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The Company Announcements Office, ASX Limited 8 May, 2023

Robe Mesa Iron Ore Project, Pilbara

CZR on track to become significant new iron ore producer after increasing Ore Reserves by 230%

JORC Ore Reserves jump to 27.3Mt; mine plan underpins initial 8 year life at 3.5Mtpa

C1 costs of just A$57/t; strong IRR of 70% at iron ore price of US$90/t[1]

Scope for more growth in inventory, mine life and production by including Robe Mesa South

Highlights

- **Ore Reserves at the Robe Mesa project increase from 8.2Mt in the pre-feasibility study (PFS) to 27.3Mt at 55.5% Fe (62.2% Fe calcined) (Table 1)**
- **Mine plan generates 3.5Mtpa direct shipping ore (DSO) over initial 8-year mine life**
- **Very low 1:1 strip ratio and only 0.3:1 in first 18 months, reducing opex during start-up**
- **Definitive feasibility study (DFS) nearing completion and on track for release mid-year**
- **Key economic results to date include low C1 cash cost of A$57/wmt FOB (US$39/wmt FOB)**
- **Strong financial returns[1]:**

Revenue Case (100%)	Free Cash Flow	NPV_{10}	IRR
Base case (US$90/dmt CFR)	A$260m	A$138m	70%
Spot price (US$106/dmt CFR)[2]	A$604m	A$342m	149%

- **Robe Mesa iron ore targeted as a sinter blend substitute for Rio Tinto's Robe Valley Fines and FMG's Super Special Fines (Table 5)**
- **Additional 3.4Mt of low-grade (59.5% Fe calcined) stockpiled over the life of mine – Not included in the Ore Reserve but will be assessed through the DFS**
- **Strong growth potential by including the Robe Mesa South deposit, located 5km from Robe Mesa and immediately south of Rio Tinto's Mesa F iron ore project**

1. Financial returns from the Ore Reserve study, further updates to the financial outputs will be reported in the mid-year DFS
2. Spot price for Platts 62% Fe index (IODBZ00) 4 May 2023

CZR Resources Ltd (ASX: CZR) is pleased to announce a 230% increase in Ore Reserves compared to the PFS (ASX announcement – 10 December 2020) at its Robe Mesa iron ore project in WA's Pilbara. The vastly expanded Ore Reserve base of 27.3Mt at 55.5% Fe underpins outstanding production and financial forecasts and is a critical step in the pending DFS for the project.

In addition to the strong production and financial metrics, Robe Mesa enjoys an extremely strategic location, being situated immediately north of Rio Tinto's Mesa F iron ore project. CZR also consolidated the Robe Mesa South project following the acquisition of E08/2137 from FMG (ASX announcement 3 March 2023), which is situated immediately south of Rio Tinto's Mesa F iron ore project.

CZR Managing Director Stefan Murphy said: "The increased Reserves allow CZR to design a larger, lower-cost and more sustainable iron ore project than identified under the 2020 PFS.

"Importantly, the new cashflow modelling shows Robe Mesa generating an outstanding internal rate of return of 70% based on a base case iron ore price of US$90/t.

"At this price, the modelling shows the project generating free cashflow of $260m over an eight-year life at an annual production rate of 3.5Mt, but at the current spot price the returns escalate to $604m in free cash flow over the life of mine and an IRR of 149%.

"With the consolidation of Robe Mesa South, only 5km from our Robe Mesa processing plant and incorporating lower-grade stockpiles in our production plans, we see further opportunities to grow the project and deliver more value to shareholders and local stakeholders."

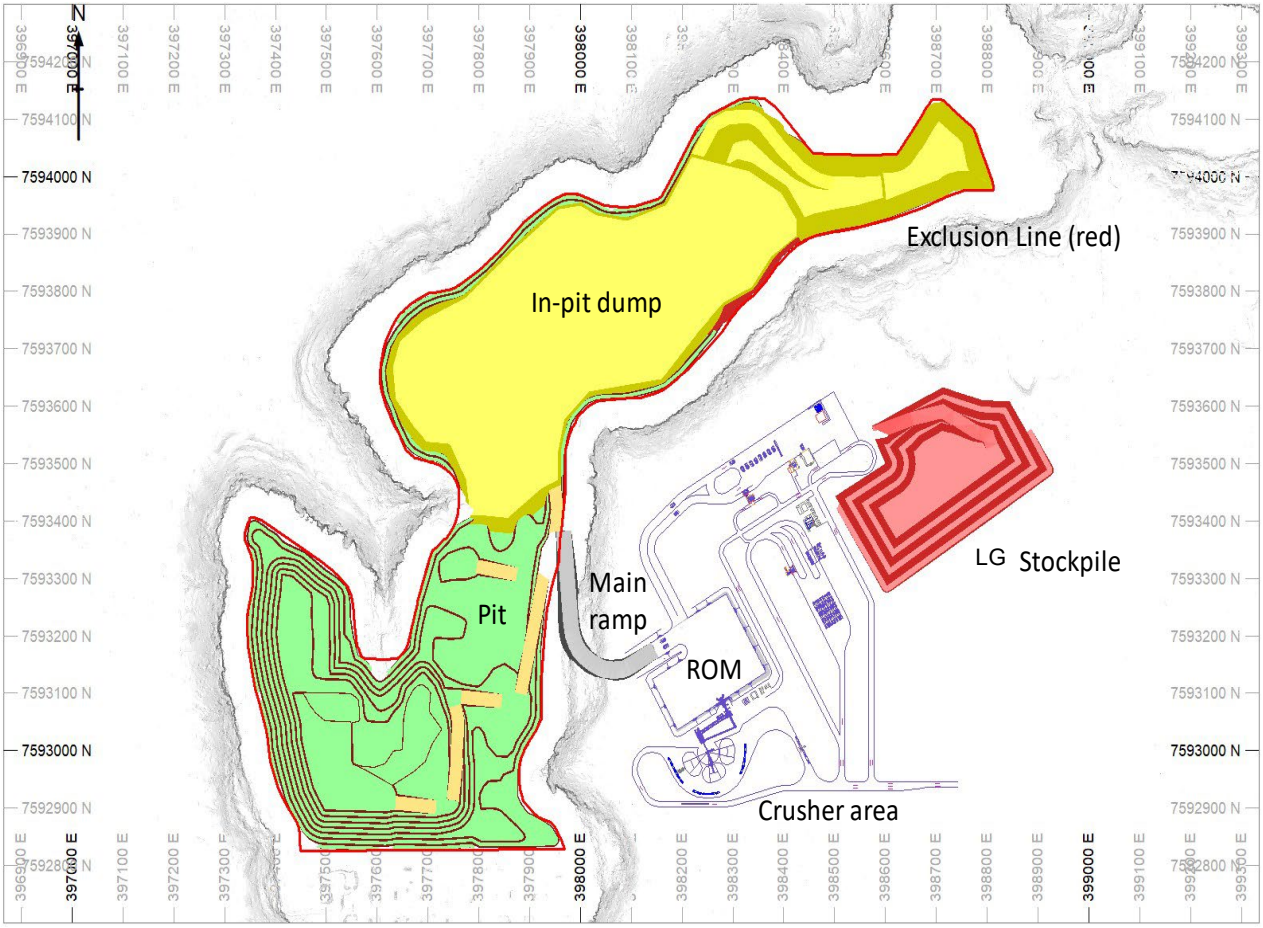


Figure 1. Robe Mesa 2023 mine site and infrastructure layout

Table 1. May 2023 Robe Mesa Ore Reserve estimate

JORC (2012) Reserve category	Tonnes Mt	Fe %	SiO2 %	Al2O3 %	P %	LOI %	S %	Fe_{ca} %
Probable	27.3	55.5	6.39	2.92	0.038	10.7	0.02	62.2

Notes:

- *Tonnes reported are dry and ROM.*
- *The cut-off grade was calculated on a block-by-block basis, with variances depending on SiO_2 and Al_2O_3 grades. A Fe cut-off grade of approximately 53% to 54% aligns with the economic cut-off grade.*
- *Fe_{ca} is the calcined iron-content calculated as (Fe%/(100-LOI%))*100 and represents the amount of iron after the volatiles (mainly held as weakly bound water in the structure of the hydrous iron minerals) is excluded from the analysis.*

Table 2. Low-grade stockpile material generated from the mining schedule

Material	Tonnes Mt	Fe %	SiO2 %	Al2O3 %	P %	LOI %	S %	Fe_{ca} %
Low-Grade Stockpile	3.4	53.0	9.0	3.7	0.03	10.9	0.02	59.5

Notes:

- *Tonnes reported are dry and ROM.*
- *The cut-off grade was calculated on a block-by-block basis, with variances depending on SiO_2 and Al_2O_3 grades. A Fe cut-off grade of 52% Fe and below the economic cut-off grade for Ore Reserves*
- *The Low-grade stockpile material is not included in the Ore Reserve estimate.*

Key Project Metrics

Table 3. Mine Production Estimate

Production rate	Mtpa	3.5
Mine Life	Yrs	8.0
Life of Mine Strip Ratio	Waste:Ore	1.0
Ore Reserves	Mt	27.3
Low-grade Stockpile	Mt	3.4
Waste (includes 256kt of Inferred Resource)	Mt	24.1

Table 4. Project Economic Estimates (100% basis)

		Base Case (US$90/t)	**Spot Price (US$106/t)**
Revenue	A$m	2,375.8	2,908.4
EBITDA	A$m	650.4	1,140.4
Net Operating Profit After Tax	A$m	303.7	647.5
C1 Cash Cost[1]	A$/wmt FOB	57.4	
Pre-production Capex	A$m	86.8	
Life of Mine Capex (pre-production, sustaining and closure)	A$m	116.2	
NPV (10% discount rate)	A$m	137.5	341.6

1. Includes capitalised waste and Port of Ashburton Consortium (PAC) export facility tariff

Material Assumptions

A prefeasibility study was completed in December 2020 and a definitive feasibility study is scheduled to be completed in mid-2023. Current market based cost estimates have been updated to reflect the DFS mine plan, production schedule and supply chain to support the 2023 Robe Mesa Ore Reserve estimate and demonstrate the financial viability of the Robe Mesa Iron Ore Project.

The assumptions specific to the Ore Reserve estimate are summarised below and are further detailed within the Joint Ore Reserves Committee Code (2012 Edition) Table 1 attached to this announcement.

Operations

- Close to existing infrastructure and major regional hubs, and therefore well supported for access and the logistics of running an operation (Figure 2)
- A simple, low strip ratio, low cost mining operation
- All mining is above water table, with waste backfilled into the open pit and a 50m buffer between the pit and mesa edge to protect areas of environmental and cultural heritage significance.
- An attractive product specification with existing product reference points that are well established in the market (Rio Tinto Robe Valley Fines, FMG Super Special Fines) (Table 5)

Infrastructure

All infrastructure associated with the mine site and haul road are covered by a granted mining licence or by miscellaneous licence applications. CZR has applied to Main Roads WA and received conditional approval for the intersection between the North West Coastal Highway and CZR's private haul road.

Key mine site infrastructure includes:

- 38km private bitumen haul road linking the mine to North West Coastal Highway
- 150 person accommodation village
- Contractor processing plant capable of up to 5Mtpa throughput capacity
- Mine Operations Centre (workshop, offices)
- Power generation, water bore field, pipework and filtration systems
- Interim iron ore product stockyard located between Robe Mesa and Port of Ashburton with 80 person camp for haulage contractor

Whilst the PFS utilised Utah Point in Port Hedland (420km), CZR has formed the Port of Ashburton Consortium (PAC) with Strike Resources Limited (SRK) and CSL Australia Pty Ltd (CSL) to assess and secure approvals for the construction of a bulk loading facility for export of iron ore from the Port of Ashburton, Onslow (POA Facility), only 170km from Robe Mesa.

The PAC has been in discussions with the Pilbara Ports Authority (PPA) in relation to installing multi-user infrastructure at the Port of Ashburton (ASX announcement: 16 December 2022), and is undertaking preliminary designs, including road train unloading, storage shed, transhipment vessel (TSV) loader and ancillary fixed and mobile infrastructure. Discussions with PPA regarding the POA Facility design and interaction with the Port of Ashburton are ongoing and PAC is yet to submit its development application.

It is proposed that the PAC will charge the exporters (initially CZR and SRK) a tariff to use the POA Facility, comprised of a capital and operating recovery charge plus margin, with the exporters to commit to a take or pay fee structure until all costs are recovered in full.

To develop the tariff fee structure, CSL has provided detailed marine cost estimates for transhipping from the POA Facility to offshore anchorages and loading cape-size bulk cargo carriers. PAC has engaged specialist mechanical and materials handling engineers to develop landside capital and operating cost estimates and the PPA has provided port access charges (wharfage, berthing, etc.).

CZR has used the proposed PAC tariff in developing the cost model for the May 2023 Robe Mesa Ore Reserve update.

Environmental and Heritage Approvals

To assess the potential impact of the project on various aspects of the environment the following work has been undertaken:

- Waste Characterisation investigation completed by Graeme Campbell and Associates, with only inert waste material identified
- Mine Closure Planning has been undertaken by Mine Earth
- Two phases of Flora, Short Range Endemics (SRE) and Three phases of Troglofauna surveys of Robe Mesa and surrounding infrastructure areas completed by Biota Environmental from 2020-2023
- Two phases of Fauna surveys completed by Bamford Consulting from 2020-22
- Hydrological assessment of bores located off the Robe Mesa and a water supply source has been identified to meet site water requirements
- A Significant Species management plan as well as blast noise modelling of mining activities on top of Robe Mesa

In December 2022, CZR and the Robe River Kuruma Aboriginal Corporation (RRKAC) entered into the Robe Mesa Project Agreement (the "Agreement"). The Agreement sets out the framework and approvals for the purpose of:

- Protecting country;
- Facilitating mining operations in the Robe Mesa Production Area; and
- Developing a meaningful, respectful relationship between CZR and the Robe River Kuruma People

The Agreement was reached through a collaborative approach, with a focus on current and future benefits for both parties. In particular, CZR has undertaken to minimise disturbance to Robe River Kuruma country, through customised commitments about the way mining is conducted that respects RRK People's cultural concerns, particularly around minimising water extraction and protecting areas of cultural heritage significance.

This information, along with the co-development of the Cultural Heritage Management Plan with Robe River Kuruma People and surface water modelling outputs will be summarised and submitted to the Department of Mines, Industry Regulation and Safety (DMIRS) for Native Vegetation Clearance Permit approval. The Robe Mesa Mining Proposal will be submitted to the DMIRS in Q2 2023.

Further environmental studies (Flora and Fauna) are underway for the interim stockyard located on Onslow Road (field work completed).

At the Port of Ashburton, Dust, Light and Surface Water modelling of the new West Quay Truck Unloading Facility is planned to be undertaken in the June quarter 2023, as part of the proposed Development Application to the PPA.

Tenure

On 4 January 2023, The WA Department of Mines, Industry Regulation and Safety granted Mining Licences M08/533 (Robe Mesa Deposit) and M08/519 (P529 Deposit) for a period of 21 years. The May 2023 Robe Mesa Ore Reserves are located entirely on Mining Licence M08/533. The granting of M08/533 and M08/519 followed the signing of the Mining Agreement between CZR and RRKAC in December 2022.

During the March 2023 quarter, CZR completed access agreements with subsidiaries of Rio Tinto, Mineral Resources and API Management covering infrastructure tenements (miscellaneous licences) where CZR intends to construct supporting infrastructure for the Robe Mesa project.

Objections have now been withdrawn and the tenements should proceed to grant, providing CZR with secure tenure and a path to market for its iron ore. CZR has also applied for miscellaneous licences to support interim stockyards and is currently negotiating agreements to progress these.

Project Ownership

The Robe Mesa project is located on part of the Yarraloola tenement package which is a joint-venture in which an 85% beneficial ownership is held by Zanthus Resources Pty Ltd for CZR Resources Ltd and 15% is held independently by ZanF Pty Ltd for Mark Creasy, free carried to completion of the DFS.

Unless stated otherwise all project metrics throughout this announcement are stated on a 100% basis.

Project Location

The Robe Mesa project is located in the West Pilbara within the Shire of Ashburton, 200 kilometres by road south-west of the city of Karratha, 175 kilometres by road from the town of Onslow and 400 kilometres by road from Port Hedland (Figure 2). Robe Mesa is not an isolated deposit but part of the Robe Valley channel iron deposits (CID), located between the Mesa A and Mesa J-K iron ore mines operated by Rio Tinto Ltd.

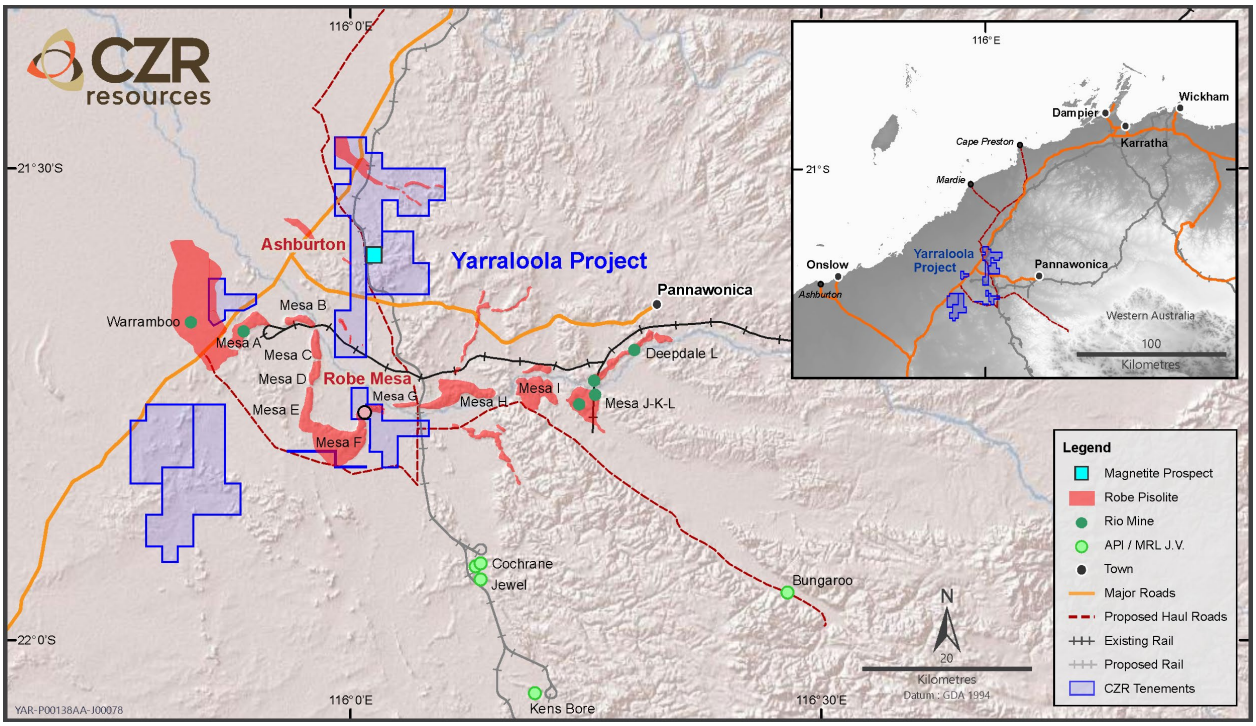


Figure 2. CZR's Yarraloola project and Robe Mesa deposit showing local infrastructure and iron ore deposits. Insert map showing regional infrastructure of the West Pilbara, relative to the Robe Mesa deposit

The West Pilbara region is experiencing an investment boom, with the Rio Tinto operated Robe River JV recently investing over $1.7 billion to replace production from existing mines at Mesa A, Warramboo and Mesa J. Production commenced at Mesa B, C and H in August 2021 and extensive drilling has been completed at Mesa F, effectively surrounding CZR's Robe Mesa deposit.

Mineral Resources Limited and the Red Hill Iron Ore Joint Venture (RHIOJV) have commenced construction of the $3 billion Onslow Iron project, developing their West Pilbara iron ore assets with initial production from Ken's Bore and exporting from a new, 35Mtpa transhipment facility at the Port of Ashburton.

Robe Mesa has similar grade specifications to products currently exported from Western Australia - the most comparable being Rio Tinto's Robe Valley Fines and FMG's Super Special Fines. Based on analysis of comparable traded products, CZR applies a 22% discount to the S&P Global Platts benchmark 62% Fe index to estimate long-term pricing for the Robe Mesa fines product.

Table 5. Iron Ore Product Comparison

Product	Fe	SiO_2	Al_2O_3	P
CZR - Robe Mesa 2023 JORC Ore Reserve	55.5	6.39	2.92	0.038
Rio Tinto - Robe Valley Fines	56.4	5.50	3.10	0.030
FMG - Super Special Fines	56.5	6.40	3.10	0.055
FMG – Fortescue Blend Fines	58.2	5.60	2.50	0.065
BHP – Jinbao Fines	56.5	7.31	1.69	0.041
BHP – Yandi Fines	57.0	6.35	1.70	0.045
Platts 58% Fe index (IODFE00)	58.0	6.00	2.90	0.060

Notes:

Comparison made between Robe Mesa Ore Reserves and operating mines of similar grade specification in the Pilbara, Western Australia (note CZR is currently not producing from Robe Mesa)

Source: S&P Global Platts Iron Ore and Metallurgical Coal Specifications Tree (2021)

https://www.spglobal.com/platts/PlattsContent/_assets/_files/en/our-methodology/methodology-specifications/iron-ore-and-metallurgical-coal-specifications-tree.html

Next steps

- Complete competitive tender process for all capex and opex items
- Assess inclusion of low-grade stockpile in the DFS to expand the Ore Reserves and production schedule
- Finalise and submit regulatory (environmental and mining) plans and permits
- Progress miscellaneous licence applications for the construction of supporting infrastructure
- Incorporate PAC Joint Venture company and submission of development application to Pilbara Ports Authority to assess the proposed PAC iron ore export facility
- Project finance, strategic partner and offtake/marketing facility for Robe Mesa and PAC
- Delivery of Robe Mesa DFS and Final Investment Decision

Mining Study - Background

As a part of the DFS scope, CZR engaged Snowden Optiro to complete an Ore Reserve estimate for the Project in accordance with the Joint Ore Reserves Committee Code (2012 Edition). Snowden Optiro's scope of work for this study included:

- Mining model preparation incorporating ore dilution and ore loss
- Pit optimisation on updated input parameters supplied by CZR
- Pit design and mine layout development
- Waste dump design with maximisation of backfill into completed pits
- Mining production schedule
- Ore Reserve estimate

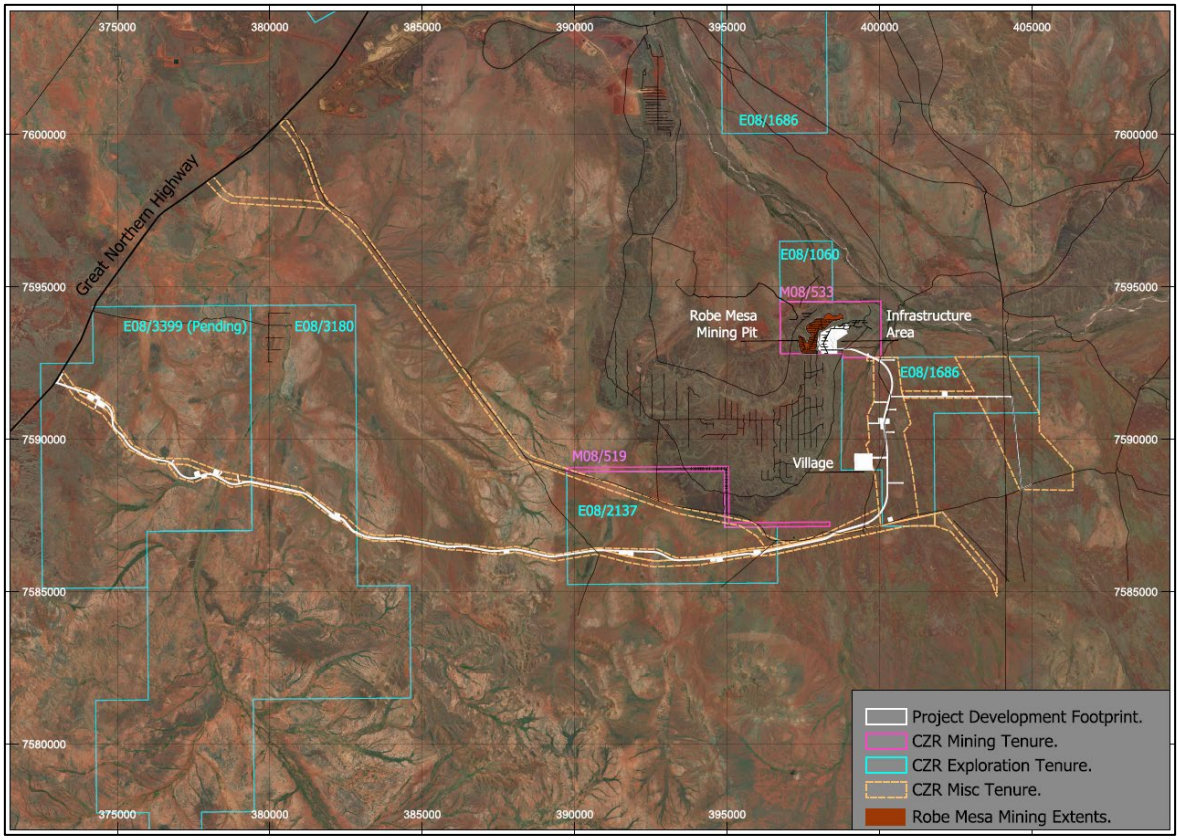


Figure 3. Robe Mesa Project Layout – Including designed haul road, village and tenure

Mining method

Mining within the Robe Mesa project area will be with conventional truck and excavator methods. The orebody consists of two horizontal channels, upper and lower which will be mined selectively on 4.0 m flitches to minimise dilution. Loading will be with a combination of 120 t excavators and haulage with 90 t trucks.

It is anticipated that all material will require drill and blast. Grade control will include an initial reverse circulation (RC) drilling campaign and then transition to blast-hole sampling grade control practises once production commences.

Ore will be hauled to a central run of mine (ROM) and fed into the ROM bin using front-end loaders. Low-grade material will be stockpiled on the surface before rehandling to the ROM later in the mine life. Waste will initially be hauled to waste rock landforms above planned mining regions due to surface restrictions. Waste will be backfilled into the open pit once sufficient dumping space is available.

Mine design

Mine designs were generated through a standard process of mining model generation, pit optimisation and design. Pit optimisations were completed in Studio NPVS software, an industry standard package. This software determines the economic limits of each deposit after accounting for estimated revenues and costs associated with mining each resource and waste block and the maximum allowable slope angles. Pit surfaces from the optimisation were used to design pits which were split into pushbacks.

Waste disposal was constrained by surface exclusion zones, limiting waste dumping to within the pit area or backfilled into the pit. After calculating the volumes of each waste type, waste rock landforms were designed to contain this material and minimise required haulage distances as much as possible.

To consider the proposed mining method, the resource model was converted to a mining model to reflect anticipated mining dilution and mining loss. This was achieved by re-blocking to the selective mining unit (SMU) of 5.0 mX x 5.0 mY x 2.0 mRL. In general, the thicker lodes incur dilution on their edges whilst the thinner lodes incur ore loss.

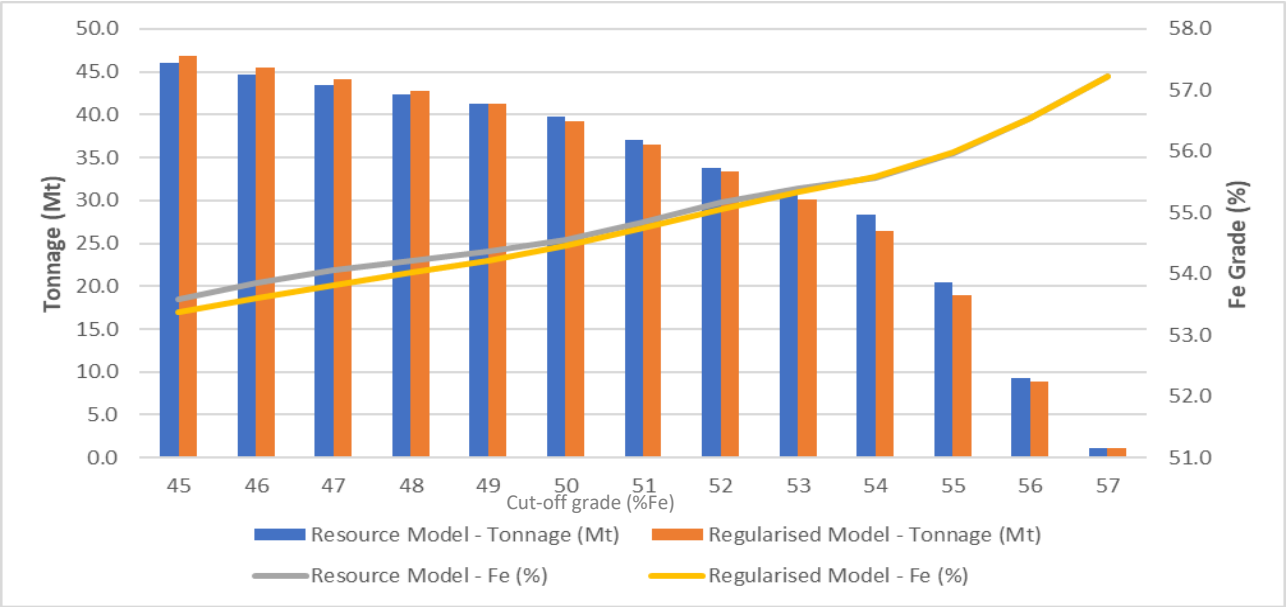


Figure 4. Grade-Tonnage Model Comparison

Only Measured and Indicated Mineral Resources were considered for pit optimisation. Inferred Resources within the final pits were reported as waste and not included as plant feed or reported as part of the Ore Reserve. Strict exclusion areas were coded into the mining model using a boundary string to ensure that the mining operation did not expand beyond the mesa edge exclusion zone, as per the Native Title agreement.

General Pit optimisation constraints:

- Overall wall angle 41.7 degrees
- Mining dilution and recovery were estimated through regularisation of the resource model
- Process plant throughput rate of 3.5Mtpa
- Mining and processing costs provided by CZR
- Revenue parameters provided by CZR - average 22% discount to the 62% Fe benchmark price over the life of mine (based on historical S&P Platts pricing)

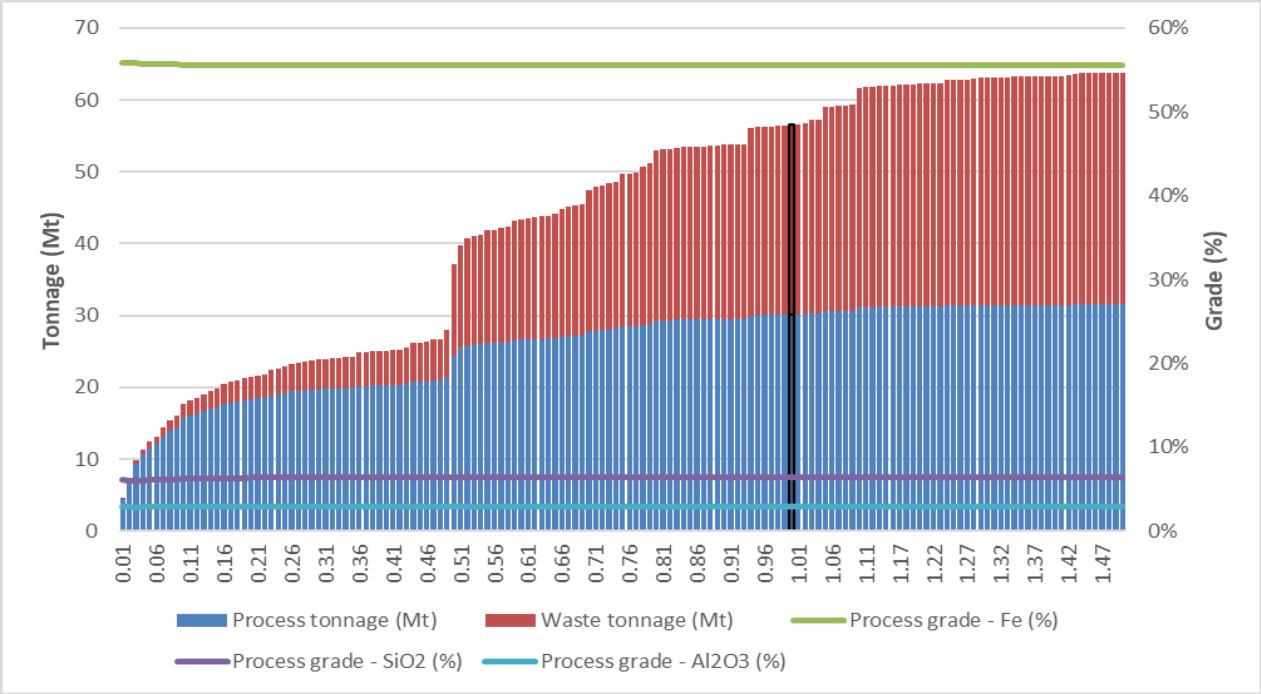


Figure 5. Pit optimisation pit graph showing individual pit shells

The revenue factor 1.00 shell was selected as the basis for the ultimate pit design, based on the adjustments to penalty pricing that resulted in saleable products. Snowden Optiro used slope design criteria from geotechnical consultant's recommendations.

Ramps were planned in the eastern wall to minimise haulage distances to the ROM pad and stockpiles. Surface exclusion zones limited the potential for ex-pit haulage atop the mesa, requiring ramps sit inside the pit optimisation shell. The ultimate pit reaches a depth of approximately 60 m in the central and southern zones, mining to the base of the lower channel.

The pit achieves a reasonable reconciliation with the pit shells (reported at an economic cut-off), as provided in Table 6.

Table 6. Pit design / Whittle shell RF100% reconciliation

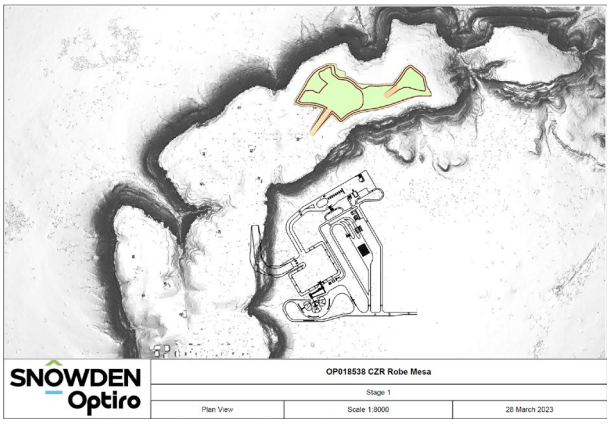
Item	Unit	Pit shell	Pit design	Difference (%)
Pit size	Mt	56.5	54.8	-3%
Waste (inc. low-grade)	Mt	26.4	27.6	+4%
Ore	Mt	30.1	27.3	-9%
Strip ratio (w:o)	-	0.88	1.01	+15%
Fe	%	55.5	55.5	0%

Initial mining targeted the upper channel ore in the north-east region of the open pit, developing the pit to the full depth to allow backfill to commence. During initial mining, waste will be dumped in the south-west until backfill capacity is developed. Mining continues to the central area, opening additional waste capacity with the south-west dump rehandled into the excavated pit. Mining finishes with development of the south-west region (Figure 6).

Table 7. Schedule inventory by stage

Pit	Ore (Mt)	Waste (Mt)	Strip ratio (w:o)	Fe (%)	Al_2O_3 (%)	SiO_2 (%)	P (%)	S (%)	LOI (%)
Stage 1	3.3	1.0	0.3	56.0	2.6	5.5	0.04	0.02	11.2
Stage 2	3.5	3.4	1.0	55.7	2.7	6.2	0.04	0.02	10.9
Stage 3	3.5	3.7	1.1	55.5	2.9	6.4	0.04	0.02	10.8
Stage 4	5.2	5.3	1.0	55.5	2.9	6.4	0.04	0.02	10.6
Stage 5	4.4	4.7	1.1	55.3	3.2	6.7	0.04	0.02	10.5
Stage 6	5.3	5.3	1.0	55.3	3.1	6.7	0.04	0.02	10.5
Stage 7	2.1	0.9	0.4	55.6	3.0	6.7	0.03	0.02	10.2
TOTAL	**27.3**	**24.1**	**0.9**	**55.5**	**2.9**	**6.4**	**0.04**	**0.02**	**10.7**

Stage 1



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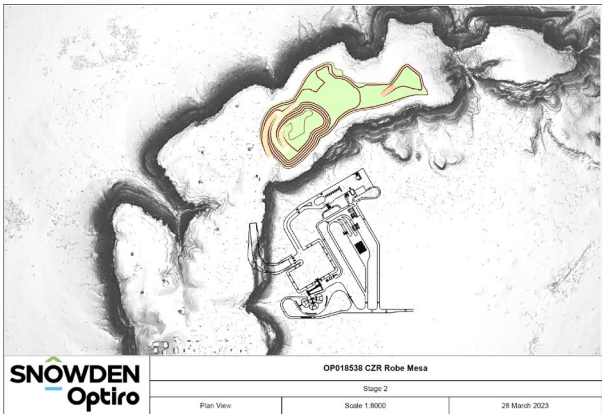

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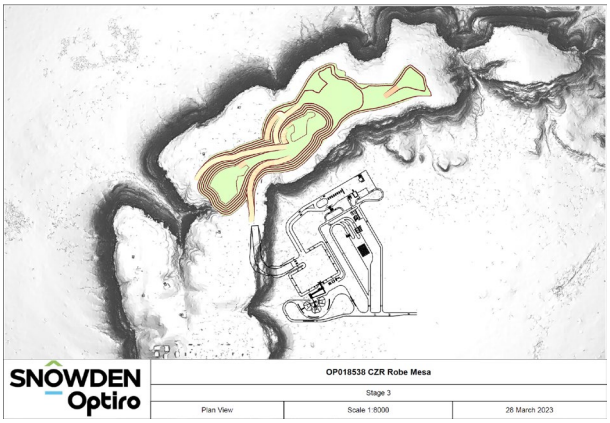
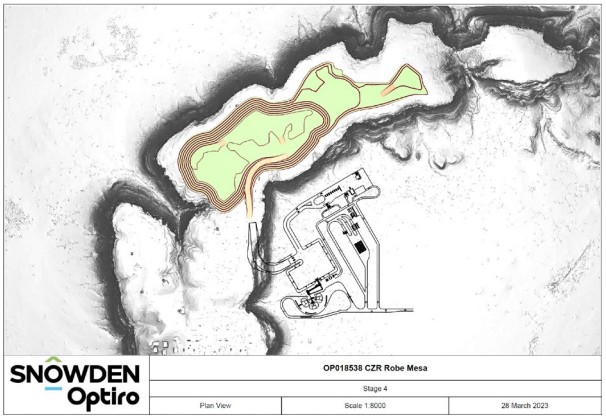


Stage 4



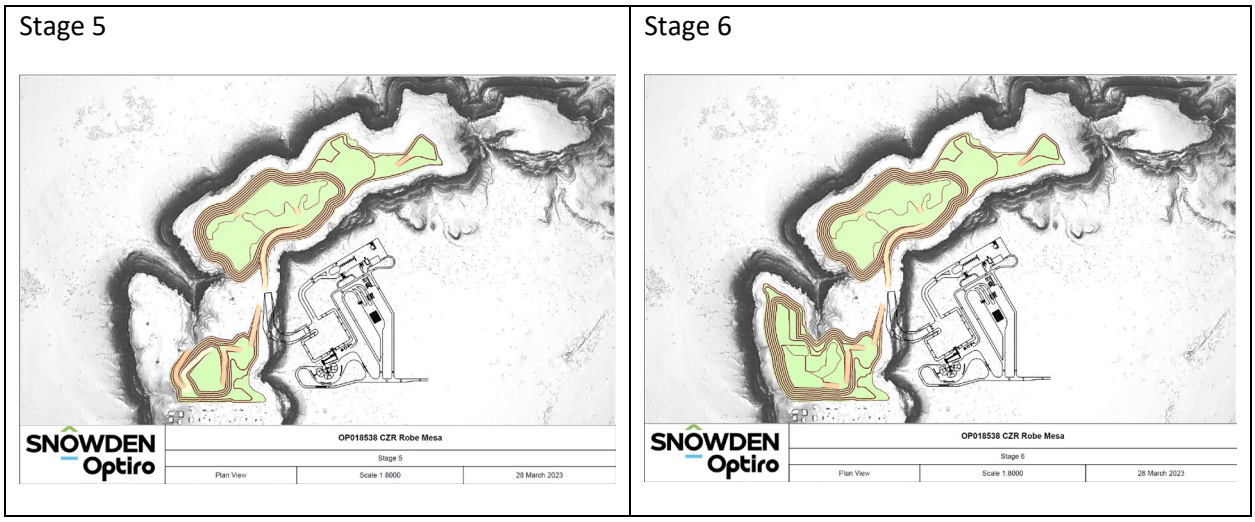


Figure 6. Progressive pit stages

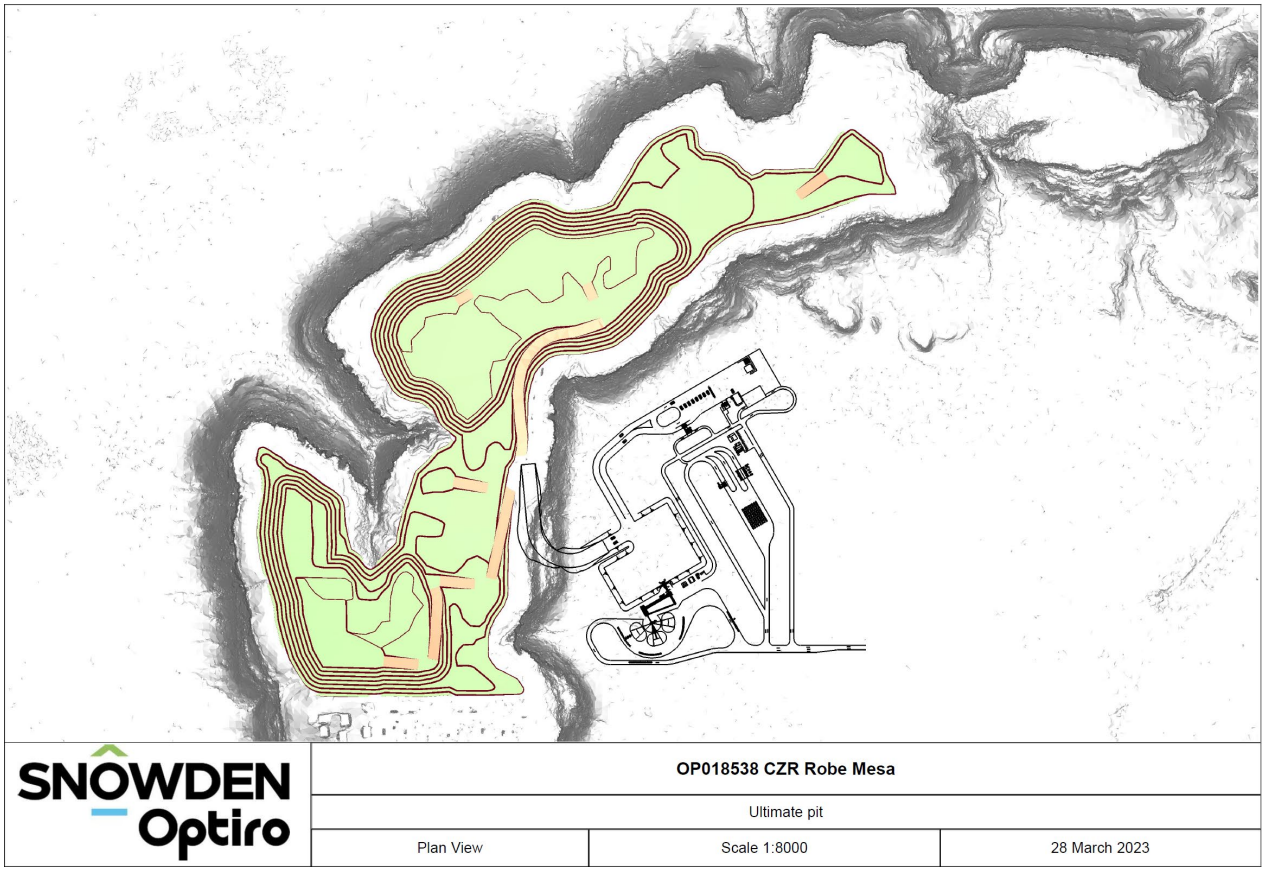


Figure 7. Ultimate pit design

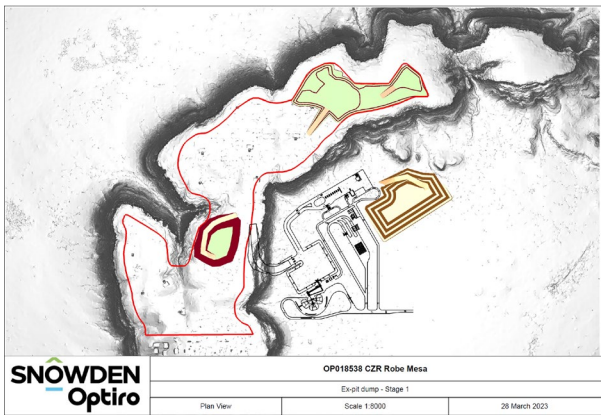
The mining haul road network is a simple layout, with a single pit exit and ramp down the mesa to the processing plant. Temporary internal ramps access surface and backfill dumping areas.

The Low-grade stockpile is located at the base of the mesa (Figure 1) and has a capacity of 1.5 Mlcm (3.4Mt). Low-grade is stockpiled at this location until full, and any future low-grade is currently scheduled to be sent to the waste dumps.

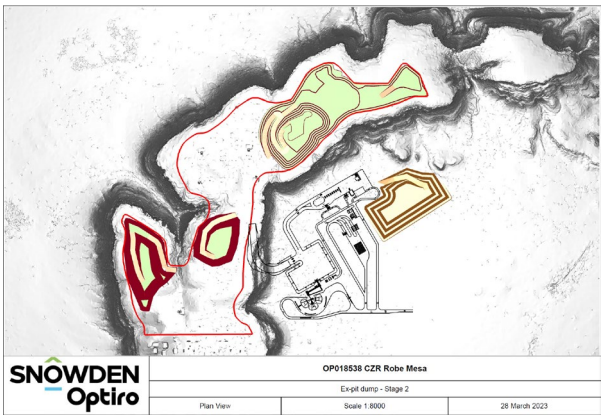
Waste rock landforms

Each stage of waste rock dumping has been designed to follow the mining sequence. Ex-pit stages 1 & 2 are effectively internal dumps on top of future stages that will need to be rehandled back in-pit to allow for mining of the pit stages below them. In-pit dumping is the priority, and this ex-pit dumping is scheduled for only when in-pit dumping isn't available and is subject to further refinement during detailed mine planning (Figure 8).

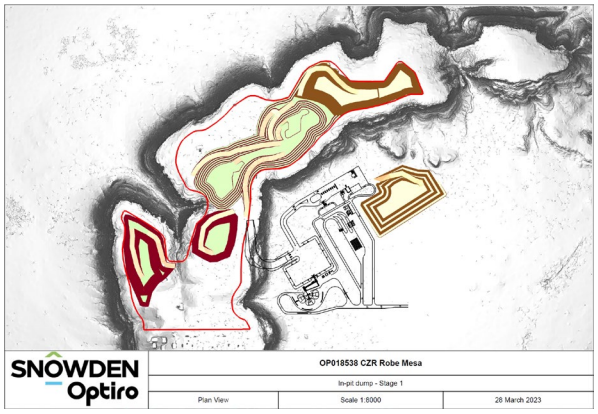
Ex-pit stage 1



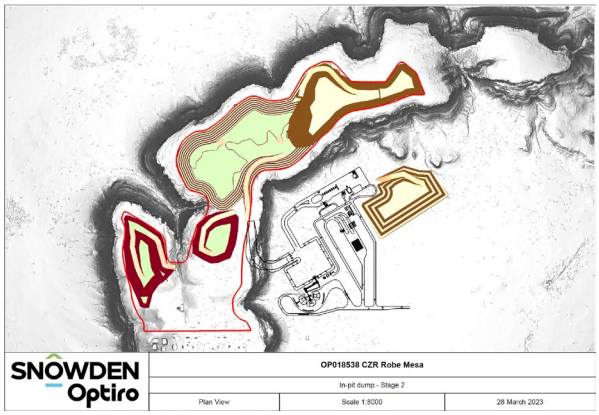
Ex-pit stage 2



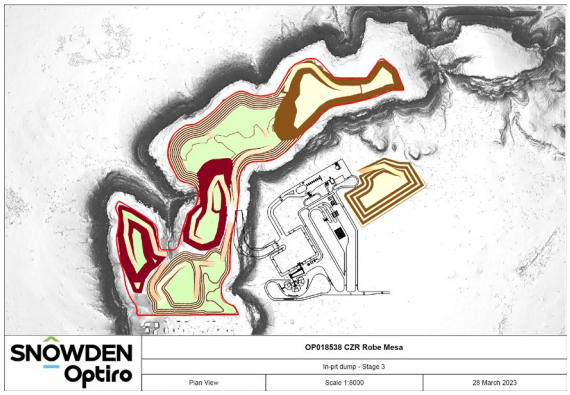
In-pit stage 1



In-pit stage 2



In-pit stage 3



In-pit stage 4

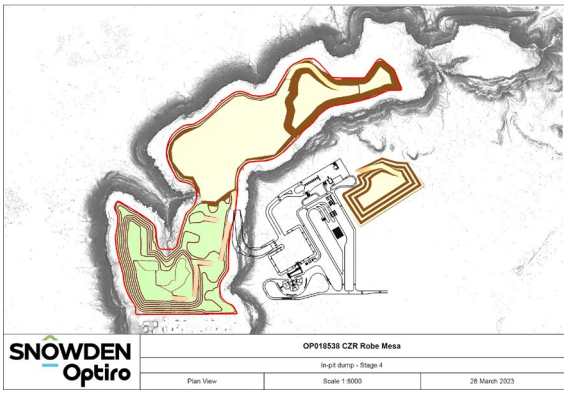


Figure 8. Waste rock dumping sequence

Clearing, stripping and topsoil storage

The total cleared area and topsoil collected for later rehabilitation purposes is shown by area in Table 8. The areas include a 10% allowance for additional area required for activities not explicitly designed (e.g. drains, bunds).

Table 8. Cleared areas and topsoil stored summary

Area	Cleared area (ha)	Topsoil stored (klcm)
Pit area	69.2	138.4
Plant area	30.1	60.3
Low-grade stockpile	9.4	18.7
Total	**108.7**	**217.4**

Figure 9 shows the clearing areas for mining operations.

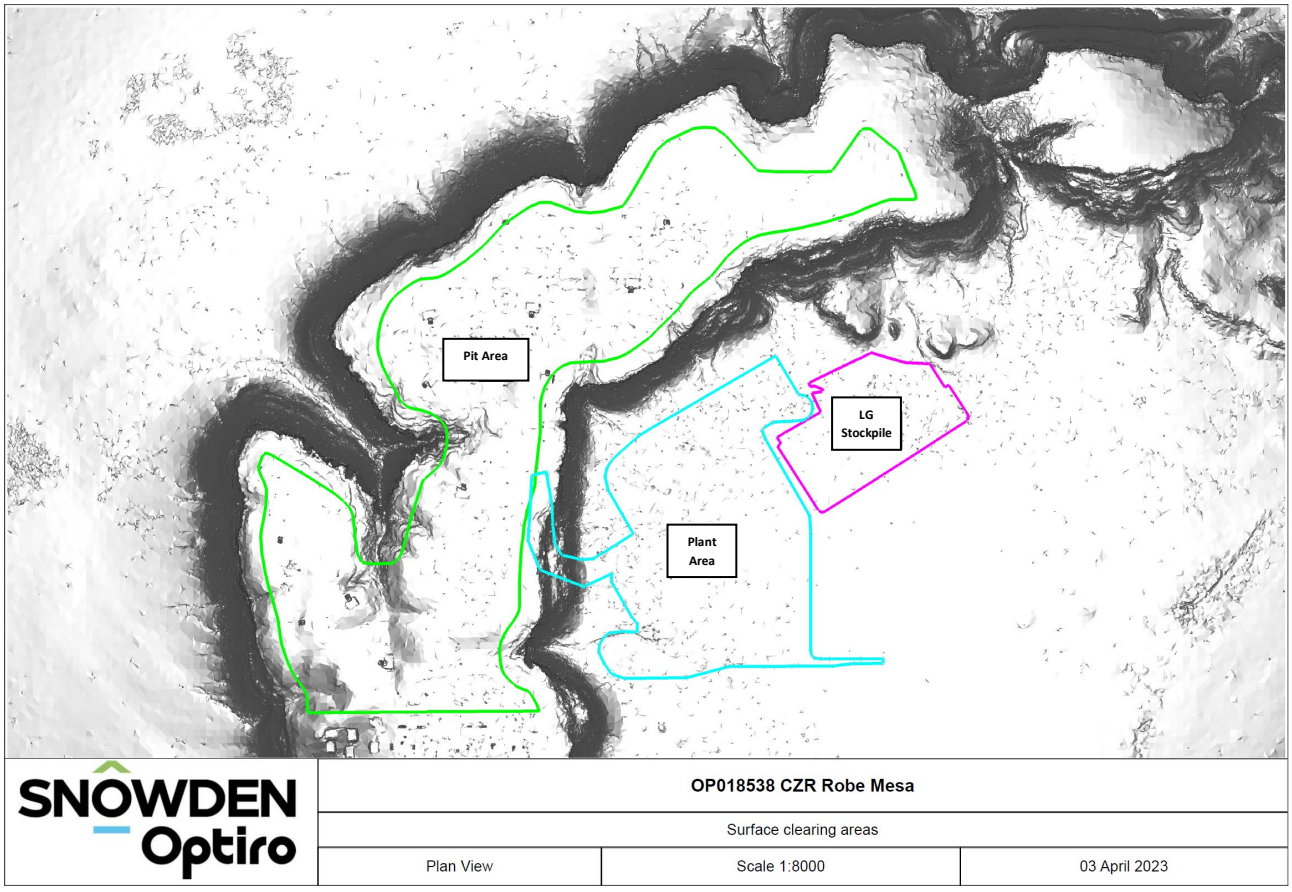


Figure 9. Clearing areas

Ore Reserve

An Ore Reserve of 27.3 Mt at 55.5% Fe was estimated by Snowden Optiro using the Guidelines of the JORC Code (2012 Edition) through the selection of positive cash flow blocks within the final pit design (Table 9).

Table 9. May 2023 Robe Mesa Ore Reserve estimate

JORC (2012) Reserve category	Tonnes Mt	Fe %	SiO2 %	Al2O3 %	P %	LOI %	S %	Fe_{ca} %
Probable	27.3	55.5	6.39	2.92	0.038	10.7	0.02	62.2

Notes:

- *Tonnes reported are dry and ROM.*
- *The cut-off grade was calculated on a block-by-block basis, with variances depending on SiO_2 and Al_2O_3 grades. A Fe cut-off grade of approximately 53% to 54% aligns with the economic cut-off grade.*

While exercising all reasonable due diligence in checking and confirming the data validity, Snowden Optiro has relied largely on the data as supplied by CZR for the 2023 Robe Mesa Ore Reserve to estimate and classify the Ore Reserve. As such:

- Snowden Optiro accepts responsibility for the geotechnical design configuration, pit design, production schedule, mining fleet assumptions and the Ore Reserve estimate and classification;
- NeoMet Engineering has assumed responsibility for the accuracy and quality of the process metallurgical data, and
- CZR has assumed responsibility for the accuracy and quality of the engineering data, mining cost estimates, marketing revenue and cash flow analysis and economic reporting.

The key Modifying Factors used to estimate the Ore Reserve are based on the experience of Snowden Optiro, NeoMet Engineering and CZR for this type of deposit and style of mineralisation. The JORC Table 1 Section 4 relating to the Ore Reserve (Appendix B) summarises the status of material aspects of the May 2023 Ore Reserve estimate in the context of the JORC Code 2012 Table 1, Section 4, Checklist of Assessment and Reporting Criteria.

Mine Schedule

The mining schedule was completed in Snowden Optiro's Evaluator scheduling software. It is driven by the maximisation of net present value in the presence of physical quantity and grade constraints. A secondary schedule for the processing plants was executed in Microsoft Excel.

All economic Indicated Resources within the pit design were considered in the feed inventory. Low-grade material (above 52% Fe and less than economic cut-off) is scheduled separately but reported as waste in the Ore Reserve. There is a further 257 kt of Inferred Mineral Resource with a grade of 55.2% Fe in-pit that is also reported as waste as no in-pit Inferred Mineral Resources were used to quantify Ore Reserves.

Table 10. Material types for scheduling

Material type code	Description	Fe feed grade	Resource class
ORE	Ore	Above marginal cut-off	Indicated
LG	Low-grade	≥ 52% Fe	Indicated
WST	Waste	Remaining	Any

The quarterly mine production schedule was based upon a maximum crusher feed of 3.5 Mt/a. The schedule considered:

- Initial development of low strip ratio regions of the pit
- Developing in-pit backfill space as soon as possible
- Maintain grades above 55.0% Fe until the final quarter of mining

Figures 10 and 11 show the mining schedule summarised quarterly. Minimal pre-strip is required as no overburden sits above the orebody in the north-east. Stage 1 mining commences in the north-east and develops the pit to full depth towards the south-west.

Due to the initial low-strip ratio, production initially starts at 5.2 Mt/a of total material movement (TMM), ramping up to 8.2 Mt/a in year three. Low-grade will be stockpiled, with the potential to be sold as a product later in the mine life or when the production schedule and economic conditions allow.

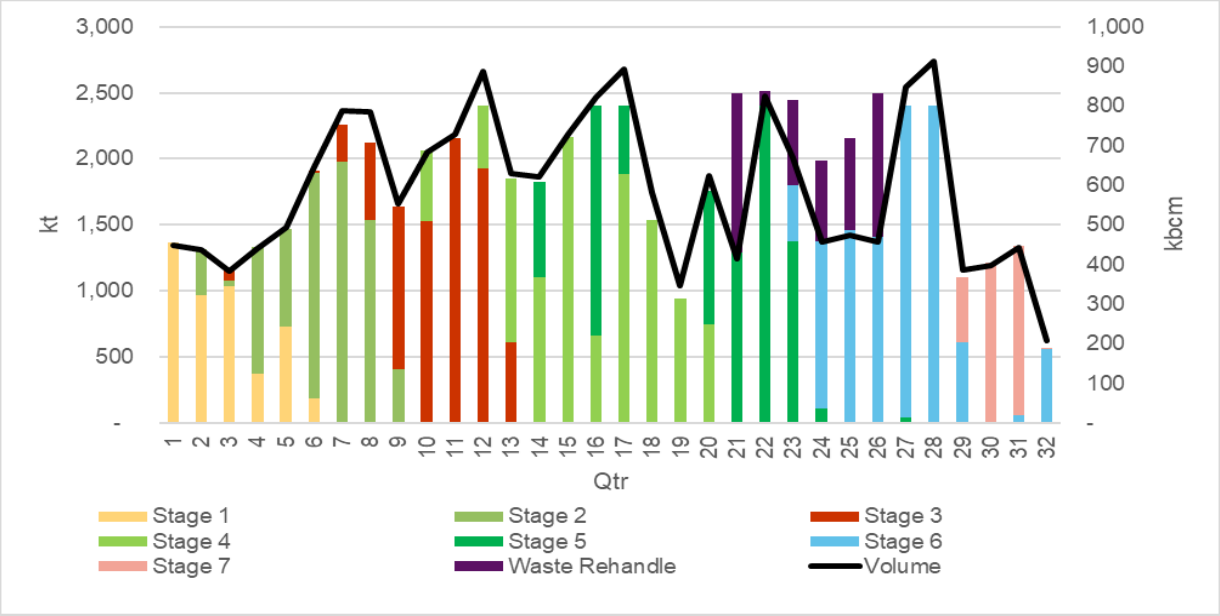


Figure 10. Mining production schedule summary

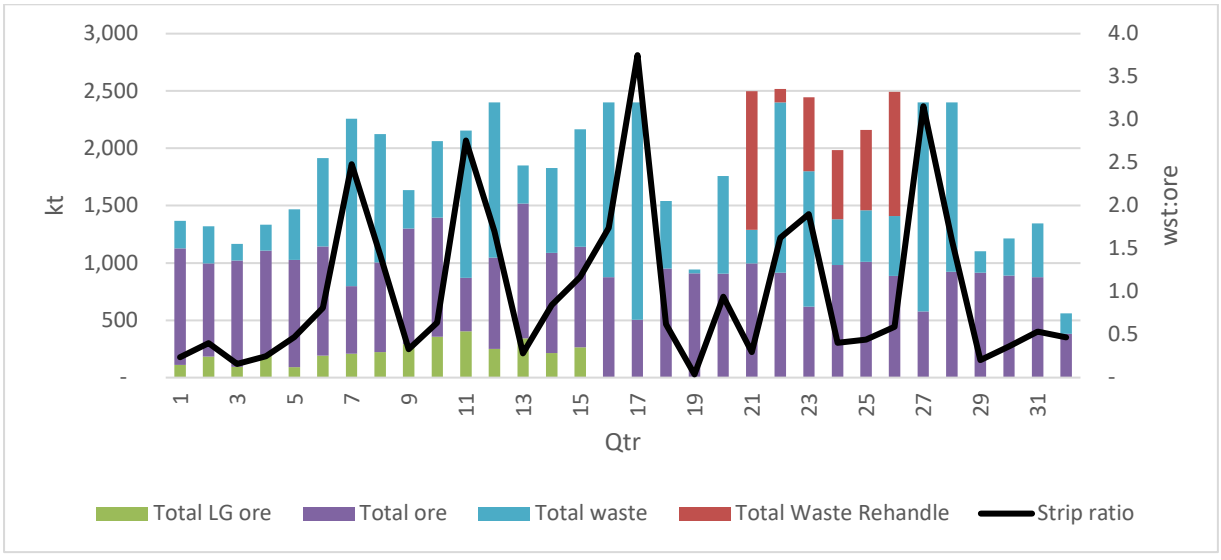


Figure 11. Mining production schedule summary

It is proposed to use a conventional crush and screening plant to produce a -10mm iron ore fines product from Robe Mesa. As the product is a direct shipping iron ore with no down-stream processing, process yields are estimated at 100% and all deleterious element discounts are included in the product price.

The processing plant is fully utilised throughout its life except for year 3 due to pit development focussing initially on opening backfill areas (Figure 12). Low-grade material could be processed to fully utilise capacity during this period. The process grade schedule initially targets 55% to 56% Fe material from the upper channel. Grades trend down over time as more lower channel material is mined. Figure 13 shows the process feed grades over time.

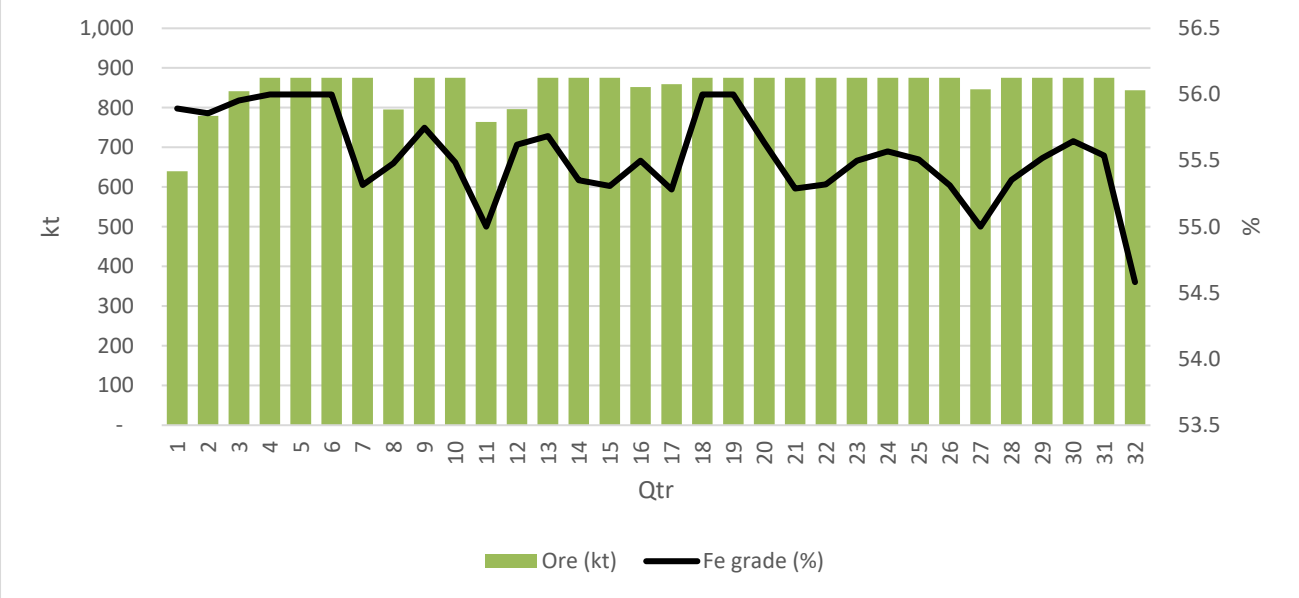


Figure 12. Processing schedule summary

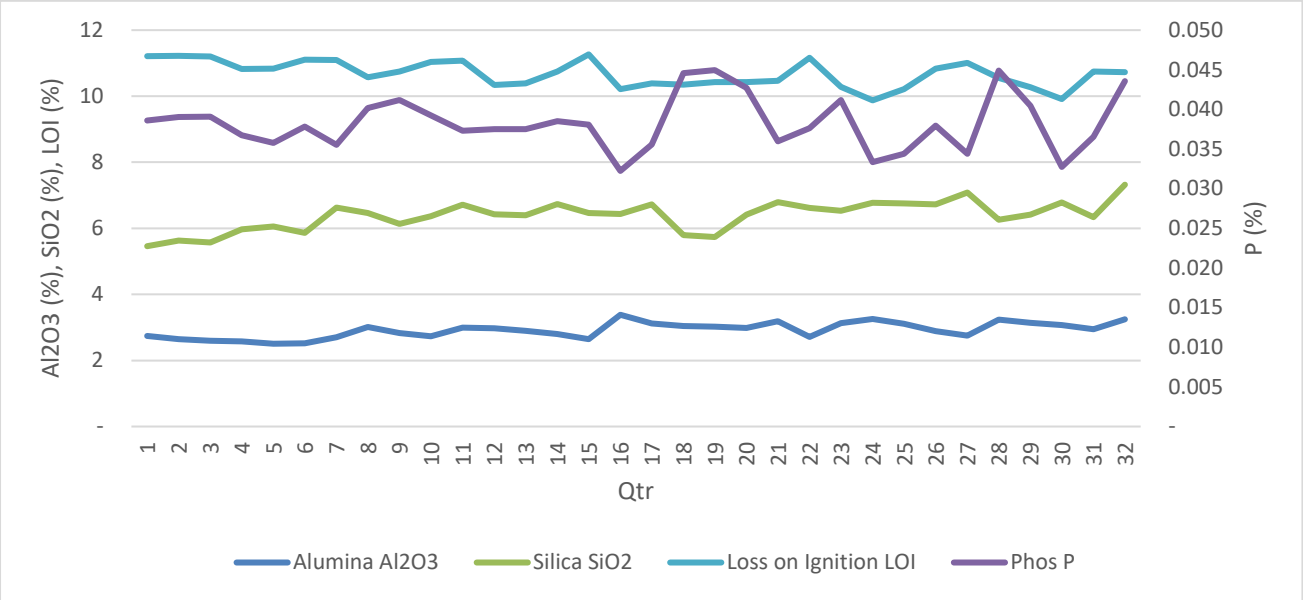


Figure 13. Processing schedule summary

Mining requirements

Table 11 summarises the primary equipment required for the mining operation at its peak of 8.2 Mt/a TMM and a schedule of equipment required is provided in Figure 14. In addition, the mining operation will require a peak of 79 personnel.

Table 11. Production equipment summary

Type	Size	Initial fleet (units)	Maximum fleet (units)	Average fleet (units)
Primary excavator	120 t	1	2	2
Trucks	90 t payload	3	5	4
Blast-hole drill	20-25 t	2	2	2
Front-end loader	30 t	1	1	1
Grader	30 t	1	1	1
Dozer	65 t	2	2	2
Water cart	40 t	1	1	1

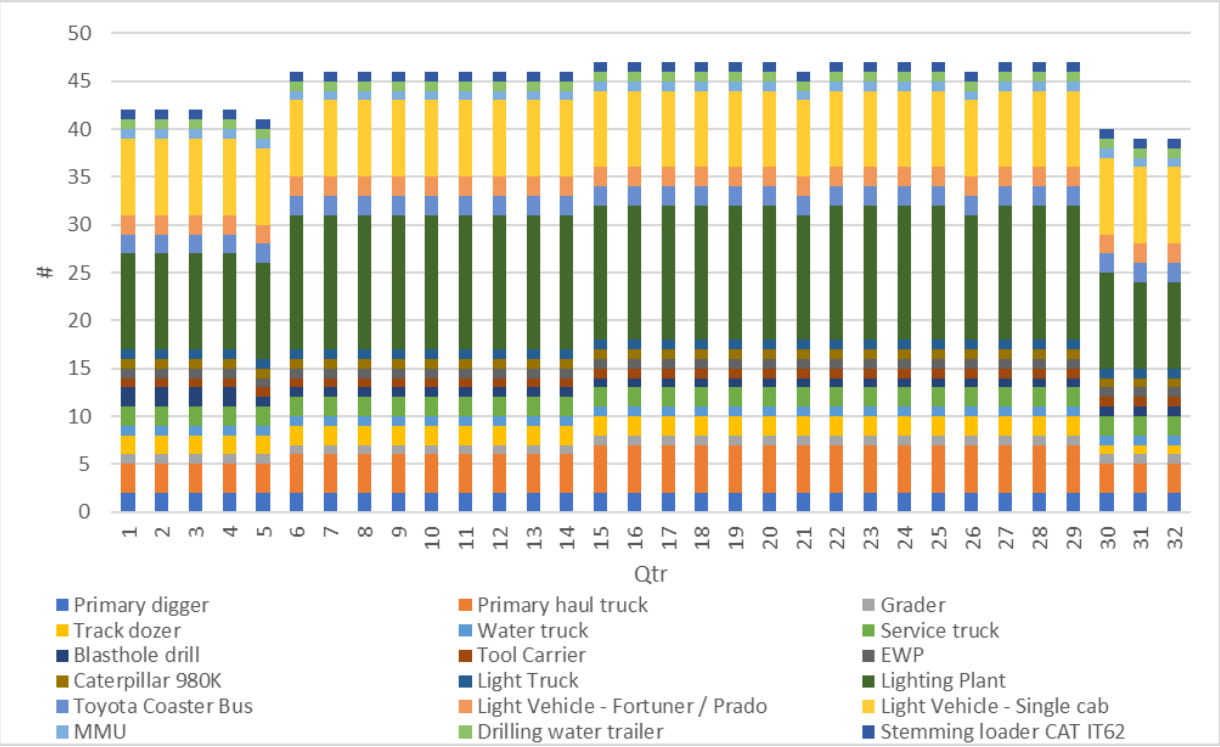


Figure 14. Equipment requirement schedule

Mining costs

Mining costs (load & haul, drill & blast) were estimated based on contractor quotes and summarised in Table 12. Owner costs are incorporated in the general and administration (G&A) costs, calculated by others.

Table 12. Mining cost estimate

Item	$/bcm insitu	$/t mined	$/t ore
Mobilisation and demobilisation	0.4	0.2	0.3
Contractor costs	13.9	4.8	9.7
Diesel	1.9	0.7	1.4
Total cost	**16.3**	**5.6**	**11.4**

Conclusions

Risks

Snowden Optiro identified these key risks related to mining:

- Increased dilution and/or decreased mining recovery: There is a risk that poor mining practices or increased local complexity of the orebody means that additional dilution will be incurred in mining the orebody
- Blending: There is a risk that the blending will be more complex after production reconciliation from operations. This may require additional mining cost to increase the flexibility of the mining operation to meet tighter targets
- Backfill sequencing: There is a risk that additional blending requirements may limit the opportunities for backfill, increasing the total rehandle quantities
- Blasting to contact may be required depending on resource/production reconciliation results and this may increase mining costs or reduce productivity or both

Opportunities

Snowden Optiro identified these key opportunities related to mining:

- Reduced dilution and/or increased mining recovery: If the mine is operated well, it may be possible to reduce the dilution and increase the feed grade. Reconciliation of mined and processed grades will guide reduced dilution planning in operations
- Processing low-grade material when processing capacity is available and market conditions allow
- Reduced mining costs: It may be possible to reduce mining costs through:
  - providing contractors with a more detailed scope of work to price against
  - revised mine planning to achieve better utilisation of equipment and personnel
  - investigating the benefit of avoiding haulage of medium-grade and low-grade ore to the long-term stockpiles near to the ROM, instead forming stockpiles near to the exit of each pit
  - More detailed medium and short term-planning to minimise rehandle quantities through amended sequencing/scheduling or alternative uses for waste (i.e. bulk earthworks fill, rehabilitation contouring, etc.)

Recommendations for further work

The study completed indicates a potentially viable operation with the proposed processing strategy and inputs. Snowden Optiro provides the following recommendations for activities to be completed in the lead up to operational implementation:

- Geotechnical:
  - Conduct a geotechnical review of the pit designs to validate the pit slope design and ramp locations.
  - To better quantify expected trafficability conditions, additional particle size distribution, Atterberg limit and in situ moisture content characterisation along with bulk sampling for laboratory California Bearing Ratio testing is required.
- Mining:
  - Develop grade control patterns to confidently predict the production grades.
  - Complete review of site layout to optimise location mine waste and stockpiles.
  - Complete review of construction requirements and how they relate to the mining.
  - Obtain multiple contractor quotes to ensure competitive tendering.

This announcement is authorised for release to the market by the Board of Directors of CZR Resources Ltd.

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Forward Looking Statements

This announcement contains "forward-looking information" that is based on CZR's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the pre-feasibility study, CZR's business strategy, plan, development, objectives, performance, outlook, growth, cashflow, projections, targets and expectations, mineral resources, ore reserves, results of exploration and related expenses. Generally, this forward looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that CZR's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause CZR's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices and demand of iron and other metals; possible variations of ore grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list and the further risk factors detailed in the remainder of this announcement are not exhaustive of the factors that may affect or impact forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information. CZR disclaims any intent or obligations to revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

Statements regarding plans with respect to CZR's mineral properties may contain forward-looking statements in relation to future matters that can only be made where CZR has a reasonable basis for making those statements. Competent Person Statements regarding plans with respect to CZR's mineral properties are forward looking statements. There can be no assurance that CZR's plans for development of its mineral properties will proceed as expected. There can be no assurance that CZR will be able to confirm the presence of mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of CZR's mineral properties.

Competent Persons Statements

The information in this announcement that relates to exploration activities and exploration results is based on information compiled by Stefan Murphy (BSc), a Competent Person who is a Member of the Australian Institute of Geoscientists. Stefan Murphy is Managing Director of CZR Resources, holds options in the Company and 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). Stefan Murphy has given his consent to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Robe Mesa Ore Reserves is based on information reviewed or work undertaken by Mr Frank Blanchfield, a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and an employee of Snowden Optiro. A prefeasibility study (PFS) was completed in December 2020 and a Definitive Feasibility Study (DFS) is scheduled to be completed in mid-2023. The PFS cost estimates have been updated to reflect the DFS mine plan, production schedule and supply chain to support the 2023 Robe Mesa Ore Reserve estimate and demonstrate the financial viability of the Robe Mesa Iron Ore Project. Mr Frank Blanchfield has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the preparation of mining studies to qualify as a Competent Person as defined by the JORC Code 2012. Mr Blanchfield has given his consent to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The scientific and technical information in this report that relates to process plant, metallurgy and metallurgical factors and assumptions is based on information reviewed by Aaron Debono of NeoMet Engineering who is a Fellow of the AusIMM. Mr Debono has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined by the JORC Code 2012. Mr Debono has given his consent to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Appendix A– Robe Mesa Mineral Resource and Ore Reserves

Table A1. Robe Mesa Mineral Resource Estimate (CZR release to ASX; 12 December 2022)

Cut-Off Grade	Category	Tonnes Mt	Fe %	SiO2 %	Al2O3 %	P %	S %	LOI %	Fe_{ca} %
55% Fe	Indicated	36.0	56.0	5.9	2.8	0.04	0.02	10.6	62.7
	Inferred	9.2	56.1	5.6	2.7	0.04	0.02	10.8	62.9
	Total	**45.2**	**56.0**	**5.8**	**2.8**	**0.04**	**0.02**	**10.7**	**62.7**
50% Fe	Indicated	71.8	54.4	7.5	3.3	0.04	0.02	10.7	61.0
	Inferred	17.8	54.3	7.6	3.3	0.04	0.02	10.8	60.8
	Total	**89.6**	**54.4**	**7.5**	**3.3**	**0.04**	**0.02**	**10.8**	**61.0**

Table A2. Robe Mesa JORC 2012 Ore Reserve (CZR release to ASX; 8 May 2023).

Ore Reserve	Tonnes	Fe	SiO_2	Al_2O_3	P	S	LOI	Fe_{ca}
	Mt	%	%	%	%	%	%	%
Probable	27.3	55.5	6.4	2.9	0.038	0.02	10.9	62.2

Table A3. P529 (Robe Mesa South) JORC 2012 Inferred Mineral Resource reported above a 50% Fe cut-off grade (9 May 2017 ASX Announcement).

Category	Tonnes	Fe	SiO_2	Al_2O_3	P	S	LOI	Fe_{ca}
	Mt	%	%	%	%	%	%	%
Inferred	4.2	53.0	9.1	3.9	0.04	0.01	10.4	59.2

Table A4. Robe East JORC 2012 Inferred Mineral Resource estimate reported above a 50% Fe cut-off grade (CZR release to ASX; 26 April 2017).

Category	Tonnes	Fe	SiO_2	Al_2O_3	P	S	LOI	Fe_{ca}
	Mt	%	%	%	%	%	%	%
Inferred	4.6	51.8	9.7	3.8	0.1	0.02	10.9	58.2

Fe_{ca} is the calcined iron-content calculated as (Fe%/(100-LOI%))*100 *and represents the amount iron after the volatiles (mainly held as weakly bound water in the structure of the hydrous iron-rich minerals) is excluded from the analysis.*

Note: *CZR confirms that it is not aware of any new information or data that materially affects the information included in the CZR announcements to the ASX on 26 April 2017, 9 May 2017, 12 December 2022 and 8 May 2023 and, in the case of estimates of the Mineral Resources in Tables A1, A3, A4, and Ore Reserves in Table A2, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed*.

Appendix B – JORC Code, 2012 Edition Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*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.*	Samples were all collected from 5.5" (140mm) reverse circulation drilling with continuous down-hole sampling.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	2-3kg of RC drill cuttings are spilt continuously during drilling and collected at 1 metre intervals in a pre-labelled calico sample bag. Samples passed over a static cone splitter attached to the drill-rig.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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.	The entire 2-3kg RC drill-chip sample was crushed (if required), dried and pulverized at ALS Laboratories in Perth. Western Australia. A sub sample was fused and the "extended iron-ore suite" of major oxide and selected trace-element analysis was obtained by XRF Spectrometry in 2014 and 2022 programs a basic iron-ore suite was reported from the 2015, 2016 and the 2021 programmes because most trace elements are below detection.
Drilling techniques	*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).*	All reverse circulation (RC) drill-holes used a 5.5" (140mm) face-sampling percussion hammer.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	RC sample size was monitored by Geologists during the drilling programme. The volume of sample derived from each metre drilled was approximately equal.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Standard RC sampling techniques were employed and deemed adequate for sample recovery. Some water was injected into the sample stream during drilling to minimise the loss of fine particles.

Criteria	JORC Code explanation	Commentary
	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.	Sample recovery is regarded as being representative.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Each metre of reverse circulation chips are described geologically for colour, texture and have an estimate of mineralogical abundance.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of RC chips is qualitative.
	The total length and percentage of the relevant intersections logged.	Entire drill-holes are logged.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	No core was collected in the programme being reported.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Reverse circulation drill chip samples were collected dry and split by a static-cone splitter during drilling.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Reverse circulation drilling is an appropriate method of recovering representative samples through the interval of mineralisation. The drilling contractor used suitable sample collection and handling procedures to maintain sample integrity.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Duplicate RC samples were simultaneously collected at a ratio of 1:20, using the splitters attached to the rig to ensure representative duplicate samples were achieved. Certified Reference Material (CRM) were also added as standards at a ratio of 1:25. Duplicates and standards were inserted across the entire drillhole, not just the mineralised interval.
	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.	The reverse circulation method samples continuously and the splitters attached to the rig selects a representative proportion of the sample, providing an indication of compositional variations associated with each lithology or mineralised interval.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The 2-3kg of homogenised drill chips that was recovered for each sample is sufficient to provide a representative indication of the material being sampled.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Samples included in this resource update were analysed by ALS at their laboratory facility in Wangara in Perth. An extended suite of major-element oxides and trace element oxides were determined by XRF analysis on fused disks. Loss on Ignition (LOI) was determined by thermogravimetric analysis at 1000° C.

Criteria	JORC Code explanation	Commentary
	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.	No hand-held geophysical tools or hand-held analytical tools were used for the reported results.
	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.	Certified Reference Material (CRM) were also added as standards at a ratio of 1:25. Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of their in-house procedures. Results highlight that sample assay values are accurate and that contamination has been contained.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	No independent or alternative company personnel were used to verify the intersections.
	The use of twinned holes.	5-RC holes have been twinned and sampled across the upper and lower mineralisation horizons to determine short-range variations in geology and geochemistry. It was observed that on the 1-meter scale there was variations of Fe-grade consistency, but the broader mineralisation extents were consistent.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All spatially located sample data is stored electronically in a Microsoft Access database. Assay data was received electronically and uploaded by CZR Geologists. Printed and laboratory-released PDF copies of analysis certificates are stored.
	Discuss any adjustment to assay data.	No adjustment or calibrations are made to any assay data.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	All drill holes within the Robe Mesa Mineral Resource, including holes drilled in 2022 and used for the Mineral Resource Update, have been picked-up by a licensed surveyor using a differential GPS with an accuracy of 0.1m.
	Specification of the grid system used.	The grid system is MGA GDA94, zone 50, all Easting's and Northing's are reported in MGA co-ordinates.
	Quality and adequacy of topographic control.	The full spatial extents of the Robe Mesa Mineral Resource was covered by a Lidar -Survey flight which was flown over the project area in July 2022. The digital outputs from this survey were

Criteria	JORC Code explanation	Commentary
		used to create a meshed surface of the topography above the Robe Mineral Resource to a certified accuracy of 0.1m.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Drilling is located approximately on centres from a 50m grid over an area of outcropping mapped mineralisation.
	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.	200m spaced drilling allowed the generation of an Inferred Resource, reducing to 100m spacing was sufficient for the conversion of a high-proportion of the inferred to indicated and a maiden probable reserve. The 2021 and 2022 RC drill programs further closed the drill hole grid to an approximately 50m spacing.
	Whether sample compositing has been applied.	Sample results represent 1m interval reverse circulation drill-chips and samples have not been composited.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Mineralisation is contained within a sub-horizontal sheet and the vertical drill-holes and associated sampling collects representative material through the mineralised zone.
	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.	The drill orientation was selected to minimise any sampling bias.
Sample security	*The measures taken to ensure sample security.*	Individually numbered samples were double packed into labelled poly-weave and then labelled bulka-bags by CZR Geologists and stored on site. Independent logistic contractors were engaged to pick up the freight from site and deliver to analytical facility in Wangara, Perth.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits or reviews of the sampling techniques and data have been obtained.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*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.*	All mining, exploration and miscellaneous licenses owned 85% by Zanthus Resources Ltd and 15% by ZanF Pty Ltd. The tenements are covered by the Kuruma Marthudunera Native Title Claim and relevant heritage agreements are in place.
	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.	The tenements are in good standing and no known impediments exist.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	In 1990-1991, Aberfoyle Resources held tenements covering the Ashburton Trough which partially overlapped Yarraloola. They collected 26 rock-chip and 73 stream sediment samples for gold and base-metal exploration but encountered no significant results and surrendered the ground.
		In 1991-1992, Poseidon Exploration Ltd held exploration tenements covering the Ashburton Trough which partially overlapped Yarraloola for base-metals, gold and iron-ore. They collected 54 rock-chips, 236 soil samples, 492 stream sediment samples and completed 159 RAB holes for 2410m but encountered no significant mineralisation and surrendered the tenements.
		In 1997-1998, Sipa Resources NL held tenements over the Ashburton Trough that partially covered Yarraloola for gold and base-metals. A field trip after the interpretation of LANDSAT and air-photos collected six rock-chip samples which failed to detect mineralisation and the tenements were surrendered.
		In 2005-2009, Red Hill Iron Ltd held a tenement 15km northwest of Pannawonica which partially overlapped Yarraloola for gold and base-metal prospectivity. Following an aeromagnetic survey and air-photo interpretation, 16 rock-chips and 207 soil samples were collected but no targets were generated and the ground was surrendered.

Criteria	JORC Code explanation	Commentary
Geology	*Deposit type, geological setting and style of mineralisation.*	The Robe Mesa is a fluvial deposit of goethite-rich fragments of wood and pisolites supported by a fine grained goethitic matrix. The deposit outlines the trace of a Tertiary-aged channel from the Robe River into older rocks of the Ashburton Formation that have since eroded. Deposits of the channelized-style of goethitic ironstone are represented and mined in other parts of the Pilbara region of Western Australia and the material is commonly referred to a "CID" for marketing purposes. The Mesa contains two cycles of deposition, and each has a sharp basal contact that shows an upwards increase in the number of iron-rich fragments.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*	
	o *easting and northing of the drill hole collar*	All drill holes have been picked up by a certified Survey Company with Differential GPS with an accuracy of 0.1m. Drill-hole collar Eastings and Northings are reported using map projection GDA Zone50, entered into an Access database and the map locations are checked by the competent person.
	o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*	All drill holes have been picked up by a certified Survey Company with Differential GPS with a RL accuracy of 0.1m.
	o *dip and azimuth of the hole*	All holes are vertical.
	o *down hole length and interception depth*	Down hole lengths and intercept depths from the RC drilling are calculated from 1m interval samples that are progressively collected as the holes are drilled.
	o *hole length.*	Hole lengths are reported both on the geological and drillers logs, entered into the access database and have been checked by a competent person.
Data aggregation methods	*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.*	Minimum intercept widths are defined as drill intervals greater than 5m with samples reporting Fe>50% (calcined Fe>55%). Some intercepts include a maximum of 2m of samples with Fe<50%. Intercept values are numerical averages of the relevant 1m sample results. No cutting of high grades has been used.

Criteria	JORC Code explanation	Commentary
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	All sample intervals used to calculate the intercepts are of equal length.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents are presented.
Relationship between mineralisation widths and intercept lengths	*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*	Vertical drill-holes are designed to intercept the true widths of the horizontally-oriented sheets of pisolitic iron-stone mineralisation.
	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').	Down-hole widths are regarded as true widths of mineralisation.
	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.	A map with the drill-hole locations are presented.
Diagrams	*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.*	Relevant diagrams have been included within the report main body of text.
Balanced reporting	*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.*	The report is believed to include all representative and relevant information and is believed to be comprehensive. Exploration results are not being reported for the first time.
Other substantive exploration data	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Diamond drilling for geotechnical and larger-scale metallurgical test-work is underway.
Further work	*Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Areas of outcropping mineralisation that have yet to be drilled are identified on the relevant maps.

Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	*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.*	Assay data has been supplied by the laboratory in both excel format and as printed certificates for verification. Data in digital format is electronically loaded directly into an Access database to prevent transcription errors. Validated data was provided to Snowden Optiro in a Microsoft Access database. The Competent Persons have checked the database validity and has found no material issues.
	Data validation procedures used.	Data tables were periodically compared to results published in the assay certificates to ensure data integrity. Sample outliers were routinely compared to assay certificates as well. The collar locations were check spatially against the digital terrain model (DTM) of the topography.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	The Competent Persons colleague, Mrs Havlin (Snowden Optiro Principal Consultant) visited the site in July 2022 during a resource definition drilling program to review sampling procedures. Mrs Havlin confirmed site practices are appropriate and satisfactory for the drill sampling to support a Mineral Resource estimate.
	If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	There is a reasonable level of confidence in the geological interpretation due to the consistent drilling results and the outcropping geology. Wireframes are used to constrain the estimation and are based on drill hole intercepts and geological logged boundaries. Two sets of wireframes were constructed: one above 53% Fe and another above 50% Fe for the upper and lower channels. These wireframes were constrained to the lateral footprint of the mesa. The interpretation process identifies larger internal waste zones within the channels and separately defines the waste between the channel horizons and below the footwall of the lower channel.
	Nature of the data used and of any assumptions made.	All available data has been used to help build the geological interpretation. This includes geological logging data, sample grade data and any available geological mapping.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The controls on and interpretation of the mineralisation is relatively straightforward, and no alternative interpretations have been considered.

Criteria	JORC Code explanation	Commentary
	The use of geology in guiding and controlling Mineral Resource estimation.	Wireframes are used to constrain the estimation and are based on drill hole intercepts and geological logged boundaries.
	The factors affecting continuity both of grade and geology.	The mesa represents a large-scale paleo river valley that has formed a deposit with considerable downstream continuity and lesser continuity across the river direction. The ironstone was deposited in two cycles of deposition, separated by variable thicknesses of sandy and silty material with the iron content of each cycle increasing towards its upper surface.
Dimensions	*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*	The Robe Mesa deposit has a total strike length of 1700 m (which is limited by the extent of the lease). The deposit extends to the south. It has an across strike width of 800 m and extend vertically for approximately 70 m below surface.
Estimation and modelling techniques	*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.*	Grade estimation using Ordinary Kriging (OK) was completed using Datamine Studio RM software for seven elements; Fe, SiO2, Al2O3, LOI, P, S and TiO2. Drill grid spacing is around 50 m by 50 m. No compositing was required as all samples were collected at one metre downhole intervals and this length was considered appropriate for the grade estimation process and general channel geometry. The data was divided into two regions of reasonably consistent strike. Grade continuity variograms were determined individually for each channel and each element within the two regions. To model the grade continuity within the plus 50% Fe domains, all data within the 50% and 53% domains was combined. This enhanced the robustness of the grade continuity models. Other estimation parameters, such as search distance, minimum and maximum sample numbers was derived from KNA.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	Compared to the previous estimate, tonnage in the above 55% Fe cut-off has increased by 22% while the Fe grade remained the same. There has been an increase in tonnes above 50% Fe of 29% while the Fe grade remained the same compared to the previous (May 2022) estimate. No mining has occurred with the deposit area; thus, no production reconciliation data is available.
	The assumptions made regarding recovery of by-products.	No assumptions have been made regarding recovery of any by-products.
	Estimation of deleterious elements or other non-grade variables of economic	Oxides and elements such as SiO2, Al2O3, TiO2, phosphorous and sulphur are potentially deleterious

Criteria	JORC Code explanation	Commentary
	significance (e.g. sulphur for acid mine drainage characterisation).	and have been included in the model estimation process for future analysis.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The block model dimensions and parameters were based on the geological boundaries and average drill grid spacing. Sub-blocks were used to ensure that the block model honoured the domain geometries and volume. Block estimates were controlled by the original parent block dimensions. The parent block dimensions are 25 mE by 25 mN by 4 mRL, with sub-blocking to 6.25 mE by 6.25 mN by 1mRL at domain boundaries. Two regions were defined to represent the channel geometry. Dedicated search directions and variography were applied in each orientation domain and their shared boundaries were treated as soft grade transitions. Estimation into parent blocks used discretisation of 5 (X points) by 5 (Y points) by 3 (Z points) to better represent estimated block volumes. Three search passes, with increasing search distances and decreasing minimum sample numbers, were employed to inform the model. All the analytes within a domain were estimated using the same search ellipse and distances, which were based on the Fe variography. Any block that did not receive a grade estimation during this process were assigned grade values using a nearest neighbour approach. Domain grade averages were assigned to surrounding waste and the basement.
	Any assumptions behind modelling of selective mining units.	No selective mining units were modelled in this estimate. It is assumed that the SMU is equal to the block model parent cell size.
	Any assumptions about correlation between variables.	Multi-element analysis was conducted on the samples. There is a strong positive correlation between SiO2 and Al2O3 and TiO2. There is a strong negative correlation with Fe and SiO2, Al2O3 and TiO2. These relationships were managed by using a consistent search neighbourhood for the estimation of all analytes.
	Description of how the geological interpretation was used to control the resource estimates.	Drillhole sample data was flagged using domain codes generated from the interpreted three-dimensional mineralisation domains. Mineralisation domains were treated as hard boundaries in the estimation process.

Criteria	JORC Code explanation	Commentary
	Discussion of basis for using or not using grade cutting or capping.	No top cuts or bottom cuts were required as all the elements exhibited low coefficients of variation and there were no extreme grade outliers.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Model validation was carried out using visual comparisons between composites and estimated blocks, checks for negative or absent grades, and statistical comparison against the input drillhole data on both a whole-of-domain basis and via graphical profiling using swath plots.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry basis.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied*	The model is optimised to report the Mineral Resource at either 50% or 55% Fe. Both reporting cut-off grades are considered to provide appropriate estimates of the size and quality of the deposit.
Mining factors or assumptions	*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.*	It is assumed that open pit mining will occur on 4 m benches Minimum channel thickness allowed by the modelling method is no less than 1 m. Larger internal waste zones have been excluded from the mineralised domains, but smaller isolated waste intersections have not been resolved and are included within the mineralisation boundary on the assumption that mining will not selectively mine these zones.
Metallurgical factors or assumptions	*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.*	No metallurgical factors or assumptions are made during the resource estimation process as this will be addressed during conversion to an Ore Reserve. The resource block model has been populated with multi-element data which is required for metallurgical analysis during the Ore Reserve process.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of*	All mined waste will be backfilled in the mining void, reducing environmental impact.

Criteria	JORC Code explanation	Commentary
	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, 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	The iron ore produced will be a direct shipping iron ore fines, with simple crush and screen processing that generates no processing waste stream.
Bulk density	*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.*	A total of 75 samples were selected from 11 diamond drill core holes. Samples were selected where whole, intact pieces of stable core were available. Core was selected to provide several samples across each logged domain/lithology. Sample bulk density was measured by a wax coated water immersion method. Density measurements ranged from 1.4 to 3.3 t/m3 and these were analysed to identify outliers for removal prior to calculating average values for each domain. Density data within the lower channel ranged from 2.62 to 2.85 t/m3, with an average of 2.72 t/m3 applied to the lower channel. The upper channel ranged from 2.71 to 3.35 t/m3 with an average of 3.12 t/m3 applied. The upper waste unit ranged from 1.80 to 3.13 t/m3 with an average of 2.44 t/m3 applied to all waste material.
	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,	Density was measured using a standard well-documented water immersion procedure. Density has been calculated for both the channels and the gangue material.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Samples taken were coded by the lithology and channel location (upper or lower). Averages were derived within each lithology and this value then used to code the block model.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories*	Classification of the resource model is based primarily on demonstrated assay data quality, drillhole spacing, and demonstrated geological and grade continuity. Indicated Mineral Resources are defined by contiguous zones where the nominal drillhole spacing is 50 m by 50 m.

Criteria	JORC Code explanation	Commentary
	Whether appropriate account has been taken of all relevant factors (i.e. 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).	The classification considers the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The classification reflects the view of the Competent Person.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	The updated Mineral Resource estimate has not been subjected to any independent audits or reviews.
Discussion of relative accuracy/confidence	*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*	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement relates to global estimates of tonnes and grade.
	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	The estimate is considered to be applicable to a global report of tonnage and grade.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available	No mining has been undertaken on any of the resource and therefore there is no production data is available.

Section 4 - Estimation and Reporting of Ore Reserves

<table>
<tr><th>Criteria</th><th>JORC guidelines</th><th>Commentary</th></tr>
<tr><td>Mineral Resource for conversion to Ore Reserves</td><td>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.
Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</td><td>Snowden Optiro prepared the updated Robe Mesa Mineral Resource estimate in December 2022. The relevant part of the Mineral Resource estimate is provided below. No planned dilution was applied to these estimates. Mineral Resources are inclusive of Ore Reserves.
<table>
<tr><th colspan="2"></th><th colspan="9">Robe Mesa Mineral Resource November 2022</th></tr>
<tr><th>Fe cut-off</th><th>Classification</th><th>Mt</th><th>Fe%</th><th>SiO2%</th><th>Al2O3%</th><th>LOI%</th><th>P%</th><th>S%</th><th>TIO2%</th><th>CaFe%</th></tr>
<tr><td rowspan="3">50</td><td>Indicated</td><td>71.8</td><td>54.4</td><td>7.49</td><td>3.27</td><td>10.75</td><td>0.039</td><td>0.018</td><td>0.121</td><td>61.0</td></tr>
<tr><td>Inferred</td><td>17.8</td><td>54.3</td><td>7.56</td><td>3.28</td><td>10.8</td><td>0.042</td><td>0.017</td><td>0.131</td><td>60.8</td></tr>
<tr><td>Sub-total</td><td>89.6</td><td>54.4</td><td>7.50</td><td>3.27</td><td>10.76</td><td>0.040</td><td>0.018</td><td>0.123</td><td>61.0</td></tr>
<tr><td rowspan="3">55</td><td>Indicated</td><td>36.0</td><td>56.0</td><td>5.86</td><td>2.81</td><td>10.64</td><td>0.041</td><td>0.018</td><td>0.097</td><td>62.7</td></tr>
<tr><td>Inferred</td><td>9.2</td><td>56.1</td><td>5.62</td><td>2.73</td><td>10.79</td><td>0.042</td><td>0.017</td><td>0.097</td><td>62.9</td></tr>
<tr><td>Sub-total</td><td>45.2</td><td>56.0</td><td>5.81</td><td>2.79</td><td>10.67</td><td>0.041</td><td>0.018</td><td>0.097</td><td>62.7</td></tr>
</table></td></tr>
<tr><td>Site visits</td><td>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.
If no site visits have been undertaken indicate why this is the case.</td><td>Site visits were completed by the following Competent Persons:
<table>
<tr><th>Competent Persons</th><th>Items</th><th>Date of site visit</th></tr>
<tr><td>Frank Blanchfield</td><td>Mining</td><td>May 2022</td></tr>
</table>
No metallurgy site visit was undertaken as there is no plant or other metallurgically relevant areas to inspect at the site.</td></tr>
<tr><td>Study status</td><td>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.
The Code requires that a study to at least PFS 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.</td><td>The Robe Mesa Iron Ore Project is currently progressing through DFS. Cost estimates prepared for the DFS have been used in preparing the May 2023 Robe Mesa Ore Reserve estimate.</td></tr>
<tr><td>Cut-off parameters</td><td>The basis of the cut-off grade(s) or quality parameters applied.</td><td>Cut-off was based on net value (revenue minus selling, processing, administration and incremental ore mining costs) > $0/t on a diluted block-by-block basis from the parameters used in the pit optimisation. This relates approximately to a 52.0 % Fe cut-off.
Post-dilution application a marginal cut-off grade was calculated for each block using values for:
• Ore cost (A$/t ore) – 49.63 (inc. 21.87 conc. transport cost to port, G&A , shipping and 5% contingency)
• Crusher feed throughput per annum (Mdtpa) – 3.5
• Yield (%) - 97</td></tr>
</table>

<table>
<tr><th>Criteria</th><th>JORC guidelines</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>• Iron ore price (US/t) – 85 (Pilbara blend 62% basis, contaminant discounts also considered) USD:AUD 1:0.7
• Ad valorem royalty (%) – 8.2</td></tr>
<tr><td>Mining factors and assumptions</td><td>The method and assumptions used as reported in the Prefeasibility 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).
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.
The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.
The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).
The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used.
The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.
The infrastructure requirements of the selected mining methods.</td><td>Snowden Optiro completed a mining study to determine a new, independent conversion of the Mineral Resource into Ore Reserve.
An evaluation using pit optimisation to produce an economic mining shell followed by detailed pit design was used to convert the Mineral Resource to an Ore Reserve. Mine equipment requirements were estimated by a mining contractor. Selective mining using an open pit drill-blast-load and haul mining cycle is used for mining activities.
Snowden Optiro reviewed the geotechnical analysis by Peter O'Bryan and Associates (March 2023) that recommended pit slope design parameters for Robe Mesa for a 56 m deep pit (Base case wall profile, summarised below.
<table>
<tr><th>Batter angle (°)</th><th>Berm width at base of batter (m)</th><th>Batter height (m)</th><th>Inter-ramp slope angle, crest to crest (°)</th><th>Overall slope angle, crest to toe (°)</th></tr>
<tr><td>65</td><td>6</td><td>8</td><td>39.4</td><td>34.0</td></tr>
</table>
Reverse circulation (RC) grade control drilling is planned to be conducted on a 25 m by 25 m pattern. The orebody consists of flat dipping stratigraphic units of channel iron deposit (CID) which will be mined selectively on 4 m flitches to minimise dilution. Mining to contact will be undertaken in the last cut to final pit design.
The resource model used is named "RM_MOD_1122.dm", generated by Snowden Optiro in December 2022, and is the subject of the April 2023 Ore Reserve estimate.
Dilution and ore loss was applied through re-blocking the model from a sub-cell size of 6.25 mE by 6.25 mN by 1 mRL to a mining model size of 5.0 mE by 5.0 mN by 2 mRL. This was deemed to be an appropriate selective mining unit (SMU) when considering minimal blast movement, grade control patterns and loading accuracy. A high supporting grade maintains the diluted grade and the ore loss is ~9% A comparison of the in-pit resource and mining model is provided, reported at the marginal block cut-off grade.
<table>
<tr><th>Model</th><th>Ore tonnes (Mt)</th><th>Fe grade (%)</th><th>Fe metal (Mt)</th></tr>
<tr><td>Resource</td><td>30.0</td><td>55.5</td><td>16.7</td></tr>
<tr><td>Mining model</td><td>27.3</td><td>55.5</td><td>15.1</td></tr>
<tr><td>Variance</td><td>-9.0%</td><td>0.0%</td><td>-9.6%</td></tr>
</table>
The minimum mining width subject to modified mining procedures in narrow basal pits is 20 m.
There is 257 kt Inferred material with a grade of 55.2% Fe in-pit. No in-pit Inferred Mineral Resources were used to quantify Ore Reserves.</td></tr>
</table>

Criteria	JORC guidelines	Commentary
Metallurgical factors and assumptions	*The metallurgical process proposed and the appropriateness of that process to the style of factors or mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.* *The nature, amount and representativeness of metallurgical testwork undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* *Any assumptions or allowances made for deleterious elements.* *The existence of any bulk sample or pilot-scale testwork and the degree to which such samples are considered representative of the orebody as a whole.* *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications.*	The PFS Robe Mesa metallurgical test work program was conducted in 2019, utilising samples collected in November 2016 drilling campaign, with core that had been packaged and stored in a way to maintain core integrity and avoid contamination. Crushing and screening of the samples followed assays by size distributions, bulk density (loose bulk density 2.02 t/m3 and compact bulk density 2.32 t/m^3), UCS (ranged from 25-50 MPa), Crusher Work Index analysis (1-7 kWhr/t) and Abrasion Index (of 0.0158 indicated slightly abrasive material) were performed at Bureau Veritas (BV) metallurgical laboratory. Iron grades did not vary significantly, silica results were typical of CID deposits and alumina showed an increasing trend with decreasing particle size. A master composite sample (55.97% Fe 5.89% SiO_2 2.82% Al_2O_3 and 0.038% P) underwent material handleability test work at Jenike & Johansen (Perth) producing a Dust Extinction Moisture level of 5.59% and Transportable Moisture Limit of 10.68%. During 2022 and 2023, further confirmatory metallurgical test work was completed as part of the project DFS. The project will be operated as a direct shipping ore process whereby there is no metallurgical upgrade by processing. DSO operations are well established in the Pilbara iron ore industry and as such operations and equipment aspects are well understood: • Product grade is determined by the mine schedule and marginally impacted by post crushing stockpile blending • The process plant is 100% mass yield The 2022 diamond drilling program produced 656 m of PQ core which was analysed at BV in Q4 2022, extended metallurgical knowledge of the upper and lower zones of the ore body. Results are similar to those achieve from earlier metallurgical testing with grade by size analysis, bulk density determinations undertaken as well as 43 CWi samples (ranging from 1-3.8kWhr/t), 10 Abrasion Index analysis (0.006-0.028) and 37 UCS tests (20 samples from Upper Zone 23-50MPa, 13 samples from Lower Zone 12-42 MPa and 4 samples from Gangue zone 4-44MPa). The consistency of the Robe Mesa geology, and similarity of metallurgical properties with surrounding well-established operations, supports the simple standard dry crush and screen processing plant to produce a direct shipped ore (DSO) of a single grade fine product. No bulk test sample is planned, no tailings facilities are required and a 100% product recovery expected.

Criteria	JORC guidelines	Commentary
		In February 2023 J&J are undertaking material handleability tests of two composite samples. One sample represents Upper Zone material only that will present in initial mining and the second sample is a blend of upper and lower zone material. Additionally, a Safety Data Specification will be produced on the Robe Mesa fine product by Microanalysis. In February-March 2023 three sinter composite samples will be analysed at Beijing Shougang Huaxia Engineering Technology in China and represent: • Upper zone material only targeting the "Standard Fines" grade (55.75% Fe 5.91% SiO_2 2.66% Al_2O_3 and 0.036% P) • Upper zone material only targeting the "Low Grade Fines" grade (53.60% Fe 7.93% SiO_2 3.41% Al_2O_3 and 0.037% P) • Upper and Lower domain blended samples to meet the Total Grade (55.37% Fe 6.53% SiO_2 2.98% Al_2O_3 and 0.041% P)
Environmental	*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 drums should be reported.*	Since 2020, CZR has undertaken the following investigations: • 4 phases of detailed terrestrial fauna surveys (>3,000 ha) • 3 phases of detailed flora and vegetation surveys (>3,000 ha) • 3 phases of troglofauna/subterranean surveys • 2 phases of SRE surveys • Three-dimensional troglofaunal habitat modelling • Noise and vibration assessment • Groundwater assessments • Surface water modelling and flood assessment • Waste characterisation Key outcomes of studies include: • Vegetation communities mapped on site are widespread within the west Pilbara • No Threatened Flora recorded • No Threatened Ecological Communities (TECs) recorded • Three Priority Flora identified, all of which are widely distributed in the west Pilbara • Three BC Act and EPBC Act listed species recorded on site (Northern Quoll records on the mesa edges, and Ghost Bats and PLNB in low numbers) • No significant roosts known within disturbance footprint • Waste rock is classified as non-acid forming (NAF) and lacking enrichments in minor-elements The project is located within the P1 Priority Ecological Community (PEC) "Subterranean invertebrate communities of mesas in the Robe Valley region". To define and manage potential impacts to the PEC, three phases of troglofauna surveys have been completed in accordance with EPA guidance. Results to date indicate at least 10 species are located within the project area.

Criteria	JORC guidelines	Commentary
		Previous surveys indicate that troglofauna are generally restricted to isolated mesa landforms with channel iron deposits. Given that the project is located within Mesa F, a 1,800 ha landform, the CZR proposal to disturb 60 ha of this landform represents a very small portion a much larger and connected troglofauna habitat. To complement the troglofaunal surveys, CZR has undertaken a detailed 3-dimensional modelling exercise to accurately define the connectivity of the troglofauna habitat within the mesa landform and to determine the impact of the project on troglofauna habitat. CZR, with the assistance of the WA Museum, is also sequencing previously collected specimens from the surrounding area to help build up knowledge of the species distribution. In summary, to assess the potential impact of the project on various aspects of the environment the following work has been undertaken: • Graeme Campbell and Associates completed the Waste Characterisation investigation, with only inert waste material identified • Mine Closure Planning has been completed by Mine Earth • Biota Environmental have undertaken 2 phase of Flora, SRE and 3 phase Troglofauna surveys of Robe Mesa and surrounding infrastructure areas from 2020-2023 • Bamford consulting has undertaken 2 phases of Fauna surveys from 2020-22 • Hydrological assessment of bores located off the Robe Mesa have been undertaken and a water supply source has been identified to meet the Mine-Plant-Village requirements • In February-March 2023, a Significant Species Management plan as well as a Blast noise modelling of mining activities on top of Robe Mesa will be undertaken This information, along the co-development of Cultural Heritage Management Plan with Robe River Kuruma People and surface water modelling outputs will be summarised and submitted to DMIRS for Native Vegetation Clearance Permit Environmental approval. The Robe Mesa Mining Proposal will be submitted to the Department of Mines, Industry Regulation and Safety (DMIRS) in Q2 2023. Further environmental studies (Flora and Fauna) will be completed in April 2023 for the intermediate stockyard located on Onslow Road. At the Port of Ashburton, Dust, Light and Surface Water modelling of the new West Quay Truck Unloading Facility will be undertaken in February-March, as part of the Development Application to Pilbara Port Authority.

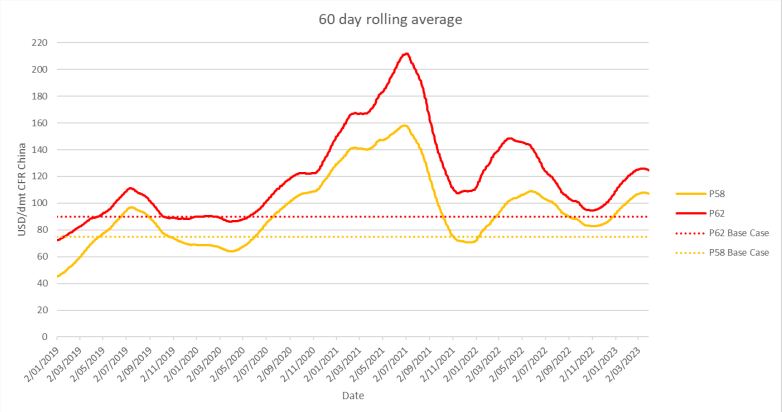
<table>
<tr><th>Criteria</th><th>JORC guidelines</th><th>Commentary</th></tr>
<tr><td>Infrastructure</td><td>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.</td><td>The following major infrastructure will form part of the Robe Mesa Project including:
37 km access and haul road, from North West Coastal Highway to Robe Mesa site
Ramp to access Robe Mesa
Associated Mine-Plant-Haulage and Administration area, consisting of portable office blocks, workshops, laydown areas.
3-4 Mtpa dry crush and screen processing plant
Diesel power generation and fuel storage facility
Borefield and associated pumping, piping and storage
ANFO storage facility
Communications tower
150-person accommodation Village
Landfill
A new intermediate stockyard will be established along Onslow Road to store product in preparation of building stock ready for shipments. An Onslow Hub administrative and Haulage contractor workshop base will also be based ~80 kms from Onslow at the intermediate stockyard.

The proposed Port of Ashburton West Quay iron ore export facility, consisting of road train unloading hopper, storage shed, conveying system and ship loader and its associated non-processing infrastructure, is still in the design stages, pending Development Application approval from the Pilbara Port Authority.</td></tr>
<tr><td>Costs</td><td>The derivation of, or assumptions made, regarding projected capital costs in the study.
The methodology used to estimate operating costs.
Allowances made for the content of deleterious elements.
The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.
The source of exchange rates used in the study.
Derivation of transportation charges.
The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</td><td>The operating and capital cost data for this study has come from the following sources and supersedes the pit optimisation input parameters:
Load and Haul from a mining contractor
Drill and Blast using guidance from George Boucher Consulting, and recent costs from a mining contractor
Processing, haulage and transhipping from third-party contractor quotes
Site-based G&A from CZR estimates based on inputs from third-party contractor quotes and manning schedules
Infrastructure from engineering consultant estimates
Operating unit costs<table><tr><th>Item</th><th>A$/wmt product</th></tr><tr><td>Mining</td><td>10.0</td></tr><tr><td>Processing</td><td>4.4</td></tr><tr><td>Product road transport / storage</td><td>19.5</td></tr><tr><td>Site G&A</td><td>5.8</td></tr><tr><td>Port charges, transhipping</td><td>15.0</td></tr><tr><td>Contingency</td><td>2.7</td></tr><tr><td>Total</td><td>57.4</td></tr></table></td></tr>
</table>

<table>
<tr><th>Criteria</th><th>JORC guidelines</th><th>Commentary</th></tr>
<tr><td></td><td>The allowances made or royalties payable, both government and private.</td><td>
Capital costs (inclusive of 10% contingency)
<table>
<tr><th>Item</th><th>Total (A$M)</th></tr>
<tr><td>Vehicles and equipment</td><td>1.1</td></tr>
<tr><td>Road & intersections</td><td>31.3</td></tr>
<tr><td>Field development</td><td>19.4</td></tr>
<tr><td>Camp</td><td>19.3</td></tr>
<tr><td>ROM pad, workshop, processing plant</td><td>11.8</td></tr>
<tr><td>Intermediate stock yard</td><td>5.0</td></tr>
<tr><td>Sustaining Capital</td><td>14.3</td></tr>
<tr><td>Total</td><td>102.3</td></tr>
</table>
The pit optimisation used a provisional rate of 8.2% royalties on DSO iron ore sales revenue for state government and Native Title payments. Since completing the pit optimisations, CZR has executed Mining Native Title Agreements, with the actual royalty rate reduced to 8%.
</td></tr>
<tr><td>Revenue factors</td><td>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.

The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</td><td>
CZR reviewed historical and forecast pricing data from internationally recognised iron ore trading markets and consultants S&P Platts. Based on a review of these forecasts CZR has selected a base case iron ore price of US$90/t CFR China for the benchmark 62% Fe product (S&P Platts reference IODEX) (spot price US$106/dmt – 4 May 2023).

A 17% discount is applied to the IODEX price to normalise for the benchmark 58% Fe product (S&P Platts reference IODFE00), based on historical price spreads between the 62% Fe and 58% Fe benchmark prices (spot discount 14.7% – 4 May 2023).



Further discounts are applied to iron, silica and alumina based on historical discounts reported by S&P Platts for iron ore grading 55-60% Fe fines.

Average Robe Mesa iron ore fines product discount to the 62% Fe benchmark over the life of mine is 22% CFR China.
</td></tr>
</table>

<table>
<tr><th>Criteria</th><th>JORC guidelines</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>Adjustments are made for moisture and freight, based on Cape and Panamax sized ocean-going vessels transporting from the port of Ashburton to North China.

Exchange rates used are A$:US$ 0.68.</td></tr>
<tr><td>Market assessment</td><td>The demand, supply and stock situation for the particular commodity, consumption trends assessment and factors likely to affect supply and demand into the future.

A customer and competitor analysis along with the identification of likely market windows for the product.

Price and volume forecasts and the basis for these forecasts.

For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</td><td>The Robe Mesa iron ore project represents an extension of the Robe Valley iron ore deposits, mined by the Robe River JV (Rio Tinto 53%, Mitsui 33%, Nippon Steel 14%). The State Agreement for Robe River was signed in the 1960's and iron ore has been mined and sold from various deposits along the Robe Valley for several decades.

A single DSO iron ore fines product will be produced from Robe Valley, comparable to other products currently produced from the Pilbara region in Western Australia, and predominantly sold into China and other Asian steel producing locations.
<table>
<tr><th>Product</th><th>Fe (%)</th><th>SiO_2 (%)</th><th>Al_2O_3 (%)</th><th>P (%)</th></tr>
<tr><td>Robe Mesa – Ore Reserve</td><td>55.5</td><td>6.4</td><td>2.9</td><td>0.04</td></tr>
<tr><td>Rio Tinto - Robe Valley Fines</td><td>56.4</td><td>5.5</td><td>3.1</td><td>0.03</td></tr>
<tr><td>FMG - Super Special Fines</td><td>56.5</td><td>6.4</td><td>3.1</td><td>0.05</td></tr>
<tr><td>FMG – Fortescue Blend Fines</td><td>58.2</td><td>5.6</td><td>2.5</td><td>0.06</td></tr>
<tr><td>BHP – Jinbao Fines</td><td>56.5</td><td>7.3</td><td>1.7</td><td>0.04</td></tr>
<tr><td>BHP – Yandi Fines</td><td>57</td><td>6.4</td><td>1.7</td><td>0.04</td></tr>
<tr><td>Platts 58% Fe index</td><td>58</td><td>6</td><td>2.9</td><td>0.06</td></tr>
</table>
Comparison made between Robe Mesa Ore Reserves and operating mines of similar grade specification in the Pilbara, Western Australia (note CZR is currently non-producing from Robe Mesa).

Source: S&P Global Platts Iron Ore and Metallurgical Coal Specifications Tree (2021):

https://www.spglobal.com/platts/PlattsContent/_assets/_files/en/our-methodology/methodology-specifications/iron-ore-and-metallurgical-coal-specifications-tree.html</td></tr>
<tr><td>Economic</td><td>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.

NPV ranges and sensitivity to variations in the significant assumptions and inputs.</td><td>CZR developed a project cashflow model for the Robe Mesa iron ore project.

The financial model was prepared by BDO based on inputs provided by CZR. Snowden Optiro is reliant on the metal price projections advised by CZR. Snowden Optiro is not an expert in the forecasting of metal prices, and other than to draw attention to the sensitivity of the project to these projections, is not able to comment on the risk that these projections will change over time. However, it is noted CZR has taken into consideration data provided under subscription from S&P Platts, a leading industry body for the global iron ore market.

The production targets are based on 100% Probable Ore Reserves. The key parameters and financial outcomes are set out below:</td></tr>
</table>

<table>
<tr><th>Criteria</th><th>JORC guidelines</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Parameter</th><th>Unit</th><th>Value</th></tr>
<tr><td>Life of mine (LOM)</td><td>years</td><td>8.25</td></tr>
<tr><td>LOM ore mined</td><td>Mt</td><td>27.3</td></tr>
<tr><td>LOM waste mined (inc. low-grade)</td><td>Mt</td><td>27.6</td></tr>
<tr><td>LOM strip ratio</td><td>(waste:ore)</td><td>1.01</td></tr>
<tr><td>Average Iron Ore head grade</td><td>% Fe</td><td>55.5</td></tr>
<tr><td>Average Iron Ore recovery (overall)</td><td>%</td><td>100%</td></tr>
<tr><td>Average production rate</td><td>Mtpa</td><td>3.4</td></tr>
<tr><td>Realised iron ore price</td><td>US$/t CRF China (P62)</td><td>$90</td></tr>
<tr><td>Exchange rate</td><td>A$:US$</td><td>0.68</td></tr>
<tr><td>NPV (10% discount rate, post-tax)</td><td>A$ M</td><td>137.5</td></tr>
<tr><td>IRR (post-tax)</td><td>%</td><td>69.5</td></tr>
</table>
A sensitivity analysis on the post-tax NPV (in A$ M) is provided below.
<table>
<tr><th>Parameter</th><th>-10%</th><th>0%</th><th>+10%</th></tr>
<tr><td>Price</td><td>22.5</td><td>137.5</td><td>252.3</td></tr>
<tr><td>Discount rate</td><td>146.2</td><td>137.5</td><td>129.4</td></tr>
<tr><td>Exchange rate</td><td>239.2</td><td>137.5</td><td>54.2</td></tr>
<tr><td>CAPEX</td><td>144.1</td><td>137.5</td><td>130.9</td></tr>
<tr><td>OPEX</td><td>203.9</td><td>137.5</td><td>70.5</td></tr>
</table>
</td></tr>
<tr><td>Social</td><td>The status of agreements with key stakeholders and matters leading to social licence to operate.</td><td>
Native Title and heritage

CZR recognises the Robe River Kuruma (RRK) People as the traditional owners of the land that Robe Mesa is located on, and the importance to the RRK People of leaving country as close as possible to the way that it was found. Working collaboratively, CZR and RRK signed the Robe Mesa Native Title Agreement on 21 December 2022 which includes a ‘live’ Cultural Heritage Management Plan to ensure the parties continue to work together to develop appropriate protection and management measures for the places it contains.

CZR acknowledges that within the vicinity of the Production Tenements there are many significant cultural places of great importance to RRK People. CZR and RRK have agreed the Productive Mining area boundaries and identified No-Go-Areas which must not be entered or impacted by CZR. The area of the Robe Mesa that has been identified for Productive Mining provides for a set back from the mesa edge or buffer that must not be entered or impacted.

Additionally, northern aspects of the Robe Mesa and other selected areas off the mesa, also contain No-Go-Areas.

Cultural Heritage surveys have been completed in parts of the tenement and will continue to be performed in 2023 on key infrastructure locations.
</td></tr>
</table>

Criteria	JORC guidelines	Commentary
		Consultation Ongoing consultation with neighbouring pastoral owners, traditional owners, neighbouring tenements (FMG, Rio Tinto, Mineral Resources, API, Red Hill Minerals, government agencies including the DMIRS, the Department of Water and Environmental Regulation (DWER) and the Shire of Ashburton have occurred since 2020. **Workforce** The workforce will fly-in/fly-out of Perth supplemented by local workforce from Onslow areas for the port site. **Monitoring** Environmental monitoring and reporting required for both sites will include the following: • Annual • Compliance • Reporting to DMIRS • Reporting to DWERS **Training** All personnel recruited to work at the project will be inducted to all general safety requirements and emergency procedures relevant to the operation, prior to commencing work at the site. **Licence to Operate** Based on the information currently available, it is anticipated that all necessary approvals will be granted within the required timeframes. **Approvals approach** CZR is proposing to seek approval to clear native vegetation for the proposal under Part V Division 2 of the EP Act and Environmental Protection (Clearing of Native Vegetation) Regulations.
Classification	*The basis for the classification of the Ore Reserves into varying confidence categories.* *Whether the result appropriately reflects the Competent Person's view of the deposit.* *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	In-pit Indicated Mineral Resources were used as the basis of Probable Ore Reserve, estimated using the guidelines of the JORC Code (2012). The result of the classification reflects the Competent Person's view of the deposit. No Inferred Resources is included in the Ore Reserve estimate.

Criteria	JORC guidelines	Commentary
Other	*The status of agreements with key stakeholders and matters leading to social licence to operate.* *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.*	CZR Resources has entered a Memorandum of Understanding with Strike Resources and CSL Australian, establishing the Port of Ashburton Consortium (PAC) for the development of a 5Mtpa export facility at the Port of Ashburton. PAC are submitting a Development Application to Pilbara Port Authority (PPA) for the construction of a greenfield road train unloading facility, storage facility, covered conveying system with ship-loader to load a 12kt transhipment vessel (TSV) which would progressively load 180kt Ocean Going Vessel for export to international markets.
Audits or reviews	*The results of any audits or reviews of Ore Reserve estimates.*	There have not been external audits or reviews of the inputs provided for the 2023 Robe Mesa Ore Reserve estimate. Mineral Resource estimate, pit optimisation, design and schedule as developed for the 2023 Robe Mesa Ore Reserve estimate were reviewed internally by Snowden Optiro.
Relative accuracy/ confidence	*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.*	The capital cost estimates in this study relating to mining, processing and cost performance are underpinned by cost estimates derived through the current DFS, which has an assessed with global accuracy of +25% and -25% at the 90% confidence range. Factors that could affect the accuracy of the Ore Reserve are related to the project risks assessed as “high”: • Lower product pricing • Higher operating cost • Fluctuation in the exchange rate impacting the AUD value Snowden Optiro’s opinion of the Ore Reserve is that the classification of Probable is reasonable.

Criteria	JORC guidelines	Commentary
	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. *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.* *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.*	