

Excellent Preliminary Metallurgical Results Validate High Quality Mining Opportunity at Iron Ridge

Summary

- Results received from metallurgical testwork which has been undertaken since February 2019
- Testwork indicates potential Project products have low impurities or deleterious elements
- Preliminary work is considered to have potential to be further optimised by ongoing analysis
- Drop tower testwork indicates presence of a lump component to the potential product, which is estimated at 25-30%; the ability of Fenix to extract premium prices will be determined in discussions with potential offtake partners

Fenix Resources Limited (ASX: FEX, “Fenix” or “Company”) is pleased to announce that it has received strongly positive metallurgical testwork results in respect of potential products from its Iron Ridge Project (“Project”) which is located in the Mid-West region of Western Australia.

Scope of Metallurgical Assessment

Fenix engaged independent consultant METS Engineering Group Pty Ltd (“METS”) to prepare a metallurgical testwork summary report for the Project. The programme was designed to assess the characteristic properties of the Project potential product and its applicability for transport and downstream processing.

Testwork was performed by Nagrom, ALS (Iron Ore Technical Centre) and E-Precision laboratory and involved assessment of particular size distribution, reducibility, decrepitation, comminution and lump ore properties.

Key Outcomes

The report by METS has been finalised and has summarised that the mineralisation tested has desirable characteristic properties. The samples tested were shown to be amenable to standard crushing and screening.

Key observations include the following:

- Deleterious elements including phosphorous in the lump and fines are low, well within the acceptable limits.
- Premium >65% Fe lump products and >63% Fe fines products with low deleterious elements were generated.
- The samples tested indicate the deposit delivers approximately 25-30% of the mineralisation as a lump product (+8 mm).
- The potential product is soft and friable, the 3 composite samples tested exhibited very low Crushing Work Index (CWi) and Bond Abrasion Index (Ai) values.
 - Average CWi of 2.6 kWh/t indicates low power consumption for crushing the easily fragmented rock.
 - Average Ai result of 0.018 indicates low equipment consumable consumption rates.
- The lump product properties (Reduction Index, Reduction-Disintegration Index and Decrepitation Index) derived for the three composites were encouraging for blast furnace use.

Ongoing work will be conducted to confirm the iron ore fines amenability to sintering.

Lump Ratio & Potential for Premium Pricing

Based on the drop tower test results, the expected lump product percentage is estimated to be 25-30%. Ultimately the ability for Fenix to extract a premium pricing for this anticipated lump component will be determined by discussions with end users, the specific requirements of each end user, and any offtake agreement(s) that might be established. Fenix intends to assume nil lump premium in its base case assessment of the Project until end user verification is received.

Managing Director Comment

Commenting on these outcomes, Fenix's Managing Director, Robert Brierley, commented:

"The metallurgical properties of any mining asset are critical to the ability to successfully finance and develop construction, and ultimately to attract customers for the specific product. These results are an excellent result for Fenix, and naturally this leads us to have significantly increased confidence in the ability for this project to become a strong and viable mine in short order.

We have noted the growing scarcity of high-grade iron ore in the global seaborne market, let alone the limited supply of lump material, so we are encouraged that our potential iron ore product will be keenly sought after."

On Behalf of Fenix Resources Limited:



Robert Brierley
Managing Director
Fenix Resources Limited

Competent Persons Statement

The information in this report that relates to the Processing and Metallurgy for the Iron Ridge Project is based on and fairly represents, information and supporting documentation compiled by Damian Connelly who is a Fellow of The Australasian Institute of Mining and Metallurgy and a full time employee of METS Engineering Group. Damian Connelly has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Damian Connelly consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

About Fenix Resources

Fenix Resources is a WA-based minerals explorer transitioning to miner.

The company's 100% owned, flagship Iron Ridge Iron Ore Project is a premium DSO deposit which hosts a JORC 2012 compliant resource located around 490 km by road from Geraldton port.

High grade iron ore attracts a premium price on the seaborne market as Chinese steel works increasingly demand more pure inputs with lower emissions due to increasing strict government regulations.

Only requiring crushing and screening, the ore is proposed to be trucked to the port by a JV signed off on 7 May, with trucking specialist Minehaul Pty Ltd headed by respected logistics expert Craig Mitchell who was the founder and owner of Mitchell Corp before selling to Toll Group.

Negotiations are well advanced with Mid West Ports Authority at Geraldton where export capacity is available.

Pit planning, metallurgical work and mining and environmental approvals are currently being undertaken.

Appendix 1: JORC Table 1

Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i></p>	<p>Samples used in the estimation of grade in the Mineral Resource were collected by Commercial Minerals Ltd (Com Min) using reverse circulation percussion (RC) in 1997 (WRR series), Atlas Iron Ltd (Atlas) in 2008 using RC (WRRRC series) and Fenix Resources Ltd (Fenix) in 2018 (IR series). Some samples were also collected from RC (1995), vacuum (1973) and diamond drilling (1962) techniques, although these were used in validating the mineralisation envelope only and not in the Mineral Resource Estimation.</p> <p>Com Min samples varied in length from 3 – 5 m in mineralisation, representing 329 m or 5.3% of the assay length. Atlas samples were taken on 1 and 2 m lengths for 1,131 m or 18.4% of the samples.</p> <p>RC and diamond drilling methods were used to assay 2,082 primary samples in the Fenix Resources Ltd 2018 program.</p> <p>All the Fenix 2018 RC samples were two metre composites, except where the drill holes terminated on an odd meter interval.</p> <p>Fenix 2018 Diamond (DDH) sampling was completed to geological contacts with the maximum length being 2m. Occasional short (<0.5m) lengths were taken. The sample intervals were measured and marked up in the field and transported in its entirety to Perth for cutting by ALS Minerals and Chemistry in Wangara, Perth, which was inspected by the Competent Person in Perth. The core was considered in a good physical state when it arrived in Perth with little degradation, except for two trays which were re-assembled with the assistance of photography.</p>
	<p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p>	<p>2008 Atlas samples were taken from shallow RC holes that remained dry and did not encounter any significant water. All samples were cone split and dry. In the event where the sample exceeded 3 kg, it was then split down to a smaller sample.</p> <p>2018 RC samples were typically collected via a cone splitter or if the splitter clogged up a representative sample has been taken by hand (scoop). While scoop samples are not ideal it is not considered material for this style of mineralisation and analysis of sample recovery showed no correlation with grades.</p> <p>55 RC field duplicates were taken on selected intervals within the interpreted mineralised horizons.</p> <p>RC samples were reported to weigh between 2 and 4kg which is appropriate. Where the primary sample exceeded 3kg it was then split down to a smaller sample. The Competent person considers the sampling process to be appropriate and representative of the mineralisation style present.</p>
	<p><i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems.</i></p>	<p>All RC samples were cone split except in some occasions where the material blocked up the splitter and had to be manually collected. In the event where the sample exceeded 3kg it was then split down to a smaller sample at the lab. The samples were processed by XRF analysis using fused disk from a ~1g charge. The laboratories procedures have been reviewed and are considered acceptable for the style of mineralization observed.</p>

Criteria	JORC Code explanation	Commentary
	<i>Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information</i>	
Drilling techniques	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i>	<p>The drilling used in the Mineral Resource estimate comprised 49 holes. The recent drilling by Fenix Resources Ltd comprised 20 RC holes for 3,370 m, eight DD holes for 1,123.7 m and one RC hole with a diamond tail for 255.7 m.</p> <p>All diamond holes except one were core from surface using triple tube techniques to improve core recovery. The core was orientated however, many orientations failed due to the friable nature of the core.</p> <p>RC drill holes utilised 5 ¼ inch face sampling drill bit.</p> <p>The drilling technique is considered appropriated for the style of style mineralisation present and the Competent Person does not consider the inability to orientate the core a material risk to the Mineral Resource estimate.</p> <p>Downhole surveys included 11 holes by gyro and 18 holes by geophysics (gamma, density, resistivity). Geophysical logging of all 2018 holes was conducted for varying depths to blockage or end of hole.</p>
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	<p>The 2018 RC sample recoveries were estimated subjectively as poor, fair, good or large. These were recorded for all samples typically with deeper, wet holes having poor to fair sample recovery. Recovery for dry samples was typically good. The 2008 drilling by Atlas was dry and while no record of recovery was available no issues were noted.</p> <p>The diamond recovery was generally good with the average being above 95%, however recovery in areas of soft clay or zones of high porosity did reduce to below 80%.</p> <p>Sample moisture content was variable. Typically, deeper holes returned moist or wet samples and shallow holes (<100m) largely returned dry samples.</p> <p>The Competent Person (CP) considers the sub-sampling appropriate for the reporting of an Exploration Result</p>
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	<p>Diamond drilling was completed to assist in validating the results from the RC samples and no identifiable bias was observed.</p> <p>Analysis of sample recovery showed no relationship with grades.</p> <p>Twin hole analysis showed good correlation between DDH and RC holes analysed.</p>
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	<p>Analysis of sample recovery measurements on diamond core and RC sample weights showed no relationship to grades.</p>
Logging	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	<p>All RC and diamond drill holes were geologically logged to an industry standard appropriate for the mineralisation present of the project.</p> <p>Diamond core was photographed, and a selection of RC chips were retained for future reference.</p> <p>The CP considers that the level of detail is sufficient for the reporting of Exploration Results and for future Mineral Resource estimation.</p>
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean,</i>	<p>Lithological logging is qualitative in nature. Logged intervals were compared to the quantitative geochemical analyses and geophysical logging to validate the logging.</p> <p>Quantitative logging was provided by downhole geophysical surveys were completed on 29 holes for long and short sign gamma density, resistivity and</p>

Criteria	JORC Code explanation	Commentary
	<i>channel, etc.) photography.</i>	<p>calliper in January to February 2019 by independent contractor MPC Kinetic in open holes drilled by Fenix Resources Ltd in November and December 2018. The geophysical probe penetrated > 85% of the final hole depth for 50% of the 29 holes and >60% of the final depth for 72% of the holes. Four holes penetrated between 40–60% of the final depth, one hole penetrated 33% and one 18% of the final depth.</p> <p>The Competent Person considers that the availability of qualitative and quantitative logging has appropriately informed the geological modelling, including weathering and oxidation, water table level and rock type.</p>
	<i>The total length and percentage of the relevant intersections logged.</i>	The total length of all drilling was logged.
Subsampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	For the Fenix 2018 DD samples, if the core was competent, the sample was cut by ALS using a purpose build automatic saw with diamond tipped blade, then half the core was sampled. For fragmented core sections, the best effort was made to separate half the sample for processing. Typically, the fragmented sections were within the clay rich areas and not in the mineralisation. ALS then crushed the sample to -6mm.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	<p>Atlas and Cons Min samples were dry and collected via cone splitter.</p> <p>For the recent Fenix drilling, RC samples were cone split except in some occasions where the material blocked up and had to be manually collected. In the event where the sample exceeded 3kg it was then split down to a smaller sample.</p>
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	<p>All RC samples were cone split to approximately a 12.5% split with the exception of some of the Fenix samples where water was encountered, and the cone splitter clogged up.</p> <p>Commercial Minerals samples were submitted to Analabs in Perth for XRF analysis for a basic iron oxide suite of elements (OX408). Commercial laboratories crushed and pulverised the sample for further subsampling for XRF analysis.</p> <p>The focus of Commercial Minerals for the Iron Ridge area was the extraction of iron oxide material for use as a pigment. Samples were also analysed for colour testing at Commercial Minerals Ltd's Technical Services Division in Footscray, Victoria.</p> <p>2007 Atlas RC samples were submitted to Ultratrace Laboratories in Perth for silicon fusion disk XRF analysis (XRF202) for the standard iron ore suite of 10 elements. Sample preparation consisted of pulverizing using robotic preparation.</p> <p>For the Fenix 2018 drilling, crushed core and RC samples were dried, pulverized to 85% passing 75 micron and riffle split to a maximum of 3 kg. 0.7 g samples were then analysed using technique ME-XRF21u with lithium bornite fusion and XRF finish (fused disk), yielding the standard iron ore analysis of 24 unnormalised elements. Loss on ignition (LOI) was determined on a 1 g pulp sample by thermogravimetric analysis.</p> <p>The Competent Person considers these methods appropriate for this style of mineralisation.</p>
	<i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i>	No Quality control (QC) samples were available for the Com Min drilling. For Atlas 2008 drilling, field duplicates were taken every 25th and 75th sample. Results were reported by Atlas to indicate good correlation between original and duplicate assays, indicating good accuracy with sample procedure. The recent Fenix drilling included certified reference materials (CRMs), field duplicates and pulp duplicates.
	<i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field</i>	<p>The recent Fenix drilling included field duplicate sampling to support this Mineral Resource estimate. The Atlas drilling also included Field duplicates.</p> <p>No ¼ core duplicate samples have been taken.</p>

Criteria	JORC Code explanation	Commentary								
	<i>duplicate/second-half sampling.</i>									
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are considered to be appropriate to the grain size of the material being sampled.								
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<p>For the recent Fenix drilling, the assaying and laboratory procedures used were consistent with industry good practice. All RC and diamond core samples were sent to ALS Minerals and Geochemistry in Wangara Perth for XRF analysis. Whole core trays were delivered to ALS Perth.</p> <p>Laboratory procedures adopted are sufficient for the reporting of Mineral Resources. ALS is a NATA accredited organisation. XRF is a total rock geochemical analysis method and a standard technique adopted by the iron ore industry.</p>								
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	<p>Down hole gamma-density was logged in counts-per-second (cps) by MPC Kenetic at 10 cm spacing down hole. These were then converted to physical property values using calibrations determined specifically for each physical property parameter. The internal consistency of the down-hole gamma-density data was demonstrated by repeat logging of against a calibration hole data from an iron ore deposit calibration holes in the Pilbara.</p> <p>The final data were supplied in a Logging ASCII Standard (LAS) file format.</p> <p>The type of instrument used was a 9239 Dual Density Instrument, Serial Number: 4412. The instrument was calibrated on 28/02/2019, source serial number CZ6595, with results shown in the table below.</p> <table border="1"> <thead> <tr> <th></th> <th>Long Space Response (cps)</th> <th>Short Space Response (cps)</th> </tr> </thead> <tbody> <tr> <td>High-Point Standard (4.48g/cc)</td> <td>198</td> <td>9650</td> </tr> <tr> <td>Low-Point Standard (1.106g/cc)</td> <td>24934</td> <td>42675</td> </tr> </tbody> </table> <p>An in-hole calliper was used to identify areas where blowouts and significant aberrations in the hole rugosity were encountered; any deviations from within 20% of the nominal hole diameter (960 mm for HQ and 1460 mm for RC) were removed.</p> <p>Long-spaced response gamma density readings were calibrated against dry water immersion / Archimedes method core density samples from the diamond drill core (41 samples) and moisture test work completed on the diamond samples. A final check was completed against other known deposits in the Weld Range from publicly available mineral resource estimates.</p>		Long Space Response (cps)	Short Space Response (cps)	High-Point Standard (4.48g/cc)	198	9650	Low-Point Standard (1.106g/cc)	24934
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High-Point Standard (4.48g/cc)	198	9650								
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	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	<p>The Fenix drilling program quality control (QC) samples included certified reference materials (CRMs), field duplicate and pulp duplicates. The CRMs used were two iron ore standards from GeoStats Pty Ltd. Standards were inserted at a rate of 3 samples every 100 (sample ID's ending 25, 50 and 100). Blanks were inserted every 100 samples (sample ID's ending 75). The standards performed well within nominated tolerance limits.</p> <p>Atlas utilised field duplicates and standards. Data was not available for review however, Atlas did not report any identified issues.</p> <p>ALS also completed their own internal QAQC with standards blanks and duplicates. The raw QAQC standard results were reviewed by CSA Global.</p>								
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	All mineralisation intersections, both significant and anomalous were verified by CSA Global during the drill hole validation process.								
	<i>The use of twinned holes.</i>	Diamond holes were drilled to infill areas of RC holes, and although not proximal twins, DD sample results showed strong correlation to the nearest RC sample results.								

Criteria	JORC Code explanation	Commentary																		
	<p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p>	<p>The data entry, storage and documentation of primary data was completed on Excel spread sheets and local hard drives, then imported into a central database managed by CSA Global.</p> <p>The competent person has reviewed the database and completed validation and considers the data management process acceptable for the use in Mineral Resource Estimation.</p>																		
	<p><i>Discuss any adjustment to assay data.</i></p>	<p>No adjustments were made to the analytical data, other than replacing a single TiO₂% below detection results with a negative value in the database, which was then set as null (absent data). Phosphorous was heterotopically sampled, therefore, the data were treated as absent rather than below detection limit or zeros. Downhole density was calibrated and adjusted using moisture and hydrostatically obtained measurements.</p>																		
<p>Location of data points</p>	<p><i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p>	<p>All collar positions were recorded in GDA 94 MGA Zone 50 coordinate system and then uploaded into the database as the final collar positions.</p> <p>MHR Surveyors measured the 29 recent collar locations by DGPS and 14 historic collars.</p> <p>Downhole surveys were completed using a Gyro tool by the drilling contractor with readings taken approximately every 30 metres. Check north seeking gyro and collar surveys by registered surveyors MHR Surveyors were undertaken. Generally, the holes remained straight with less than 2 degrees (both dip and azimuth) variation over a 100 m length recorded.</p> <p>Downhole surveys on the Fenix drilling included 11 holes by gyro and 18 holes by Reflex EZ-Trac, Geophysical logging of all holes was conducted for varying depths to blockage or end of hole. Down-hole surveys were not conducted on historic drilling.</p> <p>The Competent Person is satisfied that the location of data points is sufficiently accurate for the purpose of Mineral Resource Estimation.</p>																		
	<p><i>Specification of the grid system used.</i></p>	<p>Drill hole data were transformed from the original grid system, GDA94 MGA Zone 50, to a local grid by a two-point transformation shift using the following parameters:</p> <p>MGA Zone 50</p> <table border="1"> <thead> <tr> <th>Point</th> <th>Direction</th> <th>MGA Zone 50 (m)</th> <th>Local Coordinate (m)</th> </tr> </thead> <tbody> <tr> <td rowspan="2">1</td> <td>X</td> <td>566911</td> <td>0</td> </tr> <tr> <td>Y</td> <td>7018548</td> <td>0</td> </tr> <tr> <td rowspan="2">2</td> <td>X</td> <td>569076.064</td> <td>2500</td> </tr> <tr> <td>Y</td> <td>7019798</td> <td>0</td> </tr> </tbody> </table>	Point	Direction	MGA Zone 50 (m)	Local Coordinate (m)	1	X	566911	0	Y	7018548	0	2	X	569076.064	2500	Y	7019798	0
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1	X	566911	0																	
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	<p><i>Quality and adequacy of topographic control.</i></p>	<p>In 2007, MHR Surveyors defined a RTK GPS base station for Atlas on an existing MHR control point PCP02 at coordinates: X = 567525.519 mE; Y = 7018600.545 mE; Z = 492.662 mRL. The absolute accuracy of PCP02 was checked by logging ~4 hours of static data and submitted to the Geoscience AUSPOS. The result indicating that the current values for PCP02 have an absolute accuracy of sub 0.1m.</p> <p>Using this topographic control, Atlas a produced a georeferenced aerial survey, extracting 0.5m contours.</p> <p>Significant earthworks were required for the Fenix drilling; therefore, many recent collars are below the surface (up to ~3metres). Check traverses confirmed the accuracy of the topographic surface in relation to the Atlas and newer Fenix DGPS collars.</p> <p>The contours and the collar coordinates were meshed by Datamine and imported into Surpac for coding the Mineral Resource block model.</p> <p>The topographic surface shows strong visual correlation to the DGPS collar surveys at the resolution required for this Mineral Resource estimate.</p>																		
<p>Data spacing and distribution</p>	<p><i>Data spacing for reporting of Exploration Results.</i></p>	<p>The drill spacing is on a reasonably regular grid of approximately 40 m x 40 m along strike and down dip, with a few drill sections spaced out to 100 m x 100 m at the southwest and northeast extents of the deposit.</p>																		

Criteria	JORC Code explanation	Commentary
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	The Competent Person believes the mineralised lenses have sufficient geological and grade continuity to support the classification applied to the Mineral Resources given the current drill pattern.
	<i>Whether sample compositing has been applied.</i>	Sample lengths of the Com Min drilling was carried out on 3 to 5 m lengths, so it is assumed these were composites. However, these represent a small portion of the total dataset, and only 75 of these samples of 918 were within mineralisation wireframes. No compositing was completed on the Atlas or Fenix drilling (typically 2m sample intervals).
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The drill holes were angled appropriately to intersect the hematite mineralisation perpendicular to strike and at a high angle No major structures were reported in the drilling or noted during the field reconnaissance which could negatively impact the Exploration Results by introducing sampling bias.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	An effort has been made to drill holes as close as possible to orthogonal to the lodes. The Competent Person considers that the orientation of the sampling is unlikely to have caused biased sampling.
Sample security	<i>The measures taken to ensure sample security.</i>	RC samples were bagged, and cable tied upon collection. Diamond core samples were strapped using metal straps with a secure lid on the top tray to prevent damage to the core and improve security. Sample security was maintained through short (<1 day) collection and delivery and the use of secured transport yards. The remote site within a low risk jurisdiction mitigated the risk of sample security being compromised
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	No external audit of sampling techniques and data has been undertaken.

JORC 2012 Table 1 Section 2 – Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding</i>	The Project is located in the Mid-West region of Western Australia and comprises one granted Mining Lease (M20/118) situated approximately 380 km north east of Geraldton and some 50km north north-west of the township of Cue, Western Australia. The Mining Lease is held 100% by Prometheus Mining Pty Ltd, a wholly owned subsidiary of Fenix Resources Ltd.

Criteria	JORC Code explanation	Commentary
	<i>royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>	Heritage surveys completed in 2018 identified a site immediately to the west of the current resource. Development of the mineral resource may encroach on this site potentially reducing the size of the project.
	<i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	The tenement is securely held by Fenix and there are no impediments preventing the operation of the Mining Lease.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>The quality of the exploration by previous parties varies however, is of sufficient quality and quantity to support the Exploration Target and an Inferred Mineral Resource as previously reported. The previous results are also consistent with the 2018 results. The Competent Person considers the previous work to be useful for the ongoing assessment of the Mineral Resource.</p> <p>The relevant historical work covering M20/118 is summarised:</p> <p>1959 – 1962: Geological Society of Western Australia</p> <p>Government of Western Australia made a proposal to diamond drill six then known lenses of hematite in the Iron Ridge</p> <p>Mapping on 1" to 50 chains scale by Jones and Gemuts. Lenses W1 to W6 were mapped on contour plans at 100 feet to 1". Lenses W3 and W4 lie within the current Mining Lease.</p> <p>Five diamond drill holes for 883m were completed by the Western Australian Government in the Wilgie Mia lease, what is now M20/118. Drill holes were inclined -40 / -50 degrees.</p> <p>1973: Universal Milling Company Pty Ltd</p> <p>Five holes were drilled and intersected mineralisation grades similar to those in the Inferred Mineral Resource, close to surface.</p> <p>1992 – 2000, Commercial Minerals Limited (CML)</p> <p>1992 – 1993: Completed reconnaissance mapping and historic data compilation. Reconnaissance mapping at 1:8000 scale using 1980 aerial photography. Mapping of the iron oxide quarry at 1:250 using a tape measure.</p> <p>1995 – 1996: Mining of 8,000 t from a 4.5m cut in the existing quarry. 6000 t crushed on site over a 3-day period. 1000 t transported to Perth for storage. Mining described the increase of specular hematite with depth. Described as metallic grey with a characteristic red streak. Sample analysis by CML's Technical Service division in Footscray Victoria</p> <p>1996 – 1997: Six RC drill holes (WRR01-06) totalling 329m drilled with an Edson 600 drill rig in and adjacent to the iron oxide quarry. Purpose was to test the strike extent of the ore zone. Results confirmed an ore zone with dimensions of 50m laterally / strike, 25m width and at least 50m depth. Further to the east and west the ore pinches out with a maximum strike length of 100m. 78 composited samples sent to Analabs in Perth for XRF analysis.</p> <p>MinCorp Consultants Pty Ltd, 2007</p> <p>Engaged by Atlas Iron to research and compile the historic exploration data on Wilgie Mia and design a drill program.</p> <p>Atlas Iron Limited, 2007 to 2011</p> <p>2007: 14 rock chip samples (ARK00547 to ARK00560). Grading from 55% to 67% Fe, variable silica, alumina and phosphorous. Risks were identified: Poor grade continuity, internal waste with dolerite / shales, mineralisation pinching out at depth, moderate to high P levels</p> <p>2008: 1:1,000 scale mapping of the Iron Ridge Project in conjunction with rock chip traverse sampling. A total of <u>14 RC drill holes for 1,131m</u> were completed focused</p>

Criteria	JORC Code explanation	Commentary																														
		<p>on testing the grade and mineralisation continuity along 300m of the identified 500m of prospective strike. It was this drilling campaign and only these drill holes support the 2009 Mineral Resource. Drill spacing was on a variable 50 – 100 m x 10 – 25 m grid.</p> <p>2009: Atlas estimated an Inferred Mineral Resource in December 2009, its classification due to limited drilling with no diamond core to gauge properties. In CSA Global's opinion this is an important fact. Without diamond core or extremely high quality and detailed RC logging, there is no confidence in concluding that Iron Ridge can produce a premium lump product, particularly if the mineralisation comprises significant amounts of specularite.</p> <p>The M20/118 Inferred Mineral Resource estimation is tabulated below</p> <table border="1"> <thead> <tr> <th>Tonnes (Mt)</th> <th>Fe %</th> <th>SiO₂%</th> <th>Al₂O₃%</th> <th>P %</th> <th>S %</th> <th>LOI%</th> </tr> </thead> <tbody> <tr> <td>5.0</td> <td>64.1</td> <td>3.3</td> <td>2.7</td> <td>0.05</td> <td>0.06</td> <td>1.58</td> </tr> </tbody> </table> <p>2011: Review of the Atlas Mid-West Tenements</p> <p>The enriched zone at Wilgie Mia is described as 550m x 40m wide and at Little Wilgie Mia 370m x 45m width. It dips 80 degrees to the south and has been interpreted in excess of 80m depth</p> <p>The area between the Wilgie Mia and Little Wilgie Mia mineralised lenses is approximately 260m length. Atlas reported it as concealed by a thin alluvial cover with mineralisation potentially continuing beneath.</p> <p>Emergent Resources Limited (renamed to Fenix Resources Limited)</p> <p>2018: Independent technical assessment of the Iron Ridge Project by CSA Global Pty Ltd. Atlas 2009 Mineral Resource estimate reported in accordance with the JORC Code, 2012 Ed., by CSA Global Pty Ltd. Exploration Target reporting in accordance to JORC 2012 by CSA Global Pty Ltd. The results are tabulated below:</p> <p>An infill and step out drilling programme comprised of 20 RC holes for 3,370 m, eight DD holes for 1,123.7 m and one RC hole with a diamond tail for 255.7 m.</p> <table border="1"> <thead> <tr> <th>BIF unit</th> <th>Mineralisation</th> <th>Tonnage (Mt)</th> <th>Grade (% Fe)</th> </tr> </thead> <tbody> <tr> <td>Main BIF</td> <td>Hematite</td> <td>0.6–7.1</td> <td>64.1–65.3</td> </tr> <tr> <td>Little BIF 1/2</td> <td>Goethite</td> <td>0.1–5.5</td> <td>58.0–59.5</td> </tr> <tr> <td>Total</td> <td></td> <td>0.7–12.7*</td> <td>58.0–65.3</td> </tr> </tbody> </table> <p><i>*Totals may not sum correctly due to rounding.</i></p>	Tonnes (Mt)	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	S %	LOI%	5.0	64.1	3.3	2.7	0.05	0.06	1.58	BIF unit	Mineralisation	Tonnage (Mt)	Grade (% Fe)	Main BIF	Hematite	0.6–7.1	64.1–65.3	Little BIF 1/2	Goethite	0.1–5.5	58.0–59.5	Total		0.7–12.7*	58.0–65.3
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Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Iron Ridge is a northwest trending Archaean aged granite greenstone terrain of the Yilgarn Craton. It is a marked physiographic feature, 3-5km wide, 40km long, within which there is good exposure of metabasalts showing mainly doleritic and minor basaltic and gabbroic textures. Such exposures occur between ridges defined by weathered, steeply dipping beds of banded iron-formation which form less than 10% of the thickness of the sequence.</p> <p>The Iron Ridge Project contains one main BIF horizon which exhibits significant iron enrichment in two locations (Wilgie Mia and Little Wilgie Mia). The mineralisation comprises a mixture of banded hematite (specular and earthy, goethite and shaly limonite iron ore. It has been documented that the primary ore mineral is martite. The ore lenses have formed by remobilization of iron and replacement of jaspilites (BIF) during deep-seated thermal metamorphism. Subsequent supergene oxidation, leaching and hydration of the iron ore has resulted in the formation of goethite and the concentration of secondary hematite (occasionally in the form of red ochre).</p> <p>Three parallel to sub-parallel ranges of BIF occur on the tenement. The Main BIF (mapped as hematite) is approximately 50m wide, with much thinner (several metres) BIF ridges to the south (designated Little BIF 1 and 2 respectively). Little BIF 1 and 2 are defined by discontinuous goethitic outcrops at a lower elevation than the Main BIF.</p>																														

Criteria	JORC Code explanation	Commentary
Drillhole Information	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: Easting and northing of the drillhole collar Elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar Dip and azimuth of the hole Downhole length and interception depth Hole length.</i>	Exploration results are not being reported.
	<i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	Exploration results are not being reported.
Data aggregation methods	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i>	Exploration results are not being reported.
	<i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i>	Exploration results are not being reported.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	Exploration results are not being reported.
Relationship between	<i>These relationships are particularly important</i>	The BIF ridges dip steeply to the northwest and southeast. All drill holes were angled approximately 45-70 degrees with an azimuth (~330 degrees) perpendicular

Criteria	JORC Code explanation	Commentary
mineralisation widths and intercept lengths	<i>in the reporting of Exploration Results.</i>	to the BIF strike to provide as near a 'true' intercept thickness as realistically possibly.
	<i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i>	Exploration results are not being reported.
	<i>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').</i>	Exploration results are not being reported.
Diagrams	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.</i>	Relevant maps and diagrams are included in the body of the report.
Balanced reporting	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	Exploration results are not being reported.
Other substantive exploration data	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	<p>Surface geological observations have been incorporated into the geological interpretation and context of the results received and exhibit a correlation considered reasonable for this style of mineralization.</p> <p>Downhole geophysical surveys were completed on 29 holes for long and short sign gamma density, resistivity and caliper in January to February 2019 by independent contractor MPC Kinetic in open holes drilled by Fenix Resources Ltd in November and December 2018. The geophysical probe penetrated > 85% of the final hole depth for 50% of the 29 holes and >60% of the final depth for 72% of the holes. Four holes penetrated between 40–60% of the final depth, one hole penetrated 33% and one 18% of the final depth.</p>
Further work	<i>The nature and scale of planned further work (e.g. tests for lateral</i>	Further work planned for the project is focused on the development of the Mineral Resource to achieve greater proportions of Indicated material, as well as hydrology, metallurgy, and geotechnical studies. Further density work is required.

Criteria	JORC Code explanation	Commentary
	<i>extensions or depth extensions or large-scale step-out drilling).</i>	Metallurgical test work is expected to determine the possible products from the mineralisation. Further drilling may be required to the west to test the near surface and down plunge extent however, a heritage site has been identified in the area and access may not be possible.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Exploration results are not being reported.

JORC 2012 Table 1 Section 3 – Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<i>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.</i>	Down-hole geophysical logging was undertaken on site on 29 open holes in less than two months of the drilling date. Core logging is completed in the Perth core yard using project-specific logging codes. Data is then loaded directly into the site database. Assay results are currently received from the laboratory in digital format. Once data is finalised it is transferred to a Microsoft Access database.
	<i>Data validation procedures used.</i>	CSA Global checked the drill hole files for the following errors prior to Mineral Resource estimation: Absent collar data Multiple collar entries Questionable downhole survey results Absent survey data Overlapping intervals Negative sample lengths Sample intervals which extended beyond the hole depth defined in the collar table.
Site visits	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>	James Potter, Competent Person for sections 1 and 2 of the JORC Table 1 completed several site visits from October 2018 through February 2019 and undertook geological logging and instructed sampling. During the site and laboratory visits, the following was completed: Geological management of all Fenix drilling Inspection of the location of historic collars and their relationship to the intersection of mineralisation by the Fenix drilling Inspection of sample processing facilities Geological procedures were followed on site data and collection systems were found to be consistent with industry good practice. Furthermore, geological controls to the mineralisation were sufficiently understood to enable a Mineral Resource to be reported in accordance with the JORC Code. Laboratory systems were being maintained at a high level and processes were being followed. Alex Wishaw, Competent Person for section 3 of JORC Table 1, Mineral Resource estimate, has undertaken several site visits to the project in the last decade, prior to the project's incumbency by Fenix Resources Ltd. During these site visits, the high-grade nature of the mineralisation and the geological controls were reviewed as having the potential to host a Mineral Resource as defined by the JORC Code.

Criteria	JORC Code explanation	Commentary
	<i>If no site visits have been undertaken, indicate why this is the case.</i>	N/A
Geological interpretation	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i>	<p>The lithological interpretation is robust, supported by clear visual boundaries in mapped outcrop and drill samples, with high-contrast in colour, texture, sample weight and drill penetration (drill plod comments/logs) on rock-type changes from waste to mineralisation. The geological model is simple in the ore-waste definition.</p> <p>Statistical analysis determined that the logged mineralisation strongly correlates to a population above 47–50% Fe, which was used to assist the interpretation of the mineralisation.</p> <p>Alumina and titania grades and gamma logs also were used to confirm the boundaries of the mineralisation and the domains.</p> <p>The interpretation of the oxidation is less robust, supported by fewer records in the top 20 m of the deposit and at depth. Therefore, an iron-hard cap has not been interpreted. However, goethitic, limonitic and ochreous mineralisation has been noted in logging, but the lack of continuity meant that no substantial weathering and oxidation overprint could be modelled.</p> <p>The Competent Person has a high level of confidence in the geological model especially where there are multiple drill holes per section. The extremities of the deposit where there is less drilling, has a lower level of confidence and had been classified accordingly.</p>
	<i>Nature of the data used and of any assumptions made.</i>	No material assumptions have been made which effects the Mineral Resource estimate reported herein.
	<i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i>	<p>Alternative interpretations are not likely to materially impact on the global Mineral Resource estimate.</p> <p>It is likely that a greater understanding of the southwest-plunging extents of the mineralisation, currently open and limited by drilling information, will be developed over time. Additional drill hole information will further improve the understanding of the high alumina domain within the Main BIF.</p> <p>This may lead to separate domaining and alternative interpretation of this material in the future.</p> <p>Although very small and discontinuous, the most southern BIF unit, BIF 3, has potentially to be interpreted as a separate unit from the waste. However, it is unlikely to be of a suitable size and tenor of mineralisation to alter the Mineral Resource estimate.</p>
	<i>The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.</i>	<p>The main controls to the mineralisation are the lithological units of BIF, modelled explicitly as separate domains. The mineralisation has been estimated entirely within the BIF units.</p> <p>BIF 1 was further sub-domained by a high-grade alumina zone, which accounted for the upper 50 – 100 m, extending down-dip and along strike for the length of BIF 1. This formed a co-planar division of the unit into a hanging-wall high alumina sub-domain on the southern side, and a footwall, low-alumina sub-domain, which were treated as hard-boundaries for estimation.</p> <p>The grade and density estimates were constrained by BIF 1 high-alumina, BIF 1 low-alumina and BIF 2 domains, so that only the relevant composites were used to estimate the corresponding blocks for each domain.</p> <p>For density, the water table affected the moisture content. Therefore, the composites and blocks were further constrained to within the relevant domains and above or below the water table.</p>
Dimensions	<i>The extent and variability of the Mineral Resource expressed as length (along strike or</i>	<p>The Iron Ridge deposit constitutes two major, parallel BIF units, separated by a range of 14 to 36 m, which outcrop for ~75% of the drilled strike length of 600 m. The interpreted area lies in a minimum bounding rectangle of 7,019,245 mN, 567,498 mE to 7,019,663mN, 7,019,605mE in MGA Zone 50 coordinates.</p>

Criteria	JORC Code explanation	Commentary
	<i>otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i>	The sharp contacts to the dolerite are visible in the outcrop and in drilling, forming lateral widths of 31 m for BIF 1 and 6 m for BIF 2, which are consistent for the interpreted depth. The depth of the north-eastern extent of BIF 1 reaches an RL of 247 m for 280 m vertical depth, while the south-western extent reaches an RL of 247 m for 280 m vertical depth. The depth of the north-eastern extent of BIF 2 reaches an RL of 341 m for 176 m vertical depth, while the south-western extent reaches an RL of 510 m for 44 m vertical depth.
Estimation and modelling techniques	<i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen, include a description of computer software and parameters used</i>	<p>Quantitative kriging neighbourhood analysis (QKNA) was undertaken to assess the effect of changing key kriging neighbourhood parameters on block grade estimates on Fe% in BIF 1 and BIF 2. Kriging efficiency and slope of regression were determined for a range of block sizes, minimum/maximum samples, search dimensions and discretisation grids.</p> <p>A three-pass search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not select sufficient data for the block estimate. The primary, secondary and tertiary search ellipse dimensions represented 67%, 100% and 200% of the variogram range respectively. For a very minor number of blocks, the Sichel mean was assigned for grades that were unestimated.</p> <p>Ordinary kriging was adopted to interpolate grades into cells.</p> <p>Statistical analysis was completed using Supervisor and Isatis software. All geological modelling and grade estimation were completed using Surpac software.</p>
	<i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i>	<p>In 2009, Atlas Iron Pty Ltd reported an Inferred Mineral Resource from BIF 1 only of 5 Mt @ 64.1% Fe%, 2.73% Al₂O₃%, 1.58% LOI, 3.29% SiO₂, 0.05% P. The Mineral Resource estimate was interpreted on substantially less drill hole data with no QC sample analysis or density data available. In 2018, CSA Global converted the Atlas MRE to be reported in accordance with the JORC Code, 2012 Ed.</p> <p>However, the geological model compares well where the interpretation of the previous was established.</p> <p>Given that significant drilling was completed in 2018, the 2019 MRE is considered to provide a more realistic inventory of the mineralisation.</p>
	<i>The assumptions made regarding recovery of by-products.</i>	No assumptions have been made regarding recovery of by-products.
	<i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i>	Al ₂ O ₃ , LOI, SiO ₂ , P and TiO ₂ were estimated. All other elements and variables were not estimated, as preliminary statistics showed that their means and maxima were considered below a significant threshold for this type of mineralisation.
	<i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i>	A 20 m E by 10 m N by 20 m RL parent cell size was used with sub-celling to 5 m E by 1.25 m N by 2.5 m RL to honour wireframe boundaries. The drill hole data spacing is highly variable but approximates 25 m to 50 m along strike (north-south) by 25 m to 50 m down-dip. The block size represents approximately half of the drill spacing in the more densely drilled areas of the deposit.
	<i>Any assumptions behind modelling of selective mining units.</i>	No assumptions were made regarding selective mining units.
	<i>Any assumptions about correlation between variables</i>	The dataset is compositional; therefore, the proportion of iron in an sample is complementary or inversely correlated to the total of all other major grades, being SiO ₂ %, LOI% and Al ₂ O ₃ %. However, the estimate was optimised for iron, so that all variables used the same variogram model in each domain, which was checked against each variable to ensure there were no significant deviations no methods to

Criteria	JORC Code explanation	Commentary
		estimate by considering the complex compositional nature, or decorrelate the data, were undertaken.
	<i>Description of how the geological interpretation was used to control the resource estimates.</i>	<p>The main controls to the mineralisation are the lithological BIF units of BIF 1 and BIF 2 domains.</p> <p>BIF 1 was further sub-dominated by a high-grade alumina zone, which accounted for the upper 50 – 100 m, extending down-dip and along strike for the length of BIF 1. This formed a co-planar division of the unit into a hanging-wall high alumina sub-domain on the southern side, and a footwall, low-alumina sub-domain, which were treated as hard-boundaries for estimation.</p> <p>The grade and density estimates were constrained by BIF 1 high-alumina, BIF 1 low-alumina and BIF 2 domains, so that only the relevant composites were used to estimate the corresponding blocks for each domain.</p> <p>For density, the water table affected the moisture content. Therefore, the composites and blocks were further constrained to within the relevant domains and above or below the water table.</p>
	<i>Discussion of basis for using or not using grade cutting or capping.</i>	<p>The requirement for top-cuts was reviewed given the potential for extreme grades to bias block grade estimation.</p> <p>For each variable in each statistical domain, histograms and log-probability plots were reviewed to determine the point at which the number of samples supporting a high-grade distribution diminishes. Mean-variance plots were then reviewed to determine if potential outliers were significant contributors to the mean and variance, while themselves representing insignificant proportions of the total datasets.</p> <p>Top-cuts of the major components of the total assay were limited to < 1% of the population prevent unbalanced block total estimates.</p>
	<i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i>	Drillhole grades were initially visually compared with cell model grades. Domain drill hole and block model statistics were then compared. Swath plots were also created to compare drillhole grades with block model grades for easting, northing and elevation slices throughout the deposit. Estimated block grade totals were checked to ensure low variation from 100%. The block model reflected the tenor of the grades in the drill hole samples both globally and locally.
Moisture	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	Tonnages are estimated on a dry basis.
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	The Mineral Resources have been reported above a cut-off grade of 58% Fe. This was selected based on the grade / tonnage curve and the requirement to highlight Iron Ridge as high-grade but relatively low tonnage deposit. At a lower cut-off there is a lower level of confidence in the grade and tonnage continuity.
Mining factors or assumptions	<i>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</i>	In selecting the reporting cut-off grade, open pit mining method has been considered.

Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p>	
<p>Metallurgical factors or assumptions</p>	<p><i>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.</i></p>	<p>The very high iron grades are assumed to provide the possibility to produce a lump or fines product, thereby providing reasonable prospects for eventual economic extraction.</p> <p>In February 2019, Fenix submitted the following samples for comminution testwork on mineralisation:</p> <p>3x200-200mm full core samples for uniaxial compression strength (UCS) testwork 20 x -76 +51mm pieces for bond work. Three bulk composites for drop tower test, dry scrub and dry screen from diamond holes IR001, IR002, and IR033D. Results are pending.</p>
<p>Environmental factors or assumptions</p>	<p><i>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</i></p>	<p>It is assumed that there will be no significant environmental impediments to developing the project. This is an early stage project and potential environmental impacts require review.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>have not been considered, this should be reported with an explanation of the environmental assumptions made.</i></p>	
<p>Bulk density</p>	<p><i>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.</i></p>	<p>For mineralisation, long sign, down-hole geophysical gamma density was used to estimate density by Ordinary Kriging using the relevant iron variogram and estimation parameters for each statistical domain. Only samples points that had a caliper measurement of not more than 20% of the nominal hole diameter for each hole type. The gamma density was correlated point-by-point to each overlapping water immersion determination of specific gravity on HQ core, which found a strong correlation. Sample points were composited to 2 m length prior to estimation.</p> <p>The moisture content of BIF 2 was measured as a length-weighted average of 11.15%. The data derived from one hole at the base of the interpreted domain, which was below the water table. Based on visual assessments, the moisture content of BIF 1 below the water table was estimated as 5%. Composites below the water table were corrected for the moisture content in the relevant domain.</p> <p>The mineralisation was considered entirely oxidised, therefore, the density was not split by an oxidation profile.</p> <p>A small volume of blocks on the fringes of each domain that did not receive an estimate were assigned the arithmetic mean of the composites.</p> <p>For waste where data were limited, a length-weighted average was calculated of 2.15 g/cm³ and 2.04 g/cm³ above and below the water table respectively for oxide material, and 2.82 g/cm³ above and 2.68 g/cm³ below the water table respectively for fresh material.</p>
	<p><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</i></p>	<p>The gamma determines a quantitative, in situ measurement of density that accounts for void spaces. The measurements have been calibrated to regular calibration holes in iron ore deposits in the Pilbara.</p> <p>The water immersion method measurements were determined by measuring the weight of part or the entire sample in air and water and then applying the formula bulk density = weight_air/(weight_air-weight_water). Samples of drill core that contain 'holes' or 'vugs', are very porous, crumbly and incompetent or clay rich are sealed with a masonry sealant/wax and allowed to dry prior to bulk density determination.</p>
	<p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<p>After considering the results of the above analysis, it was clear that the gamma density data were sufficient in number for all material types, quantitative and unbiased when large calliper deviations from the nominal hole diameter were removed. Calibration to other holes and to density measured by water immersion. The approach adopted is considered robust.</p>
<p>Classification</p>	<p><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></p>	<p>The Mineral Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1.</p> <p>After considering data quality and geological continuity, grade estimation quality was assessed. For BIF 1 and BIF 2 separately and then in combination, the block model was coloured for Fe% by the number of samples used to estimate the block, average distance to informing samples, estimation pass and SOR. Drill hole composites were then loaded to gain an understanding of how these measures related to drill hole spacing. Number of samples > 8 and nearing the optimum of 18, average distance of <20 m, estimation pass 1 and SOR values of >0.5 were found to relate to a drill hole spacing of denser than approximately 40 m E by 40 m RL.</p> <p>The Competent Person classified areas as Indicated where the drill hole spacing was denser than 40 m by 40 m. All other modelled areas were classified as Inferred. The drill hole spacing in these areas is 60 – 80 m.</p> <p>Only continuous areas were classified to avoid the “spotted dog effect”.</p>

Criteria	JORC Code explanation	Commentary
	<i>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).</i>	Appropriate account has been taken of all relevant criteria including data integrity, data quantity, geological continuity, and grade continuity.
	<i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	Appropriate account has been taken of all relevant criteria including data integrity, data quantity, geological continuity, and grade continuity.
Audits or reviews	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	The current model has not been audited by an independent third party but has been subject to CSA Global's internal peer review processes.
Discussion of relative accuracy/ confidence	<i>Where appropriate, a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i>	The Mineral Resource accuracy is communicated through the classification assigned to this Mineral Resource. The Mineral Resource estimate 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.
	<i>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.</i>	The Mineral Resource statement relates to a global tonnage and grade estimate. Grade estimates have been made for each block in the block model.
	<i>These statements of relative accuracy and confidence of the estimate should be compared with</i>	No production data is available.

Criteria	JORC Code explanation	Commentary
	<i>production data, where available.</i>	