

## CUFE ACQUIRES WEST ARUNTA TENURE WITH EXCITING GEOPHYSICAL TARGETS

### HIGHLIGHTS

- CuFe acquires E80/6052, located 13km north-east of existing tenure expanding its position in the emerging West Arunta Niobium province to over 281 km<sup>2</sup>.
- Geophysical review of 3D inversion modelling magnetic data over new tenure has identified two prospective targets within E80/6052.
- Land Access agreement negotiations ongoing, with the Parna Ngururrpa Traditional Owners Group to facilitate the commencement of on-ground works.

CuFe Ltd (ASX: **CUF**) (**CuFe** or the **Company**) is pleased to provide an update on the status of its West Arunta tenure.

CuFe Executive Director, Mark Hancock, commented “We are pleased to acquire new ground in the exciting West Arunta region. This acquisition gives us an additional target area that shows the right geophysical characteristics to represent carbonatites / intrusive bodies. The tenement has synergies with our existing landholding and there has been very little exploration undertaken in this area historically. We continue to work with Parna Ngururrpa Traditional Owners Group in aim of securing a heritage and land access agreement, which is required to commence on ground works given the tenure is located with an Aboriginal Reserve area.”

### Acquisition Details

CuFe has entered a binding agreement to acquire exploration application E80/6052 from an unrelated entity, Territory Prospecting Pty Ltd. The terms of purchase comprise an upfront payment of \$10,000 cash and \$25,000 in CuFe shares at an issue price of 1.6c per share (1,562,500 shares). Upon the later of the grant of the tenure or the execution of heritage agreement a further payment is due of \$50,000, to be made in cash.

### Tenure Update

The new tenement is located 13km North-East of CuFe’s West Arunta Project and 18km North-East of Lycaon Resources Stansmore Nb-REE Project (Figure 1). The tenure is on land of the Parna Ngururrpa Traditional Owners Group and exploration requires the consent of the Minister of Aboriginal Affairs. The tenement covers an area of 64km<sup>2</sup>, this has increased CuFe’s tenement holding from 217km<sup>2</sup> to 281km<sup>2</sup> (See Figure 1).

The tenement was previously held by CRA Ltd in the early nineties who were pursuing the geophysical target as a potential kimberlite pipe however no exploration on ground was undertaken.

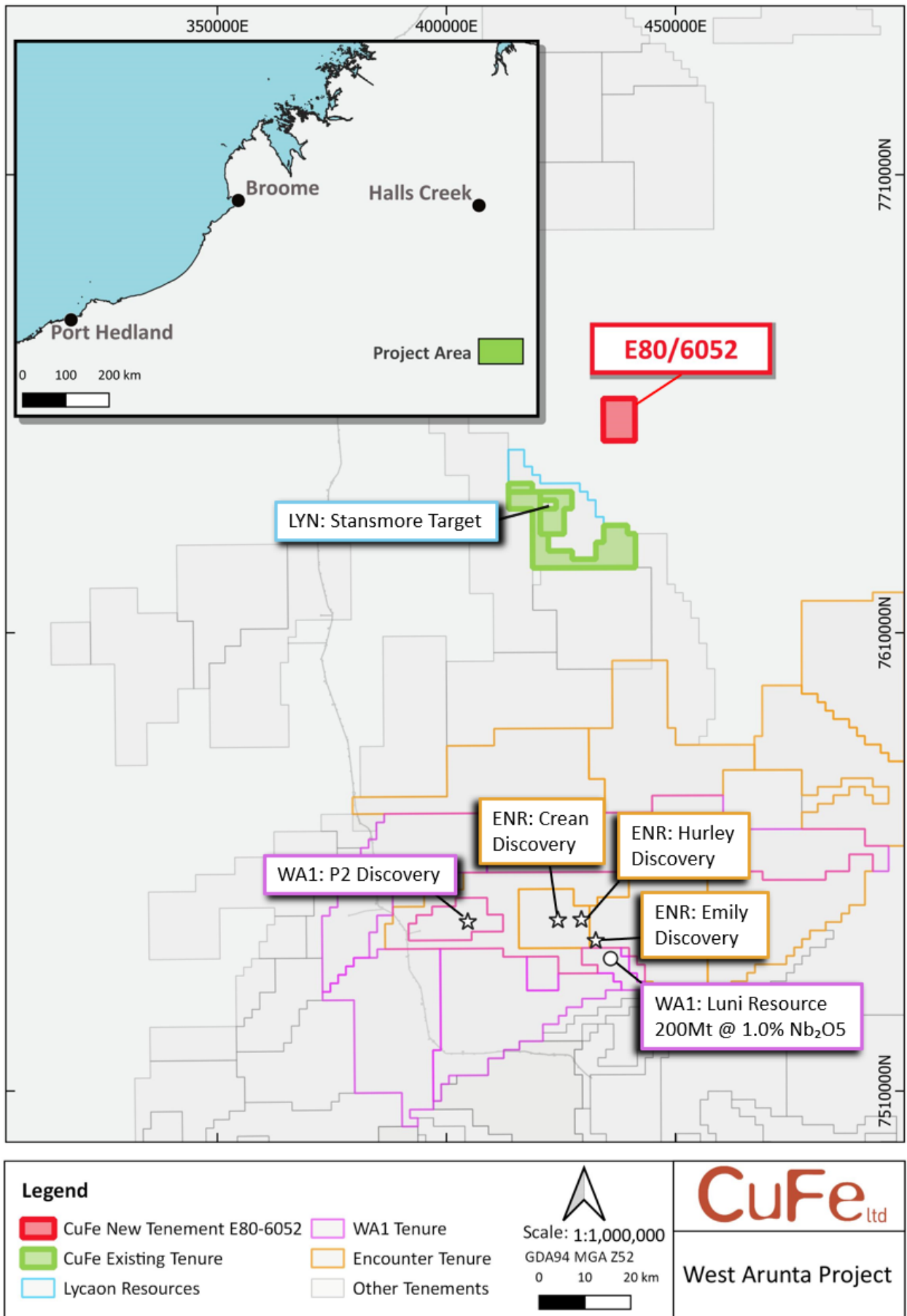


Figure 1 – New Tenement acquisition E80/6052.

The Company further advises that two of its three previous tenement applications E80/5925 and E80/5950 have been granted by the Department of Energy, Mines, Industry Regulation, and Safety (DEMIRS) on 30 May 2024 and 4 June 2024 respectively, with the third expected to proceed to grant within the next month. The granted tenure covers an area of 58 km<sup>2</sup> and forms part of the Company's 100% owned West Arunta Project in the highly prospective West Arunta region (Figure 1).

On ground exploration activities are restricted until a signed agreement is in place with the Parna Ngurrurra Traditional Owners Group and approval is given by the Minister of Aboriginal Affairs. CuFe continues to work with the group on achieving this.

### **E80/6052 – Geophysical Modelling**

Southern Geoscience Consultants were engaged by CuFe to undertake a geophysical review of the publicly available airborne magnetic data for the newly acquired West Arunta tenement. The review included the re-processing of airborne magnetic data, 3D unconstrained inversion modelling of the reprocessed magnetics and the identification and development of targets that could represent carbonatite intrusive and Niobium and REE mineralisation.

Analysis of the Total Magnetic Imagery (TMI) has identified two key anomalies labelled T1 and T2 in Figure 2.

More detail interrogation of the magnetic data using a half vertical derivative over the TMI imagery indicates the anomalies could represent various forms of volcanic intrusive, including the potential for carbonatites (see Figure 3).

3D inversion modelling of the magnetic vector (remanent and induced anomalies) are represented as vertical small bodies which likely represent intrusive volcanics. The intrusion T1 located within the centre of tenement E80/6052, is modelled with an approximate strike length of 2.05km and width of 0.65km, and depth extent of 0.42km to 0.65km. T2 located 3km south-east of T1, is modelled with an approximate strike length and width of 0.5km, and depth extent of 0.6km (see Figure 3).

It is worth noting that unconstrained inversion of the magnetic data was undertaken to derive these models and the results are non-unique and many models may fit the observed data.

### **Further Work**

Although the target areas identified could represent magnetic responses other than carbonatite intrusions the review has provided valuable context to the very early exploration strategy and work streams planned for when access to the ground is granted.

Early on ground exploration will include mapping of any outcrop, soil sampling and geochemistry in aim of further characterising the anomalies defined in the geophysical review.

The current public data is derived from open file 200m line spaced data and initiating detailed ground magnetic and gravity data can be advantageous in the exploration for carbonatite targets, as these targets often exhibit a distinct geophysical signature characterised by coincident magnetic and gravity anomalies.

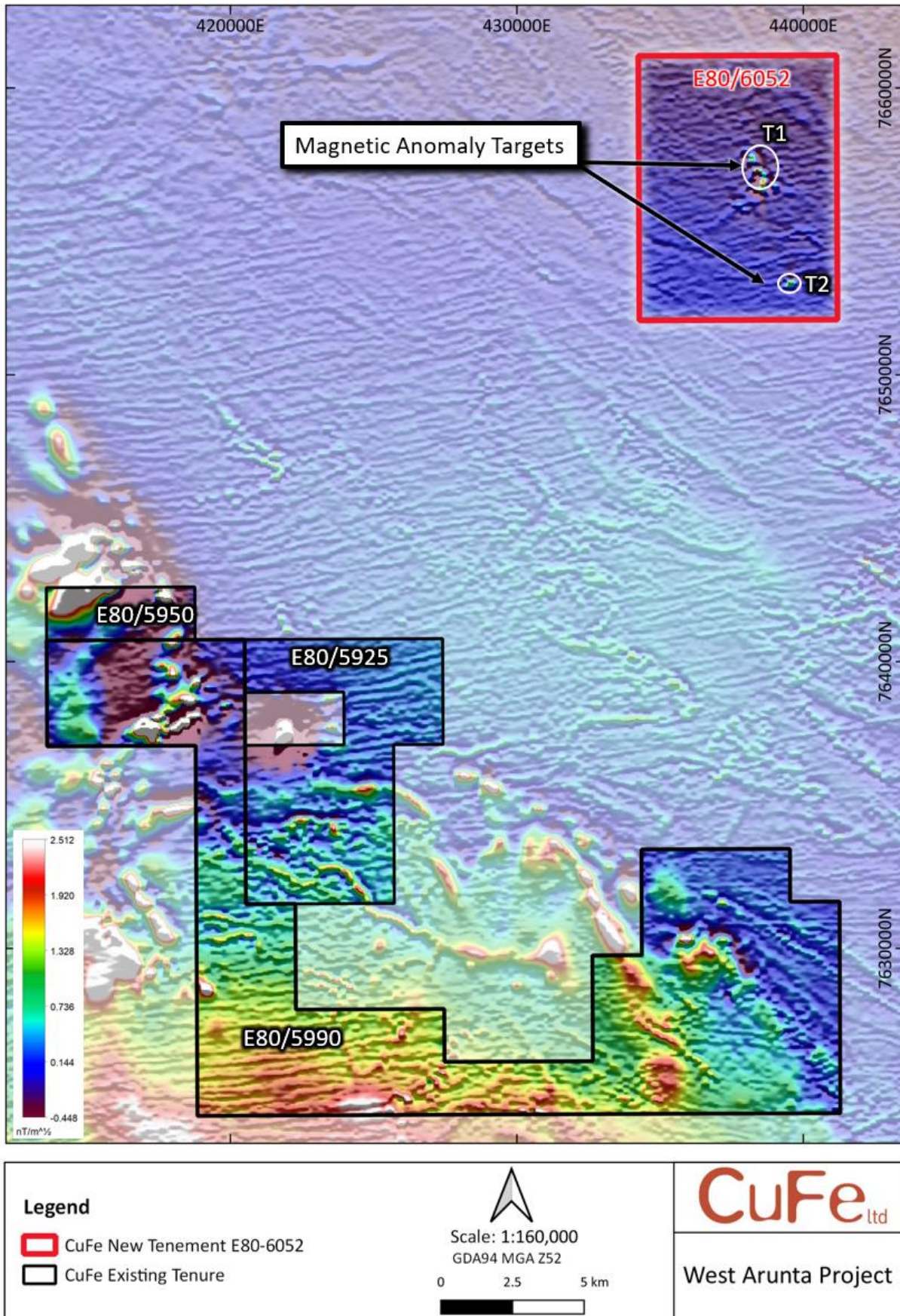
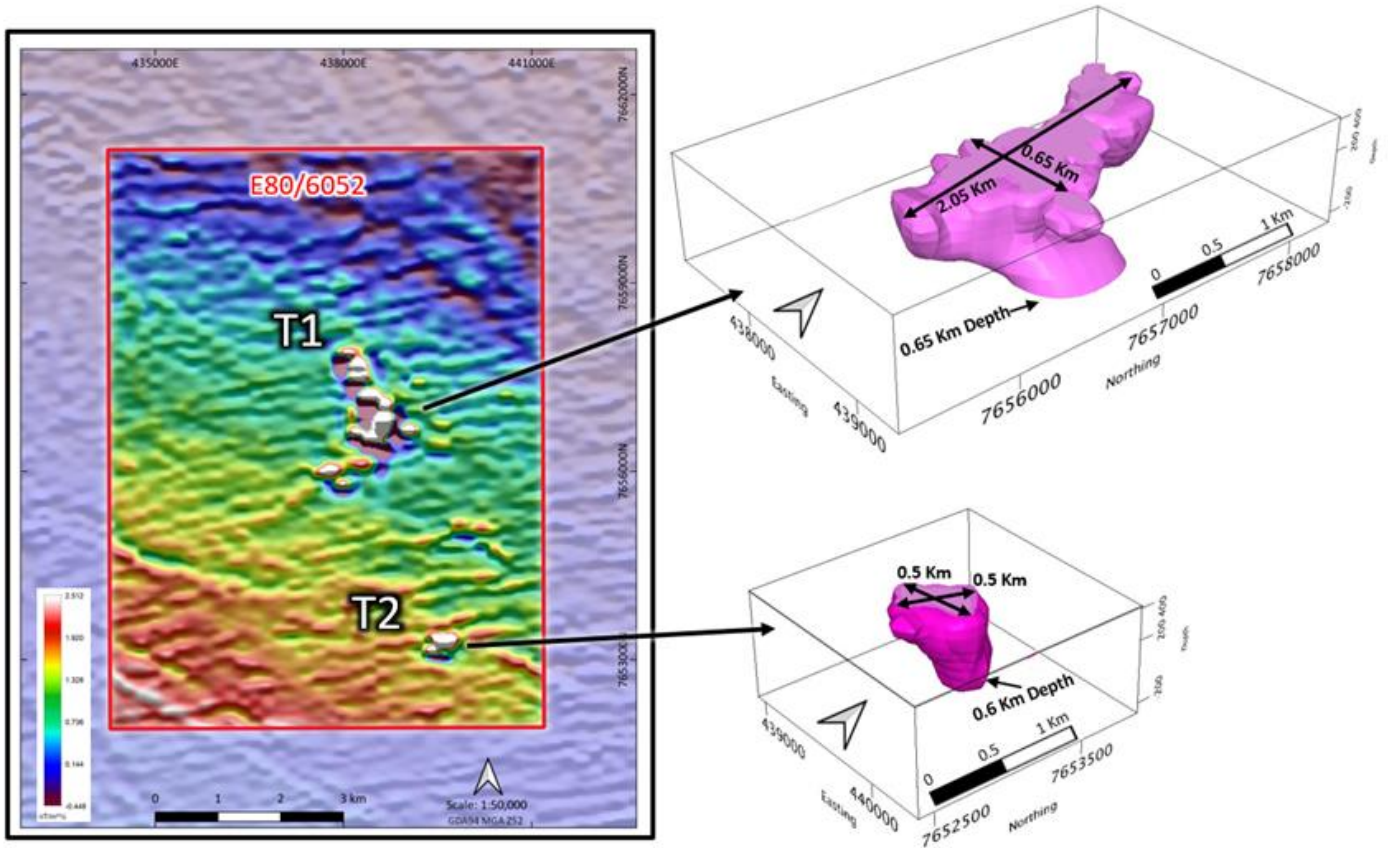


Figure 2: Total Magnetic Intensity (TMI) across CuFe’s West Arunta Tenure.



**Figure 3:** Half Vertical Derivative of TMI imagery and 3D modelled Magnetic Vector Inversion of T1 and T2.

Released with the authority of the CuFe Board.

**COMPETENT PERSON**

The information in this report that relates to geology is based on, and fairly represents, information which has been compiled by Matthew Ramsden, a Member of the Australasian Institute of Geoscientists and a full-time employee of CuFe Ltd. Matthew Ramsden has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Matthew Ramsden consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

## JORC Code, 2012 Edition – Table 1 report template

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>The geophysical data referenced in this announcement is sourced from a government survey in 2010</li> <li>The survey was an airborne survey – Stansmore East 70501 job number P1227</li> <li>The survey was flown on 200m line spacings at a mean terrain clearance of 30m.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling was undertaken by CuFe Ltd across tenure.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling was undertaken by CuFe Ltd across tenure.</li> </ul>
Logging	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>No drilling was undertaken by CuFe Ltd across tenure.</li> </ul>

Criteria	JORC Code explanation	Commentary
<p><i>Sub-sampling techniques and sample preparation</i></p>	<ul style="list-style-type: none"> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No drilling was undertaken by CuFe Ltd across tenure.</li> </ul>
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <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></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No analysis being reported in this announcement.</li> </ul>

Criteria	JORC Code explanation	Commentary
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No drilling was undertaken by CuFe Ltd across tenure.</li> </ul>
<p><i>Location of data points</i></p>	<ul style="list-style-type: none"> <li><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>GDA94 datum and MGA zone 52 projection.</li> </ul>
<p><i>Data spacing and distribution</i></p>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><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></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Line spacing of 200m, appropriate for airborne survey of this nature.</li> </ul>
<p><i>Orientation of data in relation to geological structure</i></p>	<ul style="list-style-type: none"> <li><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></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>No drilling was undertaken by CuFe Ltd across tenure.</li> </ul>



Criteria	JORC Code explanation	Commentary
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>No samples taken in this announcement.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits carried out.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>E80/5950 and E80/5925 are granted while E80/5990 and E80/6052 are both pending.</li> <li>Access to this tenure requires the consent of the Minister of Aboriginal Affairs</li> <li>Land Access agreement is in draft form with Parna Ngururrpa traditional owners</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>There has been limited exploration work on the CuFe Wet Arunta tenure and has been predominantly for Cu-Au</li> <li>In the 1980's BHP undertook some work evaluating for Kimberlites and in the early 1990's CRA held the tenure.</li> <li>In 2017-2022 Newmont undertook regolith mapping, geochemical sampling, rock chip sampling and RC drilling in the area for Cu_Au sediment hosted style mineralisation.</li> <li>Historical exploration works were limited across newly acquired tenement E80/6052. During the mid-1990s CRA reviewed magnetic data targeting diamonds within kimberlite pipes. No on ground exploration works were completed</li> <li>Lycaon Resources (LYN) hold the neighbouring tenements and have undertaken a similar geophysical review and aim to be drilling in the area mid-2024.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The CuFE West Arunta tenure is located in the West Arunta Orogen, representing the western-most part of the Arunta Orogen which</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>straddle the Western Australia– Northern Territory border.</p> <ul style="list-style-type: none"> <li>• Outcrop in the area is generally poor, with bedrock largely covered by Tertiary sand dunes and spinifex country of the Gibson Desert. As a result, geological studies in the area have been limited, and a broader understanding of the geological setting is interpreted from early mapping as presented on the MacDonald (Wells, 1968) and Webb (Blake, 1977 (First Edition) and Spaggiari et al., 2016 (Second Edition)) 1:250k scale geological map sheets.</li> <li>• The Arunta Orogen itself includes both basement and overlying basin sequences, with complex stratigraphic, structural, and metamorphic history extending from the Paleoproterozoic to the Paleozoic (Joly et al., 2013).</li> </ul>
<p><i>Drill hole Information</i></p>	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• No drilling was undertaken across the tenure by CuFe.</li> </ul>
<p><i>Data aggregation methods</i></p>	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>• <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></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No data aggregation methods were used.</li> <li>• No metal equivalents have been reported.</li> </ul>
<p><i>Relationship between mineralisation widths and</i></p>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No mineralisation widths have been reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>intercept lengths</i>	<ul style="list-style-type: none"> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Included within body of the text.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The accompanying document is a balanced report with a suitable cautionary note.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>Included within body of text.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Field validation and reconnaissance</li> <li>Geological mapping and surface rock chip sampling;</li> <li>Soil Geochemical Surveys</li> <li>Airborne and ground geophysical surveys;</li> <li>Aboriginal heritage surveys</li> <li>Drilling</li> </ul>

# CuFe<sub>ltd</sub>



## About CuFe Ltd

CuFe Ltd (ASX: CUF) is a producer and explorer, focused on near-term, high grade premium product iron ore projects and exposure to key strategic metals; Copper and Lithium. The Company has diversified commodity interests in various projects and tenements prospective for copper, lithium, gold and iron ore, located in world-class mineral provinces of Australia. Our experienced team have demonstrated their ability to execute rapid, flexible, low capex, iron ore projects.

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