

ASX: BUS ABN 17 654 970 751

W:www.bubalusresources.com.au T: +618 6188 8181 E: admin@bubalusresources.com.au

Level 2, 22 Mount Street Perth WA 6000

Wednesday 28th February 2024

**ASX Announcement** 

## COMPELLING LITHIUM TARGETS IDENTIFIED AT YINNIETHARRA

## **Highlights**

- Malinda East confirmed as high priority target for drilling in 2024 based on results of systematic surface sampling results
- Sizeable 800m x 450m lithium-in-soils anomaly along strike from Delta's Malinda Prospect, along with two other targets identified within the project area.
- Bubalus has commenced the process to obtain the relevant clearances required for drilling on the project.

Bubalus Resources Limited (ASX: BUS) (**Bubalus** or **Company**) is pleased to announce a number of prospective lithium-in-soil anomalies have been delineated at the Company's Yinnietharra Lithium Project.

The Yinnietharra Lithium Project is located only 2km's east of the Malinda Prospect (Figure 1) owned by Delta Lithium Limited (ASX :DLI) (**Delta**). Drilling at Malinda by Delta has identified spodumene-hosted lithium mineralisation over a distance of 1.6 km and to a depth of 350m<sup>1</sup>. No drilling has been undertaken on the Yinnietharra Project.

Spodumene bearing pegmatites identified by Delta<sup>1</sup> strike in an east-west orientation, trending in the direction of Bubalus' Yinnietharra Project boundary, representing an obvious walk up target for initial activities. This target (Malinda East) has now been confirmed by systematic soil sampling which has detected a clear area of anomalous lithium and caesium at surface in this area.

These anomalies may be present due to undercover spodumene bearing pegmatites, however drilling is required to test this and necessary clearances for drilling are underway.

In addition two other prospective lithium-in-soil anomalies have been defined within the Yinnietharra Lithium Project based on targeting work by Sugden Geoscience.

Only limited outcrop was mapped within the project area with most lithologies either covered by drainage or subcropping below recent cover. Mapping identified certain units which may represent the weathered expression of pegmatites however bedrock sampling would be required for definitive identification of lithology and mineralogy.

<sup>&</sup>lt;sup>1</sup> Refer to Delta Lithium Limited's ASX Announcement on 21<sup>st</sup> August 2023 *"Excellent Yinnetharra Initial Metallurgical Results and Drilling Update".* 



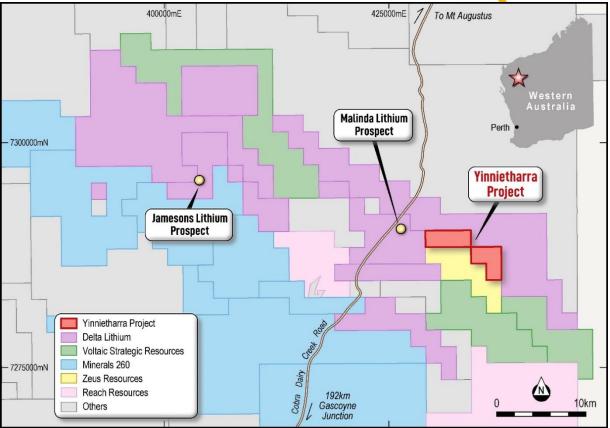


Figure 1. Location of Yinnietharra Project relative to other holdings and lithium prospects in the Gascoyne Region

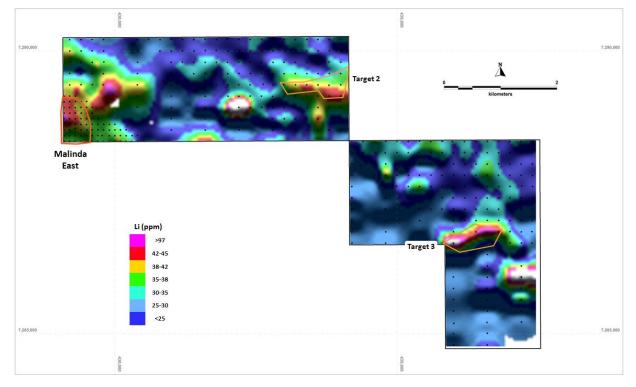


Figure 2. Plan showing gridded lithium-in-soils results at Yinnietharra



#### Commentary on soil sampling results

Bubalus completed a systematic, project wide soil sampling program with the aim to identify the size and scale of potential pegmatites within the Yinnietharra tenement boundary, given that these are unlikely to outcrop, and refine additional areas or anomalism for drill testing.

Surface sampling was conducted at a spacing of 200m by 200m across the majority of the project area, with the high priority Malinda East area adjacent to the Malinda Prospect sampled at a spacing of 100m by 100m.

The anomalism at Malinda East measures 800m north-south and 450m east-west (the strike direction of the Malinda pegmatites drilled by Delta). The anomaly is defined by lithium-in-soil values above 40ppm Li and caesium-in-soils above 8ppm Cs (Figures 2 and 3). The bedrock lithologies in this area are interpreted to belong to the Leake Springs Metamorphic unit, the host rock for the mineralised pegmatites at Malinda.

Two further lithium-in-soil anomalies were detected labelled as Target 2 and Target 3 on Figures 2 - 4. These anomalies are derived from anomalous lithium responses detected following levelling of the assay data by Sugden Geoscience based on interpreted bedrock geology, with these targets being underlain by the Leake Springs Metamorphics and Mount James Subgroup (Figure 4). These targets are based on wider spaced soil sampling (200m x 200m).

Given the intense weathering profile of the regolith in the Yinnietharra region, the tenor of these anomalies are relatively subdued however they provide clear targets to focus 2024 exploration at Yinnietharra.

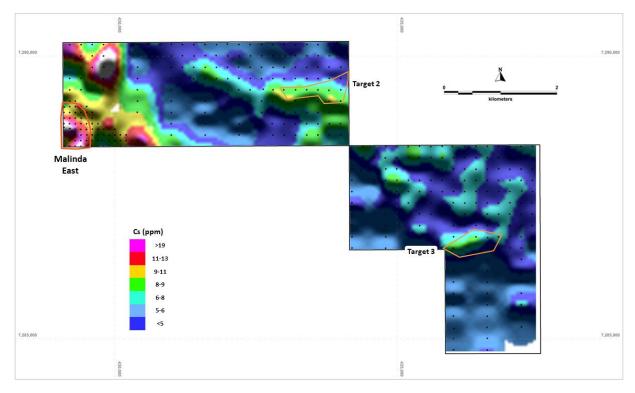


Figure 3. Plan showing gridded caesium-in-soils results at Yinnietharra



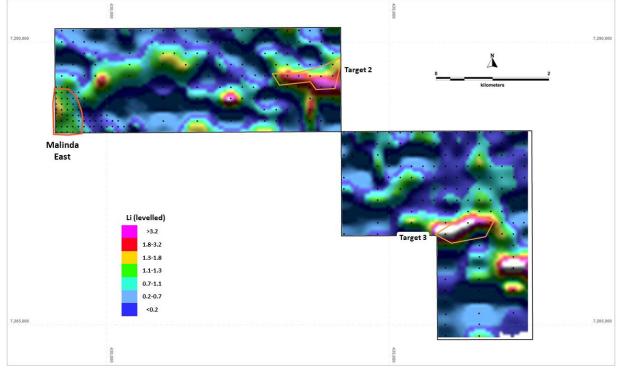


Figure 4. Plan showing lithium-in-soils results levelled using bedrock geology (Z score method)

### **Next Steps**

The Company believes Malinda East is a compelling target for drill testing in 2024 based on the anomalous soil results and the location along strike from Delta's Malinda Deposit.

The Company has commenced engagement with the Wajarri Yamatji Aboriginal Corporation (WYAC), as representatives of the Aboriginal traditional owners of the area underlying the Yinnietharra Project, to obtain the relevant clearances required for drilling on the project. The Company looks forward to a constructive relationship with the WYAC as it seeks to advance the Yinnietharra Project.

The remaining targets will be advanced by field inspection and further sampling during 2024 to refine and prioritise these targets.

This announcement has been authorised by the Board of Directors of Bubalus Resources Limited.

For more information, please contact: Mr Alec Pismiris M: +61 402 212 532

Level 2, 22 Mount Street Perth WA 6000 P: +61 8 6188 8181 E: admin@bubalusresources.com.au PO Box 7054, Cloisters Square Perth WA 6850 W: www.bubalusresources.com.au



### **ABOUT BUBALUS RESOURCES**

Bubalus has five projects, the Yinnietharra Lithium Project (prospective for lithium), Amadeus Project (prospective for Manganese), the Coomarie Project (prospective for Heavy Rare Earths), the Nolans East Project (prospective for Light Rare Earths) and the Pargee Project (prospective for Heavy Rare Earths), which are located in premier geological provinces in the Northern Territory and Western Australia:

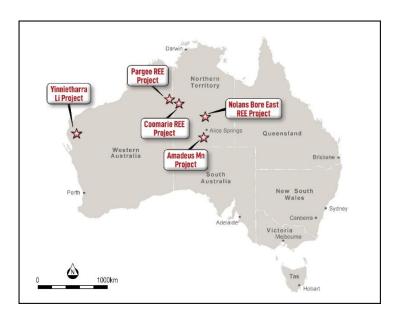
*Yinnietharra Project* (Li) - Yinnietharra Project with the boundary of E09/2724 lying only 2km east of the Malinda Prospect (Figure 1) owned by Delta Lithium Limited (ASX: DLI) (**Delta**). Drilling at Malinda by Delta has identified spodumene-hosted lithium mineralisation over a distance of 1.6 km and to a depth of 350m<sup>2</sup>.

*Amadeus Project* (Mn) - Significant land package with 150kms of strike containing outcropping high grade manganese covering 5,436km<sup>2</sup>, located 125km south of Alice Spring where historical exploration has identified 11 manganese occurrences, along with cobalt and Ni-Zn-Cu also identified.

*Nolans East Project* (Light REEs) - The project covers 380km<sup>2</sup> of the Arunta Province, analogous to Nolan's Bore light rare earth deposit and is prospective for light rare earths, located only 15kms east of Arafura's (ASX:ARU) 56Mt NPV \$1.011Bn light rare earth deposit.

*Coomarie Project* (Heavy REEs) - The project covers 1,315 km<sup>2</sup> and presents as a geological analogue to Browns Dome, host to Northern Minerals' (ASX:NTU) Browns Range heavy rare earths deposit where mineralisation is hosted on margins of granite dome intrusive where the unconformity between Gardiner Sandstone and Browns Range Metamorphics exist and located in the Tanami Region.

*Pargee Project* (Heavy REEs) - The project is prospective for heavy rare earths and located 30kms from PWV Resources' (ASX:PVW) Watts Rise heavy rare earths discovery.



<sup>&</sup>lt;sup>2</sup> Refer to Delta Lithium Limited's ASX Announcement on 21<sup>st</sup> August 2023 *"Excellent Yinnetharra Initial Metallurgical Results and Drilling Update".* 



## Appendix 1.

# The following tables are presented in accordance with requirements under the JORC Code, 2012 Edition

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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</li> </ul>	Soil sampling along regular spaced grid (200m x 200m, with infill to 100m x 100m in area of interest).
	sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	Sample collected from immediately below surface and sieved to -2mm in field. Dried at laboratory and sieved to -75µm before 4 acid digestion for analysis by ICP- MS.
	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 (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.	
Drilling techniques	<ul> <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>	No drilling results are reported.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	No drilling results are reported.
	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	
	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.	



Criteria	JORC Code explanation	Commentary
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Geological observations collected for each sample
Sub compling	. If some whether out or sown and whether	Signad to 2mm in field prior to being cigrand to 75 mm
Sub-sampling techniques	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	Sieved to -2mm in field prior to being sieved to -75µm at laboratory.
and sample preparation	<ul> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet</li> </ul>	
	or dry.	Sample preparation standard and appropriate for first pass geochemical survey.
	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	
	<ul> <li>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.</li> </ul>	
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
Quality of assay data and	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Analysis carried out at Intertek Perth, an accredited and independent analytical laboratory.
laboratory tests	<ul> <li>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.</li> </ul>	Submitted samples were dried at laboratory and sieved to -75µm. Samples then underwent 4 acid digestion before analysis by ICP-MS for 48 elements (laboratory code 4A-Li/MS48).
	<ul> <li>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.</li> </ul>	CRMs, blanks and duplicates were inserted by the laboratory according to their protocols. No additional QA/QC procedures were used due to the first pass nature of the survey
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Sample locations and geological observations were recorded in the field and verified using GIS once the campaign was completed.
	• The use of twinned holes.	Assay results were reviewed in GIS and ioGas by a
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	consultant geochemist to ensure no gross errors and consistency between batches.
		No significant intersections as no drilling.



Criteria	JORC Code explanation	Commentary
	Discuss any adjustment to assay data.	
Location of data points	<ul> <li>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.</li> </ul>	Images and data points are in MGA Zone 50. Open file topographic data is being used.
	Specification of the grid system used.	
	Quality and adequacy of topographic control.	
Data spacing and	<ul> <li>Data spacing for reporting of Exploration Results.</li> </ul>	Samples were taken at spacings of either 200m x 200m or 100m x 100m as shown on Figures
distribution	<ul> <li>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.</li> </ul>	Surface sampling should not be used for Mineral Resource estimation
	<ul> <li>Whether sample compositing has been applied.</li> </ul>	
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.	Square grid was used to avoid any bias in sampling. Dominant regional trend is NW-SE (or WNW – ESE) while pegmatites on adjacent property trend E – W.
	<ul> <li>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.</li> </ul>	
Sample security	The measures taken to ensure sample security.	Samples were taken directly to the laboratory by representatives of the Company
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits have been completed.

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and	Type, reference name/number, location     and ownership including agreements or	The Yinnietharra Project consists of 2 granted Exploration License E09/2724 and E09/2725.
land tenure status	<ul> <li>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</li> </ul>	The Tenements are currently owned by Hardy Metals Ltd and will be 100% owned by Bubalus once the Acquisition completes.
		The area underlying the Tenements is part of the Wajarri Yamatji native title determination.



Criteria	JORC Code explanation	Commentary
Onterna		Commentary
	operate in the area.	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historical exploration at the Yinnietharra Project has been limited to desktop review and field reconnaissance. Arrow Minerals and Zeus Resources have completed work within and surrounding the tenements. Work completed is recorded in WAMEX reports A115523, A117396, A127729.
Geology	Deposit type, geological setting and style of mineralisation.	The Gascoyne Province is the deformed and high grade metamorphic core of the early Proterozoic Capricorn Orogen. Tectonic trends within the Gascoyne Province wrap around the relatively stable Pilbara Craton. The Gascoyne Province comprises granitoid intrusions, mantled-gneiss domes, metamorphosed and partly melted sedimentary rocks and remobilised basement Archaean gneisses. Exploration is targeting pegmatite-hosted Li-REE mineralisation. The Thirty Three Suite is believed to be the local source for the pegmatites observed in the Yinnietharra area and mineralogy and geochemistry observed in the area is consistent with the development of Lithium-Cesium-Tantalum (LCT) bearing pegmatites.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	No drilling results are reported. No drilling has been undertaken on the Project.
Data aggregation methods	<ul> <li>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.</li> <li>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</li> </ul>	No aggregation of data.



Criteria	JORC Code explanation	Commentary
	<ul> <li>examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <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>	No drilling results are reported.
Diagrams	<ul> <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>	Refer to figures within this report.
Balanced reporting	<ul> <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>	All meaningful information has been included in the body of the text.
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.	It is believed that all material data and information has been included in the body of this and previous ASX announcements.
Further work	<ul> <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>	Detailed in text of announcement.

10\_\_\_\_



#### **COMPETENT PERSONS STATEMENT**

Information in this report relating to Exploration Results is based on information compiled, reviewed and assessed by Mr. Bill Oliver, who is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr. Oliver is a Director of Bubalus Resources and has sufficient experience which is 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 by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC Code**). Mr. Oliver consents to the inclusion of the information in the form and context in which it appears.

Some of the information is extracted from the Independent Geologist's Report contained within the Prospectus released to the ASX on 11 October 2022 and available to view on the Bubalus Resources Limited website, <u>www.bubalusresources.com.au</u> or on the ASX website, <u>www.asx.com.au</u> under the ticker code BUS.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

