

## STRONG ASSAY RESULTS CONFIRM OAKOVER DEVELOPMENT POTENTIAL

### Highlights

- Excellent infill and extensional assay results from 233-hole, 10,145m RCP infill and extensional drilling campaign completed across the Sixty Sixer and Jay Eye deposits
- Firebird has received 80% of assay results, with remaining results, including the 41-hole (1,656m) drill program completed at the Karen deposit expected in coming weeks
- Significant high-grade intercepts include:
  - **Sixty Sixer (Infill Drilling)**
    - FRB0142 – 5m @ 24.9% Mn from 24m
    - FRB0130 – 5m @ 23.1% Mn from 6m
    - FRB0127 – 3m @ 20.9% Mn from 4m
    - FRB0121 – 5m @ 19.7% Mn from 1m
  - **Sixty Sixer (Extensional Drilling)**
    - FRB0006 – 6m @ 13.6% Mn from 22m
    - FRB0007 – 6m @ 17.6% Mn from 19m
      - Including 2m @ 23.6% Mn from 23m
    - FRB0040 – 4m @ 15.3% Mn from 10m
  - **Jay Eye (Extension Drilling)**
    - FRB0020 – 4m @ 14.6% Mn from 7m
    - FRB0025 – 5m @ 15.3% Mn from 7m
    - FRB0032 – 2m @ 18.8% Mn from 9m
    - FRB0032 – 4m @ 12.3% Mn from 11m
- Results from Sixty Sixer and Jay Eye will be incorporated into an upgrade of the 64Mt Inferred Mineral Resource estimate at 10% Mn (8% Mn cut-off)
- Hill 616 Maiden Inferred Resource of 57.5 Mt @ 12.2% Mn (8% Mn cut-off) also included in Company's overall Resource base of 121 Mt Mn
- Rapid Development Program well advanced with the Oakover Pre-Feasibility Study expected to commence shortly

Firebird Metals Limited (ASX: FRB, "Firebird" or "the Company") is pleased to announce outstanding results from its maiden drill program at Oakover. The Company has received approximately 80% of assay results to date, with the remaining results including drilling completed at the Karen deposit expected in the coming weeks.

Majority of the 233-hole, 10,145m RCP infill and extension program was completed across the Sixty Sixer and Jay Eye deposits, which host the existing 64Mt, 10% Mn Inferred Mineral Resource estimate at Oakover.

Sixty Sixer and Jay Eye have been drilled on an approximate variable 50m by 50m and 100m by 50m grid with drilling on 100m by 200m grid spacing also completed at Jay Eye.

The closer spaced infill drilling grid over Sixty Sixer and Jay Eye will allow an increased confidence level in the JORC Mineral Resource classification. The drilling was complemented by downhole geophysics for density and differential GPS for collar survey.

Commenting on the significant results from the maiden drill program at Oakover, Firebird Managing Director Mr Peter Allen said: *"We are very pleased with the results delivered to date. We developed this program to be extensive and provide a platform to upgrade our current Resource at Oakover. The results so far provide us with confidence in delivering on this objective."*

*"As a manganese developer, we are fortunate to have an excellent project which provides us with near-term production opportunities along with significant exploration upside. We have a detailed two-stage strategy in place and are well advanced on stage one work, with our Rapid Development Program generating excellent results across all various workstreams."*

*"We are still awaiting around 20% of assays from Sixty Sixer and Jay Eye, along with results from the 41-hole, 1,656m program completed at our Karen deposit in the coming weeks. Once the drill program has been finalised our focus will quickly turn to delivering an upgraded Mineral Resource Estimate at Oakover and commencing the critical Pre-Feasibility Study in the coming weeks."*

The primary objective of the maiden drill program was to deliver an updated Mineral Resource Estimate at Oakover and following receipt of all results, Firebird will turn its attention to delivering a robust Resource upgrade, which is expected to be completed during the March quarter. The intention of the updated Mineral Resource estimate will be to delineate and domain the higher grade near surface supergene manganese mineralisation.

Finalisation of the drill program completes another key Rapid Development Program workstream, as Firebird continues to progress stage one of its two-stage development strategy. Firebird commenced the Rapid Development Program in June 2021 to evaluate the potential at Oakover for a low-capital, fast-start up through a direct shipping ore and simple beneficiation process of supergene material to generate early-stage cash flow through sales into steel industries.

Importantly, results from various Rapid Development Workstreams completed over the past six months continue to highlight the significant opportunity of Oakover to become a critical supplier of high-quality manganese ore and sulphate. The Company is making great strides towards completing the Rapid Development Program, with the Oakover Pre-Feasibility Study due to commence in the coming weeks.

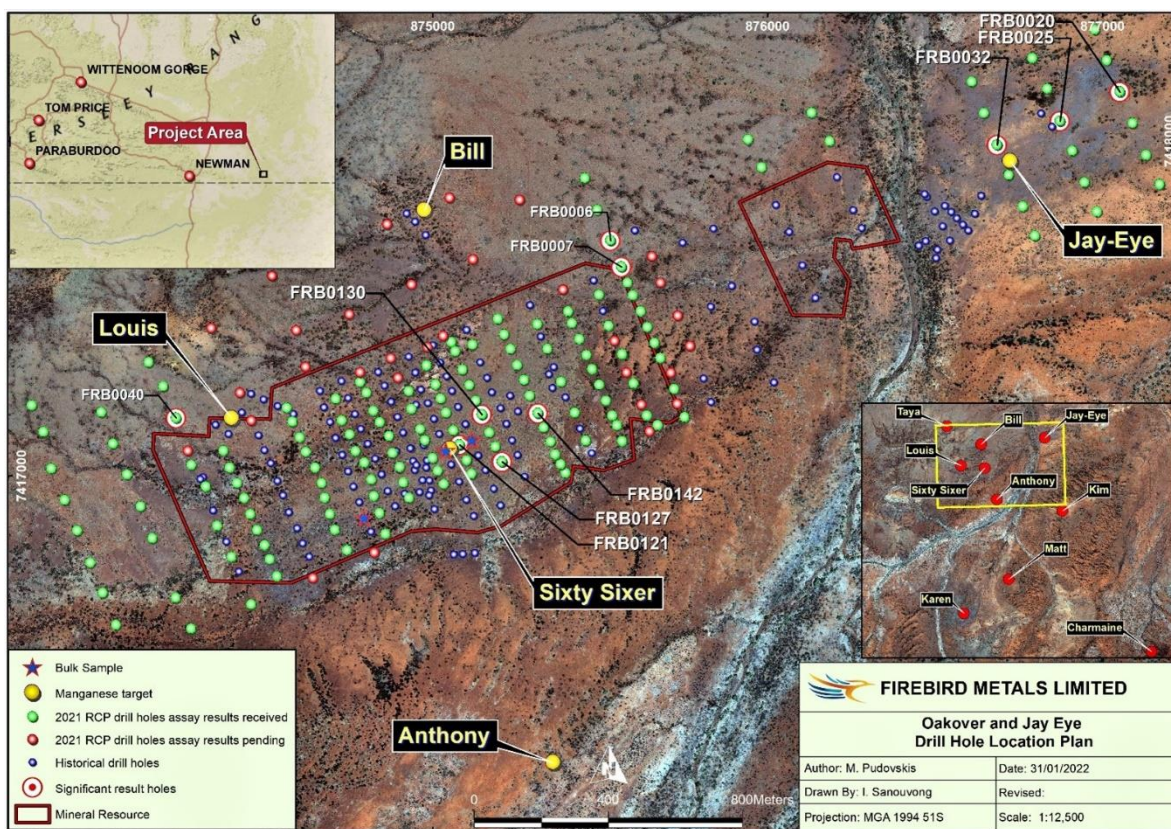
A drill hole summary table included as Table 1. Full collar details for each drill hole completed on Sixty Sixer and Jay Eye are included as Table 2 and Table 3.

Drill hole location plans showing select drill holes with significant manganese intercepts are included in Figure 1.

Deposit	Drill Holes	Drill method	No. Drill Holes	Metres
Sixty Sixer	FRB0001 - FRB0016, FRB0035 - 0168, FRB0211 - 233	RCP	174	7,753
Jay Eye	FRB0017 - 0034	RCP	18	736
Karen	FRB0169 - 210	RCP	41	1,656
			233	10,145

**Table 1: Oakover 2021 drill hole summary table**

Significant close to surface higher grade supergene shale hosted manganiferous mineralisation drill intercepts are shown in Table 4 for Sixty Sixer and Table 5 for Jay Eye.



**Figure 1: Sixty Sixer and Jay Eye drill hole location plan with significant intercept drill holes**

ENDS-



For enquiries regarding this release please contact:

Mr Peter Allen

Managing Director

Ph +61 8 6245 9818

Email: [admin@firebirdmetals.com.au](mailto:admin@firebirdmetals.com.au)

Michael Weir / Cameron Gilenko

Citadel-MAGNUS

0402 347 032 / 0466 984 953

#### About Firebird Metals Limited

Firebird Metals Limited (ASX:FRB) is a West Australian company focused on the exploration and development of its 100% owned project portfolio, comprising of four highly prospective manganese projects in the renowned East Pilbara Manganese province of Western Australia:

- Oakover Manganese Project
- Hill 616 Manganese Project
- Disraeli Manganese Project
- Raggard Hills Manganese Project

The Company's primary focus is on the development of the Oakover and Hill 616 Manganese Projects, which are located approximately 85 km east and southeast of Newman and together cover approximately 375 km<sup>2</sup>. These two projects give the company a significant total Inferred Mineral Resource Estimate of 121 million tonnes:

- Oakover Project - 64 Mt @ 10% Mn
- Hill 616 Project - 57.5 Mt @ 12.2% Mn

The total Inferred Mineral Resources Estimate of 121 million tonnes provides a solid technical foundation for further development as the company targets production of manganese for two key markets:

- a) manganese sulphate for use in the growing lithium ion battery market that is used in electric vehicles, where manganese is a critical battery raw material; and
- b) manganese concentrates for consumption in the global steel industries, where manganese plays an important and un-substitutable role in the strength and hardness of steel

Firebird is focused on creating and growing sustainable value for our stakeholders through the application of best practices in exploration and our commitment to protecting the health and wellbeing of our employees, the environment and the communities where we work.

## Competent Persons Statement

The information in this report that relates to Exploration Results and Mineral Resources for Hill 616 is based on information compiled by Mr Mark Pudovskis. Mr Pudovskis is a full-time employee of CSA Global Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy.

Mr Pudovskis has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr Pudovskis consents to the disclosure of the information in this report in the form and context in which it appears.

The information in this Report that relates to Mineral Resources for Oakover of the Company is based on, and fairly represents, information and supporting documentation that has been reviewed and prepared by Robert Wason, who is a Senior Consultant - Geology at Mining Insights Pty Ltd and is a member of AusIMM.

Mr. Wason has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which they are undertaking to qualify as an Expert and Competent Person as defined under the VALMIN Code and in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code 2012"). Mr. Wason consents to the inclusion in this announcement of the matters based on the information in the form and context in which they appear.

Drill Hole	Hole depth (m)	Easting	Northing	RL	Survey Type	Survey date	Survey company	Start Date	Finish Date	Assay results
FRB0001	40	262063	7420033	512	DGPS	28/10/2021	McGregor Surveys	5/08/2021	8/08/2021	Received
FRB0002	40	262029	7420116	512	DGPS	28/10/2021	McGregor Surveys	9/08/2021	9/08/2021	Received
FRB0003	40	261983	7420207	513	DGPS	28/10/2021	McGregor Surveys	9/08/2021	9/08/2021	Received
FRB0004	40	261737	7420733	516	DGPS	28/10/2021	McGregor Surveys	9/08/2021	10/08/2021	Received
FRB0005	42	261777	7420640	515	DGPS	28/10/2021	McGregor Surveys	10/08/2021	10/08/2021	Received
FRB0006	54	261820	7420551	515	DGPS	28/10/2021	McGregor Surveys	10/08/2021	11/08/2021	Received
FRB0007	48	261856	7420474	513	DGPS	28/10/2021	McGregor Surveys	11/08/2021	11/08/2021	Received
FRB0008	40	261876	7420427	513	DGPS	28/10/2021	McGregor Surveys	11/08/2021	12/08/2021	Received
FRB0009	40	261894	7420390	513	DGPS	28/10/2021	McGregor Surveys	12/08/2021	12/08/2021	Received

FRB0010	42	261920	7420344	513	DGPS	28/10/2021	McGregor Surveys	12/08/2021	12/08/2021	Received
FRB0011	40	261941	7420297	513	DGPS	28/10/2021	McGregor Surveys	12/08/2021	12/08/2021	Received
FRB0012	40	261964	7420251	513	DGPS	28/10/2021	McGregor Surveys	12/08/2021	13/08/2021	Received
FRB0013	42	262461	7420874	509	DGPS	28/10/2021	McGregor Surveys	13/08/2021	13/08/2021	Received
FRB0014	40	262404	7420956	509	DGPS	28/10/2021	McGregor Surveys	13/08/2021	13/08/2021	Received
FRB0015	40	262262	7420788	511	DGPS	28/10/2021	McGregor Surveys	13/08/2021	13/08/2021	Received
FRB0016	40	262218	7420869	512	DGPS	28/10/2021	McGregor Surveys	13/08/2021	13/08/2021	Received
FRB0035	40	260795	7419421	521	DGPS	28/10/2021	McGregor Surveys	17/08/2021	17/08/2021	Received
FRB0036	40	260730	7419561	522	DGPS	28/10/2021	McGregor Surveys	17/08/2021	17/08/2021	Received
FRB0037	40	260684	7419652	523	DGPS	28/10/2021	McGregor Surveys	19/08/2021	19/08/2021	Received
FRB0038	40	260644	7419768	524	DGPS	28/10/2021	McGregor Surveys	19/08/2021	19/08/2021	Received
FRB0039	40	260599	7419829	525	DGPS	28/10/2021	McGregor Surveys	19/08/2021	19/08/2021	Received
FRB0040	54	260547	7419968	528	DGPS	28/10/2021	McGregor Surveys	19/08/2021	19/08/2021	Received
FRB0041	54	260506	7420061	530	DGPS	28/10/2021	McGregor Surveys	19/08/2021	20/08/2021	Received
FRB0042	54	260459	7420131	531	DGPS	28/10/2021	McGregor Surveys	20/08/2021	20/08/2021	Received
FRB0043	40	260430	7419258	523	DGPS	28/10/2021	McGregor Surveys	20/08/2021	20/08/2021	Received
FRB0044	40	260394	7419344	523	DGPS	28/10/2021	McGregor Surveys	20/08/2021	20/08/2021	Received
FRB0045	40	260350	7419438	524	DGPS	28/10/2021	McGregor Surveys	21/08/2021	21/08/2021	Received
FRB0046	40	260310	7419526	525	DGPS	28/10/2021	McGregor Surveys	21/08/2021	21/08/2021	Received
FRB0047	40	260267	7419620	527	DGPS	28/10/2021	McGregor Surveys	21/08/2021	21/08/2021	Received
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FRB0049	48	260183	7419802	530	DGPS	28/10/2021	McGregor Surveys	21/08/2021	21/08/2021	Received
FRB0050	54	260154	7419910	532	DGPS	28/10/2021	McGregor Surveys	22/08/2021	22/08/2021	Received
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FRB0059	48.2	259738	7419819	537	DGPS	28/10/2021	McGregor Surveys	24/08/2021	24/08/2021	Pending
FRB0060	42	259372	7419648	536	DGPS	28/10/2021	McGregor Surveys	25/08/2021	25/08/2021	Pending
FRB0061	42	259416	7419559	534	DGPS	28/10/2021	McGregor Surveys	25/08/2021	25/08/2021	Pending
FRB0062	40	259457	7419468	532	DGPS	28/10/2021	McGregor Surveys	25/08/2021	25/08/2021	Pending
FRB0063	403.3	259498	7419378	530	DGPS	28/10/2021	McGregor Surveys	26/08/2021	26/08/2021	Received
FRB0064	40	259542	7419289	529	DGPS	28/10/2021	McGregor Surveys	26/08/2021	26/08/2021	Received
FRB0065	40	259582	7419195	528	DGPS	28/10/2021	McGregor Surveys	26/08/2021	26/08/2021	Received
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FRB0107	40	261233	7419804	521	DGPS	28/10/2021	McGregor Surveys	8/09/2021	8/09/2021	Received
FRB0108	40	261198	7419890	520	DGPS	28/10/2021	McGregor Surveys	8/09/2021	8/09/2021	Received
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FRB0116	48	261276	7419965	519	DGPS	28/10/2021	McGregor Surveys	9/09/2021	9/09/2021	Received
FRB0117	48	261248	7420024	518	DGPS	28/10/2021	McGregor Surveys	9/09/2021	9/09/2021	Received
FRB0118	48	261238	7420076	518	DGPS	28/10/2021	McGregor Surveys	10/09/2021	10/09/2021	Received
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FRB0123	40	261351	7420017	519	DGPS	28/10/2021	McGregor Surveys	10/09/2021	10/09/2021	Received

FRB0124	40	261334	7420059	518	DGPS	28/10/2021	McGregor Surveys	10/09/2021	10/09/2021	Received
FRB0125	48	261317	7420100	518	DGPS	28/10/2021	McGregor Surveys	10/09/2021	10/09/2021	Received
FRB0126	48	261288	7420156	516	DGPS	28/10/2021	McGregor Surveys	12/09/2021	12/09/2021	Received
FRB0127	40	261524	7419879	518	DGPS	28/10/2021	McGregor Surveys	12/09/2021	12/09/2021	Received
FRB0128	40	261503	7419922	518	DGPS	28/10/2021	McGregor Surveys	12/09/2021	12/09/2021	Received
FRB0129	40	261483	7419963	519	DGPS	28/10/2021	McGregor Surveys	12/09/2021	12/09/2021	Received
FRB0130	40	261459	7420017	519	DGPS	28/10/2021	McGregor Surveys	12/09/2021	12/09/2021	Received
FRB0131	40	261438	7420056	519	DGPS	28/10/2021	McGregor Surveys	13/09/2021	13/09/2021	Received
FRB0132	40	261418	7420103	518	DGPS	28/10/2021	McGregor Surveys	13/09/2021	13/09/2021	Received
FRB0133	40	261395	7420148	518	DGPS	28/10/2021	McGregor Surveys	13/09/2021	13/09/2021	Received
FRB0134	40	261422	7420223	517	DGPS	28/10/2021	McGregor Surveys	14/09/2021	14/09/2021	Received
FRB0135	40	261359	7420228	516	DGPS	28/10/2021	McGregor Surveys	14/09/2021	14/09/2021	Received
FRB0136	40	261371	7420201	517	DGPS	28/10/2021	McGregor Surveys	14/09/2021	14/09/2021	Received
FRB0137	40	261716	7419852	515	DGPS	28/10/2021	McGregor Surveys	14/09/2021	14/09/2021	Received
FRB0138	40	261700	7419878	515	DGPS	28/10/2021	McGregor Surveys	14/09/2021	14/09/2021	Received
FRB0139	40	261682	7419907	515	DGPS	28/10/2021	McGregor Surveys	14/09/2021	14/09/2021	Received
FRB0140	40	261667	7419944	515	DGPS	28/10/2021	McGregor Surveys	14/09/2021	14/09/2021	Received
FRB0141	40	261645	7419985	515	DGPS	28/10/2021	McGregor Surveys	15/09/2021	15/09/2021	Received
FRB0142	40	261625	7420028	516	DGPS	28/10/2021	McGregor Surveys	15/09/2021	15/09/2021	Received
FRB0143	40	261599	7420078	517	DGPS	28/10/2021	McGregor Surveys	15/09/2021	15/09/2021	Received
FRB0144	40	261580	7420124	517	DGPS	28/10/2021	McGregor Surveys	15/09/2021	15/09/2021	Received
FRB0145	40	261558	7420167	517	DGPS	28/10/2021	McGregor Surveys	15/09/2021	16/09/2021	Received
FRB0146	40	261536	7420215	517	DGPS	28/10/2021	McGregor Surveys	16/09/2021	16/09/2021	Received
FRB0147	40	261515	7420257	516	DGPS	28/10/2021	McGregor Surveys	16/09/2021	16/09/2021	Received

FRB0148	40	261494	7420303	516	DGPS	28/10/2021	McGregor Surveys	16/09/2021	16/09/2021	Received
FRB0149	40	261613	7420292	515	DGPS	28/10/2021	McGregor Surveys	16/09/2021	16/09/2021	Received
FRB0150	40	261646	7420220	515	DGPS	28/10/2021	McGregor Surveys	16/09/2021	16/09/2021	Received
FRB0151	40	261691	7420123	515	DGPS	28/10/2021	McGregor Surveys	17/09/2021	17/09/2021	Received
FRB0152	40	261736	7420033	514	DGPS	28/10/2021	McGregor Surveys	17/09/2021	17/09/2021	Received
FRB0153	40	261771	7419951	514	DGPS	28/10/2021	McGregor Surveys	17/09/2021	17/09/2021	Received
FRB0154	40	261880	7419954	513	DGPS	28/10/2021	McGregor Surveys	17/09/2021	17/09/2021	Received
FRB0155	40	261848	7420029	514	DGPS	28/10/2021	McGregor Surveys	17/09/2021	17/09/2021	Received
FRB0156	40	261827	7420073	514	DGPS	28/10/2021	McGregor Surveys	17/09/2021	17/09/2021	Received
FRB0157	40	261805	7420119	514	DGPS	28/10/2021	McGregor Surveys	18/09/2021	18/09/2021	Received
FRB0158	40	261782	7420165	514	DGPS	28/10/2021	McGregor Surveys	18/09/2021	18/09/2021	Received
FRB0159	40	261763	7420207	514	DGPS	28/10/2021	McGregor Surveys	18/09/2021	18/09/2021	Received
FRB0160	40	261740	7420253	514	DGPS	28/10/2021	McGregor Surveys	18/09/2021	18/09/2021	Received
FRB0161	40	261716	7420300	514	DGPS	28/10/2021	McGregor Surveys	18/09/2021	18/09/2021	Received
FRB0162	40	261703	7420334	514	DGPS	28/10/2021	McGregor Surveys	18/09/2021	18/09/2021	Received
FRB0163	40	261863	7420000	514	DGPS	28/10/2021	McGregor Surveys	18/09/2021	18/09/2021	Received
FRB0164	40	261793	7420387	514	DGPS	28/10/2021	McGregor Surveys	19/09/2021	19/09/2021	Received
FRB0165	40	261826	7420296	514	DGPS	28/10/2021	McGregor Surveys	19/09/2021	19/09/2021	Received
FRB0166	40	261869	7420213	513	DGPS	28/10/2021	McGregor Surveys	19/09/2021	19/09/2021	Received
FRB0167	40	261907	7420128	513	DGPS	28/10/2021	McGregor Surveys	19/09/2021	19/09/2021	Received
FRB0168	40	261950	7420033	513	DGPS	28/10/2021	McGregor Surveys	19/09/2021	20/09/2021	Received
FRB0169	40	261984	7420006	512	DGPS	28/10/2021	McGregor Surveys	20/09/2021	20/09/2021	Received
FRB0211	48	262040	7420072	512	DGPS	28/10/2021	McGregor Surveys	1/10/2021	1/10/2021	Pending
FRB0212	42	262017	7420164	512	DGPS	28/10/2021	McGregor Surveys	1/10/2021	1/10/2021	Pending

FRB0213	48	261686	7420399	514	DGPS	28/10/2021	McGregor Surveys	1/10/2021	1/10/2021	Pending
FRB0214	78	261545	7420661	517	DGPS	28/10/2021	McGregor Surveys	2/10/2021	2/10/2021	Pending
FRB0215	78	261336	7420658	518	DGPS	28/10/2021	McGregor Surveys	2/10/2021	2/10/2021	Pending
FRB0216	72	261413	7420477	516	DGPS	28/10/2021	McGregor Surveys	2/10/2021	2/10/2021	Pending
FRB0217	40	261334	7420246	516	DGPS	28/10/2021	McGregor Surveys	2/10/2021	2/10/2021	Pending
FRB0218	40	261289	7420210	517	DGPS	28/10/2021	McGregor Surveys	2/10/2021	2/10/2021	Pending
FRB0219	48	261153	7420571	518	DGPS	28/10/2021	McGregor Surveys	3/10/2021	3/10/2021	Pending
FRB0220	48	261234	7420395	517	DGPS	28/10/2021	McGregor Surveys	3/10/2021	3/10/2021	Pending
FRB0221	40	261181	7420173	518	DGPS	28/10/2021	McGregor Surveys	3/10/2021	3/10/2021	Pending
FRB0222	60	261052	7420298	519	DGPS	28/10/2021	McGregor Surveys	3/10/2021	3/10/2021	Pending
FRB0223	42	260969	7420478	521	DGPS	28/10/2021	McGregor Surveys	3/10/2021	3/10/2021	Pending
FRB0224	55	260817	7420403	525	DGPS	28/10/2021	McGregor Surveys	3/10/2021	3/10/2021	Pending
FRB0225	54	260895	7420244	522	DGPS	28/10/2021	McGregor Surveys	4/10/2021	4/10/2021	Pending
FRB0226	60	260642	7420240	531	DGPS	28/10/2021	McGregor Surveys	4/10/2021	4/10/2021	Pending
FRB0227	40	260736	7420051	525	DGPS	28/10/2021	McGregor Surveys	4/10/2021	4/10/2021	Pending
FRB0228	40	260773	7419970	524	DGPS	28/10/2021	McGregor Surveys	4/10/2021	4/10/2021	Pending
FRB0229	42	260976	7419507	520	DGPS	28/10/2021	McGregor Surveys	4/10/2021	4/10/2021	Pending
FRB0230	40	261156	7419591	518	DGPS	28/10/2021	McGregor Surveys	4/10/2021	4/10/2021	Pending
FRB0231	48	260928	7420136	521	DGPS	28/10/2021	McGregor Surveys	5/10/2021	5/10/2021	Pending
FRB0232	48	261091	7420127	519	DGPS	28/10/2021	McGregor Surveys	5/10/2021	5/10/2021	Pending
FRB0233	40	261205	7420115	518	DGPS	28/10/2021	McGregor Surveys	5/10/2021	5/10/2021	Pending

**Table 2: Oakover Sixty Sixer 2021 drill hole collars (coordinates in MGA94 51S)**



Drill Hole	Hole depth (m)	Easting	Northing	RL	Survey Type	Survey date	Survey company	Start Date	Finish Date	Assay results
FRB0017	40	263450	7420787	510	DGPS	28/10/2021	McGregor Surveys	13/08/2021	13/08/2021	Received
FRB0018	40.1	263406	7420872	510	DGPS	28/10/2021	McGregor Surveys	14/08/2021	14/08/2021	Received
FRB0019	40	263361	7420965	510	DGPS	28/10/2021	McGregor Surveys	14/08/2021	14/08/2021	Received
FRB0020	40	263320	7421058	509	DGPS	28/10/2021	McGregor Surveys	14/08/2021	14/08/2021	Received
FRB0021	40	263277	7421150	509	DGPS	28/10/2021	McGregor Surveys	14/08/2021	14/08/2021	Received
FRB0022	40	263237	7421240	509	DGPS	28/10/2021	McGregor Surveys	14/08/2021	14/08/2021	Received
FRB0023	48	263055	7421146	509	DGPS	28/10/2021	McGregor Surveys	14/08/2021	14/08/2021	Received
FRB0024	40	263103	7421058	510	DGPS	28/10/2021	McGregor Surveys	15/08/2021	15/08/2021	Received
FRB0025	40	263145	7420964	510	DGPS	28/10/2021	McGregor Surveys	15/08/2021	15/08/2021	Received
FRB0026	40	263186	7420876	510	DGPS	28/10/2021	McGregor Surveys	16/08/2021	16/08/2021	Received
FRB0027	40	263226	7420783	510	DGPS	28/10/2021	McGregor Surveys	16/08/2021	16/08/2021	Received
FRB0028	40	263266	7420697	510	DGPS	28/10/2021	McGregor Surveys	16/08/2021	16/08/2021	Received
FRB0029	40	263084	7420617	510	DGPS	28/10/2021	McGregor Surveys	16/08/2021	16/08/2021	Received
FRB0030	40	263045	7420704	510	DGPS	28/10/2021	McGregor Surveys	17/08/2021	17/08/2021	Received
FRB0031	40	262999	7420795	510	DGPS	28/10/2021	McGregor Surveys	17/08/2021	17/08/2021	Received
FRB0032	40	262960	7420884	510	DGPS	28/10/2021	McGregor Surveys	17/08/2021	17/08/2021	Received
FRB0033	40	262918	7420977	509	DGPS	28/10/2021	McGregor Surveys	17/08/2021	17/08/2021	Received
FRB0034	48	262878	7421069	509	DGPS	28/10/2021	McGregor Surveys	17/08/2021	17/08/2021	Received

**Table 3: Jay Eye 2021 drill hole collars (coordinates in MGA94 51S)**

Drill hole	Depth from (m)	Depth to (m)	Mn %	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %
FRB0006	22	28	13.62	9.36	40.41	10.91	0.062	10.41
FRB0006	30	33	13.03	8.18	45.10	11.48	0.127	8.01
FRB0007	19	25	17.56	9.68	36.40	11.03	0.077	10.71
FRB0008	16	18	13.58	16.66	19.80	19.07	0.020	14.98
FRB0010	20	28	11.54	8.57	46.87	12.49	0.045	8.50
FRB0035	11	20	12.26	10.66	38.32	9.28	0.135	11.96
FRB0036	8	20	12.45	10.53	39.68	9.51	0.118	10.60
FRB0040	10	14	15.30	10.81	39.83	9.91	0.150	8.65
FRB0075	14	17	15.92	9.19	39.85	9.62	0.121	9.94
FRB0077	0	2	16.28	11.75	38.76	8.94	0.062	9.44
FRB0077	2	6	12.91	9.87	42.00	9.84	0.072	9.75
FRB0078	5	10	14.20	11.74	40.06	9.48	0.128	9.08
FRB0080	18	21	12.49	11.38	40.52	9.60	0.125	9.51
FRB0080	21	22	24.71	11.15	27.96	6.76	0.135	10.28
FRB0086	22	26	14.40	11.83	40.01	9.97	0.109	7.82
FRB0086	26	29	19.92	11.60	33.50	8.47	0.102	8.80
FRB0087	22	26	14.31	11.15	38.57	9.67	0.141	9.63
FRB0088	12	17	14.70	9.55	42.87	10.26	0.066	8.21
FRB0090	0	3	15.11	12.34	38.98	8.99	0.046	9.94
FRB0091	1	5	15.01	9.13	44.90	9.05	0.066	8.35
FRB0096	0	3	18.49	11.35	36.69	8.37	0.048	9.71
FRB0096	5	8	15.16	10.33	42.03	9.29	0.091	8.93
FRB0097	12	26	13.41	10.77	39.79	9.54	0.130	10.04
FRB0105	27	36	16.24	10.95	37.69	9.57	0.121	9.17
FRB0107	5	7	21.52	10.19	33.64	8.08	0.096	10.27
FRB0107	22	24	22.47	8.93	33.25	8.67	0.114	9.67
FRB0109	10	13	15.66	14.92	34.82	9.35	0.056	9.77
FRB0111	17	24	14.37	10.25	39.13	9.22	0.120	10.36
FRB0112	2	4	21.79	10.12	34.18	7.71	0.114	9.82
FRB0112	7	12	16.62	8.01	42.70	10.37	0.109	8.55
FRB0114	4	6	21.47	15.61	18.11	12.40	0.036	13.44
FRB0115	9	15	15.63	11.97	38.09	9.87	0.110	9.43
FRB0115	26	30	15.58	10.36	39.41	9.91	0.126	8.82
FRB0116	8	12	18.11	10.95	35.09	10.45	0.067	10.21
FRB0119	3	7	20.07	9.73	36.09	8.52	0.073	9.92
FRB0121	1	6	19.74	19.24	19.61	9.87	0.110	12.51
FRB0122	11	13	18.31	11.10	33.77	10.15	0.061	10.72
FRB0122	30	35	17.33	10.42	36.45	9.30	0.120	9.89
FRB0125	29	32	17.75	12.32	35.30	8.72	0.132	8.71
FRB0127	4	7	20.93	11.97	27.49	11.42	0.027	11.26
FRB0128	3	8	18.34	16.04	23.97	11.96	0.030	12.26
FRB0129	3	11	22.39	15.64	18.75	10.65	0.039	12.90
FRB0130	6	11	23.08	12.67	23.84	10.01	0.028	11.74
FRB0133	24	31	17.37	11.72	36.51	8.78	0.125	8.82
FRB0141	17	32	15.94	11.64	38.72	8.80	0.163	9.20
FRB0142	7	12	16.85	14.36	24.67	12.47	0.031	14.43

FRB0142	24	29	24.89	9.92	29.63	7.10	0.114	10.43
FRB0148	28	35	17.10	11.13	37.00	9.16	0.116	8.99
FRB0150	9	14	18.47	14.41	21.28	13.67	0.028	14.22
FRB0157	21	27	16.78	11.83	37.41	8.98	0.100	9.48
FRB0159	10	14	19.93	11.28	30.43	9.98	0.046	11.28
FRB0160	10	14	21.69	10.82	29.02	9.36	0.030	11.90
FRB0160	14	21	17.06	12.04	35.28	9.72	0.106	10.12
FRB0161	10	18	18.79	15.67	23.16	12.24	0.065	11.88
FRB0162	12	21	18.63	13.96	25.81	12.49	0.071	11.69

**Table 4: Sixty Sixer significant drill intercepts (No Mn cut-off)**

Drill hole	Depth from (m)	Depth to (m)	Mn %	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %
FRB0171	10	12	12.59	8.95	45.30	10.61	0.120	7.92
FRB0172	3	12	12.05	9.71	44.50	10.63	0.138	7.87
FRB0173	20	27	10.83	8.67	44.60	10.88	0.132	9.27
FRB0174	5	13	12.54	9.08	46.40	11.58	0.072	6.83
FRB0174	9	13	14.83	8.67	44.10	11.02	0.054	7.29
FRB0174	18	22	15.38	9.73	40.53	10.66	0.087	7.99
FRB0175	0	7	13.54	9.35	45.12	9.81	0.053	7.98
FRB0175	13	21	10.55	7.93	45.38	11.15	0.124	8.89
FRB0176	0	1	15.95	7.16	45.42	9.60	0.024	8.82
FRB0176	2	5	11.56	7.70	50.66	10.04	0.029	7.52
FRB0176	6	9	11.00	7.52	49.52	11.21	0.036	7.53
FRB0177	0	7	10.33	8.99	47.75	10.52	0.090	8.30
FRB0178	5	8	11.43	10.39	43.82	10.55	0.090	8.74
FRB0179	6	8	11.94	10.72	45.60	10.26	0.125	6.77
FRB0179	8	11	18.45	10.18	37.86	8.84	0.106	7.64
FRB0179	23	26	11.28	9.81	41.39	10.26	0.141	13.52
FRB0180	0	1	15.30	14.72	34.95	9.51	0.069	9.29
FRB0180	25	29	10.42	9.09	32.45	8.22	0.103	19.20
FRB0181	14	29	11.26	10.56	34.23	8.66	0.126	17.66

**Table 5: Jay Eye significant drill intercepts (No Mn cut-off)**

## Appendix 1: JORC Table 1

### Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	Samples used in reporting the Exploration Results were obtained through reverse circulation percussion (RCP) drill methods. Drilling was completed by K-Drill Pty Ltd between August to October 2021 using a Schramm 685 RC drilling rig. A total of 233 RCP drillholes for 10,145 m were completed on the tenement.  The Competent Person considers that the sample techniques adopted were appropriate for the style of mineralisation and for reporting an Exploration Result.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	RCP samples were collected on 1 m intervals using a cyclone cone splitter.
	<i>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 (e.g. "RC 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 (e.g., submarine nodules) may warrant disclosure of detailed information.</i>	Samples received at the Nagrom the mineral processor (Nagrom) laboratory in Kelmscott Western Australia were weighed, crushed and pulverised to 80% passing 75 microns  Assaying was completed using the industry standard XRF analysis.
<b>Drilling techniques</b>	<i>Drill type (e.g. core, RC, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).</i>	RCP drilling (5 ½ " hammer) was used to collect samples. The drilling was vertical which is appropriate given the relatively shallow dip of the geology.  The Competent Person considers that the drilling techniques adopted were appropriate for the style of mineralisation and for reporting an Exploration Result.
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Drill sample recoveries were recorded qualitatively with no material evidence of poor sample recoveries.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Continual visual observations were made by the site geologists. Any sampling issues were addressed and rectified immediately.
	<i>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.</i>	There was no reported evidence of sample bias due to loss of sample.
<b>Logging</b>	<i>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.</i>	All RCP drillhole logging was qualitative with lithology, texture, grain size and colour recorded. The Competent Person considers logging appropriate for the reporting of the Mineral Resource.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	No RCP photos are present although the Competent Person did visit the drill site in October 2021 and observed the nature of the logging and the presence of manganese mineralisation.



Criteria	JORC Code explanation	Commentary
	<i>The total length and percentage of the relevant intersections logged.</i>	All 10,145m of 1m length RCP samples used in the Exploration Results have logging records. .
<b>Subsampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	There are no core samples supporting the Exploration Results
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	RCP samples were collected on 1 m intervals using a cyclone splitter.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Samples received at the laboratory were weighed, dried at 105°C, coarse crushed to topsize of 6.3mm, riffle split and pulverised to 3 80% passing 75 The pulp was then submitted for XRF analysis (Nagrom XRF103 code) and LOI1100 (CGA003 code).
	<i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i>	Firebird inserted appropriate blanks (approximate 1 in 30) CRM material (1 in 20), and collected duplicate samples (1 in 20).
	<i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i>	Field duplicate samples Were collected from the cone splitter approximately every 20 samples. The site geologist observed appropriate sample collection practices.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are considered appropriate to the grain size of the material being sampled.
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<p>Selected samples were sent to Nagrom in Kelmscott analysis (Fusion/XRF) of analytes Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub>, P<sub>2</sub>O<sub>5</sub>, S, MgO, CaO, K<sub>2</sub>O, Na<sub>2</sub>O, V<sub>2</sub>O<sub>5</sub>, Co<sub>3</sub>O<sub>4</sub>, Cr, Ni, Cu, Pb, Zn, As, BaO, SrO, ZrO<sub>2</sub>.</p> <p>Presently, approximately 19 Karen drill holes and 34 Sixty Sixer drill holes have yet to receive assay results from Nagrom. All Jay Eye assay results have been received.</p> <p>The analytical techniques are industry standard for manganese.</p>
	<i>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.</i>	A downhole geophysics programme was completed by ABIM Solutions Pty Ltd who captured short and long spaced density, caliper, magnetic susceptibility and natural gamma although the data was not used or considered relevant for the reporting of Exploration Results.
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	<p>Firebird Metals Limited (Firebird) collected and submitted for analysis 221 GMN-04 CRMs, 220 OREAS173 CRMs, 276 blanks and 552 splitter duplicate samples for quality control checks during the analytical process.</p> <p>In addition, Nagrom completed internal laboratory certified reference material (CRM), blank and pulp duplicates.</p> <p>Results have yet to be compiled and reported to establish the presence of any issues in accuracy, although for the reporting of Exploration Results, the Competent Person does not consider this material.</p>

Criteria	JORC Code explanation	Commentary
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	The sampling and assaying have not been verified by an independent third party.
	<i>The use of twinned holes.</i>	There has been no twin drilling which is normal practice for the style of mineralisation.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	CSA Global has randomly checked the laboratory raw data against the database assays and found no issues.
	<i>Discuss any adjustment to assay data.</i>	P assays has been converted by the Competent Person from the assayed P <sub>2</sub> O <sub>5</sub> .
<b>Location of data points</b>	<i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	All RCP drill collars were surveyed in the field initially by a handheld global positioning system (GPS) and upon completion of the programme by McGregor Surveys using a differential GPS.  The topography is flat. Downhole deviation was not completed but given the relatively flat nature of the stratigraphy and the shallow drillholes any deviation is not considered material.  The Competent Person considers a high level of confidence can be placed in the location of data points.
	<i>Specification of the grid system used.</i>	The project utilised the GDA94 Zone 51 coordinate system.
	<i>Quality and adequacy of topographic control.</i>	Topography was not relevant for the reporting of Exploration Results.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Sixty Sixer and Jay Eye have been drilled on an approximate variable 50m by 50m and 100m by 50m grid (Sixty Sixer) and 100m by 200m on Jay Eye. Karen has been drilled on an approximate 200m by 50m grid.
	<i>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.</i>	The Competent Person considers the drill spacing appropriate for reporting an Exploration Result.
	<i>Whether sample compositing has been applied.</i>	No sample compositing was applied for the Exploration Result since all the sample intervals were 1 m in length.
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The deposit is a relatively shallow and gently dipping sequence of supergene mineralised manganiferous shale. There is no evidence of major structures disrupting the continuity of the mineralisation.  The Competent Person considers the vertical drilling and spacing as appropriate for reporting a Mineral Resource.
	<i>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.</i>	The relationship between the drilling orientation and the orientation of key mineralised structures is unlikely to have introduced a sampling bias.

Criteria	JORC Code explanation	Commentary
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	The Competent Person considers the chain of custody and security measure taken from the field capture to delivery to Nagrom appropriate.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No independent field audits or reviews have been undertaken.  The Competent Person completed a field audit / review in October 2021 and considered the level of exploration completed appropriate for reporting an Exploration Result.

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>	The Oakover Manganese Project consists of one exploration licence (E52/3577) in the East Pilbara Shire of Western Australia, located approximately 100km east of Newman and 15km north west of the Jigalong Community.  The licence is by Firebird Metals Limited.  A tenement and drillhole location plan is included as  <i>Figure 1: Sixty Sixer and Jaye Eye drill hole location plan with significant intercept drill holes</i>  and <b>Error! Reference source not found..</b>
	<i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	The licence covers 54 blocks, was applied for on 13 September 2017, granted on 11 March 2019 with an expiry date of 10 March 2024. The Competent Person can confirm that according to Department of Mines, Industry Regulation and Safety (DMIRS) Mineral Titles Online that all rents and rates have been paid and that the tenement is in good standing.  The Competent Person has not verified any potential social or environmental impediments to progressing the Project.
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Errawarra Pty Ltd (Errawarra), operating as Hannans Reward Limited, completed the most meaningful exploration relevant to the Sixty Sixer, Jay Eye and Karen deposits. Exploration comprised regional exploration including air core, RCP and diamond core drilling, mapping and geophysics was completed between 2008 and 2011 when the tenement was held as E52/1939 between 17 May 2007 and 16 May 2017. Work specific to the Exploration Results areas on Sixty Sixer, Jay Eye and Karen comprised RCP drilling completed in 2010 and 2011:

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Sixty Sixer 55 drill holes for 4,177m on a variable 200m by 100m to 100m by 50m spaced grid.</li> <li>Jay Eye: 20 drill holes for 772m (clustered variable 50m by 50m grid in south west)</li> <li>Karen 13 drill holes for 777m (clustered variable 50m by 25m to 200m by 25m spaced grid)</li> <li>10 PQ3 diamond core holes (OKDM0001 to OKDM0010 completed in 2011, designed to collect representative samples across the Mineral Resource for metallurgical test work.               <ul style="list-style-type: none"> <li>Sixty Sixer: 5 drill holes for 201m</li> <li>Jay Eye: 2 drill holes for 53.8m</li> <li>Karen: 3 drill holes for 82.6m</li> </ul> </li> </ul> <p>This core was not metallurgically analysed until Firebird completed preliminary test work on half core samples in 2021 (quarter core analysed by XRF).</p> <p>A Mineral Resource estimate completed in August 2012 by H &amp; S Consultants Pty Ltd (H&amp;SC) who estimated an Inferred Mineral Resource (using an 8% Mn cut-off) of 64.1 Mt grading 11.5% Mn, 10.1% Fe, 10.5% Al<sub>2</sub>O<sub>3</sub> and 41.3% SiO<sub>2</sub>.</p> <p>A scoping study of the Oakover project was completed in 2015 by GR Engineering Services Limited, on behalf of Brumby Resources. The study was to estimate capital and operating costs associated with the design and construction of a 1 million tonnes per annum (Mtpa) hydrometallurgical manganese processing facility and related infrastructure and services.</p> <p><b>Firebird (2021 to present)</b></p> <p>RCP drilling as described in this ASX release.</p> <p>Preliminary metallurgical proof-of-concept ore sorting trials and preliminary heavy liquid test work on two metallurgical composite batches (FRB 01 and FRB 02) derived from historical diamond (PQ) core</p> <p>Bulk-sampling of near surface, higher grade massive manganese supergene material at the Karen and Sixty Sixer deposits (approximately 30 tonnes).</p>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	The manganese mineralisation occurs as multiple seams or bands of varying thickness within a highly weathered shale (Balfour Formation). Significant zones of manganese were still being intersected at Sixty Sixer, Jay Eye and Karen.



Criteria	JORC Code explanation	Commentary
		<p>The mineralisation was generally found to be shallow (mostly within 20 m of the surface), gently dipping and laterally extensive across the target area. The lateritic profile and subsequent manganese mineralisation show the zonation within the regolith and distribution of manganese mineralisation. The higher-grade (or nearer-surface supergene/lateritic) manganese material is generally located within the upper portion of the regolith profile at shallow depths (0–15 m).</p> <p>The Competent Person is of the opinion that the understanding of the Project's geology is detailed and well established.</p>
Drillhole information	<p>A summary of all information material to the understanding of the Exploration Results including a tabulation of the following information for all Material drillholes:</p> <ul style="list-style-type: none"> <li>• Easting and northing of the drillhole collar</li> <li>• Elevation or RL (Reduced Level – Elevation above sea level in metres) of the drillhole collar</li> <li>• Dip and azimuth of the hole</li> <li>• Downhole length and interception depth</li> <li>• Hole length.</li> </ul>	<p>The collar summary of RC drillholes completed over the Sixty Sixer, Jay Eye and Karen deposits which were used for the Exploration Results is presented in <b>Error! Reference source not found., Error! Reference source not found.</b> and <b>Error! Reference source not found.</b> of this ASX release.</p> <p>A drillhole location plan for Sixty Sixer / Jaye Eye and Karen is included as</p> <p>Figure 1: Sixty Sixer and Jaye Eye drill hole location plan with significant intercept drill holes</p> <p>and <b>Error! Reference source not found.</b> respectively.</p>
	<p>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</p>	<p>No drill hole information has been excluded.</p>
	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</p>	<p>No cut-off grades are being applied for the Exploration Results presented in <b>Error! Reference source not found., Error! Reference source not found., Error! Reference source not found.</b> for Sixty Sixer, Jay Eye and Karen respectively</p>
Data aggregation methods	<p>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.</p>	<p>The aggregation of higher grade results and lengths was done subjectively by the Competent Person based on a minimum average grade of greater than 12% Mn</p>
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<p>No metal equivalents are being reported</p>
	<p>These relationships are particularly important in the reporting of Exploration Results.</p>	
	<p>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</p>	<p>The manganiferous horizons are relatively flat lying. Drilling has intersected the manganese generally at a high angle.</p>

Criteria	JORC Code explanation	Commentary
<b>Relationship between mineralisation widths and intercept lengths</b>	<i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. "downhole length, true width not known").</i>	
<b>Diagrams</b>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.</i>	<p>A project, tenement and drillhole location plan are included as</p> <p>Figure 1: Sixty Sixer and Jaye Eye drill hole location plan with significant intercept drill holes</p> <p>and Error! Reference source not found..</p>
<b>Balanced reporting</b>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	<p>A full listing of over 10,000 drill assay suites is not practical.</p> <p>Only select and representative drill hole intercepts above approximately 12% Mn are being reported. All other, including those above 8% Mn (Mineral Resource estimate cut-off grade) are not being reported as Exploration Results but will be used for future Mineral Resource estimates.</p>
<b>Other substantive exploration data</b>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	Other exploration work completed is described above in "Exploration done by other parties".
<b>Further work</b>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	<p>The Competent Person recommends an updated Mineral Resource estimate for Sixty Sixer, Jay Eye and Karen. This work has commenced.</p> <p>Other work includes ongoing metallurgical bulk sample test work and a mine pre-feasibility study.</p>
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Diagrams showing the location of the drilled holes and tenement have been included in this report.