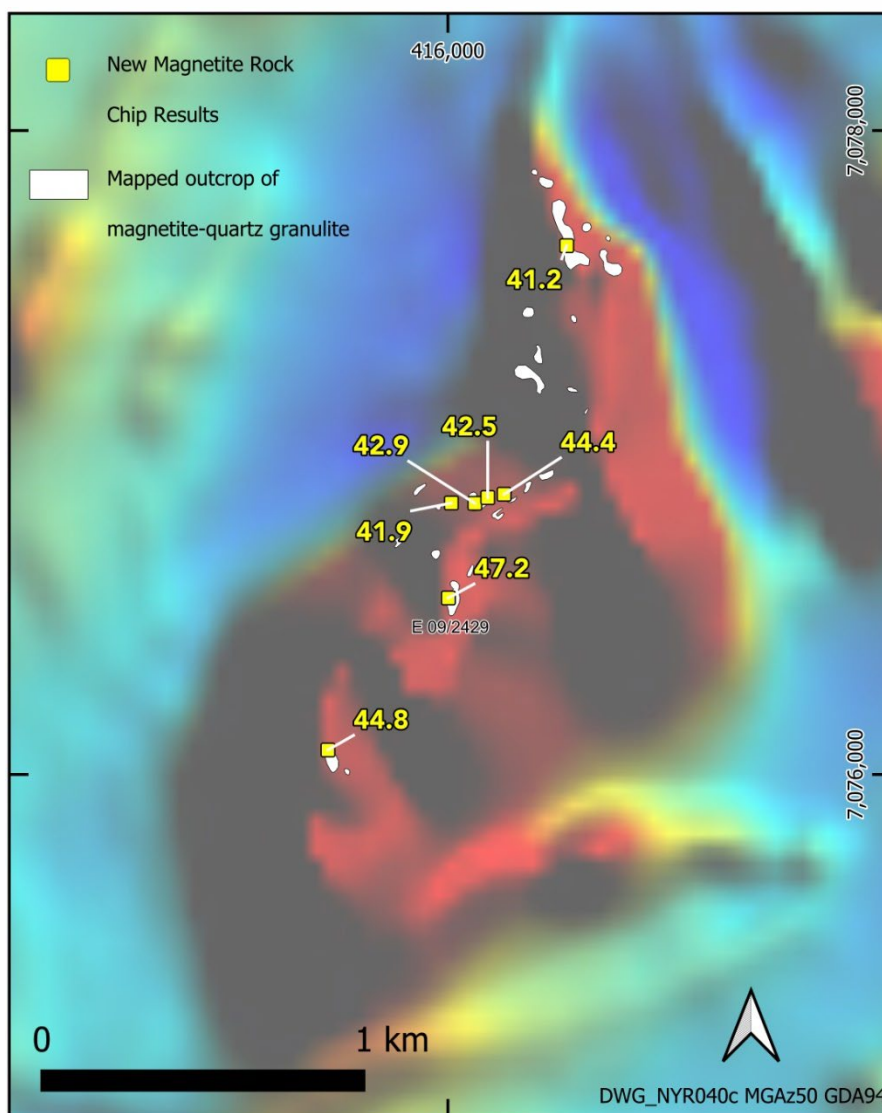


## Narryer Project: High Fe grades at Stonehut magnetite prospect

- Reconnaissance chip sampling returns >41% Fe over ~2km strike
- Coarse grain size and low levels of penalty elements

Buxton Resources Ltd ('Buxton'; ASX:BUX) is pleased to update shareholders on activities at the 100% owned Narryer Project where highly encouraging assay results up to 47.2% Fe have been received from rock-chip sampling at the Stonehut prospect (Figure 1, Figure 2).



**Figure 1:** Stonehut prospect rock-chip Fe % results on GSWA's statewide magnetic image. The prospect is defined by a ~2,200 x 700 m airborne magnetic high. Transported cover limits outcrop (which is exclusively coarse grained magnetite-quartz rock) to ~3% of the anomaly area.



The Stonehut prospect is defined by a high-amplitude magnetic anomaly (Figure 1, Figure 4). Buxton's first-pass reconnaissance along this anomaly encountered isolated exposures of magnetite-quartz granulite from which seven rock-chip samples were collected. The samples are coarse grained (>0.5mm average grain size – see Figure 3) and the assays for these samples are all > 41% Fe (Table 1).

The samples show evidence of weak-moderate oxidation, with Fe enrichment in the more weathered samples. The results indicate extremely low levels of penalty elements such as Al & Ti compared with ore from advanced magnetite projects including the nearby Fe1 deposit (Figure 4).

Buxton views these initial reconnaissance results as highly encouraging. The consistently high Fe grades, low levels of deleterious elements, the continuity / amplitude / extent of the airborne magnetic anomaly, the lithological consistency, and the coarse grain size are all positive factors that support further exploration at Stonehut. Additionally, the area is characterised by shallow cover, year-round access via existing station tracks, and abundant [groundwater resources](#).

Buxton's entire Narryer Project will soon be covered by [GSWA's Narryer airborne magnetic survey](#), with acquisition commencing in October 2024. The results from this survey will be used to plan heritage surveys and drilling that will aim to provide fresh sample for continuity assessment and testwork relevant to understanding the potential economic viability of this newly defined magnetite occurrence.

**Table 1:** Laboratory assay results from Stonehut rock chips.

Sample ID	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	S %	TiO <sub>2</sub> %	LOI %	Mag : Other FeOx	Lithology
A00025	44.8	35.3	0.46	0.02	0.04	0.09	0.95	90:10	Variably weathered magnetite - quartz granulite (highly metamorphosed banded iron formation)
A00075	47.2	30.4	0.39	0.10	0.04	0.08	1.97	80:20	
A00125	41.9	38.2	0.34	0.02	0.07	0.02	1.07	90:10	
A00175	42.9	37.9	0.20	0.02	0.04	0.02	0.25	98:2	
A00225	42.5	36.7	0.36	0.01	0.13	0.02	1.20	90:10	
A00325	44.4	33.6	0.50	0.07	0.04	0.03	0.85	90:10	
A00425	41.2	40.2	0.32	0.03	0.01	0.02	0.02	99:1	
<b>Average</b>	<b>43.5</b>	<b>36.0</b>	<b>0.37</b>	<b>0.04</b>	<b>0.05</b>	<b>0.04</b>	<b>0.90</b>		
<b>AHN Fe1 *</b>	<b>24.7</b>	<b>49.6</b>	<b>5.68</b>	<b>0.05</b>	<b>0.08</b>	<b>0.33</b>	<b>-0.04</b>	Fresh ortho-granulite (highly metamorphosed mafic igneous rock)	

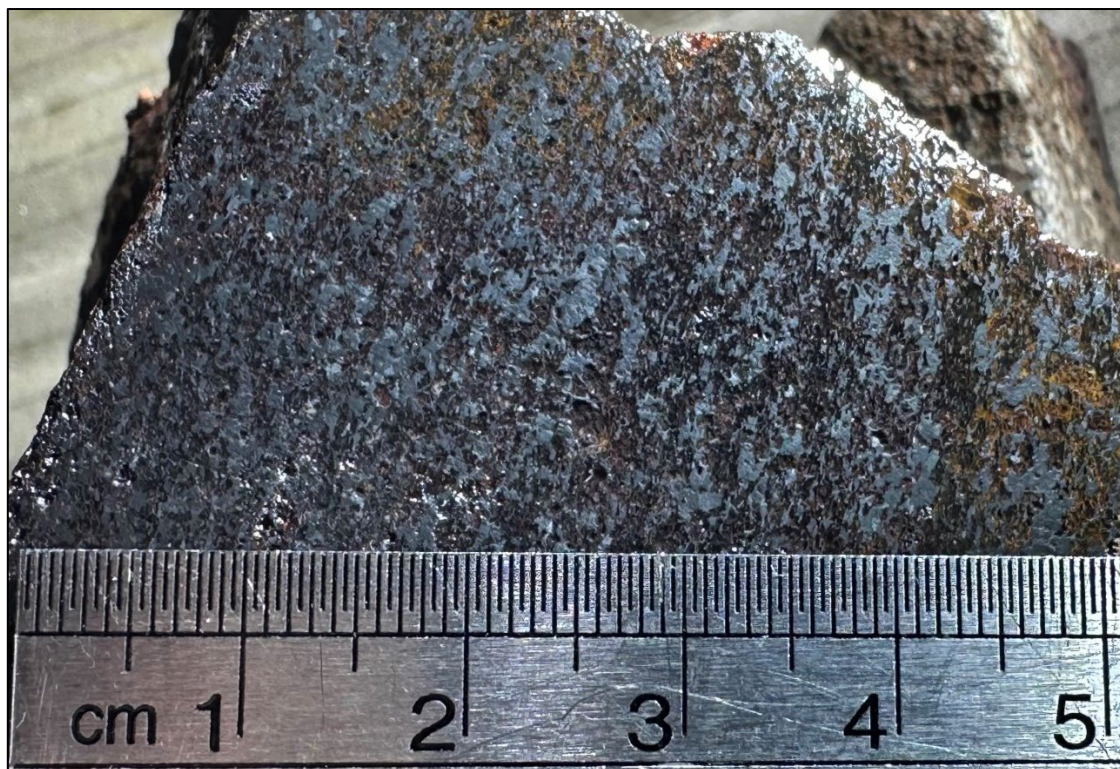
Note: Low average CaO (0.06%) & MgO (0.02%) indicate that sampled material is essentially iron-oxide + quartz. "Mag: Other FeOx" is the visually estimated proportion of magnetite to other iron-oxides (assuming no quartz). Fe1 Resource Estimate 29.3 Mt @ 24.7% Fe is based on fresh rock material from drill holes. See Athena Resources (ASX:AHN) ASX Announcements 17/01/2023, 29/03/2023, 20/5/2025







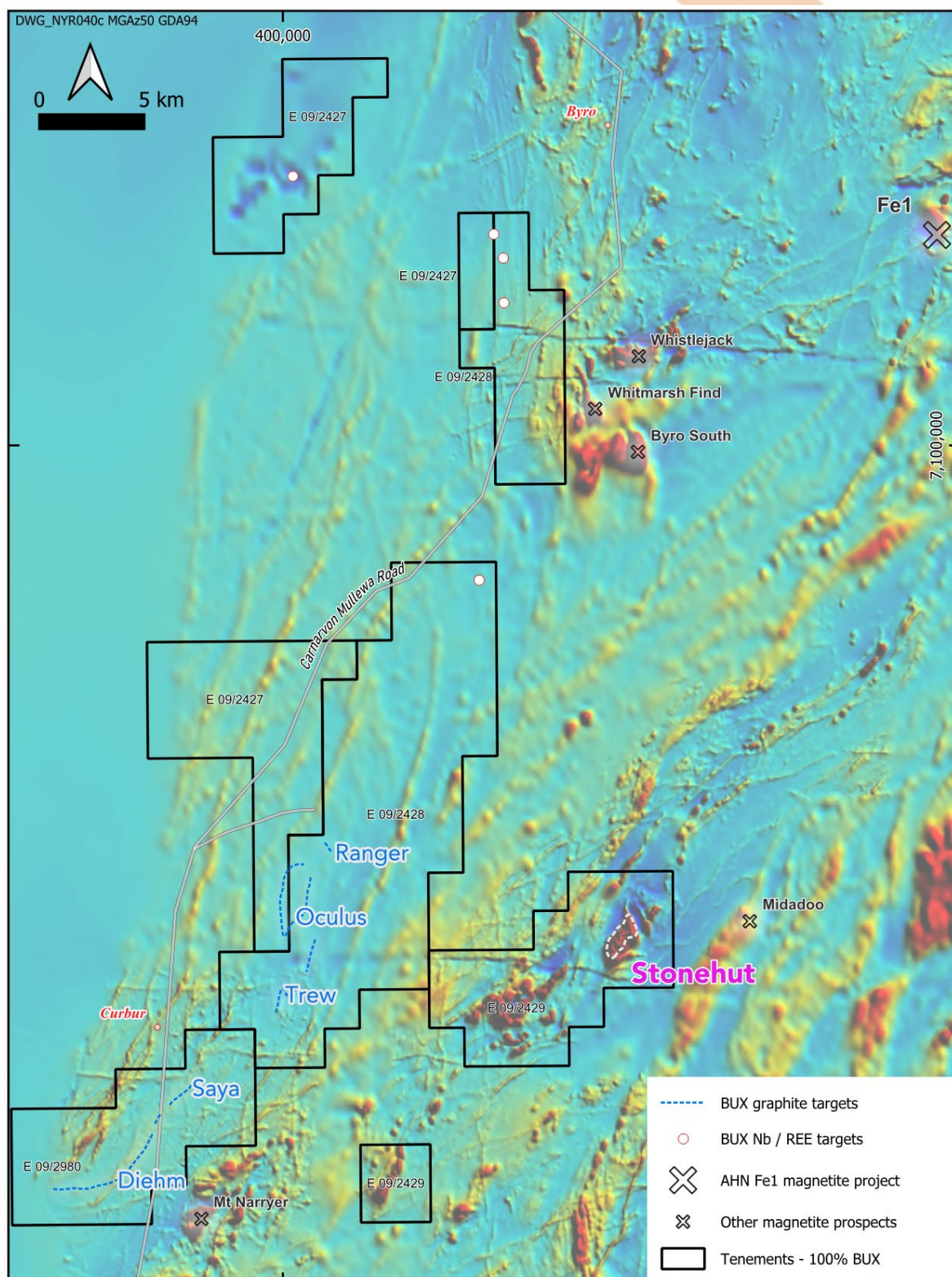
**Figure 2:** Typical outcrop of the Stonehut magnetite-quartz granulite (sample site A00225).



**Figure 3:** Slightly oxidised (weathered) magnetite-quartz granulite (sample A00025 duplicate)







**Figure 4:** GSWA airborne magnetics showing the regional setting of the Stonehut magnetite prospect in relation to the Fe1 magnetite deposit (29.3 Mt @ 24.7% Fe) and other drill-confirmed magnetite prospects (GSWA's MINDEX database). Buxton's graphite targets include the Ranger prospect, site of a [recently announced graphite discovery \(NY001RC 20m @ 9.06% TGC\)](#).



This announcement is authorised by the Board of Buxton Resources Ltd and supported by a [video overview](#) on the Company's Investor Hub website.

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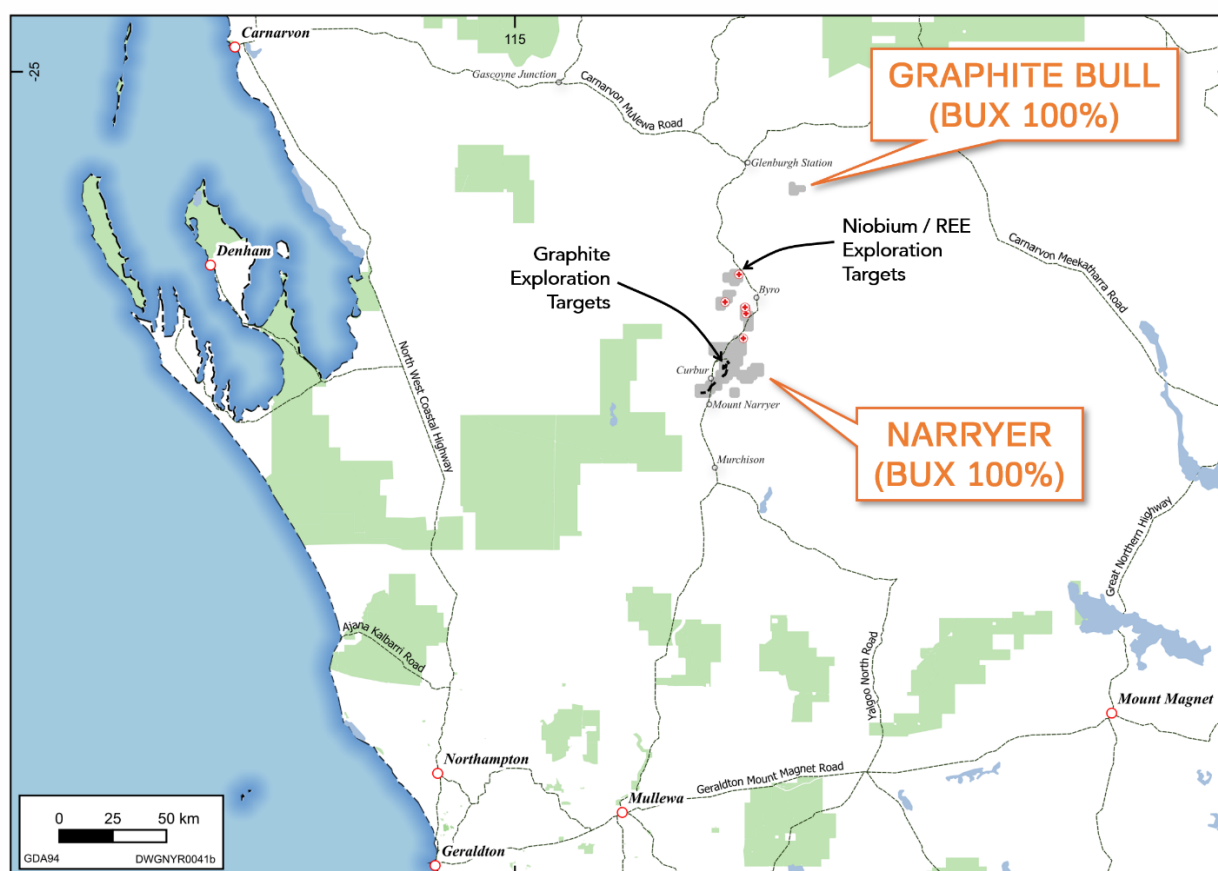
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### About the Narryer Project

The Narryer Project is comprised of five Exploration Licenses covering 519.5 km<sup>2</sup> located within the Narryer Terrane of Western Australia. Buxton has now identified that the Narryer Project has potential for flake graphite, carbonatite-related Niobium / Rare Earth Element (REE) style deposits, regolith-hosted REE and coarse-grained magnetite deposits within the Archean and adjacent Proterozoic successions.



**Figure 5:** Buxton's Graphite Bull & Narryer Projects are located within the Gascoyne / Murchison Region of Western Australia and are readily accessible year-round.



### Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Martin Moloney, Member of the Australian Institute of Geoscientists and Society of Economic Geologist. Mr Moloney is a full-time employee of Buxton Resources Ltd. Mr Moloney has sufficient experience which is relevant to the activity being undertaken to qualify as a "Competent Person" as defined in the 2012 edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Moloney consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.

### Previously Reported Information – Narryer Project

There is information in this announcement relating to exploration results previously announced on:

1. 13<sup>th</sup> October 2022 - [High priority AEM anomalies detected at Narryer Project](#)
2. 22<sup>nd</sup> May 2024 - [High Conductance Ground EM Plates Modelled at Ranger & Oculus prospects](#)
3. 27<sup>th</sup> August 2024 - [Graphite Bull & Narryer Update](#)
4. 29<sup>th</sup> August 2024 - [54 m of graphite mineralisation at Ranger](#)

### Validity of Referenced Results

Buxton confirms that it is not aware of any new information or data that materially affects the information from previous ASX announcements which has been referenced in this announcement.





## JORC Table: Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i>	Rock chip samples were collected as single samples from each outcrop which appeared macroscopically representative of the material at each outcrop. Each individual grab sample weighs between 0.5 – 1.5kg with all samples submitted to ALS Laboratories in Perth.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	
	<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. 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>	Not applicable – the release does not include drilling results. There are no Buxton drillholes and no known historic drillholes at the Stonehut prospect.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Not applicable – the release does not include drilling results. There are no Buxton drillholes and no known historic drillholes at the Stonehut prospect.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	
	<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>	
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>	All rock chips are geologically logged onsite by qualified and experienced geologists, recording relevant data and photographs to a set template.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	
	<i>The total length and percentage of the relevant intersections logged.</i>	
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	It is highly uncertain if sampling distribution or sample sizes are representative of each outcrop. Field duplicate samples have not been collected. The results are considered appropriate in the context of a first-pass / reconnaissance assessment of whether the Stonehut prospect warrants more systematic work targeting economic magnetite mineralisation.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	
	<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>	
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	



<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<p>Samples were submitted to ALS Laboratories in Perth, Australia.</p> <p>Sample preparation comprised of drying, crushing to 70% passing 2mm and a 250g split was pulverized to better than 85% passing 75 micron mesh</p> <p>Samples were submitted for multi-element analysis by ME-XRF21u</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>	The airborne magnetics data was derived from the 2008 Geoscience Australia Byro survey (MAGIX R70005), flown at 400m line spacing by GPX Surveys. The RTP grid was used to define magnetic contours at 59500 nT threshold value.
	<i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	Quality Control and Quality Assurance procedures implemented to check sampling and assaying precision was limited to the laboratory standards and blanks utilised by ALS. These indicate a high level of accuracy for the reported elements.
<i>Verification of sampling and assaying</i>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	<p>Senior company geological personnel onsite for the entirety of the drilling and logging process.</p> <p>The logging is be validated by a BUX on-site geologist and in Perth and compiled onto the BUX MX Deposit database</p> <p>Assay data is be imported directly from digital assay files from contract analytical company ALS (Perth) and merged in the Company MX Deposit drill hole database.</p> <p>Data is backed up regularly in off-site secure servers.</p> <p>No new geophysical results are used in exploration results reported.</p>
	<i>The use of twinned holes.</i>	Not applicable – the release does not include drilling results. There are no Buxton drillholes and no known historic drillholes at the Stonehut prospect.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Logging and sampling were recorded directly into a digital database.
	<i>Discuss any adjustment to assay data.</i>	No adjustments have been made to assay data.
<i>Location of data points</i>	<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>	The locations were surveyed using a handheld Garmin GPS unit with an expected accuracy of ±6m for easting and northing with elevation also recorded.
	<i>Specification of the grid system used.</i>	All surface surveying was completed using a handheld GPS to MGA94 / Zone 50 South grid system.
	<i>Quality and adequacy of topographic control.</i>	<p>Topographic control was provided by a Digital Elevation Model (DEM) derived from the SRTM dataset which provided a DEM with a +/- 3.5m vertical accuracy (Elsonbaty et al 2023).</p> <p>This is deemed adequate for first-pass exploration, particularly given that topographic relief is extremely low.</p>
	<i>Data spacing for reporting of Exploration Results.</i>	





<i>Data spacing and distribution</i>	<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>	See tables and figures in the body of the release for sample locations.
	<i>Whether sample compositing has been applied.</i>	The sampling attempted to cover the extent of the magnetic anomaly where sporadic outcrop permitted.
<i>Orientation of data in relation to geological structure</i>	<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>	These are first-pass reconnaissance results and the degree to which the sampling may bias the actual grade and extent of mineralisation is highly uncertain. An experienced company geologist was onsite for the sampling.
	<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>	
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	<p>The chain-of-sample custody is managed by the BUX staff from collection at the sample site to the submission of the samples to ALS Limited – Perth for analysis.</p> <p>Samples are being stored at the project site before being transported and processed at BUX's secure sample processing and storage facility in Belmont, Perth.</p> <p>Sample reconciliation advice is sent by ALS-Perth to BUX's Geological Database Administrator on receipt of the samples. Any inconsistencies between the despatch paperwork and samples received is resolved before sample preparation commences. Sample preparation and analysis is completed at one of the ALS laboratory sites in Perth.</p> <p>The risk of deliberate or accidental loss or contamination of samples is considered very low.</p>
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No Project-specific external audits or reviews have been undertaken.

## JORC Table: Section 2 – Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>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.</i>	<p>BUX have a 100% interest in granted exploration licenses E09/2027, E09/2028, E09/2029 and E09/2722 which cover 452 km<sup>2</sup>. New application E09/2980 covers an additional 67.5 km<sup>2</sup></p> <p>No royalties encumber these tenements.</p> <p>Native Title is held by the Wajarri Yamatji native title determination and claim covers approximately 100,701 square kilometres of land in the Yamatji region. A review of the Department of Planning, Lands and Heritage (DPLH) online ACHIS identified no Aboriginal sites or places within the Stonehut prospect survey area.</p> <p>The eastern portion of the Narryer Project lies within the Radio Quiet Zone (70 km buffer) of the Inyarrimanha Ilgari Bundara, the CSIRO Murchison Radio-astronomy Observatory. The RQZ covers the Stonehut prospect identified in this Release. An approved Radio Emissions Management Plan (REMP) will be required to undertake Programs of Work at this prospect. An REMPs typically limits the use of 2-way satellite communications to emergency management, but otherwise do not preclude Buxton's ability to undertake exploration such as drilling or geophysical surveys.</p>
	<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 in good standing with DMIRS and there are no known impediments for exploration on this tenement.



<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>Numerous exploration parties have held portions of the area covered by BUX tenure previously. No substantive historical exploration for graphite has been undertaken.</p> <p>No other parties were involved in the exploration program that generated data that was used in this release.</p>
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Narryer Project area is located on the north western margin of the Yilgarn Craton.</p> <p>The surface geology of the Narryer Project is dominated by tertiary lateritic weathering profiles and Tertiary-Quaternary drainage basin sediments that largely obscure the basement geology.</p> <p>Basement geology consists of Archean rocks of the Narryer Gneiss Terrane and, in the far northwest, the late Mesoproterozoic - Neoproterozoic Badgeradda Group. These two distinct geological terranes are juxtaposed along the Meeberie fault.</p> <p>The Narryer Gneiss Terrane is composed of a tectonically interleaved and poly deformed mixture of granite, mafic intrusions and metasedimentary rocks in excess of 3.3 billion years old, with the majority in excess of 3.6 billion years old.</p> <p>The rocks have experienced multiple metamorphic events at amphibolite or granulite conditions, resulting in often complete destruction of original igneous or sedimentary (protolith) textures.</p> <p>The Narryer Gneiss Terrane is divided into four major rock sequences (Myers 1990); the Dugel Gneiss, Meeberie Gneiss, Manfred Complex, and unassigned polydeformed leucocratic gneisses and metasediments.</p> <p>Magnetite mineralisation is banded; however it is uncertain if the protolith was sedimentary or magmatic. The rocks have undergone a high degree of recrystallisation and are likely at granulite facies metamorphic grade. The external contacts of the magnetite mineralisation are not exposed, with the nearest exposures mapped as granitic gneisses and migmatites.</p> <p>Magnetite resources have been defined nearby by Athea Resources – AHN's <a href="#">May 20 2024 Fe1 project scoping study</a> provides substantial detail on the geological setting and variations in the magnetite mineralisation of this part of the Narryer Terrain.</p>
<i>Drill hole Information</i>	<p><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></p> <ul style="list-style-type: none"> <li><i>o easting and northing of the drill hole collar</i></li> <li><i>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>o dip and azimuth of the hole</i></li> <li><i>o down hole length and interception depth</i></li> <li><i>o hole length</i></li> </ul>	<p>Not applicable – the release does not include drilling results. There are no Buxton drillholes and no known historic drillholes at the Stonehut prospect.</p>



	<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>	
<i>Data aggregation methods</i>	<p><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></p> <p><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></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	No data aggregation methods have been applied other than simple arithmetic averages of all rock chips.
<i>Relationship between mineralisation widths and intercept lengths</i>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>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').</i></p>	
<i>Diagrams</i>	<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 drill hole collar locations and appropriate sectional views.</i>	See text and figures in body of release.
<i>Balanced reporting</i>	<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>	The basis of reporting assayed is described above. The release is considered comprehensive and balanced with respect to grades and widths..
<i>Other substantive exploration data</i>	<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>	All exploration data which may be meaningful and material to the interpretation of the drilling results is presented within this release.
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	See text and figures in body of release.
	<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>	See figures in body of release.





### Cautionary Note Regarding Forward-Looking Information

This Announcement contains forward-looking statements and forward-looking information within the meaning of applicable Australian securities laws, which are based on expectations, estimates and projections as of the date of publication. This forward-looking information includes, or may be based upon, without limitation, estimates, forecasts and statements as to management's expectations with respect to, among other things, the timing required to execute the Company's programs, and the length of time required to obtain permits, certifications and approvals.

Wherever possible, words such as "anticipate", "believe", "expect", "intend", "should", "intend", "may" and similar expressions have been used to identify such forward-looking information. Forward-looking information is based on the opinions and estimates of management at the date the information is given, and on information available to management at such time. Forward-looking information involves significant risks, uncertainties, assumptions, and other factors that could cause actual results, performance or achievements to differ materially from the results discussed or implied in the forward-looking information. These factors, including, but not limited to, fluctuations in currency markets, fluctuations in commodity prices, the ability of the Company to access sufficient capital on favourable terms or at all, changes in national and local government legislation, taxation, controls, regulations, political or economic developments in Australia or other countries in which the Company does business or may carry on business in the future, operational or technical difficulties in connection with exploration or development activities, employee relations, the speculative nature of mineral exploration and development, obtaining necessary licenses and permits, contests over title to properties, especially title to undeveloped properties, the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drill results and other geological data, environmental hazards, industrial accidents, limitations of insurance coverage and the possibility of project cost overruns or unanticipated costs and expenses, and should be considered carefully.

Many of these uncertainties and contingencies can affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, the Company. prospective investors should not place undue reliance on any forward-looking information. Although the forward-looking information contained on in this Announcement is based upon what management believes, or believed at the time, to be reasonable assumptions, the Company cannot assure prospective purchasers that actual results will be consistent with such forward-looking information, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither the Company nor any other person assumes responsibility for the accuracy and completeness of any such forward-looking information.

The Company does not undertake, and assumes no obligation, to update or revise any such forward-looking statements or forward-looking information contained herein to reflect new events or circumstances, except as may be required by law. No stock exchange, regulation services provider, securities commission or other regulatory authority has approved or disapproved the information contained in this Announcement.

