

# MAJOR NEW IP ANOMALIES LIGHT UP 3 KM CORRIDOR BETWEEN NIL DESPERANDUM AND LADY FANNY COPPER GOLD DISCOVERIES

Carnaby Resources Limited (ASX: CNB) (**Carnaby** or the **Company**) is excited to announce very significant new geophysical anomalies at the Greater Duchess Copper Gold Project in Mt Isa, Queensland. **Highlights** 

#### Lady Fanny South Prospect:

 Induced Polarisation (IP) surveys south of the Lady Fanny discovery have recorded a very large and strong IP chargeability anomaly under shallow cover south of any previous drilling.



#### New Shamrock Prospect:

• IP surveys approximately 1.5km northeast of Nil Desperandum have recorded a large and strong IP chargeability anomaly coincident with undrilled historical workings.



The Company's Managing Director, Rob Watkins commented:

"The undrilled 3km corridor between Nil Desperandum and Lady Fanny now has two excellent deposit scale drill targets following the identification of these highly significant IP anomalies. IP has proven to be a fantastic targeting tool being responsible for the original high grade discovery hole at Nil Desperandum. These new IP anomalies are both of similar strength and magnitude and are being fast tracked to first pass drill testing."

# ASX Announcement 23 June 2022

### Fast Facts

Shares on Issue 144.6M Market Cap (@ 70 cents) \$101M Cash \$23M<sup>1</sup> 'As of 31 March 2022

#### Board and Management

Peter Bowler, Non-Exec Chairman

Rob Watkins, Managing Director

Greg Barrett, Non-Exec Director & Company Secretary

Paul Payne, Non-Exec Director

#### Company Highlights

- Proven and highly credentialed management team
- Tight capital structure and strong cash position
- Nil Desperandum and Lady Fanny Iron Oxide Copper Gold discoveries within the Greater Duchess Copper Gold Project, Mt Isa inlier, Queensland.
- Greater Duchess Copper Gold Project, numerous camp scale IOCG deposits over 1,022 km<sup>2</sup> of tenure
- Projects near to De Grey's Hemi gold discovery on 442 km<sup>2</sup> of highly prospective tenure
- 100% ownership of the Tick Hill Gold Project (granted ML's) in Qld, historically one of Australia highest grade and most profitable gold mines producing 511 koz at 22 g/t gold

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# **GREATER DUCHESS COPPER GOLD PROJECT**

The recently commenced extensive program of IP geophysical surveys at the Greater Duchess Copper Gold Project comprises 24 separate lines of IP at the Nil Desperandum / Lady Fanny corridor, Duchess and Mount Hope targets.

Results from the first 9 lines have been received and processed from the highest priority area between Nil Desperandum and Lady Fanny (Figure 1). This 3 km corridor is characterised by mostly shallow alluvial cover with occasional isolated hills of outcropping basement rocks.

Not a single exploration drill hole has been drilled between Nil Desperandum and Lady Fanny despite the presence of numerous historical copper gold working.

The results from the first 9 IP lines have recorded two very significant new IP chargeability anomalies named Lady Fanny South and Shamrock prospects as outlined below.



Figure 1. Lady Fanny South and Shamrock Prospect plan showing new IP anomalies.





# Figure 2. 3D view looking west showing all IP lines from Nil Desperandum to Lady Fanny and the location of new IP anomalies at Lady Fanny South and Shamrock. IP lines marked with black line labels are new IP lines.

### LADY FANNY SOUTH PROSPECT (CNB 82.5%, DCX 17.5%)

Five lines of IP were completed south of Lady Fanny at a line spacing of 200m and 400m.

Exceptional new IP chargeability anomalies have been recorded immediately south and along strike of the Lady Fanny discovery, as detailed below (Figures 1,2, 3 & 4).

The IP chargeability inversion anomaly at Lady Fanny South can be traced for over 600m south of Lady Fanny, located under shallow alluvial cover where no previous drilling has been completed. The Lady Fanny South chargeability anomaly forms a continuous chargeability anomaly with the Lady Fanny main lode copper gold mineralisation over a ~1.4km long strike length.

### 7649050N IP Line Anomaly

The strongest IP section at Lady Fanny South was recorded on line 7649050N (Figure 3). The top of the chargeability anomaly starts at approximately 60 meters below surface, with a peak modelled inversion chargeability of **31.8 m/sec** at 230 meters below surface.

The magnitude of the 7649050N IP anomaly is of comparable strength and size to previous IP surveys that outlined the Lady Fanny and Nil Desperandum discoveries and is an exceptional drill target which will be followed up with drilling as soon as possible.



The source of the IP chargeability anomaly is interpreted to be chalcopyrite copper sulphide mineralisation however other sources of chargeability can not be ruled out.



Figure 3. Lady Fanny South IP Line 7649050N Chargeability Inversion Anomaly.

# 7648850N IP Line Anomaly

A further 200m to the south, the next line of IP on 7648850N has also recorded a strong inversion chargeability anomaly that appears to be the southern continuation of the 7649050N IP anomaly (Figure 4).

The top of the chargeability anomaly starts at approximately 180 meters below surface, with a peak modelled inversion chargeability of **23.2 m/sec** at 280 meters below surface.



Figure 4. Lady Fanny South IP Line 7648850N Chargeability Inversion Anomaly.



# SHAMROCK PROSPECT (CNB 82.5%, DCX 17.5%)

Five lines of IP were completed at the new Shamrock Prospect at a line spacing of 200m (Figures 1 & 2). The Shamrock IP lines targeted a series of shallow historical workings approximately 1.4km northeast of Nil Desperandum. No previous drilling has been recorded in this area even though considerable historical copper gold workings are present.

An exceptional new IP chargeability anomaly has been recorded at Shamrock, coincident with shallow historical workings where outcropping copper gold breccia and shear hosted mineralisation is evident. The IP anomaly is continuous across at least four IP sections over a strike length of 800m, with the two central IP section lines 7647450N and 7647650N showing the strongest inversion chargeability anomalies (Figures 5 & 6).

### 7647450N IP Line Anomaly

IP line 7647450N has recorded a very strong IP inversion chargeability anomaly with a peak value of 24 m/sec modelled at 40m below surface. The top of the anomaly is modelled to start at approximately 20m below surface. The IP anomaly is modelled with a large vertical extent of approximately 400m.



Figure 5. Shamrock IP Line 7647450N Chargeability Inversion Anomaly.

### 7647650N IP Line Anomaly

IP line 7647650N has recorded a very strong IP inversion chargeability anomaly with a peak value of 22.5 m/sec modelled at 150m below surface. The top of the anomaly starts at approximately 90m below surface. This IP anomaly is continuous with the strong IP anomaly on line 7647450N.





Figure 6. Shamrock IP Line 7647650N Chargeability Inversion Anomaly.



Figure 7. Photo looking south down the Nil Desperandum / Lady Fanny corridor, showing the location of the undrilled Lady Fanny South and Shamrock IP anomalies.

Further information regarding the Company can be found on the Company's website www.carnabyresources.com.au

For further information please contact: Robert Watkins, Managing Director +61 8 9320 2320

www.carnabyresources.com.au



#### **Competent Person Statement**

The information in this document that relates to exploration results is based upon information compiled by Mr Robert Watkins. Mr Watkins is a Director of the Company and a Member of the AUSIMM. Mr Watkins consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears. Mr Watkins has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is undertaken to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code).

#### Disclaimer

References may have been made in this announcement to certain ASX announcements, including references regarding exploration results, mineral resources and ore reserves. For full details, refer to said announcement on said date. The Company is not aware of any new information or data that materially affects this information. Other than as specified in this announcement and the mentioned announcements, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources, Exploration Target(s) or Ore Reserves that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. 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.

#### Recently released ASX Material References that relate to this announcement include:

High Grades Continue at Greater Duchess, 17 June 2022 Lady Fanny Growth Continues, 32m @ 2.6% Cu at Greater Duchess, 20 May 2022 Stunning Drill Results 68m @ 2.4% Copper at Greater Duchess, 9 May 2022 Acquisition of Mount Hope Mining Lease, 11 April 2022 Exceptional Drill Results at Greater Duchess 24m @ 5% Copper, 4 April 2022 Step Out Drilling Hits South West Extension of Nil Desperandum, 8 March 2022 Lady Fanny Shines and Expands On New IP Surveys and Drilling, 25 February 2022 Lady Fanny IP Survey lights Up Strong Chargeability Targets, 17 February 2022 Nil Desperandum Continues To Grow, 11 February 2022 Major Discovery Confirmed at Nil Desperandum, 4 February 2022 Lady Fanny Prospect – LFRC008 40m @ 1.0%Cu And 11m @ 1.7%Cu, 17 January 2022 Strong Drill Results at Nil Desperandum – 60m @ 0.9% Copper, 10 January 2022 Major Copper Gold Discovery 41m @ 4.1% Cu Inc 9m @ 10.3% Cu, 29 December 2021

### APPENDIX TWO

#### 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	• Nature and quality of sampling (eg cut channels, random chips, or specific	
	specialised industry standard measurement	Multi-channel IP receiver (10x Iris Fullwaver or GDD RX32) One
	tools appropriate to the minerals under	GDD TXIV, 20Amp transmitter
	investigation, such as down hole gamma	20x half-cell non-polarising electrodes
	sondes, or handheld XRF instruments, etc).	Eight kilometres of industry rated IP cable and collection
	These examples should not be taken as	mechanisms
	limiting the broad meaning of sampling.	Two 64s Garmin handheld GPS
		Field processing computer



Criteria	JORC Code explanation	Commentary
	<ul> <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>	• N/A
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>	• N/A
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. The total length and percentage of the relevant intersections logged.</li> </ul>	• N/A
Sub-sampling techniques and sample preparation	<ul> <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> </ul>	• N/A



Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul> <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 precision have been established.</li> </ul>	<ul> <li>The following equipment was employed in the IP geophysics survey;</li> <li>Multi-channel IP receiver (10x Iris Fullwaver or GDD RX32)</li> <li>One GDD TXIV, 20Amp transmitter</li> <li>20x half-cell non-polarising electrodes</li> <li>Eight kilometres of industry rated IP cable and collection Mechanisms</li> <li>Two 64s Garmin handheld GPS</li> <li>Field processing computer</li> </ul> East-west orientated Pole-dipole (PDP) traverses extending to the south and north of PDP traverses completed during January 2022. 50 m Rx dipole spacing and 100 m Tx pole spacing. An additional angled (35 degrees from E/W) traverses to the north of Lady Fanny grid using 100 m spaced poles for Rx and Tx. Use 50 m A-spacing for receiver and 100 m spacing for transmitter for E/W traverses. Receiver and transmitter points offset. Data to at least N=10, so entire spread does not need to be out for all readings. Measurements to be made in PDP and DPP sense. locations in
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>	GDA94 MGA zone 54 provided with this program in .cs <ul> <li>N/A</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>	• IP locations were obtained using a Garmin GPS in UTM MGA94 mode
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>	• N/A
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>	• Most IP lines are at right-angles to the main mineralisation.
Sample security	The measures taken to ensure sample     security.	• N/A
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	Not conducted



# Section 2 Reporting of Exploration Results

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

Criteria	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>The Lady Fanny Prospect area encompassed by historical expired mining leases have been amalgamated into EPM14366 and is 100% owned by Carnaby.</li> <li>The Nil Desperandum, Shamrock and Lady Fanny South Prospects are located on EPM14366 (82.5% interest acquired from Discovex Resources Limited (Discovex, ASX: DCX).</li> <li>Discovex retain a 17.5% free carried interest in the project through to a Decision To Mine.</li> <li>At a Decision to Mine, Carnaby has the first right of refusal to acquire the remaining interest for fair market value.</li> </ul>
Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>There has been exploration work conducted over the Queensland project regions for over a century by previous explorers. The project comes with significant geoscientific information which covers the tenements and general region, including: a compiled database of 6658 drill hole (exploration and near-mine), 60,300 drilling assays and over 50,000 soils and stream sediment geochemistry results. This previous exploration work is understood to have been undertaken to an industry accepted standard and will be assessed in further detail as the projects are developed.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The prospects mentioned in this announcement are located in the Mary Kathleen domain of the eastern Fold Belt, Mount Isa Inlier. The Eastern Fold Belt is well known for copper, gold and copper-gold deposits; generally considered variants of IOCG deposits. The region hosts several long-lived mines and numerous historical workings. Deposits are structurally controlled, forming proximal to district-scale structures which are observable in mapped geology and geophysical images. Local controls on the distribution of mineralisation at the prospect scale can be more variable and is understood to be dependent on lithological domains present at the local-scale, and orientation with respect to structures and the stress-field during D3/D4 deformation, associated with mineralisation.</li> <li>Consolidation of the ground position around the mining centres of Tick Hill and Duchess and planned structural geology analysis enables Carnaby to effectively explore the area for gold and copper-gold deposits.</li> </ul>
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>	* N/A



Criteria	Explanation	Commentary
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>	• N/A
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>	• N/A
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>See the body of the announcement.</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 to avoid misleading reporting of Exploration Results.</li> </ul>	• N/A
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>	As discussed in the announcement
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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>Planned exploration works are detailed in the announcement.</li> </ul>