

# **ASX ANNOUNCEMENT**

29 April 2024

# THIRD QUARTER ACTIVITIES REPORT

#### **ENDING 31 MARCH 2024**

## **HIGHLIGHTS**

# Razorback Iron Ore Project

- Strategic partnering: due diligence completed by several selected groups;
   transactional negotiations in progress.
- Memorandum of Understanding signed with Port Pirie Regional Council ahead of announced State Government green iron 'Expression of Interest' process.
- Mining Lease Proposal submission 90% complete
- Federal Government engaged in a series of meetings at Parliament House,
   Canberra, with view to future infrastructure funding for the Braemar Iron
   Province.
- Metallurgical testwork: successful use of saline water in flotation advanced in laboratory tests; geometallurgical testwork program planned in conjunction with potential strategic partners.

## > Corporate

Cash and cash equivalents at 31 March: \$2.85 million

**Magnetite Mines Limited (ASX: MGT)** is pleased to provide an update of activities and financial results for the quarter ending March 31, 2024.

The Company continued to progress development of the Razorback Iron Ore Project in South Australia to deliver premium 'DR-grade' iron ore concentrates to support emerging demand from the decarbonising iron and steelmaking industry.

During the quarter, the Company has focused on transactional negotiations with selected strategic partners following a period of deep due diligence, with the objective of concluding one or more transactions.

Additionally, the Company has concentrated on aligning Magnetite Mines' vision with both State and Federal Governments to enable the necessary collaboration and support required to develop the Project in conjunction with the emergence of a new Australian 'green iron' industry.



#### **RAZORBACK IRON ORE PROJECT**

## **Strategic Partnering**

Magnetite Mines' primary focus during the quarter was the establishment of formal funding and partnering relationships with preferred strategic partners, viewed by the Company as essential for the successful development of the Razorback Iron Ore Project.

Throughout 2023, the Company engaged with a wide range of potential strategic partners, including international steelmakers, trading houses, private equity groups and Australian industrial groups. A formal Virtual Data Room was opened in August 2023 to allow selected interested parties, having signed non-disclosure and standstill (trading restriction) agreements, to access detailed confidential information about the Razorback Project and complete due diligence. Selected parties were also hosted on site visits to assess the Razorback geology, site and regional infrastructure.

This exercise was followed by Company representatives visiting both Japan and Saudi Arabia, in December 2023 and January 2024 respectively, to engage in face-to-face meetings with potential strategic partner counterparties, significantly progressing relationships with several target groups.

Due diligence was completed by a range of counterparties during the quarter, with several parties now engaged in transactional negotiations with the Company relating to potential funding support for the Project, as Magnetite Mines progresses Razorback towards FID.



Figure 1. Magnetite Mines CEO Tim Dobson presenting at Future Facing Commodities conference, Singapore, 26 March 2024



Maintaining and enhancing shareholder value remains the number one priority for the Board and management at all times during the partnering process. In parallel to 'commercial in confidence' discussions with selected potential partners, the Company has continued to engage in an array of marketing initiatives aimed at attracting alliances with both domestic and international stakeholders and securing essential investment opportunities and collaborations. These initiatives, including enhanced digital marketing campaigns and event presentations, have been designed to promote the Project's visibility across a range of stakeholders.

# **MoU with Port Pirie Regional Council**

On 13 February, the Port Pirie Regional Council and Magnetite Mines announced a collaborative Memorandum of Understanding (MoU) positioning Port Pirie as a future hub for green iron production and potential downstream processing such as pelletising and direct reduction-based ironmaking using green hydrogen<sup>1</sup>.

This unique collaborative partnership is seamlessly aligned with Magnetite Mines' leading sustainability platform, *foresight*, and the Company's commitment to effective and collaborative stakeholder partnering. The MoU leverages Port Pirie's robust industrial capabilities and aligns with an accelerating global shift towards decarbonised steel production. It also highlights the region's emerging opportunity to take advantage of coincident globally-significant magnetite and renewable energy resources, now recognised by the South Australian Government as a leading economic opportunity for the state<sup>2,3</sup> (see below).

Situated 160km to the west of the Braemar iron province, and the closest operating port, Port Pirie is ideally positioned for future export and downstream processing of magnetite concentrates produced in the expansive and undeveloped Braemar.

The Razorback Iron Ore Project is located at the south-west end of the Braemar Iron Province and is ideally suited as the 'first mover' project in the region for the following regions:

- Razorback is the most developed of all the Braemar projects and hosts the largest current Ore Reserve (2 billion tonnes, supporting a 50+ year mine life)
- The Project ore deposits are outcropping, unlike other Braemar projects, requiring little or no prestripping to commence ore production
- The Project is closest to key enabling infrastructure: grid power tie-in, reliable water supply, and local communities suitable of hosting workforce.

The Company believes that the pioneering development of the Razorback Project will support the future development of other Braemar magnetite projects in early-stage development including Magnetite Mines's 100% owned Muster Dam Project with a Mineral Resource Estimate of 1.5 billion tonnes.

The MoU establishes a key strategic framework to link the Braemar, as a long-term producer of premium DR-grade magnetite concentrates, with Port Pirie's industrial base, capable of supporting the emergence of a significant new green iron industry. The agreement commits both the Company and Council to working closely together on the economic, social and environmental aspects of this significant emerging opportunity.





Figure 2. Port Pirie Mayor Leon Stephens and Magnetite Mines CEO Tim Dobson sign MoU, 13 February 2024

# "State Prosperity Project", Government of South Australia

In February 2024, the South Australian Premier, Hon. Peter Malinauskas, and key state Ministers hosted the "Upper Spencer Gulf Major Economic Summit" across Whyalla, Port Augusta and Port Pirie<sup>2</sup>. The Summit was the launchpad for the state government's "State Prosperity Project", which has been established as the most significant economic opportunity for the state in many decades.

The State Prosperity Project seeks to take full advantage of the opportunities presented by the global energy transition, leveraging South Australia's leading wind and solar resources, combined with the state's already established, world-leading gigawatt-scale renewable energy grid.

A key pillar of the State Prosperity Project is to fast track the development of a new green iron industry in the state, in recognition of the state's abundant magnetite resources, including the Braemar Iron Province.

The government has also foreshadowed the release of a "Green Iron & Steel Strategy" in the coming months and, on 27 February, announced an Expression of Interest process for "the establishment of a DRI plant in South Australia before the end of the decade", with the process set to be rolled out in June 2024<sup>3</sup>.

These developments signal a major supportive effort by the state government to collaborate with industry and other stakeholders in taking a leading position globally to establish of a green ironmaking and export industry, and in doing so, attract the considerable international investment required to develop what will be a new, future-facing iron supply chain dynamic to enable decarbonised steelmaking.



Figure 3. SA Premier Malinauskas, Upper Spencer Gulf Major Economic Summit, Port Pirie, 27 February 2024

Magnetite Mines' MoU with the Port Pirie Regional Council has been carefully designed to take full advantage of the State Prosperity Project, the forthcoming SA Green Iron & Steel Strategy, and the DRI Expression of Interest process<sup>3,4</sup>.

For clarity, the Company and Council intends to collaborate with selected industrial partners to create the foundation for a "Green Iron Hub" to be established at Port Pirie, in support of the South Australian government's 'call to arms'. The fundamental requirement for any future green iron hub is a reliable, long-term source of premium, DR-grade iron ore concentrates, with Magnetite Mines positioning to fulfil this role. The Company's plans include the initial development of a 5Mtpa concentrate production operation at Razorback, expandable to 10Mtpa, aligning with increasing demand over the coming decade as steelmakers transition to decarbonised steelmaking technologies that require DR-grade feed stocks.

## **Federal Government Engagement**

On 14 February, preeminent economists Professors Ross Garnaut AC and Rod Sims AO, representing the influential think tank "The Superpower Institute", made an address to the National Press Club<sup>5</sup>. The Superpower Institute seeks to help inform government policy and encourage collaboration between the public and private sectors for the common benefit of all Australians.

The core message of the address titled "Realising Australia's economic and climate opportunities" was that Australia's now declining living standards can be reversed by embodying Australia's competitive advantage (renewable energy resources) into export goods, with green iron at the top of the list of opportunities.

Some key quotes attributable to Professor Ross Garnaut AC from the address include:

- "Green hydrogen and ammonia will be important, but exports of goods embodying these are the main story."
- "The processing of minerals will be the most important, with iron a long way in front."
- "SA leads the way to where Australia is headed."



On March 19 and 20, Tim Dobson (Magnetite Mines CEO) and Jim McKerlie (Magnetite Mines Chair) visited Parliament House in Canberra for a series of meetings with Senators, Members of the House of Representatives, and Ministers' and shadow Minister's offices.

It is the Company's view that for Australia to take advantage of the now-evident green iron opportunity, that deep collaboration will be required between all levels of government, community, hydrogen and magnetite producers, other industrial and logistics partners, and international investors. The Company also believes that a logical contribution from government is to support the establishment of enabling infrastructure to support the new industries of magnetite production, hydrogen production and export logistics.



Figure 4. LtoR: MGT Chair Jim McKerlie, Shadow Resources Minister Senator Susan McDonald, MGT CEO Tim Dobson Parliament House, Canberra, 19 March 2024

With this in mind, the Company presented the current status of the green iron industry opportunity at each meeting, with a focus on the Braemar Iron Province and the Razorback Iron Ore Project, and the case for government co-funding for enabling infrastructure, in particular, water supply, power supply and port upgrades at Port Pirie.

All meetings were well received and have resulted in the establishment of new relationships and follow up engagement aimed at nurturing future collaboration and common understanding.

## Sustainability

#### Approvals - Mining Lease Proposal (State Government)

The Company set an ambitious target to submit a Mining Lease Proposal (MLP) for the Razorback Iron Ore Project by the end of the March quarter. The Company completed all planned technical impact



assessments with a range of leading specialists including Tetra Tech-Coffey, RPS and CGM Smith, along with broad community engagement (see below) during the period in preparation for the MLP submission.

The impact assessment studies enable MGT to assess the environmental and social impacts of the proposed operations and have formed the basis for the Company's community engagement efforts. An additional ecology survey was completed in February 2024 to finalise all primary and step-out baseline characterisation programs required.

In consultation with relevant government departments, it was decided in March that further work on the tailings dam component of the submission is necessary to fully address the regulators' requirements. Accordingly, the MLP preparation stands at approximately 90% completion with submission now expected during the current period.

#### Approvals – EPBC Act Referral (Federal Government)

The Company proactively initiated a self-referral to the Department of Climate Change, Energy, the Environment and Water (DCCEEW) in January 2024. This self-referral enables DCCEEW to assess whether the Project requires any consents under the *Environment Protection and Biodiversity Conservation Act* (EPBC Act).

Referral documentation submitted to DCCEEW was subject to an initial validation assessment and formal assessment of the referral, along with concurrent public consultation, has commenced.

# Stakeholder and community engagement

In support of the MLP process, the Company initiated a broad community and stakeholder engagement program to directly engage with community members with an interest in the Razorback Project.

Engagement activities were held across the Mid-North region, and included:

- 8 community engagement sessions (Adelaide, Port Victoria, Peterborough, Burra, Robertstown)
- 2 council deputations (DC Peterborough, RC Goyder)
- 8 hours of local government workshops (DC Peterborough, RC Goyder)
- 2 days of drop-in sessions (Peterborough).

These sessions were designed to educate and inform community members on the potential impacts and benefits of the proposed mining and infrastructure developments identified through the technical impact assessment studies.

Importantly, the sessions provided an opportunity for Magnetite Mines to receive detailed feedback on the proposed development and for stakeholders to validate predicted impacts associated with the construction, operations and closure of the Razorback Project.

The community and stakeholder engagement strategy forms a critical component of the MLP submission and the completion of the current program of engagement represents a key milestone for the permitting process.





Figure 5. Magnetite Mines community information sessions, Burra and Peterborough, February 2024

Feedback received from these activities has been overwhelmingly positive, indicating strong community support for the Razorback Project and the Company's approach. Community members provided constructive feedback on local infrastructure and civic/amenity needs, as well as discussion regarding the significant economic opportunities for local stakeholders through business engagement and employment within the Project, both direct and indirect.

#### Land Access and Native Title

Land access negotiations for the mining lease and infrastructure corridors are progressing in line with schedule. Of note, negotiations are now underway with all remaining landholders associated with the site access / haulage road corridor, while agreements have been offered to landowners covering approximately 92% of the power transmission line corridor.

On the back of the landmark *Walking Together – One Team* Partnering Agreement signed with traditional owners Ngadjuri Nation in the December quarter, the negotiation of an Indigenous Land Use Agreement (ILUA) is now advancing rapidly, reflecting the strong relationship between the two parties<sup>6</sup>.

Several workshops were held on Country during the quarter to develop the initial terms of the ILUA, with negotiations continuing in the current quarter.

# **Value Engineering**

Value Engineering studies progressed to optimise capital and operating costs as well as confirm logistics and infrastructure assumptions. These studies are also aimed at decreasing the Project's technical risk profile in preparation for Definitive Feasibility Studies (DFS).

A series of work programs related to water sourcing and offtake, geometallurgical (ore body variability) optimisation studies as well as high voltage power capital updates are currently being planned to further derisk the Project.



# Water supply

Water supply to Razorback remains a high priority area of study for the Project and significant efforts have been made at both technical and environmental levels to derisk this Project element.

As previously reported, "coastal desalination" is the Company's preferred water supply option owing primarily to the long-term sustainability of the resource and the potential use of road easement corridors to route the proposed pipeline has further reduced the technical risk of this solution. The Company is now engaging with consultancies specialising in water pipeline engineering services to provide technical, capital costs, and execution study outputs to Definitive Feasibility Study levels of accuracy.

The use of saline water from the ocean for ore processing at site represents a significant opportunity for the Project in that it avoids the capital and operating costs associated with full scale desalination at the coast. In particular, the froth flotation step in the proposed Razorback process flow sheet is sensitive to water chemistry and hence the Company's laboratory metallurgical studies have focused on achieving DR-grade concentrates, along with acceptable recoveries, from flotation in saline water.

This work is fundamentally associated with the reagent regime used to achieve flotation and the Company is working in collaboration with major reagent manufacturers to identify a solution. Benchlevel laboratory testwork to date is showing promising results and further work is now planned to confirm the use of saline water at scales appropriate for production.

# Geometallurgical Testwork Program

In response to due diligence feedback and as part of further de-risking studies associated with the Razorback Project, a program of work is being planned to mitigate the risks associated with ore body variability. This program of work, known as geometallurgical testwork, is designed to spatially characterise the metallurgical performance across the length and breadth of the vast Razorback ore deposits (including Iron Peak) and is currently under preparation.

Ore body variability poses a significant risk in mining operations due to its potential to impact both the economic feasibility and the operational consistency of a project. To mitigate this risk, geometallurgy integrates geological, mining, and metallurgical information to create spatially-based predictive model that predicts the variability of a range of parameters across the orebody, which is then used to better forecast and optimise the Project's mining and processing plan for maximum economic benefit.

The proposed geometallurgical testwork program will build on previous testwork outcomes and will mineralogically characterise the orebody's metallurgical response across a range of scenarios.

Previously discussed metallurgical testwork programs including saline water processing and product suite assessments relating to the Project's ability to deliver Direct Reduction Pellet Feed (DRPF) grade concentrates will be included as part of this new program of work.

The execution of a geometallurgical program is subject to the availability of existing sampling material and the potential need for further drilling to produce the required sample suite. Accordingly, the initiation of the program is subject to additional funding and is the subject of current negotiations with potential strategic partners discussed earlier in this report.



#### **CORPORATE**

#### **Investor Relations**

The Company continues to enhance its investor relations and marketing efforts to increase investor awareness of the Magnetite Mines' value proposition. Throughout the quarter, the Company gained local and national media coverage and a significant increase in digital reach across all platforms.

During and subsequent to the quarter, the Company participated in the following investor and industry events<sup>7,8</sup>:

- Future Minerals Forum 2024, Riyadh Jan 9-11
- Austmine CEO Leadership Luncheon: 'South Australia's Green Iron Opportunity' presented by CEO Tim Dobson, Adelaide - Feb 21
- Upper Spencer Gulf Major Economic Summit, Port Pirie Feb 27
- SACOME 2024 Annual Resource Sector Dinner, Adelaide Mar 20
- Tribeca Future Facing Commodities Conference, Singapore Mar 26-28
- Australian-Japan Business Co-operation Committee (AJBCC) 'Transitioning Australia-Japan Energy Partnership Towards a Carbon-Neutral 2050', Adelaide – Apr 11-12
- CEDA: 'South Australia's Energy Transition and Electrification Opportunity', Adelaide Apr 17

## **Cash position**

At 31 March 2024, the Company had \$2.85 million in cash and cash equivalents at its disposal. Quarterly exploration and evaluation cash flows reduced from \$1.29 million in the December quarter to \$0.83 million in the March quarter.

#### **EXPLORATION & EVALUATION EXPENDITURE**

The Company continued its exploration activities during the quarter. In addition to general study-related overheads covering staff salaries and site visits, expenditure was related to the following activities:

- General exploration expenditure as related to tenement administration
- Environmental field programs including ecology impact assessment and groundwater studies
- Permitting and approvals related consultation
- Ongoing collaboration and consultation with the Ngadjuri Nation (native title claimant group)

No exploration drilling activities occurred during the quarter. Rehabilitation for previous drilling activities and statutory reporting proceeded in line with SA Department of Mines & Energy requirements.

## Mine production and development expenditure

The Company is currently in the pre-development stage with no active mining production. As a result, no expenditures were recorded in the quarter related to production or development activities.

The Company prioritised engagement with relevant departments of the South Australian Government. This included the Department of Energy & Mining, Department of Infrastructure & Transport, Department of Trade & Investment, Department of Treasury & Finance, and the Department of Environment & Water. This proactive approach seeks to establish a shared vision and set the groundwork for collaborative efforts between State, Federal, and international governments in the areas of energy transition and the establishment of decarbonised iron and steelmaking.



The Company maintained its active role in formal consultation processes with the South Australian Government, including the provision of inputs to the proposed Green Iron and Steel Strategy and the State Infrastructure Strategy.

#### **Tenement holdings**

The following tenements were held by Magnetite Mines Limited (and its controlled entities) as of 31 March 2024:

Tenement/ Project Name	Tenement Number	Interest at Beginning of Quarter	Interest at End of Quarter	Acquired during the Quarter	Disposed of during the Quarter	Joint Venture Partner/Farm -In Party
SOUTH AUSTRALIA						
PUALCO	EL 6126	100%	100%	-	-	-
RED DRAGON	EL 6127	100%	100%	-	-	-
RAZORBACK RIDGE	EL 6353	100%	100%	-	-	-
DRAGON'S TAIL	EL 5902	100%	100%	-	-	-
SISTER'S DAM	EL 6037	100%	100%	-	-	-
BRAEMAR	EL 6788	100%	100%	-	-	-
LIPSON	EL 6745	100%	100%	-	-	-
MANUNDA NORTH	EL 6878	100%	100%	-	-	-
MUSTER DAM	EL 6746	100%	100%	-	-	-
MUTOOROO RIDGE	EL 6877	100%	100%	-	-	-

#### This announcement has been authorised for release to the market by the Board.

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#### **ABOUT MAGNETITE MINES**

Magnetite Mines Ltd is an ASX-listed iron ore company focused on the development of magnetite iron ore resources in the highly-prospective Braemar iron region of South Australia. The Company has a 100% owned Mineral Resource of 6 billion tonnes of iron ore and is developing the Razorback Iron Ore Project, located 240km from Adelaide, to meet accelerating market demand for premium iron ore products created by iron & steel sector decarbonisation, with the potential to produce high-value Direct Reduction (DR) grade concentrates. Razorback is set to become a very long-life iron ore project with expansion optionality in a tier 1 jurisdiction that will produce a superior iron ore product sought by steelmakers globally. For more information visit magnetitemines.com.

#### **DISCLOSURE**

Where the Company references previously disclosed exploration results, Mineral Resource and Ore Reserve estimates and ASX announcements made previously, it confirms that the relevant JORC Table



1 disclosures are included with them and that it is not aware of any new information or data that materially affects the information included in those ASX announcements and in the case of Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the announcements continue to apply and have not materially changed.

#### References

- 1. ASX:MGT Announcement 13/02/2024 Partnership Positions Port Pirie as Future Green Iron Hub
- 2. State Prosperity Project, Government of South Australia <u>State-Prosperity-Project-Document.pdf</u> (stateprosperity.sa.gov.au)
- 3. Media Release 27/02/2024 Government of South Australia, Global call to arms for SA's push to decarbonise iron
- 4. ASX:MGT Announcement 29/02/2024 MGT strategy aligned with SA Gov green iron vision
- 5. Ross Garnaut AC National Press Club Speech 14/02/2024
- 6. ASX:MGT Announcement 21/12/2023 Historic Partnering agreement signed with Ngadjuri Nation
- 7. ASX:MGT Announcement 26/02/2024 Future Facing Commodities Conference Presentation
- 8. ASX:MGT Announcement 21/02/2024 South Australia Green Iron Opportunity Presentation