

ASX Announcement

5 May 2022

# MASSIVE SULPHIDES INTERSECTED in First Drill Hole at Little Duke Copper Gold and Cobalt Project

## **HIGHLIGHTS**

- The first of four diamond drill holes has intersected a 170m wide zone of coppercobalt mineralisation from 70m with multiple intersects of visual massive sulphides
- Significant sulphides in broad zone (massive in part) consisted of chalcopyrite, pyrrhotite, pyrite and quartz / carbonate in hydrothermal breccia.
- Assay results expected within four weeks.
- Second drill hole in the program has commenced.
- Primary focus remains on initial gold production from flagship Mt Freda Gold Mine in Q3, CY22

Tombola Gold Ltd (ASX:TBA) ("Tombola" or the "Company") is pleased to announce that the first diamond drill hole in a four-hole program at Little Duke has intersected a wide zone of copper mineralisation between 70-250m based on visual inspection and supported by a Niton handheld XRF analyser.

This first hole (of hole LD22DD001) was drilled as part of the recently announced 2,500m Golden Mile drilling program (Refer ASX Release - 21 April 2022).

The hole was drilled 20m south of the last drilling carried out on the area in the 2019 program, where intersections of significant copper, gold and cobalt were recorded in LD19RD025 of 68m @ 1.4g/t Au; 0.4% Cu and 245 ppm Co (incl 14m @ 4.7g/t Au, 1.3% Cu and 529ppm Co), and LD19RC023 of 121m @ 0.9g/t Au, 0.2% Cu and 287ppm Co (Figure 1

Mineralised zones of stronger mineralisation containing chalcopyrite were intersected based on visual observations between 94 – 106m, 153 – 159m and 240 – 250m within a broader zone of disseminated sulphides.

### Tombola Gold Managing Director, Byron Miles, commented:

"We are very excited with the significance of this drill hole. The 170m of mineralisation from 70m beneath surface has the potential to establish this project as a very large target for the copper, gold and cobalt operation located proximate to our flagship Mt Freda Gold Mine that is expected to produce initial gold over the coming months."

The mineralised drill core contains extensive intervals of quartz – carbonate hydrothermal breccia contained within a conductive shale-host with significant chalcopyrite, massive pyrrhotite and pyrite in an iron sulphide copper gold ("IOCG / ISCG") style of mineralization.

Importantly, the trend of mineralisation appears to continue to the south along the northwest margin of a large magmatic body interpreted to be deep and large igneous intrusion (*Refer ASX Release - 18 October 2019*). Future targets at Little Duke will continue to be defined in the sparsely drilled area going to the south testing for continuity of the strong sulphide mineralization intersected in this drill hole.



Figure 1: Proposed drilling areas at Golden Mile – Little Duke area shown in green.

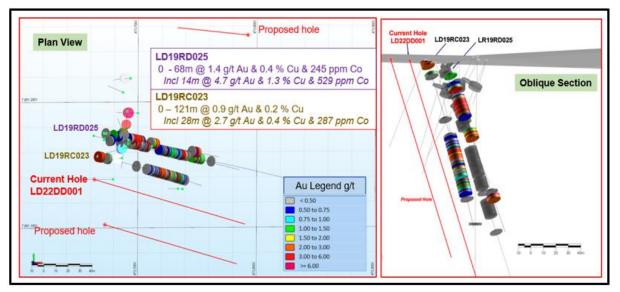


Figure 2: Little Duke - showing recently completed drill hole LD22DD001 and previous drilling.

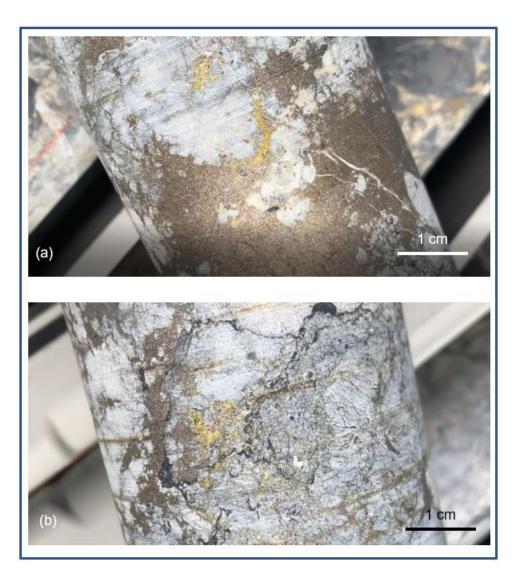


Figure 3: Pictures of drill core from hole LD22DD001 at 217m, showing yellow chalcopyrite associated with light brown pyrrhotite (massive (a) and veined (b) in mineralised quartz – carbonate breccia.

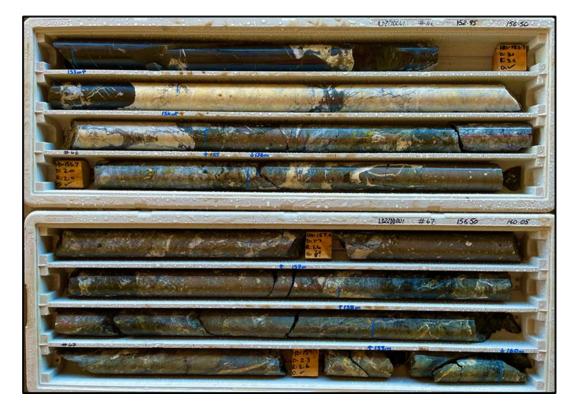


Figure 4 Mineralised drill core from LD22DD001 from 153 – 160m showing massive sulphides with chalcopyrite and pyrrhotite mineralised matrix-supported hydrothermal breccia and quartz – carbonate breccia and veining in a shale unit.



Figure 5: LD22DD001 from 115.6 – 122.35m – intervals of massive sulphide with chalcopyrite + pyrrhotite and quartz – carbonate hydrothermal breccia and veining.

The Little Duke project is located within the Golden Mile, approximately 800 m northeast of the Mt Freda Open Cut, located above a significant conductive structure previously identified by Ausmex (*Refer ASX Release - 14 March 2019*). Historic mining was previously focused on high grade gold from surface located with a steeply dipping quartz breccia. Maiden drilling on the project by Ausmex in 2018 identified a deeper graphitic shale "shear zone" that hosts extensive gold, copper and cobalt mineralisation. Follow up drilling in 2019 encountered chalcopyrite + pyrrhotite\_carbonate\_quartz brecciation and veining (*Refer ASX Release - 10 October 2019*).

### Drill hole collar details for LD22DD001 reported in this release:

PROJECT	Hole ID	Drill Type	Easting	Northing	RL	Depth	Dip	Azi Mag
LITTLE DUKE	LD22DD001	DD	473671	7681136	250	290.70	-60	99

This Announcement was authorised by the Board of Directors.

## For further enquiries:

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#### Forward Looking Statements

The materials may include forward looking statements. Forward looking statements inherently involve subjective judgement, and analysis and are subject to significant uncertainties, risks, and contingencies, many of which are outside the control of, and may be unknown to, the company. Actual results and developments may vary materially from that expressed in these materials. The types of uncertainties which are relevant to the company may include, but are not limited to, commodity prices, political uncertainty, changes to the regulatory framework which applies to the business of the company and general economic conditions. Given these uncertainties, readers are cautioned not to place undue reliance on forward looking statements. Any forward-looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or relevant stock exchange listing rules, the company does not undertake any obligation to publicly update or revise any of the forward-looking statements, changes in events, conditions or circumstances on which any statement is based.

#### **Competent Person's Statement**

Information in this Announcement is compiled and reviewed by Mr. Rod Watt, who is an Executive Director of the Company and Fellow of the Australasian Institute of Mining and Metallurgy. Mr. Watt has sufficient experience that is relevant to the style of mineralisation and the type of deposit under consideration and to the activity he has undertaken to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Watt consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# JORC Code, 2012 Edition – Table 1 Report

## 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 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>	
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>	<ul> <li>Diamond drill hole LD22DD001 reported here was drilled HQ diameter core, with the orientation of the hole being derived from historical drilling in the area.</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>	sample recovery and grade exists.
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>The hole is being geologically and geotechnically logged according to industry standards.</li> </ul>

CriteriaJORC Code explanationSub-sampling techniques and sample preparation• If core, whether cut or sawn and whether quarter, half or all core taken. • 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. • 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.• 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.	<ul> <li>Sub-sampling techniques and sample preparation</li> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <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> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> <li>Quality of assay data and laboratory tests</li> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <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> <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</li> </ul>		
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		assay data and laboratory	<ul> <li>the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <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> <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</li> </ul>
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Commentary

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and half being retained as per

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representative samplingand

Sample size is considered

were entered for analysis with the results indicating

appropriate for the material.

Fieldduplicates and standards

that representative sampling and subsequent analysis

accredited laboratory for the

assay of geological drill core samples with a 30g charge for

QAQC samples as per industry

standard have been inserted

instrument has been used to

assist with geological logging

anomalous metal values. No specific data has been referenced in this release.

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being sent to the laboratory

industry standard.

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were completed.

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Tombola.

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analysis

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Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Assays are expected to be reported in June / July.</li> <li>Sampling has been carried out as industry standard guidelines in 1m intervals, with split core.</li> </ul>
Location of data opoints	<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>The drill collars have been surveyed by handheld GPS (accuracy +/- 3m).</li> <li>The drill collars will be surveyed by a permanent base station (accuracy +/- 150mm) and recorded in MGA94, Zone 54 datum</li> <li>Drill hole collar has been referenced in the document in coordinates GDA94 MGA Zone 54.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <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> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The data is not being used in resource estimations.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <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>	<ul> <li>The orientation of the drill holes is not likely to bias assay results – this is exploration drilling so the orientation of major structures is not well defined at present.</li> <li>The orientation was made with reference to previous historical drilling orientations.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Individual 1m samples will be despatched from Cloncurry direct to Townsville by secure delivery courier.</li> </ul>
Audits or	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	No audits or reviews have been undertaken at this stage.

# Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement 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>ML2718, ML2709, ML2713, ML2719, ML2741, ML100201 &amp; EPM14163 are owned 100% by Spinifex Mines Pty Ltd. Tombola Gold Ltd owns 80% of Spinifex Mines Pty Ltd. Queensland Mining Corporation Limited own 20% of Spinifex Mines. Exploration is completed under an incorporated Joint Venture.</li> <li>93.7 % beneficial interest in sub blocks CLON825U &amp; CLON825P from EPM15923 &amp; 80/20 JV with EXCO Resources.</li> <li>EPM27763, EPM 14475, EPM15858, &amp; EPM 18286 are held by QMC Exploration Pty Limited. Tombola Gold Ltd owns 80% of QMC Exploration Pty Limited. Queensland Mining Corporation Limited own 20% of Spinifex Mines. Exploration is completed under an incorporated Joint Venture.</li> <li>ML2549, ML2541, ML2517 are 100% owned by Tombola Gold.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>All exploration programs are conducted by Tombola Gold Ltd</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The mineralisation at Mt Freda and Golden Mile is vein-hosted in a volcano- sedimentary sequence predominately composed of basalts and sandstones. Mineralisation is not considered to be confined to a particular lithology.</li> <li>Elsewhere across the tenement package copper mineralisation is associated with intrusions into altered mafic hosts, and several gold mineralised hydrothermal quartz reefs exist within the deposit containing Au, Cu, &amp; Co.</li> </ul>

Criteria	JORC Code explanation	Commentary
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>	<ul> <li>The information on drill hole LD22DD001 is contained in this release.</li> </ul>
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 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>N/A – no results are available yet / no results are being reported in this release.</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>	<ul> <li>No material information is excluded.</li> <li>The geometry of the mineralisation is not well understood at this stage as its exploration drilling.</li> <li>True widths are not known at this stage.</li> </ul>

Criteria	JORC Code explanation	Commentary
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>	<ul> <li>Maps showing the location of the EPMs and MLs and target areas for drill testing are presented in the announcement.</li> <li>The contained maps show the proposed target areas where drilling is occurring.</li> </ul>
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 avoiding misleading reporting of Exploration Results.</li> </ul>	All comprehensive assay results have previously been reported to the ASX.
Other substantive exploration 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>Surface geological maps and geophysical modelling have been incorporated into the geological interpretation.</li> <li>Surface geological mapping and structural studies have been performed on various areas of interest within EPM27763.</li> <li>Regional geophysics data has been sourced from open-file data.</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>	<ul> <li>Further work will be assessed after completion of the drilling program currently being undertaken – the results of which will be reported as they become available.</li> <li>Geological mapping will be carried out over the areas.</li> </ul>