ASX Release **23rd March 2022**

Government airborne survey detects bedrock EM anomaly at Buxton's 100% owned Narryer Project

- **Recently released AusEM Murchison SkyTEM survey reveals a strong bedrock conductor along strike from Buxton's Ministry Prospect**
- **Buxton has contracted XCalibur Multiscience to undertake a minimum 1,990 line km infill HeliTEM^2 AEM survey due to commence mid-June**
- **Less than 2% of the project has seen modern airborne EM**
- **Buxton's 100% owned Narryer Project comprises three contiguous EL covering > 1,800 km^2 in the West Yilgarn Ni-Cu-PGE province**

Buxton Resources Limited (ASX:BUX) updates the market that recently released data from the government funded AusEM Murchison survey has revealed a bedrock conductor along strike from the Ministry Prospect (see Figure 1) at the 100% owned Narryer Project, Western Australia (see Figure 5).

The AusEM Murchison survey is a government-funded airborne EM (AEM) survey which has a nominal 20 km line spacing. Three east-west oriented lines intersect Buxton's Narryer Project (see Figure 4). A strong anomaly is apparent on line 300801 around 1.8km south-southwest along geological strike from the Ministry Prospect (see Figure 1).

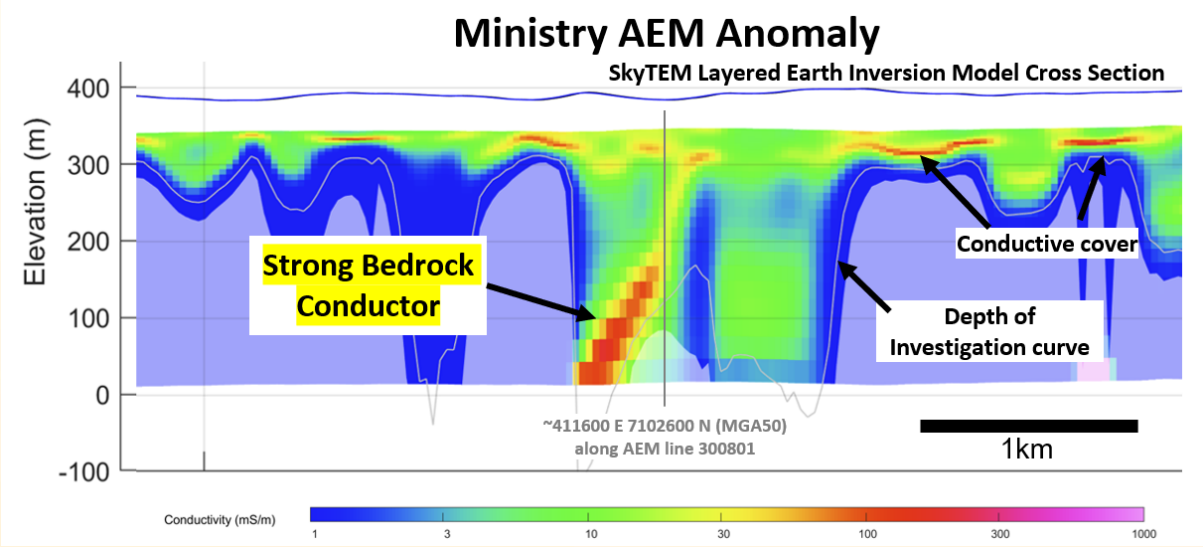


Figure 1: Ministry Prospect showing SkyTEM conductivity model cross section.

The Ministry Prospect AEM anomaly is apparent in the original SkyTEM survey dataset (Figure 1) and is confirmed by Geoscience Australia's subsequent inversion modelling (see Figure 2).

PO Box 661
Nedlands WA 6009

Suite 1, First Floor
14-16 Rowland Street
Subiaco WA 6008

Tel: 08-9380 6063

www.buxtonresources.com.au
info@buxtonresources.com.au

After review of the detailed raw survey data, independent geophysicist Russell Mortimer has described the Ministry AEM anomaly as a “legitimate bedrock conductor”.

Buxton’s reconnaissance mapping and rock chip assaying at Ministry project has confirmed the presence of ultramafic rocks (up to 18.8% MgO) and ironstones with elevated nickel (5,030 ppm), copper (543 ppm) and platinum group elements (34 ppb Pd, 18 ppb Pt, 24 ppb Au) – see Figure 3.

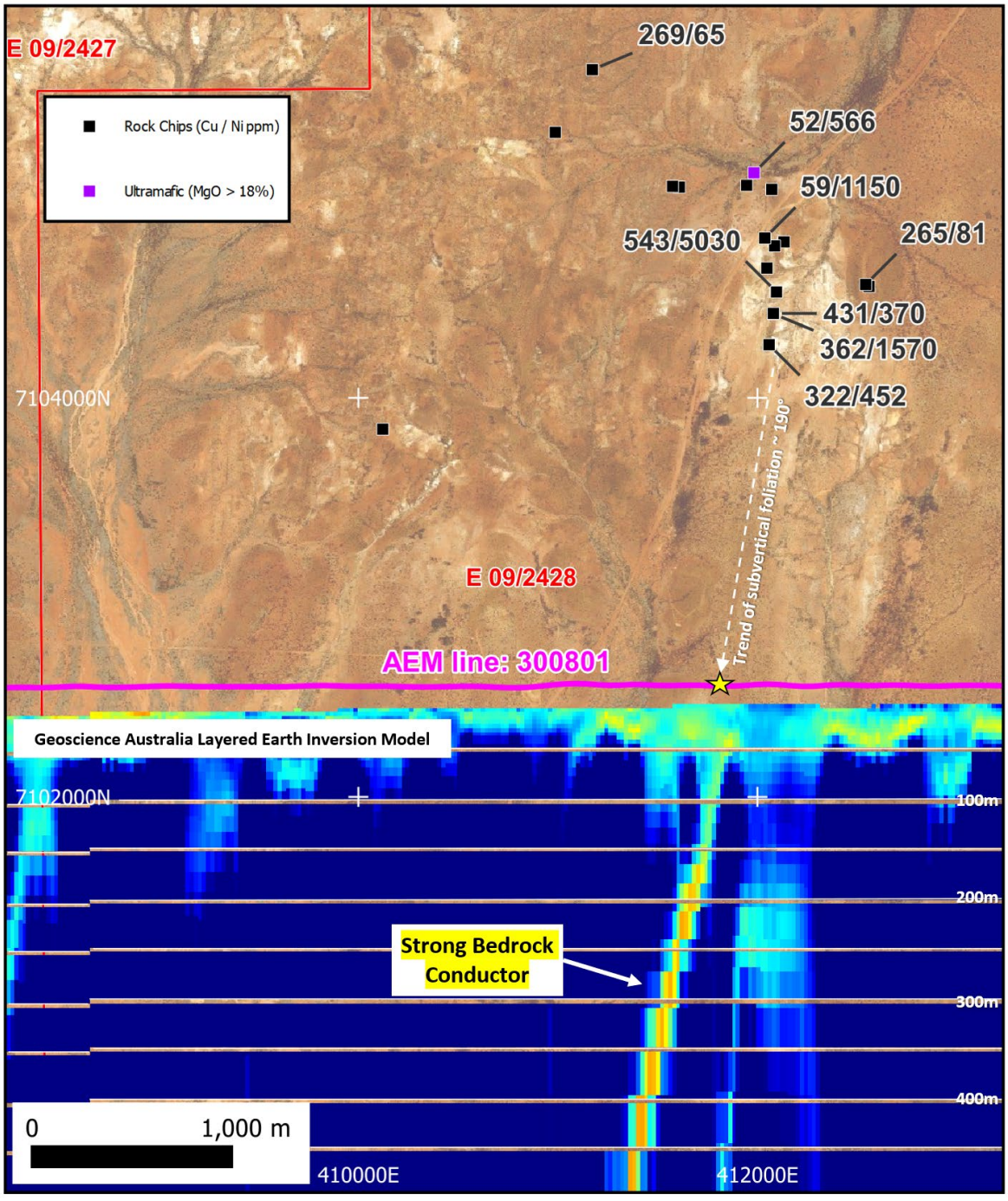


Figure 2: Ministry prospect map with Buxton’s reconnaissance rock chip sampling and aerial photo basemap. The GA conductivity model cross section is presented in the lower part of the figure.

Buxton has contracted XCalibur Multiscience to acquire a minimum of 1,990-line kilometres of AEM with their state-of-the-art HeliTEM^2 system, which operates at low base-frequency of 6.25 Hz. This low base-frequency system will allow for substantially greater penetration in areas of conductive cover compared with the 25 Hz system operated by SkyTEM for the AusAEM Murchison Survey[1].

This Buxton's AEM survey targets multiple gravity high anomalies most of which are completely covered by a thin veneer of transported sediments and have seen no previous AEM.

Previous AEM surveys which cover Buxton's Narryer Project tenure now amount to just 156-line kilometres, over half of which is attributable to the three lines from the new Murchison AEM survey. This combined historical AEM coverage accounts for just 1.7% of the Project tenure, assuming a 200-metre effective width of investigation for AEM surveys.

Buxton's design for the HeliTEM^2 AEM survey is presented in Figure 4. These areas will be flown with a nominal at 200 metre line spacing to ensure complete coverage. XCalibur has advised a mid-June start date for this survey.

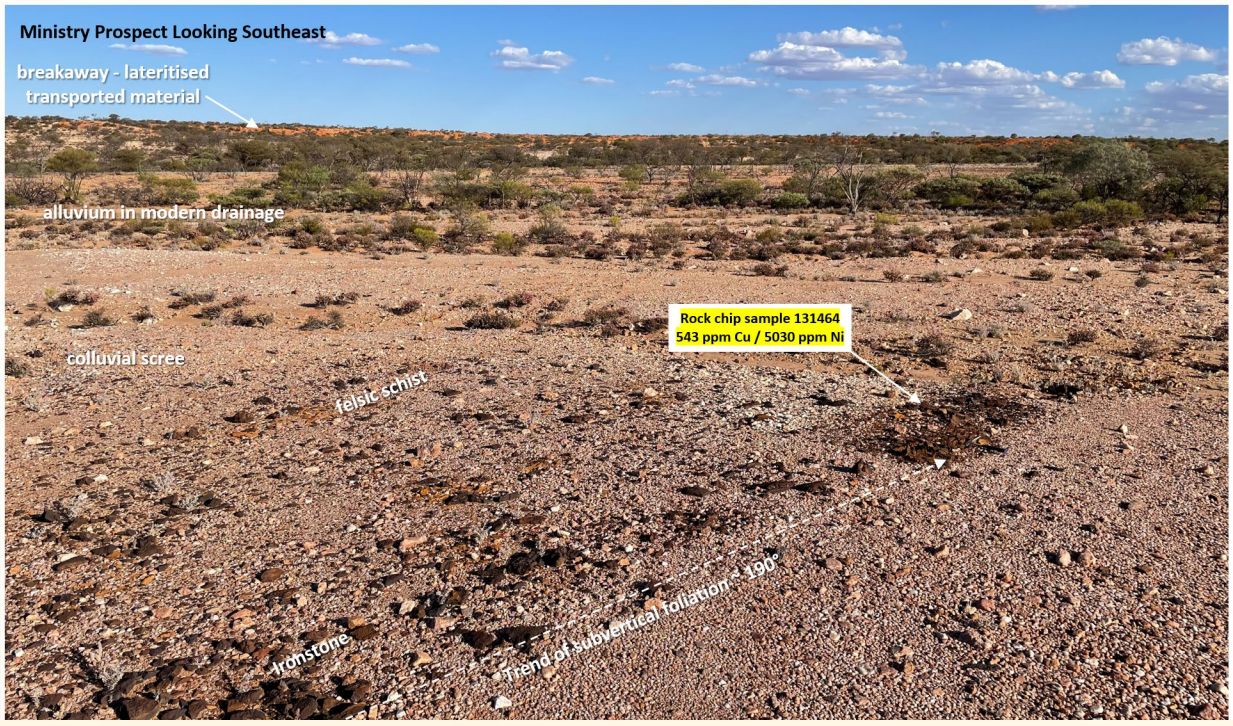


Figure 3: The Ministry Prospect is an erosional window through deeply weathered and transported material that exposes foliated Archean basement rocks. Buxton's rock chip sampling of subcropping ironstones has returned anomalous copper and nickel associated with ultramafic rocks which trend directly toward the AusEM bedrock conductor.

[1] the AusAEM survey had a multi-disciplinary objective, including groundwater and soil mapping. SkyTEM also offer a low base-frequency system specifically for minerals exploration.

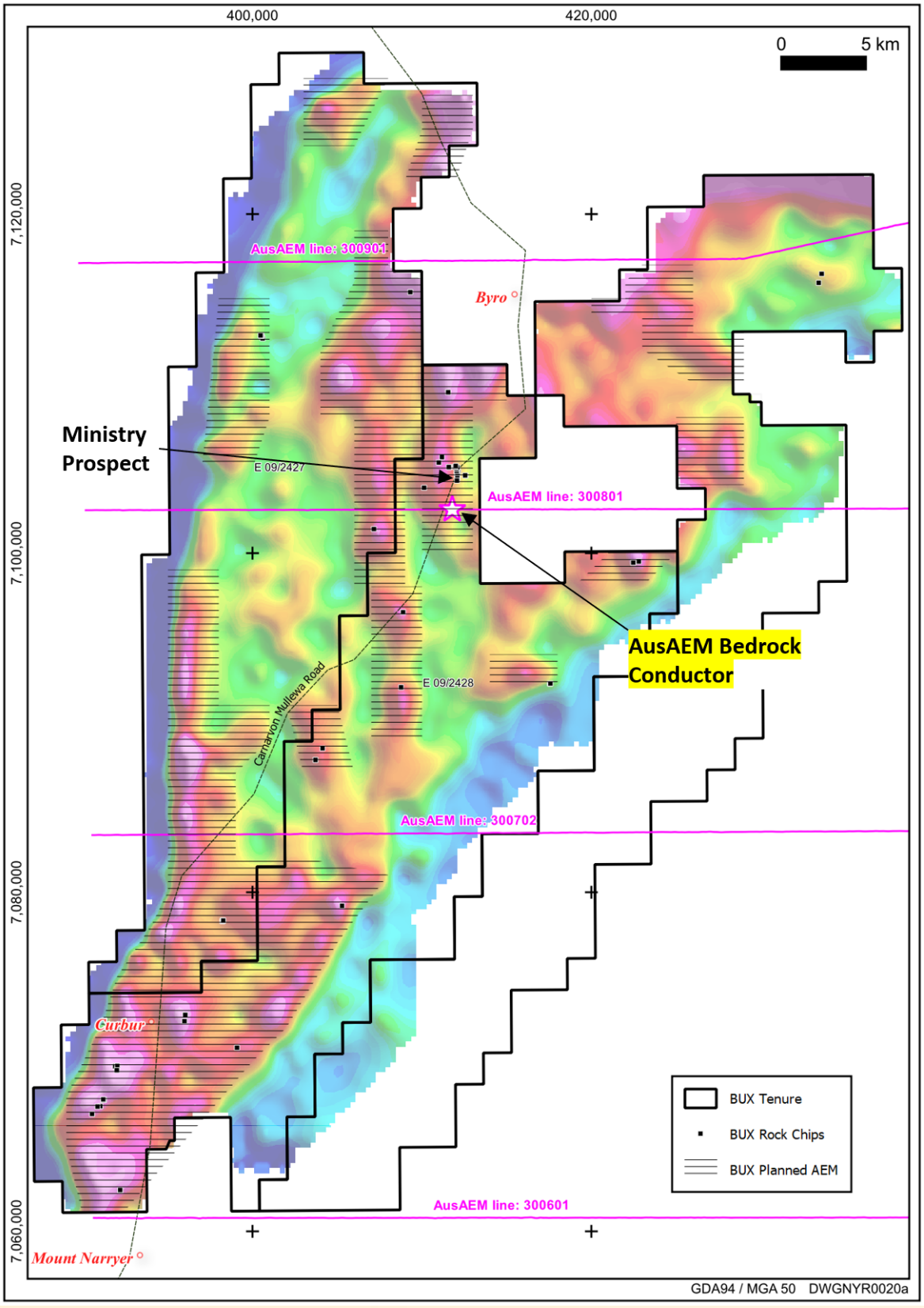


Figure 4: Narryer Project showing BUX's planned AEM survey scheduled for June 2022 with gravity imagery and rock chip sampling.

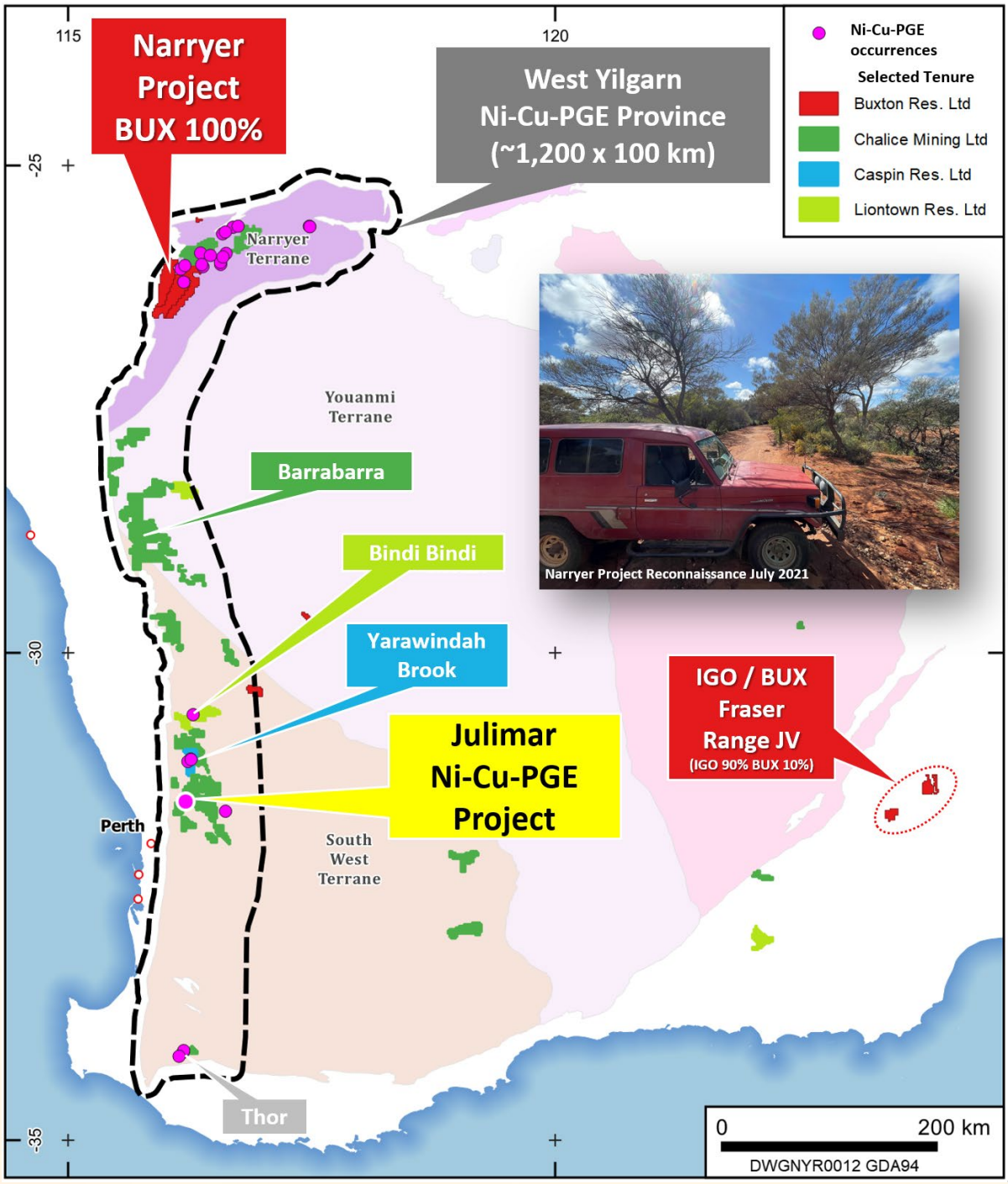


Figure 5: Regional setting of Buxton's 100% owned Narryer Project

This announcement is authorised by the Board.

For further information, please contact:

Eamon Hannon
Managing Director
ehannon@buxtonresources.com.au

Sam Wright
Company Secretary
sam@buxtonresources.com.au

Competent Persons

The information in this report that relates to Exploration Results is based on information compiled by Mr Eamon Hannon, Member of the Australasian Institute of Mining and Metallurgy, and Mr Martin Moloney, Member of the Australian Institute of Geoscientists. Mr Hannon and Mr Moloney are full-time employees of Buxton Resources. Mr Hannon and Mr Moloney have 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 Hannon and 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.

JORC Table: Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*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.*	Reconnaissance rock chip sampling by Buxton was selective, with 0.2 – 1kg of sample collected at each site. The sampling was conducted in order to provide a representative assay of the outcrop being sampled.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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.	
Drilling techniques	*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).*	Not applicable.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Not applicable.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
Logging	*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.*	Not applicable.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant intersections logged.	
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Not applicable.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	

	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	
	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.	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Not applicable.
	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.	Not applicable.
	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.	Not applicable.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Not applicable.
	The use of twinned holes.	Not applicable.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Not applicable.
	Discuss any adjustment to assay data.	Results reported as Mg were converted to MgO using a multiplication factor of 1.658
Location of data points	*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.*	Handheld GPS (+/-5m) was used to locate BUX rock chip samples. Previous drill collars were digitised from historic records as recorded in WAMEX archives with reference to topographical, satellite imagery and known reference points.
	Specification of the grid system used.	MGA50 (GDA94).
	Quality and adequacy of topographic control.	A DEM (digital terrain model) was subset from the SRTM-derived 1 Second Digital Elevation Models Version 1.0 from Geoscience Australia and is deemed sufficient for this stage of exploration. Absolute accuracy of the SRTM data as tested using Permanent Survey Marks across Australia was found to be 7.582 m at the 95th percentile with an RMS error of 3.868 m in open, flat terrain. Ninety-nine percent of points are within a height difference of less than 9.602 m.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	No Mineral Resource or Ore Reserve calculations have been performed. No sample compositing is reported.
	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.	
	Whether sample compositing has been applied.	
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Not applicable.
	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.	
Sample security	*The measures taken to ensure sample security.*	The chain-of-sample custody is managed by the BUX staff. Samples were stored at Curbur and Byro field camp and sampled in the field by BUX staff and contractors. Samples were placed in pre-numbered calico bags and further secured in green plastic sample bags with cable ties. The samples are further secured in a bulk bag and delivered to the laboratory by freight contractor. A sample reconciliation advice is sent by the laboratory to BUX on receipt of the samples. Sample preparation and analysis is completed at the one analytical laboratory (ALS). The risk of deliberate or accidental loss or contamination of samples is considered very low
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No specific external audits or reviews have been undertaken.

JORC Table: Section 2 – Reporting of Exploration Results

Criteria	**JORC Code explanation**	**Commentary**
Mineral tenement and land tenure status	*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.*	BUX have a 100% interest in E09/2427, 2428 & 2429. No material issues with land access are known at this stage.
	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.	The tenement is in good standing with DMIRS and there are no known impediments for exploration on this tenement.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Numerous exploration parties have held portions of the area covered by BUX tenure previously. Buxton has undertaken a detailed review of 140 previous exploration reports as held in the DMIRS WAMEX system, along with a compilation of other relevant open file data.
Geology	*Deposit type, geological setting and style of mineralisation.*	Known mineralisation in the Project area is interpreted to be primary ortho magmatic intrusion related Ni-Cu-Co-PGE sulphide type.
Drill hole Information	*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:*	See text and figures in body of release.
	o *easting and northing of the drill hole collar*	
	o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*	
	o *dip and azimuth of the hole*	
	o *down hole length and interception depth*	
	o *hole length*	
	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.	
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	Not applicable.

	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.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	The limited historical drill database does not allow for the relationship between mineralisation widths and intercept lengths to be known with certainty and the possibility of bias in relation to orientation of geological structure is currently unknown.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	
	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').	
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	See text and figures in body of release.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Reporting of BUX's rock chip sampling is limited areas of outcrop or subcrop, float samples have been omitted for clarity. This is not deemed to misrepresent the indicated prospectivity of the tenement package.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Not applicable.
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	See text and figures in body of release.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	See figures in body of release.