



QUARTERLY 31 July 2023

### JUNE QUARTERLY ACTIVITIES REPORT

#### **HIGHLIGHTS**

#### **Lodgement of Oakover Mining Lease Application**

- Mining Lease Application (MLA) lodged for flagship Oakover Project with the Department of Mines, Industry Regulation and Safety (DMIRS)
- MLA covers a large area of 3,429.8 ha, including the Sixty Sixer, Jay Eye and Karen Pits, proposed processing plant, tailings storage and waste dump
- MLA submission is another major milestone at Oakover, as Firebird continues to successfully progress its accelerated strategy to produce manganese concentrate and high-purity manganese sulphate (HPMSM)
- MLA submission followed delivery of an 80% uplift in Indicated Mineral Resource at Oakover Project from 58.7Mt to 105.8Mt<sup>1</sup>
  - o 33.9 Mt @ 9.7% Mn Indicated Resource at Karen deposit
  - o 13.1 Mt @ 9.7% Mn Indicated Resource at Jay Eye deposit

#### **Ongoing HPMSM Optimisation test work**

- Continued progress across key activities, which are close to completion:
  - HPMSM production and optimisation work well progressed, with results to feed into HPMSM Scoping Study in H2 CY23
- Commencement of optimisation test work program followed successful production of HPMSM<sup>2</sup> in January 2023, which yielded outstanding results including:
  - o Production of >99.8% purity manganese sulphate monohydrate crystal
  - o Meets battery grade specification
  - o HPMSM crystals contain >32% Mn
- Managing Director Peter Allen and Executive Director and Chief Financial Officer Wei Li completed a trip to China:
  - Trip focused on visiting HPMSM plants, meeting with industry participants and potential offtake partners to gain a deeper understanding of the manganese sulphate processing options in the rapidly growing Chinese market

#### **Ongoing Environmental Surveys**

 Focus during the quarter has been on finalising Flora, Vegetation and Fauna reports following taxonomic identification of species

Suite 20, 513 Hay Street Subiaco WA 6008 ABN: 24 610 035 535

<sup>&</sup>lt;sup>1</sup> see Firebird's ASX announcement dated 23 March 2023 for full details

<sup>&</sup>lt;sup>2</sup> See Firebird's ASX announcement dated 30 January 2023 for full details



**Firebird Metals Limited (ASX: FRB, "Firebird" or "the Company")** is pleased to provide an update on its activities during the June 2023 Quarter.

#### FLAGSHIP OAKOVER PROJECT (100% FRB)

#### **LODGEMENT OF MINING LEASE APPLICATION**

Firebird completed the lodgement of the MLA for the Oakover Project, which is located 85km East of Newman in Western Australia.

Submission of the MLA represented the delivery of another milestone in the development of Oakover, as Firebird continues to execute its accelerated strategy to produce manganese concentrate and high-purity manganese sulphate (HPMSM) and establish Oakover as Western Australia's next major manganese operation.

The MLA covered an area of 3,429.8 hectares, which included the Sixty Sixer, Jay Eye and Karen Pits, as well as the proposed processing plant, tailings storage and waste dump.

Firebird has also had advanced discussions with the Karlka Nyiyaparli Aboriginal Corporation RNTBC (KNAC) in relation to Oakover and have continued negotiations in good faith with the Nyiyaparli People, the Traditional Owners of the land which Firebird tenements are located, to continue progress on an agreement for the use of the land for mining activities.

Firebird will also engage and progress discussions with other key stakeholders in relation to progressing its MLA.

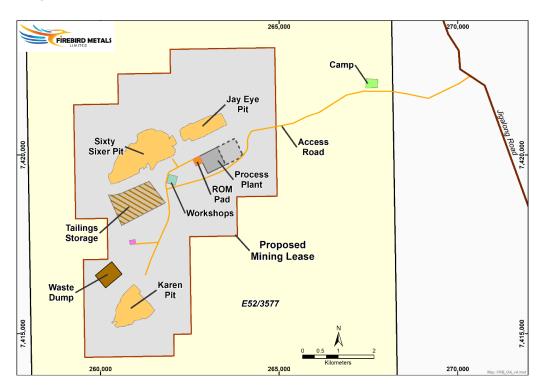


Figure 1: MLA cover area at Oakover



The MLA submission followed a significant increase in the MRE at Oakover in March. On the back of an 82-hole 2,822m infill drilling program at the Jay Eye and Karen deposits, which was completed in December quarter, Firebird delivered an 80% increase in the Indicated Resource from 58.7Mt to 105.8Mt.

Results from the drilling program reaffirmed the impressive and unique geology of Oakover, which is highlighted by shallow near surface, gently dipping, thick mineralisation and also grew the total Oakover Mineral Resource from 172.3Mt to 176.7Mt 3. Importantly, Firebird continues to advance and de-risk the Oakover Project, at a time where the Importance and demand for battery grade manganese sulphate continues to rapidly grow.

Area	Mineral Resource Classification	Tonnes (Mt)	Mn (%)	Fe (%)	SiO2 (%)	Al2O3 (%)	P (%)
Sixty Sixer	Indicated	58.8	10.4	9.2	40.2	10.1	0.10
	Inferred	43.7	9.4	8.5	38.3	9.7	0.11
<b>Sixty Sixer</b>	Sub-Total	102.5	10.0	8.9	39.4	9.9	0.11
Jay Eye	Indicated	13.1	9.7	7.6	34.2	8.3	0.10
	Inferred	22.1	10.1	6.9	31.5	8.8	0.06
Jay-Eye	Sub-Total	35.2	10.0	7.1	32.5	8.6	0.07
Karen	Indicated	33.9	9.7	8.9	39.4	9.9	0.10
	Inferred	5.1	8.2	9.1	42.3	10.5	0.11
Karen	Sub-Total	39.0	9.5	9.0	39.8	10.0	0.10
Oakover	Indicated	105.8	10.1	8.9	39.2	9.8	0.10
Oakover	Inferred	70.9	9.6	8.0	36.5	9.5	0.09
Oakover	Total	176.7	9.9	8.6	38.1	9.7	0.10

Table 1: Updated Oakover Mineral Resource Estimate reported at a cut-off grade of 7% Mn

#### **CONTINUED HPMSM OPTIMISATION WORK**

Several key workstreams commenced in the pursuit of the HPMSM Scoping Study, which is expected in H2 CY23. HPMSM production and optimisation work continued to progress steadily towards completion. The primary objective of this program is to further enhance process design and product quality, with results feeding into the HPMSM Scoping Study.

As part of Scoping Study preparation, Managing Director Peter Allen and CFO Wei Lei completed a successful trip to China in June visiting HPMSM plants, meeting with several industry participants and potential offtake partners to gain a deeper understanding of the manganese sulphate processing options in the rapidly growing Chinese market.

The trip resulted in key findings that will help guide the team in the pursuit of developing HPMSM production to feed into this high-demand and growing market.

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<sup>&</sup>lt;sup>3</sup> See Firebird's ASX announcement dated 23 March 2023 for full details.



#### **ENVIRONMENTAL WORK**

Focus during the quarter has been on finalising Flora, Vegetation and Fauna Reports following taxonomic identification of species.

Considerable effort, including planning and mobilisation arrangements continued during this quarter with a view to conducting further flora surveys.

Phases 2 and 3 of the sub terranean fauna surveys have been completed with survey reports still to be finalised pending taxonomic identifications. Surface and ground water investigations will commence later in the year.

Consultation with the Karlka Nyiyaparli Aboriginal Corporation continued with respect to planning heritage and ethnographic surveys for late 2023 / early 2024. The Jigalong Community continues to support the Project through the provision of much needed accommodation and amenities for environmental consultants and exploration teams. Overall, this quarter has seen advancement of the Project's environmental study and continued positive consultation with key stakeholders.

Preparations for referral of the Project under Part IV of the Environmental Protection Act 1986 and the Environmental Protection and Biodiversity Conservation Act 1999 will commence during Q3 2023.

#### **SAFETY AND COMMUNITY**

Firebird is committed to providing a safe and healthy workplace.

Through the Company's systems, Firebird aims to continuously improve, prevent accidents, communicate effectively, train and hold all employees accountable. It is a Company requirement to identify and monitor ongoing compliance to all state and national legal and other requirements.

Understanding legal and other obligations allows management to ensure that all activities comply with HSE and process safety legal requirements.

We acknowledge that having a competent workforce with appropriate training, skills, and knowledge to undertake their job tasks, is critical to maintaining a safe, healthy, and environmentally friendly workplace.

#### **FINANCIAL**

#### **OVERVIEW**

The Appendix 5B for the quarter ended 30 June 2023 provides an overview of financial activities.

Exploration expenditure for the quarter was \$389,000.

Corporate and other expenditure for the quarter was \$215,000.

The total amount paid to Directors of the Company, their associated and other related parties was \$124,000 comprising salary and Directors fees.

Cash and cash equivalents at quarter end were \$1,303,000.





This announcement has been authorised by the Board of Directors of the Company.

#### For further information contact:

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#### Additional Listing Rule Information

#### Listing Rule 5.3.3 Tenement Schedule

Project	Tenement	Ownership at the Start of quarter	Ownership at end of Quarter
Oakover	E 52/3577	100%	100%
Oakover	E 46/1392	100%	100%
Oakover	E 52/3948	100%	100%
Hill 616	E 52/3633	100%	100%
Raggard Hills	E45/5905	100%	100%
Midgengadge Manganese	E45/5906	100%	100%
Ashburton	E 09/2543	100%	100%
Disraeli	E 46/1389	100%	100%
Wandanya	E 46/1456	100%	100%
Wandanya	E 46/1457	100%	100%

Ownership may relate to either direct or contractual rights.





#### Forward-looking statements

This announcement may contain certain "forward-looking statements". Forward looking statements can generally be identified by the use of forward-looking words such as, "expect", "should", "could", "may", "predict", "plan", "will", "believe", "forecast", "estimate", "target" and other similar expressions. Indications of, and guidance on, future earnings and financial position and performance are also forward-looking statements. Forward-looking statements, opinions and estimates provided in this presentation are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements including projections, guidance on future earnings and estimates are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance

#### JORC Compliance Statement

This announcement contains references to Exploration Results and Mineral Resource Estimates, which have been extracted from previous ASX announcements as referenced. For full details of Exploration Results and Mineral Resource Estimates in this release that have been previously announced, refer to those announcements.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the said announcements, and in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.





#### **About Firebird Metals Limited**

Firebird Metals Limited is a manganese developer focused on its advanced, 100% owned project portfolio, located in the renowned East Pilbara manganese province of Western Australia. The portfolio boasts a total Resource of 234Mt, with exciting exploration and development growth upside.

The Company's flagship Oakover Project holds a Mineral Resource Estimate of 176.7 Mt at 10% Mn, with 105.8 Mt @ in an Indicated category. A Scoping Study completed by Firebird at Oakover highlighted the outstanding long-term potential of the Project as a manganese operation. This potential was further strengthened through the production of >99.8% purity manganese sulphate monohydrate crystal, which confirmed Oakover manganese ore can be processed into battery grade HPMSM.

The Company's other Projects, Hill 616, which contains a 57.5 Mt @ 12.2% Mn Inferred Mineral Resource and shares similar geological traits to Oakover and Wandanya, an exploration focused opportunity, with Direct Shipping Ore potential, provide compelling growth targets for Firebird.

Importance of manganese within EV's, due to its cost reduction abilities without reducing energy density and range, along with growing demand for battery grade manganese sulphate, highlights the critical need for Projects like Oakover to become operational mines. With a limited number of advanced ASX manganese developers, Firebird is in a strong position to develop Oakover and supply a high-quality product into a growing and supply-constrained market.

The Company is committed to generating sustainable long-term value and growth for stakeholders, through the implementation of best practice exploration methods while prioritising the well-being, health and environmental protection of its employees and communities it operates in.

## Appendix 5B

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity					
Firebird Metals Limited					
ABN	Quarter ended ("current quarter")				
24 610 035 535	30 June 2023				

Con	solidated statement of cash flows	Current quarter \$A '000	Year to date (12 months) \$A '000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(24)	(214)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(124)	(456)
	(e) administration and corporate costs	(215)	(781)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	-
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (GST refunds)	59	512
1.9	Net cash from / (used in) operating activities	(304)	(939)

2.	Ca	sh flows from investing activities		
2.1	Pa	yments to acquire or for:		
	(a)	entities	-	-
	(b)	tenements	-	-
	(c)	property, plant and equipment	-	-
	(d)	exploration & evaluation	(389)	(1,526)
	(e)	investments	-	-
	(f)	other non-current assets	-	-

ASX Listing Rules Appendix 5B (17/07/20)

Con	solidated statement of cash flows	Current quarter \$A '000	Year to date (12 months) \$A '000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(389)	(1,526)

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3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	3,500
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(80)	(233)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	(80)	3,267

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,076	501
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(304)	(939)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(389)	(1,526)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(80)	3,267

ASX Listing Rules Appendix 5B (17/07/20) + See chapter 19 of the ASX Listing Rules for defined terms.

Con	solidated statement of cash flows	Current quarter \$A '000	Year to date (12 months) \$A '000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	1,303	1,303

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A '000	Previous quarter \$A '000
5.1	Bank balances	1,303	2,076
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	1,303	2,076

6.	Payments to related parties of the entity and their associates	Current quarter \$A '000			
6.1	Aggregate amount of payments to related parties and their associates included in item 1	124			
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-			
	Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.				

7.	Financing facilities  Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A '000	Amount drawn at quarter end \$A '000	
7.1	Loan facilities	n/a	n/a	
7.2	Credit standby arrangements	n/a	n/a	
7.3	Other (please specify)	n/a	n/a	
7.4	Total financing facilities			
7.5	Unused financing facilities available at qu	uarter end	n/a	
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.			
	n/a			

Estimated cash available for future operating activities	\$A '000
Net cash from / (used in) operating activities (item 1.9)	(304)
(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(389)
Total relevant outgoings (item 8.1 + item 8.2)	(693)
Cash and cash equivalents at quarter end (item 4.6)	1,303
Unused finance facilities available at quarter end (item 7.5)	-
Total available funding (item 8.4 + item 8.5)	1,303
Estimated quarters of funding available (item 8.6 divided by item 8.3)	1.88
	Net cash from / (used in) operating activities (item 1.9) (Payments for exploration & evaluation classified as investing activities) (item 2.1(d)) Total relevant outgoings (item 8.1 + item 8.2) Cash and cash equivalents at quarter end (item 4.6) Unused finance facilities available at quarter end (item 7.5) Total available funding (item 8.4 + item 8.5)  Estimated quarters of funding available (item 8.6 divided by

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: Yes

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: The Company routinely monitors its cash position and projected outgoings to modify outflows to match available cash as necessary. Further, the Company continually evaluates potential financing alternatives for its near to medium term as well as longer term working capital requirements. FRB's Board is confident that the Company will be able to raise sufficient additional cash as required to continue the exploration and development of its projects.

8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
Answe	r: Refer to answer to 8.8.2
Note: wh	ere item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

#### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date:	31 July 2023	
	By the Board	
Authorised by:	horised by:	
•	(Name of body or officer authorising release – see note 4)	

#### Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.