

# Significant 108.5Mt 58.0% Fe DSO Resource Defined at Hamersley Iron Ore Project

- Equinox has defined a large-scale, high-grade Direct Shipping Ore (DSO) component of its wider Iron Ore Resource, totaling 108.5Mt at 58% Fe.
- Equinox's DSO Inferred Mineral Resource Estimate (MRE) is very similar in grade to the Pilbara fines product from the region sold to Asian markets.
- The resource is strategically located in the infrastructure-rich Pilbara region of Western Australia, approximately 30 km south of Fortescue Metals Group's Solomon Mining Hub (ASX: FMG) currently producing ~65 to 70Mtpa at 56.9% Fe.
- The DSO mineralisation starts ~20 meters below surface and is likely to be easily mineable given the uniform nature of the deposit with no deleterious material present.
- There is significant exploration upside potential to grow the DSO material, as evidenced by drill hole PLRC0167 which ended in mineralisation of 61.6% Fe.
- An infill Phase 1 drilling program of approximately 3,300 meters is planned for H2 CY2024 in the high-grade region of the orebody.
- Metallurgical testwork shows that post-screening and scrubbing, the iron grades can upgrade to approximately 60% to 62% Fe.
- Importantly, this JORC compliant MRE, sits on a mining lease with a native title agreement in place and could be rapidly developed against the backdrop of a high iron ore price environment.
- The initial DSO MRE is one of the largest undeveloped hematite detrital resources in the Pilbara, wholly owned by an ASX-listed junior company.

**Equinox Resources Limited (ASX: EQN) ("Equinox Resources" or the "Company")** is pleased to announce a Mineral Resources Estimate ("**MRE**") for Direct Shipping Ore ("**DSO**") for the 100% owned Hamersley Iron Ore ("**Hamersley**" or "**Project**") of 108.5Mt at 58% Fe<sup>1</sup>.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au Level 50, 108 St Georges Terrace Perth, WA 6000

<sup>&</sup>lt;sup>1</sup> Disclosure as per ASX listing rule 5.8 relating to reports of Minerals Resources for material mining projects are provided in Appendix 1 this appendix 2 to this market appendix and the market appendix 1 the market appendix 1 to the market app

<sup>1</sup> this announcement. A JORC Table 1 is included as Appendix 2 to this market announcement.



"At Equinox Resources, we're committed to advancing the Hamersley Iron Ore Project with a clear focus on accelerating its exploration and development. The reinterpretation of the Mineral Resource Estimate confirms an initial Direct Shipping Ore of 108.5 Mt at a grade of 58.0% Fe targeting the Platts 58% Fe Index and highlighting significant hematite mineralisation. By reassessing the resource and collaborating closely with our geological team, we've unlocked a clearer understanding of its true economic potential, whilst revealing unprecedented exploration upside.

This MRE update lays the groundwork for targeting the higher-grade region of the ore body. Our Phase 1 drilling program for the second half of CY2024 is set to unlock this higher-grade region, further enhancing the resource volume and grade.

These strategic efforts will pave the way for a comprehensive scoping study. This study will thoroughly evaluate alternative valuation scenarios, considering both the MRE for 58% Fe and a +60% Fe market index, with our decisions driven by a commitment to maximising value for shareholders."

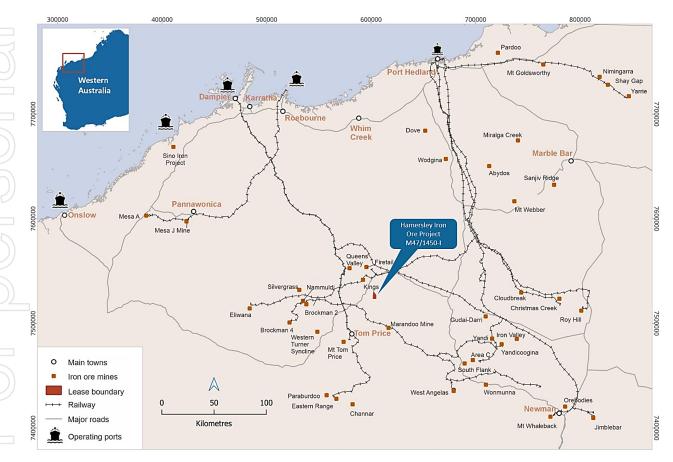


Figure 1: Location map showing Hamersley Iron Ore Mining Lease in the Pilbara Region of Western Australia

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



# Significant Undeveloped Pilbara Hematite Detrital Project

Equinox Resources has released a DSO MRE as part of the development of the Hamersley Iron Ore Project. This MRE incorporates the results of a recent geological re-interpretation of the deposit conducted by ERM Australia Consultants Pty Ltd, trading as CSA Global, the Company's geological consultant.

The Hamersley Iron Ore Project is supported by a comprehensive knowledge base, including 22,621 meters of historical drilling, assays, geological modelling, metallurgical testwork, and geophysical data. This data has been re-interpreted to enhance the geological characterization and lithological domaining of the deposit.

The initial DSO MRE for the project represents one of the largest undeveloped hematite detrital resources in the Pilbara, wholly owned by an ASX-listed junior iron ore company. With a target grade of 58% Fe, the project can produce a DSO iron ore product that is saleable in the current market.



Figure 2: View of the Hamersley Iron Ore Project area

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



### **Section 18 Approval Timings**

The Department of Planning, Lands and Heritage has notified Equinox Resources that the Minister has granted the Aboriginal Cultural Heritage Committee (ACHC) an extension of 30 days to submit to the Minister the section 18 Notice (Notice) and their recommendation concerning the Notice. This means that the ACHC has until 8 July 2024 to provide the Notice and recommendation to the Minister. The Minister is expected to notify the Company of its decision on or before 5 August 2024.

### For further information please contact:

Investors
-----------

Media

**Zac Komur** Equinox Resources MD & CEO M: +61 467 775 792 E: zac.komur@eqnx.com.au Kelly-Jo Fry

Equinox Resources Investor Relations T: +61 08 9389 4499 E: info@eqnx.com.au

Authorised for release by the Board of Equinox Resources Limited

### **COMPETENT PERSON STATEMENT**

The information in this report that relates to Mineral Resources is based on information compiled by Ms Sonia Konopa and Mr Mark Pudovskis. Ms Konopa is a full-time employee of ERM and is a Member and Fellow Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Mark Pudovskis is a full-time employee of ERM and is a Member of the AusIMM. Ms Sonia Konopa and Mr Mark Pudovskis have 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 Competent Persons as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Ms Sonia Konopa and Mr Mark Pudovskis consent to the disclosure of the information in this report in the form and context in which it appears. Mr Mark Pudovskis assumes responsibility for matters related to Sections 1 and 2 of JORC Table 1, while Ms Sonia Konopa assumes responsibility for matters related to Section 3 of JORC Table 1.

### FORWARD LOOKING STATEMENTS

This announcement may contain certain forward-looking statements and projections. Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon. Forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved. Equinox Resources Limited does not make any representations and provides no warranties concerning the accuracy of the projections and disclaims any obligation to update or revise any forward-looking statements/projects based on new information, future events or otherwise except to the extent required by applicable laws. While the information contained in this report has been prepared in good faith, neither Equinox Resources Limited or any of its directors, officers, agents, employees, or advisors give any representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this announcement.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



# Appendix 1 Hamersley Iron Project Mineral Resource Estimate

# **Executive Summary**

ERM Australia Consultants Pty Ltd (ERM), formerly CSA Global, were requested by Equinox Resources Limited (Equinox) to estimate a Mineral Resource for the Hamersley Iron project located in the Pilbara region of Western Australia. The Mineral Resource estimate was required to be reported in accordance with the JORC Code<sup>2</sup>.

The Mineral Resource estimate update precipitated from an ERM review of the Mineral Resource estimate completed by Runge Pinnock Minarco Ltd in 2013, updated to JORC 2012 by Al Maynard & Associates in June 2019, and reported to the ASX on 23 February 2021.

The ERM review concluded that although no material issues were reported in the geological data, resource modelling and estimation, the geological interpretation was found to contain inconsistencies stemming from likely incorrect recognition of channel iron deposit (CID) against CzD3<sup>3</sup> detrital iron deposit (DID), and absence of adequate geological domaining within the detrital sequence.

The Hamersley Iron project's geology was re-interpretated and a new geological model created in Leapfrog software which underpins this updated Mineral Resource estimate.

The updated Mineral Resource estimate, reported at a 56.5% Fe cut-off is shown in Table 1.

Table 1: Hamersley Iron Mineral Resource estimate

JORC classification	Tonnage (Mt)	Fe (%)	P (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)	LOI (%)	CaFe (%)
Inferred	108.5	58.0	0.042	7.32	3.57	5.42	61.4
Total	108.5	58.0	0.042	7.32	3.57	5.42	61.4

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

The Competent Persons deem that there are reasonable prospects for eventual economic extraction (RPEEE) of iron mineralisation on the following basis:

- The detrital iron mineralisation has been delineated by reverse circulation percussion (RCP) and diamond core drilling over an approximately 2.5 km x 1.5 km area. The southern extension of the resource is near surface and therefore amenable to initial simple open pit mining.
- The iron mineralisation present is relatively comparable in iron grade to Pilbara products Robe River Fines, FMG Blend Fines and Super Specials Fines, that are benchmarked under the Platts 58% Fines Index.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

<sup>&</sup>lt;sup>2</sup> Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

<sup>&</sup>lt;sup>3</sup> CzD3: (Pliocene-Quaternary) are colluvial deposits derived from the Brockman and Marra Mamba Iron Formations. Some of these deposits, which are eroded from mineralised surfaces, can result in exploitable deposits. Majority of the Hamersley Iron Project Mineral Resource is potentially CzD3.



- beneficiated to produce an improved iron fines product with acknowledgement that additional and focused metallurgical work is required to provide a representative population of results. Although the Mineral Resource is not of a scale to justify the capital expenditure of a standalone rail infrastructure, smaller tonnage Pilbara iron trucking operations to the shared Port Hedland Utah Point have operated successfully - Mineral Resources' Wonmunna and Iron Valley are examples. The proposed Red Hawk Mining Blacksmith project is another example of a proposed small trucking opportunity planning to use the Utah Point Bulk Handling Facility (RHK ASX Announcement, 1 May 2024, pg. 13). The data quality, data distribution, and geological and grade continuity were considered when classifying the Mineral Resource. The following approach was adopted when classifying the Mineral Resource: Geological continuity was assessed, and the domains were reasonably continuous along and across the strike of the deposit. QAQC results and procedures followed over the course of the project are sufficient to support a Mineral Resource Estimate. Minimal quantitative and representative density measurements have been collected. Density values were assigned to the block model domains/ZONES using based on industry experience and similar style of detrital mineralisation. The variography showed long range structures typical for deposits displaying good geological continuity. However, there is a limited number of points to confidently define the short-range structures along and across strike. Infill drilling (discussed as recommendations below) is required to improve the confidence of the estimation. The drill holes were generally spaced on 250 m northwest-southeast sections and 100 m apart on section, with samples composited over a 2 m length.
  - The Mineral Resource was classified as Inferred.

ERM recommends the following activities to improve the confidence in the Mineral Resource and support future mine studies:

Historical metallurgical test work has provided evidence that the detrital iron mineralisation can be

- The density has been assigned to the stratigraphical units based on industry experience. All holes from future drilling programmes should be logged for density using geophysical methods so that a representative, valid dataset can be obtained.
- Future Hamersley Iron drilling programmes should capture the groundwater level and help to confidently estimate the proportion of Mineral Resource above and below water table.
- All QAQC information including, CRMs, duplicates, umpire laboratory assays, should be captured and included in the Database for the project.
- ERM recommends a phased exploration approach to improve confidence in the Hamersley Iron Mineral Resource and provide sufficient representative metallurgical and marketing samples:
  - Phase 1 (Southern extent of Mineral Resource) o
    - A total of 27 RCP drillholes for an estimated 2,640 m, with drill depths ranging between 50 m and 130 m is recommended to initially improve the confidence in the nearer surface iron mineralisation in the south of the deposit. The drilling will expand an approximate 100 m x 100 m drill grid over an approximate 500 m by 500 m area.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325

www.eqnx.com.au T: +61 08 9389 4499 E: info@eanx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



 Six PQ3 diamond core drill holes within the southern 500m by 500m area for metallurgical testwork (total of 690 m).

Upon completion of Phase 1, and on the assumption of the implementation of appropriate data collection techniques, the southern extent of the Hamersley Iron Mineral Resource will most likely convert to Indicated.

- Phase 2
  - An additional approximately 9 infill drill sections, each comprising an estimated 7 12 100m spaced RCP drill holes, will be required to infill much of the resource area to an approximate 125m by 100m spaced grid.
- In addition to the Phase 1 27 RCP drill holes, an approximate 70 to 100 RCP drill holes may be required to infill the entire resource.
- All holes from future drilling programmes should be downhole geophysically logged for:
  - Gamma
  - Magnetic Susceptibility
  - Deviation
  - 3-arm caliper
  - Dual density
  - Borehole Magnetic Resonance (for dry bulk density)

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



# **Geology Setting and Mineralisation**

# **Regional Geology**

The Hamersley Project is situated within the Hamersley Iron Province which covers an area of approximately 80,000 km<sup>2</sup> and is comprised of Late Archaean to Palaeo-Proterozoic rocks of the Mount Bruce Supergroup, which consists of the Fortescue, Hamersley, and Turee Creek groups, overlain by remnants of the Wyloo Group. The banded iron formation (BIF) units of the Hamersley Group host the BIDs of the Pilbara with mineralisation occurring predominantly within the Marra Mamba Iron Formation and Brockman Iron Formation. Substantial mineralisation also occurs in overlying detrital units, primarily CID which occupies paleo-drainage, and CzD3.

The Hamersley Iron Province is covered by the Geological Survey of Western Australia (GSWA) 1:250,000 and select 1:100,000 geological mapping, which is in the public domain and is the primary source of regional geological information.

The Hamersley Group contains five major BIF units, of which two, the Marra Mamba Iron Formation and the Brockman Iron Formation, host most of the iron mineralisation (including most of the exploited iron ore deposits) in the Hamersley Province. A detailed description of the Hamersley Group has been published in Harmsworth et al. (1990) and is summarised below.

The Marra Mamba Iron Formation is made up of three members (from oldest to youngest):

- The Nammuldi Member contains chert-rich BIF and thin discrete shale bands and is up to 130 m thick.
- The MacLeod Member contains BIF, chert and carbonates with numerous interbedded shale bands and is up to 35 m thick.
- The uppermost Mount Newman Member comprises BIF interbedded with carbonate and shale bands and is up to 60 m thick.

Most iron mineralisation is hosted within the Mount Newman Member. The Marra Mamba Iron Formation is not present at the Hamersley Iron Project.

The Wittenoom Formation overlies the Marra Mamba Iron Formation, and its lowermost member is the West Angela Member which is made up of shales and thin BIFs and chert. Above the West Angela Member is the dolomite-dominated Paraburdoo Member of the Wittenoom Formation. The Wittenoom Formation is overlain by the Mount Sylvia Formation and the Mount McRae Shale, and then by the Brockman Iron Formation and Weeli Wolli Formation.

The Brockman Iron Formation comprises four members (from oldest to youngest):

- The basal Dales Gorge Member (which hosts the bulk of the iron mineralisation and the best quality deposits), comprising alternating 17 interbedded BIF and 16 shale bands, and is up to 150 m thick. There is minor interpreted hardcapped Dales Gorge Member present at the Hamersley Iron Project.
- The overlying Whaleback Shale comprises four alternating chert/BIF and shale macro-bands and is approximately 50 m thick.
- The thickest member (overlying the Whaleback Shale) is the Joffre Member, which comprises primarily BIF with some chert and shale interbeds (approximately 360 m thick), and which is overlain by the topmost Yandicoogina Shale (approximately 60 m thick), comprising interbedded chert and shale variably intruded by dolerite.

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



Member. project.

The overlying Weeli Wolli Formation consists of alternating BIF and shale with extensive intrusive dolerite. It is normally un-mineralised, except occasionally where it occurs adjacent to mineralisation at the top of the Joffre Member.

The Hamersley Surface is the paleo-surface of the Hamersley Province and is the result of an extended period of approximately 50 million years of alternating intense ferruginisation and erosion (Kneeshaw and Morris, 2014). The Hamersley Surface is seen throughout the province, most conspicuously on the outcropping Brockman and Marra Mamba Iron Formation ridges. Its importance lies in the alteration of surface outcrop which, in a mineralised sequence, may not reflect subsurface mineralisation.

The Cenozoic Detritals have been divided into three units based on three distinct periods of sedimentation (Kneeshaw and Morris, 2014). These are, from oldest to youngest:

- CzD1 (Eocene to Oligocene) which occurs at the deepest part of the paleovalleys, generally on the West Angela Member/Marra Mamba Iron Formation contact. They are characterised by a bright red hematitic silt but can also contain rare lumpy BIF fragments. CzD1 is not present at the Hamersley Iron Project.
- CzD2 (Mid-Miocene) ranges from pedogenic fluvial gravel deposits with abundant fossil wood in confined palaeochannels (CID) through to variable thickness clays/smectites with occasional goethite, lignite and calcrete horizons in broad paleo-valleys. There is no obvious evidence of CID within the Hamersley Iron project.
- CzD3 (Pliocene-Quaternary) are colluvial deposits derived from the Brockman and Marra Mamba Iron formations. Some of these deposits, which are eroded from mineralised surfaces, can result in exploitable deposits. The majority of the Hamersley Iron project Mineral Resource is CzD3.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



### Local Geology

The Hamersley Iron project comprises interfingering lenses of CzD3 detritals comprising surface, high matrix, loose and pisolitic detritals with interpretated underlying Dales Gorge Member hardcap mineralisation.

A Hamersley Iron Province detrital stratigraphy, based on Kepert, 2018 (page 66 and 67) and modified by ERM is shown in Table 2.

Table 2:	Stratigraphic units identified by ERM at the Hamersley Iron Project. Source: ERM (modified from
	Kepert, 2018)

Stratigraphy	Unit/Member	Brief description
CzD3	SZ	Colluvium. Loose surface detrital comprising variable BIF, chert, hematite in a soil matrix.
)	HMZ	Soil rich detrital with minor fine clasts of hematite.
)	LZ	Unconsolidated to compacted detritals with angular to subrounded clasts in a red-brown soil matrix. Clast rather than matrix dominated.
1	PZ	Pisolitic high maghemite (<1–2 mm), well rounded supported in a hematite/soil matrix.
CzD2	CzD2	Mixture of clay and textureless goethite in various proportions.
Dales Gorge Member	PHbd	Bedrock can be enriched beneath detritals. Mostly hardcap.

RCP chip tray photography illustrating examples of loose and pisolitic detritals is included as Photo 1.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



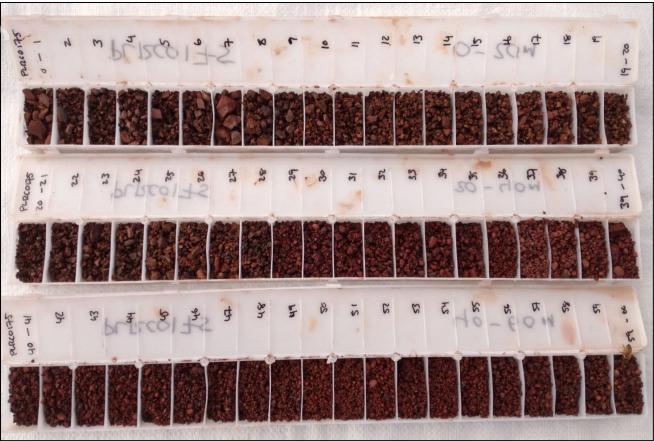


Photo 1: RCP drillhole PLRC0175 0–60 m; CzD3 surface detrtial (SZ) 0-28m, pisolitic detrital (PZ) 28-60m

### **Drilling, Sampling and Data Collection**

A total of 168 drill holes have been completed on the Hamersley Iron project, comprising 3 sonic, 12 diamond core and 163 RCP (reverse circulation percussion) holes (Table 3). Drilling was initially completed by Robe River Associates in 1998, then Cazaly and Winmar Resources / Pathfinder between 2008 and 2012.

156 drill holes were used for the Mineral Resource estimate. The excluded holes included six holes with no assays (PLSD0019 -PLSD0021, SB022- SB024) and six holes located outside the Mineral Resource area of interest (PLRC0013-PLRC0014, PLRC0106-PLRC0107, PLRC0135-PLRC0136).

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



### : Hamersley Iron Project Drill hole Data

Company	Year	Drill Method	No. Drill Holes	Metres			
Robe	1998	RCP	3	160			
Cazaly	2008	RCP	18	1,795			
Cazaly	2009	Sonic	3	354			
Cazaly	2009	RCP	9	1,332			
Cazaly	2010	RCP	2	230			
Cazaly	2011	RCP	81	12,805			
Cazaly	2011	DD	12	747			
Pathfinder	2012	RCP	40	5,314			
			168	22,737			

Prior to 2010, 1 m RCP samples were collected in a plastic bag through an industry standard cyclone with 3-5kg samples collected in calico bags. A 2 m composite sample was collected from 1 m samples by using a bench riffle splitter.

Post 2010, the RCP sampling was on 2 m intervals collected using a rig mounted cone splitter in marked calico bags.

All drill holes were geologically logged using industry accepted logging systems for rock type, colour, shape, alteration, hardness, and moisture. Mineralised zones were identified from observations of mineralogy, lithological characteristics, and geochemistry.

The recovery of drill samples from all drilling campaigns was reported qualitatively as of an 'acceptable standard'.

Drill hole collar locations were surveyed by differential GPS. No downhole survey or geophysics was completed.

Previous explorers reported the standing water level at approximately 70 m below the ground level although it was reported that majority of the samples were dry. There has been insufficient hydrological work to confirm with confidence an accurate water level. Future Hamersley Iron drilling programmes should capture the groundwater level to enable the estimation of Mineral Resource above and below water table.

A drill hole location plan is included as Figure 1.

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



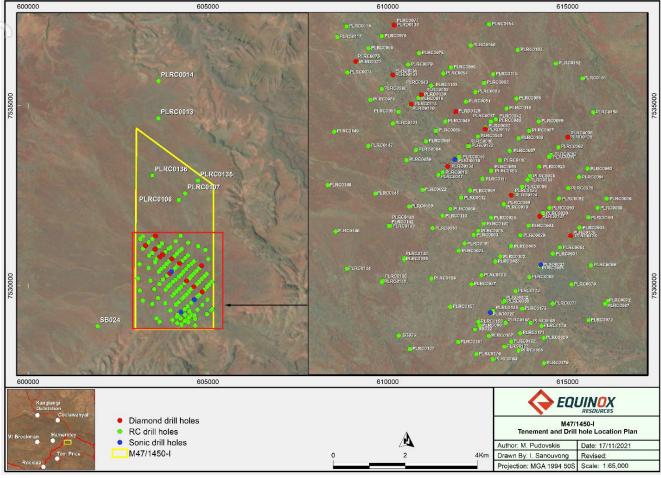


Figure 1: Hamersley Iron Project drill hole location plan

# Metallurgy

Six rounds of metallurgical test work were completed by Winmar / Pathfinder on various drillhole samples from the Hamersley Iron Project in 2012 and 2013.

The key findings, based on a review by ERM comprised:

- Four of the six rounds of metallurgical testing were not useable because either the type of material sampled for composites could not be verified, sampling was across geological domains, or selective sampling was done within domains.
- In two of the test work rounds, there is some evidence the detrital iron mineralisation has the potential to be upgraded, albeit with elevated alumina and silica grades. Results included:

Yields ranged from 51% to 70% for the +1 mm fraction with iron grades ranging from about 60% to 62% with alumina and silica grades of 3.44–4.41% and 5.03–5.73%, respectively.

In conclusion, a majority of the historical testwork appears to have been completed on multi-sourced material derived from variable geological units i.e. composited sampling across geological domains, and completed without detailed geological context.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



recommended. ٠ •

Metallurgical sampling and testwork without geological context and across geological domains is not recommended.

ERM is of the opinion that despite the sub-optimal composited sampling and absence of geological context, the metallurgical testwork has provided evidence that a detrital Mineral Resource can be beneficiated to produce iron fines product and enhance the prospectivity of the Hamersley Iron Mineral Resource; however, additional, and focused metallurgical work based on appropriate geological domaining is required to provide a representative population of results.

# Sample Preparation, Analysis and Quality Assurance

Cazaly drill samples were sent to Kalassay Laboratory in Perth and Winmar / Pathfinder samples were sent to Nagrom Laboratory in Perth for XRF analysis. Samples were processed in the following manner:

- Received samples recorded by the assay laboratory.
- Ring-mill pulverisation to 90% passing 75 μm.
- Samples greater than 4 kg were split for pulverising and then re-combined.
- A sub-sample of 500 g pulp was retained in a pulp envelope.
- Pulps are stored at the laboratory for future reference.
- The remaining sample reject was discarded.

Assaying of Fe, Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, Mn, P, S and TiO<sub>2</sub> was conducted at Kalassay Laboratory (prior to 2012) and Nagrom Laboratory in Perth (in 2012), using the XRF spectrometry on fused bead, while analysis of LOI was determined by Thermo-Gravimetric Analysers at 371°C, 650°C and 1000°C.

# Quality Assurance / Quality Control (QAQC)

ERM did not complete a review of the original quality control data. The quality control information has been sourced from previous MRE reports. Terra Search completed internal QAQC reports for the various drilling programmes. Al Maynard & Associates (AM&A) was contracted by Pathfinder Resources Ltd (PF1) to review and report a Mineral Resource estimate in accordance with JORC Code 2012. They independently compiled all the QAQC data from the Terra Search reports. The information constituted QAQC data from the different drilling phases. RPM sourced the QAQC data in 2021 and concluded that the assay data was representative, homogenous and repeatable, and suitable for use.

Practices included standards, blanks, field duplicates, laboratory repeats and an umpire laboratory check using SGS laboratory in Perth.

# **Competent Persons' Opinion on Data Quality**

Field duplicates and CRMs were inserted into the sample stream by Equinox. Check assays were sent to an umpire laboratory. Field duplicates were used to assess sample precision, while CRMs were used to assess analytical accuracy. Field duplicate results indicate good precision, giving confidence in sampling procedures. CRM results give confidence in the accuracy of the primary laboratory. The umpire laboratory check assay results provide further validation of the accuracy of the primary laboratory. The umpire laboratory check results should be made available in future. All the QAQC data should be compiled and loaded in the database. ERM considers that the QAQC results and procedures followed over the course of the project are sufficient to support a Mineral Resource Estimate.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



# Density

Minimal quantitative and representative density measurements have been collected. The previous Mineral Resource estimate used applied densities (Table 4) based on select measurements of a single unnamed diamond core hole.

Table 4:	Historic	al applied bulk	density
Mineralisatio	n Type	Bulk Density	
Waste		2.5	
Detrital		2.5	
CID		2.59	

Based on experience of the Pilbara and knowledge of the detrital mineralisation, and leveraging from analogous detrital deposits in the region, the historical applied densities do not represent the style of iron mineralisation on the Hamersley Iron project.

ERM is of the opinion that the style of detrital mineralisation as reported by Red Hawk Mining (ASX announcement 6 September 2023) is a reasonable geological analogy to the detrital mineralisation at the Hamersley Iron project. This is supported by the relatively proximity of both projects to each other (approximate 50km distance) located in the Central Pilbara, and majority of each projects' resources classified as CzD3 detritals underneath recent colluvium proximal to outcropping Dales Gorge Member.

For the estimation of the Hamersley Iron Mineral Resource, ERM has used the same assigned densities as used by Red Hawk Mining (ASX announcement 6 September 2023), shown in Table 5. To support and improve the confidence in the Mineral Resource, ERM recommends that downhole geophysics is completed on all drill holes and that long spaced density is captured and used to interpolate a density.

/	Table 5: Hamersely Iron F	Project de	ensity summe
	Unit/Member	ZONE	Density
	SZ	1	2.5
)	HMZ	7	2.4
, 	LZ	2	2.85
)	PZ	3	3.00
_	CzD2	8	2.4
	PHbd hard cap mineralisation	5	2.8
1	PHbd BIF	6	2.6

 Table 5:
 Hamersely Iron Project density summary

# **Estimation Methodology**

ERM completed a geological reinterpretation of the stratigraphy of the Hamersley deposit. The internal stratigraphy of CzD3 was subdivided into four separate units and the CzD2 was subdivided into two separate units (Table 6).

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



Table 6: Stratig	Table 6:       Stratigraphic Units identified by ERM						
Stratigraphy	Unit/Member	Brief description					
CzD3	SZ	Colluvium. Loose surface detrital comprising variable BIF, chert, hematite in a soil matrix.					
HMZ Soil rich detrital with minor fine clasts of hematite.							
	LZ	Unconsolidated to compacted detritals with angular to subrounded clasts in a red-brown soil matrix. Clast rather than matrix dominated.					
	PZ	solitic high maghemite (<1–2 mm), well rounded supported in a ematite/soil matrix.					
CzD2	CzD2	Mixture of clay and textureless goethite in various proportions.					
Dales Gorge Member	PHbd	Bedrock can be enriched beneath detritals. Mostly hardcap.					

A histogram of all the assays within the PHbd unit revealed a bimodal population (Figure 2). A grade of 50% Fe from the histogram was selected to separate the hardcap mineralisation in Dales Gorge Member from the waste Dales Gorge Member BIF unit.

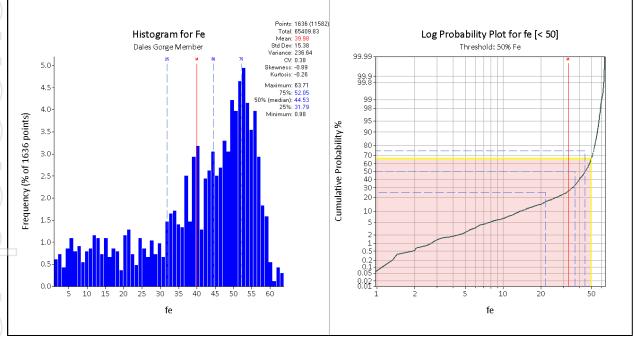


Figure 2: Histogram and probability plot for all assays within the PHbd unit

The wireframe interpretations developed from geological modelling of the stratigraphic units developed by ERM were used to select drillhole samples from the estimation drillhole dataset for each model area. These were used as domains in the estimation process. Samples were then flagged with appropriate values to represent the modelled feature. Analysis was then undertaken on the flagged drillhole file to determine estimation parameters.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



Statistical analysis was completed for Fe, Al<sub>2</sub>O<sub>3</sub>, CaFe, LOI, Mn, S, P, SiO<sub>2</sub>, and TiO<sub>2</sub>. A histogram of raw sample lengths was initially viewed for the data to be used in the Mineral Resource estimation to assist with the selection of an appropriate composite length. Approximately 85.8% of the sample data comprised 2 m intervals, 14.1% are 1 m intervals, and the rest of the intervals are between 4.9 m and 40 m. Based on this result; a 2 m composite length was chosen.

Analysis of grade outliers was undertaken to ensure that extreme grades are treated appropriately during grade estimation. Domains which do not have significant outliers were not capped. A histogram was used to select outliers, the point at which the number of samples supporting the high-grade tail diminishes was also considered as a top cut value. The selected top cuts are shown in Table 7.

1	able 7:	Top Cut V	alues							
	ZONE	Fe %	Al <sub>2</sub> O <sub>3</sub> %	CaFe%	LOI%	Mn %	Р%	S %	SiO <sub>2</sub> %	TiO₂ %
ĺ	1	50	17	51	7	0.5	-	-	-	1.0
ĺ	2	-	28	-	-	0.6	-	0.1	-	1.6
I	3	-	10	-	-	1.5	0.10	-	20	-
ſ	5	-	-	-	-	0.7	0.12	0.05	-	1.2
ſ	6	-	40	-	30	5	0.13	0.6	-	3.0
I	7	-	-	51	30	1	0.08	0.2	-	-
ſ	8	-	-	-	13	6	-	-	-	-
1		1						1		

Table 7: Top Cut Values

Variography was completed for Fe, Al<sub>2</sub>O<sub>3</sub>, CaFe, Loi, Mn, S, P, SiO<sub>2</sub>, and TiO<sub>2</sub> for each domain using Supervisor software. The variogram models generally show long range structures typical for deposits displaying good geological continuity. However, there is a limited number of points to confidently define the short-range structures. Infill drilling is recommended to improve the variograms especially in the SE-NW directions were drill spacing is around 250 m. An example of the variogram is shown in Figure 3.

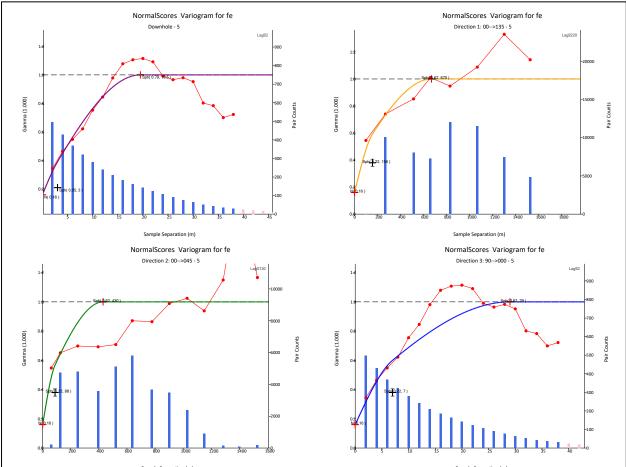
A parent cell dimension of 50 m x 100 m x 2 m in northing, easting and elevation and sub-cells of 12.5 m x 20 m x 0.5 m were used for block model generation. A smaller block size was chosen to give a better estimation of the volume of the deposit considering the wireframe boundaries and the variable domain widths.

Quantitative kriging neighbourhood analysis was undertaken to assess the effect of changing key kriging neighbourhood parameters on block grade estimates. Kriging efficiency and slope of regression were determined for a range of block sizes, minimum/maximum samples, search dimensions and discretisation grids. A three-pass search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not be met.

Dynamic anisotropy was adopted to enable the search ellipse to follow the orientation of the interpreted wireframes. Dynamic anisotropy is a process whereby a search ellipse is defined for each block, allowing the undulating nature of the mineralisation to be reflected in the modelling. Ordinary kriging was adopted to interpolate grades into cells, with variogram rotations consistent with the search ellipse rotations. All interpolated grades variable utilise the search and sample selection plan obtained from the variograms of their respective domains. A minimum of four samples were used and the maximum number of samples ranged between four and twenty samples per estimate, with a maximum number of samples per drill hole of two for all domains.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au





Minimal quantitative and representative density measurements have been collected on the project. Density values were assigned to the block model domains/ZONES as shown in Table 5.

Figure 3: Fitted variogram model – Fe ZONE 5

The block model was then validated by comparing block model grades with drill hole composites on sections throughout the deposit. Block grades were found to reasonably reflect the drill hole data, with a degree of smoothing evident in the block model, which is expected given the change in support. Mean global block model and drill hole composite grades were then compared for each domain (Table 8 - Table 16). The block model generally reflected the tenor of the grades in the drill hole samples both globally and locally.

Swath plots were created for northing, easting and elevation slices throughout the deposit at 100 m increments in X direction and 50 m increments in Y direction. Block mean grades compared reasonably well with the drill hole grades within their respective domains, example Zone 5 (Figure 4). The block model and drill hole grades for all domains show trends consistent with effective grade interpolation. Areas with low sample numbers generally show higher variance between model and drill hole mean grades.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



:	Comparison	of drill l	hole and	block mod	el arades	for	Fe
					<u>-</u>	J - · ·	

)	ZONE	Composite mean (naive)	Block model mean (volume weighted)	Relative Difference (%)
	1	31.66	30.87	-2.51%
	2	47.00	47.22	0.47%
	3	57.69	57.54	-0.25%
	5	50.95	48.81	-4.19%
	6	33.23	31.71	-4.59%
	7	21.69	20.54	-5.30%
	8	36.11	34.51	-4.44%

### Comparison of drill hole and block model grades for Al<sub>2</sub>O<sub>3</sub>

ZONE	Composite mean (naive)	Block model mean (volume weighted)	Relative Difference (%)
1	5.58	5.53	4.46%
2	6.13	6.37	-1.92%
3	3.76	3.68	-0.25%
5	5.33	5.85	9.76%
6	11.42	9.58	-16.11%
7	12.28	12.74	3.77%
8	12.92	12.47	-3.53%

Table 50: Comparison of drill hole and block model grades for CaFe

ZONE	Composite mean (naive)	Block model mean (volume weighted)	Relative Difference (%)
1	32.70	31.89	-2.49%
2	49.02	49.41	0.80%
3	60.86	60.96	0.17%
5	55.16	52.87	-4.30%
6	36.27	34.71	-4.30%
7	22.85	21.86	-5.11%
8	39.61	37.88	-4.36%

Table 6:

### Comparison of drill hole and block model grades for LOI

ZONE	Composite mean (naive)	Block model mean (volume weighted)	Relative Difference (%)
1	3.23	3.25	0.62%
2	4.07	4.41	8.38%
3	5.20	5.61	7.86%
5	7.54	7.57	0.40%
6	8.67	10.04	15.75%
7	5.62	5.86	4.20%
8	8.81	8.71	-1.10%

Equinox Resources Limited ASX: EQN ABN 65 650 503 325

www.eqnx.com.au **T:** +61 08 9389 4499 E: info@eqnx.com.au



ZONE	Composite mean (naive)	Block model mean (volume weighted)	Relative Difference (%)	
1	0.06	0.07	7.32%	
2	0.06	0.07	7.27%	
3	0.13	0.14	11.34%	
5	0.12	0.12	2.45%	
6	0.29	0.26	-13.25%	
7	0.08	0.08	2.11%	
8	0.50	0.44	-11.39%	

### Table 83: Comparison of drill hole and block model grades for P

ZONE	Composite mean (naive)	Block model mean (volume weighted)	Relative Difference (%)
1	0.04	0.04	-3.89%
2	0.03	0.03	-4.54%
3	0.04	0.04	-2.28%
5	0.05	0.05	-4.16%
6	0.04	0.05	8.31%
7	0.02	0.02	-1.26%
8	0.04	0.05	14.99%

Table 94:Comparison of drill hole and block model grades for S

ZONE	Composite mean (naive)	Block model mean (volume weighted)	Relative Difference (%)
1	0.033	0.032	-2.443%
2	0.015	0.014	-7.20%
3	0.013	0.011	-12.26%
5	0.015	0.016	4.173%
6	0.013	0.010	-20.47%
7	0.012	0.012	5.83%
8	0.009	0.008	-14.50%

Table 105: Comparison of drill hole and block model grades for SiO<sub>2</sub>

ZONE	Composite mean (naive)	Block model mean (volume weighted)	Relative Difference (%)	
1	44.44	45.24	1.79%	
2	21.51	20.61	-4.19%	
3	7.76	7.64	-1.49%	
5	13.24	15.74	18.90%	
6	28.48	27.5	-3.95%	
7	48.02	48.55	1.11%	
8	23.34	25.58	9.59%	

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



### Table 116: Comparison of drill hole and block model grades for TiO<sub>2</sub>

ZONE	Composite mean (naive)	Block model mean (volume weighted)	Relative Difference (%)
1	0.30	0.31	2.73%
2	0.36	0.37	2.42%
3	0.21	0.18	-10.99%
5	0.24	0.26	-9.03%
6	0.56	0.45	-18.81%
7	0.61	0.62	0.26%
8	0.66	0.61	-8.42%

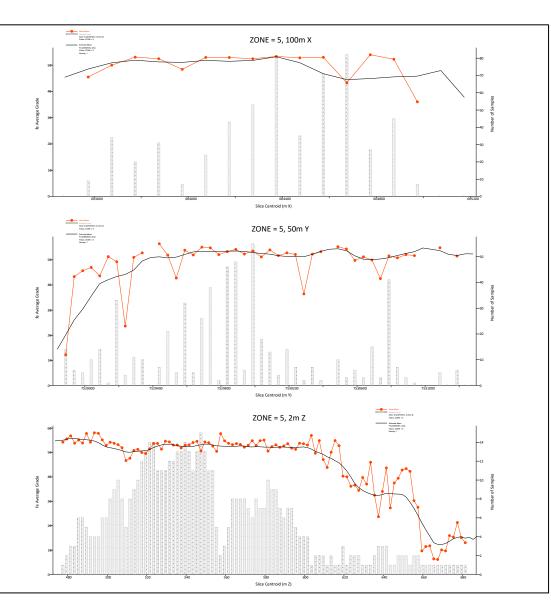


Figure 4: Comparison of the ZONE 5 Fe% grades along northing, easting, and elevation

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



# **Mineral Resource Reporting**

### **Reasonable Prospects Hurdle**

Clause 20 of the JORC Code (2012) requires that all reports of Mineral Resources must have reasonable prospects for eventual economic extraction (RPEEE), regardless of the classification of the Mineral Resource. The Competent Person believes there are reasonable prospects for eventual economic extraction of the Mineral Resources based on the following:

- The detrital iron mineralisation has been delineated by reverse circulation and diamond core drilling over an approximately 2.5 km x 1.5 km area. The southern extension of the resource is near surface (0-20m cover) and therefore amenable to open pit mining.
- The iron mineralisation present is relatively comparable in iron grade to Pilbara products Robe River Fines, FMG Blend Fines and Super Specials Fines, which are benchmarked under the Platts 58% Fines Index.
- Historical metallurgical test work has provided some evidence that the detrital iron mineralisation can be beneficiated to produce an improved iron fines product with acknowledgement that additional and focused metallurgical work is required to provide a representative population of results.
- Although the Mineral Resource is not of a scale to justify the capital expenditure of a standalone rail infrastructure, smaller tonnage Pilbara iron trucking operations to the shared Port Hedland Utah Point have operated successfully Mineral Resources' Wonmunna and Iron Valley are examples. The proposed Red Hawk Mining Blacksmith project is another example of a proposed small trucking opportunity planning to use the Utah Point Bulk Handling Facility (RHK ASX Announcement, 1 May 2024, pg. 13).

### **Mineral Resource Classification**

The Mineral Resource has been classified in accordance with guidelines contained in the JORC Code. The classification applied reflects the author's view of the uncertainty that should be assigned to the Mineral Resources reported herein. The data quality, data distribution, and geological and grade continuity were considered when classifying the Mineral Resource. The following approach was adopted when classifying the Mineral Resource:

- Geological continuity was assessed, and the domains were reasonably continuous along and across the strike of the deposit.
- QAQC results and procedures followed over the course of the project are sufficient to support a Mineral Resource Estimate.
- Minimal quantitative and representative density measurements have been collected. Density values were assigned to the block model domains/ZONES using based on industry experience and similar style of detrital mineralisation.
- The variography showed long range structures typical for deposits displaying good geological continuity. However, there is a limited number of points to confidently define the short-range structures along and across strike. Infill drilling is recommended to improve the confidence of the estimation. The drill holes were generally spaced on 250 m northwest-southeast sections and 100 m apart on section, with samples composited over a 2 m length.
- The Mineral Resource was classified as Inferred.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



# **Mineral Resource Estimate**

The Hamersley Iron Ore Project MRE, reported in accordance with JORC, is summarised in Table 17.

A reporting cut-off grade of 56.5% Fe was selected as it reflects the in-situ chemistry of the iron mineralisation likely to be mined to produce a DSO iron fines product. Only material from ZONE 2 (LZ -unconsolidated to compacted detritals), ZONE 3 (PZ - Pisolitic high maghemite detritals) and ZONE 5 (Dales Gorge Member mineralisation) has been reported.

Mineral Resources have been reported according to the following criteria:

- Inferred material (RESCAT=3)
- Blocks with Fe % grade >56.5%
- Material from LZ ZONE 2, PZ ZONE 3 and Dales Gorge Member ZONE 5 (REP=1).

Table 17: Hamersley Iron Mineral Resource estimate

JORC classification	Tonnage (Mt)	Fe (%)	P (%)	SiO <sub>2</sub> (%)	$AI_2O_3(\%)$	LOI (%)	CAFE (%)
Inferred	108.5	58.0	0.042	7.32	3.57	5.42	61.4
Total	108.5	58.0	0.042	7.32	3.57	5.42	61.4

### Note:

- 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. •

Reporting criteria are: Inferred material (RESCAT=3), Fe >56.5%, ZONE=2, ZONE=3 or ZONE=5. •

# The Mineral Resources reported by mineralisation type are shown in Table 18.

Table 12:	Hamersley Iron MRE by LZ, PZ, and Dales Gorge Member ZONE (56.5% Fe cut-off)

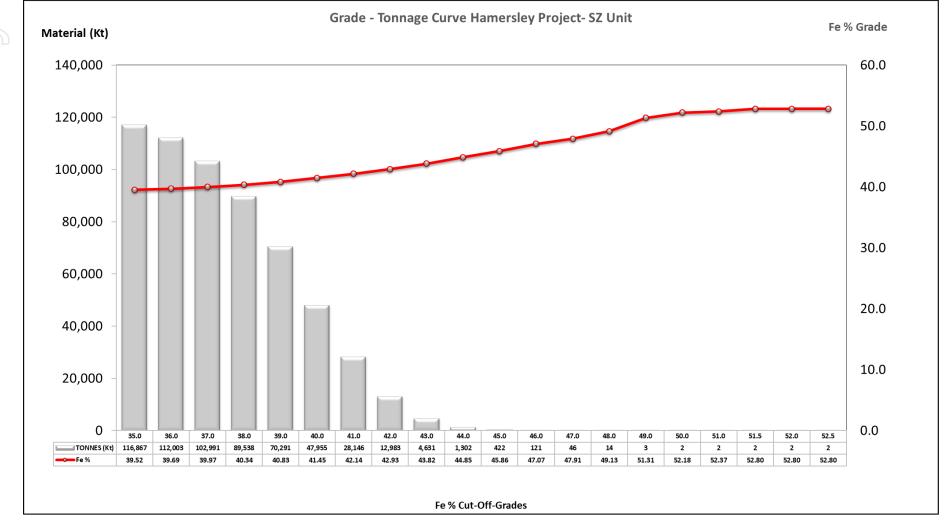
ZONE	JORC classification	Tonnage (Mt)	Density (t/m³)	Fe (%)	P (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)	LOI (%)
LZ – 2	Inferred	3.3	2.85	57.2	0.035	9.21	4.09	4.35
LZ – 2	Subtotal	3.3	2.85	57.2	0.035	9.21	4.09	4.35
PZ- 3	Inferred	103.3	3.00	58.1	0.042	7.28	3.54	5.42
PZ- 3	Subtotal	103.3	3.00	58.1	0.042	7.28	3.54	5.42
Dales Gorge	Inferred	2.0	2.80	57.3	0.067	6.46	3.92	6.75
Member – 5	Subtotal	2.0	2.80	57.3	0.067	6.46	3.92	6.75
1	TOTAL	108.5	2.99	58.0	0.042	7.32	3.57	5.42

Note

- 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.
- Reporting criteria are: Inferred material (RESCAT=3), Fe >56.5%, ZONE=2, ZONE=3 or ZONE=5.

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au





### Figure 5: Grade Tonnage curve - SZ

Equinox Resources Limited ASX: EQN ABN 65 650 503 325

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



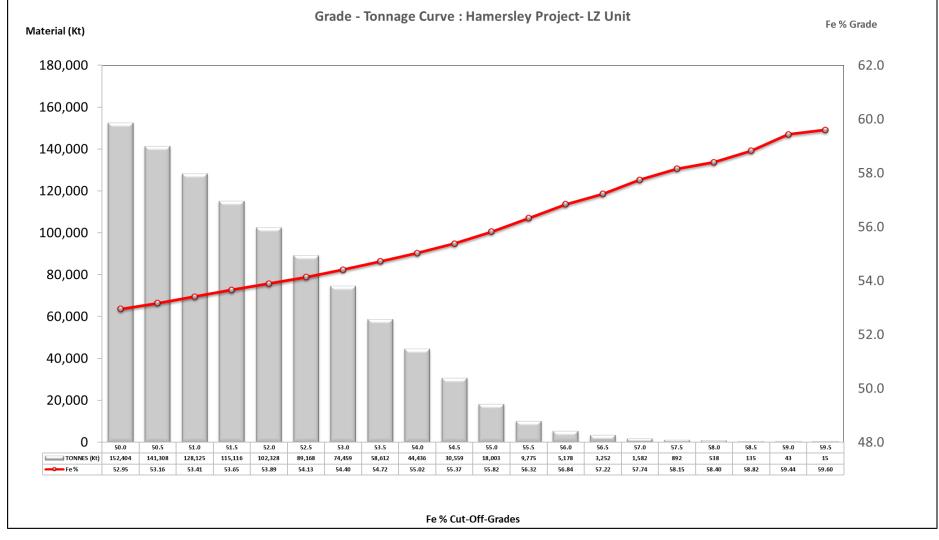
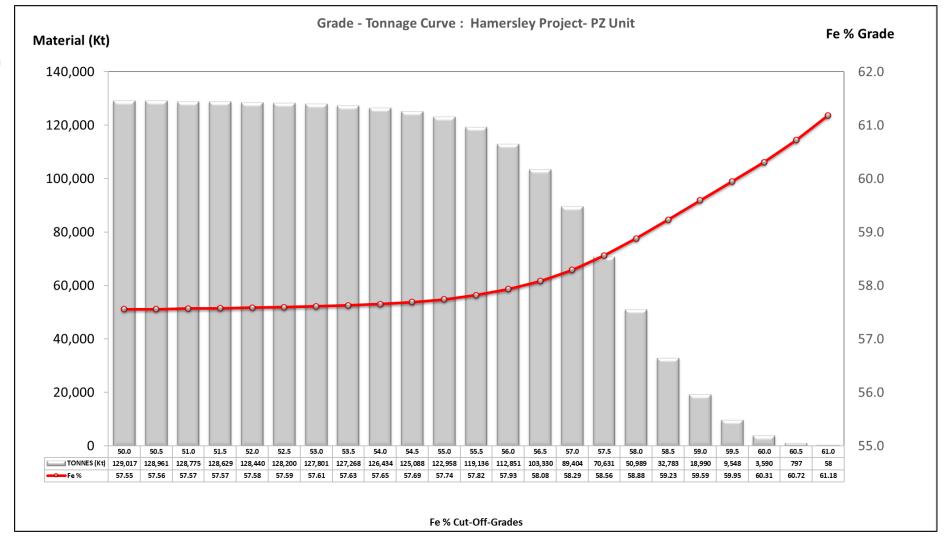


Figure 6: Grade Tonnage curve - LZ

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



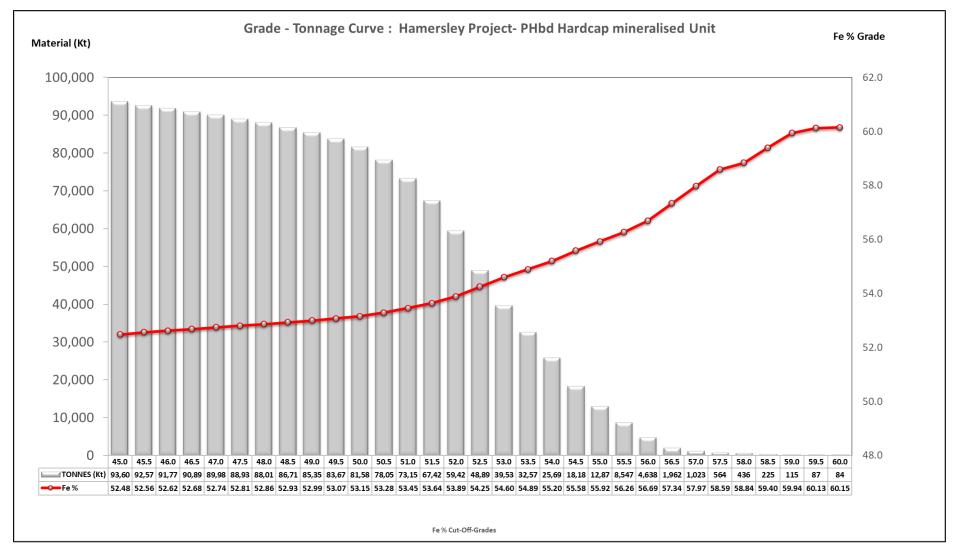


# Figure 7: Grade Tonnage curve - PZ

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



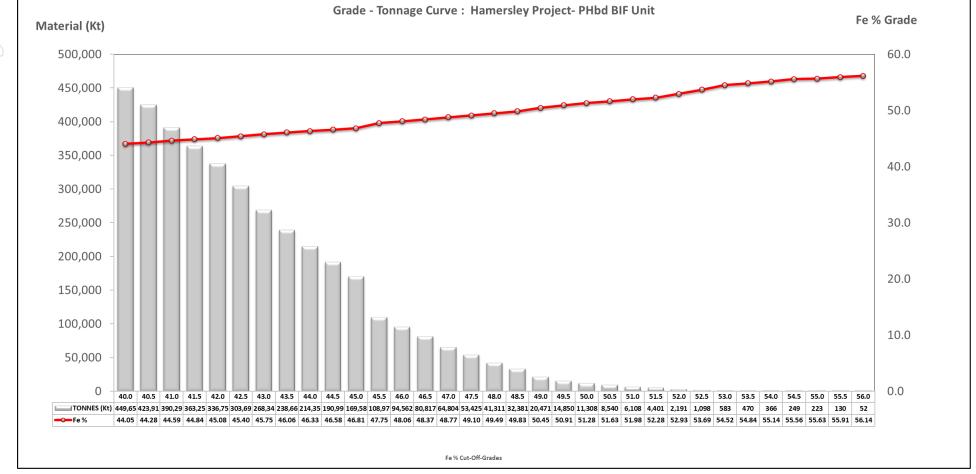


### Figure 8: Grade Tonnage curve – PHbd Hardcap

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000

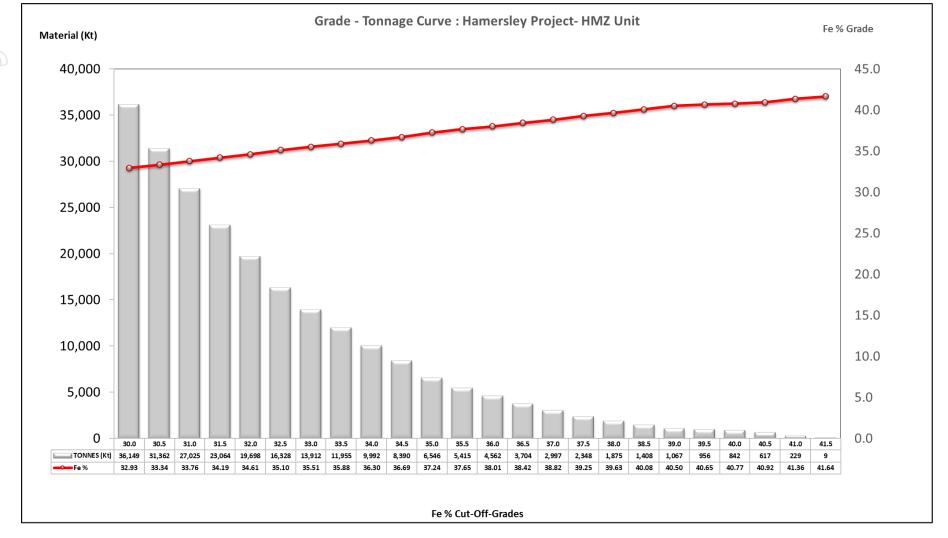






Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au





### Figure 1: Grade Tonnage curve - HMZ

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au **T:** +61 08 9389 4499 **E:** info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



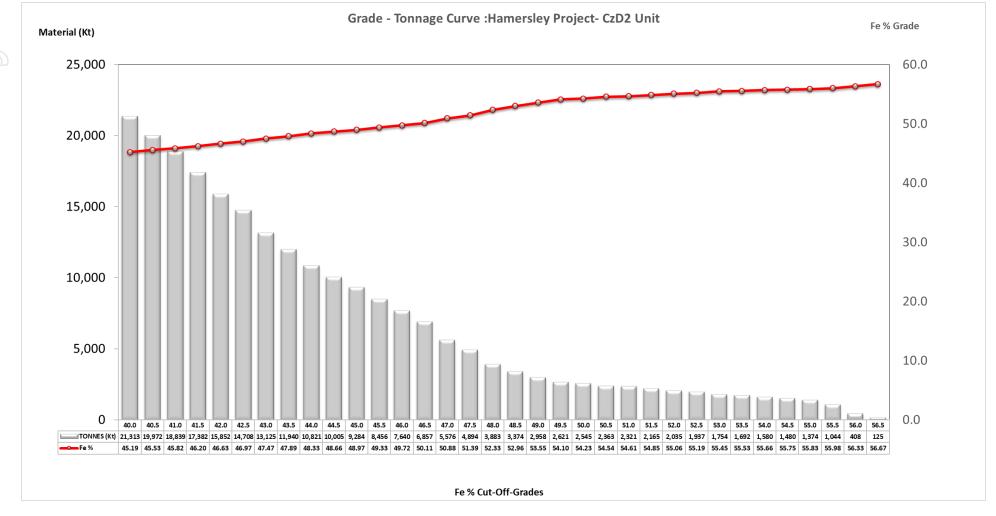
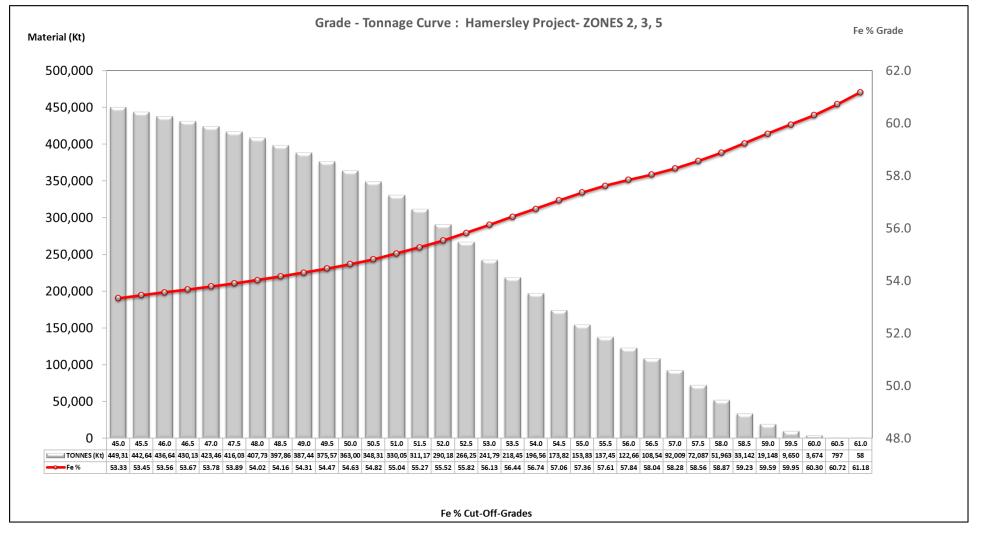


Figure 11: Grade Tonnage curve – CzD2

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au Level 50, 108 St Georges Terrace Perth, WA 6000





# Figure 12: Grade Tonnage curve – LZ, PZ and PHbd combined

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



### **Modifying Factors**

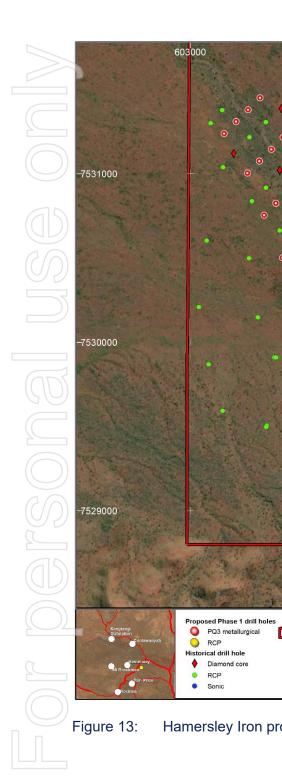
No modifying factor have been applied to the data.

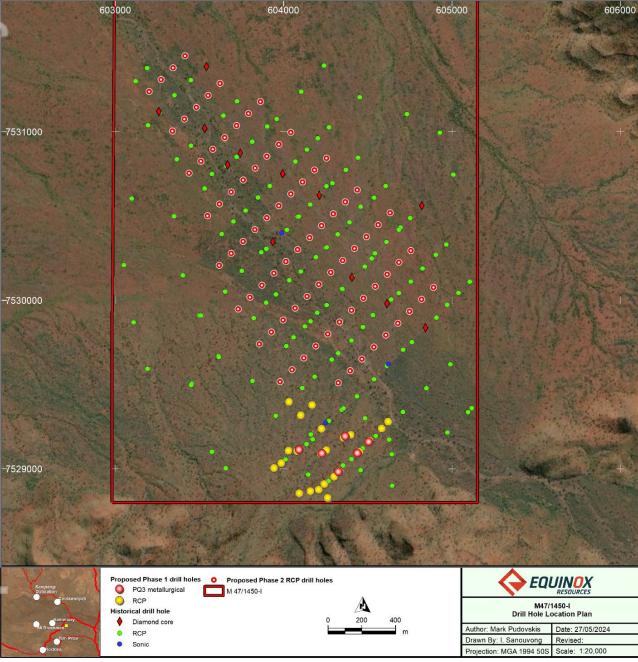
### Recommendations

ERM recommends the following activities to improve the confidence in the Mineral Resource and support future mine studies:

- The density has been assigned to the stratigraphical units based on industry experience. All holes from future drilling programmes should be logged for density using geophysical methods so that a representative, valid dataset can be obtained.
- Previous explorers reported the standing water level at approximately 70 m below the ground level although it was reported that majority of the samples were dry. There has been insufficient hydrological work to confirm with confidence an accurate water level. Future Hamersley Iron drilling programmes should capture the groundwater level to enable the confident estimation of Mineral Resource above and below water table.
- All QAQC information including, CRMs, duplicates, umpire laboratory assays, should be captured and included in the database for the project.
- ERM recommends a phased exploration approach to improve confidence in the Hamersley Iron project Mineral Resource and provide sufficient representative metallurgical and marketing samples:
  - Phase 1 (Southern extent of Mineral Resource)
    - A total of 27 RCP drillholes for an estimated 2,640 m, with drill depths ranging between 50 m and 130 m is recommended to initially improve the confidence in the nearer surface iron mineralisation in the south of the deposit. The drilling will expand an approximate 100 m x 100 m drill grid over an approximate 500m by 500m area.
    - Six PQ3 diamond core drill holes within the southern 500m by 500m area for metallurgical testwork (total of 690 m).
  - Phase 2
    - An additional approximate 9 infill drill sections, each comprising an estimated (average) 7 12
       100m spaced RCP drill holes, will be required to infill much of the resource area to an approximate
       125m by 100m spaced grid.
- In addition to the Phase 1 27 RCP drill holes, an approximate 70 to 100 RCP drill holes may be required to infill the entire resource.
  - All holes from future drilling programmes should be downhole geophysically logged for:
    - Gamma
    - Magnetic Susceptibility
    - Deviation
    - 3-arm caliper
    - Dual density
    - Borehole Magnetic Resonance (for dry bulk density)









**Equinox Resources Limited** ASX: EQN ABN 65 650 503 325

www.eqnx.com.au **T:** +61 08 9389 4499 E: info@eqnx.com.au



### **Competent Persons Statement**

The information in this report that relates to Mineral Resources is based on information compiled by Ms Sonia Konopa and Mr Mark Pudovskis<sup>4</sup>. Ms Konopa is a full-time employee of ERM and is a Member and Fellow Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Mark Pudovskis is a full-time employee of ERM and is a Member of the AusIMM. Ms Sonia Konopa and Mr Mark Pudovskis have 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 Competent Persons as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Ms Sonia Konopa and Mr Mark Pudovskis consent to the disclosure of the information in this report in the form and context in which it appears. Mr Mark Pudovskis assumes responsibility for matters related to Sections 1 and 2 of JORC Table 1, while Ms Sonia Konopa assumes responsibility for matters related to Section 3 of JORC Table

### References

1.

- Harmsworth R.A., Kneeshaw M., Morris R.C., Robinson C.J., and Shrivastava P.K. 1990. "BIF-Derived Iron Ores of the Hamersley Province" in *Monograph 14, Geology of the Mineral Deposits of Australia and Papua New Guinea*, pp 617 -642. (AusIMM, Melbourne).
- Joint Ore Reserves Committee, 2012. Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. [online]. Available from <u>http://www.jorc.org</u> (The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists, and Minerals Council of Australia).
- Kepert, D.A. 2018. "The Mapped Stratigraphy and Structure of the Mining Area C region, Hamersley Province". Geological Survey of Western Australia, Report 185.
- Kneeshaw M., and Morris R.C. 2014. "The Cenozoic detrital iron deposits of the Hamersley Province, Western Australia" in Australian Journal of Earth Sciences, 2014
- McMunn, N. 2012. Annual Report E47/1617 Hamersley Station for the period ending 05/08/2012. Winmar Resources Limited.

Maynard, J.2021, Mineral Resource Estimate Winmar Iron Deposit, Hamersley iron ore Project Pilbara Region, Western Australia. Pathfinder Resources Limited

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000

<sup>&</sup>lt;sup>4</sup> M Pudovskis has over 28 years' Pilbara, African and South American iron ore experience across bedded, detrital and channel iron deposits.



# Appendix 2 JORC 2012 Table 1 – Hamersley iron ore project

### Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. 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 (e.g. "RC drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay"). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	<ul> <li>Historical Work: 2008 – 2012 (Robe River Associates, Cazaly Resources Limited – CAZ &amp; Pathfinder Resources Ltd – PF1 (formerly Winmar Resources Limited)</li> <li>RCP samples were collected at 1 m or 2 m intervals from a rig mounted riffle or cone splitter. For CAZ 2008 drilling, 1 m samples were composited into 2 m samples using a bench splitter.</li> <li>Diamond and sonic drill holes have not beer assayed.</li> <li>The Competent Person (CP) considers the sampling techniques adopted by previous explorers are appropriate for the style of mineralisation, and for reporting Exploration Results and a Mineral Resource estimate.</li> </ul>
Drilling techniques	Drill type (e.g. core, RC, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	<ul> <li>Historical Work: 2008 – 2012 (Robe, CAZ &amp; PF1)</li> <li>Robe River Associates completed three RCP dril holes in 2008.</li> <li>CAZ completed three phases of RCP drilling. The first phase in October 2008, CAZ contracted Kennedy Drilling of Kalgoorlie and 18 holes were drilled for 1,795 m (PLRC0001 – PLRC0018). In the second phase in November 2009, CAZ contracted McKay Drilling of Wangara drilling 9 holes for 1,332 m (PLRC0022 – PLRC0030). During a 3rd phase in 2011, CAZ used two McKay rigs to drill 81 holes (PLRC0044 – PLRC0136) totalling 12,805 m.</li> <li>PF1 took ownership of the project in 2012 and completed 40 RCP drill holes (PLRC0137 – PLRC0176) using McKay Drilling and Frontline Drilling of Midvale for a total of 5,314 m.</li> <li>CAZ drilled 12 diamond drill holes in 2011 totalling 747 m.</li> </ul>

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



Criteria	JORC Code explanation	Commentary
		<ul> <li>CAZ drilled three sonic drill holes in 2009 totalling 354 m for bulk density testwork.</li> <li>RCP drill holes of approximately 140 mm diameter</li> </ul>
		were completed using a standard face sampling hammer.
		Drill holes were vertical.
		The CP considers the drilling techniques adopted by the previous explorers are appropriate for the style of mineralisation, and for reporting Exploration Results and a Mineral Resource estimate.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	In an October 2019 Mineral Resource Estimate for the Winmar Iron Deposit, by Al Maynard & Associates Pty
	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.	Ltd (AM&A), the 2012 JORC Table states actual recoveries from RCP drilling were not measured.
		The recovery of drill samples from all drilling campaigns was reported of an acceptable standard.
		The CP cannot confirm whether the sample recoveries were adequate for the historical work. The CP is less concerned about the historical recoveries, as the CP knows the drilling companies used have a long standing and good reputation in the industry.
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> </ul>	All drill holes were geologically logged using industry accepted logging systems for rock type, colour, shape, alteration, hardness, and moisture.
		Mineralised zones were identified from observations of mineralogy, lithological characteristics, and geochemistry.
		The CP considers the logging adopted by the previous explorers are appropriate for the style of
	The total length and percentage of the relevant intersections logged.	mineralisation, and for reporting Exploration Results and a Mineral Resource estimate.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



Criteria	IOPC Code explanation	Commentary
	JORC Code explanation	Commentary
Subsampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	Historical Work: 2008 – 2012 (CAZ & PF1)
sample preparation	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	RCP prior to 2010 – 1 m or 2 m samples were collected in a plastic bag through a properly designed cyclone and of sufficient weight. A 2 m composite sample was collected from 1 m samples by using a bench riffle splitter.
	technique. Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	RCP drilling from 2010 – 2 m samples were split using a rig mounted cone splitter and collected in marked calico bags. The majority of samples were dry.
)	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.	<ul> <li>Standards and duplicates were inserted at a frequency of 1 in every 20 samples.</li> <li>No diamond core was cut for sampling.</li> </ul>
5	Whether sample sizes are appropriate to the grain size of the material being sampled.	No formal analysis of sample size versus grain size has been undertaken by Equinox. The Competent Person does not consider this material for the style of mineralisation.
		The CP considers the sub-sampling methods adopted by the previous explorers are appropriate for the style of mineralisation, and for reporting Exploration Results and a Mineral Resource estimate.
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. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	<ul> <li>Historical Work: 2008 – 2012 (CAZ &amp; PF1)</li> <li>CAZ drill samples were sent to Kalassay Laboratory in Perth and PF1 samples were sent to Nagrom Laboratory in Perth for XRF analysis. Received samples were recorded by the assay laboratory, then ring-mill pulverised to 90% passing 75 µm, samples greater than 4 kg were split for pulverising and then re-combined. A sub-sample of 500 g pulp was retained in a pulp envelope, with pulps stored at the laboratory for future reference. The remaining sample reject was discarded.</li> <li>Assaying of Fe, Al2O3, SiO2, Mn, P, S and TiO2 was conducted at Kalassay Laboratory (prior to 2012) and Nagrom Laboratory in Perth (in 2012), using the XRF spectrometry on fused bead, while analysis of LOI was determined by Thermo-Gravimetric Analysers at 371°C, 650°C and 1000°C.</li> <li>A majority of standards submitted report within the required grade range without bias.</li> <li>A majority of field duplicates are within tolerance of the original assay and without bias.</li> </ul>

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



Criteria	JORC Code explanation	Commentary
D		No geophysical tools were used to support the preparation of this Mineral Resource estimate. The Competent Person considers that acceptable
		levels of accuracy and precision have been established.
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.	<ul> <li>Historical Work: 2008 – 2012 (CAZ &amp; PF1)</li> <li>No verification sampling or drilling has been carried out.</li> <li>No holes were twinned.</li> <li>Runge Pinnock Minarco Ltd (RPM) who estimated a Mineral Resource in 2013 completed systematic data validation steps in generating a database.</li> <li>ERM loaded the data into Datamine, completed validation and minor errors were corrected.</li> <li>No adjustments were made to the analytical data, other than replacing below detection results with a value equal to half the detection limit.</li> <li>The CP considers the verification of sampling and assaying data is appropriate for the style of mineralisation, and for reporting Exploration Results and a Mineral Resource estimate.</li> </ul>
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.	<ul> <li>Historical Work: 2008 – 2012 (CAZ &amp; PF1)</li> <li>All drill hole collar locations were surveyed in MGA94,</li> <li>Zone 50 grid system by qualified contract surveyors using DGPS equipment. The last 13 holes drilled in 2012 have not been surveyed.</li> <li>All drill holes were drilled vertical and recorded at -90° dip and 0° azimuth within the database. No down hole surveys were completed. Given the drilling is relatively shallow, typically less than 100m, not having down hole surveys was likely to have only a minimal influence on the shape of the mineralisation envelope as the deposit is generally flat lying and continuous.</li> <li>RPM checked 37 drill collar sites with a hand-held GPS against their recorded locations in their database and confirmed their location.</li> <li>There was no topographic control established. Given the terrain is relatively flat, the CP does not consider this a material risk.</li> <li>The CP considers the accuracy of the surveying was</li> </ul>
		The CP considers the accuracy of the surveying was appropriate for the style of mineralisation, and for reporting Exploration Results and a Mineral Resource estimate

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



Criteria	JORC Code explanation	Commentary		
Data spacing	Data spacing for reporting of Exploration Results.	Historical Work: 2008 – 2012 (CAZ & PF1)		
and distribution 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.		A majority of drill spacing of approximately 250 m (along strike) by 100 m (on section) is considered adequate to establish both geological and grade continuity Mineral Resource estimation and classifications applied.		
	Whether sample compositing has been applied.	The southern end of the resource has been drilled on a closer approximate 150m by 100m grid.		
		RCP prior to 2010 – 2 m composite samples were collected from 1 m samples by using a bench riffle splitter.		
		Post 2010 – no compositing of samples occurred.		
		The drill spacings are considered suitable by the CP for the reporting of a Mineral Resource.		
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The holes are vertical and typically less than 120 m. The detrital units are generally flat to moderately undulating and any deviation of the vertical holes will have minimal impact on geological interpretation.		
	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.	The risk of sample bias is not considered material and not applicable for the style of mineralisation.		
Sample security	The measures taken to ensure sample security.	Historical Work: 2008 – 2012 (CAZ & PF1)		
		Sample security for the historical samples is unknown.		
		The CP does not consider the security of the historical samples is a major concern.		
Audits or	The results of any audits or reviews of sampling	Historical Work: 2008 – 2012 (CAZ & PF1)		
reviews	techniques and data.	<ul> <li>No external audits were carried out during the drill programmes.</li> </ul>		
		RPM conducted a site visit in October 2012 to review the project and deposit geology and verify drill hole collar locations.		
		<ul> <li>All site drilling and sampling procedures were standard industry practice.</li> </ul>		
		ERM visited the project in 2022 and viewed historical drill spoils to confirm geology.		
		The CP considers that auditing adopted by previous explorers are appropriate for the style of mineralisation, and for reporting Exploration Results and a Mineral Resource estimate		

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



## JORC 2012 Table 1, Section 2 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary				
Mineral tenement and	Type, reference name/number, location and ownership including agreements or material issues	The Hamersley Project comprises a mining lease (M47/1450-I) and is in good standing				
land tenure status	with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The tenement is located approximately 45 km north- northeast of Tom Price in the Pilbara region of Western Australia and abuts the Karijini National Park to the east. A Land Access Exploration and Heritage Agreement between Wintawari Guruma Aboriginal Corporation RNTBC and Winmar Resources Limited was signed on 18 April 2012.				
	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.					
		In 2012, two heritage surveys were conducted on Exploration Licence E47/1617-I, and no Aboriginal sites were identified. Following those surveys, WGAC negotiated and signed a Native Title Deed with the project owners, and in November 2014, the Mining Lease for the Hamersley Project was granted as a partial conversion of the Exploration Licence.				
		As reported to the ASX (20 February 2024) Equinox Resources Limited filed a Section 18 application under the Aboriginal Heritage Act 1972 (WA) with the Department of Planning, Lands and Heritage (DPLH) to use land within its Mining Lease 47/1450-1.				
		S18 approval from the Minister of Aboriginal Affairs required prior to any further drilling activities are undertaken.				
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Relevant investigations into the iron mineralisation a the Hamersley Iron Project have been made since th late 1990's by Robe River Mining Co Pty Ltd.				
		Since grant, previous work was conducted through a joint venture between Pathfinder Resources Ltd (70% and Lockett Fe Pty Ltd (30%) (a wholly owned subsidiary of Cazaly Resources).				
		Exploration has comprised several reverse circulatio and diamond drilling exploration programmes since 1998, and in total 168 holes have been drilled for 22,621 m of drilling. A Mineral Resource estimate we completed by Runge Pinnock Minarco Ltd in 2013 ar updated to JORC (2012) by Al Maynard & Associates in June 2019.				

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



	Criteria	JOR
	Geology	Dep min
$\bigcirc$		
	Drillhole information	A su und tabi
$\bigcirc$		Mat • E • E
$\mathcal{O}$		s • [ • [
<u>a</u> 5		• H If th
		basi excl of ti
	Data	expl
	Data aggregation methods	In re avei grad
		cut- stat
		Whe leng
		low aaa

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	The Hamersley Project is situated within the Hamersley Iron Province which covers an area of approximately 80,000 km2 and is comprised of Late Archaean to Palaeo-Proterozoic rocks of the Mount Bruce Supergroup, which consists of the Fortescue, Hamersley, and Turee Creek groups, overlain by remnants of the Wyloo Group. The banded iron formation (BIF) units of the Hamersley Group host the bedded iron deposits (BIDs) of the Pilbara with mineralisation occurring predominantly within the Marra Mamba Iron Formation and Brockman Iron Formation. Substantial mineralisation also occurs in overlying detrital units, primarily channel iron deposit (CID) which occupies paleo-drainage, and CzD3.
		The Hamersley Iron project comprises interfingering lenses of CzD3 detritals comprising surface, high matrix, loose and pisolitic detritals with minor interpreted underlying Dales Gorge Member hardcap mineralisation.
		The Project's geological setting and mineralisation is described in detail in this report.
Drillhole information	<ul> <li>A summary of all information material to the understanding of the Exploration Results including a tabulation of the following information for all Material drillholes:</li> <li>Easting and northing of the drillhole collar</li> <li>Elevation or RL (Reduced Level – Elevation above sea level in metres) of the drillhole collar</li> <li>Dip and azimuth of the hole</li> <li>Downhole length and interception depth</li> <li>Hole length.</li> </ul>	Exploration Results are not being reported.
	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.	Exploration Results are not being reported.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Exploration Results are not being reported.
	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.	Exploration Results are not being reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration Results are not being reported.

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.	Exploration Results are not being reported.
ienguns	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. "downhole length, true width not known").	Exploration Results are not being reported.
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 drillhole collar locations and appropriate sectional views.	Relevant maps and diagrams are included in the body of the report.
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.	Exploration Results are not being reported.
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.	No substantive exploration data not already mentioned in this table has been used in the preparation of this MRE.
Further work	The nature and scale of planned further work (e.g. 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.	<ul> <li>Future work may include:</li> <li>Infill RCP drilling to improve the confidence in the Mineral Resource.</li> <li>Downhole geophysics for density to enable interpolation of densities as opposed to using applied densities.</li> <li>Metallurgical testwork to understand the ability to upgrade the Mineral Resource.</li> <li>Diagrams have been included in the body of this report.</li> </ul>

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



## JORC 2012 Table 1, Section 3 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
Database integrity	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. Data validation procedures used.	ERM completed numerous checks on the data. Absent collar data, multiple collar entries, suspect downhole survey results, absent survey data, overlapping intervals, negative sample lengths and sample intervals which extended beyond the hole depth defined in the collar table were reviewed. All assays, survey, collar and geology files have been stored securely on ERM servers in Perth.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	The Competent Person for Section 1 and 2 of the JORC Table (Mark Pudovskis) visited the Hamersley Iron Project in 2022. The visit included field reconnaissance and examination of historical RCP drill spoils.
Geological interpretatio n	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	ERM completed a geological interpretation over the Hamersley Iron Project. A series of hardcopy cross sections were drafted, and an initial reinterpretation was completed using RCP chips tray photography, core photography and assays, underpinned by a knowledge of contemporary deposits in the Pilbara. The geological interpretation is based on geometallurgy and geology, balanced against geochemistry. The adopted stratigraphy and nomenclature are aligned to industry standard. No other interpretation was considered. The geological interpretation is provided in detail in the body of this report.
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.	Hamersley Iron Project is approximately 2.5 km by 1.5 km in area extent. The southern extension of the deposit is near surface deepening to the north.

Equinox Resources Limited ASX: EQN ABN 65 650 503 325 www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



Criteria	JORC
Estimation and modelling techniques	The n estim assun grade parar extra assist a des parar
	The a estim wheth such a
	The a by-pr
	Estim non-g

	JORC Code explanation	Commentary									
n S	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	The MRE has been completed using the approach described below. Top cuts were selected following statistical analysis. The point at which the number of samples supporting the high- grade tail diminishes was the primary method. The selected top cuts are shown below.									
	assisted estimation method was chosen include a description of computer software and	ZONE	Fe	Al <sub>2</sub> O <sub>3</sub>	CaF	LOI	Mn	Р	S	SiO <sub>2</sub>	TiO <sup>2</sup>
	parameters used.	1	50	17	e 51	7	-	-	-	1	-
		2	-	28	-	-	-	0.1	-	1.6	-
		3	-	10	-	-	0.1	-	20	-	0.1
		5	-	-	-	-	0.12	0.05	-	1.2	0.12
		6	-	40	-	30	0.13	0.6	-	3	0.13
		7	-	-	51	30	0.08	0.2	-	-	0.08
		8	-	-	-	13	-	-	-	-	-
		Quantitative kriging neighbourhood analysis (QKNA) was undertaken to assess the effect of changing key kriging neighbourhood parameters on block grade estimates.         Kriging efficiency (KE) and slope of regression (SOR) were determined for a range of block sizes, minimum/maximu samples, search dimensions and discretisation grids.         A three-pass search ellipse strategy was adopted whereb search ellipses were progressively increased if search critic could not be met.         Dynamic anisotropy was used to ensure undulation in the mineralisation relating to the folded nature of the stratigraphy was captured by the search ellipses (i.e. rotating search ellipses).         Ordinary kriging was adopted to interpolate grades into cells, with variogram rotations consistent with the search ellipse rotations.         All interpolated grades variable utilise the search and sample selection plan obtained from the QKNA of the irod domains. A minimum of four and maximum of 20 sample per estimate, with a maximum number of samples per drillhole of two for all ZONES was used.				e um by teria he					
	The availability of check estimates, previous estimates and/or mine production records and whether the MRE takes appropriate account of such data.										
	The assumptions made regarding recovery of by-products.	No assu by-prod	•		ve bee	n ma	de reg	arding	g the re	covery	/ of
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage	Non-gra and silic elemen	on d ts.	ioxide v	vere e	estima	ated as	stand	dard iro		
	characterisation).	There w	as n	o indica	tion o	felev	vated s	ulphu	r.		

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



Criteria	JORC Code explanation	Commentary
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	A 100 m(E) x 50 m(N) x 2 m(RL) parent cell size was used to honour wireframe boundaries. The drillhole data spacing is generally on approximating 250 m along strike by 100 m across strike. Sampling has been completed on 1 and 2 m intervals. 86% of the samples were collected on 2 m intervals. A smaller block size was chosen to give a better estimation of the volume of the deposit considering the wireframe boundaries and the variable domain widths.
	Any assumptions behind modelling of selective mining units.	No assumptions were made regarding selective mining units
	Any assumptions about correlation between variables	No assumptions have been made regarding correlation between variables.
	Description of how the geological interpretation was used to control the resource estimates.	The relogged stratigraphic units were used to create a cross- sectional interpretation of the Hamersley Iron Project. These sections were then used to develop five geological domains or ZONES as solids in Leapfrog software. A grade of 50% Fe obtained from the histogram plot was used to separate the Dales Gorge Member hardcap mineralisation from the Dales Gorge Member BIF.
		Each stratigraphic unit is considered as being a separate estimation domain. Dynamic anisotropy was used to ensure undulation in the mineralisation domains was captured by the search ellipses during grade interpolation.
	Discussion of basis for using or not using grade cutting or capping.	Grade capping was applied to all grade variables prior to grade interpolation. Histograms and log-probability plots were reviewed to understand the distribution of grades and assess the requirement for grade capping for each estimation domain. Selection of no top cut can lead to significant grade over-estimation and bias in the block model if extreme grades outliers are within the grade population variables.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Drillhole grades were initially visually compared with cell model grades. Domain drillhole and block model statistics were compared. Swath plots were then created to compare drillhole grades with block model grades for easting, northing and elevation slices throughout the deposit. The block model reflected the tenor of the grades in the drillhole samples both globally and locally.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	All tonnages have been estimated on an in-situ dry basis. No moisture content was reviewed.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	A reporting cut-off grade of 56.5% Fe was selected as it reflects the in-situ chemistry of the iron mineralisation likely to be mined to produce a DSO iron fines product. Only material from ZONE 2 (LZ – loose detrital), ZONE 3 (PZ – pisolitic detrital) and ZONE 5 (PHbd – mineralisation) has been reported.

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au



Criteria	JORC C
Mining	Assum
factors or	method
assumptions	interna
	dilutior
	process
	for eve potenti
$\bigcirc$	made r
	parame
	Resour
	this is t
	explan
	assum
Metallurgical	The ba
factors or	regard
assumptions	always
	determ
	econon
	metallu
	regardi and pa
	Resour
$\mathbf{\mathcal{G}}$	this is t
	explan
	assump
2	
Environmenta	Assum
I factors or	and pro
assumptions	always
~	determ
	econon enviror
5	process
$\cup$	determ
$\leq$	impact
	may no
	early co
	enviror
	Where
	this sho the env
	ine env

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	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.	The cut-off grade assumes that open pit mining methods would be applied.
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 eventual 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 is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Equinox are targeting a low annual tonnage of DSO iron mineralisation comparable in iron grade to Pilbara Robe River Fines, FMG blend Fines and Super Specials Fines which are benchmarked under the Platts 58% Fines Index (High alumina). Historical metallurgical test work completed on the Hamersley Iron Project has provided some evidence that the detrital Mineral Resource can also be beneficiated to produce an improved iron fines product with acknowledgement that additional and focused metallurgical work is required to provide a representative population of results.
Environmenta I factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this 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 potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	Environmental considerations have not been considered.

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



	Criteria	JORC Code explanation	Cor	nmentary		
	Bulk density	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. The bulk density for bulk material must have	Bas det dep hist and	Based on experience of the Pilbara and knowledge of the detrital mineralisation, leveraging from analogous detrital deposits in the region, ERM is of the opinion that the historical Hamersley Iron applied densities are inappropriate and not a true reflection of the style of mineralisation. The CP is of the opinion that the style of detrital		
) 1)		been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates	min ann geo Har For	neralisation as reported by Red H nouncement 6 September 2023) ological analogy to the detrital m mersley Iron project. the estimation of the Hamersley	ławk Minir is a reasor ineralisatio y Iron Mine	ng (ASX nable on at the eral Resource,
		used in the evaluation process of the different materials.	belo	CP has used assigned densities a ow. Unit/Member	as shown in	n the table Density
			-	SZ	1	2.5
			-	HMZ	7	2.4
			-			
			-	LZ	2	2.85
			-	PZ	3	3.0
adi			-	CzD2	8	2.4
30			-	PHbd hard cap mineralisation	5	2.8
				PHbd BIF	6	2.6
Ŋ						
	Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	con	e Mineral Resource has been clas isideration of all criteria contain d Section 3 of JORC 2012 Table 1	ed in Sectio	
$\bigcirc$			con Res	e data quality, data distribution, atinuity were considered when c source. The following approach v ssifying the Mineral Resource:	lassifying t	he Mineral
			٠	Geological continuity was asses	sed, and tl	he domains
$\square$				were reasonably continuous alo	ong and ac	ross the strike
$\bigcirc$				of the deposit.		
			٠	QAQC results and procedures for		
				of the project are sufficient to s	upport a N	/lineral
				Resource Estimate.		
			•	The variography showed long ra	-	
				for deposits displaying good ge	-	-
				However, there is a limited num		
				confidently define the short-ran	-	-
				across strike. Infill drilling is rec		
				the confidence of the estimatio	n. The dril	l holes were

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au

Level 50, 108 St Georges Terrace Perth, WA 6000



Criteria	JORC Code explanation	Commentary		
D		<ul> <li>generally spaced on 250 m northwest-southeast sections and 100 m apart on section, with samples composited over a 2 m length.</li> <li>Minimal quantitative and representative density measurements have been collected. Density values were assigned to the block model domains/ZONES using based on industry experience and similar style of detrital mineralisation.</li> <li>The Mineral Resource was classified as Inferred.</li> </ul>		
	Whether appropriate account has been taken of all relevant factors (i.e. 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).	Appropriate account has been taken of all relevant criteria including data integrity, data quantity, geological continuity, and grade continuity.		
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The MRE appropriately reflects the Competent Person's views of the deposit.		
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The current model has not been audited by an independent third party but has been subject to ERM's internal peer review processes.		
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the MRE 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.	The Mineral Resource accuracy is communicated through the classification assigned to this Mineral Resource. The MRE has been classified in accordance with the JORC Code (2012 Edition) using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.		
	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.	The Mineral Resource statement relates to a global tonnage and grade estimate. Grade estimates have been made for each block in the block model.		
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No production data is available.		

www.eqnx.com.au T: +61 08 9389 4499 E: info@eqnx.com.au