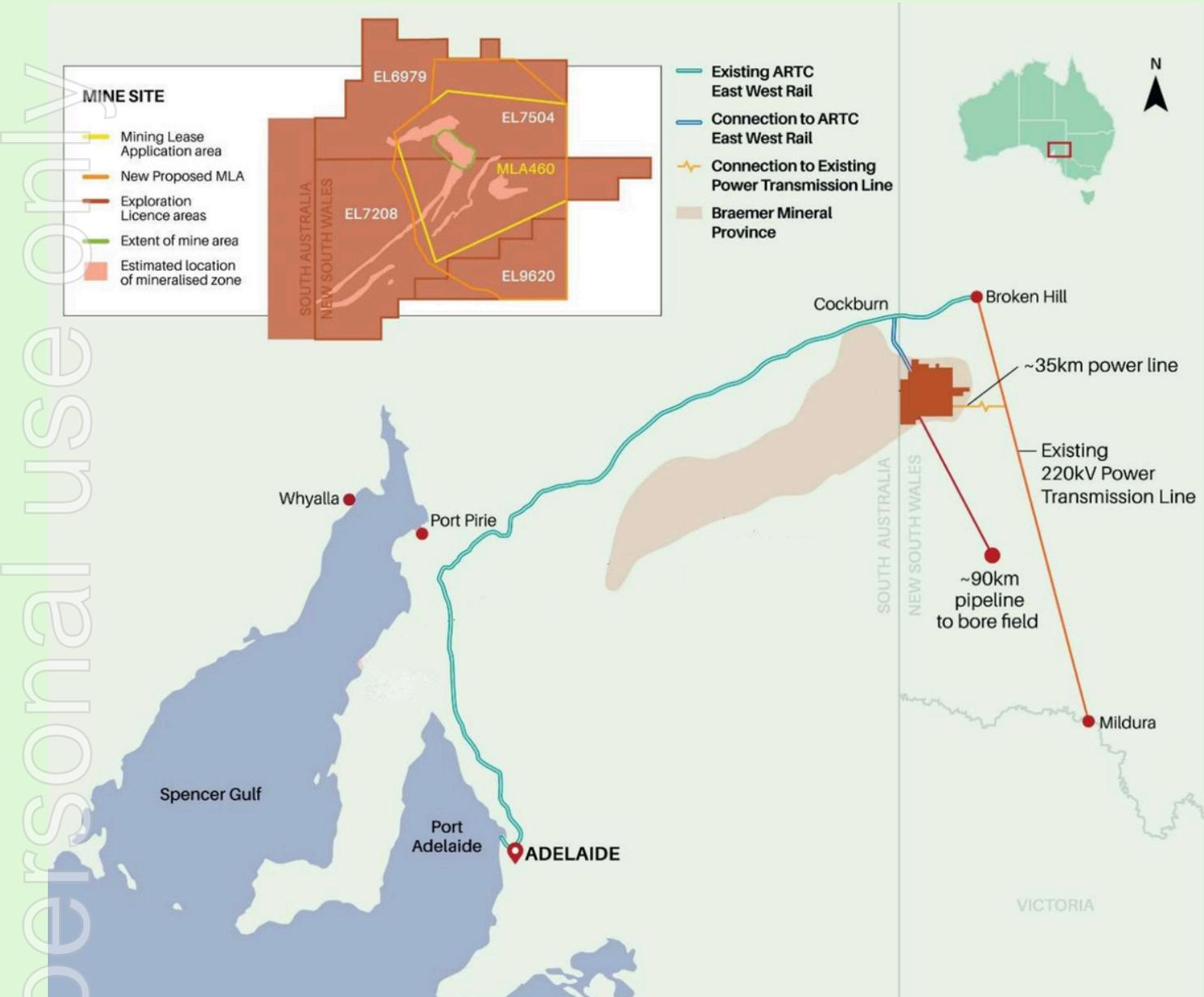


Figure 1 Hawsons Iron Project Location Map

## LOCATION

The Project is located approximately 60km southwest of Broken Hill, in New South Wales, near the South Australian border. Raw water from the borefield is located in the Lower Renmark Aquifer near Coombah, approximately 90km south of the Project site.

Transgrid 220kV transmission line is approximately 35km east of the Project site.

There will be a new rail spur line of approximately 43km long, connecting the Project to the existing Australian Rail Track Corporation (**ARTC**) network at Cockburn and rail to Port Adelaide for export. Location of the Project site and the infrastructure can be referred to in Figure 1.

## TENEMENTS

The Hawsons Mineral Resource and Ore Reserve is contained within four Exploration Licences (EL6979, EL7208, EL7504 and EL9620) and a current Mining Lease Application (MLA641) as indicated in Figure 1.

## PFS CONTRIBUTING EXPERTS

Company	Area of Expertise and Responsibility
<b>H&amp;S Consultants</b>	Geological Modelling and Mineral Resource Estimate.
<b>PSM</b>	Open cut geotechnical design.
<b>Stantec</b>	PFS Study engineers, Process Plant design, Capital Cost Estimate – Process Plant with Infrastructure estimation by 2MC and incorporated into the estimate. Operating Cost development of inputs for Process and G&A.
<b>Australian Mine Design and Development Pty Ltd</b>	Mining method, pit optimisation, pit design, cutoff grade, mine schedule, mining personnel and equipment, mining costs, site visit, Ore Reserves estimation and overall sign-off of Ore Reserves.
<b>Inmett Projects</b>	Project management of the PFS. Assessment of metallurgical testwork with Stantec, CDM Consultants and Pitch Black. Assessment of inputs from Stantec and 2MC for capital and operation estimates. Review and inclusion of previous Study work by Hawsons relevant to the PFS including water and environmental studies and regulatory requirements.
<b>2MC</b>	Project Infrastructure and earthworks inputs to capital estimate. Power and water supply capital estimate inputs. Logistics and transport costs.



Image 1 Project Area - Burta Station

## MINERAL RESOURCE

H&S Consultants (**H&SC**) have completed geological modelling and a Mineral Resource Estimate for the Project.

The Mineral Resource Estimate is reported at a 4% DTR cut-off grade. The below table summarise the Mineral Resources by category.

**Table 1 Mineral Resource Estimate as of June 2024**

Category	Mt	DTR %	DTR Concentrate (Mt)	Density (t/m <sup>3</sup> )
Measured	528	12.9	68	3.04
Indicated	1,882	11.2	210	2.94
Inferred	2,005	11.3	226	2.89
<b>Total</b>	<b>4,415</b>	<b>11.4</b>	<b>504</b>	<b>2.93</b>

### Concentrate Grades

Category	Fe %	Al <sub>2</sub> O <sub>3</sub> %	P (ppm)	S (ppm)	SiO <sub>2</sub> %	LOI %
Measured	69.0	0.26	73	42	3.36	-2.81
Indicated	68.6	0.30	83	54	3.62	-2.60
Inferred	68.2	0.32	84	60	4.18	-2.67
<b>Total</b>	<b>68.4</b>	<b>0.30</b>	<b>82</b>	<b>56</b>	<b>3.85</b>	<b>-2.66</b>

The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserve (JORC Code, 2012 Edition).

## ORE RESERVE

The Probable Ore Reserve Estimate, summarised in Table 2, is for open cut mining, feeding a 100Mtpa processing plant at the Hawsons Project site. The Ore Reserve Estimate is based on the Mineral Resource model updated and reported on 24 June 2024.

The ore grade is estimated as percent Davis Tube Recovery (**DTR**), representing a notional mass recovery to magnetite concentrate.

**Table 2 Ore Reserve Estimate**

Ore Reserve Category	Mt	DTR%	Fe <sub>tot</sub> %
Probable	2,300	11.7	16.7

Notes:

- The tonnes and grades shown in table 2 are stated to a number of significant figures reflecting the confidence of the estimate. The table may nevertheless show apparent inconsistencies between the sum of components and the corresponding rounded totals
- Fe<sub>tot</sub> is the total iron grade in %.
- Refer to Appendix 1 – JORC Table 1

## BASIS OF ORE RESERVE ESTIMATE

### ESTIMATION METHODOLOGY

- The study carried out as part of the Hawsons Iron Project's Ore Reserve is to a Pre-Feasibility Study level.
- The relative accuracy of the estimate is reflected in the reporting of the Ore Reserve as per the guidelines regarding modifying factors, study levels and Competent Persons contained in the JORC Code (2012). These Ore Reserves represent 95.4% of the currently defined Measured and Indicated MRE. The Ore Reserve for the Project has been estimated as at December 2025 in accordance with the JORC Code.

### BASIS OF CUTOFF GRADE

- The MRE is inclusive of the Ore Reserve Estimate.
- Using base case values of:
  - Magnetite concentrate price of \$US 140 per dry t,
  - 0.65 \$US/\$AU exchange rate,
  - Concentrate transport cost of \$AU 57.15 per dry t,
  - Processing and G&A cost of \$AU 4.42 per t ore,
  - NSW Government and third party royalties, and
  - Mass recovery of DTR% x 95%,

results in a marginal economic cutoff grade of 2.95% DTR. However, to enhance the operating discounted cash flow model, while achieving an acceptable mine life, a cutoff of 4.0% DTR has been applied for the life of mine schedule and Ore Reserve Estimate.

### BASIS OF DILUTION

- For the PFS mine plan and Ore Reserves estimate AMDAD applied dilution adjustment block-by-block in the block model. Dilution grade is applied based on the grade of the adjacent material. The method adjusts tonnes and grade according to the nominated dilution skin thickness and block dimensions.



Image 2 Hawsons Iron Broken Hill offices and yard facility



## MINING METHOD

Mining of the Hawsons open cut is assumed to be completed by conventional drill and blast, load and haul methods. The development of the open cut will comprise progressive excavation of five open cut stages over a 26 year life of mine.

The final open cut will have a length of approximately 4km in a NW-SE orientation and a width of approximately 1.75km in the north-western end and 2.5km in the south-eastern end. The final depth will be up to approximately 500m.

Access to the pits will be via two-lane 40m wide haul roads, supplemented by 27.5m wide single-lane haul roads for access to pit base areas.



## PRODUCT LOGISTICS

Rail from the Project via 43km private spur line constructed connection to the existing ARTC rail system to the Port of Adelaide, a total of approx. 580km; thereafter, port storage and transhipment to sea freight.

**Image 3 Site Activities – Hawsons Project**



## PROCESSING

Processing capacity of 100Mtpa via 3 trains of 33Mtpa consisting of dry crushing, grinding and magnetic separation, rougher magnetite concentrate, upgraded to +68% Fe magnetite concentrate via wet grinding, magnetic separation, elutriation and filtration. Process waste streams are combined conditioned and compacted for dry disposal in a co-disposal facility (**CDF**) with mine waste.

The process plant is staged to match the mining schedule with the initial stage consisting of 2 trains and the 3<sup>rd</sup> train commencing operation in year 5 of operations.



## WATER AND POWER SUPPLY

Water to be supplied for the Project is primarily for mining and dust management and wet processing. Other water requirements include site operational and maintenance activities and the accommodation camp. The estimated annual water demand is 12GLpa, and it will be sourced from the Lower Renmark groundwater aquifers, in the vicinity of Woolcunda.

The project will be powered during operations from an overhead powerline connecting to the 220kV Transgrid powerline supplying Broken Hill from Mildura.

# KEY PROJECT PARAMETERS

Key project parameters are summarised in Table 3

**Table 3 Key Project Parameters**

Parameter	UOM	Value
Mine life – Reserve	Year	26
Plant operating hours	hr pa	7,960
ROM feed rate	Mtpa	46 Mtpa year 1 71 Mtpa year 2 to year 4 100 Mtpa from year 5
Magnetite production (nom)	Mtpa	3.4 Mtpa year 1 5.8-7.6 Mtpa year 2 to year 4 10.9 Mtpa from year 5
Total life of mine magnetite concentrate production	Mt (dry)	257 Mt dry at +68% Fe
Davis Tube Recovery (DTR) grade (average)	%	11.62
Target magnetite concentrate grade	% Fe	+68
Co-Disposal production	Mtpa	Mine Waste – 39Mtpa Process Waste – 90Mtpa
Raw water demand (nominal)	GLpa	12
Project Site Operating power	MW	206

**Image 4 Mildura to Broken Hill Power Lines**



Hawsons has been working closely with stakeholders and regulators to support the assessment and approvals required to develop the Project.

## TENURE

The Hawsons Project – excluding water supply, rail spur and accommodation camp, is located entirely within Mining Lease Application MLA641.

## NATIVE TITLE AND HERITAGE

HIO continues to engage with the Broken Hill Local Aboriginal Land Council (**BHLALC**) as well as the Wilyakali and have developed such methodologies to include, consultation, communication and collaboration with all Registered Aboriginal Parties (**RAPs**) on all aspects of the Project's development.

HIO consults with both archaeologists and registered Aboriginal parties before conducting any exploration and project development activities.

There are currently no Native Title Claims on the Project area.

## ENVIRONMENTAL APPROVALS

The main components of the Project are located within NSW, with a small section of rail infrastructure within South Australia (**SA**), plus product transport will be through SA. The primary approval will be the NSW Government, with additional approvals to be coordinated with the SA Government.

Environmental management of the Project will comprise completing all of the environmental investigations and reporting necessary for obtaining statutory approvals required to construct and operate the Project facilities and meeting all of the statutory monitoring and environmental conditions of the various approvals during the implementation and operations phases of the Project.

The Project will likely be declared a State Significant Development (**SSD**), with applications determined by the Minister for Planning, the Independent Planning Commission (**IPC**), or a delegate of either. SSD applications are considered under Division 4.7 of the Environmental Planning and Assessment Act 1979. The IPC is the consent authority for an SSD.

The major environmental approval required is the issue of consent for a Development Application (**DA**) under the NSW Environmental Planning and Assessment Act. This consent is required before the necessary Mining Leases can be granted under the NSW Mining Act. Applications for Development Consent must be supported by a comprehensive Environmental Impact Statement (**EIS**) which must be prepared in accordance with conditions established.

The EIS will underpin the high level of support the Project currently has at a senior Government level. The rural region in which the Project is located is in economic decline and the benefits of a project the scale of Hawsons is readily apparent to Government at the highest level.

Transportation, water supply, water quality management, air quality and social/economic issues form key focus areas for the EIS. Considerable effort has been expended by Hawsons in consulting with the NSW Government on these and other matters, to the extent that a responsive consultation process with Government has been developed.

## ACCESS AGREEMENTS

The Project is contained within the three pastoral grazing properties, of which land will need to be either acquired, or an access arrangement obtained, prior to commencing of development. An option to acquire one is currently in place, with the others in negotiation.

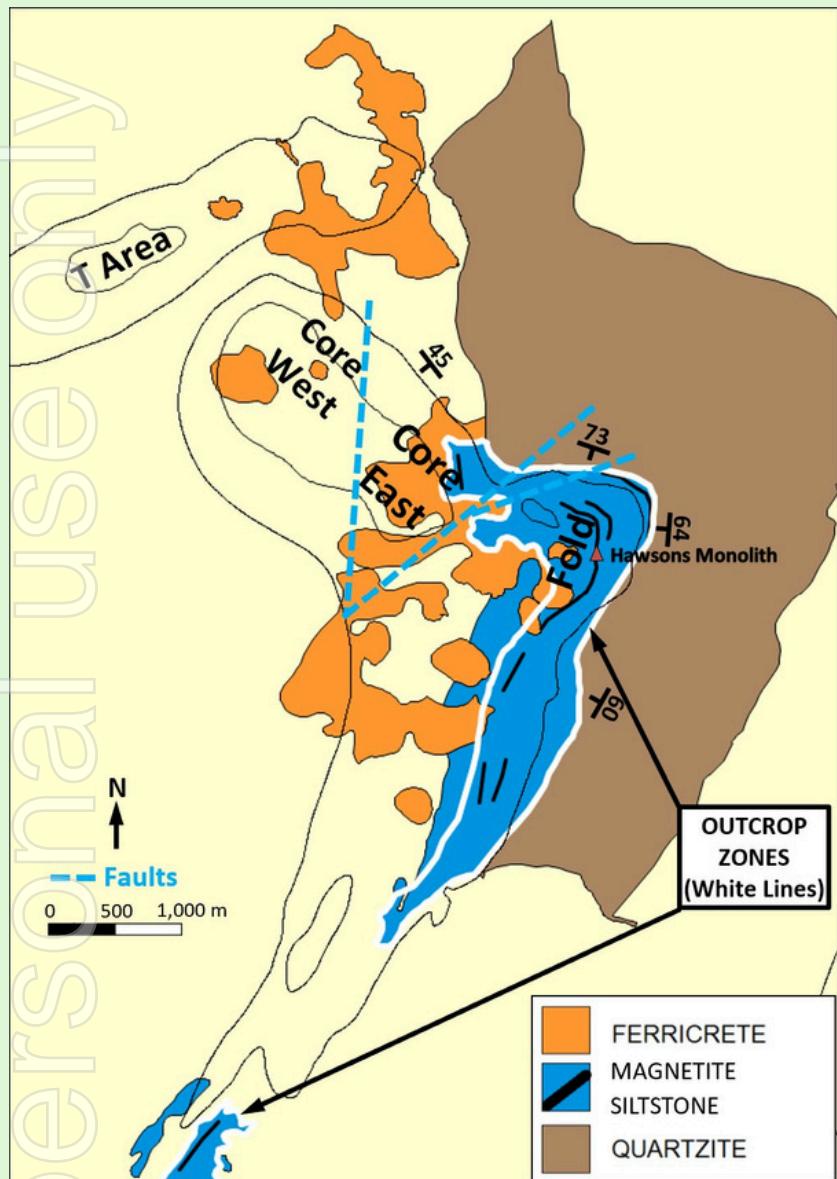
Infrastructure off-site will require land access and easement agreements with all relevant landholders to be finalised before undertaking construction activities. This includes the rail spur, powerline, water bores and pipeline, and mine access road. Preliminary discussions have been undertaken, but will only be finalised when final alignments are established during the Feasibility Study.

## ESG FRAMEWORK

Hawsons is committed to establishing a well designed and well managed project which aligns with contemporary stakeholder expectations and complies with required legislation, standards and approvals.

An Environmental, Social and Governance (**ESG**) strategy is being developed to prepare the business for current and future mandatory reporting requirements. The ESG strategy is expected to be completed in 2026. Development will include internal and stakeholder consultation based on surveys and interviews, as well as an independent audit.

# GEOLOGY



**Figure 2 Hawsons Surface Geology**

The Hawsons Project is situated within the Braemar Formation extending through NSW and SA.

Ground mapping of the geology in the immediate vicinity of the Hawsons deposit was conducted by Brewster et al. (2009) and this was confirmed by Becker and Nichols (2022) and Grasso (2023). The following figure shows the rationalisation of this ground mapping and confirms the location of the outcrop of the magnetite-rich siltstones of the Braemar Formation Iron facies and the limit of the Willyama Complex quartzite (basement to the Braemar Formation magnetite-rich siltstones).

Zones of ferricrete exist in the eastern portion of the deposit area adjacent to the outcropping magnetic metasiltstones of the Braemar Formation. Hawsons Monolith is a prominent feature of the outcrop and approximately 10m above the surrounding plainlands. Figure 2 illustrates the nature of this outcrop.

Exploration at the Hawsons deposit began in the late 1800s and has evolved from ground mapping, shallow pits to advanced drilling and geophysical surveys. Efforts intensified in the 2000s, with major exploration campaigns in 2009, 2010, 2016, and most recently from 2021 to 2024. The latest drilling in 2023–2024 confirmed near-surface mineralization (0–150 m depth) with grades  $\geq 9\%$  DTR in the Fold area. The geology database contains data from 210 drillholes, with 188 used to develop the Hawsons geology model.

**Table 4 Drillhole Summary**

Category	No. Holes	Percussion (m)	Rotary Mud (m)	RC (m)	NQ Core (m)	HQ Core (m)	8C Core (m)	Total Drilling (m)
Database	210	584	348	46,058	3,971	8,035	35	59,032
Model	188	584	52	42,482	3,193	8,010	35	54,357

# MINING

## ORE RESERVE

The PFS supports the reporting of a JORC-compliant Probable Ore Reserve for the Hawsons Project. The Probable Ore Reserve Estimate, summarised in Table 5, is for open cut mining, feeding a 100Mtpa processing plant at the Hawsons Project site. The Ore Reserve Estimate is based on the latest Resource model updated and reported by HIO on 24 June 2024.

The ore grade is estimated as percent Davis Tube Recovery (**DTR**), representing a notional mass recovery to magnetite concentrate.

**Table 5 Hawsons Ore Reserve**

Ore Reserve Category	Mt	DTR%	Fe <sub>tot</sub> %
Probable	2,300	11.7	16.7

NOTES:

- The tonnes and grades shown are stated to a number of significant figures reflecting the confidence of the estimate. The table may nevertheless show apparent inconsistencies between the sum of components and the corresponding rounded totals.
- Fe<sub>tot</sub> is the total iron grade in %.
- Refer to Appendix 1 – JORC Table 1
- Refer to page 5 for basis of Ore Reserve Estimate

The mine planning component of the PFS involved pit optimisation, mine design and scheduling and mine cost estimation. The Mine Plan supporting the Ore Reserve is based on an open pit mine using owner mining with conventional mining equipment. Processing assumptions for the Ore Reserve used a magnetite concentrator circuit to generate a +68.0% Fe magnetite product at a nominal production rate of 11Mtpa over the Life of Mine. A product moisture content of 9% has been assumed ex-concentrator. The product will be railed from the Hawsons site to the Port of Adelaide. From the port it will be loaded to Cape class vessels for transport to customers globally.

The Ore Reserve does not include Inferred Resources. However, approximately 400Mt of Inferred Resource will be mined as waste within the proposed open cut design. This additional potential mill feed may represent upside to the Reserves within the designed open pit.

The Project has additional Inferred and unclassified materials within the remaining deposit. Future work will look to convert this mineralisation to Ore Reserve in the sequence that it is planned to be mined. The mineralisation has been drilled and has good potential to be converted to Ore Reserve.

## MINE PLAN

The PFS has delivered a mine plan for the Hawsons Project. The Mine Plan has been developed by AMDAD. It incorporates the geological block model. The Mine Plan identifies a 26-year mine life with production of ore and waste, ramping up from 20Mtpa to 164Mtpa across a three-year period.

Pit optimisations were undertaken for Hawsons to identify the pit shells possible mining sequences. The optimisation was based on Project economic data and ranked the shells using net present value. Pit designs were produced using Geovia Surpac with geotechnical and other mine design parameters held constant with the design parameters. This Mine Plan supports the reporting of a JORC-compliant Probable Ore Reserve for the Hawsons Project.

## GEOTECHNICAL

Pit geotechnical slope designs used in the optimisation were provided by PSM (2022). For each pit slope design sector PSM provided Inter-ramp angle for the key rock mass units based on specific bench face angles, bench heights and berm widths.

AMDAD determined overall slope angles for each pit sector from PSM's Inter-ramp angle by adding allowances for in-wall haul roads.

## HYDROLOGY

The hydrogeological system at Hawsons project site is fracture-controlled and contained within the metasediments of the Yudnamutana Subgroup (including the Braemar Formation). The geology is considered to be similar to the Torrowangee Group rocks, which have limited groundwater due to the tight nature of these materials.

The boundary between the rock aquifers of the Yudnamutana Subgroup and the sediments of the Murray Basin lies approximately 8km to the south of the Hawsons project area and forms a barrier that prevents water transfer between the two systems.

In the mine area, groundwater yields below surface alluvial aquifers is confined to fracture systems, e.g. faults, joint, and estimated flow rates derived from exploration drilling are low, up to 10L/s.

The potential groundwater pressures around the mine pit walls have been assessed by using a simplified axisymmetric model with the permeability data obtained from monitoring bore tests. The model indicates a gradual drawdown in the water table surrounding the pit as the excavation progresses.

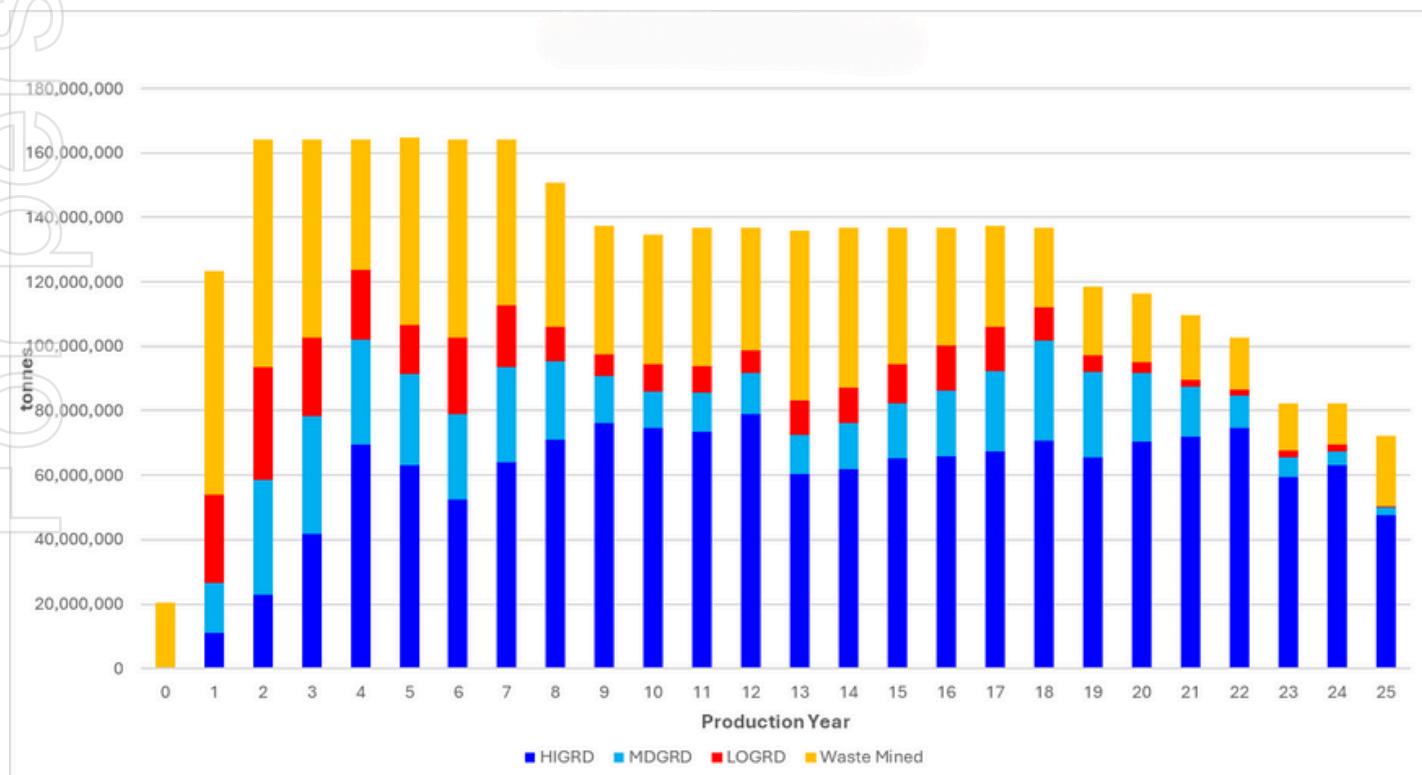
## PRODUCTION SCHEDULE

AMDAD prepared the PFS life of mine (**LOM**) Schedule using the Geovia MineSched program. Key outcomes of the reserve case include:

- 26 years of mining including six months of pre-production mining to remove surface cover and build ore stockpiles;
- 26 years of ore processing and concentrate production with the final year running down low-grade stockpiles;
- Progressive commencement of three parallel concentrator trains;
- Concentrate production achieves target rate by Year 5 and is maintained at 12M wet tpa for the rest of the project life;
- 2,326Mt of ore processed at an average head grade of 11.6% DTR and strip ration of 0.43;
- 1,004Mt of mine waste and 2,070Mt process waste is placed in the CDF;
- 1,899Mt of ore crushed directly from the pit and 427Mt passed through long-term stockpiles; and
- Total life of mine production of 282Mt (wet) of concentrate at an average grade of 68.6% Fe.

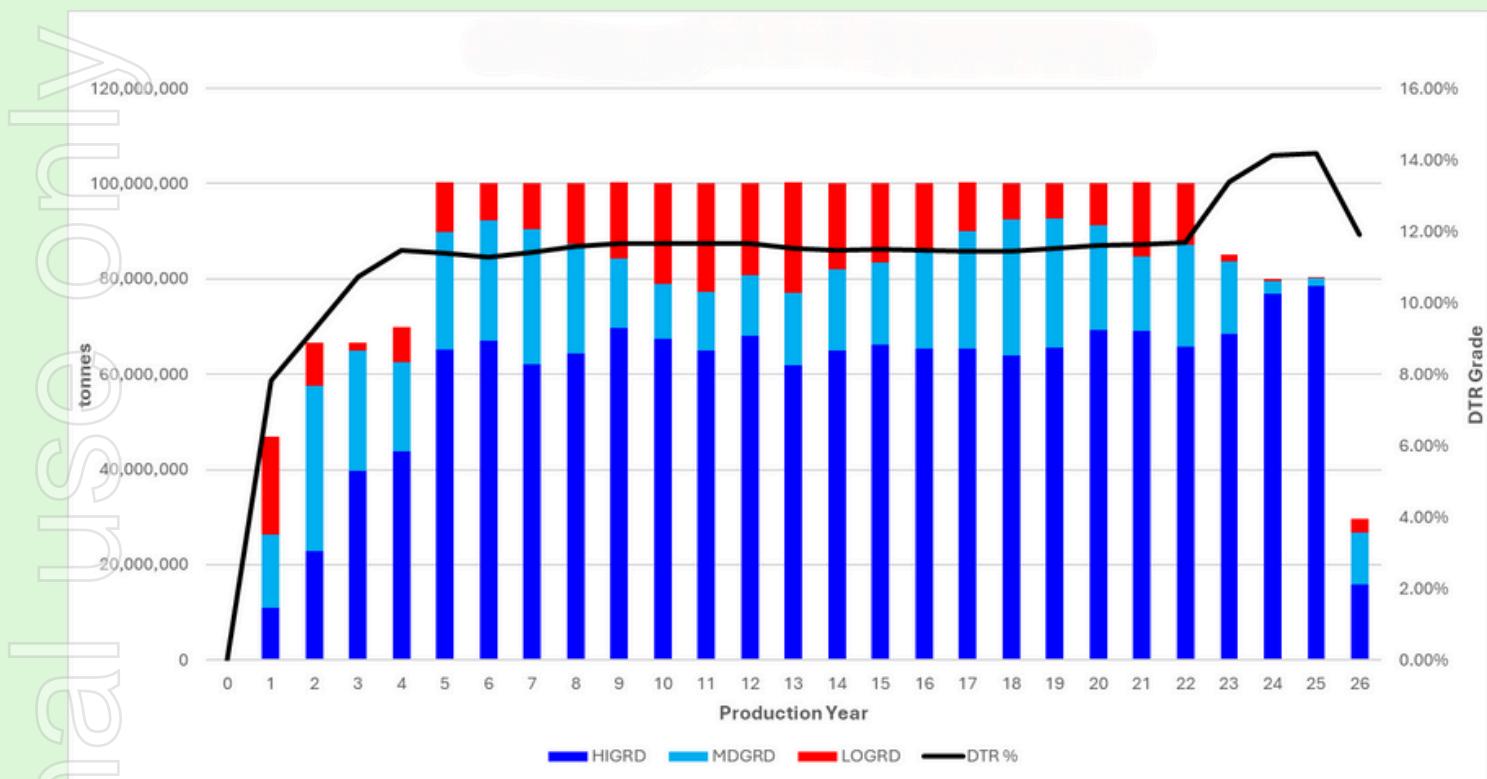
The annual mine production for ore and waste is shown in Figure 3.

**Figure 3 Annual Mine Production**



The concentrator feed tonnage and grade is shown in Figure 4

**Figure 4 Annual Process Plant Feed tonne and grade**



## MINE OPERATIONS

The Hawsons Project will be developed employing a conventional open pit mining methodology utilising a typical drill / blast / load / haul mining cycle.

The mining operations are planned to be undertaken by owner mining, with contractor explosives services.

The Mine Plan is based on a mining fleet using up to six 600t class hydraulic excavators and 40 300t class haul trucks, along with suitable support vehicles. The annual production capacity of this fleet is approximately 160Mtpa.

An additional 10 300t class haul trucks are dedicated to transport of process waste to the CDF, along with suitable support vehicles.

The mining operation is supported by a Mining Technical Services team of mining engineers, geologists, geotechnical engineers and maintenance personnel.

# METALLURGY

## RECOVERY

The overall magnetite recovery of the DTR feed grade values has been calculated at 95%. This will produce a +68% Fe magnetite concentrate at less than 3% SiO<sub>2</sub>.

The MRE is based on the DTR assay method, which is a metallurgical test to determine the magnetic Fe content at a selected grind size to produce a magnetic concentrate of particular chemical values. The Process plant undertakes this metallurgical process at a commercial scale. As a result the overall recovery is measured as the inefficiency of the laboratory and commercial processes.

## METALLURGICAL TESTWORK SUMMARY

Metallurgical testwork for the Project has been ongoing since 2010, with the initial focus on a conventional magnetite process route with crushing, wet grinding and magnetic separation. In 2024 the focus of the testwork shifted to a 2 stage process with initial dry crushing, grinding and rougher magnetic separation to produce a rougher magnetite concentrate to be then upgraded using conventional wet magnetite processing.

This change was enabled by some of the unique physical properties of the Hawsons mineralisation, it being relatively soft to crush and grind and low abrasive indices. This enabled the consideration of primary crushing with mineral sizers with dry grinding using equipment common in the cement and phosphate industries, being Vertical Roller Mills (**VRM**).

Hawsons has carried out extensive diamond core and RC drilling, sampling and testwork since 2010. More than 82 samples were used for the testwork. The deposit has been categorised into 3 units being Interbed, Unit 2, and Unit 3.

Comminution testwork results are summarised in Table 6.

**Table 6 Comminution Indices**

Item	Units	Value	Comment
Ore Density (SG)	t/m <sup>3</sup>	3.04	
Unconfined Compressive Strength, UCS (85 <sup>th</sup> Percentile)	MPa	53.31	Typical upper limit for mineral sizers is 200MPa
Metso Crushability Index	kWh/t	5.10	3 – 7kWh/t is considered as easy to crush
Abrasion Index		0.10	Moderate
Bond Ball Mill Index	kWh/t	9.00	Considered soft
VRM Specific grinding energy	kWh/t	3.3 to 6.6	Dry grind to 38micron (target 100micron) - Vendor specific energy parameters
Jar Mill test for concentrate regrind P <sub>80</sub> of 32µm	kWh/t	3.89 to 10.57	Ranging from low energy to medium energy
HPGR (85 <sup>th</sup> Percentile)	kWh/t	3.00	Considered as medium hardness

Magnetic separation testing has been undertaken both wet and dry. The wet testing demonstrates that at 32micron grind the DTR recoveries and grades are being achieved. The dry magnetic testing at coarser grind, nominal 100micron, has resulted in lower recoveries compared to the standard DTR test at 32micron, with losses in the range of 2 to 10% achieved in unoptimised initial testing, with the assessment that optimised conditions will result in 3-4% loss.

Other testwork relevant to the selected flowsheet for the PFS, includes concentrate thickening, Transport Moisture Limit (**TML**) and elutriation testing.

The elutriation testwork indicates the silica grades can be reduced to below 3%. The Fe losses with demagnetisation and a flow rate of 3l/min, resulted in Fe recoveries of 98.9% and 99.4% and Fe grades of 69.5% and 69.4%, with silica grades below 3% in the range of 2.55% and 2.96%.



Image 5 Testwork at the JK Mineral Research Centre

# PROCESSING

## PROCESS FLOWSHEET

**Dry crushing, grinding and magnetic separation to produce a rougher magnetite concentrate.**

-This reduces the mass by 80% with 97% DTR recovery at a nominal product size of  $P_{80}$  100 micron

**Process waste handling by combining the dry non-magnetic and wet non-magnetic thickener underflow and conditioning prior to compacting and disposal to the CDF.**

The process plant is supported by common air, water and reagent systems. Infrastructure for water and power supply, operations and maintenance facilities and on-site laboratory are included.

To facilitate the mine production ramp up and mine schedule and providing realistic equipment selection the flowsheet consists of 3 identical trains operating at nominally 33Mtpa for a combined capacity of 100Mtpa. The mine production schedule allows 2 trains to operate from years 1 to 4 with the 3<sup>rd</sup> train online in year 5 of operations.

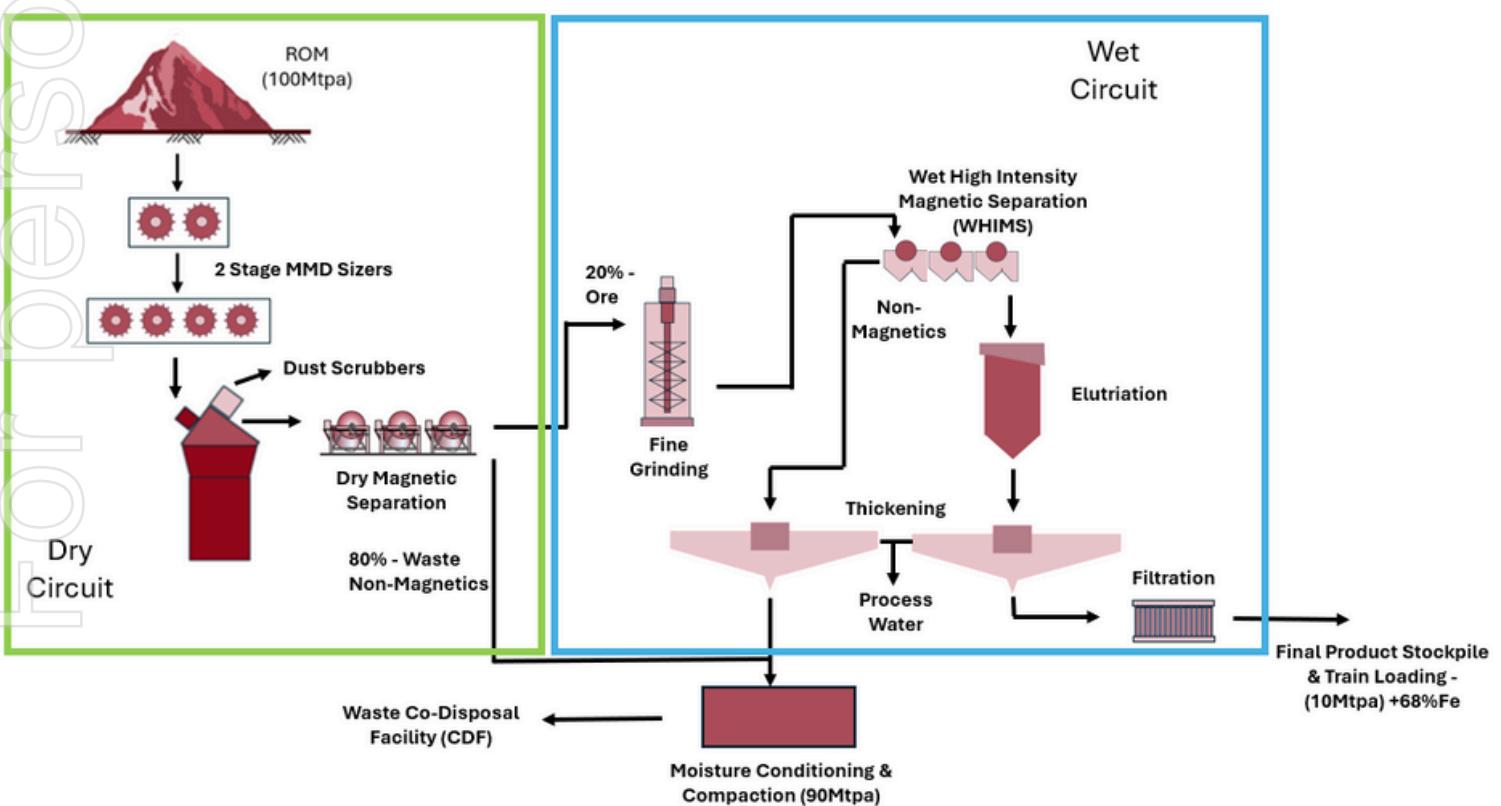
**Wet grinding, magnetic separation, elutriation and magnetic and non-magnetic thickening and magnetic concentrate filtration and washing.**

-The magnetite concentrate at 38micron is +68% Fe and less than 3%  $\text{SiO}_2$  after elutriation with up to 2% DTR loss

**Filtered magnetite concentrate conveyed to a product stockpile prior to train loading and transport to customers.**

**Figure 5 Process Flowsheet Schematic – 1 Train**

International  
Resource  
Consultants  
Hawsons

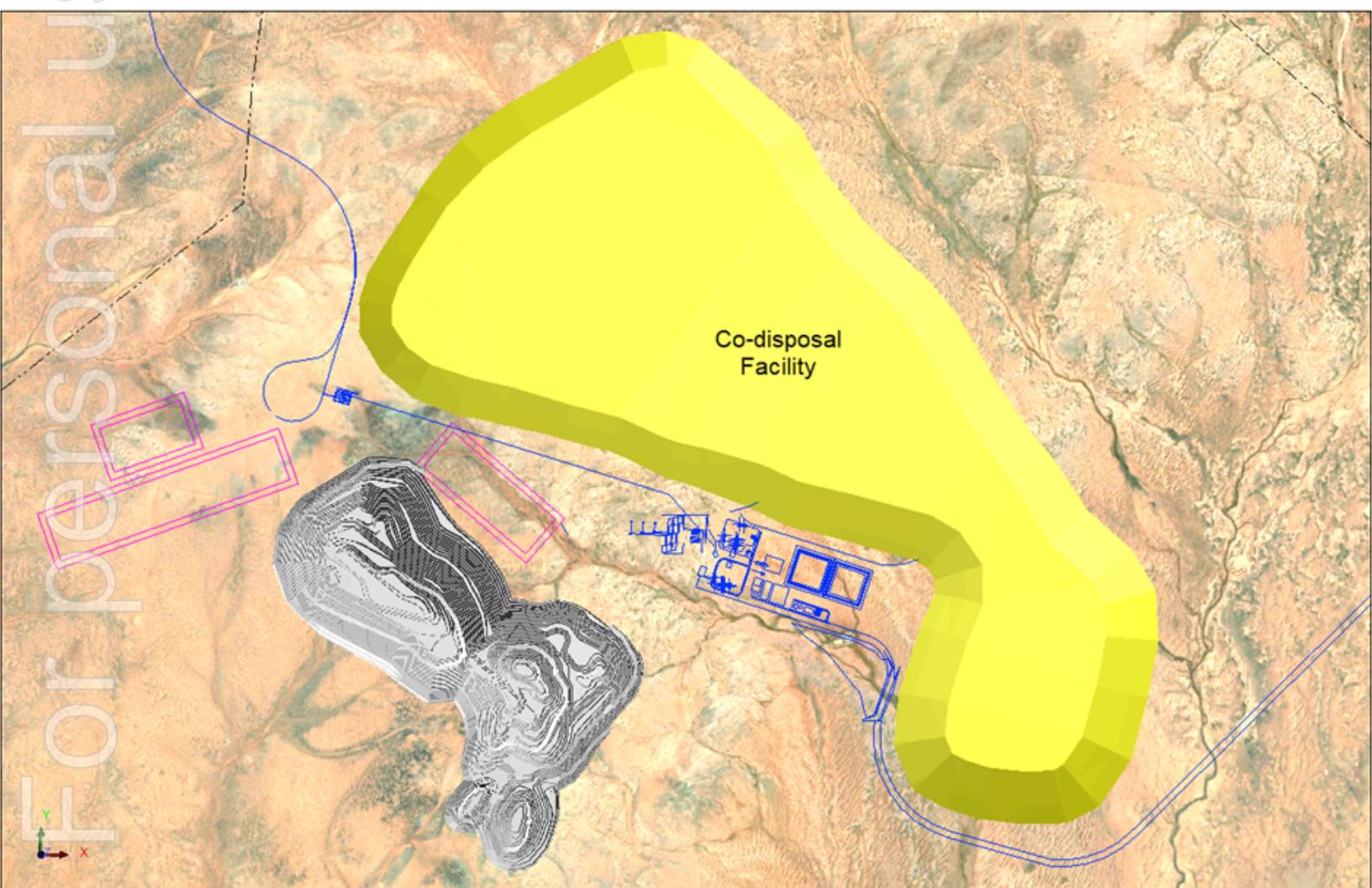


# INFRASTRUCTURE

The infrastructure will comprise of:

- Administration, mining services and process office and workshops, and a on-site laboratory;
- CDF for storage of the process and mine waste;
- Water supply and water catchment areas;
- A rail spur line and balloon loop at site to ARTC network at Cockburn;
- HV power supply line to the Project site;
- Accommodation village;
- Access road to the Project site; and
- Access roads within the plant and the Project site.

**Figure 6 Zoned CDF Overall Footprint**





## Water Supply

Water supply is planned to come from a borefield located in the Lower Renmark Aquifer near Coombah, approximately 90km south of the Project site. The Lower Renmark Aquifer contains saline groundwater with total dissolved solids concentration of around 10,000mg/L.

Water demand will primarily be for dust suppression and within the wet process circuit and process waste to control dusts. The Project nominal water demand is 12GLpa.

Potable water demand is for the accommodation camp, site drinking water, safety showers and other site services needing clean water.

The raw water pump station and borefield pumps, located 67km south of the Project site, will be powered by diesel generator sets, with the potential to minimise diesel consumption through the integration of solar and battery storage and/or grid connection.



## Mine Access Road

The Silver City Highway (B79) provides mine access to Broken Hill. Highway B79 and the mine access road T-intersection is approximately 52km south of Broken Hill and 250km north of Mildura. The mine access road is approximately 35km (see Figure 7) to the Project site and 25km to the Accommodation camp.

The mine access road construction will be a high quality and maintained gravel road.



## Power

The Project will be powered during operations from a to-be-constructed overhead high voltage powerline connecting to Transgrid 220kV powerline that runs between Broken Hill and Wentworth, near the Silver City Highway. The new powerline will follow the path of the site access road, approximately 35km between the Project site and the 220kV powerline Tee alongside the Silver City Highway. See Figure 7 for the proposed powerline.

The estimated total installed power for the Project site is 284MW and operating power 206MW.



## Co-Disposal Facility

At the ROM Feed rate of 100Mtpa, the proposed process plant will produce ~90 Mtpa of dry process waste.

The CDF will store both the mine waste rock and the dry process waste. The CDF will be zoned to encapsulate the process waste within a waste rock outer and upper capping. This is due to the fine-grained nature and dusting potential of the process waste.

The process waste materials stream will be essentially dry at ~5% moisture as a compacted cake. The moistened process waste is loaded into 300-tonne mine trucks via a hopper system and hauled to the CDF dump point

The CDF will be entirely above ground as no pit storage is available during the life of operations. It will be located directly north of the plant (Figure 6).

# PRODUCT LOGISTICS

## RAIL

The magnetite concentrate will be loaded onto trains on site for rail to Port Adelaide for export.

A new rail spur and balloon loop will go from the mine site to connect with ARTC network at Cockburn, 48km east of Broken Hill.

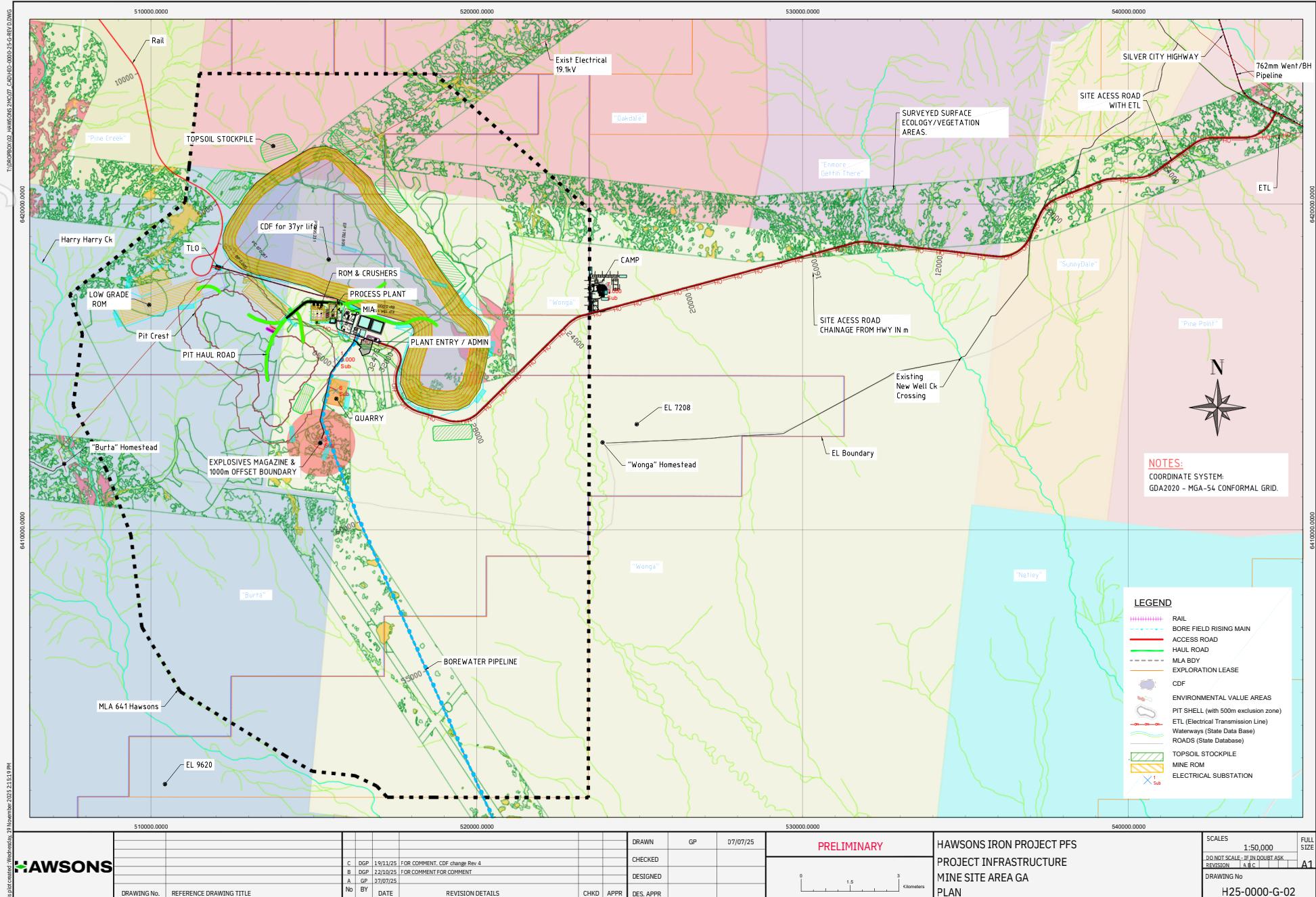
## PORT AND SHIPPING

Port facility at Port Adelaide using Flinders Port Holdings and includes the following:

- Operator, proposed to be Flinders Port Holdings (**FPH**). The port facility is to include rail line and balloon loop, train unloading, reclaim from the train unloading area, materials handling and storage infrastructure, product loading and export infrastructure.
- FPH propose to build and operate the upgrade port facility.
- Trans-shipment loading and transfer to ocean going vessels

Shipping based off Cape size vessel, CFR North China. Shipping to North China is indicative only and the end port will ultimately be determined by offtake agreements.

**Figure 7 Site Layout**



The capital cost estimate was led by Stantec and developed alongside industry-leading vendors and supported by 2MC for infrastructure and supplemented by Inmett Projects.

The Project will be executed by using EPCM delivery model with selected BOO and Turnkey packages, assigning each work area to technically proficient partners who possess the relevant delivery and construction experience (such as the Accommodation Camp).

The 43km rail spur will connect the Project to the ARTC rail network at Cockburn, along with the 35km site Access Road from the Silver City Highway to Broken Hill.

The estimated cost to deliver the Hawsons Project is \$AU 3,911.6M, inclusive of contingency (\$AU 495.7M), indirects including engineering, procurement, construction management, owners cost, construction indirects, freight and spares and first fills.

The capital and operating costs presented are in Australian dollars. All capital costs were developed to an AACE Class 4 accuracy level (-10% to +30%), with a base date of Q3 2025.

**Table 7 Capital Costs**

WBS NUMBER	WBS AREA	Initial Capital Cost \$AU M	Stage 2 Capital Cost (Year 7*) \$AU M
<b>Direct Costs</b>			
1000	Mining	393.85	
2000	Processing	1,573.51	729.85
3000	Infrastructure	310.63	
4000	Rail	136.70	
6000	Power Supply	209.40	
7000	Accommodation Camp	11.71	
	<b>Total Direct Cost</b>	<b>2,635.81</b>	<b>729.85</b>
<b>Indirect Costs</b>			
8000	Construction & Project Indirects	362.30	67.43
8100	Freight	92.15	35.19
8200	Spares and first Fills	53.37	
8300	EPCM	172.28	54.74
8400	Owners Costs	100.00	25.00
	<b>Total Indirect Costs</b>	<b>780.10</b>	<b>182.36</b>
9000	Contingency	495.70	138.46
	<b>Total Capital Cost</b>	<b>3,911.62</b>	<b>1,050.66</b>
	<b>Total Capital Cost - \$US</b>	<b>2,542.55</b>	<b>682.93</b>

\*7<sup>th</sup> year from the commencement of EPCM.

## SUSTAINING CAPITAL COST – LOM

Table 8 Summary of Sustaining Capital - Life of Mine

Cost Component	\$AU M
Mining – mobile fleet	971
Mining – other	31
ROM stockpile reclaim – mobile fleet	43
CDF – mobile fleet	205
CDF – other	40
Process plant and infrastructure	440
<b>Total</b>	<b>1,730</b>

## CLOSURE COSTS

Closure costs have been estimated based on disturbed areas for a total area of 3,946Ha and closure allowance of \$AU 81M. The assumption that the \$AU 100M allowance for mine rehabilitation on operating costs provides progressive rehabilitation for areas suitable.

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Image 6 Broken Hill 53MW Solar Farm

Hawsons has worked closely with Stantec, AMDAD and Inmett Projects to build a robust Life of Mine cost profile. The PFS Life of Mine C1 cash cost of \$AU 75.91 (\$US 49.34) per tonne.

The operating cost centres for the Project are:

- Mining
- Processing
- Co-Disposal Facility
- General & Administration
- Rail
- Port
- Shipping
- Royalties

**Table 9 Unit Operating Costs – LOM**

Cost Component	\$AU / dry t Concentrate
Mining	35.92
Process Plant	23.92
Co-Disposal Facility	10.19
General and Administration	5.87
<b>C1 Cost</b>	<b>75.91</b>
Product Logistics (FOB)	36.42
Royalties	5.33
Sea Freight	20.73
<b>CFR Cost</b>	<b>138.37</b>

## C1 CASH COST

The C1 operating costs presented are in Australian dollars with a base date of Q3 2025.

### MINING COST

The AMDAD mine plan and physicals schedule was used to develop an owner mining cost estimate.

- Direct mining – ore and waste
- ROM ore handling
- Rehabilitation

### PROCESSING COSTS

Stantec and Inmett projects developed a bottom up processing operating cost estimate using industry norms, vendor pricing and factored maintenance based on installed mechanical equipment capital costs and estimated labour costs from a developed organisation chart for the Project.

### CO-DISPOSAL FACILITY

The CDF utilises trucking to transport and place mine waste and process waste. AMDAD used the mine waste schedule and process waste schedule to estimate a cost estimate.

### GENERAL & ADMINISTRATION COST

Accommodation, flights and other amenities make up the majority of the general and administrative cost. Additionally, the Hawsons administration, warehouse/stores, environmental and OH&S operations team and salary cost are estimated and included.

### RAIL COST

Rail budget pricing from reputable rail logistics companies was obtained, inclusive of ARTC rail charges and used as the basis of the rail freight.

### PORT COST

Port Handling and transhipment charges for the Port of Adelaide, inclusive of capital repayment, was obtained.

### SHIPPING COST

To estimate shipping costs, Hawsons engaged a reputable international shipping consultancy.

# PROJECT ECONOMICS

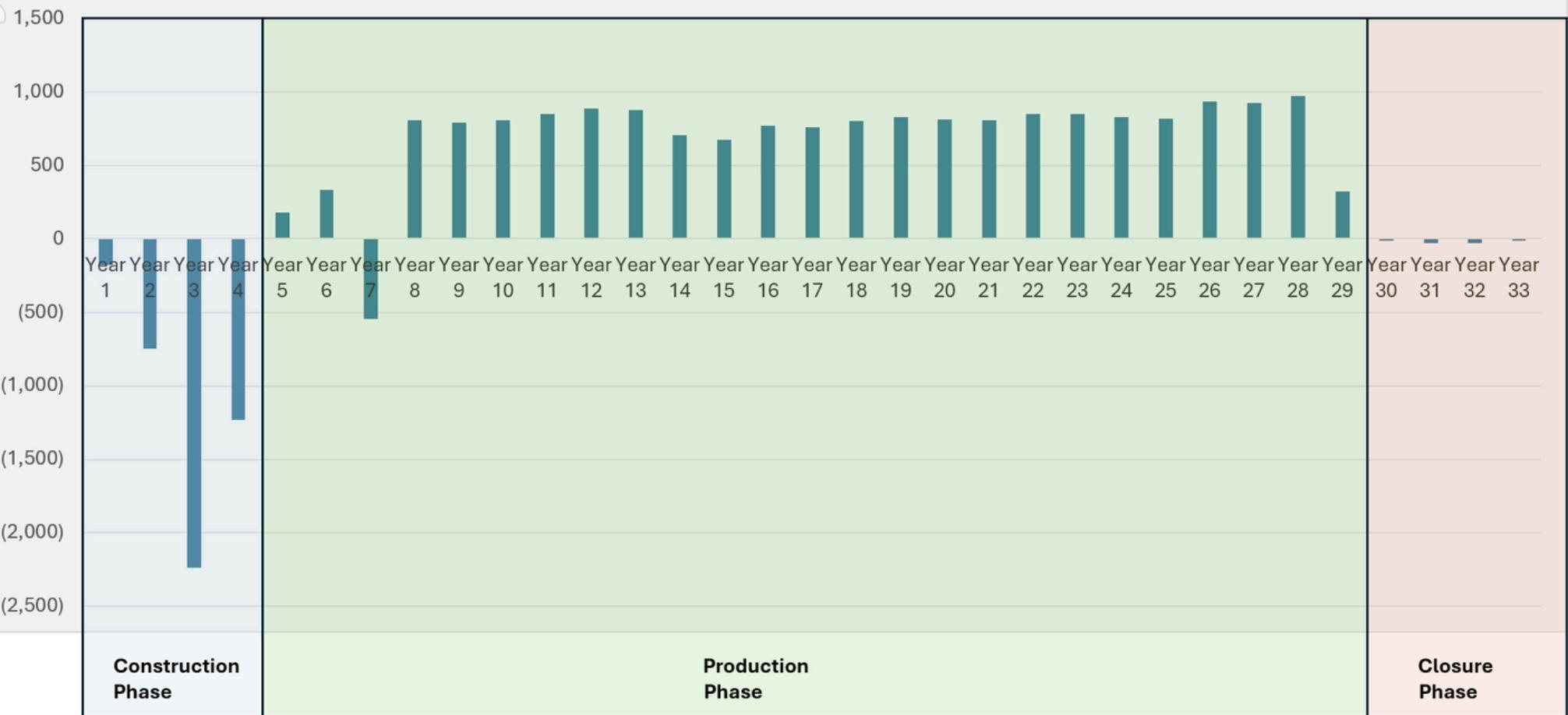
## ECONOMIC INPUTS

Key economic assumptions used in the PFS are shown in the below table:

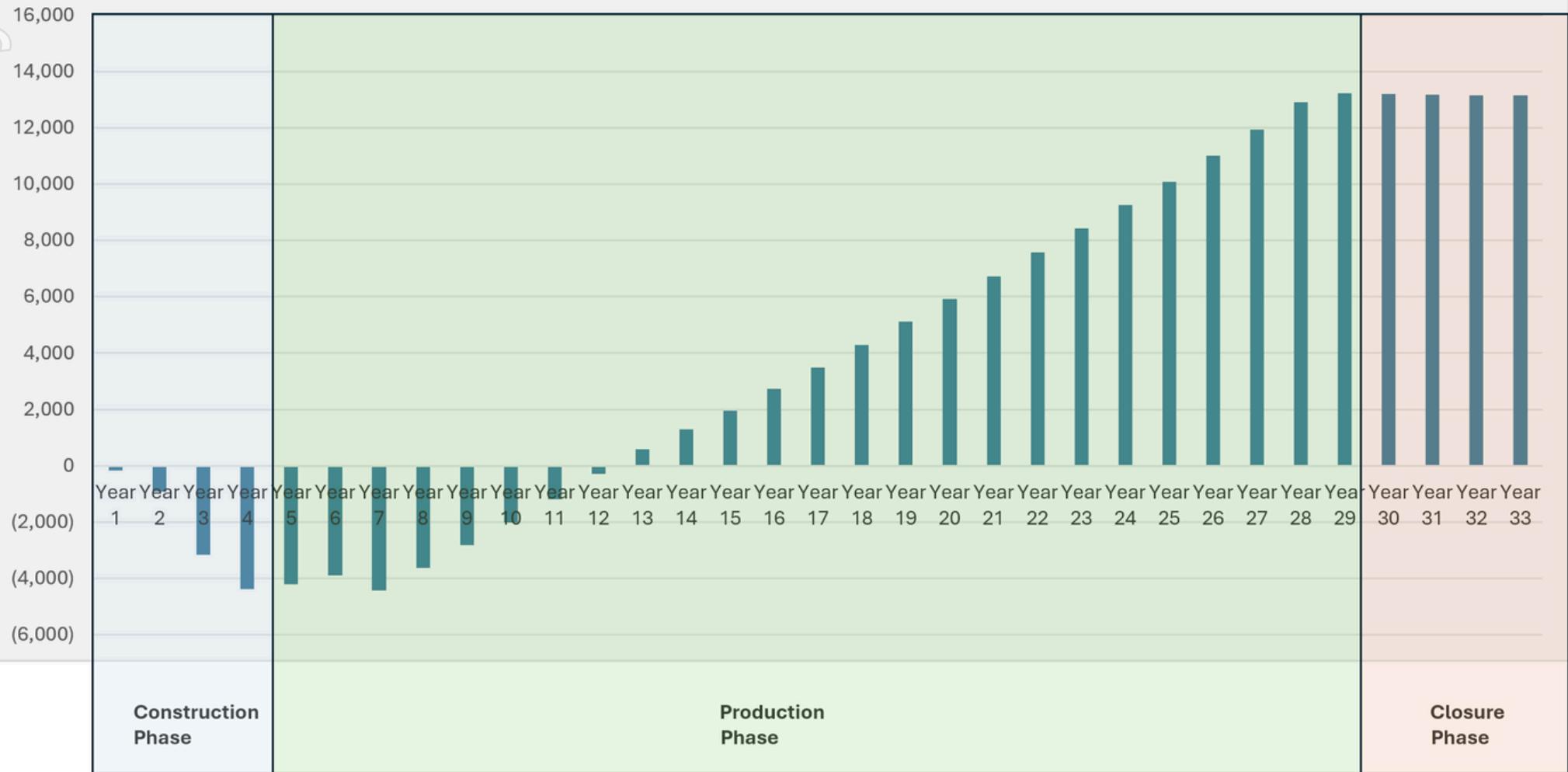
Assumption	Rate / Amount	Comments / Source
Discount Rate	8.00%	Estimated after-tax rate based upon comparable rates applied to projects similar in profile and expected costs of capital.
Iron Ore Benchmark Prices	62% Fe \$US 107.62/dry t 65% Fe \$US 123.30/dry t	Based upon the current price of the 62% Fe Fines and 65% Fines (Qingdao Port, CFR Equiv.)
Product Price Premium	\$US 32.38/dry t (62% Fe Index) \$US 16.70/dry t (65% Fe Index)	Expected price premium over the current 62% and 65% prices, based upon the grade premium above the relevant price, not allowing for any Direct Reduction premium.
Exchange Rates	AU/US: \$1.00/\$0.65	Hawsons' expectation of the average long run AU/US pricing, based on average monthly AU/US exchange rate for the last 2 years, rounded to the nearest cent.
Debt/Equity Funding	Debt: 0% Equity: 100%	The PFS has assessed the economic viability at the Project level only and assumes all funding will be via equity investment directly in the Project. Debt funding has not been considered at this stage.
Taxation Rate	30%	Current legislated company tax rate.
New South Wales State Government Royalty	4% 'Ex Mine Value' for each period	Ex Mine Value = Total Concentrate - % of downstream plant OpEx - downstream depreciation - downstream onsite administration.

# PROJECT CASHFLOWS

Annual Project Cashflows  
(pre-tax, undiscounted)



## Cumulative Project Cashflows (pre-tax, undiscounted)



## FINANCIAL SENSITIVITY ANALYSIS

The below table demonstrates the impact of changes in key items to the pre-tax NPV and IRR at the Project investment level.

Each scenario changes one key input by the percentage noted and holds all other items constant with the base case.

Scenario	NPV <sub>8</sub> \$AU M	IRR
<b>Base case</b>	<b>1,360</b>	<b>10.93%</b>
OpEx +10%	260	8.58%
OpEx +5%	810	9.77%
OpEx -5%	1,910	12.05%
OpEx -10%	2,460	13.16%
FX -10% (AU decrease)	2,872	13.87%
FX -5% (AU decrease)	2,409	10.00%
FX +5% (AU increase)	604	9.34%
FX +10% (AU increase)	(152)	7.65%
Price +10%	3,040	14.19%
Price +5%	2,200	12.60%
Price -5%	520	9.16%
Price -10%	(321)	7.26%
CapEx +10%	916	9.85%
CapEx -10%	1,805	12.16%

## FUNDING

To achieve the range of outcomes indicated in the Pre-feasibility Study, the Company requires funding of approximately \$AU 4.427B for CAPEX and operating losses until profits are generated.

The Company has undertaken a detailed assessment of its funding strategy and has formed the view that there is a reasonable basis to believe that the necessary funding to develop the Project will be available when required in the future. The grounds on which the Company has formed this belief include:

- The PFS has only assessed the economic case for the Project's Ore Reserves. In addition to the Ore Reserves:
  - The PFS mine plan includes the mining of approximately 400Mt of Inferred Mineral Resource treated as waste. Hawsons is planning to assess the economic impact of processing this material in future iterations of the mine schedule;
  - Excluding the above 400Mt, the Mineral Resource has approximately a further 1.6Bt of Inferred Resource. The Company is confident there is a good possibility that the remaining Inferred Resource will prove to be economically viable, extend the Life of Mine beyond what is currently assumed in the PFS.
- The Company's ongoing detailed discussions with key strategic investors to potentially fund future studies and ultimately provide Project funding, and the release of the PFS will provide additional information in relation to the Project and a strong platform to advance discussions further.
- The Company has appointed Cutfield Freeman & Co (**CF&Co**) to provide financial advisory services in relation to the development and implementation of the financing plan for the Project. CF&Co is a global mining finance adviser, with expertise in project and corporate finance, joint ventures, M&A, offtake and trade finance. CF&Co will assist Hawsons with obtaining the most economically effective funding solutions as the Project and the Company progresses.
- The Company's Board has a strong track record of successfully raising funds for, and managing, large scale projects.
- CF&Co have advised that based on their experience developing and implementing financing plans for similarly large funding requirements, they believe that Hawsons have a reasonable expectation of funding being available for the Project.

For the reasons outlined above, the Board believes that there is a reasonable basis to assume that future funding for the Project will be available and securable. Notwithstanding the above, there is no certainty that the Company will be able to source funding as and when required. Project finance typically involves a combination of debt and equity and it is possible that such funding may only be available on terms that may dilute (or otherwise affect) the value of the Company's existing shares.

The Company will continue to develop its funding strategy as part of the Feasibility Study, including engagement with CF&Co and key strategic investors. A detailed funding plan will be developed during the Feasibility Study.

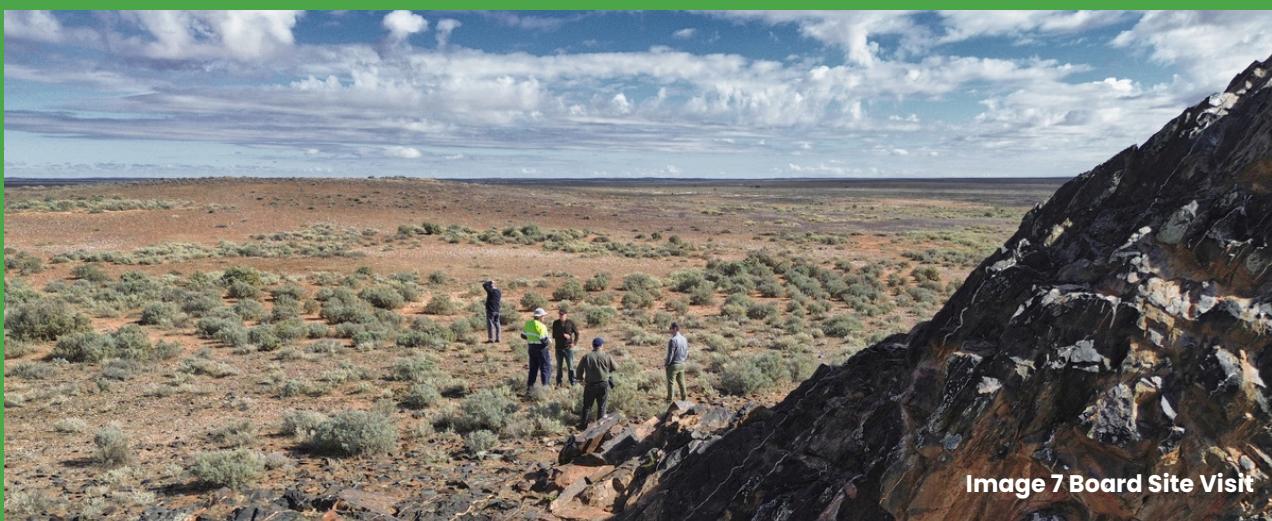


Image 7 Board Site Visit

## RISKS TABLE

The estimates of production and financial performance in relation to the Project are based on a range of assumptions and expectations that are subject to risks and reasonable control. These uncertainties arise from a range of general factors, including the nature of the mining industry and changing economic environment. Risks that have the potential to materially impact the proposed Project include but are not limited to

<b>Resources, Reserves and Exploration</b>	<p>The Mineral Resource Estimate and Ore Reserves are expressions of judgement based on knowledge, experience and industry practice. Estimates which were valid when initially calculated may alter significantly when new information or techniques become available. In addition, by their very nature Mineral Resources and Ore Reserve estimates are imprecise and are dependent on the quality of data inputs and geological interpretations which may prove to be inaccurate.</p> <p>Hawsons may undertake additional exploratory work with the aim of extending and further defining the Resources at the Project. No assurances can be given that additional exploration will result in the determination of a Mineral Resource on any of the exploration targets identified. Even if additional mineralisation is identified no assurance can be provided that this can be economically extracted.</p>
<b>Mine Development</b>	<p>Future development of mining operations are dependent on a number of factors including, but not limited to, the acquisition and/or delineation of economically recoverable mineralisation, favourable geological conditions, receiving the necessary approvals from all relevant authorities and parties, project facilities meeting process and engineering design criteria, shortages or increases in the price of consumables, spare parts and plant and equipment, cost overruns, access to the required level of funding and contracting risk from third parties providing essential services.</p> <p>Geotechnical drilling work is required to ensure the current pit parameters are adequate.</p>
<b>Mining</b>	<p>If production commences at the Project, its operations may be disrupted by a variety of risks and hazards.</p> <p>Such risks include inability to achieve estimated head grades, inability to achieve the required ore production rate, seasonal weather patterns, unanticipated technical and operational difficulties encountered in extraction and production activities and mechanical failure of operating plant and equipment.</p>
<b>Processing</b>	<p>Process risk associated with the Project has been minimised in general by adopting circuits and equipment flowsheets that are commercially proven, however processing may still be disrupted by a variety of risks and hazards.</p> <p>Such risks include forecast tonnage throughput will not be able to be achieved or maintained, dry magnetic separation (cobbing) does not achieve the required DTR recovery, and the concentrate product specifications will not be able to be achieved and maintained.</p> <p>Further metallurgical testwork may impact process plant design criteria and equipment selection. In addition, recovery and product grade predictions may vary with further testwork.</p>
<b>Infrastructure</b>	<p>Future development of the Project is dependent upon major infrastructure items such as power supply, water supply, rail logistics and port logistics are all key components of the Project.</p> <p>Development of Project infrastructure is subject to risks including receiving the necessary approvals from all relevant authorities and parties, sufficient rail capacity access, energy prices, rail charges, port charges and international shipping rates.</p> <p>Sterilisation drilling for all surface infrastructure including process plant is required to ensure placement of infrastructure is not over potential mineralisation and resource.</p>
<b>Project Operations</b>	<p>Mining and process operations are dependent on a number of factors including, but not limited to, access to skilled labour, industrial relations matters, shortages or increases in the price of key items across the supply chain, cost overruns, access to the required level and contracting risk from third parties providing essential services.</p>
<b>Environmentally Sensitive Areas</b>	<p>The Project contains areas that may be identified as environmentally sensitive areas. Whilst mining is not prohibited within these areas additional consents and approvals prior to conducting activities on the Reserves may be required. The development of the environmental requirements for the current Project scope needs to be established and studies undertaken for design input and to obtain the necessary development consent in both NSW and SA.</p> <p>Delays in obtaining, or the inability to obtain, these consents and approvals may significantly impact operations.</p>

<b>Native Title and Aboriginal Heritage</b>	<p>In relation to the Project tenements there may be areas over which legitimate common law native title rights of Aboriginal Australians exist. Where native title rights do exist, the ability of Hawsons to gain access to tenements (through obtaining consent of any relevant landowner), or to progress from the exploration phase to the development and mining phases of operations may be adversely affected.</p> <p>In the event Aboriginal heritage sites and objects are identified within the area of the Project, generally speaking, exploration and mining activities can be undertaken so as to avoid adverse impact to those sites identified, however the existence of these sites (and future Aboriginal heritage sites and objects identified) may lead to restrictions on the areas that Hawsons will be able to explore and mine.</p>
<b>Tenure, access and grant of applications</b>	<p>Mining and exploration tenements are subject to periodic renewal. The renewal of the term of granted tenements is subject to compliance with the applicable mining legislation and regulations and the discretion of the relevant mining authority. Renewal conditions may include increased expenditure and work commitments or compulsory relinquishment of areas of the tenements. The imposition of new conditions or the inability to meet those conditions may adversely affect the operations, financial position and/or performance of Hawsons.</p> <p>Access to land in NSW for mining and exploration purposes can be affected by land ownership, including private (freehold) land, pastoral leases and regulatory requirements within the jurisdiction where the Company operates. Several of the tenements overlap certain third-party interests including private land, pastoral leases held by third parties, and areas covered by native title determinations or native title claims. The Project will also require easements over land for road, rail and water supply. Any non-compliance by or dispute with the contract counterparty could affect the Hawsons' ability to access the projects and associated infrastructure which will affect operations and financial performance generally.</p> <p>The development of the Project will require the:</p> <ul style="list-style-type: none"> <li>• granting of mining leases; and</li> <li>• acquisition of, and/or granting of easements over private land.</li> </ul> <p>There can be no guarantee that such grants or acquisitions will occur.</p>
<b>Results of Studies</b>	<p>Hawsons intends to undertake a feasibility study in respect of the Project. This study will be completed within parameters designed to determine the economic feasibility of the relevant Project within certain limits. There can be no guarantee that the feasibility study will confirm the economic viability of the Project.</p>
<b>Political</b>	<p>Political risks and opportunities relate to possible changes to the land tenure system, permitting requirements and royalty or taxation regimes.</p> <p>The systems for granting land tenure and issuing permits for developing and operating mining and minerals processing plants are well established in New South Wales. The Project currently has the support of Local and State Government leaders, however such support is not guaranteed in the future.</p> <p>Levels of royalty and taxation and methods for their calculation are well established but may be subject to change in the future.</p>
<b>Climate</b>	<p>Climate-related factors that may affect the operations and proposed activities include:</p> <ul style="list-style-type: none"> <li>• The emergence of new or expanded regulations associated with the transitioning to a lower-carbon economy and market changes related to climate change mitigation. The Project may be impacted by changes to local or international compliance regulations related to climate change mitigation efforts, or by specific taxation or penalties for carbon emissions or environmental damage; and</li> <li>• Climate change may cause certain physical and environmental risks that cannot be predicted by Hawsons, including events such as increased severity of weather patterns and incidence of extreme weather events and longer-term physical risks such as shifting climate patterns.</li> </ul>
<b>Funding</b>	<p>Hawsons may seek to raise further funds through equity or debt financing, joint ventures, licensing arrangements, or other means. Failure to obtain sufficient financing for the Company's activities may result in delay and indefinite postponement of activities and the Company's proposed strategy. There can be no assurance that additional finance will be available when needed or, if available, the terms of the financing may not be favourable to the Company and might involve substantial dilution to Shareholders.</p>
<b>Economic</b>	<p>General economic conditions, introduction of tax reform, new legislation, movements in interest and inflation rates, iron prices and currency exchange rates may have an adverse effect on the Project, as well as on Hawsons' ability to fund operations.</p>

## OPPORTUNITY TABLE

The Pre-Feasibility Study has identified the following Project opportunities. Hawsons intends to investigate these opportunities as part of its planned upcoming activities:

<b>Conversion of Inferred Mineral Resource to Measured and Indicated Resources</b>	The PFS mine plan includes the mining but excludes the processing of approximately 400Mt of Inferred Mineral Resource. Hawsons is planning to assess the economic impact of processing this material in future iterations of the mine schedule.
<b>Mineral Resource Drilling</b>	As part of the FS, Hawsons is planning a drilling program designed on converting a portion of the Project's Inferred Resource to at least the Indicated Resource classification. This drilling will target the upper 100m to improve ore supply in the early mine life and reduce waste production.
<b>Product Grade</b>	Hawsons is undertaking further testwork to determine whether the end concentrate grade can be increased beyond its current level of 68.6% Fe.
<b>By Products</b>	Previous testwork conducted by the CSIRO has identified non-magnetite iron contained within the waste stream. Hawsons will shortly commence further work to determine whether this by product can be economically liberated, potentially having positive impacts on project revenues and/or operating costs.
<b>Mining</b>	As part of the FS, Hawsons will investigate cost saving opportunities, in particular: <ul style="list-style-type: none"><li>• Electrification of the mine haul fleet;</li><li>• Autonomous mining haulage;</li><li>• In-pit crushing and conveyor haulage</li></ul>
<b>Process Plant</b>	As part of the FS, Hawsons will conduct layout optimisation to improve process flows which is expected to improve structural steel, earthworks and civil requirements.
<b>Co-Disposal Facility</b>	The PFS envisions that CDF process waste is transported by truck to the facility. This trucking option is both capital and operating cost sub-optimal and a conveying stacking arrangement may result in significantly reduced operating cost. This option will be considered as part of the FS.
<b>Water</b>	The processing approach has resulted in a decrease of 60–70% of earlier estimated water needs. Given the reduction, alternative sources of water will be investigated, closer to the Project area which may result in both capital and operating cost savings.

# MARKETING AND SALES

Hawsons Iron aims to supply the global steel industry with high-grade iron ore concentrate products, essential to steelmakers transitioning to low-carbon Green Steel production using renewable energy and less, to no, fossil fuels.

Letters of Intent (**LOI**) already in place with marketers and steel mills and discussions undertaken with international miners reinforce the increasing recognition towards high-grade magnetite over hematite. Interest in products that attract a Green Steel premium is largely coming from the auto and electronics sectors with potential for Asian steel producers to supply the European market where implementation of the European Union's (**EU**) Carbon Border Adjustment Mechanism began in October 2023.

To reduce steel's carbon footprint, steelmakers are expected to shift from traditional blast furnaces (**BF**) to Green hydrogen-based direct reduced iron (**DRI**) processes, requiring high-grade, low-impurity iron feedstocks like Hawsons magnetite. According to Boston Consulting Group, using magnetite concentrate and Green Hydrogen in DRI electric arc furnaces (**EAF**) can cut emissions by up to 55% compared to blast furnaces.

While new technologies with Green Hydrogen may offer alternatives, the primary path to decarbonization is likely to involve DRI/EAF steelmaking using high-grade iron ore. It has also been demonstrated by many producers that the addition of 20% magnetite concentrate to a sinter blend for BFs can reduce fuel consumption by around 10%, when compared to a hematite-only blend.

Features of Hawsons Iron high-grade magnetite:

- 68.6% Fe magnetite fines with ultra-low impurities
- Excellent pelletising properties, improves pellet performance.



Image 8 Hawsons Iron Magnetite Concentrate

# SOCIAL AND COMMUNITY

The Project is likely to have the following potential environmental and socio-economic impacts:

- **Dust:** Dust suppression methodologies will be employed to mitigate or limit dust generation.
- **Local properties:** Hawsons has, and will continue to keep, local landholders informed as the project develops, to ensure their ideas and concerns are considered as part of future development plans.
- **Employment and Economic:** Broken Hill, nearby towns and other areas of South Australia and New South Wales will benefit from the Project.
- **Community Health and Safety:** HIO has implemented an extensive Mine Safety Management System including a comprehensive Risk Management and Gap Analysis process that is used to continually assess, update, and monitor all the company's activities to ensure that such activities do not adversely impact on the community or other stakeholders' health and safety.
- **Heritage Impacts and Traditional Owners:** Hawsons is engaging and working with the traditional owners and the Broken Hill Local Aboriginal Land Council to ensure heritage issues and opportunities are considered and integrated into future development plans.

**Image 9 Meeting with the Broken Hill Local Aboriginal Land Council**



# CONCLUSIONS AND FORWARD PROGRAM

The goals of the Pre-Feasibility Study / Ore Reserve process were to:

- Establish an Ore Reserve;
- Assess the economic viability of the Project, based solely on the Ore Reserves, using the revised dry processing approach;
- Highlight risks and opportunities to be addressed in future works and studies; and
- Determine the forward works plan.

The outcomes of the Pre-Feasibility Study resulted in positive outcomes for the above goals and support the development potential of the Project in the current iron price environment.

Accordingly, Hawsons remains focused on advancing its Project. The planned forward activities include:

- Confirmatory / optimisation test work at scale, on a number of key areas relating to process and waste management;
- Completion of viability works on the byproduct extraction;
- Undertake further drilling to expand and upgrade portions of the Mineral Resource to the Measured and Indicated and Reserve categories;
- Complete large representative sample collection suitable for Vertical Roller Mills pilot work;
- Optimisation works on waste management materials handling;
- Commencement of the Feasibility Study; and
- Environmental and permitting advancements to align with development timelines, including the current ML Application over the Project area.

Hawsons looks forward to developing and operating this important large scale mining project in compliance with best-practise guidelines as aligned with IFC Performance Standards on environmental and social sustainability.

The Company has made significant gains over the last 12 months. The Project is mineralogically unique in its chemical and physical properties which have resulted in lower risk and cost benefits. This approach is expected to result in significant environmental benefits and result in the Project becoming a material contributor to the global green steel supply chain.

Located near Broken Hill, infrastructure is readily available for the Company's development and operational needs. Local stakeholders have demonstrated significant support for the Project realising the potential benefits of having another large-scale, long-term mining operation in the region.



## APPENDIX 1: JORC CODE, 2012 EDITION - TABLE 1

### SECTION 1 - SAMPLING TECHNIQUES AND DATA

(Criteria in this section apply to all succeeding sections.) (Work was completed by Carpentaria Exploration (“CAP”) 2010-2018, Hawsons Iron (“HIO”) 2019-2024)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"><li><i>Nature and quality of sampling (eg 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.</i></li><li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li><li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li><li><i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘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 (eg submarine nodules) may warrant disclosure of detailed information.</i></li></ul>	<ul style="list-style-type: none"><li>Sampling consisted of drillholes with a mixture of reverse circulation (RC) from surface, diamond tails to RC precollars (RC_DD) and diamond core from surface (DD).</li><li>A total of 72 drillholes for 21,605.8m, were drilled by CAP in two main phases i.e. 2010 (RC &amp; DD) and 2016 (RC).</li><li>A total of 111 drillholes for 32,07.9m were drilled by HIO in three main phases i.e 2021-2022 (RC &amp; RC_DD), 2023 (RC) and 2023-2024 (RC &amp; DD).</li><li>CRAE completed 5 drillholes for 734.6m (percussion and DD) in 1988/9 which were peripheral to the main body of mineralisation.</li><li>RC drillholes were drilled to obtain 1m bulk samples with sample compositing a] in the field (various lengths under geological control) via spear sampling applied in order to obtain manageable sample sizes for laboratory sample preparation and assaying by CAP &amp; HIO 2021-2 or b] by the laboratory in the lab (HIO 2023-4).</li><li>For the 2010 RC drilling, sampling comprised 2m to 10m 3kg composite samples. The 2016 sampling comprised 5m composites generating 6kg of sample. All samples were pulverized to produce 150g aliquot for X-Ray Fluorescence (XRF) and Davis Tube Recovery (DTR) analysis. The 2021-2024 HIO drilling produced 5m composites. All samples were pulverized to produce 150g aliquot for X-Ray Fluorescence (XRF) and Davis Tube Recovery (DTR) analysis.</li><li>Diamond core sampling involved sawing half core samples to produce an 8m composite sample (predominantly NQ core) for CAP and 5m composites for NQ/HQ3 core (HIO). Samples were pulverized to produce a 150g aliquot for XRF and DTR analysis.</li><li>Geophysical logging was completed for a majority of holes and consisted of natural gamma, magnetic susceptibility, density and calliper readings.</li><li>Mineralisation comprises bands of variable thickness of disseminated, idioblastic magnetite in low metamorphic grade fine grained siliciclastics and diamictites. Siliciclastic grain size and porosity tends to provide a strong control to mineralisation. Substantial regional deformation has occurred but locally the main mineral units are relatively straightforward moderately dipping units albeit with a 90o fold rotation in the middle of the deposit.</li><li>Consistency of sampling method varied but the QAQC work indicated no bias with the sampling.</li><li>The sampling techniques are considered appropriate for the deposit type with all sampling to industry standard practices.</li></ul>



Criteria	JORC Code explanation	Commentary
Drilling techniques	<ul style="list-style-type: none"><li>• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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>	<p><b>CAP</b></p> <ul style="list-style-type: none"><li>• The RC drilling for 2010 was carried out using a truck mounted Schramm and truck mounted KWL 1600H. Both rigs used 4.5" rods and 5.5" face bits.</li><li>• PD and DD drilling was carried out using a truck mounted UDR650 using NQ2 and standard HQ diameters. Core orientation used the Ace Core orientation tool.</li><li>• For the 2016 drilling (all RC drilling) truck-mounted Sandvik DE 840 (UDR1200), UDR1000 and Metzke rigs were used. All rigs used 4.5" rods with 5.5" face bits.</li></ul> <p><b>HIO</b></p> <ul style="list-style-type: none"><li>• The RC drilling for 2021-2022 was carried out using the following truck mounted drill rigs:</li><li>• Sandvik UDR 1200HC o Sandvik UDR 1000 o Both rigs used 4.5" rods and 5-5/8" face bits.</li><li>• The DD drilling was carried out using a range of truck-mounted drill rigs, including:</li><li>• Two x Sandvik UDR 1000</li><li>• Sandvik UDR 1200</li><li>• Bournedrill L1000THD</li><li>• Boart Longyear KWL 1600.</li><li>• All core drilled was HQ3 diameter. A range of core orientation tools were used on geotechnical core, they include:</li><li>• Reflex Act III o Boart Longyear TruCore</li><li>• Boart Longyear TruShot</li><li>• The 2023-4 drilling used a truck-mounted McCulloch DR950 rig with</li><li>• 4.5" rods with stabiliser subs and 5-5/8" face bits.</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><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>	<p><b>CAP</b></p> <ul style="list-style-type: none"><li>• The 2010 RC sampling was on 1m intervals into green plastic bags. Sample recoveries for RC were visually estimated by the geologist at the time of drilling and recorded qualitatively as high, medium and low.</li><li>• Because no numerical RC chip recovery data existed it was not possible to conclude if there was a relationship between sample recovery and mineral grade</li><li>• The 2016 RC drilling recorded sample weights for 272 1m samples with recoveries of 80-90% for dry samples and 40 to 50% for wet samples. Plotting of recoveries versus DTR grade indicated no obvious sampling bias.</li><li>• Core recoveries were recorded by measuring the length of core recovered in each drill run divided by the drilled length of the individual core runs; average recovery is &gt;97%.</li><li>• A handheld XRF orientation study by CAP for the 2010 RC drilling concluded that there was no sample bias</li></ul>



Criteria	JORC Code explanation	Commentary
		<p>with loss or gain of fine/coarse material with the RC drilling.</p> <ul style="list-style-type: none"><li>• A very modest number of wet samples were recorded in the 2010 RC drilling and for the 2016 drilling, &lt;5% of samples were logged as wet.</li><li>• A study by Keith Hannan of Geochem Pacific Pty Ltd, an independent geochemist/consultant determined, “the magnetite recoveries for the composited intervals of individual samples are not systematically influenced (biased) by method of drilling and type of recovered sample”</li></ul> <p><b>HIO</b></p> <ul style="list-style-type: none"><li>• The 2021-2 RC drilling indicated no sampling bias of significance for DTR vs sample recovery</li><li>• Triple tube HQ core had core recoveries recorded by measuring the length of core recovered in each drill run divided by the drilled length of the individual core runs. No numerical recovery percentage was supplied but visual indications were that recovery was very good.</li><li>• For the 2023-4 drilling RC recoveries were recorded by measuring the mass of the primary, library/duplicate and bulk reject samples of each 1m drilled. This data was then used to calculate a recovery percentage based on a theoretical mass calculated using downhole short-spaced density (SSD) data and the nominal drillhole diameter (143mm). An average qualitative value of 78% was achieved.</li><li>• No bias was noted in any of the HIO datasets</li><li>• Triple tube HQ core was used resulting in diamond core recoveries for the 2023-4 period being very good.</li><li>• Lower than normal core recoveries in both campaigns were recorded for top of hole cover and oxidised zones and the occasional but rare rubble/clay gouge fault 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><li>• The total length and percentage of the relevant intersections logged.</li></ul>	<ul style="list-style-type: none"><li>• Every RC, percussion and diamond drillhole was logged by a geologist &amp; entered into Excel spreadsheets recording; Recovery, Moisture content, Magnetic susceptibility, Oxidation state, Colour, % of Magnetite, Gangue Min, Sulphide Min, Veins and Structure. Data was uploaded to a customised Access database.</li><li>• Handheld magnetic susceptibility measurements and geological logging was completed for every metre of every drillhole.</li><li>• Logging used a mixture of qualitative and quantitative codes.</li><li>• All RC samples were sub-sampled, sieved, washed and stored in a labelled plastic chip tray. All remaining drill core after sampling was stored in labelled plastic core trays and subsequently stored at the company's offices in Broken Hill.</li><li>• Processing of drillcore included core orientation, metre marking, magnetic susceptibility measurements (every 0.5m), core recoveries, rock quality designation (RQD). All drill core was photographed wet and dry after logging and before cutting.</li><li>• All relevant intersections were logged.</li><li>• Geological logging was of sufficient detail to assist in the creation of a geological model.</li></ul>



Criteria	JORC Code explanation	Commentary
<p><i>Sub-sampling techniques and sample preparation</i></p>	<ul style="list-style-type: none"><li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li><li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li><li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li><li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li><li>• <i>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.</i></li><li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li></ul>	<p><b>CAP</b></p> <ul style="list-style-type: none"><li>• The 2010 RC samples were composited in the field using geological control via the spear sampling method of the 1m bulk sample bags. The spear method was concluded by CAP to be adequate based on the results of a handheld XRF orientation exercise. The green plastic bags were speared from a range of angles to the bottom of the bag to ensure a representative sample. The compositing produced a 2m to 10m 3kg sample for laboratory analysis at ALS Labs in Perth.</li><li>• The 2016 RC samples were split using a riffle splitter (no details of type used) that produced a 1/16th split taken from the rig every metre and then composited to 5m intervals by splitting again using a 50/50 splitter to give a 6-7kg sample.</li><li>• DD core was cut into half core using a brick saw and diamond blade. The core was cut using the orientation line or perpendicular to bedding, to produce an 8m composite sample (predominantly NQ core). Half core was sent to ALS Perth for analysis, whilst the remaining half core was retained for reference.</li><li>• <u>Sample Preparation was completed at ALS Laboratories Perth:</u><ul style="list-style-type: none"><li>○ Crush the sample to 100% below 3.35 mm.</li><li>○ A 150 g sub-sample for pulverizing in a C125 ring pulveriser (record weight) – DTR SAMPLE.</li><li>○ Initially pulverize the 150 g sample for nominal 30 seconds – the sample is unusually soft for a ferro-silicate rock.</li><li>○ Wet screen the DTR sample at 38 micron pressure filter and dry, screen at 1 mm to de-clump and re-homogenize.</li><li>○ Report the times and weights for each grind pass phase.</li><li>○ Combine and homogenize all retained -38 micron aliquots and &lt;5 g oversize –final pulverized product. Sub-sample the final pulverized product to give a 20 g feed sample for DTR work and a ~10 g sample for HEAD analysis via XRF fusion.</li></ul></li><li>• The 2010 work employed field duplicates (23 5m samples) using the spear sampling technique which on analysis produced acceptable results.</li><li>• The 2016 work had a much more comprehensive QAQC programme which included 87 ‘field pairs’ (not actual duplicates) at an insertion rate of 1 in 10, 111 lab duplicates and 39 blanks (river sand) at an insertion rate of 1 in 20, 58 2nd lab checks (Intertek Labs in Perth), pulp duplicates for XRF analysis and sample preparation checks.</li><li>• For the 2016 work the field pair results produced a slightly suboptimal outcome but were still acceptable for the current resource classification and seemed to be less precise than the spear sampling method used in 2010. The lab duplicates (a second 150g split) produced good results indicating acceptable sample preparation procedures. The 2nd lab checks on 150g sub-samples produced results indistinguishable from the original lab results. Pulp duplicates demonstrated chemical homogeneity with the XRF analysis.</li><li>• 30 primary crush and sub-sample checks were completed by Aussam Geotechnical Services (Broken Hill)</li></ul>



Criteria	JORC Code explanation	Commentary
		<p>which concluded that no evidence of bias with the oversize mineralogy.</p> <ul style="list-style-type: none"><li>• Blank samples comprising river sand produced results that indicated no contamination of the samples during the sample preparation process.</li><li>• An additional check on the field sub-sampling and compositing procedure used a Jones 3 tier riffle splitter (1/8) and a free-standing 1:1 splitter to match the 1/16 rig splitter. A total of 30 5m composite intervals were utilised. Noting that all samples were dry, slightly better results were achieved than the original ‘field pair’ process. However under full field conditions it was thought that there was likely to be no difference between the riffle splitting and spear subsampling methods. Both are at risk to human errors, which perhaps can be better managed with the riffle splitting.</li></ul> <p><b>HIO</b></p> <ul style="list-style-type: none"><li>• The 2021/2022 RC samples were split using a 1/8th-7/8th riffle splitter placed under the rig cyclone. Samples were taken every metre and then composited in 5m intervals using the spear sampling method. Samples were then sent to a commercial laboratory, Bureau Veritas in Adelaide.</li><li>• DD core was cut perpendicular at start and end of sample interval and cut longitudinally in quarter for geochemical sampling.</li><li>• The 2023-4 RC samples were sub-sampled using a Metzke Fixed Cyclone/Cone Splitter combination. Every metre was separated into a 12% primary, a 12% library/secondary sample and a 76% bulk reject sample. Samples were sent to a commercial laboratory Bureau Veritas (“BV”) in Adelaide for sample preparation and analysis.</li><li>• Each 1m primary sample and selected 1m secondary samples (used to form 5 metre duplicate composites) were sub-divided into ¼ portions at the BV laboratory using rotary splitter, then composited into 5m samples for DTR &amp; XRF preparation.</li><li>• The HQ3 DD core from the calibration hole was cut into 1m intervals. Each 1m interval was then cut longitudinally to produce ¼ core samples for geochemical sampling.</li><li>• Sample preparation was as for CAP with drying, crushing and pulverising to give a 150g pulp sample. 20g feed for DTR and 10g feed for head XRF assays.</li><li>• QAQC consisted of both field and laboratory duplicates for DTR and XRF analyses (both DTR concentrate and head assays). No issues were reported. QAQC also included coarse reject samples again with no issues noted.</li><li>• All sampling methods and samples sizes are deemed appropriate by HSC.</li></ul>



Criteria	JORC Code explanation	Commentary
Personal Use Only	<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 make and model, reading times, calibrations factors applied and their derivation, etc.</li><li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li></ul>	<p><b>CAP</b></p> <p><u>Davis Tube Recovery (DTR) Analysis</u></p> <ul style="list-style-type: none"><li>Pulveriser bowl 150 ml</li><li>Stroke Frequency - 60/minute</li><li>Stroke length – 38mm</li><li>Magnetic field strength – 3000 gauss</li><li>Tube Angle – 45 degrees</li><li>Tube Diameter – 40mm</li><li>Water flow rate – 540-590 ml/min</li><li>Washing time 20 minutes</li><li>Collect the concentrate in small collector (magnetic fraction) and discard tails.</li><li>Dry the DTR concentrate and report the weight of the concentrate as a percentage of measured feed and report – DTR Mass Recovery.</li></ul> <p><u>X-Ray Fluorescence (XRF) Assaying</u></p> <ul style="list-style-type: none"><li>Using the Head Sample, analyse by XRF fusion method for the following attributes: Al2O3%, As%, Ba%, CaO%, Cl%, Co%, Cr%, Cu%, Fe%, K2O%, MgO%, Mn% Na2O%, Ni%, P%, Pb%, S %, SiO2%, Sn%, Sr%, TiO2%, V%, Zn%, Zr% &amp; LOI.</li><li>Using the DTR concentrate sample analyse by XRF fusion method for the following grades: Al2O3%, As%, Ba%, CaO%, Cl%, Co%, Cr%, Cu%, Fe%, K2O%, MgO%, Mn% Na2O%, Ni%, P%, Pb%, S %, SiO2%, Sn%, Sr%, TiO2%, V%, Zn%, Zr% &amp; LOI</li><li>JH8 and KT5 magnetic susceptibility meters were used to record magnetic susceptibility. A laboratory standard was used each day to calibrate each metre. A Niton XL3T Gold handheld XRF machine was used. A laboratory analysed sample was used to calibrate for Fe.</li><li>QAQC procedures consisted of the use of 3 certified reference materials for DTR (head and high grades) and XRF analysis at a frequency of 1 per 15 for the 2016 drilling. The reported results for the standards meet industry accepted criteria for accuracy, both for DTR magnetite recoveries and XRF analyses of the critical elements (Fe, Si, Al, and P).</li><li>It is uncertain if certified reference materials were used for the 2010 drilling. In CAP's documented drilling procedures it was indicated that a standard insertion rate of 1 in 30 should be used. In a QAQC review of procedures Keith Hannan noted that CAP utilises a 'monitor' standard consisting of crushed magnetite-rich rock derived from local outcrops but without commenting on any results.</li><li>Keith Hannan of Geochem Pacific Pty Ltd, an independent geochemist/consultant reviewed the QAQC results for both the 2010 and 2016 drilling and expressed satisfaction with precision, accuracy and any lack of bias in</li></ul>



Criteria	JORC Code explanation	Commentary
		<p>the data, making it fit for purpose for resource estimation.</p> <ul style="list-style-type: none"><li>The CAP SSD (density) data was collected using a FDS50 down hole tool containing a 3500CO radioactive source. No other information is available particularly for calibration.</li><li>All assay methods are deemed appropriate by HSC. HIO</li><li>Analysis for the 2021-2 and 2023-4 drilling was the same as for the CAP drilling. This included recovered magnetic fraction using a Davis Tube with XRF analysis of the DTR concentrate and the original composited sample (head assays)</li><li>The 2021-2 and 2023-4 drilling used Certified Reference Materials, blank samples and second lab checks (ALS in Perth).</li><li>QAQC procedures consisted of the use of 3 certified reference materials for DTR (head and high grades) and XRF analysis at a frequency of 1 per 15. The reported results for the standards meet industry accepted criteria for accuracy, both for DTR magnetite recoveries and XRF analyses of the critical elements (Fe, Si, Al, and P).</li></ul> <p><u>Geophysical Logging (HIO)</u></p> <ul style="list-style-type: none"><li>Geolog Pty Ltd logged each hole with three downhole logging tools:</li><li>Robertson Geoscience compensated dual density, natural gamma, caliper and temperature probe (Density Combination Probe); • Robertson Geoscience magnetic susceptibility probe (Magsus); and • Reflex Gyro downhole survey instrument (Gyro).</li><li>QAQC measures/checks applied to these probes included:</li><li>Calibrated in aluminium block and water prior to departure to Hawsons site.</li><li>Calibrated in Robertson Geoscience calibration sleeve prior to departure to Hawsons site.</li><li>The gyro utilises a digital surface-referenced MEMS-gyro system for accuracy of calibration and is tested against the driller's Axis rod-string gyro tool.</li><li>On site calibration uses cored hole FCFO23023. This hole is now logged with all tools each time the logger comes to site, before logging of newly drilled holes commences, and at other nominated times during the logging campaign.</li><li>All assay methods are deemed appropriate by HSC.</li></ul>
Verification of sampling and assaying	<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></ul>	<p><b>CAP</b></p> <ul style="list-style-type: none"><li>Data was stored in a customised Access database.</li><li>Database checks were completed by S. Tear of HSC on 5 randomly selected drillholes. Checks included comparing database values with original collar survey reports, downhole survey reports and assay certificates. No issues were noted.</li><li>Two DD holes were used as twin holes to verify the results for 2 pairs of RC holes and the DTR performance.</li></ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"><li><i>Discuss any adjustment to assay data.</i></li></ul>	<ul style="list-style-type: none"><li>The results are reasonable but there is some potential ambiguity mainly due to a fundamental lack of assay data (mainly with the diamond drilling) and the separation distance of the relative mineral intercepts. It was concluded by Keith Hannan that “the ‘twin hole’ site data that, although there is demonstrable variation in average magnetite grades within several metres along-strike, there is no evidence of a consistent positive bias in the magnetite levels determined for RC samples”.</li><li>No details are available for any documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li><li>CAP used a suite of documented procedures for the 2016 drilling related activities drawn as a flowsheet.</li><li>No adjustments were made to raw assay data except for the resource estimation where below detection results were recorded as half below detection value.</li><li>Density data from the downhole geophysics was adjusted upwards by 5.2% based on check density measurements using drillcore and an immersion in water technique and the weight in air/weight in water (Archimedes) method.</li></ul> <p><b>HIO</b></p> <ul style="list-style-type: none"><li>Wes Nichols, Competent Person for the HIO Exploration Results, has visited the site several times in the 2021-4 time period.</li><li>One diamond twin of an RC hole has been completed by HIO for the 2023-4 drilling. This diamond hole is used for the geophysical calibration and provided information on the density and the need for any corrections to the downhole geophysical data.</li><li>A file-based database system was used “DataStore” which utilised import and export tools that also validated and formatted the data. Data inputs for lithology, geochemistry and geophysics were utilised. Heading checks on each file were enacted via the software and once flagged corrections made in the input forms to ensure correct allocation of outcomes. Data was verified maximum / minimum value checks, sample advice to report reconciliation, dictionary checks and text value checks. Clean validated files once available were automatically uploaded to the database</li><li>All assay data is validated through a proprietary MS Excel-based software (Lab-In for Geochem) program which has error-trapping and validation dictionary routines. Error reports are produced and provided back to the data provider for rectification and resubmission of corrected data.</li></ul>
<i>Location of data points</i>	<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>	<p><b>CAP</b></p> <ul style="list-style-type: none"><li>Drillhole collars were located by a local surveyor using a Differential GPS with accuracy to less than one metre.</li><li>Coordinates were supplied in GDA 94 – MGA Zone 54. HSC used a local grid conversion which involved rotating the drilling data 320° in a clockwise direction to give an orthogonal E-W strike to the mineralisation.</li><li>Down hole surveys for the 2010 drilling were initially recorded as single shot digital displays and were then recorded using a gyroscope due to the highly magnetic nature of the deposit. All the 2016 drillholes had downhole surveys measured using a gyroscope.</li></ul>



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"><li>• It is noted that the downhole surveys in the database for the 2010 drilling consisted of 30 to 60m spaced single shot camera surveys and not the gyro data due to limitations with the gyro data as result of hole collapse and reluctance of the contractor to send the probe to the full hole depths. A 3D check plot of five holes indicated minimal deviation for the common downhole lengths between the single shot and gyro data. Hole deviation appeared to increase to significant distances but is associated with a 'run over' projection of the gyro data and therefore not necessarily accurate.</li><li>• Topographic control was collected using a high-resolution</li><li>• Differential Global Positioning System by a local surveyor.</li><li>• Location methods used to determine accuracy of drillhole collars are considered appropriate.</li></ul> <p><b>HIO</b></p> <ul style="list-style-type: none"><li>• For the 2021-22 and 2023-4 exploration programs, drillhole collars were surveyed by a local accredited surveyor using ALTUS APS-3 RTK (Real Time Kinematic) GPS units in differential mode, which provided an accuracy of 2 to 3 centimetres in horizontal and vertical measurements.</li><li>• Current GDA94 coordinates of an existing permanent control point HK1 at the exploration site were utilised as a basis for the surveys.</li><li>• Coordinates were supplied in both GDA94 – MGA Zone 54 and GDA2020 – MGA Zone 54. HIO is now operating in GDA2020 – MGA Zone 54 and is using this as standard.</li><li>• Due to the highly magnetic nature of the mineralisation, down hole surveys for the 2021-22 drilling were measured using a gyroscope where possible. Difficulty with getting the tool down the hole because of hole cave meant that some holes could not be logged along their entire length and where possible a multi shot downhole camera survey was utilized.</li><li>• Downhole surveys for the 2023-4 drilling were measured using both</li><li>• Geolog's downhole Reflex gyro and an Axis Champ Navigator Gyroscope at 10m intervals down the length of the holes and to within 10m of final hole depth.</li><li>• Topographic control was maintained using data control points set out by an accredited local surveyor. In 2021, a LiDAR survey was conducted to better constrain the local topography.</li></ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"><li>• Data spacing for reporting of Exploration Results.</li><li>• 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.</li><li>• Whether sample compositing has been applied.</li></ul>	<p><b>CAP</b></p> <ul style="list-style-type: none"><li>• The deposit is drilled at a nominal spacing of 150m to 200m in section and plan extending to 400m on the periphery of the deposit. Downhole RC and DD sample spacing was 1m.</li><li>• The drill spacing was deemed adequate for the interpretation of geological and grade continuity noting the along strike stratigraphic homogeneity associated with the style of mineralisation.</li><li>• A majority of holes had downhole geophysics completed except where hole collapse prevented progress of the probe. Downhole sampling was at 1cm intervals which were averaged over 10cm intervals to aid modelling.</li></ul>



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"><li>The 2010 drill samples were composited in the field under geological control with an interval range of 2 to 10m with an average length of 8m. The 2016 RC drill samples were composited to 5m.</li></ul> <p><b>HIO</b></p> <ul style="list-style-type: none"><li>In 2021-22, closer spaced drilling on approximately 100m centres was completed within the Core West area and the drill spacing was deemed adequate for the interpretation of geological and grade continuity for the stratigraphic homogeneity associated with the style of mineralization along strike.</li><li>The data spacing is deemed appropriate for Mineral Resources and their classifications.</li><li>The 2021-2 and 2023-4 RC and DD samples were composited into 5m intervals along the hole length.</li></ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"><li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li><li>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.</li></ul>	<ul style="list-style-type: none"><li>Drilling was generally angled at -60° dip, and at right angles to geological strike to ensure sub-perpendicularity to the bedding, which is the primary control to the magnetite mineralisation.</li><li>Different azimuths were used to reflect the changing strike of the beds associated with folding of the sediments and were designed to maintain the steep angle to the bedding.</li><li>Locally holes suffered significant deviation to the right (east) with depth. This affected the lower Unit 2 more than the upper Unit 3.</li><li>Drilling orientations are considered appropriate with no bias.</li><li>The drilling orientation made it very difficult to intersect the cross cutting fault structures as the drilling was often sub-parallel to these features. Therefore information on the nature and impact on metal grade of the structures, particularly with any potentially associated penetrative oxidation, is relatively unknown.</li></ul>
Sample security	<ul style="list-style-type: none"><li>The measures taken to ensure sample security.</li></ul>	<p><b>CAP</b></p> <ul style="list-style-type: none"><li>All samples were stored on site under CAP personnel supervision until transporting to the CAP Broken Hill office.</li><li>No details are available on the transportation of samples to the laboratory.</li></ul> <p><b>HIO</b></p> <ul style="list-style-type: none"><li>All primary &amp; secondary samples were bagged using industry standard calico sample bags and stored on site under the supervision of an HIO representative. Primary sample bags are pre-numbered to ensure that samples are not missed.</li><li>Primary and secondary samples were separately packed into IBC containers, a lid was secured with tek screws and strapped to the container to ensure there was no loss of sample during transport.</li><li>Samples were dispatched on a regular basis via a trusted logistics company and were accompanied by a manifest. Photos were taken of each IBC at its send point before despatch</li><li>The HIO assay results are emailed by the laboratory to multi company personnel where validation checks are completed, any errors are communicated back to the laboratory which fixes any issues and rereports the assay results.</li></ul>



Criteria	JORC Code explanation	Commentary
Audits or reviews	<ul style="list-style-type: none"><li><i>The results of any audits or reviews of sampling techniques and data.</i></li></ul>	<p><b>CAP</b></p> <ul style="list-style-type: none"><li>Sample procedures and results were systematically reviewed by CAP personnel.</li><li>The QAQC data was reviewed by CAP staff Geochemist/consultant who concluded:</li><li>The duplication procedure for composite RC samples, by careful spearing, is demonstrably effective.</li><li>An absence of mismatches between duplicates and the consistency of analytical results for CAP blanks and the CAP certified standards indicate that sample handling procedures in the field for this complex program are well executed.</li><li>Based on the laboratory chemical analyses and derived parameters such as magnetite content, the CAP monitor standard is chemically and mineralogically uniform and therefore ‘fit-for-purpose’.</li><li>The high degree of correlation between the averaged field portable (FP) XRF readings for Fe on primary bags of RC spoil and the laboratory analyses of Fe on the much smaller composite samples derived thereof, indicates that downhole Fe distributions are successfully mapped by FP XRF and that the compositing procedure is effective.</li><li>Keith Hannan completed an exhaustive review of the sampling and assaying for the 2016 drilling which concluded “The investigation of multiple sources of QAQC data finds the magnetite recoveries and chemical analyses obtained for the sample composites of the Hawsons Iron Project 2016 RC Infill Drilling Programme to be fit for the intended purpose of ore resource estimation and planning. Sampling and laboratory preparation and analytical errors are well within industry standard tolerances, and without demonstrable bias”.</li></ul> <p><b>HIO</b></p> <ul style="list-style-type: none"><li>An audit on sample tracking/arrival, sample preparation and analysis procedures was conducted by Wes Nichols on 01/12/2021 at the Bureau Veritas Laboratory at Wingfield in Adelaide. While the equipment and procedures were observed for XRF analysis during this audit visit, no samples were ready to be analysed via XRF at that date.</li><li>McMahon Resources completed reviews of the sampling and assaying for the 2023-4- drilling program data. No issues were noted</li><li>The 2010 QAQC data was also reviewed by Keith Hannan of Geochem Pacific Pty Ltd, an independent consultant.</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><i>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.</i></li><li><i>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.</i></li></ul>	<ul style="list-style-type: none"><li>The Hawsons Magnetite project is located in Western NSW, 60 km southwest of Broken Hill. The deposit is 30km from the Adelaide Sydney railway line, a main highway and a power supply.</li><li>The project is wholly owned by HIO who currently manage the project.</li><li>In December 2023, Hawsons acquired a new tenement (EL9620) that adjoins the southern boundary of EL7208. The project area is entirely within Exploration Licences (ELs) 6979, 7208, 7504 &amp; 9620. Hawsons is the sole tenure holder of these Els.</li><li>Licence conditions for all ELs have been met and are in good standing.</li><li>An application for a Mining Lease (ML) was lodged with the NSW Trade &amp; Investment Department in October 2013 and MLA621 was granted in December 2023. MLA621 covers more area than the previous MLA460 which was relinquished on the granting of the new MLA.</li></ul>
<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>	<ul style="list-style-type: none"><li>In 1960 Enterprise Exploration Company (the exploration arm of Consolidated Zinc) outlined a number of track-like exposures of Neoproterozoic magnetite ironstone (+/- hematite) which returned a maximum result of 6m at 49.1% Fe from a cross- strike channel sample. No drilling was undertaken by Enterprise.</li><li>CRAE completed in 1984, five holes within EL 6979 seeking gold mineralisation in a second-order linear magnetic low interpreted to be a concealed faulted iron formation within the hinge of the curvilinear Hawsons' aeromagnetic anomaly. CRAE's program failed to locate significant gold or base metal mineralisation but the drilling intersected concealed broad magnetite ironstone units interbedded with diamictite adjacent to the then untested peak of the highest amplitude segment of the Hawsons aeromagnetic anomaly.</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 Hawsons Magnetite Project is situated within folded, upper greenschist facies Neoproterozoic rocks of the Adelaide Fold Belt. The Braemar Iron Formation is the host stratigraphy and comprises a series of strike extensive magnetite-bearing siltstones generally with a moderate dip (circa -55°), primarily to the southwest. The airborne magnetic data clearly indicates the magnetite siltstones as a series of parallel, high amplitude magnetic anomalies. Large areas of the Hawsons prospective stratigraphy are concealed by transported ferricrete and other younger cover. The base of oxidation due to weathering over the prospective horizons is estimated to average 80m from surface.</li><li>The Hawsons project comprises a number of prospects including the Core, Fold, T-Limb, South Limb and Wonga deposits. Mineral Resources have been generated for the Core and Fold areas, which are contiguous.</li><li>The depositional environment for the Braemar Iron Formation is believed to be in a subsiding basin, with initial rapid subsidence related to rifting possibly in a graben setting as indicated by the occurrence of diamictites in the lower part of the sequence (Unit 2). A possible sag phase of cyclical subsidence followed with deposition of finer grained sediments with more consistent bed thicknesses, style and clast composition (Unit 3), as</li></ul>



Criteria	JORC Code explanation	Commentary
		<p>compared to the diamictite units. The transition from high (Unit 2) to lower (Unit 3) energy sediment deposition is marked by top of the Interbed Unit.</p> <ul style="list-style-type: none"><li>The distribution of disseminated, inclusion-free magnetite in the Braemar Iron Formation at Hawsons is related to the composition and nature of the sedimentary beds. The idioblastic nature of the magnetite is believed due to one or more of a range of possible processes including in situ recrystallisation of primary detrital grains, chemical precipitation from seawater, or permeation of iron-rich metamorphic fluids associated with regional greenschist metamorphism. Grain size generally ranges from 10microns to 0.2mm but tends to average around the 40microns. The sediment composition and grain size appear to provide the main control on the mineralisation. There is no evidence for structural control in the form of veins or veinlets coupled with the lack of a strong structural fabric</li><li>In the majority of the Core and Fold deposits the units strike southeast and dip between 45 and 65° to the south west. The eastern part of the Fold deposit comprises a relatively tight synclinal fold structure resulting in a 90° strike rotation.</li></ul>
Drill hole Information	<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>Exploration results not being reported</li></ul>
Data aggregation methods	<ul style="list-style-type: none"><li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li><li>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</li></ul>	<ul style="list-style-type: none"><li>Exploration results not being reported</li></ul>



Criteria	JORC Code explanation	Commentary
	<p><i>typical examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"><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 (eg 'down hole length, true width not known').</i></li></ul>	<ul style="list-style-type: none"><li>Drilling has tended to be at a steep angle to the dip angle of the sedimentary beds.</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>Exploration results not being reported</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>Exploration results not being reported</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, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li></ul>	<ul style="list-style-type: none"><li>A substantial amount of polished and thin section work has been completed on both RC chips and diamond core. This work has confirmed the nature and style of both the original sediment and the iron minerals including magnetite, hematite, chlorite and ferroan dolomite.</li><li>Downhole geophysics comprises magnetic susceptibility, gamma and density and has been completed for a majority of the holes. This has resulted in the definition of a magnetic (and density-related) stratigraphy that is coincident with a chronostratigraphic interpretation.</li><li>A geotechnical report was furnished by Gutteridge Haskins and Davey (GHD) in 2019 titled “Carpentaria-Hawsons Iron Ore project 2017 Prefeasibility Study Geotechnical Assessment.” This study was completed via a staged approach to progressively improve the level of Geotechnical understanding for the PFS and to identify gaps that needed to be addressed.</li><li>For the 2021-2022 exploration program, Pells, Sullivan &amp; Meynink (PSM) completed a geotechnical design study for pit wall stability and to fill the gaps outlined in the GHD report. This report was completed in October</li></ul>



Criteria	JORC Code explanation	Commentary
		<p>2022</p> <ul style="list-style-type: none"><li>• TSIM VLF-EM ground-borne geophysical surveys have been conducted by HIO to help ascertain the north westerly and southeasterly extensions of newly discovered near-surface and exposed mineralisation in the Fold Zone and to assist with drillhole targeting.</li></ul>
Further work	<ul style="list-style-type: none"><li>• <i>The nature and scale of planned further work (eg 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>• Infill drilling is planned to upgrade the current Mineral Resources to Measured and Indicated, upgrade a portion of the Exploration Target to Inferred.</li></ul>



### SECTION 3 - ESTIMATION AND REPORTING OF MINERAL RESOURCES

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"><li><i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i></li><li><i>Data validation procedures used.</i></li></ul>	<ul style="list-style-type: none"><li>Independently customised 2016 MS Access database by GR-FX Pty Ltd for CAP supplied to H&amp;S Consultants (HSC).</li><li>Validation of CAP database undertaken by Keith Hannan of Geochem Pacific Pty Ltd, an independent consultant. Additional validation completed by HSC in 2017.</li><li>The new HIO database was compiled by independent database manager Chris McMahon of McMahon Resources. Assay results are reported to multi company personnel and passes through a series of validation checks involving those personnel.</li><li>New drilling data is supplied by HIO to HSC as a series of CSV files which are then appended to the HSC 'resource database'.</li><li>HSC completed some independent validation of the new data to ensure the drill hole database is internally consistent. Validation included checking that no assays, density measurements or geological logs occur beyond the end of hole and that all drilled intervals have been geologically logged. The minimum and maximum values of assays and density measurements were checked to ensure values are within expected ranges (some density and magnetic susceptibility data was suspect). Further checks include testing for duplicate samples and overlapping sampling or logging intervals. It was noticed that some of the downhole geophysics' calibrations for magnetic susceptibility and density looked at odds with the data from surrounding holes. Levelling by HSC was required to make the data fit for purpose, although the amount of downhole magnetic susceptibility data required to generate DTR values for grade interpolation has been significantly reduced since July 2022.</li><li>HSC takes responsibility for the accuracy and reliability of the CAP data used in the Mineral Resource estimates.</li><li>HIO takes responsibility for the accuracy and reliability of the HIO data used in the Mineral Resource estimates.</li><li>HSC created a local E-W orthogonal grid for all interpretation and modelling work.</li><li>There are accuracy issues with some of the data, mainly the downhole geophysics for magnetic susceptibility and density, which following appropriate processing have a very modest impact on the composite generation for grade interpolation.</li></ul>
<i>Site visits</i>	<ul style="list-style-type: none"><li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li><li><i>If no site visits have been undertaken indicate why this is the case.</i></li></ul>	<ul style="list-style-type: none"><li>Regular site visits were completed by HIO's Competent Person for Exploration Results throughout the 2021-2024 exploration programs.</li><li>Regular site visits were completed by CAP's Competent Person for Exploration Results for the period 2009 to 2017.</li><li>A site visit was undertaken in 2012 by Simon Tear of HSC, Competent Person for the CAP Exploration Results</li></ul>



Criteria	JORC Code explanation	Commentary
		and the reporting of the new Mineral Resources. The visit included geological logging of diamond drillhole DD10BRP023 covering over 500m of stratigraphy and an inspection of drill sites and outcropping mineralisation.
Geological interpretation	<ul style="list-style-type: none"><li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li><li>• <i>Nature of the data used and of any assumptions made.</i></li><li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li><li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li><li>• <i>The factors affecting continuity both of grade and geology.</i></li></ul>	<ul style="list-style-type: none"><li>• The broad geological interpretation of the Hawsons deposit is relatively straightforward and reasonably well constrained by drilling and the high amplitude airborne and ground magnetic anomalies.</li><li>• The mineralisation is stratabound as disseminated grains of magnetite associated with variable interstitial porosity of the clastic sediments with no obvious structural remobilisation or overprint. Mineralisation exhibits relatively poor downhole continuity with zones of variable magnetite grade (a function of the clastic grain size and composition) but in most instances the contacts between higher and lower grade mineralisation are gradational and precludes the use of hard boundaries as stratigraphic controls to mineral grade interpolation.</li><li>• The downhole geophysical data, gamma and magnetic susceptibility, has been used in conjunction with DTR recovered magnetic fraction grades to produce a detailed geological interpretation and to the generation of a set of 3D wireframes representing variously mineralised units that provide the stratigraphic framework to the deposit.</li><li>• The consistency of the geophysical patterns for the sediments provides for a high level of confidence in the stratigraphic interpretation. The stratigraphic orientation controls the rotations of the grade interpolation search ellipses.</li><li>• Two main cross faults, possibly a conjugate pair, have been interpreted and are believed to have caused small offsets in the mineral-bearing stratigraphy. The faults have been used to delineate three structural domains that act as hard boundaries for composite selection and grade interpolation. The exact orientation of the faults is unknown with the interpretation based on magnetic anomaly discontinuities.</li><li>• HSC used the geological logs of the drill holes and the multi-element head assay data to create a wireframe surface representing the base of colluvium.</li><li>• HSC also used the geological logs of the drill holes and the multielement head assay data to create wireframe surfaces representing the base of complete oxidation (“BOCO”) and the top of fresh rock (“TOFR”). The recent HIO drilling has indicated that magnetite mineralisation can extend up into the oxide/transition zones as remnant mineralisation. As a result the BOCO and TOFR surfaces were not treated as hard boundaries in the grade interpolation.</li><li>• Any additional faulting in the deposit is assumed to be insignificant relative to the resource estimation at this stage.</li><li>• HSC is aware that alternative interpretations of the mineralised zones and faults are possible but consider its approach to adequately approximate the locations of the mineralised zones. Alternative interpretations may have a limited impact on the resource estimates.</li></ul>



Criteria	JORC Code explanation	Commentary
Dimensions	<ul style="list-style-type: none"><li><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li></ul>	<ul style="list-style-type: none"><li>The Mineral Resources have a strike length of around 3.3km in a south easterly direction. The plan width of the resource varies from 700m to 1.9km with an average of around 1.1km (noting the relatively moderate dip angle of the beds). The upper limit of the mineralisation is exposed in the SE of the deposit with the fresh rock generally occurring between 25 and 80m below surface (average 65m) and the lower limit of the Mineral Resource extends to an approximate depth of 550m below surface (-360mRL).</li><li>The lower limit to the Mineral Resource is a direct function of the depth limitations to the drilling in conjunction with the search parameters. The mineralisation is open at depth and to the south beyond the Fold area (i.e. the South Limb).</li></ul>
Estimation and modelling techniques	<ul style="list-style-type: none"><li><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li><li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li><li><i>The assumptions made regarding recovery of by-products.</i></li><li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li><li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li><li><i>Any assumptions behind modelling of selective mining units.</i></li><li><i>Any assumptions about correlation between variables.</i></li><li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li><li><i>Discussion of basis for using or not using grade cutting or capping.</i></li></ul>	<ul style="list-style-type: none"><li>Ordinary Kriging (“OK”) with multiple search domains was used to complete the estimation using FSSI’s GS3M modelling software. The geological interpretation and block model creation and validation was completed using the Surpac mining software. HSC considers OK to be an appropriate estimation technique for the type of mineralisation and extent of data available from the Core and Fold prospects. All data attributes have low coefficients of variation, generally &lt;1.</li><li>Two main cross faults have been interpreted to have caused small offsets in the mineral-bearing stratigraphy. These faults were treated as hard boundaries during estimation allowing for the creation of three structural domains so that data from within a particular fault block were only used to estimate blocks in that fault block.</li><li>Regression equations based on downhole surveyed magnetic susceptibility data were used to estimate missing DTR values for the different structural domains, company drilling campaigns and levels of oxidation. Regression equations based on the handheld magnetic susceptibility data was used to estimate the DTR values where wireline magnetic susceptibility data was not available. Missing Fe concentrate grades were calculated using regression equations based on the DTR grades for the structural domains, different companies and oxidation levels and the remaining concentrate elements were calculated using simple linear regressions based on the iron concentrate grade. The use of regression equations has been historically a small part of the Hawsons project and while not ideal the subsequent drilling has indicated no immediate issue with the use of generated estimated values for DTR and DTR concentrates in the Mineral Resources.</li><li>A total of 10,419 5m composites, including residuals, were generated from the drillhole database with no wireframe constraints and modelled for DTR, and the DTR concentrate grades of Fe, Al<sub>2</sub>O<sub>3</sub>, P, S, SiO<sub>2</sub>, and LOI. Head Fe data had lower sample numbers but was still modelled together with the other data.</li><li>Grade interpolation was unconstrained, except by the search parameters and the variography, in acknowledgement of the gradational nature to changes in sediment composition, porosity and grain size of the host sediments. Comparison of block grades with the interpretation of stratigraphic sub-units showed a good match with the block grades except in the basal stratigraphy where there was a notable lack of drilling control ie around mineralised Unit 1.</li><li>In prior estimates, the TOFR surface was found to coincide with a marked difference in density and DTR but the hardness of the boundary has softened with the new drilling (and substantially more oxide/transition data) such that the surface was not treated as a hard boundary for density or DTR grade interpolation.</li></ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"><li><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li></ul>	<ul style="list-style-type: none"><li>The cover data was used in the grade interpolation to act as a buffer to the oxide/transition data. No estimated grades were included into the cover zone in the block model.</li><li>No recovery of any by-products has been considered in the resource estimates as no products beyond iron are considered to exist in economic concentrations.</li><li>No top-cutting was applied as extreme values were not present and top-cutting was considered by HSC to be unnecessary.</li><li>No check estimate was carried out though the new estimates are in line with previous estimates. Hellman &amp; Schofield, the predecessor to HSC, and HSC itself have completed six resource estimations between 2010 and 2022. There has been a sensible increase in size of the resource, a decrease in DTR grade and improvement in the resource classification based on the drilling completed and the cut off grades employed to report the MRE.</li><li>Block dimensions are 50m x 25m x 10m (Local E, N, RL respectively) with no sub-blocking. The east dimension was chosen as it is around half to a third of the nominal drillhole distances in the detailed drilled area of structural Domain 1. The north dimension was chosen partly on the drillhole spacing but also taking into account the geometry of the mineralisation with its moderately south-dipping stratigraphy. The vertical dimension was chosen to reflect the sample spacing and possible mining bench heights and to allow for flexibility in potential mining scenarios.</li><li>All grades were estimated as a combined dataset for each structural domain as each had the same number of composites, except for head Fe, for that domain and all values were inter-related. Six search passes were employed with progressively larger radii or decreasing data point criteria. The Pass 1 used radii of 150x150x25m, Passes 2 and 3 used 300x300x50m, the fourth pass used 400x400x75m (along strike, down dip and across mineralisation respectively). The first and second passes required a maximum of 24 data and a minimum of 12 data points from 4 octants whereas the third and fourth passes required a minimum of 6 data points from at least 2 octants. A fifth and sixth search pass (for exploration potential) used search dimensions of 600m by 600m by 112.5m with 6 and 3 minimum data respectively and 2 octants.</li><li>The maximum extrapolation distance for the Mineral Resources was in the order of 300m down dip and 400m along strike to the SW and 100m along strike to the NW, the latter due to a perceived fault termination. The rollover zone in the NW of the deposit was limited to 400m of extrapolation. The across strike and dip extent was 75m.</li><li>The new block model was reviewed visually by HSC and it was concluded that the block model fairly represents the grades observed in the drill holes. HSC also validated the block model using a variety of summary statistics and statistical plots. No issues were noted.</li></ul>
Moisture	<ul style="list-style-type: none"><li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li></ul>	<ul style="list-style-type: none"><li>Tonnages of the Mineral Resources are estimated on a dry weight basis.</li></ul>



Criteria	JORC Code explanation	Commentary
Cut-off parameters	<ul style="list-style-type: none"><li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li></ul>	<ul style="list-style-type: none"><li>The resources are reported at a cut-off of 4% DTR based on the outcome of a recently completed pit optimisation study by independent consultants AMDAD of Brisbane. All oxidation levels contained Mineral Resources except the Cover sequence.</li><li>The cut-off grade at which the resource is quoted reflects the intended bulk-mining approach.</li></ul>
Mining factors or assumptions	<ul style="list-style-type: none"><li><i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></li></ul>	<ul style="list-style-type: none"><li>The Mineral Resources were estimated on the assumption that the material is to be mined by open pit using a bulk mining method.</li><li>Minimum mining dimensions are envisioned to be around 25m x 10m x 10m (strike, across strike, vertical respectively). The block size is significantly larger than the likely minimum mining dimensions.</li><li>The resource estimation includes internal mining dilution, but no allowance for external dilution or mining losses.</li><li>The proposed mining method is a conventional truck and shovel operation with transport to a processing plant adjacent to the planned pit.</li><li>Mine design and production is targeting a 68-71% iron product at 12Mtpa.</li></ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"><li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></li></ul>	<ul style="list-style-type: none"><li>The idioblastic nature of the magnetite lends itself to relatively easy liberation.</li><li>The ROM material is considered relatively soft for a magnetite deposit with a bond work index much lower than typical Banded Iron Formation deposits.</li><li>Liberation of the magnetite grains is a function of grinding to fine size. Tests have been conducted that show grinding the ore to -38 microns gives a P80 of 25 microns.</li><li>XRF analysis from metallurgical testwork on the recovered magnetic fraction shows that a 68-71% iron product is feasible.</li></ul>
Environmental factors or assumptions	<ul style="list-style-type: none"><li><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project,</i></li></ul>	<ul style="list-style-type: none"><li>The deposit lies within flat, open country typical of Western NSW.</li><li>Predominantly scrub vegetation that allows for sheep grazing.</li><li>There are large flat areas for waste and tailings disposal.</li><li>Small number of creeks with only seasonal flows.</li><li>The host sediments have low sulphur contents.</li><li>Continuous data loggers have been installed on 9 water monitoring bores in the vicinity of the main pit design area to collect ground water data that will be used to update the current hydrogeology model covering the</li></ul>



Criteria	JORC Code explanation	Commentary
	<p><i>may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></p>	<p>site.</p> <ul style="list-style-type: none"><li>Additional water monitoring bores and pump testing bores are being planned to test the effect that mining will have on aquifers in the vicinity of the proposed mining area.</li><li>It is currently assumed that all process residue and waste rock disposal will take place on site in purpose built and licensed facilities.</li><li>All waste rock and process residue disposal will be done in a responsible manner and in accordance with any mining license conditions.</li></ul>
Bulk density	<ul style="list-style-type: none"><li><i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li><li><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li><li><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li></ul>	<ul style="list-style-type: none"><li>The short-spaced density (“SSD”) data from the downhole geophysics was used to estimate the density of the Mineral Resources. Data consisted of 1cm data points averaged to 10cm intervals.</li><li>The CAP SSD data was collected using a FDS50 down hole tool containing a 3500CO radioactive source.</li><li>The HIO SSD data was collected using a Robertson Geo Sidewall Density with BRD and Temperature, (Part No I002016) down hole tool containing a iOS Cs137 125 milli-curie radioactive source.</li><li>The CAP data had a correction factor of +5.2% applied based on comparative testwork completed on 194 10-15cm NQ core samples using an immersion-in-water technique i.e. weight in air / (weight in air - weight in water) – the Archimedes Principle.</li><li>The HIO data had a correction factor of +4.94% applied based on testwork completed on 166 10-15cm HQ core samples using the same immersion-in-water technique.</li><li>The 2023/4 core drilling produced results that required no correction factor to the downhole geophysical density data.</li><li>No moisture determinations were made.</li><li>The siltstones show no vughs, and porosity is occluded, as observed from polished and thin section work. There is no characteristic alteration associated with the mineralisation.</li><li>The density data was composited to 5m intervals prior to modelling. This resulted in 8,338 data points. The data was derived exclusively from the downhole geophysics with the company correction factors applied. Processing of this data included levelling inconsistent data for 4 holes (15-30% overstatement of density in comparison with surrounding holes). Default average density values were generated for 5m downhole intervals down to 100m downhole. These values were applied to holes where density data for those near surface intervals were not available. Regression equations using the head iron assay were used to generate missing values in the Fold area.</li><li>The density at Hawsons was estimated using Ordinary Kriging using similar methodology to the DTR grade interpolation ie structural domains, same search ellipses and data point requirements.</li><li>Blocks with no values from the density estimation were allocated average default values. These additions generally occurred on the periphery of the deposit.</li></ul>



Criteria	JORC Code explanation	Commentary
<i>Classification</i>	<ul style="list-style-type: none"><li><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li><li><i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li><li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li></ul>	<ul style="list-style-type: none"><li>The classification of the resource estimates is nominally based on the data point distribution which is a function of the drillhole spacing.</li><li>A pit shell created by AMDAD was used to constrain the resource estimates; no other wireframe constraint was used. This pit had a base at -360mRL.</li><li>The 100m spaced infill drilling in Domain 1 has indicated much improved grade continuity as demonstrated by the variogram maps; 60-70% of the variance between samples occurs within a 100-120m range. This forms the basis for the Measured Resources.</li><li>Other aspects have been considered qualitatively in the classification including, the style of mineralisation, the geological model, sampling method and recovery, missing data and estimated grades, coherency of the downhole geophysics including density, the QAQC programme and results and comparison with previous resource estimates.</li><li>The initial pass categories were reviewed and in five specific areas of Core West and Core East, Pass 1 blocks occurred in clusters, due to closer spaced drilling (circa 100m), that were delineated using Defined Shapes to retain the Pass 1 category as Measured Resource. Elsewhere more isolated Pass 1 blocks and Pass 2 blocks were classed as Indicated Resource (removal of the 'spotted dog' effect) and Passes 3 and 4 were classed as Inferred Resources.</li><li>A 2017 detailed sedimentological review using gamma and magnetic susceptibility downhole data had demonstrated strong stratigraphic continuity of the DTR grades within the sediment packages. This was updated in December 2022 and resulted in the additional conversion of Inferred Resource to Indicated.</li><li>HSC believes the confidence in tonnage and grade estimates, the continuity of geology and grade, and the distribution of the data reflect Measured, Indicated and Inferred categorisation. The estimates appropriately reflect the Competent Person's view of the deposit. HSC has assessed the reliability of the input data and takes responsibility for the accuracy and reliability of the CAP data used to estimate the Mineral Resources. HIO takes responsibility for the recent 2021/2022/2023 drilling data used to estimate the Mineral Resources.</li></ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"><li><i>The results of any audits or reviews of Mineral Resource estimates.</i></li></ul>	<ul style="list-style-type: none"><li>The estimation procedure was reviewed as part of an internal HSC peer review.</li><li>Mining Associates Limited (“MAL”) completed a technical review in 2016 on the 2014 Indicated and Inferred Resources. MAL concluded that the model is a good global representation of the magnetite resource and considers Ordinary Kriging to be an appropriate estimating technique for the type of mineralisation with very low coefficients of variation.</li><li>In a follow up report in 2020 MAL concluded that for the 2017 Mineral Resources: “Following [a] review of the geology, MRE and Reserve, MAL does not consider the current approach to the geology model and MRE suitable. A much higher level of detail needs to be incorporated into the Geological Model and MRE” and strongly proposed its own methodology of using implicit modelling “with much smaller blocks” incorporating upwards of 20+ stratigraphic boundaries, as being more suitable.</li><li>Behre Dolbear Australia (“BDA”) completed a technical review for CAP in 2010 based on a GHD study. BDA considered that the broad geology and geological controls on mineralisation, the sampling methodology and</li></ul>



Criteria	JORC Code explanation	Commentary
		the geological database were generally adequately defined for estimation of Inferred [2010] Resources.
<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"><li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li><li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li><li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li></ul>	<ul style="list-style-type: none"><li>• No statistical or geostatistical procedures were used to quantify the relative accuracy of the resource. The global Mineral Resource estimates of the Hawsons deposit are moderately sensitive to higher cut-off grades but does not vary significantly at lower cut-offs.</li><li>• The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the Competent Person's experience with similar deposits and geology</li><li>• The Mineral Resource estimates are considered to be accurate globally, but there is some uncertainty in the local estimates due to the current drillhole spacing, a lack of geological definition in certain places eg fault zones, and some ambiguity with the absence of assay data and the QAQC procedures and outcomes.</li><li>• No mining of the deposit has taken place, so no production data is available for comparison.</li></ul>



## SECTION 4 - ESTIMATION AND REPORTING OF ORE RESERVES

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary																																								
Mineral Resource estimate for conversion to Ore Reserves	<ul style="list-style-type: none"><li><i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i></li><li><i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</i></li></ul>	<ul style="list-style-type: none"><li>The Ore Reserve Estimate is based on the June 2024 Mineral Resource Estimate(MRE) prepared by H&amp;S Consultants (H&amp;SC) for open cut magnetite resources at Hawsons, reported by HIO 24 June 2024.</li><li>H&amp;SC estimated grades as % Davis Tube Recovery (DTR) and reported the MRE at a 4% DTR cutoff grade, constrained within an optimised pit shell with base at -360mRL.</li><li>The MRE is inclusive of the Ore Reserve.</li><li>The DTR grades for ore definition were estimated by Ordinary Kriging (OK) with multiple search domains, using FSSI's GS3M modelling software.</li><li>Top cutting was not applied as extreme values were not present.</li><li>Two main cross faults were treated as hard boundaries during estimation, forming three structural domains so that data within a particular fault block was only used to estimate blocks in that fault block.</li><li>Within each domain the grade interpolation was unconstrained, except by the search parameters and the variography.</li><li>MRE tonnage is based on dry bulk density using short-spaced density ("SSD") data from downhole geophysics by HIO. Density was estimated by OK using a similar methodology to the DTR grade interpolation.</li><li>As a conservative measure no estimated grades were loaded into the cover zone in the block model.</li><li>H&amp;SC used Surpac mining software for the geological interpretation and for block model creation and validation. The block model is a regular model with block dimensions 50m Local E x 25m N x 10m RL.</li><li>The MRE is classified as shown in the following table based on the search ellipse passes. Four search passes were employed with progressively larger radii and decreasing data point criteria. Beyond the Inferred classification, a fifth and sixth pass define Exploration Potential.</li></ul> <table border="1"><thead><tr><th>MRE Classification</th><th>Measured</th><th>Indicated</th><th>Inferred</th></tr></thead><tbody><tr><td>Interpolation pass</td><td>Pass 1</td><td>Pass 2</td><td>Pass 3</td></tr><tr><td>Search Ellipse Radii</td><td></td><td></td><td>Pass 4</td></tr><tr><td>Along Strike</td><td>150m</td><td>300m</td><td>300m</td></tr><tr><td>Down Dip</td><td>150m</td><td>300m</td><td>300m</td></tr><tr><td>Across Strike</td><td>25m</td><td>50m</td><td>50m</td></tr><tr><td>Data Requirements</td><td></td><td></td><td>75m</td></tr><tr><td>Min Data</td><td>12</td><td>12</td><td>6</td></tr><tr><td>Max Data</td><td>24</td><td>24</td><td>24</td></tr><tr><td>Octants</td><td>4</td><td>4</td><td>2</td></tr></tbody></table>	MRE Classification	Measured	Indicated	Inferred	Interpolation pass	Pass 1	Pass 2	Pass 3	Search Ellipse Radii			Pass 4	Along Strike	150m	300m	300m	Down Dip	150m	300m	300m	Across Strike	25m	50m	50m	Data Requirements			75m	Min Data	12	12	6	Max Data	24	24	24	Octants	4	4	2
MRE Classification	Measured	Indicated	Inferred																																							
Interpolation pass	Pass 1	Pass 2	Pass 3																																							
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Down Dip	150m	300m	300m																																							
Across Strike	25m	50m	50m																																							
Data Requirements			75m																																							
Min Data	12	12	6																																							
Max Data	24	24	24																																							
Octants	4	4	2																																							



Criteria	JORC Code explanation	Commentary
Site visits	<ul style="list-style-type: none"><li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li><li><i>If no site visits have been undertaken indicate why this is the case.</i></li></ul>	<p>John Wyche, Competent Person for overall Ore Reserves sign-off, undertook a site visit at Hawsons Project Site from 16<sup>th</sup> to 17<sup>th</sup> September 2025, including the following:</p> <ul style="list-style-type: none"><li>Representative drill core,</li><li>Proposed open cut mining area,</li><li>Proposed waste rock and tailings co-disposal area,</li><li>Proposed run of mine (ROM) ore stockpile areas,</li><li>Proposed process plant facility and site infrastructure areas, and</li><li>Access roads</li></ul>
Study status	<ul style="list-style-type: none"><li><i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i></li><li><i>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i></li></ul>	<ul style="list-style-type: none"><li>The Hawsons Ore Reserve has been estimated in conjunction with preparation of a mine plan for the Hawsons Iron Project Pre-feasibility Study (PFS) prepared by HIO, AMDAD and Stantec in through 2025. That report covers all key elements of the project, addressing all material modifying factors for the mine plan and ore reserves estimate as described below. It supports the overall project technical feasibility and economic viability of the Project.</li><li>The 2025 Hawsons Iron Project PFS is preceded by a number of studies by HIO from 2010 to 2024.<ul style="list-style-type: none"><li>Pre-Feasibility Study – ASX release 28 July 2017</li></ul></li></ul>
Cut-off parameters	<ul style="list-style-type: none"><li><i>The basis of the cut-off grade(s) or quality parameters applied.</i></li></ul>	<ul style="list-style-type: none"><li>Using base case values of:<ul style="list-style-type: none"><li>Magnetite concentrate price of \$US 140/dmt,</li><li>0.65 \$US/\$AU exchange rate,</li><li>Concentrate transport cost of \$AU 57.15/dmt,</li><li>Processing and G&amp;A cost of \$AU 4.42/t ore,</li><li>NSW Government and third party royalties, and</li><li>Mass recovery of DTR% x 95%,</li></ul></li></ul> <p>results in a marginal economic cutoff grade of 2.95% DTR. However, to enhance the operating DCF, while achieving an acceptable mine life, a cutoff of 4.0% DTR has been applied for the life of mine schedule and estimated Ore Reserves.</p>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>The life of mine scheduling also applies intermediate cutoff grades in conjunction with stockpiling of lower grade ore as follows, to improve cashflows in early years:-           <ul style="list-style-type: none"> <li>4.0% DTR – 7.0% DTR Low grade</li> <li>7.0% DTR – 10.0% DTR Medium grade</li> <li>&gt; 10.0% DTR High grade</li> </ul> </li> <li>The open pit optimisation was run using net value per tonne (NVPT) defined in the optimisation block model calculated using the revenue, costs and recoveries listed above. A minimum DTR grade of 4% was applied in the NVPT calculation to avoid excessive amounts of marginal value mineralisation.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li><i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i></li> <li><i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i></li> <li><i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i></li> <li><i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></li> <li><i>The mining dilution factors used.</i></li> <li><i>The mining recovery factors used.</i></li> <li><i>Any minimum mining widths used.</i></li> <li><i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></li> <li><i>The infrastructure requirements of the selected mining methods.</i></li> </ul>	<p><u>Mining Method</u></p> <p>For the purpose of the PFS and Ore Reserve estimate, mining of the Hawsons open cut is assumed to be completed by conventional drill and blast, load and haul methods. The development of the open cut will comprise progressive excavation of five open cut stages, as shown in the figure below, over a 26 year life of mine.</p> <p>The final open cut will have a length of approximately 4km in a NW-SE orientation and a width of approximately 1.75km in the north-western end and 2.5km in the south-eastern end. The final depth will be up to approximately 500m.</p> <p>Access to the pits will be via two-lane 40m wide haul roads, supplemented by 27.5m wide single-lane haul roads for access to pit base areas.</p> <p><b>Figure 1 Hawsons open cut stage design</b></p>



Criteria	JORC Code explanation	Commentary
		<p>Mining activities to be carried out on the Hawsons Project site will include;</p> <ul style="list-style-type: none"><li>• Clearing and stockpiling of soil and sparse vegetation from the footprints of the open cuts, co-disposal facility, haul roads and pads</li><li>• Development of haul roads and access roads</li><li>• Mine water management including:-<ul style="list-style-type: none"><li>◦ dewatering of the pit if/as required</li><li>◦ management of occasional surface rainwater runoff to keep uncontaminated water separate to contact water by use of water management structures including drains, bunds, sediment/containment ponds, piping and pumping</li></ul></li><li>• Grade control including:-<ul style="list-style-type: none"><li>◦ Sampling from blast hole drilling and sample assaying</li><li>◦ Adjustment of resource model as appropriate and mark out of ore zones</li></ul></li><li>• Mining ore and waste rock by<ul style="list-style-type: none"><li>◦ Drill and blast mainly on 20m benches with 250mm blastholes,</li><li>◦ Load and haul using 600t class hydraulic excavator and 300t payload rigid dump trucks.</li></ul></li><li>• Placement of waste rock on the co-disposal facility (CDF) with compacted process waste.</li><li>• Haulage of ore to the run of mine (ROM) crusher and stockpile areas, where the ore will either be direct-tipped into the crusher or stockpiled for later rehandling.</li><li>• Blasting operations will be undertaken by contractor. All other mining operations will be undertaken by HIO.</li></ul> <p><u>Geotechnical</u></p> <ul style="list-style-type: none"><li>• Geotechnical specialist PSM provided preliminary open cut slope design parameters. Further stability analyses are required to confirm appropriateness of these parameters, and therefore the design parameters are potentially subject to change. In place of completed stability analyses, PSM has relied upon experience and engineering judgement, and prioritised modelling and analyses which is expected to control pit slope stability, in order to deliver the early pit slope design parameters.</li><li>• The open cut geotechnical design proposed by PSM is summarised below for the geotechnical domains defined by PSM.</li></ul>



Criteria	JORC Code explanation	Commentary						
		Pit Domain	Sub Domain	Weathering	Bench Face °	Berm Width (m)	Bench Height (m)	IRA°
		Soil / Colluvium	All	OX	45	6	10	32
			F1	TR	45	10	20	34
			F2		50	8	20	39
			F3, F4		50	8	20	39
			F1	FR	45	6.5	20	37
			F2, F3		60	10	20	43
			F4		60	10	20	43
			H1, H2, H3	TR	50	8	20	39
			H1, H2	FR	75	10	20	52.5
			H3		75	10	20	52.5
			NW1	TR	50	8	20	39
			NW1	FR	75	10	20	52.5
		<ul style="list-style-type: none"><li>The geotechnical parameters summarised above determine the inter-ramp angles (IRAs) for each domain. Flatter overall slopes angles (OSAs) result in open cut walls that incorporate one or more segments of in-wall haul ramps.</li><li>Additionally PSM recommended a maximum inter-ramp height of 200m for the footwall, dictated by results of stability analysis, with potential for footwall slab failures controlled by structures sub-parallel to the slope. To apply this limit, AMDAD interrupted any footwall slopes greater than 200m with a 30m wide geotechnical berm.</li></ul>						
		<u>Mine Design</u> The open cut design was guided by Whittle pit optimisation run by AMDAD. The optimisation applied preliminary mining costs built up by AMDAD, and other parameters provided by the HIO FS team. This includes pit wall batter and berm configurations based on the preliminary geotechnical design parameters by PSM with allowance for the haul ramps. Preliminary schedules were run on the optimised pit shells to optimise pit shell staging and sequencing subject to practical mining constraints. AMDAD prepared the 3D open cut stage design using Surpac mine planning software. It has the following features: <ul style="list-style-type: none"><li>Crest of excavation: 182mRL to 202mRL</li><li>Base: 320mRL</li><li>Overall Strip Ratio: 0.43 t waste : 1.00 t ore</li></ul>						



Criteria	JORC Code explanation	Commentary												
		<ul style="list-style-type: none"><li>• Haul Ramp<ul style="list-style-type: none"><li>◦ Width: 40m two lane, 27.5m single lane</li><li>◦ Gradient: 1 in 10</li></ul></li><li>• Approximate minimum mining width of 80m</li></ul> <p><u>Dilution and Mining Loss</u></p> <p>For the PFS mine plan and Ore Reserves estimate AMDAD applied dilution adjustment block-by-block in the block model. The method simulates mixing at the grade-control boundaries resulting from blast movement, rilling of material down the faces of the working flitches, as well as imprecise excavation. Each block experiences an interchange of material across each lateral block face. Dilution grade is applied based on the grade of the adjacent material. The method adjusts tonnes and grade according to the nominated dilution skin thickness and block dimensions.</p> <p>The most conspicuous change in grades from the dilution method is at the ore-waste interface defined by cutoff grade. The ore blocks that abut the ore-waste interface decrease in grade after dilution. However, the waste blocks immediately on the other side of the boundary increase in grade and in some instances a new ore boundary results incorporating blocks that were previously waste.</p> <p>Within the ore zone a transfer of grade (metal) has occurred between blocks. In some instances, this has resulted in a slight increase of grade. In other cases, the grade has decreased slightly. Well within the ore zone, away from the ore boundary, the transfer of grade between blocks results in no net loss or gain of metal within the production tonnes, and the overall production grade remains the same.</p> <p>AMDAD applied a dilution skin of 5m, considered reasonable for mining by 600t class backhoe excavator or similar, with 4.8m wide bucket, and 20m high blast benches, and the geometry of the deposit, characterised by:-</p> <ul style="list-style-type: none"><li>• Relatively continuous ore zones</li><li>• Moderate dip of 50° to 60°</li><li>• Ore zones typically 25m wide to 200m wide</li></ul> <p>The dilution modelling resulted in minor changes to the DTR grade and tonnes within the optimised pit shell:</p> <table border="1"><thead><tr><th></th><th>DTR Grade</th><th>M tonnes</th></tr></thead><tbody><tr><td>Undiluted</td><td>11.67%</td><td>2,327</td></tr><tr><td>Diluted</td><td>11.65%</td><td>2,316</td></tr><tr><td>Change</td><td>-0.17%</td><td>0.47%</td></tr></tbody></table>		DTR Grade	M tonnes	Undiluted	11.67%	2,327	Diluted	11.65%	2,316	Change	-0.17%	0.47%
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		<p><b>Mine Sequencing and Schedule</b></p> <ul style="list-style-type: none"><li>• AMDAD prepared a mining schedule using the Geovia MineSched program:-<ul style="list-style-type: none"><li>◦ targeting a feed rate to the processing plant of 100Mtpa, with staged ramp-up according to commissioning of each of three processing trains,</li><li>◦ 12Mwtpa concentrate limit, and</li><li>◦ 18 month mining ramp-up period to allow for delivery of large excavators.</li></ul></li><li>• The open cut will be developed in 20m high benches. Two to three benches may be active at any time, accessed from a network of haul roads. This will provide flexibility in work scheduling and help to balance resources.</li><li>• Following the establishment phase, the operational schedule will see open cut mining conducted over a 26 year LOM, with sustainable ore delivery after the first six months of production.</li></ul> <p><b>Inferred Resources</b></p> <p>The ore reserve does not include Inferred Resources. However, approximately 400 Mt of Inferred Resources would be extracted within the proposed open cut design. This additional potential mill feed may represent upside to the reserves within the designed open pit.</p> <p>If future planned drilling upgrades Inferred Resources, including them in the pit optimisation will also result in a substantially larger optimal pit shell. Separate to the Reserves schedule, a Production Target schedule was also prepared as part of the PFS, based on a larger optimised pit. The Production Target is underpinned by the Ore Reserves but incorporates 25% Inferred Resources, representing potential upside to the Reserves.</p> <p><b>Topographic Surface</b></p> <p>Reserve and mining estimates are based on 2015 LiDAR ground surface data in x, y, z text format sourced from the NSW Government Spatial Services through the ELVIS Elevation Foundation Spatial Data website. Using the Surpac program, from the x, y, z data, AMDAD prepared a ground surface wireframe topo201503.dtm. AMDAD used this ground surface model for its pit optimisation and mine design modelling.</p> <p><b>Mine Water Management</b></p> <ul style="list-style-type: none"><li>• AMDAD understands that groundwater monitoring bores located around the outer extents of the proposed open cut area have indicated an average water table of approximately 80m below ground surface.</li><li>• Preliminary groundwater assessment by groundwater consultants, indicates that major inflow of groundwater into the open cut is unlikely and that even when the open cut benches are advanced below the water table, open cut dewatering requirements will be driven by the occasional rain and runoff events within the open cut crest, rather than groundwater inflow.</li><li>• Several ephemeral drainage channels cross the open cut footprints. These channels only flow during infrequent short periods of high rainfall.</li></ul>



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		<ul style="list-style-type: none"><li>• Open cut dewatering is planned to be managed by the following measures:-<ul style="list-style-type: none"><li>○ Any benches that “daylight” at the pit crest will be graded to drain to the crest and to external sumps dug near the crest. From here the water will be transferred by pipe, with pumping as required, to one or more centralised containment ponds.</li><li>○ in-pit sumps and high volume/high head diesel pumps will pump water to the external sumps or containment ponds.</li></ul></li><li>• Water management structures such as cutoff drains, bunds and culverts will be established to help prevent contaminated surface run-off from entering water courses beyond the mine area. They will be implemented in line with the site Surface Water Management Plan to be developed as part of the detailed design phase.</li></ul> <p><u>Mine Infrastructure</u></p> <p>Mine infrastructure and services will include the following:-</p> <ul style="list-style-type: none"><li>• Mine haul roads</li><li>• Run of mine (ROM) Stockpile Areas.</li><li>• Mine Industrial Area (MIA), including.</li><li>• Mine office and facilities within the site admin/office area, including.</li><li>• Lighting for night time mining operations.</li><li>• Water stand pipes for mine water trucks used for dust suppression.</li><li>• Water management structures, pumps and pipes as described under Mine Water Management above.</li><li>• Explosives facility including a magazine for storage of explosives, storage for ammonium nitrate and other non-explosive pre-cursors and an explosives manufacturing facility.</li></ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"><li>• <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li><li>• <i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li><li>• <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li><li>• <i>Any assumptions or allowances made for deleterious elements.</i></li></ul>	<p><u>Metallurgical Testwork</u></p> <p>HIO has carried out extensive diamond core and RC drilling, sampling and testwork since 2010. More than 82 samples were used for the testwork. The deposit has been categorised into 3 mineral domains being Interbed, Unit 2, and Unit 3. These Unit 2 and 3 domains make up the majority of the resource and have been the focus of metallurgical testwork.</p> <p>Metallurgical testwork for the Project has been ongoing since 2010, with the initial focus on a conventional magnetite process route with crushing, wet grinding and magnetic separation. In 2024 the testwork program, shifted to a 2-stage process with initial dry crushing, grinding and rougher magnetic separation to produce a rougher magnetite concentrate to be then upgraded using conventional wet magnetite processing wet, incorporating grinding, magnetic separation and elutriation.</p>



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	<ul style="list-style-type: none"> <li><i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i></li> <li><i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<p>This change was enabled by interpreting and utilising some of the unique physical properties of the Hawsons mineralisation developed by testwork. The key properties of the mineralisation being relatively soft to crush and grind with low abrasive indices. This enabled the consideration of primary crushing with mineral sizers and dry grinding using equipment common in the cement and phosphate industries, being Vertical Roller Mills (VRM).</p> <p>Preliminary testwork by two VRM vendors on different samples from Hawson indicated low specific energy for grinding and low to moderate abrasion.</p> <table border="1"> <thead> <tr> <th>Item</th><th>Units</th><th>Value</th><th>Comment</th></tr> </thead> <tbody> <tr> <td>Ore Density (SG)</td><td>t/m<sup>3</sup></td><td>3.04</td><td></td></tr> <tr> <td>Unconfined Compressive Strength, UCS (85<sup>th</sup> Percentile)</td><td>MPa</td><td>53.31</td><td>Typical upper limit for mineral sizers is 200MPa</td></tr> <tr> <td>Metso Crushability Index</td><td>kWh/t</td><td>5.10</td><td>3 - 7kWh/t is considered as easy to crush</td></tr> <tr> <td>Abrasion Index</td><td></td><td>0.10</td><td>Moderate</td></tr> <tr> <td>Bond Ball Mill Index</td><td>kWh/t</td><td>9.00</td><td>Considered soft</td></tr> <tr> <td>VRM Specific grinding energy</td><td>kWh/t</td><td>3.3 to 6.6</td><td>Dry grind to 38micron (target 100micron) – Vendor specific energy parameters</td></tr> <tr> <td>Jar Mill test for concentrate reground P<sub>80</sub> of 32µm</td><td>kWh/t</td><td>3.89 to 10.57</td><td>Ranging from low energy to medium energy</td></tr> <tr> <td>HPGR (85<sup>th</sup> Percentile)</td><td>kWh/t</td><td>3.00</td><td>Considered as medium hardness</td></tr> </tbody> </table> <p>The overall magnetite losses through the process plant are estimated to be 5%, or 95% of the DTR Feed grade values producing a +68% Fe magnetite concentrate at less than 3.0% SiO<sub>2</sub>. The MRE is based on the DTR assay method, which is a metallurgical test to determine the magnetic Fe content at a selected grind size to produce a magnetic concentrate of particular chemical composition. The Process plant undertakes this metallurgical process at a commercial scale. As a result the overall recovery is measured as the inefficiency of the laboratory test.</p> <p>Magnetic separation testing has been undertaken both wet and dry. The wet testing demonstrates that at 32micron grind the DTR recoveries and grades are being achieved. The dry testing at coarser grind, nominal 100micron, has resulted in lower recoveries compared to the standard DTR test at 32micron, with losses in the range of 2 to 10% achieved in unoptimised initial testing, with the assessment that optimised conditions will result in 3-4% loss.</p> <p>Other testwork relevant to the selected flowsheet for the PFS, includes concentrate thickening, Transport Moisture Limit (TML) and elutriation testing.</p> <p>The elutriation testwork indicates the silica grades can be reduced to below 3% and Fe grades of 69.5%.</p>	Item	Units	Value	Comment	Ore Density (SG)	t/m <sup>3</sup>	3.04		Unconfined Compressive Strength, UCS (85 <sup>th</sup> Percentile)	MPa	53.31	Typical upper limit for mineral sizers is 200MPa	Metso Crushability Index	kWh/t	5.10	3 - 7kWh/t is considered as easy to crush	Abrasion Index		0.10	Moderate	Bond Ball Mill Index	kWh/t	9.00	Considered soft	VRM Specific grinding energy	kWh/t	3.3 to 6.6	Dry grind to 38micron (target 100micron) – Vendor specific energy parameters	Jar Mill test for concentrate reground P <sub>80</sub> of 32µm	kWh/t	3.89 to 10.57	Ranging from low energy to medium energy	HPGR (85 <sup>th</sup> Percentile)	kWh/t	3.00	Considered as medium hardness
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		<p>Comparison of the head and tail magnetic and total iron grades in the test work for each unit process indicates an overall magnetite mass loss of 5% can be expected. On this basis the mass recovery from plant feed to magnetite mass recovery is set at the DTR% x 95%.</p> <p><u>Processing Plant</u></p> <p>The PFS process flowsheet developed from the testwork consists of 4 major components:</p> <ul style="list-style-type: none"><li>• Dry crushing, grinding and magnetic separation (Cobbing) to produce a rougher magnetite concentrate. This reduces the mass by 80% at a nominal product size of <math>P_{80}</math> 100 micron</li><li>• The rougher magnetic concentrate is processed in a wet circuit including grinding, magnetic separation, elutriation with thickening of the magnetic and non-magnetic streams and magnetic concentrate filtration and washing. The magnetite concentrate at 38micron is <math>\geq 68\%</math> Fe and less than 3% <math>\text{SiO}_2</math> after elutriation</li><li>• Process waste handling by combining the dry non-magnetic and wet non-magnetic thickener underflow and conditioning prior to compacting and disposal to the CDF</li><li>• Filtered magnetite concentrate is conveyed to a product stockpile prior to train loading and transport to customers.</li></ul> <p>The process plant is supported by common air, water and reagent systems. Infrastructure for water and power supply, operations and maintenance facilities and on-site laboratory are included.</p> <p>To facilitate the mine production ramp up and mine schedule and providing realistic equipment selection the flowsheet consists of 3 identical trains operating at nominally 33Mtpa for a combined capacity of 100Mtpa. The mine production schedule allows 2 trains to operate from years 1 to 4 with the 3rd train online in year 5 of operations.</p>

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		<p>The flowsheet shows the processing of ROM (100Mtpa) through a Dry Circuit and a Wet Circuit.</p> <ul style="list-style-type: none"> <li><b>Dry Circuit:</b> ROM is processed through 2 Stage MMD Sizers, followed by Dust Scrubbers and Dry Magnetic Separation. This results in 20% - Ore and 80% - Waste.</li> <li><b>Wet Circuit:</b> The 20% - Ore is processed through Fine Grinding, Thickening, Elutriation, and Filtration to produce Process Water and a Final Product Stockpile &amp; Train Loading - (10Mtpa) +68%Fe.</li> <li><b>Waste Co-Disposal Facility (CDF):</b> The 80% - Waste is sent to the CDF, which also receives Process Water and moisture-conditioned waste from the Dry Circuit. The CDF then performs Moisture Conditioning &amp; Compaction (90Mtpa) before sending waste to co-disposal.</li> </ul>
<i>Environmental</i>	<ul style="list-style-type: none"> <li>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</li> </ul>	<p><u>Environmental approvals</u></p> <p>The main components of the Project are located within NSW, with a small section of rail infrastructure within South Australia (SA), plus product transport will be through SA. The primary approval will be the NSW Government, with additional approvals to be coordinated with the SA Government.</p> <p>Environmental management of the Project will comprise completing all of the environmental investigations and reporting necessary for obtaining statutory approvals required to construct and operate the Project facilities and meeting all of the statutory monitoring and environmental conditions of the various approvals during the implementation and operations phases of the Project.</p> <p>The Project will be declared a State Significant Development (SSD), with applications determined by the Minister for Planning, the Independent Planning Commission (IPC), or a delegate of either. SSD applications are considered under Division 4.7 of the Environmental Planning and Assessment Act 1979. The IPC is the consent authority for an SSD.</p>



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		<p>The major environmental approval required is the issue of consent for a Development Application (DA) under the NSW Environmental Planning and Assessment Act. This consent is required before the necessary Mining Leases can be granted under the NSW Mining Act. Applications for Development Consent must be supported by a comprehensive Environmental Impact Statement (EIS) which must be prepared in accordance with conditions established.</p> <p>The EIS will underpin the high level of support the Project currently has at a senior Government level. The rural region in which the Project is located is in economic decline and the benefits of a project the scale of Hawsons is readily apparent to Government at the highest level. Transportation, water supply, water quality management, air quality and social/economic issues form key focus areas for the EIS. Considerable effort has been expended by Hawsons in consulting with the NSW Government on these and other matters, to the extent that a responsive consultation process with Government has been developed.</p> <p><b><u>Environmental studies status</u></b></p> <p>To address NSW environmental approvals HIO has been conducting environmental and cultural heritage studies over the Hawsons exploration leases as part of the exploration and development program since 2010 up to 2023.</p> <p>As part of the NSW SEARs process, extensive requirements for the EIS are being addressed. HIO had commenced this program of technical studies prior to a slowdown of the project in late 2022. The technical studies to inform the EIS are well established and mature programs and will recommence rapidly in conjunction with the FS phase of project development.</p> <p>To address South Australian environmental approvals, HIO developed an Environmental Protocol for Field Development and Constraints Analysis which can also be utilised for the currently planned rail line.</p> <p><b><u>Waste Rock and Process Waste Management</u></b></p> <p>Waste rock will be placed and stored with process waste in a co-disposal facility (CDF) to the north and east of the open cut and project process plant and infrastructure areas.</p> <p>The process waste is expected to consist of all non-magnetic material, including silica / mica and non-magnetic iron species including hematite.</p> <p>The process waste will be conditioned with water and formed into a stable cake in a roller mill to be hauled to the co-disposal facility to be stored with the mine waste rock. The current mine plan uses truck haulage of the dry process waste. Conveyor haulage and stacking will be assessed in future iterations.</p>



Criteria	JORC Code explanation	Commentary
		<p><u>Closure Plan</u></p> <p>The closure strategy encompasses a staged approach to rationalising land and water management, environmental monitoring and compliance. The New South Wales Resources Regulator regulates rehabilitation activities against the conditions of the mining lease (issued under the Mining Act 1992). A Progressive Closure and Rehabilitation plan (PRCP) will be developed as part of the technical studies conducted as part of the EIS studies required for project approvals in New South Wales. The PFS has made economic allowances for rehabilitation and closure.</p>
Infrastructure	<ul style="list-style-type: none"><li><i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i></li></ul>	<p>Infrastructure required for the mining operations at Hawsons has been described above under Mining factors or assumptions. In addition to the mine infrastructure, the overall project on-site and off-site infrastructure requirements include the following:</p> <ul style="list-style-type: none"><li>• 100Mtpa process plant as described under Metallurgical factors or assumptions, including crushed ore stockpile area</li><li>• Concentrate storage and handling facilities.</li><li>• Co-disposal facility (CDF) for mine waste rock and compacted process waste.</li><li>• Power supply.</li><li>• Diesel fuel storage for mobile equipment.</li><li>• Site Warehouse and Process Plant workshop.</li><li>• On-site laboratory.</li><li>• Administration complex, for construction and operations</li><li>• Communications.</li><li>• Water supply infrastructure.</li><li>• Mine affected water management structures and systems including</li><li>• Camp east of the MLA for project and construction workforce.</li><li>• Medical and Emergency Services on-site.</li><li>• Heli-pad.</li><li>• Access and general site roads.</li><li>• Temporary construction facilities and laydown areas, etc.</li></ul>



Criteria	JORC Code explanation	Commentary
		<p><u>Land Access</u></p> <p>The Project is contained within the three pastoral grazing properties, of which land will need to be acquired prior to commencing of development. An option to acquire one is currently in place, with the others in negotiation.</p> <p>Infrastructure off-site will require land access and easement agreements with all relevant landholders to be finalised before undertaking construction activities. This includes the rail spur, powerline, water bores and pipeline, and mine access road. Preliminary discussions have been undertaken but will only be finalised when final alignments are established during the Feasibility Study.</p>
Costs	<ul style="list-style-type: none"><li>• <i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></li><li>• <i>The methodology used to estimate operating costs.</i></li><li>• <i>Allowances made for the content of deleterious elements.</i></li><li>• <i>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.</i></li><li>• <i>The source of exchange rates used in the study.</i></li><li>• <i>Derivation of transportation charges.</i></li><li>• <i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i></li><li>• <i>The allowances made for royalties payable, both Government and private.</i></li></ul>	<p><u>Project Capital costs</u></p> <p>The Hawsons initial capital cost estimate is \$AU 3,911 million</p> <p>Sustaining Capital cost estimate – \$AU 1,739 million</p> <p>Mine Closure cost estimate – \$AU 81 million</p> <p>Stage 2 Capital to construct the 3<sup>rd</sup> Process Plant train for operation in year 5 of operations – \$AU 1,050.66 million.</p> <p>The estimate has been compiled in accordance with Stantec Project Services Estimating Procedures based on AACE and AusIMM standards. This estimate is consistent with a Class 4, appropriate for a Pre-Feasibility Study estimate. The overall capital cost estimate presented is judged to have an accuracy of -20% to +30%.</p> <p><u>Source of Estimate Costs and Quantities</u></p> <p>Estimated labour hours and costs were developed based on budgetary prices from Vendors, recent historical norms for similar types of work/projects and in-house data and/or quotations from known Vendors.</p> <p>Engineering provided bulk material quantities by WBS code using preliminary engineering and design works as MTO's from general arrangement drawings, layout drawings and preliminary design calculations and industry software.</p> <p>Quantities for earthworks were developed using Civil3D. Primary structural steel sizing and quantities were developed using SpaceGass and other take-off usings measurements for preliminarily sized items such as concrete, platework, grating, handrailing, stair tread and sheeting.</p> <p>In the event where quantities, engineering data and/or equipment pricing were not available, best engineering practice and assumptions were utilised, as well as industry benchmarking. Factors were used for specified items based on historical averages for similar projects.</p> <p><u>Pricing Methodology</u></p> <p>Pricing of bulk materials was based on informal budget quotations and enquiries placed with reputable Chinese and Western suppliers. Historical unit rates and in-house benchmark cost data from previous and current projects (as recorded in the Stantec cost database) were applied for items where quotations were either not provided or deemed unnecessary for the estimate quality.</p>



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		<p><u>Project Operating Costs</u></p> <p>The Opex estimate has been compiled based on:</p> <ul style="list-style-type: none"> <li>• Process and infrastructure inputs from Stantec, including labour rates and allowances, reagent and consumables and freight</li> <li>• Infrastructure inputs for power supply by Incite Energy</li> <li>• Water supply by 2MC and NSW Government published charges</li> <li>• Accommodation Camp and catering by BOO vendor supply</li> <li>• Mining and CDF operating costs from AMDAD</li> </ul> <p>The operating costs are calculated as fixed and variable costs as applicable on a period basis as per the mining and process schedule.</p> <p>Project operating costs are summarised:-</p> <table border="1"> <thead> <tr> <th>Department</th><th>\$AU/dry t Concentrate</th><th>\$AU/t Plant Feed</th></tr> </thead> <tbody> <tr> <td>Mining</td><td>35.92</td><td>3.97</td></tr> <tr> <td>Process Plant</td><td>23.92</td><td>2.64</td></tr> <tr> <td>Co-Disposal Facility</td><td>10.19</td><td>1.13</td></tr> <tr> <td>General and Administration</td><td>5.87</td><td>0.65</td></tr> <tr> <td><b>C1 Cost</b></td><td><b>75.91</b></td><td><b>8.38</b></td></tr> </tbody> </table>	Department	\$AU/dry t Concentrate	\$AU/t Plant Feed	Mining	35.92	3.97	Process Plant	23.92	2.64	Co-Disposal Facility	10.19	1.13	General and Administration	5.87	0.65	<b>C1 Cost</b>	<b>75.91</b>	<b>8.38</b>
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Revenue factors	<ul style="list-style-type: none"> <li>• <i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i></li> <li>• <i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></li> </ul>	<p><u>Magnetite Concentrate Revenue</u></p> <p>The pit optimisation, ore reserve mine plan and financial modelling used a magnetite concentrate price of \$US 140/dry t concentrate and exchange rate of 0.65 \$US / \$AU, equating to \$AU 215/t.</p> <p>The \$US 140/dry t price for magnetite concentrate at ≥68% Fe is based on a linear extrapolation of current 62% and 65% prices (as of 3 December 2025) on a CFR basis into a Chinese port. It does not include any premium as a direct reduction feed stock.</p> <p><u>Selling costs</u></p> <p>For the pit optimisation, cutoff grade and financial modelling, transport costs of \$AU 57.14/ dry t concentrate include:-</p>																		



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		<ul style="list-style-type: none"><li>• Rail (FOB) – \$AU 16.44 / dry t concentrate</li><li>• Port Costs (FOB) – \$AU 18.98 / dry t concentrate</li><li>• Shipping (CFR North China) – \$US 12.98 / wet t concentrate</li></ul> <p>Assumed royalty charges include:-</p> <p><i>NSW Government Royalties - 4% 'Ex Mine Value' for each period:</i></p> <p>Ex Mine Value = Total Revenue - % of downstream plant OpEx - downstream depreciation - downstream onsite administration</p> <p><i>Perilya Royalties - 1.5% Net Royalty:</i></p> <p>Net Smelter Royalty = Total Revenue - Total Costs</p>
Market assessment	<ul style="list-style-type: none"><li>• <i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></li><li>• <i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></li><li>• <i>Price and volume forecasts and the basis for these forecasts.</i></li><li>• <i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i></li></ul>	<p><u>Marketing strategy</u></p> <p>HIO is independent of any major operator in the steel supply chain. The company intends to establish its own in-house marketing channel but will consider using other commodity sales options strategically aligned with the project's ultimate joint venture ownership structure or agreed commercial marketing arrangements.</p> <p>Magnetite mining and processing costs are higher than those for lower grade haematite and the capital cost of the plant and associated infrastructure reflects this. Consequently, operating margins for magnetite concentrate producers will generally be lower than those for haematite.</p> <p>Steel producers are also going to need to move to potentially higher cost production methods and / or accelerate capital replacement decisions. This may also put pressure on operating margins for steel producers in the absence of an upward shift in the wholesale price of finished steel products.</p> <p>Consequently, Hawsons anticipates the potential for a realignment of the commercial linkages between steel producers and iron ore suppliers, which may include joint ventures, long term offtake contracts, fixed or formula-based pricing and other commercial, risk-sharing structures.</p> <p>Hawsons believes it is competitively placed to be successful in this new steel industry economic structure.</p> <p>As demonstrated by LOIs already in hand, Hawsons has identified significant demand for its high-grade magnetite concentrate from all sectors of the global steelmaking industry, encompassing BF, pellet plants, EAF and DRI / Hot Briquetted Iron (HBI) processes and technologies.</p> <p>Commodity traders are well represented, as are potential domestic users.</p> <p>Given an abundance of magnetite within the Braemar mineral province and existing steel industry at Whyalla, the South Australian Government is fostering the development of Green Hydrogen (created by electrolysis using renewable wind and solar energy) to position the state at the centre of solutions to decarbonising the global steel sector.</p>



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		To this end, the state and Commonwealth governments recently ratified \$AU 100 million in combined funding arrangements to support the establishment of a Green Hydrogen export hub at Port Bonython, which could also support EAF production of Green Steel at nearby Whyalla.															
Economic	<ul style="list-style-type: none"><li><i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i></li><li><i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></li></ul>	<p><u>Project cost/financial model</u></p> <p>HIO prepared a financial model for the project in Excel using operating and capital cost estimates described in the “Costs” section above, and based on a magnetite concentrate price of \$US 140/t. The model uses the PFS Ore Reserves mining schedule prepared by AMDAD.</p> <p>The financial model shows a pre-tax discounted cashflow (DCF) at 8% discount rate, of approximately \$AU 1,360 million and a pre-tax IRR of 10.93%.</p> <p><b>Economic Inputs</b></p> <table border="1"><thead><tr><th>Assumption</th><th>Rate / Amount</th><th>Comment / Source</th></tr></thead><tbody><tr><td><b>Discount Rate</b></td><td>8.00%</td><td>Estimated pre-tax rate based upon comparable rates applied to projects similar in profile and expected costs of capital.</td></tr><tr><td><b>Product Price</b></td><td>\$US 140.00/dmt</td><td>Based on a linear extrapolation of current 62% and 65% prices (as of 3 December 2025) on a CFR basis into a Chinese port.</td></tr><tr><td><b>Exchange Rate</b></td><td>\$US / \$AU 0.65/1.00</td><td>Hawson’s expectation of the average long run \$US / \$AU pricing.</td></tr><tr><td><b>Taxation Rate</b></td><td>30%</td><td>Current legislated company tax rate.</td></tr></tbody></table> <p>HIO has confirmed that its economic analysis based on the Hawsons Ore Reserves demonstrates that the planned operations would be economically viable given the price and exchange rate assumptions.</p>	Assumption	Rate / Amount	Comment / Source	<b>Discount Rate</b>	8.00%	Estimated pre-tax rate based upon comparable rates applied to projects similar in profile and expected costs of capital.	<b>Product Price</b>	\$US 140.00/dmt	Based on a linear extrapolation of current 62% and 65% prices (as of 3 December 2025) on a CFR basis into a Chinese port.	<b>Exchange Rate</b>	\$US / \$AU 0.65/1.00	Hawson’s expectation of the average long run \$US / \$AU pricing.	<b>Taxation Rate</b>	30%	Current legislated company tax rate.
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		<u>Sensitivity Analysis</u>		
Scenario	NPV \$AU M (pre-tax)	IRR (pre-tax)		
Base case	1,360	10.93%		
OpEx +10%	260	8.58%		
OpEx +5%	810	9.77%		
OpEx -5%	1,910	12.05%		
OpEx -10%	2,460	13.16%		
FX -10% (AUD decrease)	2,872	13.87%		
FX -5% (AUD decrease)	2,409	10.00%		
FX +5% (AUD increase)	604	9.34%		
FX +10% (AUD increase)	(152)	7.65%		
Price +10%	3,040	14.19%		
Price +5%	2,200	12.60%		
Price -5%	520	9.16%		
Price -10%	(321)	7.26%		
CapEx +10%	916	9.85%		
CapEx -10%	1,805	12.16%		
Social	<ul style="list-style-type: none"><li>The status of agreements with key stakeholders and matters leading to social license to operate.</li></ul>	Broken Hill and the HIO site are situated on the traditional lands of the Wilyakali people, while other areas are home to several other groups, including the Malyangapa, Paakantyi (Barkindji), Pantyikali, Thangkaali and Wanyuparlk people.  Hawsons continues to engage with the Broken Hill Local Aboriginal Land Council (BHLALC) as well as the Wilyakali and have developed such methodologies to include, consultation, communication and collaboration with all Registered Aboriginal Parties (RAPs) on all aspects of the project's development.  All land surrounding the project and infrastructure is Crown Land and administered by the NSW Western Lands Department. No Native Title exists over this area.  The Project is contained within the three pastoral grazing properties, of which land will need to be acquired prior to commencing of development. An option to acquire one is currently in place, with the others in negotiation.		



Criteria	JORC Code explanation	Commentary
		<p>Infrastructure off-site will require land access and easement agreements with all relevant landholders to be finalised before undertaking construction activities. This includes the rail spur, powerline, water bores and pipeline, and mine access road. Preliminary discussions have been undertaken but will only be finalised when final alignments are established during the Feasibility Study.</p> <p>Other Stakeholders engaged:</p> <ul style="list-style-type: none"><li>• State and Federal Members of Parliament<ul style="list-style-type: none"><li>◦ NSW State Government</li><li>◦ SA State Government</li></ul></li><li>• Local Government<ul style="list-style-type: none"><li>◦ Broken Hill City Council</li></ul></li><li>• Industry groups<ul style="list-style-type: none"><li>◦ Foundation Broken Hill.</li></ul></li></ul> <p><u>Heritage</u></p> <p>The land surrounding the project, for 50km in diameter, has primarily been used for pastoral grazing since European settlement began in the area in the early 19th century. The area has been sparsely populated since this time and evidence of early European settlement of significance has not been identified in any areas associated with the project.</p> <p>There are several areas that contain evidence of aboriginal occupation as well as identified areas of cultural significance (Bronzewing Pidgeon Story). Numerous scatter zones consisting of stone chip artifacts have been identified in proximity to rocky outcrops and the surrounding areas.</p> <p>All artifact sites have been mapped and logged with the Aboriginal Heritage Information Management Systems (AHIMS). Hawsons Iron consults with both archaeologists and registered aboriginal parties before conducting any exploration activities on the project. Identified areas of cultural occupation are precluded from any activity. Where project activities necessitate the need to enter such areas, an Aboriginal Cultural Heritage Assessment Report (ACHAR) must be carried out and no activity is to be undertaken until an Aboriginal Heritage Impact Permit (AHIP) is granted.</p>
Other	<ul style="list-style-type: none"><li>• <i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></li><li>• <i>Any identified material naturally occurring risks.</i></li><li>• <i>The status of material legal agreements and marketing arrangements.</i></li><li>• <i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and</i></li></ul>	Apart from risks noted in this Table 1 Section 4, HIO has confirmed that there are no other material issues or risks that could impact on the project and on the estimation of the ore reserves.



Criteria	JORC Code explanation	Commentary
	<p><i>government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i></p>	
Classification	<ul style="list-style-type: none"><li><i>The basis for the classification of the Ore Reserves into varying confidence categories.</i></li><li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li><li><i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i></li></ul>	<p><u>Reserve Classification</u></p> <p>The Probable Ore Reserve is derived from the Measured and Indicated Mineral Resources. This component of the Reserves derived from the Measured Mineral Resource is classified as Probable because the level of confidence in some of the Modifying Factors is not considered to be at a sufficiently high level commensurate with Proved Ore Reserves. In particular, assumed processing recovery, concentrate filtration, and geotechnical design parameters are not considered to be at a sufficiently high level of confidence for Proved Ore Reserves.</p> <p><u>General Project Risks</u></p> <p>Significant elements of risk to the overall project and ore reserves are summarised below:-</p> <ul style="list-style-type: none"><li>Ability of planned flow sheet to achieve target mass recovery from crusher feed to magnetite concentrate.</li><li>Significant changes to the magnetite concentrate price and/or exchange rate.</li><li>Delays to the process plant start up due to longer than forecast construction time and commissioning issues.</li><li>Delays to ore production due to difficulty resourcing mining personnel and longer than expected lead times for mining equipment</li><li>Geotechnical factors</li><li>Concentrate production variances, revenue and operating cost impacts from uncertainty in the processing recovery</li><li>Uncertainty of water supply – land access, route/cost</li><li>Management of silica fines in process waste</li><li>Cultural heritage and landowner access risk for site operations</li><li>Risks associated with rail costs and port capacity</li><li>Geotechnical design risk for the CDF</li><li>Rehabilitation performance uncertainty</li></ul> <p>Taking into account the risks and uncertainties noted above, the mine plan and Probable Ore Reserve are considered to appropriately reflect the Competent Person's view of the deposit.</p>



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Audits or reviews	<ul style="list-style-type: none"><li><i>The results of any audits or reviews of Ore Reserve estimates.</i></li></ul>	No audits or reviews of the latest resource estimate and the ore reserve estimate have been undertaken.
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"><li><i>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</i></li><li><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li><li><i>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i></li><li><i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li></ul>	<p>The resource model from which the Ore Reserve is estimated does not include measures of relative accuracy other than what is implied by the resource classification. No simulations or probabilistic modelling have been undertaken on the Ore Reserves that would provide a meaningful measure of relative accuracy.</p> <p>The Modifying Factors are considered to be supported by studies generally at PFS level.</p>