

5 December 2024

# IRON RIDGE MINERAL RESOURCE UPDATE Mineral Resource Estimate increased by 177% to 13.4 Million Tonnes at 64.9% Fe

### **Highlights**

- Iron Ridge Mineral Resource Estimate increased by 8.5 Mt to 13.4 Mt @ 64.9% Fe 4.3 Mt @ 65.9% Fe as Indicated and 9.0 Mt @ 64.4% Fe as Inferred
- Exceptionally high grade and continuity of the Iron Ridge ore body maintained with potential for further resource base expansion
- The updated MRE enhances the geological confidence and provides a basis for future exploration and updated mine planning and Ore Reserve Estimate updates

**Fenix Resources Limited (ASX: FEX) (Fenix or the Company)** is pleased to announce an updated JORC compliant reportable Mineral Resource Estimate (**MRE**) for the Company's 100% owned Iron Ridge Iron Ore Mine (**Iron Ridge**) reported as at 30 November 2024 (**2024 MRE**).

The updated Iron Ridge 2024 MRE will provide a base for further exploration programs to be conducted in 2025 as well as inform future mining planning work aimed at extending the Iron Ridge mine life.

Class	Tonnes	Fe	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	TiO <sub>2</sub>	Р	LOI
01855	t	%	%	%	%	%	%
Indicated	4,315,357	65.90	1.80	2.36	0.09	0.04	1.31
Inferred	9,045,000	64.37	2.22	3.17	0.12	0.05	1.87
Total	13,360,357	64.86	2.09	2.91	0.11	0.04	1.69

 Table 1: Iron Ridge MRE as at 30 November 2024, at a 58% Fe cutoff grade

 Due to effects of rounding, totals may not represent the sum of all components

Fenix's Executive Chairman, Mr John Welborn, commented:

"Maintaining our excellent high-grade iron ore production from Iron Ridge is a priority for Fenix. The success of our recent exploration program has significantly improved our understanding of the deposit and the addition of more than eight million tonnes of high-grade iron ore to our mineral resource estimate provides a strong foundation for future growth.

"Fenix is committed to unlocking the full potential of the remarkable Iron Ridge ore body and we are confident in our ability to continue our strong mining and operational performance while respecting and preserving important heritage areas. We are on track for an exciting 2025 with an expected mine plan update for Iron Ridge, ongoing production from the Shine Iron Ore Mine, and the commencement of production from our third operating mine at Beebyn-W11. We continue to look for further opportunities to expand our operations to deliver long-term value for all our stakeholders."



### Iron Ridge Updated Mineral Resources Estimate

### **Exploration Success and Resource Context**

The 2024 MRE is a result of the exploration drilling program conducted between July 2024 and October 2024 (see ASX Announcement dated 20 November 2024). The program targeted key extensions in the southwest of the deposit and enhanced resource definition in previously explored areas. A total of six drillholes intercepted mineralisation, comprising three Diamond Drillholes (DDH) and three Reverse Circulation (RC) holes.

The new data improved geological confidence and identified additional zones of high-grade mineralisation, particularly in the main hematite banded iron formation (BIF) ore zone referred to as the "Big BIF". These results reinforce the deposit's continuity and provide a stronger basis for future mine planning and reserve estimation.

#### **Changes From Previous Estimate**

In 2019, the pre-mining MRE was stated at 10.5million tonnes (see ASX announcement dated 21 August 2019). Since then, mining has depleted 5.7 million tonnes (**Mt**) of the Mineral Resource up to 30 November 2024, resulting in 4.8 Mt. The data generated from the recent successful exploration drilling program at Iron Ridge has added an additional 8.5 Mt to the MRE (depicted in Figure 1 and shown in Table 2 below).

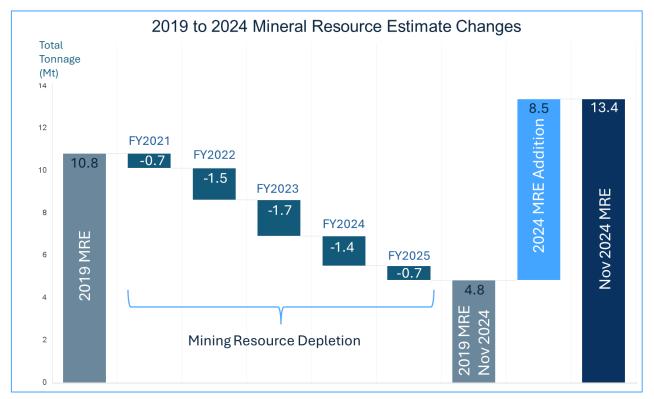


Figure 1: Mineral Resource Estimate change waterfall chart.

An increase in Fe grade is evident in the resource model due to the new drilling assays showing higher grades at depth, inversely  $AI_2O_3$ ,  $SiO_2$  and P decreases with depth while  $TiO_2$  stays constant.

Class	Tonnes	Fe	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	TiO <sub>2</sub>	Р	LOI			
Class	Mt	%	%	%	%	%	%			
PRE-MINING 201	PRE-MINING 2019 MRE (Aug 2019) <sup>1</sup>									
Indicated	10.0	64.3	2.56	3.21	0.09	0.05	1.90			
Inferred	0.5	62.5	2.80	4.41	0.12	0.05	3.13			
Total	10.5	64.2	2.57	3.26	0.09	0.05	1.96			
POST-MINING 2	019 MRE as at 30 I	November 20	)24		•	•	•			
Indicated	4.5	65.7	1.87	2.48	0.09	0.04	1.52			
Inferred	0.3	61.3	2.79	4.74	0.10	0.05	4.52			
Total	4.8	65.4	1.92	2.60	0.09	0.04	1.69			
Current 2024 MR	RE as at 30 Novem	ber 2024								
Indicated	4.3	65.9	1.80	2.36	0.09	0.04	1.31			
Inferred	9.0	64.4	2.22	3.17	0.12	0.05	1.87			
Total	13.4	64.9	2.09	2.91	0.11	0.04	1.69			
Calculated MRE	difference betwee	n 2024 MRE	to 2019 MR	E (30 Nov 20	)24)					
Total	8.5	64.55	2.19	3.09	0.12	0.06	1.69			

 Table 2: Iron Ridge MRE changes since 2019 up to end of November 2024

 Due to effects of rounding, totals may not represent the sum of all components

Tonnages are rounded to the nearest 0.1 million tonnes and grades are shown to two significant figures

#### **Mineral Resource Estimate**

The updated 2024 MRE was derived using Ordinary Kriging (OK) as the primary interpolation method, with variography used to define grade continuity for Fe,  $AI_2O_3$ ,  $SiO_2$ ,  $TiO_2$ , LOI, and P. Geological modelling incorporated both historical data and the results from the 2024 drilling campaign, focusing on enhancing the resource's spatial continuity and confidence.

Key changes include a significant increase in tonnage from the Big BIF zone and improved definition of the parallel Little BIF zone.

The resource has been constrained by a Reduced Level (RL) of 170m, incorporating geotechnical and economic considerations, including pit slope angles and tenement boundary constraints. These factors ensure the resource meets the criteria for Reasonable Prospects of Eventual Economic Extraction (RPEEE).

The modelling generated for the BIF's use a cut-off grade of 58% Fe as a clear distinction could be witnessed in the geology, therefore unchanged to 2019 MRE reporting criteria. A cross section along mineralisation strike (SW-NE) of the updated MRE is shown below in Figure 2 and Figure 3.

<sup>1</sup> Refer to 21 August 2019 MRE Fenix ASX announcement



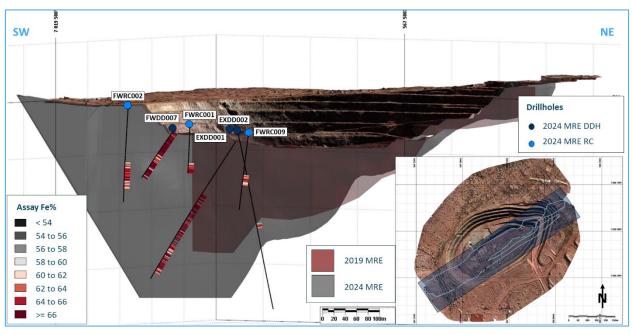


Figure 2: North facing cross section Big BIF 2019 and 2024 MRE

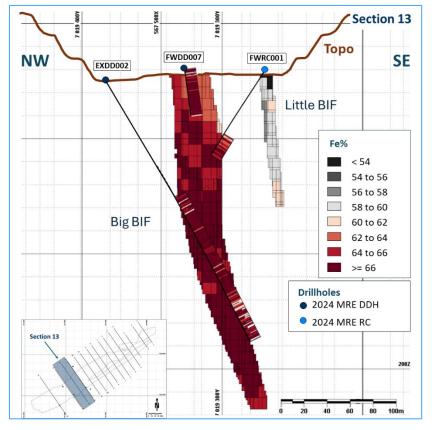


Figure 3: Northeast facing cross section view of the 2024 modelled resource

The JORC Code guidelines have been adhered to in the classification of the 2024 MRE. The classification level is based on the understanding of the deposits geology and mineral continuity, considering the drillhole spacing the QC results and search parameters.



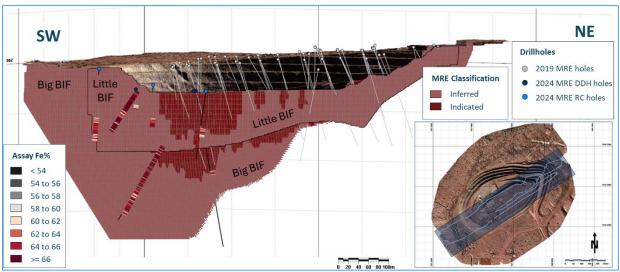


Figure 4: North facing cross section of resource classification of Little and Big BIF

#### **Resource Split by BIF Zones**

The Iron Ridge deposit is divided between the Big BIF and Little BIF zones, with the Big BIF accounting for most of the resource tonnes. This zone shows robust continuity, high grades, and potential for further extensions, particularly in the southwest.

The Little BIF, while more constrained in terms of depth and volume, contributes incremental tonnage and complements the overall deposit. Both zones underscore the high-grade nature of the resource and its economic potential.

LODE	CLASS	Volume	Density	Tonnes	Fe	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	TiO₂	Р	LOI
LODE	CLASS	m³	t/m³	t	%	%	%	%	%	%
BIG BIF	Indicated	1,296,104	3.20	4,147,533	66.13	1.77	2.24	0.09	0.04	1.13
BIG BIF	Inferred	2,539,000	3.20	8,125,000	64.88	2.15	2.83	0.12	0.04	1.53
BIG BIF	TOTAL	3,835,104	3.20	12,272,533	65.31	2.02	2.63	0.11	0.04	1.40
LITTLE BIF	Indicated	54,080	3.10	167,824	60.15	2.58	5.29	0.07	0.06	5.76
LITTLE BIF	Inferred	299,000	3.08	920,000	59.80	2.90	6.22	0.10	0.07	4.79
LITTLE BIF	TOTAL	353,080	3.09	1,087,824	59.85	2.85	6.08	0.09	0.07	4.94
LITTLE BIF + BIG BIF	TOTAL	4,188,184	3.19	13,360,357	64.86	2.09	2.91	0.11	0.04	1.69

Table 3: Mineral Resources by lode Big BIF and Little BIF

### Heritage

Important heritage exclusions zones exist in close proximity to the Iron Ridge pit. Fenix will ensure that any extensions to the Iron Ridge mine plan respects these exclusion zones and appropriately preserves important heritage. The impact of heritage imposed limitations will be assessed in detail as part of the upcoming ore reserve estimation process.

### **Next Steps**

Fenix will integrate the 2024 MRE and commence a comprehensive review of the Iron Ridge Ore Reserve Estimate. This process will incorporate the refined resource model, updated economic



parameters, heritage considerations and geotechnical inputs to ensure that the Ore Reserve Estimate accurately reflects the current and future economic extraction potential of the Iron Ridge deposit.

Further exploration will be conducted in early 2025 to focus on the high-priority target areas identified in the recent geophysical survey, including smaller iron-rich zones within the Iron Ridge lease area. These targets offer potential upside to the project and may contribute to further resource and reserve expansion.

Authorised by the Board of Fenix.

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### Mineral Resource Estimate Methodology, as per ASX Listing Rules 5.8.1

### **Geological Overview**

Iron Ridge, located in Western Australia's Weld Range, is a high-grade hematite deposit hosted within banded iron formations (BIFs). Mining commenced in 2020, and the deposit is known for its exceptional grade (>63% Fe) and low impurities (alumina and silica below 2.6% and 3.3% respectively).

The 2024 MRE builds on earlier geological and exploration work<sup>2</sup>, incorporating the results of the July 2024 to October 2024 drilling campaign<sup>4</sup>. This campaign aimed to improve resource confidence and test extensions to the southwest, resulting in a deeper understanding of the orebody's geometry and potential.

### **Exploration History**

The Iron Ridge project has a rich exploration history, underpinned by a long-standing interest in the region's high-grade hematite deposits.

#### Early Investigations

Initial investigations into the Iron Ridge deposit date back to the mid-20th century when the area's hematite-rich BIFs were first recognized as a potential source of high-grade iron ore. Early efforts primarily focused on surface mapping and sampling, which revealed high iron content and significant potential for direct shipping ore (DSO).

#### Modern Exploration Efforts

Modern exploration at Iron Ridge began in earnest in the early 2000s, when advancements in exploration technology allowed for more detailed geological assessments. Key phases include:

- **Geological Mapping and Sampling (2005–2010)**: Systematic surface mapping and sampling campaigns confirmed the presence of high-grade hematite mineralization. These efforts identified key zones of mineralization and highlighted the structural complexity of the deposit.
- **Drilling Campaigns (2010–2020)**: Multiple phases of drilling, including Reverse Circulation (RC) and diamond drilling hole (DDH), were conducted to delineate the extent of the orebody. These programs provided detailed information on mineralisation continuity, grade distribution, and structural controls on the deposit.
- **Geophysical Surveys (2015–2020)**: Airborne and ground-based geophysical surveys, including magnetic and gravity studies, enhanced understanding of the orebody's structure and provided insights into potential extensions of mineralisation.
- **Pre-Feasibility Studies (2018–2020)**: The data collected from drilling and geophysics informed resource modelling and early-stage economic assessments, culminating in the definition of a high-grade, economically viable hematite resource<sup>3</sup>.

#### **Recent Advancements**

Since acquiring the project, Fenix has implemented an exploration strategy aimed at further enhancing Mineral Resource confidence and optimising operational planning:

<sup>&</sup>lt;sup>2</sup> Refer to 21 August 2019 MRE Fenix ASX announcement

<sup>&</sup>lt;sup>3</sup> Refer to 4 November 2019 Feasibility Study Fenix ASX Announcement



- High-Resolution Drone Magnetic Survey (2024): Conducted by Resource Potentials, this survey refined the geological model of Iron Ridge, improving the understanding of orebody continuity and structural influences.
- Latest Drilling Campaign (2024): Focused on in-pit resource definition and geotechnical studies, this program has provided critical data to support resource updates and mine design.

### **Drilling and Sampling Techniques**

The MRE incorporates data from a recent drilling campaign (June–October 2024<sup>4</sup>), which added six drill holes comprising of three Diamond Drillholes (DDH) and three Reverse Circulation (RC) holes to the MRE data base. Drilling targeted both near-mine extensions and deeper mineralisation zones, improving resource confidence and expanding the orebody to the southwest. Drill collars were located based on access suitability and do not follow a predefined pattern.

- Samples were collected using cone splitters for RC and chisel-split for DDH, ensuring consistent representativity.
- QA/QC measures, including the use of standards, blanks, duplicates, and external laboratory checks, were implemented to ensure data integrity.

### **QA/QC Summary**

The quality assurance and quality control (QA/QC) processes implemented for the Iron Ridge project adhere to industry best practices, ensuring the accuracy, reliability, and consistency of exploration data.

#### QA/QC Measures

The quality assurance and quality control for the field-introduced work included:

- **Field Duplicates**: Used to assess sample repeatability, verifying the consistency of sampling procedures in the field.
- **Standards and Blanks**: Certified Reference Materials and blanks were introduced at regular intervals to monitor accuracy and detect potential contamination.

For assaying, the laboratory-introduced measures included:

- Standards and Repeats: Internal laboratory standards, along with pulp repeats and coarse reject repeats, were used to assess the reproducibility and accuracy of sample preparation and assay results.
- Element and Assay Reproducibility Tests: Designed to validate analytical consistency, these tests included separate batch analyses to cross-check sample results.
- Alternative Laboratory Checks: Select pulp samples were re-analysed at an independent laboratory to confirm assay reliability.

#### **QA/QC Statistics**

From the total database of 134,187 primary samples a total of, 3,723 QA/QC samples were incorporated. These included:

- **Pulp Repeats**: 1,768 samples (1.32% of the total)
- External Lab Checks: 1,431 samples (1.07%)
- Field Standards and Blanks: 217 samples (0.16%)
- **Field Duplicates**: 166 samples (0.12%)

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<sup>&</sup>lt;sup>4</sup> Refer to 20 November 2024 Iron Ridge Exploration Update Fenix ASX announcement



• Element Repeats: 72 samples (0.05%)

#### **Data Management and Security**

The exploration data are maintained within the SQL-based Core.XDB Database Management System, which supports the secure storage, validation, and reporting of data. Key features include:

- Validation Procedures: Comprehensive spatial and multi-table validation checks ensure data integrity.
- **Restricted Access**: Administrative access is limited to authorised personnel to prevent unauthorised modifications.
- **Regular Backups**: Incremental and full backups are performed daily, weekly, and monthly to ensure data security and recoverability

#### **Drilling Work Completed**

The exploration drilling program was completed from July 2024 to October 2024<sup>4</sup> with the ambition of identifying potential opportunities to expand the Iron Ridge MRE. This program consisted of 22 drill holes, completed by Top Drill, amounting to 3,037.98 metres of drilling. 11 were Diamond Drill (DD) holes, eight of which were drilled for geotechnical purposes, two for MRE and one used for both geotechnical and MRE purposes. The remaining 11 were Reverse Circulation (RC) holes, three of which were used for MRE and the remaining 8 were used to identify targets adjacent to the MRE area.

Below is a summary of the significant high-grade intercepts received from the in-pit holes (announced to ASX on 20 November 2024). These results provide critical data on mineralised continuity and include a dual-purpose geotechnical hole (FWDD0007) that was also sampled for resource estimation purposes.

- 162.9m @ 66% Fe from 138.1m in hole EXDD002 (DDH)
- 21.0m @ 65% Fe from 81.0m in hole FWRC001 (RC)
- 97.5m @ 64% Fe from the start of hole FWDD007 (DDH)
- 57.0m @ 63% Fe from 115.0m in hole FWRC002 (RC)
- 19.0m @ 62.8% Fe from 79.0m in hole FWRC009 (RC)
- 10.4m @ 60.3% Fe from 171.6m in hole EXDD001 (DDH)

The drilling targeted both near-mine extensions and deeper mineralisation, integrating results with the historical 2019 MRE dataset. The resulting dataset consisted of 62 collars totalling 9 466.6m and 3752 assay records.

#### **Geological Modelling**

The updated geological model was developed using implicit modelling in Micromine 2024 software.

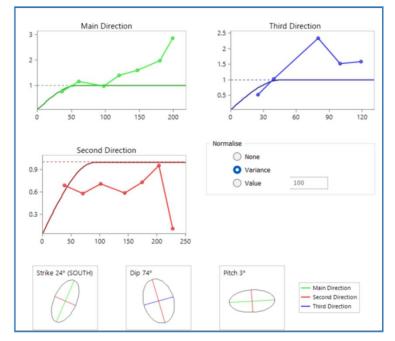
#### **Estimation Methodology**

Ordinary Kriging (OK) was used to estimate grades for Fe,  $AI_2O_3$ ,  $SiO_2$ ,  $TiO_2$ , LOI, and P across three estimation passes. It was found that the sparsity of the data especially true for BIF 2, did not present very good continuity in the variograms. With the nature of the deposit, it was decided to adopt a global trend for both BIF 1 and BIF 2 together. In doing so it was possible to generate meaningful variography and search parameters. The parameters mentioned can be seen in Table 4 with an example of the fitted variograms in Figure 5.



						Structure 1					Struc	ture 2	
Variable	Nugget	z	×	>	Sill (%)	Major (m)	Semi-major (m)	Minor (m)	Sill (%)	Major (m)	Semi-major (m)	Minor (m)	
Al <sub>2</sub> O <sub>3</sub> % Fe% LOI% P% SiO <sub>2</sub> % TiO <sub>2</sub> %	0.0425	203º	3.25°	74.22º	0	32.5	35.9	9.8	95.14	58.5	90.7	46.1	





#### Figure 5: Variography fitment

A block size of 10x10x10m was selected based on drill spacing, ensuring a balance between geological accuracy and economic practicality. The model was further validated using swath plots and comparative statistics to ensure consistency.

Due to less than perfect recovery and the highly weathered nature of the ore within the drill holes it was decided to rather use the density estimates from the multiple samples from the production data which was made available by Fenix.

The mineralisation was constrained by a 58% Fe cut-off grade due to a clear distinction could be witnessed in the geology, therefore unchanged to 2019 MRE reporting criteria, with wireframes generated for BIF 1 and BIF 2, summarised in Figure 6 below.



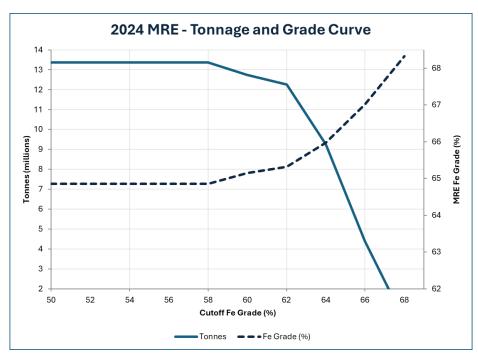


Figure 6: 2024 MRE tonnes and grade chart

The models were validated visually and statistically against drillhole data and historical interpretations.

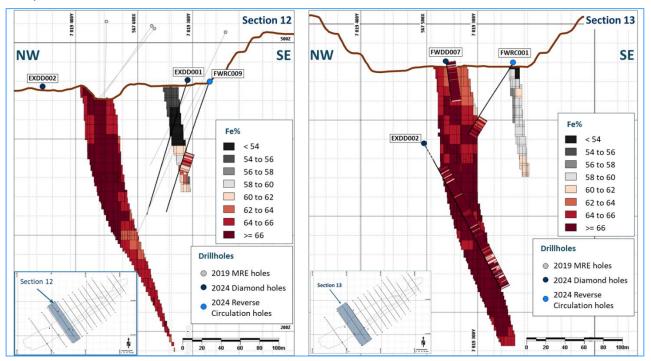


Figure 7: North facing cross sections of the modelling with new drill hole data



### **Classification of Mineral Resources**

Resources were classified in accordance with the JORC Code (2012) guidelines, based on geological continuity, drill spacing, and data quality:

- Indicated Resources: Blocks estimated in the first two kriging passes with a regression slope >0.5.
- **Inferred Resources**: All remaining economic material not meeting the criteria for Indicated classification.
- No Measured Resources were reported.

Key criteria that have been considered when classifying the Mineral Resources are detailed in JORC Table 1 which is contained in Appendix 2.

### **Other Modifying Factors**

Mineral Resources are constrained by the mining lease boundary with the heritage site Little Wilgie. The constraint is projected at depth at an angle of 58° in a NE direction from the tenement boundary impacting the lower portion of mineralisation extent, with such portion excluded from current MRE illustrated in Figure 8.

### **Reasonable Prospects for Eventual Economic Extraction (RPEEE)**

The Iron Ridge Project's 2024 MRE has been evaluated against the JORC Code's criteria for "Reasonable Prospects for Eventual Economic Extraction" (RPEEE). This assessment involves an analysis of technical and economic factors to establish a realistic limit for resource extension, ensuring that only mineralisation with future reasonable economic viability is included in the resource inventory.

#### **Key Considerations**

- 1. Geological and Structural Constraints:
  - The Iron Ridge deposit consists of tabular, vertically dipping hematite-rich BIFs.
  - Depth extensions beyond 400 metres pose challenges due to increasing strip ratios and logistical complexities associated with the steep dip and confined deposit geometry.

#### 2. Pit Slope and Density Assumptions:

- Traditional open pit mining is assumed, and underground extraction method was excluded for current estimate.
- A theoretical overall pit slope of 46° was applied to the volumetric assessments, with average densities of 3.2 t/m<sup>3</sup> for ore and 2.8 t/m<sup>3</sup> for waste.

#### 3. Economic Assumptions:

- Financial modelling was conducted using Fenix's integrated financial model, incorporating mining, processing, haulage, and shipping costs, alongside a sensitivity analysis for iron ore prices (US\$100 per tonne) and a USD/AUD exchange rate of 0.65.
- The maximum strip ratio to achieve value accretion was determined to be 8:1 (wasteto-ore). Beyond this limit, the operation would face diminishing returns under current economic assumptions.

#### 4. Defining the Lowest Economic Limit:

• Based on volumetric and financial modelling, a cut-off depth was established for inclusion in the MRE. The recommended lowest resource extension limit is RL 170m,



ensuring the resource aligns with economic extraction criteria. Below this depth, increasing waste volumes render extraction economically unfeasible (under current price forecast of US\$100 per tonne).

As such, even though mineralisation is open at depth, the MRE has excluded any mineralisation beyond RL 170m based on current extraction method as per Figure 8 below.

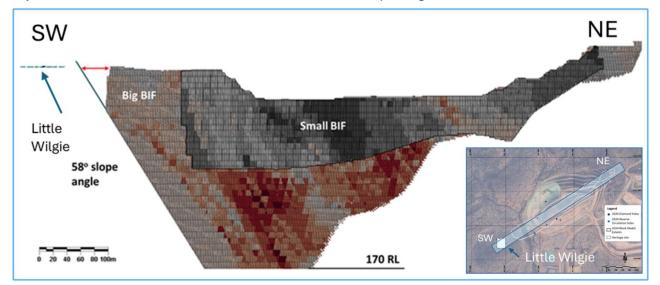


Figure 8: Plan view and cross section illustrating key modifying factors

### **Changes From Previous Estimate**

In 2019, the MRE was estimated at 10.5 Mt. By the end of November 2024, mining had depleted the Mineral Resource to 4.8 Mt. The new drilling campaign has added a further 8.5 Mt to the 2024 MRE. An increase in Fe grade is evident in the resource model due to the new drilling assays showing higher grades at depth, inversely  $AI_2O_3$ ,  $SiO_2$  and P decreases with depth while  $TiO_2$  stays constant.

A breakdown of the comparison is provided in Appendix 2 Table where a decrease in the Indicated resource is noted. The 0.2 Mt deficit in the MRE categorised as Indicated, is attributed to changes in the geological model, informed by new drill hole data. Specifically, drill hole EXDD001 indicates that the Big BIF thins out more in the central portion than previously estimated and this is reflected in the decrease of the Indicated Mineral Resource. The 2024 MRE reflects depletion from mining activities, contributions from new drillholes and updated modelling.

Model	Class	Volume	Density	Tonnes	Fe	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	TiO <sub>2</sub>	Р	LOI
		m³	t/m³	t	%	%	%	%	%	%
2019 MRE	Indicated	3,122,250	3.20	9,986,124	64.33	2.56	3.21	0.09	0.05	1.90
2019 MRE	Inferred	151,625	3.27	495,182	62.53	2.80	4.41	0.12	0.05	3.13
2019 MRE	TOTAL	3,273,875	3.20	10,481,306	64.24	2.57	3.26	0.09	0.05	1.96
Depleted November 2024	Indicated	1,408,213	3.23	4,549,718	65.66	1.87	2.48	0.09	0.04	1.52

Madal	Class	Volume	Density	Tonnes	Fe	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	TiO <sub>2</sub>	Р	LOI
Model	Class	m³	t/m³	t	%	%	%	%	%	%
Depleted November 2024	Inferred	87,981	3.16	278,176	61.35	2.79	4.74	0.10	0.05	4.52
Depleted November 2024	TOTAL	1,496,193	3.23	4,827,894	65.42	1.92	2.61	0.09	0.04	1.69
Post Drilling Campaign	Indicated	1,350,184	3.20	4,315,357	65.90	1.80	2.36	0.09	0.04	1.31
Post Drilling Campaign	Inferred	2,838,000	3.19	9,045,000	64.37	2.22	3.17	0.12	0.05	1.87
Post Drilling Campaign	TOTAL	4,188,184	3.19	13,360,357	64.86	2.09	2.91	0.11	0.04	1.69

Table 5: MRE changes pre and post latest drilling campaign

### **Key Outcomes**

The updated MRE now stands at 13.36 Mt @ 64.86% Fe, reflecting an 8.5 Mt increase over the previous estimate due to new drilling data. The resource comprises:

- Indicated Resource: 4.3 Mt @ 65.90% Fe.
- Inferred Resource: 9.0 Mt @ 64.37% Fe.

The updated MRE enhances the geological confidence and provides a basis for future mine planning and ore reserve estimation.



### **Competent Person Statement**

The information in this announcement relating to the Drilling Results is based on information compiled by Vannessa Clark, a Competent Person who is a member of the South African Council for Natural Scientific Professions (SACNASP) and a Fellow of the Geological Society of South Africa (GSSA). Ms Clark is an employee of Practara Metals & Mining Advisory, a sub-consultant of ResourcesWA Pty Ltd. Ms Clark has sufficient exploration experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Ms Clark consents to the inclusion in this report of the matters based on this information in the form and context in which it appears and assumes responsibility for the matters related to Sections 1 and 2 of JORC Table 1. Ms Clark is not a shareholder of Fenix (ASX:FEX).

The information in this announcement relating to the Iron Ridge Mineral Resource is based on the information compiled by Dr Heather King, a Competent Person who is a member of the South African Council for Natural Scientific Professions (SACNASP) and a Fellow of the Geological Society of South Africa (GSSA). Dr King is employed by A and B Global Mining a sub-consultant of ResourcesWA Pty Ltd. Dr King has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the JORC Code. Dr King consents to the inclusion in this report of the matters based on this information in the form and context in which it appears and assumes responsibility for the matters related to Section 3 of JORC Table 1. Dr King is not a shareholder of Fenix (ASX:FEX).

With respect to the previously reported Iron Ridge Mineral Resource, the Company confirms it is not aware of any new information or data that materially affects the information included in the original market announcement on 21 August 2019 and the Company's subsequent annual reports released on 29 August 2022, 29 August 2023 and 29 August 2024, and all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

#### **Forward Looking Statements**

This announcement may include forward-looking statements. Forward-looking statements are only predictions and are subject to risk. Uncertainties and assumptions which are outside the control of the Company. Actual values, results or events may be materially different to those expressed or implied in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward-looking statements. Any forward-looking statement in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law, the Company does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement or any changes in events, conditions, or circumstances on which any such forward looking statement is based.



**Fenix** (**ASX: FEX**) is a highly profitable, fully integrated mining, logistics and port services business with assets in the Mid-West region of Western Australia. Fenix operates a unique fully integrated mining and logistics business. High quality iron ore products are transported by road to Geraldton using the Company's 100% owned Newhaul Road Logistics business. Fenix's wholly owned Newhaul Port Logistics business operates its own loading and storage facilities at the Geraldton Port, with storage capacity of more than 400,000 tonnes and loading capacity of more than 5 million tonnes per annum.

Fenix's diversified Mid-West iron ore, port and rail asset base provides an excellent foundation for future growth. These assets include the Iron Ridge mine, the Beebyn-W11 Deposit, the Twin Peaks Iron Ore Mine, the Shine Iron Ore Mine, the Newhaul Road Logistics haulage business which includes a state-of-the-art road haulage fleet, two rail sidings at Ruvidini and Perenjori, as well as the Newhaul Port Logistics business that operates three on-wharf bulk material storage sheds at the Geraldton Port.

The Company's 100% owned, flagship Iron Ridge Iron Ore Mine is a premium high grade, high margin, direct shipping iron ore operation located approximately 360km northeast of Geraldton that hosts some of the highest-grade iron ore in Western Australia. Production commenced at Iron Ridge in December 2020 and is currently operating at the production run rate of 1.4 million tonnes per annum. Fenix will substantially increase its production profile with the addition of the tonnes<sup>5</sup> from the Shine Iron Ore Mine (restarted in August 2024) and the Beebyn-W11 Project, due to be in production in early 2025.

The Company is led by a proven team with deep mining and logistics experience and benefits from strategic alliances and agreements with key stakeholders, including the Wajarri Yamaji people who are the Traditional Custodians of the land on which Fenix is currently operating. Fenix is focused on promoting opportunities for local businesses and the community. The Company has generated more than 200 local jobs. Fenix is proud to have a strong indigenous representation in the Company's workforce and to be in partnership with leading local and national service providers. We acknowledge the Wajarri Yamaji people as the Traditional Custodians of the land our Iron Ridge Project is located on. We pay our respects to elders and leaders past, present and emerging.

<sup>&</sup>lt;sup>5</sup> Refer to announcement dated 4 July 2024, which sets out the production guidance from Shine is expected to reach a rate of 100,000 tonnes per month during the current financial year, and announcement dated 25 July 2024 for the Beebyn-W11 production target.



# **Follow Fenix**

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### **APPENDIX 1**

Class	Tonnes	Fe	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	TiO <sub>2</sub>	P <sub>2</sub> O <sub>5</sub>	LOI
Class	Mt	%	%	%	%	%	%
2019 MRE (Aug 201	19)						
Indicated (Ind)	10.0	64.3	2.56	3.21	0.09	0.05	1.90
Inferred (Inf)	0.5	62.5	2.80	4.41	0.12	0.05	3.13
Total	10.5	64.2	2.57	3.26	0.09	0.05	1.96
MRE Changes due	to depletion l	by mining b	y end of fir	ancial year	(FY)		
FY20 (Ind+Inf)	10.5	64.2	2.57	3.26	0.09	0.05	1.96
FY21 (Ind+Inf)	9.8	64.4	2.46	3.16	0.09	0.05	1.92
FY22 (Ind+Inf)	8.3	64.8	2.25	2.95	0.09	0.04	1.78
FY23 (Ind+Inf)	6.6	65.1	2.07	2.77	0.09	0.04	1.78
FY24 (Ind+Inf)	5.2	65.3	1.97	2.65	0.09	0.04	1.76
2019 MRE (as at No	ovember 2024	) as per de	pletion sch	edule			
Indicated	4.5	65.7	1.87	2.48	0.09	0.04	1.52
Inferred	0.3	61.4	2.79	4.74	0.10	0.05	4.52
Total	4.8	65.4	1.92	2.61	0.09	0.04	1.69
New 2024 MRE (as	at November	2024)					
Indicated	4.3	65.9	1.80	2.36	0.09	0.04	1.31
Inferred	9.0	64.4	2.22	3.17	0.12	0.05	1.87
Total	13.4	64.9	2.09	2.91	0.11	0.05	1.69
Delta 2024 MRE to	2019 MRE (as	at Novemb	per 2024)				
Indicated	-0.2	65.1	2.02	2.8	0.11	0.04	1.66
Inferred	8.7	64.3	2.23	3.2	0.12	0.05	1.87
Total	8.5	64.4	2.21	3.1	0.12	0.05	1.85

 Table 6: Mineral Resource Estimate changes between 2019 and 2024 (up to end of November 2024)

 Due to effects of rounding, totals may not represent the sum of all components

Tonnages are rounded to the nearest 0.1 million tonnes and grades are shown to two significant figures



Drill Hole	Drill	RegEast	RegNorth	RegRL	End of Hole		ineralis rsectior		Average Grade	Commonto
ID	Туре	MGA94_50S	MGA94_50S	MGA94_50S	(m)	From	То	Width	Fe %	Comments
EXDD001	DDH	567,623	7,019,300	460.4	333.8	171.6	182.0	10.4	60.3	
EXDD002	DDH	567,544	7,019,428	454.7	326.6	138.1	313.1	175.0	56.0	Including core loss
EXDD002*	DDH	567,544	7,019,428	454.7	326.6	138.1	313.1	162.9	66.8	Excludes core loss
FWDD007	DDH	567,482	7,019,306	460.6	100.2	0.0	97.5	97.5	64.0	
Sub total					760.6					Total DDH
FWRC001	RC	567,549	7,019,258	471.9	102.0	81.0	102.0	21.0	65.0	
FWRC002	RC	567,463	7,019,193	504.0	198.0	115.0	172.0	57.0	63.0	
FWRC009	RC	567,651	7,019,292	465.0	144.0	79.0	98.0	19.0	62.8	
Sub total					444.0					Total RC
Total					1204.6					Total All

Table 7: New Drillholes Added to the 2024 MRE

\*Hole EXDD002, with a total of 173.9m at an average of 56% Fe from surface, highlights extensive mineralisation in the main hematite zone, also known as 'Big BIF'. This hole had some limitation in terms of recovery due to unconsolidated nature of the ore and the grade shown is inclusive of the non-sampled section making up almost 16% of the hole. If non-sampled sections are ignored the grade mean comes to 66.8 % Fe. It is fair to extrapolate that grade extends across the total intersection.



## **APPENDIX 2**

### JORC Code, 2012 Edition – Table 1 Report – Iron Ridge Project

# Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>A total of 22 drill holes were completed, amounting to 3,037.98 metres of drilling. The exploration was overseen by ResourcesWA, based in Perth, Australia, on behalf of Fenix. Of the 22 holes drilled, 11 were diamond drill (DD) holes and the remaining 11 were reverse circulation (RC) holes. For diamond drilling (DD), the core samples are split using a chisel, with one half sent to the laboratory for analysis, while the other half is retained in the core tray for reference. A separate calico bag was collected for each metre directly from the cone splitter, and all samples were placed on the coarse reject pile for each corresponding metre.</li> <li>After logging, sample intervals were established, marked on the core boxes, and recorded in the field book. The core was sampled for all types of mineralisation and sent to the company laboratory for sample preparation before being forwarded for chemical analysis.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>The drilling contractor that completed the 2024 drilling programme was Top Drill.</li> <li>The RC drill holes were created using a reverse circulation drill rig equipped with a 5 ¼ face sampling hammer.</li> <li>Diamond drilling was conducted using triple-tube PQ3 and HQ3 equipment.</li> <li>Drilling reached an average depth of 138 metres, with a maximum depth of 333.8 metres.</li> <li>Both DD and RC holes were inclined at angles between 50° and 75° to the NNE and SE, approximately perpendicular to the dip of the mineralisation.</li> <li>Down hole surveys were carried out</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>The drilled and recovered metres for the diamond drill holes were initially recorded by the drill crew and later verified by company personnel to ensure accuracy. To optimize core recovery, triple tube drilling methods were employed, which are particularly effective in minimising core loss, especially in challenging ground conditions. The diamond drill core recovery ranged from a minimum of 93.84% to a maximum of 98.96%.</li> <li>RC cuttings were collected through a cyclone splitter, which ensured efficient retrieval.</li> <li>No discernible relationship or bias was detected between sample recovery and grade.</li> </ul>

### IRON RIDGE MINERAL RESOURCE ESTIMATE UPDATE | 5 DECEMBER 2024



Criteria	JORC Code explanation	Commentary
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All RC and diamond drill holes were logged geologically, using logging techniques based on the template provided by GeoBase. Particular attention was given to lithological descriptions, geological structures, and alterations during core logging. The diamond core was photographed and sampled, with photos taken in both wet and dry conditions.</li> <li>It is acknowledged that all drilled material, totalling approximately 1,513.68 metres for diamond core and 1,524 metres for reverse circulation, has been logged qualitatively.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Every recovered core interval was thoroughly logged from a geological perspective.</li> <li>The diamond core has been halved for assay work, with the remaining portion stored for reference.</li> <li>RC sample chips were collected into pre-labelled calico bags directly from a cone splitter for assay purposes. The samples generally consisted of particles 1-10 mm and weigh between 25 to 40 kg per 1-metre interval, depending on the rock type and degree of weathering.</li> <li>Wet and dry samples were collected using this method before being transported to the laboratory. The wet samples were allowed to dry prior to processing at the lab.</li> <li>Industry-standard sampling preparation procedures were followed, incorporating standards, blanks, and duplicates, which were added to the sample sequence at a ratio of 1:40, along with Bunbury blanks. The laboratory results will be reviewed and assessed for deviations using certified reference materials.</li> <li>The samples were sent to Intertek Group in Perth for analysis using x-ray fluorescence (XRF).</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Laboratory and Analysis: Sample analysis was conducted by Intertek Group PIc in Perth, WA, where procedures such as X-ray fluorescence (XRF) were utilised to determine concentrations of Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, LOI, and trace elements in samples.</li> <li>Certified Reference Materials (CRMs): 25 unique laboratory CRMs were used, including AMIS, OREAS, and PBS series, to maintain assay accuracy. CRMs were monitored against certified standard deviations, and results were flagged as "Pass," "Warning," or "Fail" based on their alignment with control limits.</li> <li>Repeatability Checks: Assay repeatability was verified using 32 pulp repeat samples. The results indicated acceptable consistency with minor deviations. No significant bias was noted across primary and duplicate pulp assays.</li> <li>Independent Checks: No external laboratory checks were conducted during this period as the current accuracy levels were deemed sufficient.</li> <li>Field Standards and Duplicates: QA/QC protocol included 44 field standards and 13 field duplicates, which were introduced to control for sample bias and ensure repeatability in field-sourced samples.</li> <li>General Outcome: The applied QA/QC measures indicated a high level of confidence in the accuracy and precision of assay results throughout the reporting period</li> </ul>



Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>The initial inspection and logging were conducted by the onsite geologist.</li> <li>The laboratory provided the assay data electronically, which was then uploaded into the drillhole database.</li> <li>No twinning holes were drilled, except for one instance where a diamond drill (DD) hole was placed next to a reverse circulation (RC) hole. Most of the DD holes were drilled in the current pit, while the RC holes were drilled in the current pit and at Targets 2, 3, and 4 which is still under investigation.</li> <li>Laboratory standards, duplicate samples, and blanks were incorporated into the sample sequence at a ratio of 1 in 40. These samples were utilised to evaluate the precision and accuracy of the sampling method and laboratory analyses. No field duplicates were collected for the diamond core samples.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The final collar positions were uploaded to the database after being documented in the GDA 94 MGA Zone 50 coordinate system. The grid is used to reference all provided coordinates.</li> <li>Downhole surveys were completed</li> <li>A lidar survey was conducted to provide topographic data.</li> <li>Iron Ridge is an operating mine.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The results and drill spacing are adequate to establish a mineral resource.</li> <li>The drillhole spacing varies from 30 to 150 metres and is irregular due to potential interference with mining activities or the instability of the mining walls.</li> <li>The drillhole spacing in and around the pit varies, but the latest and historical holes show continuity of the ore deposit.</li> <li>No compositing of samples has been applied.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>In order to intersect mineralisation, every drill hole has been positioned roughly perpendicular to its orientation and trend.</li> <li>Since the drilling orientations are almost perpendicular, no sample bias will be introduced.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Each sample bag was logged and clearly labelled with a unique sample ID. The bags were then securely sealed in plastic for protection and organised for storage at the field office, ensuring proper sample management and traceability throughout the process.</li> <li>Sample security is strictly maintained through a comprehensive chain-of-custody procedure. This process begins with the completion of sample submittal forms for each shipment, ensuring that every sample is accurately tracked and accounted for. Once prepared, the samples are securely sealed in bags and transported to the analytical laboratory. Along with the samples, all necessary documentation such as the original sample preparation request numbers and completed chain-of-custody forms accompanies each shipment.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	There have been no audits conducted on the drilling so far.



# Section 2 Reporting Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Iron Ridge Iron Ore mine, owned and operated by Fenix Resources (FEX), is located approximately 60 km NNW of the town of Cue in the Murchison region of Western Australia. It consists of a single granted mining lease ML M20/118 that is 100% owned by Prometheus Mining Pty Ltd, a wholly owned subsidiary of Fenix Resources Ltd.</li> <li>The tenement is securely held by Fenix and there are no impediments preventing the operation of the Mining Lease.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The Iron Ridge project has undergone various stages of exploration by multiple companies over several decades, providing a solid foundation of geological understanding. Although the quality of historical exploration data varies, it is considered adequate in both quality and quantity to support the exploration target and an Inferred Mineral Resource as previously reported. Below is a summary of relevant historical work.</li> <li>1962 - Mines Department of Western Australia: Drilled 14 diamond holes, with recoveries ranging from 6% to 88%. Despite low recoveries, the drilling confirmed continuous hematite mineralisation across several lenses. During this period, lenses W1 to W6 were mapped photogrammetrically on contoured base maps, and additional lenses W7 to W13 were identified.</li> <li>1970 - Northern Mining Corporation: Conducted mapping of the Weld Range, identifying 32 outcropping iron ore lenses, contributing to the understanding of the regional geology and iron ore potential.</li> <li>1972-1973 - Bulk Sampling: Two horizontal adits were developed at Weld Range to collect bulk samples of iron ore. In 1975, an additional bulk sample was mined from lens W3 to evaluate the iron ore's suitability for use as red iron oxide pigment.</li> <li>1997 - An Feng Kingstream Steel Limited: Began operations targeting the Weld Range, initiating field reconnaissance, rock chip sampling, data acquisition, GIS compilation, and land access negotiations as preparatory activities for exploration.</li> <li>2007 - MinCorp Consultants Pty Ltd for Atlas Iron: Engaged to compile historical data and design a drilling program for the Wilgie Mia area. This study laid the groundwork for future drilling by Atlas Iron.</li> <li>2007 - MinCorp Consultants Pty Ltd for Atlas Iron: Engaged to compile historical data and design a drilling program for the Wilgie Mia area. This study laid the groundwork for future drilling by Atlas Iron.</li> <li>2007 - MinCorp Consultants Pty Ltd for Atlas Iron: Engaged to compile historical data and</li></ul>



Criteria	JORC Code explanation	Commentary								
		<ul> <li>2018 - CSA Global Pty Ltd: Conducted an independent assessment of Iron Ridge 2009 Mineral Resource estimate, reporting it in accordance with the JORC Codwork added credibility to the initial estimates and confirmed the potential of Iron iron ore resource.</li> <li>2018-2019 - Fenix Resources Ltd: Conducted an updated drilling program, ir diamond drilling, to enhance the geological model and resource estimate. Fenix Resource estimate in late 2018, with CSA Global reporting it under JORC 20 program included detailed sampling, quality assurance measures, and density MRE included an Indicated classification of 6.6 Mt at 64.5% Fe and an Inferred on at 63.2% Fe, based on a 58% Fe cut-off.</li> </ul>					RC Code, 2012 Edition. This of Iron Ridge as a significant gram, including both RC and e. Fenix completed a Mineral DRC 2012 standards. Fenix's density studies. The updated			
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> <li>A summary of all information material to the understanding of the</li> </ul>	<ul> <li>The Iron Ridge deposit is located in an Archaean granite-greenstone terrain within the</li> <li>The mineralisation includes a blend of banded hematite (in both specular and earthy for and shaly limonite.</li> <li>The regional geography is characterised by metabasalts, primarily consisting of dole along with some minor basaltic and gabbroic formations. This area stretches for nearly and spans a width of 3 to 5 km.</li> <li>These formations are indicative of ancient volcanic activity and play a crucial role in deposits.</li> <li>The presence of banded iron formations is important, as they serve as primary source Iron Ridge, the mineralisation is primarily associated with hematite and goethite, which found in BIFs. It has been recorded that the main ore mineral is martite.</li> </ul>						orms), goethite, ritic formations, 60 km in length nosting mineral s of iron ore. At a are commonly		
Drill hole Information	<ul> <li>exploration results including a tabulation of the following information for all Material drill holes:</li> <li>easting and northing of the drill hole collar</li> </ul>	Below is a summary This report details th using the MGA94_5	e geogra	aphic coordina						
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> </ul>	BHID	Drill Type	RegEast	RegNorth	RegRL	EOH	Dip	Azi	Comments
	<ul> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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</li> </ul>	EXDD001	RC	567622,8	7019300	460,395	333,8	-69.8	358	Hole completed and intersected primary BIF.
	should clearly explain why this is the case.	EXDD002	DD	567543,5	7019428	454,676	326,6	-50.3	196	Completed
		FWDD001	DD	567430,119	7019499,259	509,152	100	-69.3	293	Completed
		FWDD002	DD	567398,075	7019283,845	504,488	100	-54.2	178	Completed
		FWDD003	DD	567935,339	7019363,628	518,585	60,4	-74.8	137	Completed



Criteria	JORC Code explanation	Commentary								
		FWDD004	DD	567481,691	7019306,224	460,63	100,68	-56.1	318	Completed
		FWDD005	DD	567518,069	7019274,035	462,702	91,1	-56.2	193	Hole abandoned due to excessive water and collar blowing out making pad dangerous
		FWDD006	DD	567471,647	7019356,443	459,73	100	-55.3	268	Completed
		FWDD007	DD	567481,691	7019306,224	460,63	100,2	-55.3	224	Completed
		FWDD008	DD	567593,537	7019618,526	515,621	100,6	-60.7	340	Completed
		FWDD009	DD	567745,637	7019246,362	511,408	100,6	-75.3	133	Completed
		FWRC001	RC	567549,49	7019257,63	471,87	102	-57.0	322	Hole abandoned due to excessive water and collar blowing out making pad dangerous
		FWRC002	RC	567462,59	7019193,2	503,97	198	-59.0	321	The hole was completed and intersected the main Iron Ridge ore body.
		FWRC003	RC	568405,19	7019644,72	549,92	240	-58.6	323	Geophysical target was intersected. Hole intersected the southern target and the main anomaly.



Criteria	JORC Code explanation	Commentary								
		FWRC004	RC	568334,92	7019611,34	550,34	228	-58.7	333	Intersected the southern target and the main target, the occurrence of BIF became patchy.
		FWRC005	RC	567572,94	7019150,68	504,81	66	-55.2	147	Geology sediments intersected but no BIF was intersected in the target.
		FWRC006	RC	567677,47	7019201,35	508,07	60	-55.2	147	Geology sediments intersected but no BIF was intersected in the target. Selected samples were taken for assaying.
		FWRC007	RC	567761,11	7019242,77	511,2	54	-56.3	139	Geology sediments intersected but no BIF was intersected in the target.
		FWRC008	RC	567847,13	7019308,67	516,14	60	-53.6	144	Geology sediments intersected but no BIF was intersected in the target. Selected samples were taken for assaying.
		FWRC009	RC	567650,92	7019291,56	516,14	144	-70.5	306	The hole was assayed;



Criteria	JORC Code explanation	Commentary								
										however, it is now thought that the intersected mineralisation is from the "Little BIF" rather than the main ore body.
		FWRC0010	RC	568164,16	7019863,52	558,15	168	-66.4	326	The entire unit was in the mafic and no sedimentary unit was intersected.
		FWRC0011	RC	567961,52	7019831,65	545,53	204	-57.6	137	Completed and intersected sedimentary unit.
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Weighted average grades over mineralised intersections above 50% Fe</li> <li>Non sampled sections where core loss has occurred reported as 0% Fe and further consideration given to Mean exclusive of non-sampled.</li> <li>Higher core losses experienced in Geological DD holes due to unconsolidated nature of orebody</li> <li>Only exploration results reported as part of this announcement</li> </ul>								
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>The diamond drill holes were angled between -50° to -75° and were designed to intersect the mineralisation perpendicularly including to achieve the true thickness of the orebody.</li> <li>The RC drill holes were angled at approximately -50° to -70° and were designed to intersect the mineralisation perpendicularly.</li> <li>While downhole intercepts are not reported as true widths, they are close to true widths based on the drill orientation and the current understanding of the mineralisation.</li> </ul>					to intersect the			

### IRON RIDGE MINERAL RESOURCE ESTIMATE UPDATE | 5 DECEMBER 2024



Criteria	JORC Code explanation	Commentary
Diagrams	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 drill hole collar locations and appropriate sectional views.	<ul> <li>The body of the report includes relevant maps and diagrams. Below is the Plan View of Exploration and Geotech Drilling.</li> </ul>
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.	<ul> <li>The significant mineralised intercepts and widths have been included in previous reports.</li> <li>Only exploration results presented and no Mineral Resource Estimate</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>All relevant information has been included in the report.</li> <li>Geotechnical data collected holds bearing on current mining activities being conducted.</li> <li>This report includes all significant results to date for Davis Tube Recovery (DTR) concentrate assay grades exceeding a 58% Fe cut-off grade</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Update current Mineral Resource Estimate (MRE) based on this new data.</li> <li>Additional drilling may be necessary for metallurgical testing to enhance the MRE classification.</li> <li>Targets identified in southwest extending into Fenix exploration licence area that should be further investigated.</li> <li>Nature and scale of planned work is also included in the body of the announcement.</li> </ul>



# **Section 3 Estimation and Reporting of Mineral Resources**

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	The data was imported into a SQL database with validations run on the data by GeoBase Australia and signed off by Resources WA.
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>In order to implement proper logging, sampling, and drilling standards Mr Adrian Dellar (Geologist) has visited the site multiple times and continuously managed all drilling, sampling, and other operations.</li> <li>The Competent Person for this study is Heather King (PhD, GDE (Geostatistics), Pr.Sci.Nat., FGSSA, FSEG) from ResourcesWA. No site visit was done by the Competent Person due it being an existing and operational mine and due to t time constraints. Mr Adrian Dellar was appointed to oversee the drilling and is deemed to be competent with the drilling of this type of mineralisation,</li> <li>Digital plots were used to confirm the drilling and geological estimates along with the commentary from Mr Adrian Dellar.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>Geological interpretations, informed by lithology, mineralization, and structure, were conducted by geologists from Resources WA using a logging template from GeoBase Australia. Additionally, 3D geological modelling was performed by Resources WA to generate wireframes of the greater than 58% Fe content ore body.</li> </ul>
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	<ul> <li>The Iron Ridge deposit, located within the Main Banded Iron Formation (BIF) band, comprises two prominent parallel BIF units. These units are separated by a distance ranging from 14 to 36 meters. These BIF units are exposed along approximately 75% of the 600-meter drilled strike length. A distinct contact exists between the BIF and the surrounding dolerite, enclosing 31 meters of BIF 1 and 6 meters of BIF 2.BIF 2 's thickness remains consistent with increasing depth. BIF 1 thins out in the northeastern section but stays constant in the southwestern section. BIF 1 has been tested down to a vertical extent of 280 meters in both the northeastern and southwestern sections of the deposit. In contrast, BIF 2 extends to a vertical depth of 176 meters in the northeastern portion, while its southwestern extent reaches a depth of 44</li> </ul>



Criteria	JORC Code explanation	Commentary
Criteria Estimation and modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource</li> </ul>	<ul> <li>meters. (https://miningdataonline.com/ viewed July 2024).</li> <li>Micromine 2024.5 was used to produce a block model. Ordinary Kriging was used as the main estimation method, this is an industry standard for this type of mineralisation. Due to low volume of drilling information for BIF 2 the two ore bodies were given the same search parameters as this produced the best variograms. The two bodies were limited by the wireframes generated for each and estimated separately.</li> <li>There was no clear evidence of extreme outliers that would</li> </ul>
	<ul> <li>estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> </ul>	Variable     Nugget     Z     X     Y     Sill     Major     Major     Major     Major     Major       (m)
	<ul> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	Al2O3%,       Fe%,         LO1%,       0.0425       203°       3.25°       74.22°       0       32.5       35.9       9.8       95.14       58.5       90.7       46.1         SiO2%,       TiO2%       The below table shows the parameters used for estimation purposes:



Criteria	JORC Code explanation	Con	ommentary				
			Parameter		Primary	Secondary	
				Input data	Drillhole	Drillhole	
			E	stimation method	Ordinary Kriging	Ordinary Kriging	
					Seventy percent of full range		
					(by anisotropic ratio)	Full range	
				Major	Equating to 40.95	Equating to 58.5	
			Search ellipse Dimensions		Seventy percent of full range		
			(radius)		(by anisotropic ratio)	Full range	
				Semi-major		Equating to 90.7	
					Seventy percent of full range		
					(by anisotropic ratio)	Full range	
				Minor	Equating to 32.27	Equating to 46.1	
				X (m)		10	
				Y (m)		10	
			Block size	Z (m)		10	
			Minimum nu	mber of samples	16	10	
			Maximum nu	mber of samples	20	20	
			Maximum	samples per hole	3	3	
				Discretisation	5 x 5 x 5	5 x 5 x 5	
		•	Other elements (Al <sub>2</sub> O <sub>3</sub> , TiO <sub>2</sub> , SiO <sub>2</sub> , LOI and P) were als estimated using the same search parameters due to eil positive or negative correlation with the Fe. Block sizes were selected as 10m x 10m x 10m in the p and z directions to generate blocks equal to one quarter the spacing of the drill hole data. The grade was cut at 58% Fe as a clear distinction cou- witnessed in the geology. The block model was compared to the drilling data both visually and statistically and deemed to align with the d hole data with only some smoothing occurring due to th nature of the deposits and number of drill holes used.				



Criteria	JORC Code explanation	Commentary					
		• Swath plots were also used to compare the data and deemed acceptable.					
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	<ul> <li>Tonnages were assessed on a dry-in situ basis.</li> <li>There was no moisture values reviewed.</li> </ul>					
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul> <li>The stated Mineral Resources are over the 58% Fe cut-off grade.</li> <li>A 58% Fe cut-off has been used to model low grade domains.</li> <li>Cut-off grade is calculated by making projections about the cost of metals, metallurgical recovery, and mining and processing.</li> </ul>					
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul> <li>The resource is currently being mined as an open pit mining method.</li> <li>The original resource has not had any mining factors (dilution, ore loss, recoverable resources at selective mining block size) applied to it.</li> </ul>					
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventus economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.						
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of th process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at thi stage the determination of potential environmental impacts, particularly for a Greenfields project, may not always be well advanced, the status of early consideration of these potentia environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made</li> </ul>	environmental risks with the deposit's exploitation.					



Criteria	JORC Code explanation	Commentary
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Most of the drill holes are RC, which makes the material unsuitable for density measurements. Additionally, there are only two DD holes, with a diameter of 36.4 mm, which experienced high core loss and vuggy conditions. As a result, standard density measurements couldn't be obtained from this drilling phase, prompting the need to explore alternative methods. As an alternative to traditional density measurements, the four years of production data from Iron Ridge, including volumes and tonnages of extracted material, will be used to estimate a fixed density value for the resource model. Although the resource is classified as Inferred, this production information provides a practical proxy for the deposit's density.</li> <li>For the resource estimation at Iron Ridge, different density values will be applied based on material grades. Waste material from the BIF, with less than 50% Fe, will use a density of 2.7 g/cm<sup>3</sup>. Low-grade ore, with Fe content below 60%, will have a density of 3.0 g/cm<sup>3</sup>, while high-grade ore, containing over 60% Fe, will use a density of 3.2 g/cm<sup>3</sup>.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	The degree of geological knowledge about the deposit, sample quality, density information, drillhole spacing, and the procedures for sampling and assaying were all taken into consideration when classifying, Measured, Indicated, and Inferred the Mineral Resource.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Resources WA conducted internal audits to validate the estimate's technical inputs, methodology, parameters, and outcomes.
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> </ul>	<ul> <li>It is believed that the global mineral resource estimate for the measured and indicated resources, based on the estimating method, data distribution, and quality, is sufficient for the classification.</li> <li>Outside of this range, the level of confidence in Inferred Mineral Resources is reduced, and the Exploration Target is classified differently from Mineral Resources.</li> <li>There is a global estimate of in-situ tonnes and grade in the Mineral Resource statement.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	