

7th November 2022

# **Airborne Conductors identified at Julimar Nth**

## Highlights

- Multiple conductors identified in preliminary MMT data report
- Initial Ground EM planned to follow-up priority targets Progressing drill planning at Julimar Nth

### Julimar Nth and WH Sth Airborne MMT Programs

Tambourah Metals Ltd(ASX:TMB) is pleased to announce that Expert Geophysics has completed a proprietary helicopter based airborne magneto-telluric (MMT) survey over priority targets at Bolgart East, Yerecoin, and selected targets at the WH Sth project<sup>1</sup> (figure 1). The program consisted of the flying of 825-line km, at a line spacing of 400m. The survey collected

- MMT data to define conductors;
- detailed magnetics along the flight lines;
- Digital Terrain Model (DTM) data; and
- Very low Frequency data (VLF), for additional mapping of conductors and geological structures.

Preliminary apparent conductivity data has been provided to the company with the final data package expected in the next few weeks. The preliminary imaging show the presence of multiple conductors at each of the projects.

Executive Chairperson Rita Brooks commented "The MMT survey has provided Tambourah with many conductors to assess and follow-up as we ramp up our exploration for critical minerals at Julimar Nth. With the large land holding at Julimar Nth and WH Sth the company is well positioned to unlock the mineral potential of its large tenement portfolio within the region"

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Airborne Geophysics to Commence at Julimar Nth Projects 24 Oct 2022

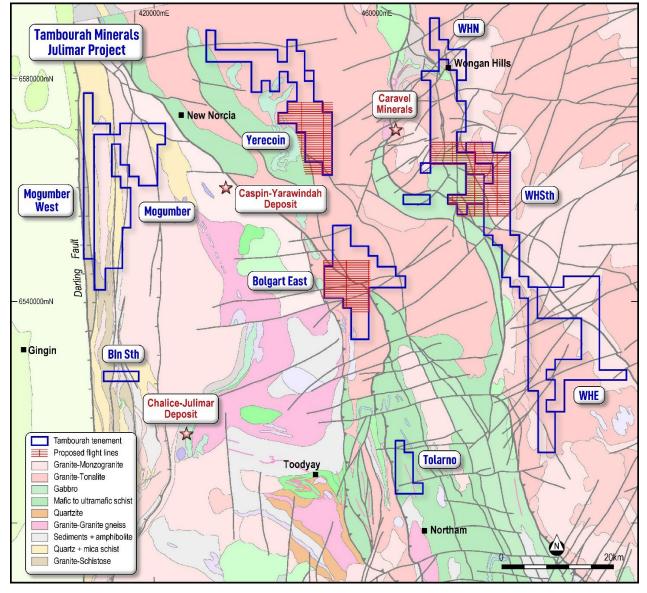


Figure 1: Julimar Nth and WH Sth flight lines over GSWA 1:100 000 geology

## **Bolgart East**

The Bolgart Survey consisted of 201-line km of flying adjacent to the town of Bolgart. The survey was designed to test for the presence of conductors associated with existing airborne gravity anomalies<sup>2</sup> (figure 2). The Bolgart East tenure is prospective for hosting Gonneville style Ni-Cu-PGE mineralisation within ultramafic rocks. Company geologists have identified scattered ultramafic rocks in subcrop at Bolgart East. The significance of these rocks with respect to the MMT conductors and the regional structures will be determined when the final data package is fully interpreted.

<sup>&</sup>lt;sup>2</sup> TMB ASX 28 Jan 2022 "Multiple gravity targets at Bolgart East and Tolarno"

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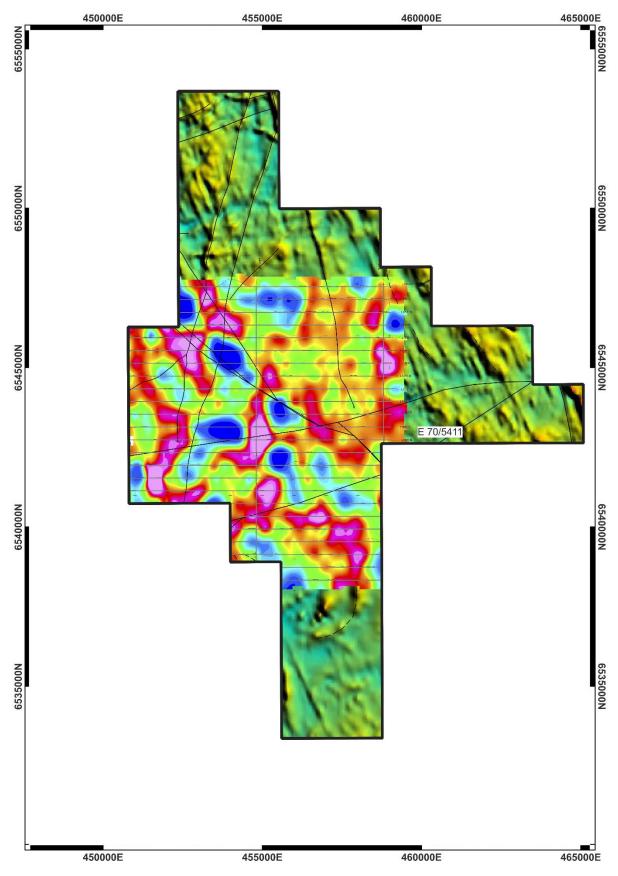
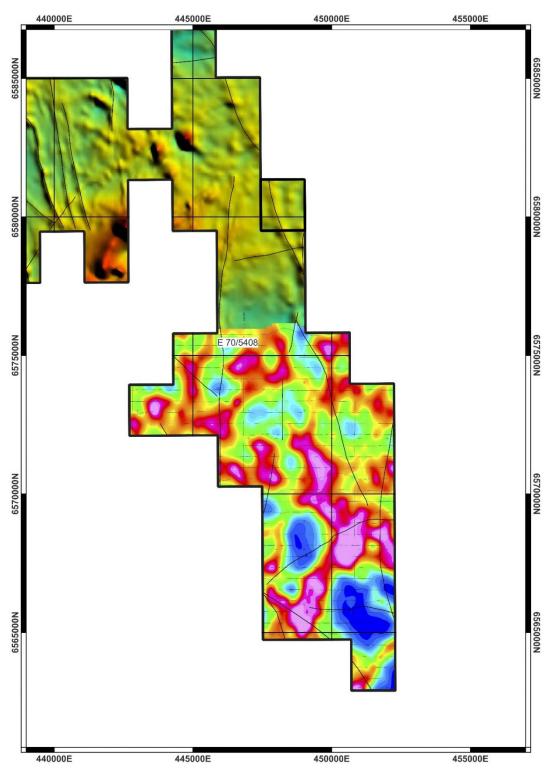


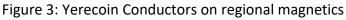
Figure 2: Bolgart East conductors on regional magnetics



### Yerecoin

The Yerecoin Survey consisted of 244-line km of flying to the east of the town of Yerecoin. The survey was designed to test for the presence of conductors associated with existing airborne magnetic anomalies<sup>2</sup> and significant regional structures (figure 3).





Yerecoin, like Bolgart East, is prospective for hosting Gonneville styles of mineralisation in ultramafic rocks. Gabbros have been identified in scattered subcrop at Yerecoin.



#### WH Sth

The WH Sth targets are located within a 5 km radius of the Caravel Resources Cu-Mo Au project in an area that hosts multiple magnetic anomalies. The WH Sth Project is prospective for hosting both Caravel style of porphyry Cu-Mo-Au mineralisation and Gonneville style Ni-Cu-PGE. Ultramafic rocks have been identified in scattered outcrops in the region of the MMT survey. Multiple conductors were identified at WH Sth Central prospect (figure 4).

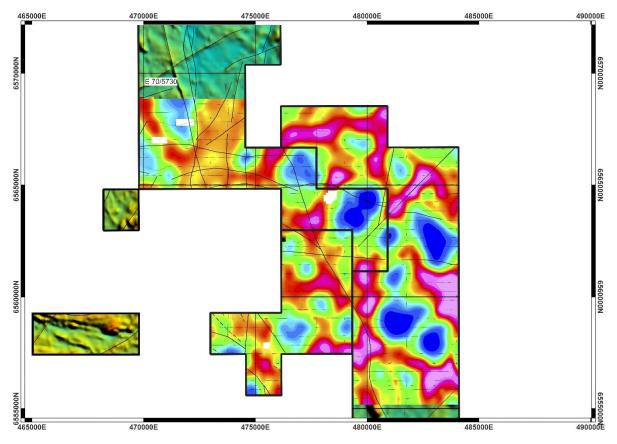
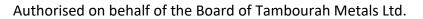


Figure 4: WH Sth survey area on regional magnetics

## Next steps at Julimar Nth and WH Sth Ni-PGE-Cu

- The final products including all digital data, images and inversion models will be delivered by Expert Geophysics with 21 days,
- The company, in conjunction with geophysical consultants, has designed a ground EM (MLEM) survey to test magnetic and MMT targets at Bolgart East and to the immediate south of the WH Sth MMT survey block. It is expected that this short program will commence in the next few weeks.
- Detailed analysis of all newly acquired Airborne and MLEM datasets will be undertaken
- Access negotiations to enable drilling of the conductors will continue.



**Rita Brooks** 

#### **Executive Chairperson**

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7 November 2022

#### **About Tambourah Metals Ltd**

Tambourah Metals Ltd is advancing and developing critical minerals projects for a decarbonised future. The Company's primary objective is the rapid exploration and development of its flagship Tambourah Gold and Lithium project in the Pilbara. The Tambourah goldfield is an is an advanced gold exploration project with lithium and gold development potential. Importantly, Tambourah Metals Ltd has an exciting opportunity for further regional growth through gold and lithium exploration at its Russian Jack and Nullagine projects in the East Pilbara. The Company has also expanded its Julimar Nth and WH Sth (Ni-Pge-Cu) projects in the SW terrane. The Company's other projects include the Achilles Ni-PGE-Cu-Au in the NE Goldfields and the advanced Cheela Gold project.

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Figure 5 Tambourah Metals Projects - Location Map



#### **Competent Person Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr. Kelvin Fox, a full-time employee of the company, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr. Kelvin Fox has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Kelvin Fox consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **Forward Looking Statements**

Certain statements in this document are or may be "forward-looking statements" and represent Tambourah's intentions, projections, expectations, or beliefs concerning among other things, future exploration activities. The projections, estimates and beliefs contained in such forward-looking statements don't necessarily involve known and unknown risks, uncertainties, and other factors, many of which are beyond the control of the company, and which may cause Tambourah's actual performance in future periods to differ materially from any express or implied estimates or projections.

Nothing in this document is a promise or representation as to the future. Statements or assumptions in this document as to future matters may prove to be incorrect and differences may be material. Tambourah does not make any representation or warranty as to the accuracy of such statements or assumptions.



# 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
Samplin g techniqu es	<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 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>	No samples were collected during the airborne survey.
Drilling techniqu es	<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>	<ul> <li>No samples were collected during the airborne survey.</li> </ul>
Drill sample recovery	<ul> <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> <li>No samples were collected during the airborne survey.</li> </ul>
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>	<ul> <li>No samples were collected during the airborne survey.</li> </ul>

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Criteria **JORC Code explanation** Commentary If core, whether cut or sawn and whether No samples were collected during sampling quarter, half or all core taken. the airborne survey. techniqu If non-core, whether riffled, tube sampled, es and rotary split, etc and whether sampled wet or sample dry. preparati For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all subsampling 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 The nature, quality and appropriateness of the The survey was flown by Expert of assay assaying and laboratory procedures used and Geophysics using the following data and whether the technique is considered partial or data acquisition systems laborator total. • MobileMT (Mobile v tests For geophysical tools, spectrometers, handheld MagnetoTellurics) towed bird with XRF instruments, etc, the parameters used in the 97 m long tow cable determining the analysis including instrument Geometrics G822A or Scintrex make and model, reading times, calibrations CB-3 Cesium Magnetometer, factors applied and their derivation, etc. installed in a separate towed bird Nature of quality control procedures adopted • EG PTY LTDPC-104 based Data (eg standards, blanks, duplicates, external Acquisition System laboratory checks) and whether acceptable • EG PTY LTDGPS Navigation levels of accuracy (ie lack of bias) and Computer/Pilot Steering Indicator precision have been established. Smart micro model UMRR-0A Radio Altimeter, 0 – 500 m rang

- The base station consisted of
  - MobileMT Base Station. 4 electric channels for 4 pairs of electrodes, with data logger •
  - GEM Systems GSM-19 Base Station Magnetometer, (or equivalent model) with data logger
- A Field Data Processing Workstation and a full suite of software for the quality control and preliminary processing of the airborne geophysical data

on of either in sampling personi and • The use assaying • Docum procedu (physic	rification of significant intersections by ndependent or alternative company nel. e of twinned holes. entation of primary data, data entry ures, data verification, data storage al and electronic) protocols. s any adjustment to assay data.	<ul> <li>The sample lines were flown 400m spacing with 4000m sp tie lines. The data was verifie the flight contractor and any I with poor data were reflown.</li> <li>The nominal survey altitude of helicopter at which the survey flown was 140 - 150 m above terrain.</li> <li>The details of the MT receive</li> </ul>	aced d by ines of the / was e the

• Airborne receiver: Three orthogonal induction coils (1.4 m Tambourah Metals Ltd

Criteria	JORC Code explanation	Commentary
		<ul> <li>diameter each)</li> <li>Airborne shell: Aerodynamic shaped capsule • Digitizing rate: 73,728 Hz</li> <li>Tow cable length: 97 m</li> <li>Ground sensors 4 pairs of electrodes • Electrode separation 50 m (typical)</li> <li>Frequency range: 25 Hz – 20,000 Hz • Output computed parameters: Apparent conductivity for selected frequencies</li> <li>Output frequencies: Selectable from 25 Hz – 20,000 Hz depending on signal strength</li> </ul>
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> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Survey airspeed was approximately 80 – 100 km/hour. The airspeed varied in the rugged terrain. With a data recording rate of 10 times per second, radar, magnetic and GPS measurements are acquired approximately every 2.2 metres along the survey lines. Electromagnetic data will be digitized and recorded at 73,728 Hz and processed two (2) times every second in time, resulting in electromagnetic data sampled at approximately every 11 meters along each flight line.</li> <li>The GPS navigation system consists of</li> <li>EG PTY LTD uses a proprietary GPS navigation system utilizing the GPS Receiver with Linx RXM- GNSS-TM GPS Engines. The key features of the GPS Receiver are:</li> <li>L1 1575.42MHz, C/A code</li> <li>33-channel satellite tracking</li> <li>Position accuracy: 2.5m</li> <li>10 Hz update rate</li> <li>Constellation System Support: - GPS - GLONASS - GALILEO - QZSS</li> <li>DGPS support: - (SBAS) Satellite-Based Augmentation System - (RTCM) Radio Technical Commission for Maritime Services - (WAAS) Wide-Area Augmentation System - (EGNOS) European Geo-Stationary Navigation System - (GAGAN) GPS-Aided Geo-Augmented Navigation A EG Pty Ltd Computer/Pilot Steering Indicator is used to compute the flight path</li> </ul>

Criteria **JORC Code explanation** Commentary grids in realtime onboard the helicopter. Data Data spacing for reporting of Exploration See point above spacing Results. and Whether the data spacing and distribution is • distributi sufficient to establish the degree of geological on and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. Orientati Whether the orientation of sampling achieves The geological structure in the on of unbiased sampling of possible structures and survey area is approximately data in the extent to which this is known, considering north-south, with the flight lines relation the deposit type. being east-west oriented, and to • If the relationship between the drilling hence the orientation of the flight geologic orientation and the orientation of key lines was appropriate to test the al mineralised structures is considered to have geology. structure introduced a sampling bias, this should be assessed and reported if material. Sample The measures taken to ensure sample All data generated by the flight • • security contractor always remained with security. the flight contractor. Audits or The results of any audits or reviews of No audits or reviews has been • ٠ reviews sampling techniques and data. conducted of the preliminary data. A full assessment of the data will be undertaken when the final data is delivered.

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# Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral teneme nt and land tenure status	<ul> <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> <li>Yerecoin-E70/5408</li> <li>Bolgart-E70/5411</li> <li>WH Sth-E70/5730, E70/5796, E70/5755</li> <li>All tenements are held 100% by Baracus Pty Ltd, a private exploration company, with transfers lodged to transfer 100% tenure to Tambourah Metals.</li> <li>There are no heritage issues associated with exploration of these projects as they are covered by a regional state govt ILUA</li> <li>The tenure is held under freehold farms and to progress exploration Tambourah metals must gain access agreements with the individual farmers. Currently these access negotiations are ongoing.</li> </ul>
Explorat ion done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>No exploration has been done by other parties at Yerecoin and Bolgart. There has been limited historic soil sampling conducted at WH Sth. This soil sampling data is yet to be interpreted within the context of the MMT data.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>Yerecoin and Bolgart are prospective for hosting Gonneville style Ni-Cu-PGE in ultramafic rocks. WH sth is prospective for this same sty;e of information and also for porphyry style Cu-Mo-Au.</li> </ul>
Drill hole Informat ion	<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>	<ul> <li>No drilling was undertaken during the airborne survey.</li> </ul>

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Criteria	JORC Code explanation	Commentary
Data aggrega tion 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 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>	<ul> <li>No data aggregation methods were applied to the airborne data.</li> </ul>
Relation ship between minerali sation 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>	<ul> <li>No such relationships could be established by the first pass airborne survey.</li> </ul>
Diagram s	<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>	<ul> <li>See body of the report.</li> </ul>
Balance d reportin g	<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>	• This is preliminary data. Further announcements will be made when the full dataset is received from the contractors and fully interpreted by Tambourah Metals geologists and consultants.
Other substant ive explorati on data	<ul> <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> <li>TMB has previously flown an airborne AGG survey over Bolgart. There appears to be a degree of correlation between the AGG data and the MMT data, however the degree of correlation and significance of any such correlation can only be made after the full and final dataset is delivered and interpreted.</li> <li>Yerecoin and WH Sth are covered by publicly available magnetic datasets. Any relationship between magnetic features and the MMT conductors defined in this survey are yet to be defined.</li> </ul>
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>	See announcement body.

