

EXCELLENT ASSAY RESULTS FROM KAREN CONFIRM SIGNIFICANT POTENTIAL TO GROW OAKOVER RESOURCE

Highlights

- Further strong assay results from 41-hole, 1,656M extensional drilling campaign completed at the Karen deposit.
- Significant intercepts include:
 - FRB0174 – 4m @ 14.8% Mn from 9m
 - FRB0174 – 4m @ 15.4% Mn from 18m
 - FRB0176 – 1m @ 15.9% Mn from surface
 - FRB0179 – 3m @ 18.4% Mn from 8m
 - FRB0200 – 2m @ 12.5% Mn from 8m
 - FRB0201 – 4m @ 12.7% Mn from 3m
 - FRB0203 – 1m @ 21.7% Mn from 7m
 - FRB0203 – 4m @ 12.7% Mn from 11m
 - FRB0209 – 10m @ 11.64% Mn from 9m
 - FRB0209 – 5m @ 15.0% Mn from 31m
 - FRB0209 – 2m @ 14.5% Mn from 37m
 - FRB0210 – 1m @ 15.2% Mn from surface
 - FRB0210 – 5m @ 11.5% Mn from 6m
 - FRB0210 – 7m @ 11.1% Mn from 18m
- Results indicate potential presence of multiple stratigraphic horizons, most evident in drill holes FRB0174, FRB0209 and FRB0210
- Significant intercepts demonstrate an approximate 600m by 400m lateral distribution, with variable thickness of 2m to 15m in an interpreted gently dipping northwest stratigraphy
- Results will be incorporated into estimating both a maiden Mineral Resource for Karen and an upgrade of the Oakover Inferred Mineral Resource estimate of 64Mt at 10% Mn (8% Mn cut-off)

Firebird Metals Limited (ASX: FRB, “Firebird” or “the Company”) is pleased to announce further promising results from its maiden drill program at Oakover, with the Company having received all assays from its 41-hole, 1,656m drill program completed at the Karen deposit in October last year.

The Company is still awaiting the last set of assay results (~10%) from drilling completed at Sixty Sixer, which are expected in the coming weeks.

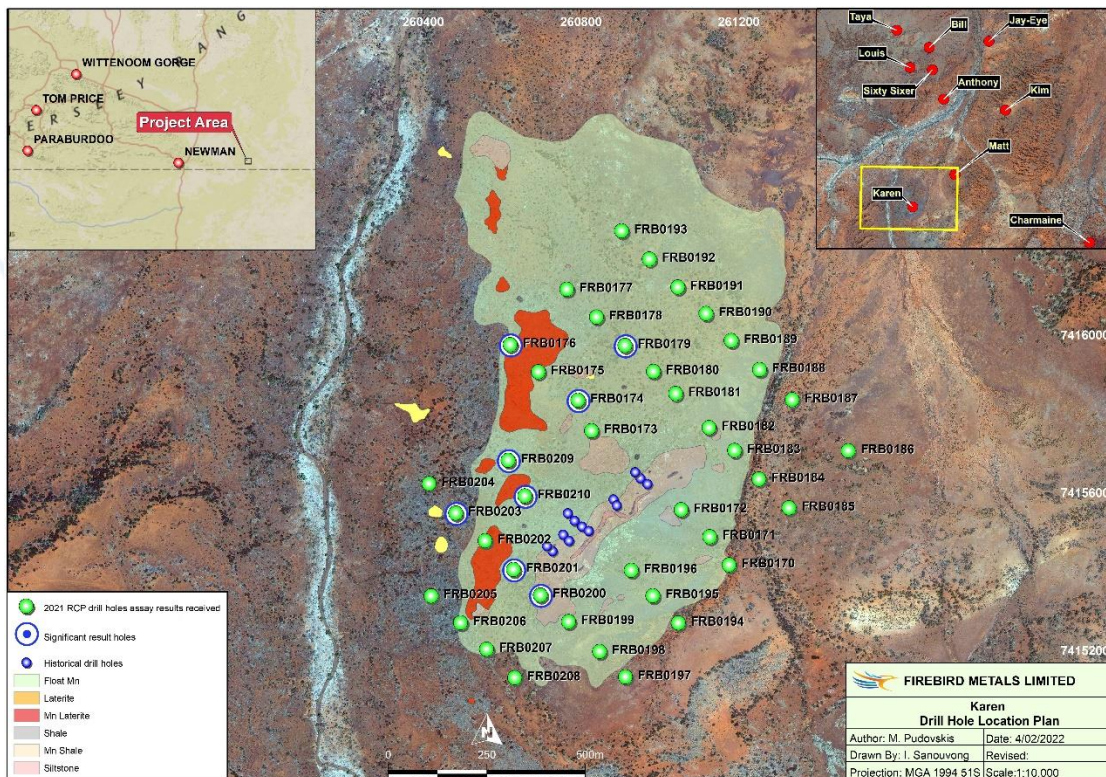
Drilling completed at Karen was a key part of the broader 233-hole, 10,145 RCP infill and extensional drill campaign completed at Oakover, which currently hosts an Inferred Mineral Resource estimate of 64Mt at 10% Mn.

Commenting on the significant results from the Karen deposit, Firebird Managing Director Mr Peter Allen said: “We are very excited by results received from our maiden drill program at Karen, which reinforces our strong view that Karen has massive potential to expand on our current Mineral Resource Estimate at Oakover.

“Oakover is a very exciting project, with enormous growth and development potential and importantly, provides the Company with a near-term production pathway. 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”

Strong results from Karen have demonstrated near surface manganiferous mineralisation extending south-west, north-west and north-east from historical drill holes. Drilling was completed on an approximate 200m by 100m grid.

Significant intercepts from the program, as shown in figure 1 and table 2, demonstrate an approximate 600m by 400m lateral distribution, with variable thickness of 2m to 15m in an interpreted gently dipping northwest stratigraphy. Results also indicate potential presence of multiple stratigraphic horizons, most evident in drill holes FRB0174, FRB0209 and FRB0210.



Looking ahead, Firebird has already commenced work on completing a geological model with a focus of on delineating the higher grade manganiferous horizons and estimating a maiden Mineral Resource for Karen.

Karen is located ~4km from the Sixty Sixer deposit and bolsters the development opportunity at Oakover. Firebird has a detailed two-phase strategy in place, with phase one being progressed by the Rapid Development Program, focused on assessing 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. All results received from key workstreams of the Rapid Development Program have provided

the Company with confidence in the strategy, with the critical Oakover Pre-Feasibility Study expected to commence in the coming weeks.

Full collar details for each drill hole completed at Karen are included as tableError! Reference source not found. 1 with below map at figure 2 demonstrating the proximity of the Karen Prospect to the existing Mineral resource Estimate at Sixty Sixer.

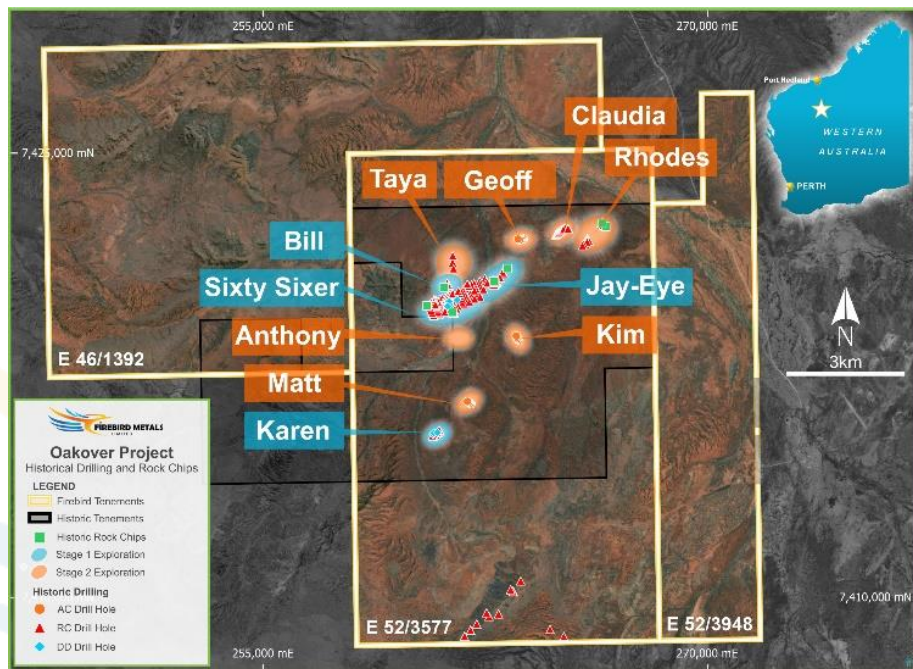


Figure 2 : Location of Karen Deposit, approx. 4 Km to the South of Sixty Sixer

ENDS-

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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 km². 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 Minerals Resources for Hill 616 project 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 project 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
FRB0170	48	261178	7415414	524	DGPS	28/10/2021	McGregor Surveys	21/09/2021	21/09/2021	Received
FRB0171	40	261129	7415486	525	DGPS	28/10/2021	McGregor Surveys	21/09/2021	21/09/2021	Received
FRB0172	40	261056	7415554	527	DGPS	28/10/2021	McGregor Surveys	21/09/2021	21/09/2021	Received
FRB0173	40	260829	7415754	528	DGPS	28/10/2021	McGregor Surveys	21/09/2021	21/09/2021	Received
FRB0174	40	260794	7415832	527	DGPS	28/10/2021	McGregor Surveys	21/09/2021	21/09/2021	Received
FRB0175	40	260694	7415904	527	DGPS	28/10/2021	McGregor Surveys	22/09/2021	22/09/2021	Received
FRB0176	40	260623	7415972	527	DGPS	28/10/2021	McGregor Surveys	22/09/2021	22/09/2021	Received
FRB0177	40	260766	7416113	523	DGPS	28/10/2021	McGregor Surveys	23/09/2021	23/09/2021	Received
FRB0178	40	260842	7416042	524	DGPS	28/10/2021	McGregor Surveys	23/09/2021	23/09/2021	Received
FRB0179	40	260914	7415971	524	DGPS	28/10/2021	McGregor Surveys	23/09/2021	23/09/2021	Received
FRB0180	40	260986	7415904	524	DGPS	28/10/2021	McGregor Surveys	24/09/2021	24/09/2021	Received
FRB0181	40	261042	7415849	524	DGPS	28/10/2021	McGregor Surveys	24/09/2021	24/09/2021	Received
FRB0182	40	261127	7415762	524	DGPS	28/10/2021	McGregor Surveys	24/09/2021	24/09/2021	Received
FRB0183	40	261192	7415704	523	DGPS	28/10/2021	McGregor Surveys	24/09/2021	24/09/2021	Received
FRB0184	40	261253	7415631	523	DGPS	28/10/2021	McGregor Surveys	24/09/2021	24/09/2021	Received
FRB0185	40	261330	7415559	524	DGPS	28/10/2021	McGregor Surveys	25/09/2021	25/09/2021	Received
FRB0186	40	261480	7415703	523	DGPS	28/10/2021	McGregor Surveys	25/09/2021	25/09/2021	Received
FRB0187	40	261338	7415833	522	DGPS	28/10/2021	McGregor Surveys	26/09/2021	26/09/2021	Received
FRB0188	40	261255	7415909	522	DGPS	28/10/2021	McGregor Surveys	26/09/2021	26/09/2021	Received

FRB0189	40	261183	7415983	522	DGPS	28/10/2021	McGregor Surveys	26/09/2021	26/09/2021	Received
FRB0190	40	261119	7416051	522	DGPS	28/10/2021	McGregor Surveys	26/09/2021	26/09/2021	Received
FRB0191	40	261048	7416118	522	DGPS	28/10/2021	McGregor Surveys	27/09/2021	27/09/2021	Received
FRB0192	40	260975	7416189	522	DGPS	28/10/2021	McGregor Surveys	28/09/2021	28/09/2021	Received
FRB0193	40	260905	7416261	521	DGPS	28/10/2021	McGregor Surveys	28/09/2021	28/09/2021	Received
FRB0194	40	261049	7415267	525	DGPS	28/10/2021	McGregor Surveys	28/09/2021	28/09/2021	Received
FRB0195	40	260984	7415336	526	DGPS	28/10/2021	McGregor Surveys	28/09/2021	28/09/2021	Received
FRB0196	40	260930	7415401	527	DGPS	28/10/2021	McGregor Surveys	28/09/2021	28/09/2021	Received
FRB0197	40	260915	7415130	526	DGPS	28/10/2021	McGregor Surveys	28/09/2021	28/09/2021	Received
FRB0198	40	260849	7415195	527	DGPS	28/10/2021	McGregor Surveys	29/09/2021	29/09/2021	Received
FRB0199	40	260771	7415271	528	DGPS	28/10/2021	McGregor Surveys	29/09/2021	29/09/2021	Received
FRB0200	40	260699	7415338	530	DGPS	28/10/2021	McGregor Surveys	29/09/2021	29/09/2021	Received
FRB0201	40	260631	7415402	531	DGPS	28/10/2021	McGregor Surveys	29/09/2021	29/09/2021	Received
FRB0202	40	260559	7415475	530	DGPS	28/10/2021	McGregor Surveys	29/09/2021	29/09/2021	Received
FRB0203	40	260484	7415546	528	DGPS	28/10/2021	McGregor Surveys	29/09/2021	29/09/2021	Received
FRB0204	40	260417	7415620	526	DGPS	28/10/2021	McGregor Surveys	30/09/2021	30/09/2021	Received
FRB0205	40	260422	7415336	529	DGPS	28/10/2021	McGregor Surveys	30/09/2021	30/09/2021	Received
FRB0206	40	260497	7415268	530	DGPS	28/10/2021	McGregor Surveys	30/09/2021	30/09/2021	Received
FRB0207	40	260563	7415201	528	DGPS	28/10/2021	McGregor Surveys	30/09/2021	30/09/2021	Received
FRB0208	40	260634	7415128	528	DGPS	28/10/2021	McGregor Surveys	30/09/2021	30/09/2021	Received
FRB0209	48	260618	7415679	529	DGPS	28/10/2021	McGregor Surveys	30/09/2021	30/09/2021	Received
FRB0210	40	260660	7415589	531	DGPS	28/10/2021	McGregor Surveys	30/09/2021	30/09/2021	Received

Table 1: Karen 2021 drill hole collars (coordinates in MGA94 51S)

Drill hole	Depth from (m)	Depth to (m)	Mn %	Fe %	SiO ₂ %	Al ₂ O ₃ %	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
FRB0182	13	24	12.56	12.45	32.51	7.54	0.120	18.02
FRB0183	8	13	13.34	12.06	36.96	9.34	0.128	11.39
FRB0200	8	10	12.51	7.50	46.54	11.46	0.096	7.86
FRB0201	3	7	12.71	9.15	45.18	10.56	0.113	8.32
FRB0203	7	8	21.72	8.08	36.46	7.57	0.022	10.07
FRB0203	11	15	12.68	8.08	47.87	10.81	0.071	7.55
FRB0209	9	19	11.64	9.14	45.55	10.90	0.037	8.88
FRB0209	31	36	14.96	9.18	41.12	10.48	0.134	8.74
FRB0209	37	39	14.45	12.70	38.26	10.12	0.179	8.08
FRB0210	0	1	15.20	18.95	26.57	11.41	0.034	10.25
FRB0210	6	11	11.55	9.68	46.49	10.62	0.064	8.17
FRB0210	18	25	11.13	10.21	44.93	10.67	0.197	8.05

Table 2: Karen significant drill intercepts (No Mn cut-off)

Appendix 1: JORC Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<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>	<p>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.</p> <p>The Competent Person considers that the sample techniques adopted were appropriate for the style of mineralisation and for reporting an Exploration Result.</p>
	<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>	<p>Samples received at the Nagrom the mineral processor (Nagrom) laboratory in Kelmscott Wester Australia were weighed, crushed and pulverised to 80% passing 75 microns</p> <p>Assaying was completed using the industry standard XRF analysis.</p>
Drilling techniques	<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>	<p>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.</p> <p>The Competent Person considers that the drilling techniques adopted were appropriate for the style of mineralisation and for reporting an Exploration Result.</p>
Drill sample recovery	<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.
Logging	<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. .
Subsampling techniques and sample preparation	<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.
Quality of assay data and laboratory tests	<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, SiO₂, Al₂O₃, TiO₂, P₂O₅, S, MgO, CaO, K₂O, Na₂O, V₂O₅, Co₃O₄, Cr, Ni, Cu, Pb, Zn, As, BaO, SrO, ZrO₂.</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
Verification of sampling and assaying	<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 ₂ O ₅ .
Location of data points	<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.
Data spacing and distribution	<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.
Orientation of data in relation to geological structure	<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
Sample security	<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.
Audits or reviews	<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
Mineral tenement and land tenure status	<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 Error! Reference source not found. and Figure 1.
	<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.
Exploration done by other parties	<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: <ul style="list-style-type: none"> • Sixty Sixer 55 drill holes for 4,177m on a variable 200m by 100m to 100m by 50m spaced grid. • Jay Eye: 20 drill holes for 772m (clustered variable 50m by 50m grid in south west) • Karen 13 drill holes for 777m (clustered variable 50m by 25m to 200m by 25m spaced grid)

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		<ul style="list-style-type: none"> • 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"> ○ Sixty Sixer: 5 drill holes for 201m ○ Jay Eye: 2 drill holes for 53.8m ○ Karen: 3 drill holes for 82.6m <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 & S Consultants Pty Ltd (H&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% Al₂O₃ and 41.3% SiO₂.</p> <p>A scoping scoping 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>Firebird (2021 to present)</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>
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>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.</p> <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>

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		The Competent Person is of the opinion that the understanding of the Project's geology is detailed and well established.
Drillhole information	<p><i>A summary of all information material to the understanding of the Exploration Results including a tabulation of the following information for all Material drillholes:</i></p> <ul style="list-style-type: none"> • Easting and northing of the drillhole collar • Elevation or RL (Reduced Level – Elevation above sea level in metres) of the drillhole collar • Dip and azimuth of the hole • Downhole length and interception depth • Hole length. 	<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 Error! Reference source not found., Error! Reference source not found. and Error! Reference source not found. of this ASX release.</p> <p>A drillhole location plan for Sixty Sixer / Jaye Eye and Karen is included as Error! Reference source not found. and Figure 1 respectively.</p>
	<p><i>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.</i></p>	No drill hole information has been excluded.
Data aggregation methods	<p><i>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.</i></p>	No cut-off grades are being applied for the Exploration Results presented in Error! Reference source not found., Error! Reference source not found., Error! Reference source not found. for Sixty Sixer, Jay Eye and Karen respectively
	<p><i>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.</i></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><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	No metal equivalents are being reported
Relationship between mineralisation widths and intercept lengths	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p>	
	<p><i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i></p>	The manganiferous horizons are relatively flat lying. Drilling has intersected the manganese generally at a high angle.
	<p><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></p>	
Diagrams	<p><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 Error! Reference source not found. and Figure 1.
Balanced reporting	<p><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.

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		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.
Other substantive exploration data	<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”.
Further work	<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>	The Competent Person recommends an updated Mineral Resource estimate for Sixty Sixer, Jay Eye and Karen. This work has commenced. Other work includes ongoing metallurgical bulk sample test work and a mine pre-feasibility study.
	<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.