Cautionary Statement

The China-based Manganese Sulphate Scoping Study, the subject of this announcement, is a preliminary technical and economic study of the potential viability of the processing of part of the manganese concentrate to be produced from the Oakover Manganese Project at a facility to be established in China. The Scoping Study outcomes, production targets and forecast financial information referred to in this release are based on low accuracy level technical and economic assessments that are insufficient to support estimation of Ore resources.

The Scoping Study has been completed to a level of accuracy of +/- 35% in line with a scoping level study accuracy. While each of the JORC modifying factors was considered and applied, there is no certainty of eventual conversion to Ore Reserves or that the production target itself will be realised. Further exploration and evaluation work and appropriate studies are required before the Company will be in a position to estimate any Ore Reserves or to provide any assurance of an economic development case. Accordingly, given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study. Given that the results of the Scoping Study are subject to the qualifications above (including assumptions as to accuracy), any results reported in this release should be considered as approximates and subject to variances having regard for the assumptions referred to in this release. The Company has reasonable grounds for disclosing a Production Target, given that approximately 99% of the Life-of-Mine (LOM) Production Target is in the Indicated Mineral Resource category, and 1% is in the Inferred Mineral Resource category. The production target stated in this announcement is based on Firebird's current expectations of future results or events and should not be relied upon by investors when making investment decisions. Further evaluation work and studies are required to establish sufficient confidence that the production target will be met. Firebird confirms that the financial viability of the Oakover Manganese Project is not dependent on the inclusion of Inferred Resources in the Scoping Study.

The Company considers all the material assumptions in this Study (which are set out in pages 6 to 22 of this announcement) to be based on reasonable grounds. These include assumptions about the availability of funding. While Firebird considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved. To achieve the range of potential outcomes indicated in the Scoping Study, funding of in the order of US$82.3 million (excluding working capital and finance costs) will likely be required. Investors should note that there is no certainty that Firebird will be able to raise that amount of funding when needed. However, the Company has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes that it has a "reasonable basis" to expect it will be able to fund the development of the Project. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Firebird's existing shares. It is also possible that Firebird could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce Firebird's proportionate ownership of the project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

The Mineral Resources underpinning the production target in the Scoping Study have been prepared by a competent person in accordance with the requirements of the JORC Code (2012). The Competent Person's Statement is found on page 5 of this announcement.

For full details of the Mineral Resources estimate, please refer to Firebird's ASX release dated 10th March 2022 and 23 March 2023. Firebird has confirmed that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that ASX release continue to apply and have not materially changed.

ASX ANNOUNCEMENT

21 November 2023

EXCELLENT RESULTS GENERATED FROM CHINA-BASED BATTERY GRADE MNSO4 SCOPING STUDY

HIGHLIGHTS

- Strong results from the China-based Manganese Sulphate Scoping Study ('SS' or 'Study') **affirm Firebird's LMFP Battery Strategy, validating establishment of a China-based Manganese Sulphate Plant**
- Key results include:
  - Chinese circular industry provides **localised key reagents and inputs that drive a low OPEX of approximately US$659/mt for production of battery grade manganese sulphate**
  - **Total CAPEX of approximately US$82.3M,** including land and a 30% contingency
  - **~US$331M NPV at a discount rate of 8%**, before tax[1]
  - **Payback period in less than 2 years**
  - Average **~EBITDA of US$48.3M**, before tax[1]
  - **IRR of 47%** before tax[1]
  - **Plant capacity of 72,000 mt/a of battery grade manganese sulphate** (MnSO4) equivalent, producing:
    - 50,000mt/a Battery Grade Manganese Sulphate (MnSO4); and
    - 10,000mt/a Manganese Tetra Oxide (Mn_3O_4)
  - **Key reagents, sulfuric acid, steam and customers all located in close proximity to the potential Plant location**
  - **Potential location to have capacity for future expansion through replication of Plant**

- **Following results of the Study, Firebird will promptly advance towards the Pre-Feasibility ('PFS') Stage for battery grade manganese sulphate production in China, while continuing to progress development of the Oakover Project**
- **The Company, through a recently announced Placement, is fully funded to complete the China-based Battery Grade Manganese Sulphate PFS and ongoing environmental surveys, metallurgical test work and Concentrate PFS studies for Oakover**
- 2023 is seen by industry participants as the beginning of a new era for Li-ion batteries propelled by the commercialisation of LMFP batteries, having the steepest forecast growth of of any battery cathode active material formulation in the medium to long-term
- The rise of LMFP is imminent as LFP battery capacity is reaching its theoretical energy density capacity and more importantly, LMFP fits the strategies of end users as it is cost effective, safe and provides a long range
- **The Study results place Firebird in a strong position to execute on its vision of becoming a global leader in the manganese industry, combining mining and downstream processing with a dedication to the advancement of the EV battery sector**

[1] All financial results are on a pre-tax basis, Chinese company tax is 25%, Firebird has ongoing and incomplete discussions with appropriate Chinese government agencies around potential tax incentives, the result of these discussions are expected to be announced through PFS.

Firebird Metals Limited (**ASX: FRB**, "**Firebird**" or "**the Company**") is pleased to announce the successful completion of an in-house Scoping Study ("SS" or "Study") for production of battery grade manganese sulphate in China utilising concentrate from its flagship Oakover Project, located 85km East of Newman, Western Australia.

Completion of the Study follows the conclusion of a Manganese Concentrate Production Scoping Study to mine and produce manganese concentrate at Oakover, which confirmed the Project as a long-life manganese operation (see ASX Announcement 30/08/2023).

Results from the Concentrate Scoping Study followed an 80% uplift in the Oakover Indicated Mineral Resource Estimate (MRE), which now stands at 105.8 Mt @ 10.1% Mn, and combined with an Inferred MRE of 70.9Mt, the total Oakover MRE now stands at 176.7Mt @ 9.9% Mn (all using a 7% Mn cut-off).[2]

The results generated from the in-house China-based Battery Grade Manganese Sulphate Scoping Study validate Firebird's LMFP battery strategy to produce battery grade manganese sulphate in China, with a strong projected NPV of approximately US$331M, Total CAPEX of approximately US$82.3M, an impressive IRR of 47% and a payback period of less than two years.

Importantly, results from the Study have continued to build upon the strong platform for Firebird to successfully deliver on its vision to become a global leader in the manganese industry, combining mining and downstream processing with a dedication to the advancement of the Li-ion battery sector.

Firebird Managing Director Mr Peter Allen commented: *"We are extremely pleased with the results from our China-based Battery Grade Manganese Sulphate Scoping Study, which reinforces the next phase of our growth strategy and demonstrates the true potential of Oakover.*

"*The past few months have been an exciting and transformative period for the Company as we embark on becoming a near-term producer of battery grade manganese sulphate. The delivery of this Study and the results generated marks the completion of another key milestone as we work through a busy 12 months ahead.*

"Importantly, we continue to build on the strong platform we have created at Oakover and our vision to become a global leader in the manganese industry, combining mining and downstream processing with a dedication to the advancement of the EV battery sector. We are developing and pushing ahead with Oakover at the right time, as the use of manganese in EV batteries continues to grow rapidly.

"LMFP batteries are forecast for the largest growth of all the manganese-based batteries, due to the fact it meets the key criteria of car manufacturers - cheap, safe and delivers good range. 2023 is seen by many industry participants as the beginning of the new era of Li-ion batteries by commercialising LMFP and we are well-positioned to benefit greatly from this demand."

[2] For full details refer ASX announcement dated 10/3/2022 and ASX announcement dated 23/3/2023

Forward-looking Statements

This announcement contains forward-looking statements which are identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects', or 'intends' and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this announcement, are considered reasonable. Such forward-looking statements are not a guarantee of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the Directors and the management. The Directors cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. The Directors have no intention to update or revise forward looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this announcement, except where required by law or the ASX listing rules.

Firebird has concluded that it has a reasonable basis for providing these forward-looking statements and the forecast financial information included in this release. To achieve the range of outcomes indicated in this Scoping Study, funding of in the order of an estimated US$82.3 million will likely be required by the Company. Based on the current market conditions and the results of studies to date there are reasonable grounds to believe the Project can be financed via a combination of debt and equity, as has been done for numerous comparable projects in Western Australia in recent years. Debt may be secured from several sources including Australian banks, international banks, the high yield bond market, resource credit funds, and in conjunction with product sales of offtake agreements. It is also possible the Company may pursue alternative funding options, including undertaking a corporate transaction, seeking a joint venture partner or partial asset sale.

There is, however, no certainty that Firebird will be able to source funding as and when required. Whilst no formal funding discussions have commenced the Company has engaged with a number of potential financiers on the Oakover Manganese project and these potential financiers have expressed an interest in being involved in the funding of the project. No commercial terms have been agreed between the parties, the discussions are incomplete, and there can be no certainty that any agreement or agreements can be reached or that any transaction will eventuate from these discussions. Accordingly, no investment decision should be made on the basis of this information. As the discussions mentioned above are at an early stage and are incomplete, any announcement of the details of these discussions would be premature and speculative.

This ASX release has been prepared in compliance with the current JORC Code (2012) and the ASX Listing Rules. All material assumptions, including sufficient progression of all JORC modifying factors, on which the production target and forecast financial information are based have been included in this ASX release.

This announce has been approved for release by the Board.

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Competent Persons Statements / 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.

Competent Persons Statement (Metallurgical Testwork)

The information in this announcement that relates to metallurgical test work results is based on information reviewed by Mr Hermann Scriba, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Scriba is an employee of Linico Pty Ltd and consultant to Firebird Metals Limited. Mr Scriba is a qualified extractive metallurgist and has sufficient experience which is relevant to the supervision and interpretation of test work activities undertaken to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012 Edition). Mr Scriba consents to the inclusion in the report of the matters based on the reviewed information in the form and context in which it appears.

INTRODUCTION

Next Phase of Strategic growth

Following a two-year period of significant exploration and development success at the Oakover Project, Firebird has announced the next phase of major strategic growth, which is aimed at positioning the Company to supply directly into the growing Chinese battery market.

The specific strategy has been established to develop Firebird into a near-term producer of battery-grade MnSO4 (high-purity manganese sulphate), which is a key cathode material in LMFP (Lithium, Manganese, Iron and Phosphate) batteries for electric vehicles. Demand for LMFP batteries and hence Battery Grade Manganese Sulphate is forecast to grow rapidly, with many industry participants touting the batteries as superior to other technologies.

This strategy is underpinned by extensive research completed by Firebird in China on the high-purity manganese sulphate market. Firebird executives have conducted multiple trips to China and developed relationships with several key Chinese manganese sulphate experts.

Importantly, Firebird is progressing the LMFP strategy at an opportune time, with 2023 seen by many industry participants as the beginning of the new era of batteries propelled by the commercialisation of LMFP.

Execution of the LMFP growth strategy is expected to place Firebird at the forefront of manganese sulphate production to meet the further downstream aspirations of becoming a cathode producer and this places the Company in a strong position to benefit from growing demand for LMFP's.

Following this period of due-diligence and release of the next phase of strategic growth, the Company is now pleased to announce the in-house China-based Manganese Sulphate Scoping Study results.

The Company believes this Scoping Study clearly demonstrates the advantages and possible value accretion of the LMFP Strategy, validating the strategy to build an initial Battery Grade Manganese Sulphate plant in China.

Building a team of in-country experts is a key pillar for the future success and execution of the Company's strategy. For the last six months Firebird has been consulted to by Mr Zhou Qiyun who has vast manganese sulphate experience spanning over 25 years in the production, development, and optimisation of manganese sulphate plants in China.

Scoping Study

The Company has completed Scoping Studies envisioning the production of Battery Grade Manganese Sulphate feed with manganese concentrate from the Oakover Project. The Company considers production of Battery Grade Manganese Sulphate in China as the preferred location to provide optimum value and returns for all Firebird shareholders.

The in-house China-based Battery Grade Manganese Sulphate Scoping Study looks to develop a plant with a total capacity of 72,000 battery grade manganese sulphate equivalent producing 50,000 tpa of Battery Grade $MnSO_4$ and 10,000 tpa of Mn_3O_4 capacity in China from manganese concentrate. Economic assumptions for the study assume that manganese concentrate is able to be sourced from Oakover (or third parties) at prevailing forecast market prices.

The Company has carried out extensive due diligence on possible factory locations within China, visiting 10 industrial park sites in different provinces. The Company has considered all facets when visiting these industrial parks, from availability of sulphuric acid, steam, key reagents, proximity to customers, transportation routes and factory residue consumers. Firebird will announce is preferred location as part of the next phase PFS study.

The Company will process concentrate through ore preparation, leaching, reagent addition, multi-stage precipitation, impurity removal and 2-stage crystallisation to produce key Battery Grade $MnSO_4$ and Mn_3O_4.

The Company's Oakover project is located 85 km east of Newman in the Eastern Pilbara region of Western Australia. Access to Oakover is via Great Northern Highway, Marble Road and Jigalong Road. Oakover comprises of three granted exploration licenses, with the central license E52/3577 holding the Sixty Sixer, Jay Eye & Karen prospects, which host an MRE of 176.7 Mt @ 9.9% Mn, with 105.8 Mt @ 10.1 % Mn in the Indicated Mineral Resource category and 70.9 Mt at 9.6 % Mn in the Inferred Mineral Resource category. For full details refer ASX announcement dated 10/3/2022 and ASX announcement dated 23/3/2023.

MANGANESE PROCESS FOR BATTERIES

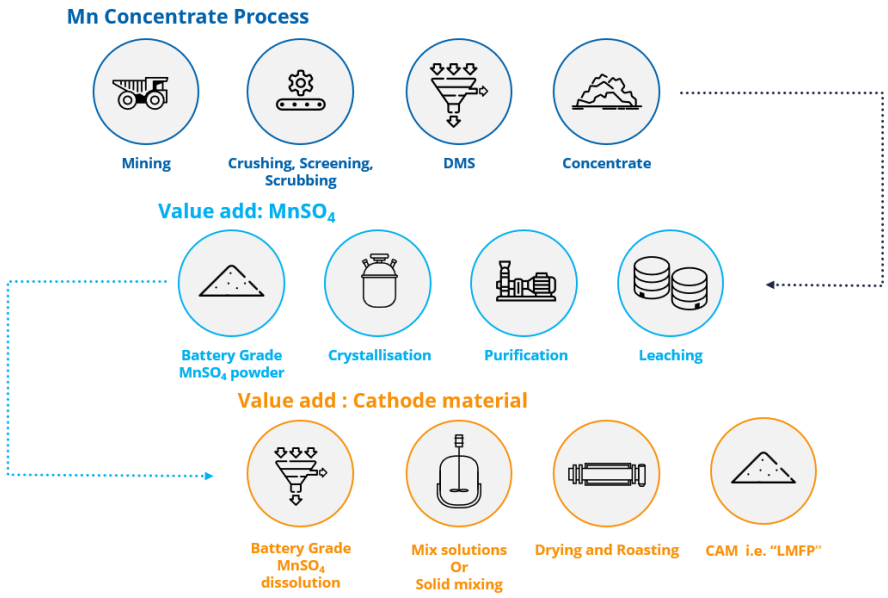


Figure 1: high level manganese production process for battery cathodes

China-based Manganese Plant

The Battery Grade Manganese Sulphate circuit will grind manganese concentrate from Oakover, where it will be leached in a leach tank with Sulfuric Acid and reagents and the tanks heated to produce a pregnant leach solution (PLS). Once leached the PLS will be further purified through multiple precipitation stages.

The solution will then be crystallised in a two-stage crystallisation process to produce Battery Grade MnSO4. The details of the reagents used are commercially sensitive and of a confidential nature.

Mn_3O_4 will be produced by taking the solution after Stage 1 Crystallisation and process it through its own circuit, with the addition of further reagents and second stage crystallisation. Mn_3O_4 has a typical Mn content of 71.5%.

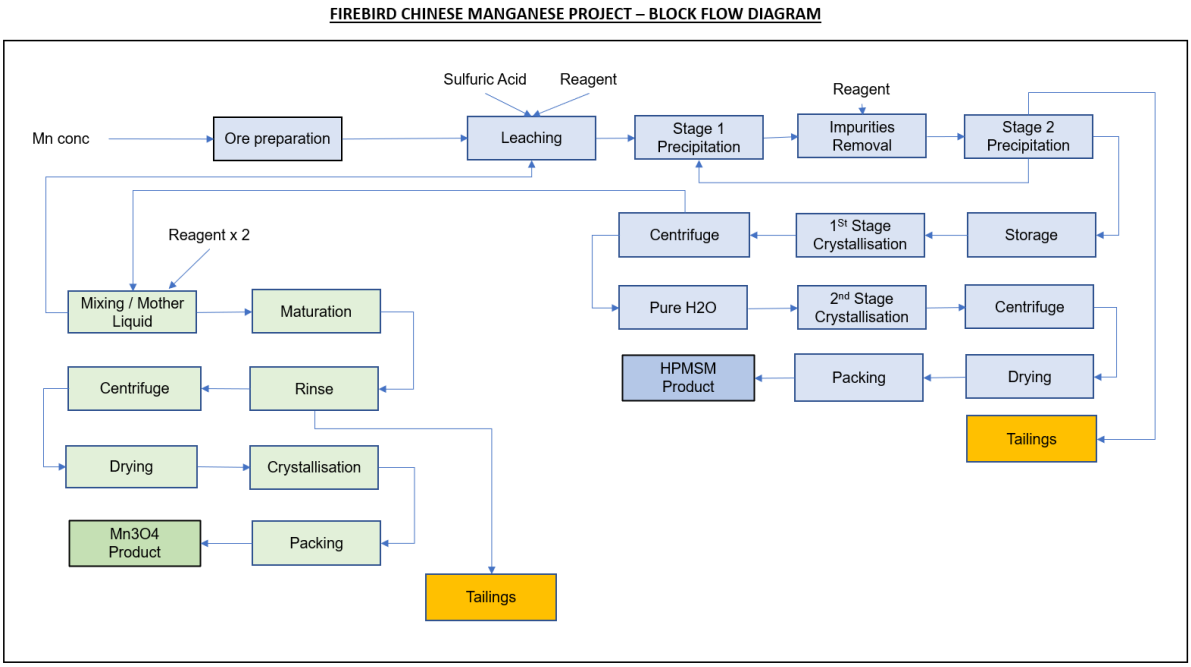


Figure 2: Block flow Diagram

The Company's flow sheet has been designed based on test work completed initially in Australia and then in China with significant input from the Company's Chinese Technical consultant, Mr Zhou. The flow sheet has been developed and refined based on Mr Zhou's 25 years of experience in the production, development and optimisation of manganese sulphate plants in China.

Mr Zhou Qiyun, is a graduate of the Hunan University of Chemical Engineering, with a major in Chemical Process Engineering. Mr Zhou's career has spanned more than 25 years and has been largely focused on manganese sulphate processing. Furthermore, Mr Zhou is a specialist in Mechanical Vapor Recompression (MVR) and holds numerous patents in generational redesigns for MVR crystallisers. Mr Zhou has previously been a part-owner of a manganese sulphate plant in China and has consulted to numerous manganese sulphate plants for both process and crystallisation optimisation.

A bench scale amenability testwork program was conducted on a sample of 30% Mn concentrate that was generated from diamond drill core from all Oakover manganese ore domains of the Sixty Sixer, Jay-Eye and Karen deposits, which had been crushed, screened, scrubbed, and beneficiated. Leaching tests on ground concentrate confirmed the amenability of the Oakover concentrate to the proposed reductive leaching process. The resultant manganese sulphate leach solution was subjected to a sequence of impurity removal steps, followed by production of manganese sulphate crystals.

Trace element analyses for typical impurity elements was conducted to determine impurity levels in the crystals and levels of individual impurity elements listed in the Manganese Sulphate for Battery Materials Specification (HG/T 4823-2015) were within specified limits, also confirming the suitability of the purified manganese sulphate solution for production of Mn_3O_4 and HPMSM used in LMFP batteries.

The metallurgical testwork results underpin the selection of the flowsheet for the Scoping Study, which is largely based on processes that are proven in full scale production plants on similar feed materials.

Chinese Location consideration

Figure 3: Sites inspected in China

The Company has carried out extensive due diligence on possible factory locations within China, visiting 10 industrial park sites in different provinces. The Company has considered various facets of the project when visiting these industrial parks, including availability of sulphuric acid, steam, key reagents, and proximity to customers, transportation routes and factory residue consumers. The Company will announce is preferred location as part of the next phase PFS study.

Key criteria for site selections are:

- Logistics for importing ore and transport products
- Proximity to customers
- Electricity prices
- Proximity to acid & reagents suppliers
- Industrial boiler to supply steam
- Tailing disposal (proximity to cement factories)
- Local government support and investment environment
- Skilled labour force and cost
- Ability to expand Chinese plant

Study Pricing and Financials

The price used in this Study is based on the Benchmark Minerals price forecast for Battery Grade Manganese Sulphate for China domestic trade. With an average of US$1419 Ex factory including VAT. The price used for Mn_3O_4 is a management assumption extrapolated from the battery grade manganese sulphate forecast.

Feed pricing has been based on the company's long term market view as per the Concentrate scoping study sales price of US$4.80/CIF China. Please refer to the ASX announcement of 30th August 2023 for full details.

All financial results are on a pre-tax basis, Chinese company tax is 25%, Firebird has ongoing and incomplete discussions with appropriate Chinese government agencies around potential tax incentives, the result of these discussions are expected to be announced through PFS.

Total investments	**USD M**
CAPEX $MnSO_4$	34.3M
CAPEX Mn_3O_4	13.7M
Other facilities	11M
Contingency 30%	17.7M
Total civil & CAPEX	**76.7M**
LAND	5.6M
Total project	**82.3M**

Table 1: Capital Estimates Summary[3][4]

[3] E*xcluding working capital and finance costs*

[4] *Based on Q4 2023 costings and has no allowance for inflation or deflation*

Cost Summary	USD/mt (metric tonne)	USD/mt (metric tonne)
Ore Feed Cost (1.15mt per 1mt of Battery Grade $MnSO_4$)		**$176.0**
OPEX for 1mt of Battery Grade $MnSO_4$		
Processing Costs and reagents	$328	
Labour	$41	
Maintenance	$21	
Contingency	$93	**$483**
Total Cost for 1mt of Battery Grade $MnSO_4$		**$659**
OPEX for 1mt of Mn3O4		
2.3mt of Battery Grade $MnSO_4$	$1,500	
Processing Costs and reagents	$795	
Labour	$41	
Total cost for 1mt of Mn_3O_4		**$2,336**

Table 2: Project Opex – Financial Model[34]

China-based Battery Grade Sulphate plant		
Ore Feed	Ktpa	80.5
Battery Grade $MnSO_4$ produced	Ktpa	50
Mn_3O_4 Produced	Ktpa	10
Battery Grade MnSO4 price (China)	US$/mt	$1,419
Mn_3O_4 price (China)	US$/mt	$3,365
NPV 8% disc pre tax	US$	$331
IRR pre tax		47%
Simple Payback		2 years
Operating Cost - BG MnSO4	US$/mt	$659/t
Operating Cost – Mn3O4	US$/mt	$2,336/t
Annual EBITDA AVERAGE pre tax	US$	$48.3M
CAPEX	US$	$82.3M
CNY/USD exchange rate		7.3

Table 3: Key Financial (Based on 15 Year plant operation) [134]

Sensitivities

The Scoping Study is most sensitive to the manganese sulphate and Mn_3O_4 prices and reagent costs while being relatively insensitive to capital costs.

The Scoping Study has a NPV of approximately US$331 M, an exceptional IRR of 47% and an average EBITDA of approximately US$48.3M per annum.

- 10% increase in prices increases NPV to approximately US$419 M pre tax
- 10% decrease in price decreases NPV to approximately US$242 M pre tax
- 10% increase in cost decreases NPV to approximately US$302 M pre tax
- 10% decrease in cost increases NPV to approximately US$359M pre tax

Category	Source
Sulphate Processing	Mr Zhou
Chinese Capital	FRB Management and Mr Zhou
Chinese logistics	FRB Management and Mr Zhou
Manganese Market	FRB Management
Exchange Rate	FRB Management
Sales price	FRB management and Benchmark Minerals Limited

Table 4: Key Inputs for China-based in-house Manganese Sulphate Scoping Study

Project Funding

The Project's low risk, technically simple and strong economic fundamentals provide a strong platform for Firebird to source traditional financing through debt and equity markets, in addition to pursuing other financing strategies should this be to the benefit of shareholders.

There is, however, no certainty that Firebird will be able to source funding as and when required. No formal funding discussions have commenced; however, Firebird has engaged with a number of financial institutions and potential partners which have expressed a high level of interest in being involved in the funding of the Project. To achieve the range of outcomes indicated in the Scoping Study, pre-production funding of approximately US$82.3M. It is envisioned that a working capital / shipment financing of approximately US$13.9M will be required during commencement of mining and processing, finance costs of these funds have been built into the financial model. Typical project development financing would involve a combination of debt and equity. Firebird has formed the view that there is a reasonable basis to believe that requisite future funding for development of Oakover will be available when required.

There are grounds on which this reasonable basis is established including:

- Global debt and equity finance availability for high-quality projects remains robust
- The Project is low risk, technically simple and has a rapid payback of only less than 2 years from commercial production
- The very strong pre-tax cashflows of approximately US$48.3M per annum and rapid payback would support a high level of conventional debt financing for Project development
- Oakover has significant exploration potential to grow the Mineral Resource base that forms this Scoping Study, which will likely further strengthen the potential Project economics

- Release of the Scoping Study results provides a platform for Firebird to discuss the outcomes with potential financiers
- The Firebird Board and Management Team has extensive experience in project development, financing and production in the resources industry.
- Members of the Board were involved in the funding and development of New Century Resources Ltd (ASX:NCZ), Benz Mining Corporation (ASX:BNZ), Vital Metals Ltd (ASX:VML) and Boss Energy Ltd (then known as "Boss Resources Limited") (ASX:BOE).
- Australia is a stable investor friendly jurisdiction, with a history of successful traditional debt financing of bulk raw material and processing developments.

Growing interest in funding critical battery raw materials within Australia and China.

Ore Supply Feed - Oakover

Firebird's long-term strategy is to use manganese concentrate from the Company's Oakover Project which is located 85 km east of Newman in the Eastern Pilbara region of Western Australia. Access to the Project is via Great Northern Highway, Marble Road and Jigalong Road.

Oakover comprises of three granted exploration licenses, with the central license E52/3577 holding the Sixty Sixer, Jay Eye & Karen prospects, which host an MRE of 176.7 Mt @ 9.9% Mn, with 105.8 Mt @ 10.1 % Mn in the Indicated Mineral Resource category and 70.9 Mt at 9.6 % Mn in the Inferred Mineral Resource category.

Area	Mineral Resource classification	Tonnes (Mt)	Mn (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)
Sixty Sixer	Indicated	58.8	10.4	9.2	40.2	10.1	0.1
Sixty Sixer	Inferred	43.7	9.4	8.5	38.3	9.7	0.11
Sixty Sixer	**Sub-Total**	102.5	10	8.9	39.4	9.9	0.11
Jay Eye	Indicated	13.1	9.7	7.6	34.2	8.3	0.1
Jay Eye	Inferred	22.1	10.1	6.9	31.5	8.8	0.06
Jay Eye	**Sub-Total**	35.2	10	7.1	32.5	8.6	0.07
Karen	Indicated	33.9	9.7	8.9	39.4	9.9	0.1
Karen	Inferred	5.1	8.2	9.1	42.3	10.5	0.11
Karen	**Sub-Total**	39	9.5	9	39.8	10	0.1
Oakover	Indicated	105.8	10.1	8.9	39.2	9.8	0.1
Oakover	Inferred	70.9	9.6	8	36.5	9.5	0.09
Oakover	**Grand Total**	176.7	9.9	8.6	38.1	9.7	0.1

Table 5: Oakover Mineral Resource Estimate – March 2023

Notes:

- *Mineral Resources reported at a cut-off grade of 7% Mn.*
- *Due to the effects of rounding, the total may not represent the sum of all components.*

The Mineral Resource of the Oakover Project has been classified using the JORC Code guidelines and is based on the results from a total of 482 drill holes (22, 918 m) comprising 473 (22,630.2 m) reverse circulation percussion (RCP) and 9 (287.6 m) diamond drilling (DD) holes completed between 2010 and 2022. GDA94 Zone 51S coordinate system was used for the Project. Drilling, logging and sampling has defined a number of geological/mineralisation domains at the Project.

The recommended mining method is conventional open cut mining using truck and shovel, to focus on the two current economical rock domains, without sterilising the potentially economic manganiferous shale rock domain.

This very common method allows better targeting of the highest-grade and specific rock types, depending on processing plant throughput requirements and customer contract specifications.

Indicated material accounts for 99.2% of the material processed, approximately 70.95Mt, with Inferred making up the remaining 0.8%.

Manganese Market

South Africa, Australia, Brazil, Ghana and Gabon are major producing countries of global manganese ore. It is generally accepted that seaborne manganese can be classified as high, medium and low grades in terms of their manganese contents. Below is a summary of their classification:

- High grade > 44% Mn
- Medium grade between 30% and 44% Mn; and
- Low grade < 30% Mn.

China is the largest importer of manganese ore and concentrates and is also the largest producer of manganese alloys. According to International Manganese Institute, China imported more than ~30 million tonnes of manganese ore in 2022. This is a substantial increase from around 10 million tonnes of manganese 10 years earlier. The significant increase in import is mainly due to a combination of depleting domestic mines and stricter environmental regulations. The concentrate produced at Oakover is expected to fit into the medium grade classification.

Manganese is an industrial metal that has a wide range of applications. The most significant use of manganese is in steel production (about 90%) where every tonne of steel requires approximately 1-2% of manganese in the form of manganese alloys.

Manganese acts as deoxidiser and desulfuriser agents in steel production, to remove oxygen and sulphur to increase the quality of steel products. Specifically, manganese helps to prevent corrosion, make steel more resistant to abrasion and increases the hardenability rate.

Manganese ore is predominantly mined in the form of carbonate, semi-carbonate or an oxide and is smelted into a manganese alloy, with the main types of manganese alloys being:

- Silicomanganese (SiMn) – Most common alloy consumed and is used principally in the production of construction steels, such as long steels products like rebar. Typically contains up to 2% carbon

- High carbon ferromanganese (HCFeMn) – Used mainly in flat-steel products destined for manufacturing and consumer appliances. Typically contains up to 8% carbon
- Refined Alloys being Medium carbon (MCFeMn) and Low carbon ferromanganese (LCFeMn) – Used mainly in higher-quality steels sector where impurities need to be closely controlled

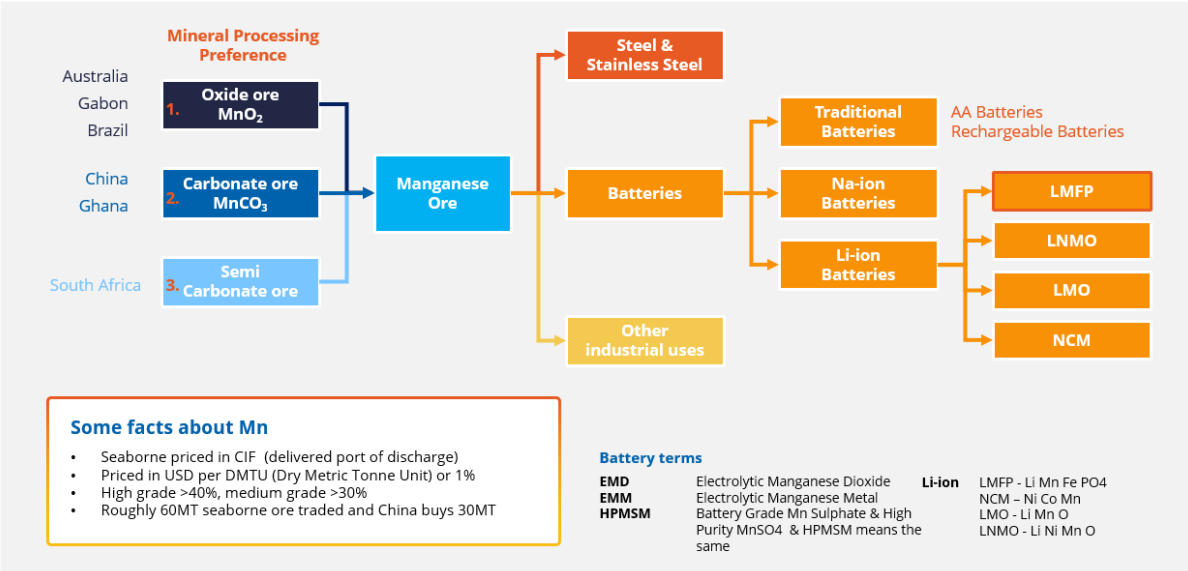


Figure 4: Manganese Market Snapshot

Importantly, the use and demand for manganese in EV batteries is growing rapidly. Manganese is a key and critical element required in the production of cathodes for lithium-ion batteries, which are at the centre of the clean energy transition. The use of these batteries in EVs continues to grow exponentially, forming a major market for supply and consumption of battery grade manganese sulphate ($MnSO_4$). Historically the main consumption and use of MnSO4 has been within Ternary cathodes, for example Nickel Cobalt Manganese (NCM) and Lithium Manganese Oxide (LMO) cathodes.

Figure 5: Manganese content (kg) in per battery in each vehicle above (Source: Benchmark Mineral Intelligence)

Research and advocates for manganese rich batteries is on the rise, due to manganese being abundant and relatively inexpensive compared with nickel and cobalt. For example, Tesla plans to have 2/3 of their batteries as manganese based.

According to a projection by Benchmark Mineral Intelligence in 2023, the demand for manganese in batteries is predicted to rise significantly, surpassing the demand for key battery metals such as lithium, nickel, and cobalt (Benchmark Mineral Intelligence).

More recently, the use of manganese has expanded from Ternary into Lithium Iron Phosphate (LFP) to make Lithium Manganese Iron Phosphate (LMFP) cathodes. Traditionally, LFP based batteries are considered safer and cheaper to manufacture, whereas ternary batteries provide more capacity, they are more expensive and not as safe as LFP based batteries.

In the case of LMFP, manganese content within this battery isn't as high as other manganese-based EV batteries, however, the size and growth potential of this market is the largest in medium to long term. LMFP is an upgrade from LFP and by introducing manganese to replace iron, the following benefits are achieved:

- Manganese enhances the voltage platform, increasing energy density
- Adding manganese increases capacity by 15-20%, nearing mid-range ternary batteries
- Flexible, used on its own or mixed with ternary batteries

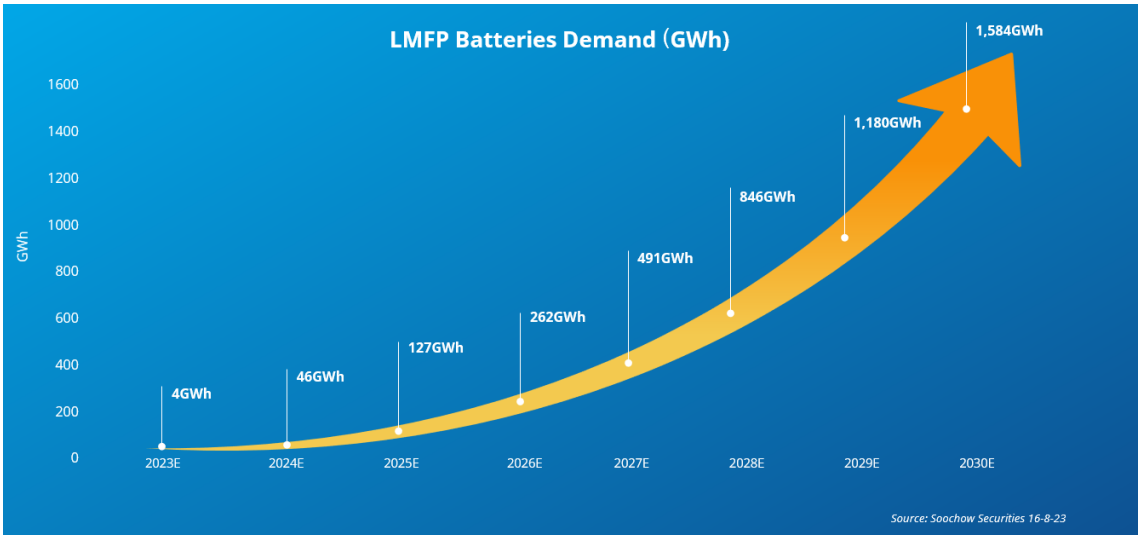
The rise of LMFP is imminent as LFP battery capacity is reaching its theoretical energy density capacity and more importantly, LMFP fits strategies of end users as its cost effective, safe and provides strong range.

LMFP Demand Forecast (excluding current manganese use in batteries)									
	Unit	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Global Demand in EV	GWh	879	1,183	1,626	2,152	2,739	3,385	4,106	4,853
LFP penetration rate	%	42%	45%	46%	46%	47%	47%	49%	50%
LFP Demand	GWh	373	531	750	998	1,279	1,607	1,993	2,419
Ternary Batteries penetration rate	%	58%	55%	54%	54%	53%	53%	51%	50%
Ternary Batteries Demand	GWh	506	652	876	1,155	1,460	1,778	2,113	2,434
Forecast LMFP to replace LFP	**%**	**0.5%**	**6.5%**	**13.0%**	**20.0%**	**30.0%**	**40.0%**	**45.0%**	**50.0%**
Forecast LMFP to mix with Ternary	**%**	**0.2%**	**1.5%**	**3.0%**	**5.0%**	**7.0%**	**11.0%**	**13.0%**	**15.0%**
Total LMFP Demand	%	0.4%	3.7%	7.5%	11.8%	17.5%	24.5%	28.2%	32.1%
LMFP Batteries Demand	**GWh**	**4**	**46**	**127**	**262**	**491**	**846**	**1,180**	**1,584**
Growth rate yoy	%	/	1157.8%	177.8%	106.5%	87.6%	72.1%	39.6%	34.2%
Equivalent MnSO4 required	kt	3	62	156	343	624	1,092	1,716	2,278

Source: Soochow Securities 16-8-23

Figure 6: LMFP demand forecast in China by Soochow Securities

Figure 7: LMFP growth graph – Source Soochow Securities



Who is driving LMFP growth and development?

- Since June of 2023, more than 400kt of LMFP production has been announced in China, implying ~350kt of $MnSO_4$ additional demand from current levels
- SAMSUNG SDI and China's Gotion have recently announced LMFP batteries

How much MnSO4 equivalent is used in cars?

- For an average car battery, total $MnSO_4$ is equivalent to:
  - Large car: 200-300kg
  - Medium car: 125-190kg
  - Small car: 90-125kg
- With more Mn being used in batteries, these numbers are set to significantly grow

How is LMFP being used?

- LMFP + NCM mix is becoming increasingly popular for battery makers, estimated to be 15% of nickel-based batteries market by 2030
- LMFP is expected to replace 50% of LFP batteries by 2030
- COST+SAFETY+CAPACITY=LMFP

It is not only about Li-ion batteries

- Na-ion battery are becoming popular and estimated to drive $MnSO_4$ demand by excess of 100kt per annum and is not included in estimate by market

Typical High Mn Batteries (MnSO4 equivalent per mt cathode)

- NCM532 – 354kg
- NCM217 – 1.3mt
- LMO – 1.9 mt
- LMFP – average 875kg

Source: Benchmark Minerals, Soochow Securities, Company Research

Figure 8: LMFP key statistics

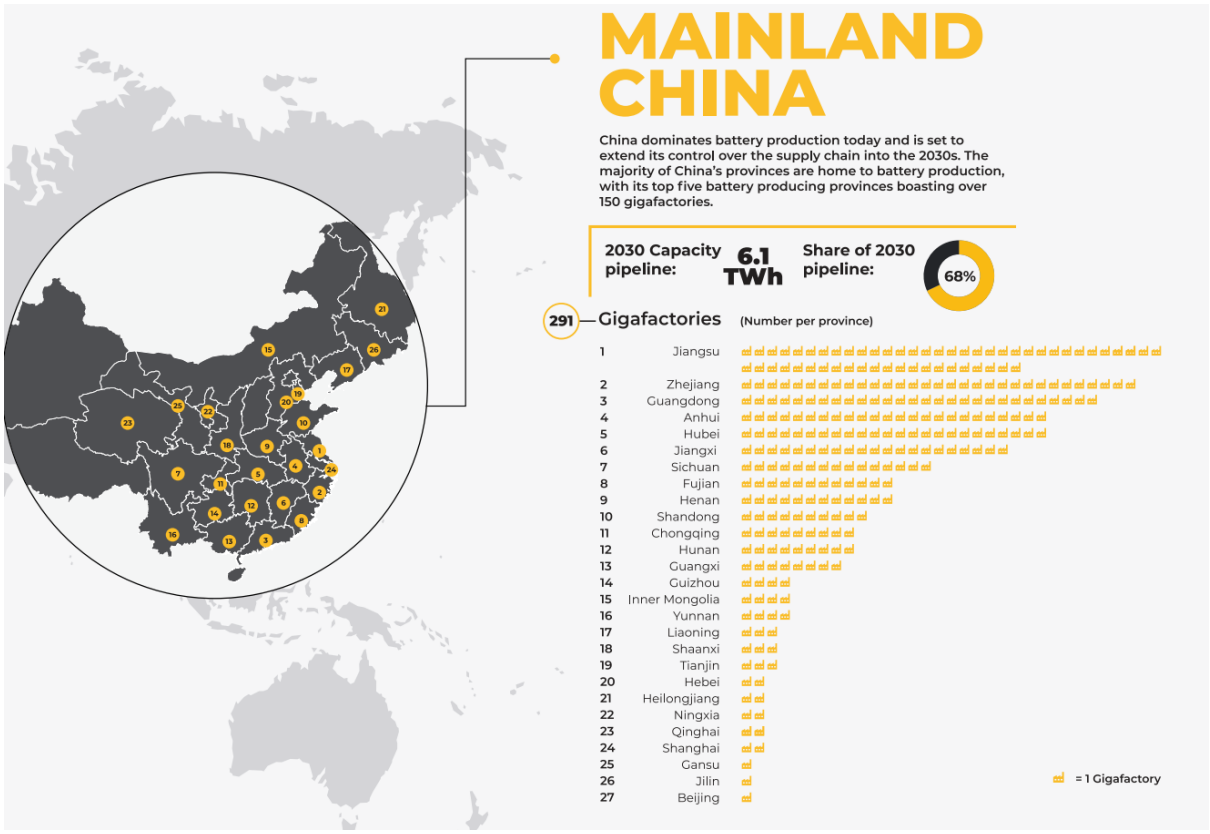


Figure 9: Chinese Battery Forecast by Benchmark Minerals

Environment, Social and Governance (ESG)

ESG methodologies and future objectives form a significant reflection in how Firebird plans and conducts business, including corporate governance systems, people management systems, support for local communities and management of our operations.

Firebird identifies the importance of ESG affairs while advancing its projects. This Study has been approached with key ESG metrics in mind.

Key considerations will be the integration of clean energy technologies where possible. A strategy for energy consumption and energy management has been developed by engaging suitably qualified expert consultants.

As Firebird grows, systems and processes will be implemented to support and develop the Company's workforce through employee assistance programs, traineeships, apprenticeships, graduate recruitment and training. We will continue to review capabilities and prioritise courses that align with our corporate performance indicators.

Australian Manganese Sulphate Scoping Study

The Company advises that it has also successfully completed a scoping study on Sulphate production in Australia, with the proposed plant located in Port Hedland, with concentrate being trucked to Port Hedland from Oakover for Battery Grade Sulphate production.

Due to cost pressures principally from the need to import all reagents and sulphuric acid, high labour costs and the need to return production residue back to the Oakover site, the Company's primary focus will remain on the development of a sulphate plant in China.

JORC Code, 2012 Edition Table 1 – Oakover Manganese Project

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Ten diamond core holes were drilled by Topdrive Drillers Australia on the Oakover project in June 2011. • Nine diamond core holes (OKDM0012-OKDM010) were logged by CSA Global in June 2021, and sampled and assayed by Nagrom Metallurgical in August 2021. • Samples were dried, crushed, ring pulverised and analysed by X-Ray Fluorescence Spectrometry (XRF). The elements determined by XRF were • Mn, Fe, Al2O3, CaO, Cr2O3, P2O5, SiO2, Ba, K2O, MgO, Na2O, S, TiO2, LOI1000. • Prepared sample was fused in lithium borate flux with lithium nitrate additive. The resultant glass bead was analysed by XRF. Loss on Ignition (LOI) is packaged with XRF suites to achieve close to 100% characterisation. • The Competent Person (CP) considers that the sample techniques adopted were appropriate for the style of mineralisation and for reporting of an Exploration Result.

Criteria	JORC Code explanation	Commentary
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Drilling was completed by PQ3 diamond coring methods in 2011. The core was not orientated. Given the relatively shallow nature of the deposit and the supergene overprinting, orientation is not material.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• The core recoveries from the 2021 CSA Global relogging are summarised below. •
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and*	• The core was originally logged in 2011 by Brumby Resources then geologically and geotechnically logged by CSA Global consultants in 2021 to a level of detail sufficient to establish appropriate domaining

Drill Hole	Prospect	Hole length	Core Recovery % (average 1.5m core runs)
OKDM001	66	49.8	-
OKDM002	66	45.3	94.1
OKDM003	66	36.3	79.6
OKDM004	66	34.8	73.8
OKDM005	66	34.8	90.2
OKDM006	Karen	34	84.9
OKDM007	Karen	27.3	89.2
OKDM008	Karen	21.3	97.2
OKDM009	Jay Eye	25	86.4
OKDD010	Jay Eye	28.8	93.8

Criteria	JORC Code explanation	Commentary
	metallurgical studies. • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	for planned metallurgical test work. • With the exception of drill hole OKDM001, all drill holes (OKDM002 to OKDM010) were logged from surface to end of hole. Drill depths are summarised in the Table under 'Drill hole Information'.

Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*
	• *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.*
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*
		• Sample preparation was as follows;
		  • Receive, sort, log, and batch samples
		  • Two longitudinal core cuts (halved and quartered)
		  • Coarse Crushing of one quarter to a nominal topsize of 6.3mm
		  • Riffle split all samples
		  • Pulverise to 80% passing 75µm
		• Sampling intervals were based on the CSA Global diamond core logging and sampling report of June 2021
		• The CP considers that the sub sampling techniques adopted were appropriate for the style of mineralisation.

Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*
	• *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.*
		• XRF Analysis
		  • Mn, Fe, Al2O3, CaO, Cr2O3, P2O5, SiO2, Ba, K2O, MgO, Na2O, S, TiO2, LOI1000
		  • Prepared sample was fused in lithium borate flux with lithium nitrate additive.
		  • The resultant glass bead was analysed by XRF. XRF is suitable for the total analysis of a range of geological ores. XRF Suites are

Criteria	JORC Code explanation	Commentary
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	tailored to specific ore types, using predefined inter-element and matrix corrections. • Loss on Ignition (LOI) is packaged with XRF suites to achieve close to 100% characterisation.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• All sampling intersections were determined by CSA Global, an independent consulting company.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill locations were located by handheld GPS. Expected accuracy is +/- 5m for northing and easting. • GDA94 Zone 51 datum is used as the coordinate system. • There is no record of topographic control although the terrain is flat • The CP considers that the survey techniques adopted were appropriate for the style of mineralisation and for reporting of an Exploration Result.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Seven diamond core holes were drilled on the Oakover prospect (OKDM001/2/3/4/5/9/10) of approximately 2km in strike. Three further holes were drilled to south on the Karen prospect (OKDM006/7/8) • The CP considers the data spacing is sufficient when consolidated with the current RCP programme to establish a degree of grade continuity for the project.
Orientation of data in	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is*	• Diamond core hole sample spacing, and orientation is considered suitable for regional geochemical exploration to define manganese

Criteria	JORC Code explanation	Commentary
relation to geological structure	*known, considering the deposit type.* • *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.*	targets.
Sample security	• *The measures taken to ensure sample security.*	• Nagrom Metallurgical were contracted to both sample and assay the preserved core providing a continuous chain of possession sufficient for sample security
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• There is no record of any audits or reviews having been undertaken on the sampling data.

Section 2 Reporting of Exploration Results – Oakover Manganese Project

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Oakover Manganese project consists of one exploration licence (E52/3577-I) in the East Pilbara region of Western Australia. • The licence is by Firebird Metals Limited. • 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

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Brumby Resources completed RCP drilling, mapping and a Mineral Resource estimate 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. • The diamond core PQ3 (triple tube) drilling programme, relevant to this release was completed in 2011 and was designed to collect representative samples across the Mineral Resource for metallurgical test work
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The manganese mineralisation is stratiform and hosted by dolomitic-rich Balfour Downs shale beds. The mineralisation is tabular in form, dips gently at approximately 10˚ to the northwest and outcrops at the surface at the southern edge of the deposit. Supergene enrichment of the manganese stratigraphy within the top 5-10m has resulted in massive manganese outcrops at the surface •
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth*	•

Drill Hole	Prospect	Easting	Northing	RL	Hole length
OKDM001	66	261308	7419826	529	49.8
OKDM002	66	261295	7419895	522	45.3
OKDM003	66	261277	7419984	518	36.3
OKDM004	66	261225	7419824	520	34.8
OKDM005	66	261554	7420051	516	34.8
OKDM006	Karen	260747	7415499	536	34

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>

hole length.
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.

</td><td>
<table>
<tr><td>OKDM007</td><td>Karen</td><td>260763</td><td>7415552</td><td>535</td><td>27.3</td></tr>
<tr><td>OKDM008</td><td>Karen</td><td>260890</td><td>7415570</td><td>535</td><td>21.3</td></tr>
<tr><td>OKDM009</td><td>Jay Eye</td><td>262788</td><td>7420675</td><td>517</td><td>25</td></tr>
<tr><td>OKDD010</td><td>Jay Eye</td><td>262810</td><td>7420647</td><td>517</td><td>28.8</td></tr>
</table>
</td></tr>
<tr><td>Data aggregation methods</td><td>

In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.
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.
The assumptions used for any reporting of metal equivalent values should be clearly stated.

</td><td>

No maximum cut-off value was used.
A simple arithmetic average of intervals above and below the 10% cut-off was used to interpret the results
Please refer to appendix 1 for table of all results

</td></tr>
<tr><td>Relationship between mineralisation widths and intercept lengths</td><td>

These relationships are particularly important in the reporting of Exploration Results.
If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.
If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg ‘down hole length, true width not known’).

</td><td>

The relationship between mineralisation and intercepts lengths is still to be determined.

Down hole intercept lengths only are reported, however the mineralisation is relatively shallow dipping and drill intercepts, although not true thicknesses, will not be too materially different from those thicknesses reported.
</td></tr>
<tr><td>Diagrams</td><td>

Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery

</td><td>

Refer to figures within the body of the release.

</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	• *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.*	• A full summary of all diamond core drill results in included as Appendix 1.

Other substantive exploration data	• *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.*	• Part of the bulk samples extracted from PQ drill core underwent feed preparation at Nagrom Laboratories in Perth which comprised:
		  ○ Stage crushing and screening of the composite samples to 100% passing 50mm
		  ○ Scrubbing in a tumbling mill scrubber
		  ○ Wet screening the scrubbed product at 8mm and 1mm
		  ○ Re-crushing and screening (at 32mm) the +8mm - 50mm component to produce the +8mm -32mm ore sorter feed
		• Heavy liquid separation batch test work on the +1mm – 8mm component was carried out by Nagrom at various specific gravity settings to determine sinks and floats.
		• Ore sorting test work on the +8mm -32mm ore sorter samples was carried out by Steinert in Perth using a full-size Steinert KSS ore sorter. The ore sorting tests for each composite sample comprised two stage sorting using multiple sensor scanners – The first pass to produce an ore sorter

Criteria	JORC Code explanation	Commentary

		concentrate, followed by re-feeding of this concentrate at a higher sensitivity level to produce the final upgraded concentrate.
		• Assay of all products was carried out by Nagrom using the assay procedure as detailed above (Section 1 – Sampling Techniques).
		• Part of the bulk samples extracted from PQ drill core underwent feed preparation at ALS Metallurgy in Perth which comprised:
		  ○ Stage crushing and screening of the composite samples to 100% passing 3.35mm
		  ○ Grinding to required grind size
		• Assay of all products was carried out by ALS Metallurgy using the assay procedure as detailed above (Section 1 – Sampling Techniques).

Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• An infill Reverse Circulation drilling programme over the Oakover prospect was undertaken during October 2022. • Further ore sorting and HLS test work is currently underway using larger bulk samples of shallow outcropping supergene mineralisation extracted from the Sixty-Sixer and Karen deposits.

Appendix 1: Summary of all Oakover PQ3 diamond core results

Drill Hole #	Meterage From	Meterage To	Sample ID	Mass kg	% Mn	% Fe	% Al_2O_3	% SiO_2	% P_2O_5	% S	% LOI_{1100}
OKDM002	0.00	1.00	OKDM002 0-1	2.76	1.69	29.54	10.71	35.79	0.082	0.020	6.63
OKDM002	1.00	2.07	OKDM002 1-2.07	2.12	2.39	29.23	12.60	31.56	0.078	0.019	7.81
OKDM002	2.07	3.00	OKDM002 2.07-3	2.04	6.98	19.55	15.81	32.46	0.033	0.018	11.46
OKDM002	3.00	4.00	OKDM002 3-4	2.44	8.62	21.26	17.77	24.80	0.022	0.019	12.73
OKDM002	2.07	4.84	OKDM002 2.07-4.84	2.00	3.73	27.11	18.17	22.83	0.033	0.022	12.83
OKDM002	4.84	6.00	OKDM002 4.84-6	3.30	3.96	25.73	18.37	23.44	0.033	0.020	13.27
OKDM002	6.00	7.28	OKDM002 6-7.28	5.06	2.05	27.61	17.07	25.38	0.034	0.023	12.57
OKDM002	7.28	7.78	OKDM002 7.28-7.78	1.32	9.28	20.50	15.60	25.78	0.028	0.015	13.24
OKDM002	7.78	8.80	OKDM002 7.78-8.8	2.34	1.93	19.72	18.56	34.94	0.020	0.010	12.03
OKDM002	8.80	10.00	OKDM002 8.8-10	3.26	8.04	11.65	15.53	41.61	0.037	0.010	11.21
OKDM002	10.00	11.00	OKDM002 10-11	3.26	4.05	8.94	15.35	53.20	0.031	0.008	9.73
OKDM002	11.00	12.00	OKDM002 11-12	2.76	6.68	8.47	13.53	52.02	0.092	0.009	9.64
OKDM002	12.00	13.41	OKDM002 12-13.41	3.30	3.56	10.66	11.35	56.51	0.084	0.012	8.67
OKDM002	13.41	13.91	OKDM002 13.41-13.91	1.14	2.69	5.00	13.16	65.75	0.077	0.011	6.24
OKDM002	13.91	15.00	OKDM002 13.91-15	1.84	5.20	8.46	12.39	56.35	0.104	0.010	8.25
OKDM002	15.00	16.00	OKDM002 15-16	2.26	6.15	10.85	11.56	52.35	0.109	0.009	8.64
OKDM002	16.00	16.73	OKDM002 16-16.73	3.20	11.20	12.10	10.18	44.05	0.146	0.010	9.53
OKDM002	16.73	18.00	OKDM002 16.73-18	1.94	15.04	10.91	9.45	40.33	0.262	0.015	9.91
OKDM002	18.00	19.00	OKDM002 18-19	2.28	12.69	10.29	10.69	42.65	0.263	0.010	9.60
OKDM002	19.00	20.00	OKDM002 19-20	2.74	14.40	11.77	8.96	39.65	0.237	0.007	10.05
OKDM002	20.00	20.81	OKDM002 20-20.81	2.40	13.29	11.20	9.15	40.77	0.191	0.005	10.33

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OKDM002	20.81	22.00	OKDM002 20.81-22	3.16	12.40	10.29	10.05	42.44	0.211	0.006	10.06
OKDM002	22.00	23.00	OKDM002 22-23	2.88	13.11	8.96	8.75	38.40	0.293	0.008	12.68
OKDM002	23.00	24.23	OKDM002 23-24.23	3.24	12.67	8.10	9.19	37.56	0.261	0.009	13.20
OKDM002	24.23	25.20	OKDM002 24.23-25.2	2.48	12.28	9.34	8.95	36.29	0.293	0.009	13.45
OKDM002	25.20	26.00	OKDM002 25.2-26	0.94	15.59	10.08	9.13	37.53	0.295	0.009	10.84
OKDM002	26.00	27.00	OKDM002 26-27	2.64	12.49	9.26	10.96	42.84	0.329	0.006	9.21
OKDM002	27.00	28.00	OKDM002 27-28	2.34	13.30	8.50	10.83	41.15	0.319	0.006	11.58
OKDM002	28.00	29.00	OKDM002 28-29	2.00	13.05	8.19	10.22	39.76	0.285	0.222	13.77
OKDM002	29.00	30.00	OKDM002 29-30	3.48	9.88	7.46	9.76	36.75	0.269	0.453	18.19
OKDM002	30.00	31.00	OKDM002 30-31	3.46	8.78	6.92	9.98	37.55	0.271	0.442	18.16
OKDM002	31.00	32.00	OKDM002 31-32	3.74	8.34	6.59	10.24	38.54	0.246	0.577	17.70
OKDM002	32.00	33.00	OKDM002 32-33	4.30	8.07	6.38	10.37	39.12	0.266	0.846	17.46
OKDM002	33.00	34.00	OKDM002 33-34	3.70	9.23	6.61	9.43	36.16	0.259	0.630	18.75
OKDM002	34.00	35.00	OKDM002 34-35	3.90	8.53	6.30	9.92	38.62	0.241	0.775	17.78
OKDM002	35.00	36.00	OKDM002 35-36	3.76	7.94	6.01	10.03	39.93	0.253	0.773	17.27
OKDM002	36.00	37.00	OKDM002 36-37	3.92	6.20	6.19	11.68	44.66	0.242	0.547	14.91
OKDM002	37.00	38.00	OKDM002 37-38	4.06	7.87	6.15	9.73	41.42	0.251	0.700	16.87
OKDM002	38.00	39.00	OKDM002 38-39	3.08	7.75	5.81	10.24	41.09	0.221	1.077	17.01
OKDM002	39.00	40.00	OKDM002 39-40	3.18	7.25	6.45	10.43	40.17	0.257	0.926	16.83
OKDM002	40.00	41.00	OKDM002 40-41	3.14	7.09	5.96	10.66	41.65	0.245	1.088	15.85
OKDM002	41.00	42.00	OKDM002 41-42	3.36	7.53	6.05	10.51	40.70	0.241	1.036	16.75
OKDM002	42.00	43.00	OKDM002 42-43	3.74	7.13	6.40	10.83	41.44	0.249	1.040	16.29
OKDM002	43.00	44.00	OKDM002 43-44	3.86	6.27	6.29	11.37	43.47	0.254	1.065	14.91
OKDM002	44.00	45.30	OKDM002 44-45.3	4.46	5.69	6.13	11.71	45.15	0.269	1.291	14.31
OKDM003	0.00	1.00	OKDM003 0-1	1.37	0.16	27.49	15.63	32.48	0.061	0.031	10.12
OKDM003	2.20	3.00	OKDM003 2.2-3	2.34	0.05	20.23	24.14	31.45	0.049	0.041	12.41
OKDM003	3.00	4.00	OKDM003 3-4	1.32	0.10	19.87	23.77	32.33	0.056	0.031	11.80

OKDM003	4.00	5.00	OKDM003 4-5	1.13	0.03	11.02	27.76	39.44	0.044	0.013	12.68
OKDM003	5.00	6.52	OKDM003 5-6.52	1.89	1.02	18.85	21.22	35.31	0.048	0.018	11.14
OKDM003	6.52	7.50	OKDM003 6.52-7.5	1.15	9.33	13.75	14.62	38.62	0.083	0.012	10.25
OKDM003	7.50	8.00	OKDM003 7.5-8	2.00	19.93	12.67	9.43	29.46	0.242	0.011	10.83
OKDM003	8.00	9.00	OKDM003 8-9	3.21	10.64	11.38	13.48	41.78	0.064	0.010	9.92
OKDM003	9.00	10.00	OKDM003 9-10	3.29	16.81	12.74	9.69	34.81	0.249	0.011	10.35
OKDM003	10.00	11.00	OKDM003 10-11	3.37	15.06	14.34	9.90	34.93	0.177	0.011	10.57
OKDM003	11.00	12.00	OKDM003 11-12	2.18	3.55	20.97	10.63	42.38	0.214	0.007	9.08
OKDM003	12.00	13.00	OKDM003 12-13	2.64	11.92	19.79	8.22	33.91	0.270	0.011	10.23
OKDM003	13.00	14.00	OKDM003 13-14	3.11	13.32	11.18	10.73	42.29	0.076	0.010	9.62
OKDM003	14.00	15.00	OKDM003 14-15	2.78	11.65	13.78	10.06	40.90	0.167	0.011	10.11
OKDM003	15.00	16.00	OKDM003 15-16	2.52	10.89	10.74	10.99	46.28	0.127	0.007	8.94
OKDM003	16.00	17.43	OKDM003 16-17.43	3.50	11.03	9.45	11.42	47.13	0.123	0.008	8.99
OKDM003	17.43	18.00	OKDM003 17.43-18	1.72	7.26	7.23	12.33	55.41	0.095	0.006	8.42
OKDM003	18.00	19.00	OKDM003 18-19	2.62	9.36	9.82	11.28	49.50	0.141	0.009	8.82
OKDM003	19.00	20.00	OKDM003 19-20	0.37	12.43	12.93	9.14	42.08	0.220	0.009	10.06
OKDM003	21.00	22.00	OKDM003 21-22	1.27	10.74	7.02	11.53	49.68	0.180	0.006	9.74
OKDM003	22.00	23.00	OKDM003 22-23	2.02	13.32	10.49	9.50	42.03	0.315	0.008	10.12
OKDM003	23.00	24.00	OKDM003 23-24	2.54	11.04	9.36	10.33	45.62	0.251	0.006	9.93
OKDM003	24.00	25.00	OKDM003 24-25	1.77	11.94	9.81	9.64	44.50	0.233	0.005	9.86
OKDM003	25.00	26.00	OKDM003 25-26	3.14	8.03	5.53	7.05	28.85	0.186	0.006	22.84
OKDM003	26.00	27.00	OKDM003 26-27	2.53	10.65	10.60	8.76	38.14	0.379	0.009	13.25
OKDM003	27.00	28.00	OKDM003 27-28	2.86	8.58	8.87	9.53	44.54	0.274	0.012	10.95
OKDM003	28.00	29.00	OKDM003 28-29	2.05	7.44	7.51	10.69	50.00	0.271	0.009	10.36
OKDM003	29.00	30.30	OKDM003 29-30.3	3.32	13.92	8.29	9.05	41.67	0.243	0.008	11.05
OKDM003	30.30	31.00	OKDM003 30.3-31	0.91	25.03	9.27	6.16	28.00	0.307	0.007	12.40
OKDM003	31.00	32.00	OKDM003 31-32	0.80	10.40	8.29	11.83	47.84	0.295	0.007	8.45
OKDM003	32.00	33.20	OKDM003 32-33.2	1.80	16.97	9.69	9.24	37.64	0.229	0.011	9.97
OKDM003	33.20	34.00	OKDM003 33.2-34	2.00	17.51	15.50	7.89	29.58	0.352	0.010	11.16

OKDM003	34.00	35.00	OKDM003 34-35	0.85	10.54	9.03	8.42	33.20	0.296	0.757	19.86
OKDM003	35.00	36.30	OKDM003 35-36.3	2.88	10.01	8.88	8.37	32.96	0.270	1.237	17.28
OKDM004	0.00	1.00	OKDM004 0-1	0.81	1.04	30.47	13.87	28.93	0.076	0.051	10.10
OKDM004	1.00	2.00	OKDM004 1-2	2.99	1.15	22.10	19.91	32.81	0.066	0.039	11.99
OKDM004	2.00	2.80	OKDM004 2-2.8	2.18	5.26	22.32	17.18	28.94	0.072	0.033	12.11
OKDM004	2.80	3.52	OKDM004 2.8-3.52	1.61	12.95	16.45	16.25	25.49	0.073	0.025	13.75
OKDM004	3.52	4.80	OKDM004 3.52-4.8	3.85	27.53	8.59	8.17	25.36	0.143	0.012	11.66
OKDM004	4.80	6.00	OKDM004 4.8-6	4.74	16.21	12.86	9.54	36.07	0.106	0.014	9.59
OKDM004	6.00	7.29	OKDM004 6-7.29	2.19	23.85	8.67	9.21	29.86	0.109	0.010	11.44
OKDM004	7.29	8.00	OKDM004 7.29-8	1.77	3.82	9.29	12.54	58.43	0.041	0.009	7.78
OKDM004	8.00	9.00	OKDM004 8-9	3.42	0.12	11.56	12.91	60.49	0.041	0.011	7.35
OKDM004	9.00	9.61	OKDM004 9-9.61	2.34	1.38	12.34	12.53	57.46	0.087	0.012	7.60
OKDM004	9.61	10.80	OKDM004 9.61-10.8	2.46	9.88	15.29	8.96	43.28	0.120	0.015	9.24
OKDM004	10.80	12.00	OKDM004 10.8-12	4.15	1.70	16.05	9.34	54.37	0.195	0.016	8.22
OKDM004	12.00	13.00	OKDM004 12-13	1.22	6.54	9.50	11.36	52.39	0.103	0.014	9.83
OKDM004	13.00	14.00	OKDM004 13-14	1.61	20.61	10.80	7.63	33.26	0.242	0.017	10.93
OKDM004	14.00	15.00	OKDM004 14-15	2.44	17.33	10.58	8.47	36.88	0.256	0.016	10.78
OKDM004	15.00	16.00	OKDM004 15-16	2.05	12.01	9.67	10.31	44.26	0.352	0.011	9.60
OKDM004	16.00	17.00	OKDM004 16-17	1.71	11.62	9.31	10.34	45.44	0.441	0.009	9.21
OKDM004	17.00	18.00	OKDM004 17-18	1.64	11.67	8.97	10.74	43.93	0.705	0.007	9.80
OKDM004	18.00	19.00	OKDM004 18-19	0.75	14.61	9.21	9.41	41.82	0.429	0.007	9.89
OKDM004	19.00	19.80	OKDM004 19-19.8	0.63	28.92	9.53	5.32	22.05	0.232	0.009	13.08
OKDM004	19.80	21.00	OKDM004 19.8-22.3	0.35	2.38	6.22	15.07	60.08	0.351	0.005	6.40
OKDM004	21.00	22.30	OKDM004 22.3-23.4	1.60	17.64	6.71	10.40	38.76	0.262	0.006	10.57
OKDM004	23.40	24.40	OKDM004 23.4-24.4	1.52	16.40	10.30	9.93	36.62	0.295	0.005	10.49

OKDM004	24.40	25.40	OKDM004 24.4-25.4	1.20	23.37	9.64	7.84	29.08	0.223	0.008	11.68
OKDM004	25.40	26.00	OKDM004 25.4-26	1.00	3.45	8.22	14.86	53.42	0.332	0.436	7.55
OKDM004	26.00	26.90	OKDM004 26-26.9	1.39	8.49	9.63	11.01	43.75	0.327	0.719	11.69
OKDM004	26.90	28.00	OKDM004 26.9-28	1.80	7.93	7.41	11.11	43.05	0.291	0.794	14.13
OKDM004	28.00	29.00	OKDM004 28-29	2.38	8.14	5.93	10.32	40.51	0.243	0.664	16.84
OKDM004	29.00	30.00	OKDM004 29-30	2.99	8.01	7.31	12.00	46.52	0.261	0.444	11.23
OKDM004	30.00	31.00	OKDM004 30-31	3.21	7.40	6.78	9.78	42.05	0.273	0.656	16.14
OKDM004	31.00	32.00	OKDM004 31-32	2.39	7.44	5.58	10.29	41.58	0.229	0.977	16.16
OKDM004	32.00	33.00	OKDM004 32-33	2.82	7.50	6.63	9.94	39.96	0.270	0.828	16.82
OKDM004	33.00	34.00	OKDM004 33-34	2.42	7.40	6.23	10.34	40.62	0.241	1.023	16.61
OKDM004	34.00	34.80	OKDM004 34-34.8	2.00	7.75	6.60	9.91	39.30	0.284	1.017	17.05
OKDM005	0.00	1.00	OKDM005 0-1	1.44	0.27	24.09	10.62	47.24	0.068	0.022	5.03
OKDM005	1.00	2.00	OKDM005 1-2	2.29	0.87	28.12	15.86	31.32	0.091	0.034	8.46
OKDM005	2.00	3.00	OKDM005 2-3	2.18	0.16	27.29	18.52	29.79	0.080	0.031	9.82
OKDM005	3.00	4.00	OKDM005 3-4	3.11	0.09	26.48	18.98	30.19	0.066	0.028	10.35
OKDM005	4.00	5.00	OKDM005 4-5	2.07	0.15	27.95	19.29	27.82	0.063	0.022	10.35
OKDM005	5.00	5.62	OKDM005 5-5.62	1.33	4.39	27.57	17.41	23.70	0.063	0.020	10.79
OKDM005	5.62	6.86	OKDM005 5.62-6.86	1.99	5.17	20.53	15.30	31.45	0.030	0.019	12.94
OKDM005	6.86	8.00	OKDM005 6.86-8	1.47	15.62	18.56	12.21	22.08	0.070	0.024	13.07
OKDM005	8.00	9.00	OKDM005 8-9	2.27	18.08	13.73	11.42	26.51	0.044	0.012	12.47
OKDM005	9.00	10.00	OKDM005 9-10	2.78	27.41	11.58	9.16	19.34	0.092	0.014	12.30
OKDM005	10.00	11.00	OKDM005 10-11	1.15	2.77	15.28	17.23	40.55	0.029	0.019	12.69
OKDM005	11.00	12.26	OKDM005 11-12.26	2.51	11.01	20.46	11.87	29.01	0.105	0.017	11.13
OKDM005	12.26	13.00	OKDM005 12.26-13	1.59	14.26	15.33	9.67	35.33	0.126	0.013	10.39
OKDM005	13.00	14.00	OKDM005 13-14	2.57	7.47	16.75	10.44	44.25	0.140	0.015	8.23
OKDM005	14.00	15.00	OKDM005 14-15	3.12	16.48	11.19	9.69	38.88	0.103	0.007	9.39
OKDM005	15.00	16.00	OKDM005 15-16	2.79	16.92	8.94	10.54	40.52	0.095	0.007	9.47

OKDM005	16.00	16.96	OKDM005 16-16.96	2.30	13.86	9.73	10.97	43.51	0.088	0.007	9.02
OKDM005	16.96	18.00	OKDM005 16.96-18	2.76	7.23	8.62	12.60	54.59	0.072	0.005	7.41
OKDM005	18.00	19.00	OKDM005 18-19	2.23	7.07	8.09	13.07	54.81	0.124	0.005	7.05
OKDM005	19.00	20.00	OKDM005 19-20	2.60	15.15	9.65	10.61	42.23	0.160	0.008	8.79
OKDM005	20.00	21.00	OKDM005 20-21	2.18	17.00	12.60	8.81	37.39	0.226	0.010	8.93
OKDM005	21.00	22.00	OKDM005 21-22	3.36	8.19	10.55	12.24	48.96	0.258	0.007	8.02
OKDM005	22.00	23.00	OKDM005 22-23	2.53	12.41	9.58	10.82	46.29	0.218	0.009	7.98
OKDM005	23.00	23.75	OKDM005 23-23.75	1.20	12.36	7.58	12.05	48.49	0.187	0.009	7.09
OKDM005	23.75	25.00	OKDM005 23.75-25	1.77	13.90	11.60	9.88	43.44	0.193	0.013	7.07
OKDM005	25.00	26.00	OKDM005 25-26	2.50	12.48	13.17	9.40	43.61	0.163	0.015	7.36
OKDM005	26.00	27.00	OKDM005 26-27	1.13	5.05	4.64	13.89	61.62	0.140	0.007	6.13
OKDM005	27.00	28.80	OKDM005 27-28.8	1.30	14.92	8.08	12.70	41.22	0.116	0.005	8.81
OKDM005	28.80	30.00	OKDM005 28.8-30	2.13	13.68	9.71	8.69	39.12	0.188	0.011	11.01
OKDM005	30.00	31.00	OKDM005 30-31	1.37	9.57	12.10	11.01	46.76	0.285	0.011	7.15
OKDM005	31.00	32.00	OKDM005 31-32	1.18	7.07	14.09	11.51	47.11	0.429	0.013	6.87
OKDM005	32.00	33.00	OKDM005 32-33	2.33	19.79	15.78	6.95	29.10	0.361	0.012	9.36
OKDM005	33.00	34.00	OKDM005 33-34	1.45	12.03	12.63	10.78	41.40	0.373	0.010	8.10
OKDM005	34.00	34.80	OKDM005 34-34.8	0.57	20.66	8.65	9.52	35.11	0.276	0.008	8.96
OKDM006	1.60	2.00	OKDM006 1.6-2	1.24	20.13	12.86	7.65	32.48	0.159	0.014	9.47
OKDM006	2.00	3.00	OKDM006 2-3	2.46	17.65	13.30	8.74	35.05	0.158	0.014	8.66
OKDM006	3.00	4.00	OKDM006 3-4	2.05	17.96	11.89	7.96	37.81	0.155	0.015	8.74
OKDM006	4.00	5.00	OKDM006 4-5	1.98	13.63	12.21	8.38	43.58	0.119	0.014	8.56
OKDM006	5.00	6.00	OKDM006 5-6	3.27	14.43	10.78	9.17	43.41	0.122	0.014	8.25
OKDM006	6.00	7.00	OKDM006 6-7	2.27	15.12	12.60	9.46	38.29	0.117	0.017	9.65
OKDM006	7.00	8.32	OKDM006 7-8.32	2.73	21.47	10.50	8.50	33.46	0.145	0.013	8.87
OKDM006	8.32	9.00	OKDM006 8.32-9	1.53	6.78	7.54	11.01	59.00	0.040	0.008	6.42
OKDM006	9.00	10.00	OKDM006 9-10	2.00	4.65	10.03	12.33	56.73	0.043	0.012	6.50

OKDM006	10.00	11.00	OKDM006 10-11	2.27	14.29	12.19	10.24	40.85	0.127	0.012	7.67
OKDM006	11.00	12.00	OKDM006 11-12	2.18	11.81	13.29	10.62	42.35	0.289	0.013	7.54
OKDM006	12.00	13.00	OKDM006 12-13	2.61	15.81	10.14	9.77	41.12	0.183	0.010	8.28
OKDM006	13.00	14.00	OKDM006 13-14	3.06	11.87	9.91	11.18	45.15	0.157	0.011	8.58
OKDM006	14.00	14.60	OKDM006 14-14.6	1.61	12.68	9.73	11.43	43.53	0.193	0.010	8.66
OKDM006	14.60	16.00	OKDM006 14.6-16	4.53	8.13	10.66	10.87	50.52	0.231	0.007	7.80
OKDM006	16.00	17.00	OKDM006 16-17	3.77	7.15	11.71	11.46	49.94	0.255	0.009	7.71
OKDM006	17.00	18.00	OKDM006 17-18	2.87	8.33	9.57	10.69	52.18	0.213	0.006	7.64
OKDM006	18.00	19.00	OKDM006 18-19	2.11	6.41	10.00	11.25	53.77	0.251	0.006	7.34
OKDM006	19.00	20.00	OKDM006 19-20	3.39	8.33	10.53	10.80	50.34	0.235	0.005	7.87
OKDM006	20.00	21.00	OKDM006 20-21	1.50	9.58	10.40	10.57	49.33	0.221	0.005	7.53
OKDM006	21.00	22.00	OKDM006 21-22	1.80	7.47	12.19	11.40	48.70	0.244	0.006	7.26
OKDM006	22.00	23.00	OKDM006 22-23	2.40	10.35	11.37	10.08	46.92	0.184	0.004	7.96
OKDM006	23.00	23.95	OKDM006 23-23.95	1.78	9.60	10.15	10.09	49.34	0.144	0.003	7.77
OKDM006	23.95	25.00	OKDM006 23.95-25	1.31	1.46	7.98	13.72	61.78	0.170	<0.001	5.73
OKDM006	25.00	26.00	OKDM006 25-26	1.96	7.40	11.53	11.22	49.54	0.240	0.002	7.58
OKDM006	26.00	27.30	OKDM006 26-27.3	0.68	8.51	10.03	11.28	49.68	0.209	<0.001	7.80
OKDM006	27.30	28.10	OKDM006 27.3-28.1	1.19	20.07	9.19	8.42	35.26	0.237	0.007	9.52
OKDM006	28.10	29.00	OKDM006 28.1-29	0.84	16.17	10.21	9.14	38.86	0.315	0.007	9.12
OKDM006	29.00	30.00	OKDM006 29-30	1.02	22.93	9.87	7.12	30.80	0.209	0.012	10.37
OKDM006	30.00	31.00	OKDM006 30-31	1.99	13.26	8.63	10.63	44.93	0.253	0.007	7.52
OKDM006	31.00	32.00	OKDM006 31-32	1.09	24.38	9.18	7.29	29.78	0.219	0.014	9.90
OKDM006	32.00	34.00	OKDM006 32-34	1.21	19.65	15.15	7.49	29.49	0.340	0.022	9.21
OKDM007	0.00	1.00	OKDM007 0-1	2.16	16.20	13.88	8.53	35.93	0.206	0.015	9.68
OKDM007	1.00	2.00	OKDM007 1-2	2.12	8.85	9.04	10.86	52.34	0.089	0.007	7.98
OKDM007	2.00	3.00	OKDM007 2-3	1.36	10.15	9.79	10.12	49.92	0.135	0.010	8.52

OKDM007	3.00	4.00	OKDM007 3-4	1.84	11.67	11.09	8.19	47.51	0.090	0.011	8.75
OKDM007	4.00	5.00	OKDM007 4-5	1.48	13.86	8.61	8.31	47.68	0.106	0.008	8.67
OKDM007	5.00	6.00	OKDM007 5-6	2.94	10.44	10.54	9.86	48.79	0.048	0.014	8.42
OKDM007	6.00	7.00	OKDM007 6-7	1.94	7.98	10.05	11.29	52.19	0.048	0.014	7.61
OKDM007	7.00	8.00	OKDM007 7-8	2.06	4.68	10.48	11.38	56.98	0.057	0.013	6.51
OKDM007	8.00	9.40	OKDM007 8-9.4	2.80	7.17	12.53	9.88	51.65	0.183	0.014	7.12
OKDM007	9.40	10.00	OKDM007 9.4-10	0.98	7.19	12.52	10.42	50.57	0.169	0.012	7.17
OKDM007	10.00	11.00	OKDM007 10-11	2.22	5.85	10.35	11.92	54.11	0.278	0.015	6.76
OKDM007	11.00	12.00	OKDM007 11-12	3.30	5.37	9.30	10.92	57.91	0.162	0.014	5.80
OKDM007	12.00	13.00	OKDM007 12-13	3.46	5.80	10.93	12.37	52.23	0.268	0.011	7.00
OKDM007	13.00	14.00	OKDM007 13-14	2.84	10.09	10.77	11.42	46.43	0.218	0.009	7.93
OKDM007	14.00	15.00	OKDM007 14-15	4.24	14.43	12.37	9.21	39.77	0.247	0.010	8.67
OKDM007	15.00	16.00	OKDM007 15-16	1.70	9.50	12.70	10.69	45.43	0.221	0.010	8.04
OKDM007	16.00	17.00	OKDM007 16-17	1.22	11.69	10.19	10.47	45.56	0.162	0.007	8.18
OKDM007	17.00	18.00	OKDM007 17-18	1.36	6.65	8.00	12.16	55.63	0.171	0.005	6.57
OKDM007	18.00	19.00	OKDM007 18-19	1.72	7.77	9.22	10.56	54.03	0.216	0.004	6.94
OKDM007	19.00	20.00	OKDM007 19-20	1.68	8.98	10.13	11.82	48.28	0.231	0.004	7.57
OKDM007	20.00	21.00	OKDM007 20-21	1.52	8.75	11.78	10.82	47.37	0.202	0.003	7.61
OKDM007	21.00	22.00	OKDM007 21-22	1.12	8.56	11.93	10.37	47.52	0.229	0.004	7.88
OKDM007	22.00	23.00	OKDM007 22-23	1.76	9.95	11.57	10.16	45.21	0.613	0.005	7.77
OKDM007	23.00	24.00	OKDM007 23-24	1.22	11.05	10.37	10.05	45.93	0.248	0.005	7.91
OKDM007	24.00	25.00	OKDM007 24-25	1.82	17.35	8.07	9.47	39.11	0.203	0.006	9.51
OKDM007	25.00	26.00	OKDM007 25-26	1.66	17.05	9.68	8.86	38.21	0.315	0.007	9.29
OKDM007	26.00	27.30	OKDM007 26-27.3	1.38	21.75	8.87	7.78	33.31	0.219	0.010	10.27
OKDM008	0.00	1.00	OKDM008 0-1	1.74	14.90	11.68	7.70	43.70	0.145	0.019	8.26
OKDM008	1.00	2.00	OKDM008 1-2	1.88	16.97	13.85	7.47	36.76	0.237	0.024	9.07
OKDM008	2.00	3.00	OKDM008 2-3	2.20	9.85	15.65	9.48	42.58	0.281	0.029	8.24
OKDM008	3.00	4.00	OKDM008 3-4	1.70	6.70	12.02	11.61	50.03	0.246	0.072	7.18
OKDM008	4.00	5.53	OKDM008 4-5.53	1.94	14.08	15.79	9.07	35.33	0.393	0.041	9.44

OKDM008	5.53	7.00	OKDM008 5.53-7	1.92	9.81	11.28	11.72	46.05	0.282	0.027	7.77
OKDM008	7.00	7.90	OKDM008 7-7.9	0.92	5.97	10.00	13.63	51.86	0.242	0.022	6.70
OKDM008	7.90	9.00	OKDM008 7.9-9	1.42	10.50	12.20	10.92	44.42	0.340	0.022	8.01
OKDM008	9.00	10.00	OKDM008 9-10	1.32	9.32	11.72	11.61	45.82	0.293	0.013	7.96
OKDM008	10.00	11.00	OKDM008 10-11	1.68	10.83	8.90	11.97	46.86	0.192	0.011	8.16
OKDM008	11.00	12.00	OKDM008 11-12	1.82	12.75	10.40	10.71	42.80	0.188	0.013	8.80
OKDM008	12.00	13.47	OKDM008 12-13.47	2.36	11.88	10.11	11.13	43.77	0.137	0.011	8.85
OKDM008	13.47	14.00	OKDM008 13.47-14	0.72	11.51	10.18	11.19	43.69	0.113	0.007	8.85
OKDM008	14.00	15.00	OKDM008 14-15	1.76	9.80	9.01	12.04	47.55	0.111	0.006	8.03
OKDM008	15.00	16.00	OKDM008 15-16	1.22	9.03	7.82	12.19	49.82	0.340	0.007	7.71
OKDM008	16.00	17.00	OKDM008 16-17	1.54	10.71	8.34	11.52	47.09	0.272	0.008	8.33
OKDM008	17.00	18.00	OKDM008 17-18	1.54	9.51	7.92	12.37	50.19	0.307	0.004	7.11
OKDM008	18.00	19.30	OKDM008 18-19.3	1.66	9.36	10.65	11.61	46.45	0.253	0.004	7.98
OKDM008	19.30	20.00	OKDM008 19.3-20	1.26	0.31	9.37	12.50	52.50	0.180	0.005	3.26
OKDM008	20.00	21.30	OKDM008 20-21.3	1.62	0.98	9.78	12.50	52.50	0.181	0.008	6.14
OKDM009	0.00	0.30	OKDM009 0-0.3	0.40	5.40	14.28	7.32	34.31	0.225	0.019	15.62
OKDM009	0.30	1.00	OKDM009 0.3-1	0.66	0.08	2.21	6.79	32.44	0.027	0.025	24.99
OKDM009	1.00	2.00	OKDM009 1-2	1.26	0.05	0.58	1.85	37.24	0.022	0.035	25.08
OKDM009	2.00	3.30	OKDM009 2-3.3	2.12	0.79	1.55	1.45	30.25	0.040	0.013	28.09
OKDM009	3.30	4.00	OKDM009 3.3-4	1.12	5.19	5.63	11.76	53.19	0.110	0.008	9.04
OKDM009	4.00	5.00	OKDM009 4-5	1.52	6.50	6.12	14.10	56.40	0.156	0.005	5.64
OKDM009	5.00	6.00	OKDM009 5-6	1.56	12.94	7.12	11.63	48.28	0.124	0.006	6.73
OKDM009	6.00	7.00	OKDM009 6-7	2.42	8.38	10.13	12.03	50.38	0.174	0.006	6.41
OKDM009	7.00	8.00	OKDM009 7-8	2.04	15.16	10.34	9.87	42.11	0.153	0.005	7.76
OKDM009	8.00	9.00	OKDM009 8-9	2.50	11.34	9.95	10.95	46.77	0.194	0.005	7.40
OKDM009	9.00	10.00	OKDM009 9-10	2.50	16.34	10.78	8.69	39.95	0.327	0.006	8.25
OKDM009	10.00	11.00	OKDM009 10-11	1.28	20.48	9.80	9.06	34.60	0.192	0.006	9.33
OKDM009	11.00	12.00	OKDM009 11-12	1.72	14.60	8.91	9.19	39.01	0.242	0.008	10.85
OKDM009	12.00	13.40	OKDM009 12-13.4	2.84	11.01	8.80	10.35	41.51	0.281	0.008	11.19

OKDM009	13.40	14.00	OKDM009 13.4-14	1.12	13.25	8.95	9.16	37.83	0.220	0.012	12.13
OKDM009	14.00	15.00	OKDM009 14-15	1.62	10.31	8.31	9.29	38.02	0.307	0.011	13.51
OKDM009	15.00	16.00	OKDM009 15-16	2.02	8.70	9.52	9.81	40.88	0.355	0.015	12.47
OKDM009	16.00	16.60	OKDM009 16-16.6	0.52	10.06	7.12	11.50	46.01	0.247	0.012	9.71
OKDM009	16.60	18.00	OKDM009 16.6-18	2.06	4.91	11.47	10.56	41.94	0.306	0.009	12.44
OKDM009	18.00	19.00	OKDM009 18-19	1.32	18.75	9.18	9.41	36.19	0.292	0.014	9.36
OKDM009	19.00	20.00	OKDM009 19-20	1.80	18.42	7.73	10.13	39.07	0.298	0.013	8.48
OKDM009	20.00	21.00	OKDM009 20-21	1.10	11.41	11.09	11.38	43.87	0.397	0.014	7.71
OKDM009	21.00	22.00	OKDM009 21-22	1.60	20.00	7.70	9.59	37.44	0.311	0.016	8.55
OKDM009	22.00	23.00	OKDM009 22-23	2.86	17.11	11.98	9.28	35.66	0.432	0.014	8.42
OKDM009	23.00	24.00	OKDM009 23-24	2.92	13.48	13.20	10.18	39.36	0.320	0.019	7.69
OKDM009	24.00	25.00	OKDM009 24-25	2.70	9.51	12.04	10.84	47.27	0.348	0.017	6.52
OKDM010	0.00	1.00	OKDM010 0-1	2.72	8.08	6.16	7.07	28.81	0.128	0.019	21.36
OKDM010	1.00	2.05	OKDM010 1-2.05	1.56	2.69	3.10	5.04	38.69	0.065	0.019	20.99
OKDM010	2.05	3.00	OKDM010 2.05-3	2.43	2.00	1.92	1.39	33.12	0.053	0.016	26.60
OKDM010	3.00	3.80	OKDM010 3-3.8	2.02	8.78	7.50	7.39	41.60	0.170	0.006	14.60
OKDM010	3.80	5.00	OKDM010 3.8-5	2.50	18.03	12.72	8.01	32.10	0.319	0.004	10.73
OKDM010	5.00	6.03	OKDM010 5-6.03	3.06	17.79	10.71	8.91	35.81	0.314	0.003	9.92
OKDM010	6.03	7.00	OKDM010 6.03-7	1.44	11.29	12.95	9.71	43.26	0.359	0.007	8.50
OKDM010	7.00	8.00	OKDM010 7-8	1.26	12.84	11.62	10.48	41.99	0.376	0.008	8.51
OKDM010	8.00	9.00	OKDM010 8-9	1.74	13.27	7.70	11.19	46.75	0.165	0.004	7.67
OKDM010	9.00	10.00	OKDM010 9-10	1.82	9.90	8.14	12.02	49.61	0.390	0.002	7.35
OKDM010	10.00	11.00	OKDM010 10-11	1.36	9.97	8.48	11.74	49.56	0.328	0.002	7.45
OKDM010	11.00	12.00	OKDM010 11-12	1.50	18.77	10.22	8.71	35.62	0.332	0.004	9.60
OKDM010	12.00	12.90	OKDM010 12-12.9	1.62	10.26	10.01	9.76	40.81	0.322	0.004	11.89
OKDM010	12.90	14.00	OKDM010 12.9-14	2.18	5.89	5.89	10.58	43.43	0.258	0.004	14.77
OKDM010	14.00	14.95	OKDM010 14-14.95	1.94	9.35	7.31	10.14	43.08	0.341	0.006	12.38
OKDM010	14.95	16.00	OKDM010 14.95-16	1.84	10.98	8.99	9.12	36.72	0.339	0.008	13.86
OKDM010	16.00	17.25	OKDM010 16-17.25	3.48	8.81	9.31	8.50	36.39	0.361	0.010	15.36

OKDM010	17.25	18.00	OKDM010 17.25-18	0.96	7.57	12.00	11.55	47.68	0.456	0.006	7.35
OKDM010	18.00	19.00	OKDM010 18-19	2.38	20.98	9.05	8.49	33.39	0.488	0.007	9.65
OKDM010	19.00	20.00	OKDM010 19-20	1.74	19.08	11.57	7.94	34.45	0.408	0.008	9.35
OKDM010	20.00	21.00	OKDM010 20-21	3.36	9.43	8.66	11.94	49.06	0.474	0.004	7.31
OKDM010	21.00	22.00	OKDM010 21-22	2.74	15.61	11.83	8.54	37.91	0.580	0.012	8.79
OKDM010	22.00	23.00	OKDM010 22-23	1.88	3.31	10.45	11.25	56.70	0.370	0.005	6.19
OKDM010	23.00	23.65	OKDM010 23-23.65	2.24	21.71	8.38	6.10	36.64	0.318	0.011	9.17
OKDM010	23.65	25.00	OKDM010 23.65-25	4.36	4.63	8.85	13.46	55.96	0.213	0.007	6.12
OKDM010	25.00	26.00	OKDM010 25-26	1.34	9.61	9.89	8.82	52.62	0.280	0.014	6.62
OKDM010	26.00	27.00	OKDM010 26-27	2.96	10.65	15.89	8.09	42.55	0.303	0.015	7.50
OKDM010	27.00	28.00	OKDM010 27-28	1.88	3.39	4.69	15.22	57.92	0.152	0.526	8.24
OKDM010	28.00	28.80	OKDM010 28-28.8	1.00	8.85	8.88	10.89	47.28	0.230	0.012	11.91