

# ASX ANNOUNCEMENT



9 November 2022

## Rock chip assays of 16.05% Cu drive Austral's 2023 drill targets

### Key highlights:

- Drilling of prioritised phase 1 Anthill 2.0 copper oxide exploration targets within the existing ML are currently in progress.
- Drilling of phase 1 McLeod Hill and Lady Annie copper oxide exploration targets scheduled to be completed in 2022, both targets on existing ML's.
- Copper Oxide Targets in 2023 include the Drifter trend where recent surface rock chip samples assayed at 16.05% Cu, highly prospective known targets adjacent to the Anthill open pit mine and targets within the Glencore JV.
- Copper Sulphide targets in 2023 include Lady Colleen where Austral continues to define a high-grade zone, Enterprise where Austral reported a Maiden Mineral Resource, Flying Horse, Lady Annie, Investigator and Neptune.
- Flying Horse and Lady Annie have existing Mineral Resource estimates. In 2023 Austral will explore for additional high-grade oxide and sulphide copper mineralisation, including lower-tonnage higher-grade zones within the sulphide mineralisation.
- Austral continues leveraging off the material existing legacy datasets to accelerate the exploration to discovery pipeline.
- \$10m budgeted for exploration over 2023 and JV discussion continue with multiple parties.

Copper producer Austral Resources Australia Limited (ASX:ARI) ("Austral" or the "Company") is pleased to announce its planned development and exploration program for the remainder of calendar 2022 (CY22) and the 1<sup>st</sup> half of calendar 2023 (H1CY23).

### Austral's Exploration Strategy Progressed

As previously reported, Austral has committed to an annual exploration and development budget of \$10M<sup>1</sup>.

<sup>1</sup> Appendix 1, ASX release 26 April 2022

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Austral's current total JORC compliant Mineral Resource Estimate of 60Mt @ 0.7%Cu, hosts 420,000t of contained copper<sup>2</sup>. Within this headline number, mineralisation by type is approximately 50% sulphide, 25% transitional and 25% oxide. Austral is constantly reviewing this resource inventory, with the dual aims of expanding and commercialising it.

The Company's key exploration activities continue to be:

- Extend mine life beyond the current four years at Anthill by discovering additional copper oxide ore;
  - The focus in 2022 and 2023 are targets on existing mining leases and/or within 50km of the Mt Kelly SX-EW plant
- Increase the current JORC compliant Mineral Resource estimate of 420kt of contained copper
- Monetise Austral's current JORC compliant sulphide Mineral Resources of 210kt of contained copper
- Explore for primary copper and base metal sulphide mineralisation within the Company's vast 2,100km<sup>2</sup> of exploration tenure.

## CY22 copper oxide exploration has systematically progressed

### Lady Annie ML

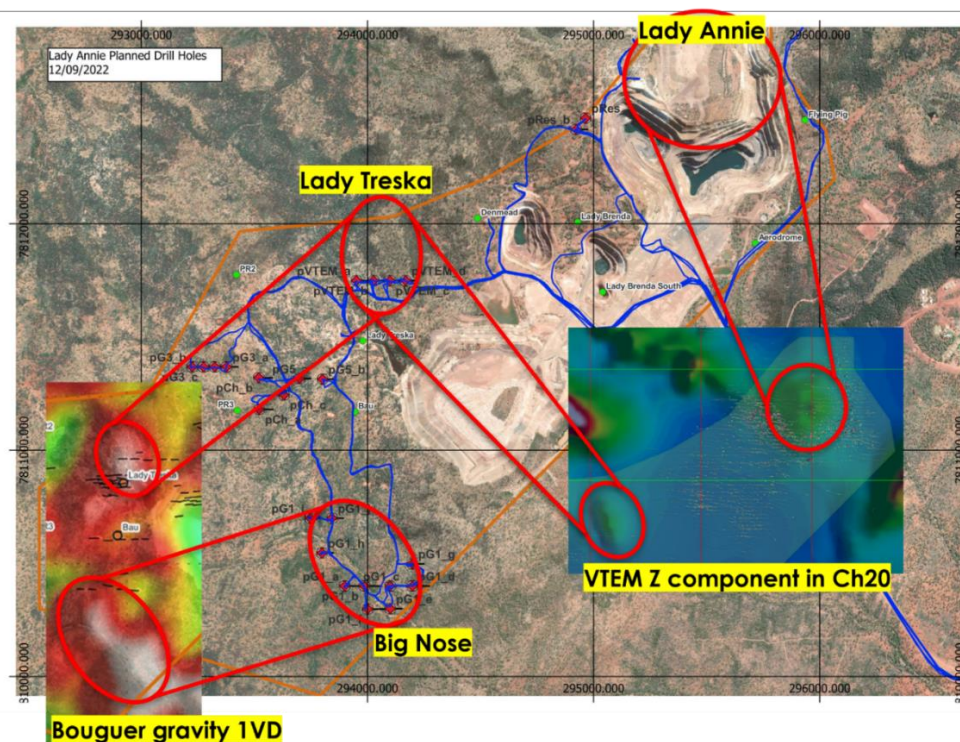


Figure 1: Plan view of Lady Annie ML with details of geophysical targets and indicative drill collars

<sup>2</sup> Appendix 1, ASX release 01 November 2021



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Lady Annie has an existing JORC Compliant resource of 12.2Mt @ 0.76% Cu at a 0.3% Cu cut-off<sup>2</sup>. Phase 1 exploration drilling is targeting geophysical targets (Figure 1). Exploration program details:

- Lady Treska - geophysical VTEM anomaly occurs with a coincidental gravity anomaly offset 100m to the west. This feature is comparable with the adjacent Lady Annie VTEM anomaly
- Big Nose - the largest geophysical gravity anomaly on ML displays a coincidental spatial distribution of high amplitude gravity with anomalous Cu in soils >500ppm
- Planned drilling in 2022 of prioritised 13 holes for 1,450m. All CHC & CCA in place. Access and drill pads are being developed.

## Anthill ML

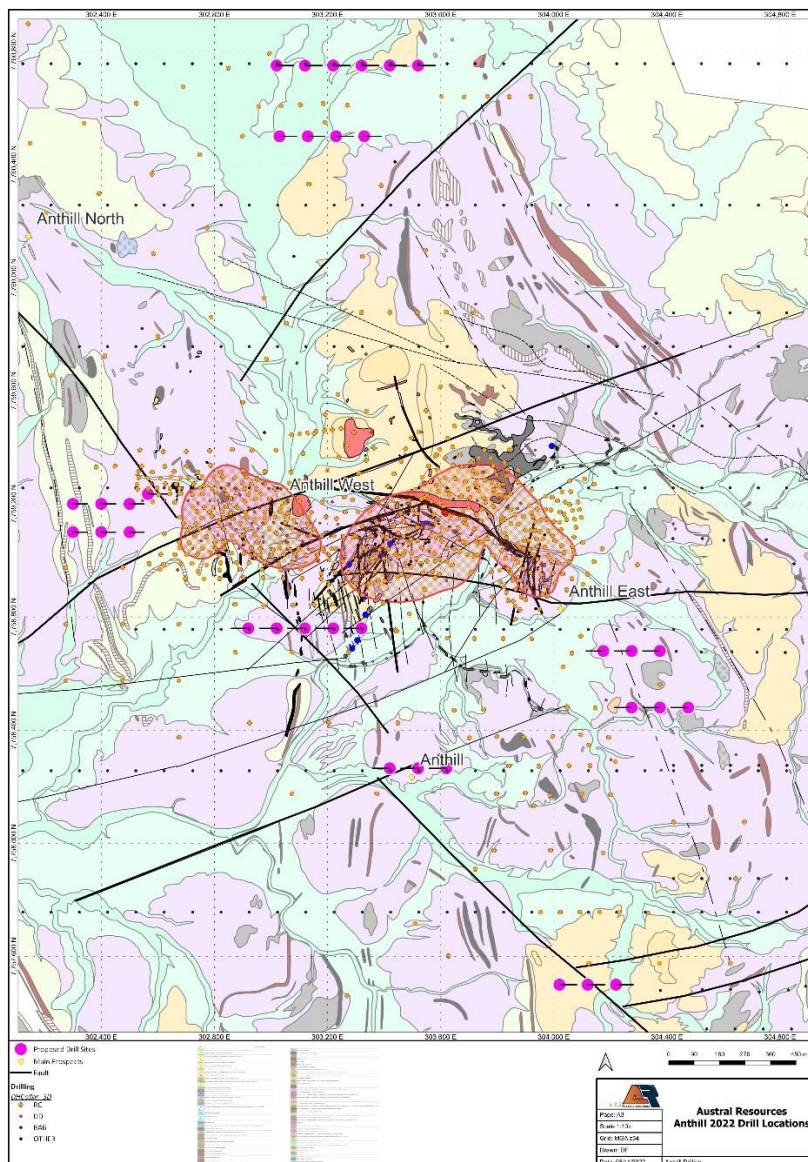


Figure 2: Anthill Drill locations for 2022

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Anthill is the current Austral Resources flagship with a JORC 2012 compliant resource of 13.8Mt @ 0.7% Cu<sup>2</sup>. During 2022 the area surrounding Anthill mine was reviewed using historical and newly acquired additional data. A significant amount of historical exploration work has been completed including surface sampling, drilling and mapping. This legacy work was integrated with additional information including;

- Following up on targets identified by previous explorers.
- Process freely available land satellite data and use the images to better delineate geological litho types, exposed mineralogy, and signify geological domain boundaries.
- Assess previous drill hole/ exploration data in relation to new-found targets to determine whether additional ground truthing can be beneficial in proving additional resource.
- Geologic knowledge gleaned from exposures in the current mining operation has been integrated into the exploration design.
- Intended 34 holes for 3,630m. All CHC & CCA approvals in place. Pads and access completed (Figure 2).
- Planned holes have been reviewed and prioritised. The highest priority 19 holes total 2,200m. Further drilling of lower priority holes will be dependent upon results from the phase 1 drilling.

## McLeod Hill ML

The McLeod Hill prospect hosts a 2012 JORC-compliant inferred resource of 1.42Mt @ 0.49% Cu<sup>2</sup>. The inferred resource is strongly correlated with an outcropping zone of strongly developed hematite alteration running parallel to and adjacent to the McNamara Fault, a reactivated D1 structure.

Details of the 2022 exploration program include:

- Surface sampling of around 500 rock chips over the southern area of McLeod's Hill ML has been completed.
- Planned drilling of 10 holes for 800m. All CHC & CCA in place. Pads and access completed.

## CY23 copper oxide targets

The key area of focus in Austral's CY23 copper oxide exploration program is located within the Company's Western Tenement Area (WTA). A key positive for the viability of any additional resource found in this area will be its economic haulage distance to the Lady Annie SX-EW plant.



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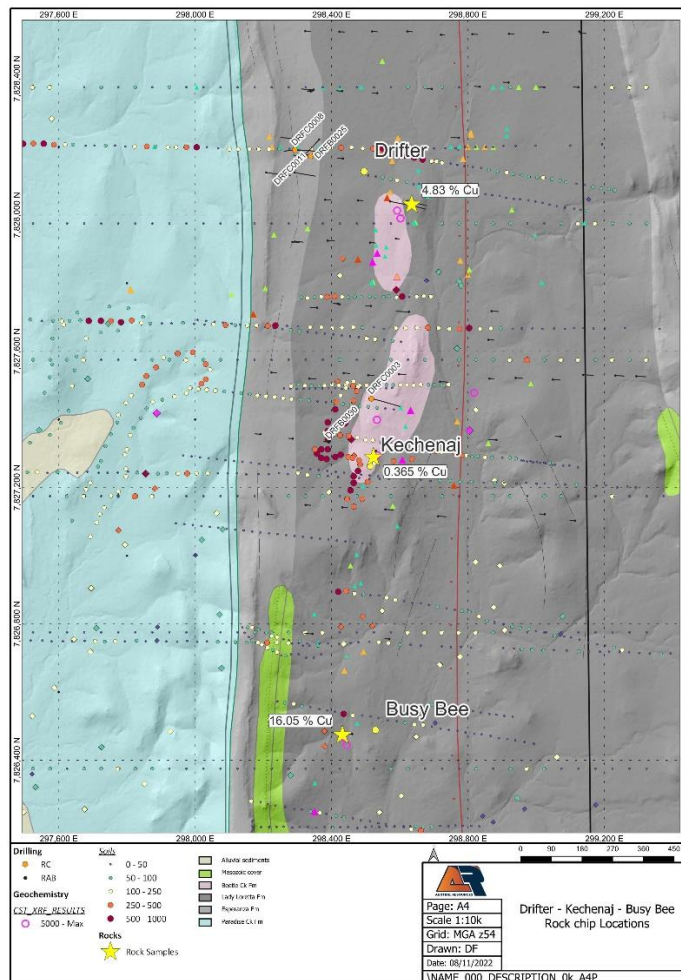


Figure 3: Drifter Prospect area, location of recent rock chip samples and historical holes cited.



Figure 4: Busy Bee copper oxide mineralisation (16.05% Cu) looking south and Malachite infill in quartz fault breccia

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There are a number of strong copper oxide exploration targets across the WTA that are scheduled for exploration in CY23. Priority exploration targets within the WTA include:

## Drifter Prospect Area

The Drifter prospect is located 15km NNE of Lady Annie (Figures 3 & 5)<sup>1</sup>. It hosts multiple historic prospects including:

- Drifter

Recent rock chip sampling includes assay results at 4.83% Cu (Appendix 2 & Figure 3). Historical drilling results (Appendix 3) include;

- 22m @ 1.23% Cu from 28m, including 5m @ 2.93% Cu from 39m (DRFB0025)
- 25m @ 0.93% Cu from 29m, including 2m @ 2.51% Cu from 39m (DRFC0011)
- 8m @ 2.36% Cu from 37m, including 2m @ 5.67% Cu (DRFC0008)

- Kechenaj

Historical drilling results (Appendix 3) include;

- 4m @ 1.34% Cu from 1m (DRFC0003)
- 4m @ 1.14% Cu from 4m (DRFB0030)

- Busy Bee

Recent rock chip sampling includes assay results at 16.05% Cu (Figure 4). Limited prior drilling did not return any significant assays.

## Lady Agnes

The Lady Agnes prospect is located 15km due north of the Lady Annie copper mine (Figure 5). The target in this prospect has significantly lower exploration maturity than the Drifter-Kechenaj area, but hosts many of the features necessary for copper mineralization and is considered reasonably prospective. The Lady Agnes prospect is located within the Gunpowder Formation and hosts a 1,800m long, +100ppm Cu soil anomaly confined between two NNE- to NE-trending structures.

Limited drilling has been completed at Lady Agnes South with the bulk of the copper soil anomaly remains untested by drilling.



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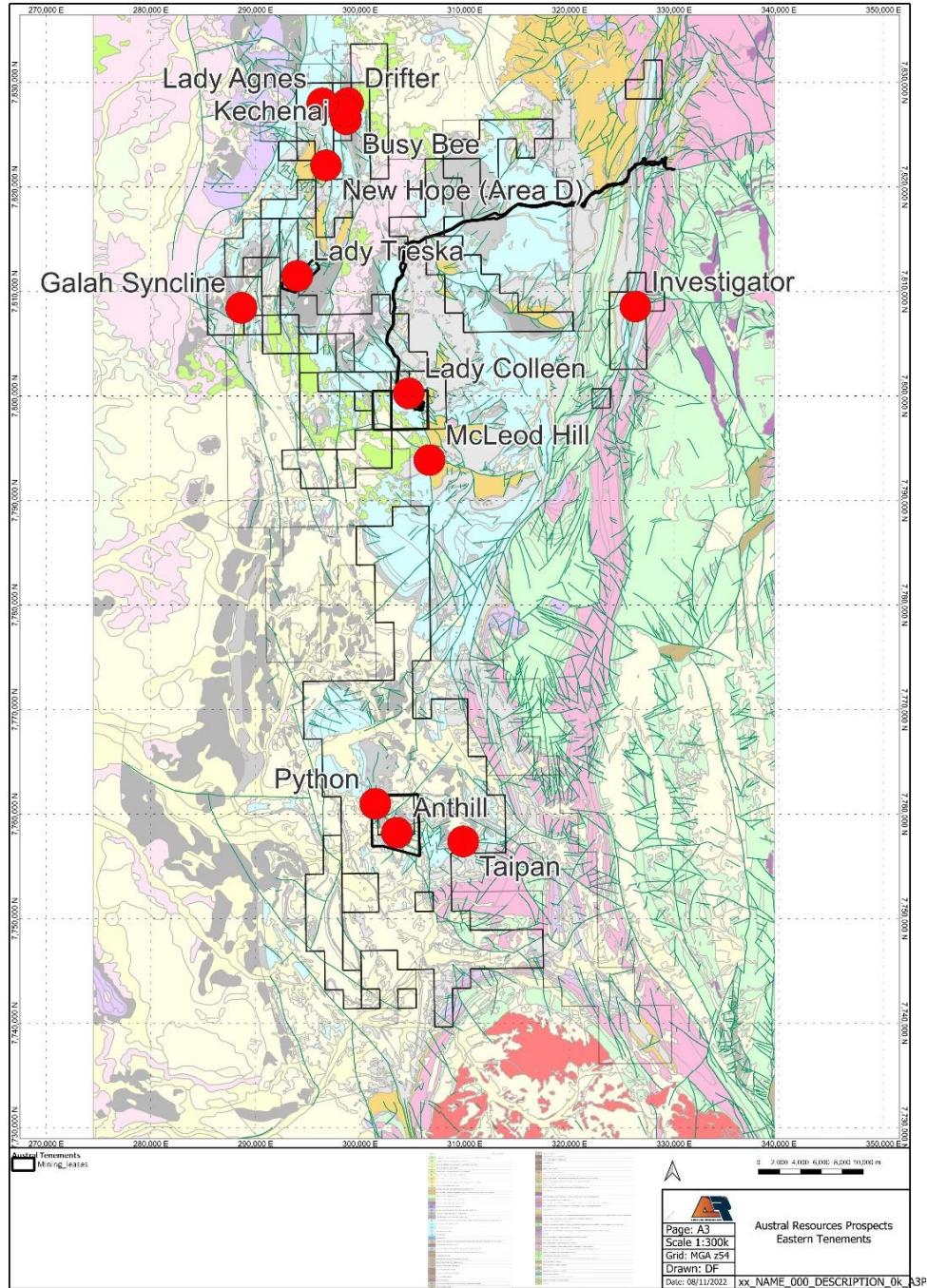


Figure 5: Austral Project and Prospect locations Western Tenement Area

## New Hope

The New Hope prospect is located 10km north of Lady Annie and hosts a 650m by 200m, +100ppm copper soil anomaly within the upper Gunpowder Formation (Figure 5). The prospect has not been drilled. New Hope is a conceptual target that displays many important ore-forming characteristics, but it has only a subtle supporting copper anomaly. There are favourable structural, stratigraphic and geophysical features present at New Hope.

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## Galah Syncline

The Galah Syncline prospect area is located 7km southwest of Lady Annie and comprises a number of strongly folded anticlines and syncline within an area of structural complexity (Figure 5). The area is considered an analogy to the Lady Loretta Syncline and Lady Loretta sediment-hosted Zn-Pb-Ag deposit.

## Anthill region

The most prospective known targets within EPM16244 include Python, Taipan, MaxEnt23, Lindsay's Lament and Mercurius (Figure 5). There are favourable structural, stratigraphic and geophysical features present across EPM16244. The extent, complexity and depth of cover across EPM16244 is considered to have hindered effective exploration for both copper oxide and copper sulphide.

## Glencore JV

An assessment of the copper oxide prospectivity of the Glencore JV tenure (EPM25435 Russell Fault) was completed utilising first-order exploration targeting vectors developed from existing CST and consultant's work<sup>3</sup>. Results enabled a confident first-pass assessment of the JV tenure, identifying several exploration targets for further evaluation. This assessment provides a sound basis into which to integrate the further exploration data provided by Glencore as part of the JV. Over 2023 the exploration program across the Russell Fault EPM 26435 as part of the JV will include:

- Source all relevant Russell Fault exploration data.
- Determine extent, vintage and quality of data relevant to copper oxides.
- Identify regional and local structures with the emphasis on structural elements known to be highly prospective.
  - Conduct field visits to prioritised prospective areas including mapping and geochemical sampling if warranted.
  - Review and integrate copper oxide targets at Russell Fault EPM 26435 into a prioritised sequence, ranked against current Austral exploration targets, for further testing and evaluation.

## CY23 copper sulphide targets

### Lady Colleen

The 2022 exploration programs at Lady Colleen has confirmed the presence of a continuous high-grade core at Lady Colleen<sup>4</sup>. Critically, the high-grade core remains open along strike and down

<sup>3</sup> Appendix 1, ASX release 26 September 2022

<sup>4</sup> Appendix 1, ASX release 13 October 2022



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plunge. In 2023 Austral will focus on understanding the controls on high-grade mineralisation to target the next phase of drilling exploring the potential continuation along strike and down plunge.

## Flying Horse

Flying Horse has an existing JORC compliant Mineral Resource estimate of 14.51Mt @ 0.77% Cu at a 0.3% cut-off, including a total sulphide Mineral Resource of 10.71Mt @ 0.85% Cu<sup>5</sup>. In 2023 Austral will undertake an exploration program similar to that successfully completed in 2022 at Lady Colleen, exploring for additional high-grade oxide and sulphide copper mineralisation with a focus on identifying lower-tonnage higher-grade zones within the sulphide mineralisation.

## Lady Annie

Lady Annie has an existing JORC compliant Mineral Resource estimate of 12.17Mt @ 0.76% Cu at a 0.3% cut-off, including a total sulphide Mineral Resource of 4.88Mt @ 0.86% Cu<sup>5</sup>. In 2023 Austral will undertake an exploration program similar to that successfully completed in 2022 at Lady Colleen, exploring for additional high-grade oxide and sulphide copper mineralisation with a focus on identifying lower-tonnage higher-grade zones within the sulphide mineralisation.

## Investigator

This prospect shows strong geologic and structural similarities to the Mammoth–Esperanza camp, located 12km along strike to the north (Figure 5). There are numerous Cu anomalies with sparse drilling. Each anomaly ranges between 800m and 1.2km in strike<sup>1</sup>. Prior drilling results (Appendix 3) include:

- 4m@ 1.36% Cu from 150m (INVC0003, includes 1m@ 4.16% Cu from 150m).

## Enterprise

In 2022, Austral announced a completed maiden Mineral Resource Estimate for the Enterprise Deposit located within Austral's Eastern Tenement Area (Figure 6)<sup>6</sup>. The Mineral Resource at a 0.7% Copper cut-off and to a depth of 85m below surface is:

- 0.58 Mt @ 1.3% Cu (Inferred Sulphide Mineral Resource).

Mineralisation is tested to over 200m in depth, remains open at depth and the high-grade core appears to lengthen at depth. The Enterprise Mineral Resource has potential to improve with further exploration and is adjacent to other current copper operations.

<sup>5</sup> Appendix 1, ASX release 02 August 2022

<sup>6</sup> Appendix 1, ASX release 09 August 2022

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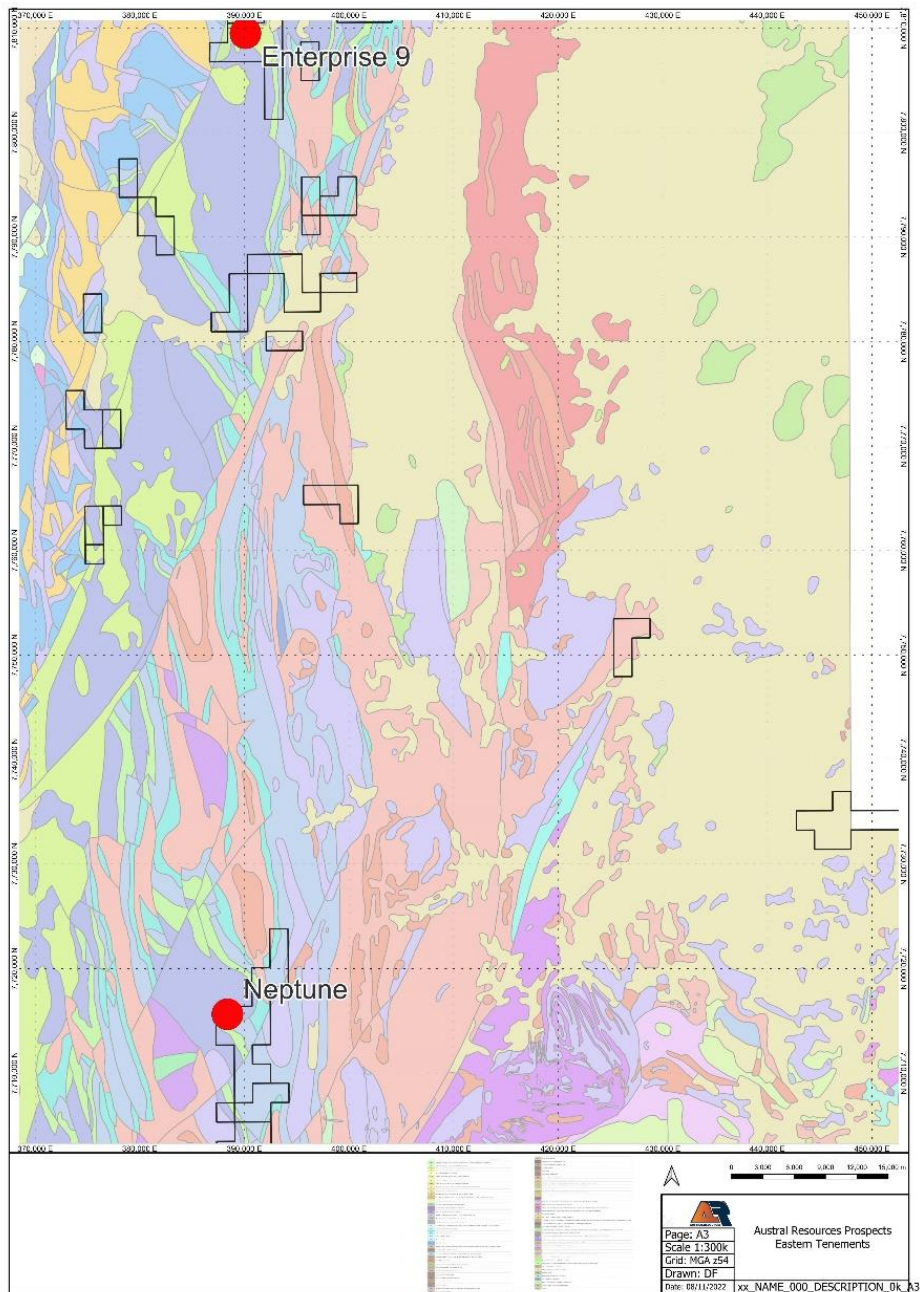


Figure 6: Austral Project locations Eastern Tenements

## Neptune

The Neptune prospect is located within the Mary Kathleen belt within Austral’s Eastern Tenement Area (Figure 6)<sup>2</sup>. Neptune is approximately 55km west of Mt Isa and 60km north of Carnaby’s recent Nil Desperardum Cu-Au discovery. Discoveries by Hammer Metals in 2021 at Trafalgar (30km to south) highlight the prospectivity of the Mary Kathleen belt and elevates the importance of the Neptune target.



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Prior drilling intercepted several meaningful copper mineralized zones in two locations within the Neptune soil anomaly north of the fault (Figure 7 & Appendix 3):

- 8m @ 0.82% Cu from 20m (CCRC001)
- 20m @ 0.41% Cu from 32m (CCRC001)
- 16m @ 0.42% Cu from 32m (CCRC008).

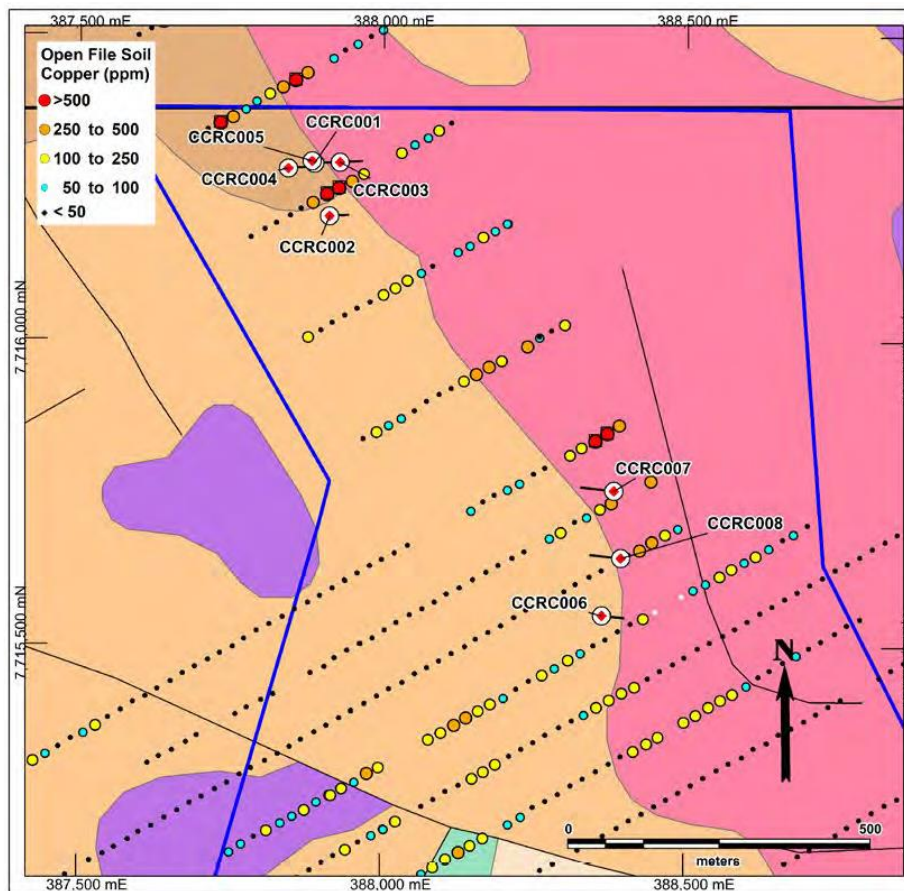


Figure 7. Neptune prospect, location of RC drillholes and results from soil geochemistry

Austral's Managing Director and CEO, Dan Jauncey said:

"We are thrilled we are now on track with our Anthill copper production with Mt Kelly processing facility hitting 1,000 tonne per month during this quarter. This enables our team to focus on the longer-term future of Austral, and extending our revenue potential through exploration. Our team continue to set about defining additional copper oxide and sulphide resources that both extend and increase feed to the Mt Kelly plant and extend Austral's mine life. This discovery process has seen a range of exploration activities progress over 2022. This work will hopefully deliver some further outstanding exploration results over coming months that build on the strong assay metrics recently announced from our Lady Colleen deposit.

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*Looking to calendar 2023, the next stages of our ongoing exploration program are already taking shape. A key area of focus in next year's copper oxide exploration program will be identified targets within 50km of our Mt Kelly SE-EW plant at Mt Kelly.*

*We are very proud of our development journey, for such a small team to have achieved so many milestones is very pleasing. As the Company's Mt Kelly copper cathode production facility continues to build scale, it will provide a revenue base that helps us fund our ongoing exploration efforts. While this ramp up phase is occurring, we continue to explore ways to realise the prospectivity inherent across our tenure. We look forward to updating the market on results flowing from these initiatives over the months ahead."*

**This announcement is authorised for market release by Managing Director and CEO, Dan Jauncey.**

## **FOR FURTHER INFORMATION PLEASE CONTACT:**

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## **About Austral Resources**

Austral Resources Australia Limited (ASX:ARI) is a copper cathode producer operating in the Mt Isa region, Queensland, Australia. Its Mt Kelly copper oxide heap leach and solvent extraction electrowinning (SX-EW) plant has a nameplate capacity of 30,000tpa of copper cathode. Austral has developed its Anthill oxide copper mine which has an Ore Reserve of 5.06Mt at 0.94% Cu. The Company expects to produce 40,000t of copper cathode over a four-year period from mid-2022.

Austral also owns a significant copper inventory with a JORC compliant Mineral Resource Estimate of 60Mt@ 0.7% Cu (420,000t of contained copper) and 2,100km<sup>2</sup> of highly prospective exploration tenure in the heart of the Mt Isa district, a world class copper and base metals province. The Company is implementing an intensive exploration and development program designed to extend the life of mine, increase its resource base and then review options to commercialise its copper resources.

To learn more, please visit: [www.australres.com/](http://www.australres.com/)



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## Competent Persons' Statement

The information in this announcement that relates to Mineral Assets, Exploration Targets, Exploration Results, Mineral Resources and Ore Reserves is based on and fairly reflects information compiled and conclusions derived by Mr Andrew Beaton and Mr Ben Coutts, Competent Persons who are Members of the Australasian Institute of Mining and Metallurgy. Mr Beaton is the Site General Manager at Austral and Mr Coutts is Exploration Manager of the Company. Mr Coutts and Mr Beaton are geologists and have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results and Ore Reserves (2012 JORC Code). Mr Coutts and Mr Beaton consent to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

## Ore Reserve and Mineral Resource Estimate Statements

Detailed information that relates to Ore Reserves and Mineral Resource Estimates is provided in Austral Resources Prospectus, Section 7, Independent Technical Assessment Report. This document is available on Austral's website: [www.australres.com](http://www.australres.com) and on the ASX released as "Prospectus" on 1 November 2021. The Company confirms that it is not aware of any new information or data that materially affects the exploration results and estimates of Mineral Resources and Ore Reserves as cross referenced in this release and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not changed.

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## Appendix 1. Key Austral ASX announcements

DATE	TITLE
<b>1 Nov 2021</b>	Austral Prospectus
<b>3 Nov 2021</b>	Austral lists on ASX
<b>9 Nov 2021</b>	Anthill and Mt Kelly development underway
<b>17 Nov 2021</b>	Anthill blasting commences
<b>7 Dec 2021</b>	Thiess signing
<b>14 Dec 2021</b>	Updated Company presentation
<b>11 Jan 2022</b>	Mining commences at Anthill
<b>30 Jan 2022</b>	December Quarter Report
<b>3 Feb 2022</b>	Offtake and Prepayment Agreement secured with Glencore
<b>31 Mar 2022</b>	Austral's Anthill Mine Ore Shipments Commence
<b>26 Apr 2022</b>	Exploration update
<b>28 Apr 2022</b>	March Quarter Report
<b>4 May 2022</b>	RIU Conference presentation
<b>6 Jun 2022</b>	Austral exploration update
<b>8 Jun 2022</b>	Glencore (MIM) JV
<b>8 Jun 2022</b>	Resources Rising Stars Presentation
<b>27 Jul 2022</b>	June Quarter Report
<b>28 Jul 2022</b>	Lady Colleen Drilling Update
<b>2 Aug 2022</b>	Drilling at Flying Horse
<b>9 Aug 2022</b>	Maiden Mineral Resource at Enterprise
<b>11 Aug 2022</b>	Successful Placement
<b>26 Aug 2022</b>	Operational and Strategic Update
<b>29 Aug 2022</b>	Half-year Report
<b>5 Sep 2022</b>	New Drilling at Lady Colleen
<b>16 Sep 2022</b>	Austral Board Approves Scoping Study for Lady Colleen
<b>26 Sep 2022</b>	Austral and Glencore Finalise Agreements for \$8.3M Spend
<b>27 Sep 2022</b>	Lady Colleen Assays Confirm 5m @ 5.74% Cu
<b>13 Oct 2022</b>	Step-out Drilling Delivers 6m @ 2.95% Cu at Lady Colleen
<b>28 Oct 2022</b>	Lady Colleen grade increases by 200%
<b>31 Oct 2022</b>	Austral September 2022 Quarterly Report



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## Appendix 2. Surface Geochemical results reported in this release

Sample Type	Sample Method	COORD SYS	Easting	Northing	RL	Description	Date Sampled	Prospect	EPM	ME-ICP49 Ca %	ME-ICP49 Cu %	ME-ICP49 Fe %	ME-ICP49 Mg %	ME-ICP49 S %	Cu-OG46 Cu_OG %
ROCK	INSITU	MGA94_54	298523	7827289	312	dolomitic siltstone, weakly laminated, malachite/chrysocolla on fractures	23-Oct-22	Kechenaj	EPM17088	4.94	3650	0.6	0.04	<0.01	
ROCK	INSITU	MGA94_54	298432	7826474	302	fault breccia, qtz vn fragments malachite cement	23-Oct-22	Busy Bee	EPM17088	0.02	>50000	0.39	0.01	0.03	16.05
ROCK	INSITU	MGA94_54	298635	7828031	320	fine-medium grain sandstone, malachite stained	23-Oct-22	Drifter	EPM17088	1.05	48300	13.25	0.03	0.01	

## Appendix 3. Historical drill hole summary table

HoleID	Type	Depth	Easting	Northing	RL	Dip	Azimuth	Prospect	Company	Lease_ID
DRFB0025	RAB	75	298341	7828176	318	-60	270	Drifter	CST	EPM17088
DRFB0030	RAB	30	298392	7827335	309	-60	270	Kechenaj	CST	EPM17088
DRFC0003	RC	150	298517	7827461	320	-60	90	Kechenaj	CST	EPM17088
DRFC0008	RC	108	298292	7828191	320	-60	90	Drifter	CST	EPM17088
DRFC0011	RC	96	298339	7828173	316	-60	270	Drifter	CST	EPM17088
INVC0003	RC	198	316377	7810598	315	-60	60	Investigator	CST	EPM16240
CCRC001	RC	120	387886	7716289	352	-60	91	Neptune	CST	EPM25515
CCRC008	RC	78	388394	7715645	359	-50	276	Neptune	CST	EPM25515

## Appendix 4. JORC Code Table 1

## Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems.</i></p> <p><i>Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>RC drilling was sampled on 1 m intervals to collect 2 to 3 kg samples. The splitter was cleaned at the end of each rod, the cyclone was cleaned at the start of each hole.</p> <p>Diamond core drilling was used to sample half core in 1 m lengths based on mineralisation. Samples were sent to ALS lab for sample preparation and analysis. The laboratory conforms to Australian Standards ISO 9001 and ISO 17025.</p> <p><b>Neptune Surface Sampling Techniques</b></p> <p>Historical soil sampling was completed by Delta Gold Exploration Pty limited and Kalmet Resources NL, in the year ending July 1992. A 100m x 20m grid was erected over the Neptune prospect, in an area of magnetic anomaly evident from BMR magnetics data and weak copper and gold stream sediment anomalies near the north of EPM 5985. The grid was soil sampled non selectively to the local grid. The open file relinquishment report 'CR28992' does not detail the method in which samples were collected, assayed or quality controlled.</p> <p><b>Neptune RC Drill Sampling</b></p> <p>CST 2015 – used industry standard RC drilling techniques to produce 1m interval bulk samples of RC chip (approximately 20kg) whilst taking a homogenised (using a triple deck riffle splitter) 2kg offshoot representative sample in a calico bag. Thereafter, the bulk samples were collected into plastic bags and deposited on the ground in rows. Neptune samples were manually composited into four meter intervals by spearing</p>

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Criteria	JORC Code explanation	Commentary
		<p>each of the 1m, 2kg triple deck riffle split samples and placing the four individual spear samples into a single numbered calico bag.</p> <p>On completion of the RC hole, the 1m, 20kg bulk samples were stored in a sample farm at the drill site with the hole and metre interval clearly marked on the outside of the bag.</p>
Drilling techniques	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<p>Reverse circulation and percussion methods were used to test near surface oxide mineralisation while diamond drilling (HQ and NQ) was used for evaluating deeper sulphide mineralisation.</p> <p>RC drilling used standard face sampling hammers, high pressure compressor and a riffle splitter.</p> <p>Diamond drilling was HQ size using standard/triple tubing.</p> <p>Drill holes considered unreliable such as water bore, percussion holes, RAB holes, were excluded from the resource estimate</p>
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>For RC samples the weight of the recovered sample was recorded as high, medium or low or as a number from 1 to 5. The drill hole database indicates that 35% of the samples have a high sample recovery weight and 51% with medium sample recovery weights.</p> <p>For diamond drilling, the sample recovery averages 95.39%.</p> <p>RC and diamond sampling methods are appropriate for the style of mineralisation. The AR1 and CST RC drilling procedures include adequate measures to control sample contamination and minimise sample loss.</p>
Logging	<p><i>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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged.</i></p>	<p>Every meter of Diamond, RC &amp; RAB drilling has been logged and includes lithology, alteration, mineralogy, and veins. Assays were recorded over 4m composites for some holes and for every meter for others.</p> <p>The logging is generally qualitative in nature. Some percentages of identified minerals have been recorded which were quantitative.</p> <p>Geological logging entered into a Microsoft Access database includes lithology, oxidation, grain size, colour, rock texture, dominant copper minerals, fracture angle and bedding angle (DD).</p>
Sub-sampling techniques and sample preparation	<p><i>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.</i></p>	<p>A diamond core is sawn longitudinally with half core taken for sampling. The RC drilling has an attached cyclone and riffle splitter from which 2 to 3 kg samples were collected.</p> <p>Field duplicates were collected for the RC samples from a bucket containing the rejects using a spear.</p> <p>Composite sampling (~4m intervals) of RC drill samples was by spearing each of the 1m, 2kg triple deck riffle split homogeneous samples in the interval and placing them into a single numbered calico bag.</p> <p>There is no mention as to whether individual meter sample weights differed over the 4m composite range that could bias a composite toward one meter or another when spearing. Each 1m RC homogenised sample is assumed to be of same quantity for combining purposes.</p> <p>Duplicates for diamond core samples were taken from the crushed rejects at ALS laboratory.</p>
Quality of assay data and laboratory tests	<p><i>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 (e.g. standards, blanks, duplicates, external laboratory</i></p>	<p>Standards and blanks were inserted at a rate of 1 in 25 and a minimum of 2 standards per batch. Standards were picked to match the expected grade of the mineralised interval.</p> <p>Blanks were inserted immediately after the standard.</p> <p>Field duplicates were inserted with the blanks and standards.</p> <p>Prior to 2008 there was minimal QAQC, but some check sampling and production reconciliation indicated no material problems with assaying. Available QAQC data was assessed and there were no significant sampling and assaying issues noted.</p>

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Criteria	JORC Code explanation	Commentary
	<i>checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	The frequency of standards, blanks and duplicates is considered adequate. 2022 XRF sampling protocols are being established to statistically determine levels of accuracy compared to laboratory assay methods.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.</i>	A twinning program was conducted by CopperCo of selected Buka drilling at the Lady Annie deposit and assessed by FinOre. The assessment showed that the CopperCo twinned drilling within 7.5 m (81 drill holes) of existing Buka drilling showed a higher mean copper grade while comparison with drilling within 10 m (296 drill holes) showed a lower mean copper grade. However, the older Buka and CopperCo drilling is overwhelmed by the more recent drilling by CST. There are a small number (19) of closed spaced drilling (within 10 m) that intersect the <b>Anthill</b> copper mineralisation. Comparison of the close-spaced drilling show that in most cases the trend and magnitude of the copper mineralisation is consistent between the paired drill holes. The drill hole database is maintained on site in digital (Microsoft SQL database) and hard-copy format. A designated database administrator maintains the database and is tasked with adding data and making any corrections to the database. Negative assay values indicate half detection limit (typically 0.005). Unsampled intervals within the mineralised envelope were assigned a value of 0.01% Cu.
Location of data points	<i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.</i>	Majority of the drill hole locations are reported to be by differential GPS which provides sub-metre accuracy for regional AMG coordinates. All drilling is in Australian Map Grid (AMG84) coordinates Zone 54. Down hole surveys were collected using a range of methods with the majority of the drill holes surveyed using a single-shot or multi-shot camera on approximately 30 m intervals. 16% of samples at Lady Annie were surveyed by compass and 3% were vertical. For 34% of the Lady Annie drill holes the survey method is not recorded in the database. Topography is provided by a detailed survey by Austral, which is continuously updated with sub metre accuracy. The current topography surfaces have been updated to the end of January 2021.  <b>Neptune</b> The documented drill hole collar locations were set out using GPS and recorded X,Y to the nearest meter. Collar elevations were recorded to the nearest 10mm, however the method for acquiring the higher accuracy 'Z' elevation data is not known. Hole azimuths were set out by hand held compass from surface and followed by reflex surveys every 50m down hole where possible. Results are reported in the MGA94 Zone 54 Grid system. Reference is made to drilling below the Neptune Mine workings further verifying the location of drill collars.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.</i>	Lady Annie/Lady Brenda: drill spacing varies from 10 m by 10 m to 100 m by 100 m, averages 20 m by 10 m to 20 m by 20 m. Mt Kelly/Flying Horse: drill spacing varies from less than 20 m by 20 m to 100 m by 50 m, averages approximately 50 m. Swagman: drill spacing on oblique grid of 20 m by 20 m. McLeod Hill: drill spacing is approx. 50 m by 25 m. Anthill drill spacing varies from 20 m to over 100 m and averages approximately 20 m by 40 m. Drill hole data was composited to 3 m intervals by mineralisation domain for Lady Annie, Mt Kelly and Anthill main areas, and 1 m intervals by mineralisation and oxide domain for Swagman and McLeod Hill. Drill hole data was composited to 3 m intervals by mineralisation domain for Lady Annie and , Mt Kelly/Flying Horse.



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		<p>Neptune: Drilling at Neptune was at an early stage, with drillholes targeting old workings or geochemical anomalies, with data spacing at this stage is insufficient to establish the continuity required for a Mineral Resource estimate.</p> <p>The drill spacing is sufficient to capture the salient geological features controlling the mineralisation and is sufficient, in places, to define Measured and Indicated Mineral Resources.</p>
Orientation of data in relation to geological structure	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p>	<p>Lady Annie/Lady Brenda: drilling is oriented on average 60 toward an azimuth of 090 and 270 ; copper mineralisation shallow dipping in the near surface oxide.</p> <p>Mt Kelly/Flying Horse: drilling is oriented 60 toward azimuths of both 040 and 220 ; copper mineralisation is flat dipping near surface oxide and steeper mineralisation is dipping 35 to 40 with a strike of 120 to 170 .</p> <p>Swagman: drilling gridlines are orientated towards the north-east; mineralisation is flat lying in the oxide and dips approximately 50 toward 200 for the transition and sulphide mineralisation.</p> <p>McLeod Hill: drilling is oriented toward the east to north-east; mineralisation strikes at 170 and dips approximately 60 toward the west.</p> <p>Anthill: drilling is oriented on average 60 toward azimuths 090 and 270 in Anthill west and 035 and 215 for Anthill east and link zone; Copper mineralisation is generally shallow dipping in the near surface oxide; Anthill west there is steep mineralisation that dips 40 to 65 and strikes 300.</p> <p>Drilling is appropriately oriented to intersect the mineralisation across dip to avoid any sampling bias.</p> <p>Neptune: Drill holes at Neptune have been oriented perpendicular to the Hardway Granite and Leichhard Volcanics sheared contact.</p>
Sample security	<i>The measures taken to ensure sample security.</i>	<p>Samples were collected by CST field staff during previous drilling campaigns and AR! Staff during current drilling campaigns. Sample numbers are recorded on the sample sheet and the data is later entered into the corresponding drill log. Once the hole/log is complete the file is sent to the database manager and checked by a geologist. Samples are placed in numbered samples dispatch bins, prior to being sent to the laboratory. The sample number, bin and date-time are recorded in the sample dispatch sheet which is signed by the operating field technician. Each sample bin or approximately every 300 samples are allocated a batch number and a separate laboratory submission sheet. Samples were dispatched by truck to the ALS Townsville laboratory weekly.</p> <p>The assay results were sent from the Laboratory directly to the database</p> <p>The assay results were sent from the laboratory directly to the manager and geologist by email.</p>
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	<p>FinOre Mining Consultants undertook an audit of the drill hole QAQC including an audit of the laboratory in 2005 for the CopperCo Lady Annie Feasibility Study.</p> <p>In 2007 and 2008 Maxwell GeoServices assessed the CopperCo QAQC data.</p> <p>Snowden in 2010 assessed the QAQC data collected since 2008.</p> <p>Golder completed a high-level database review in 2012, including undertaking a small number of checks of the hard-copy data with the digital data and rudimentary checks of the drill hole database.</p> <p>No major issues with the sampling and assaying were identified by the reviews. The RC and diamond drilling data are appropriate for Mineral Resource estimation.</p>

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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 tenement and land tenure status	<p>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.</p> <p>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.</p>	<p>Austral Resources Lady Annie Pty Ltd holds 15 Mining Leases (ML) and 14 Exploration Permit for Minerals (EPM) around the Lady Annie Copper Project. Mineral Resources, Ore Reserves and all mining and processing infrastructure are located on ML's.</p> <p>A further 18 EPM's are held by Austral Resources Exploration Pty Ltd, a 100% subsidiary of Austral Resources.</p> <p>All tenements are in good standing and no known impediments exist</p>
Exploration done by other parties	<p>Acknowledgment and appraisal of exploration by other parties.</p>	<p>Buka Minerals Limited (Buka) purchased the Lady Annie and Lady Loretta deposits in 1996 and commissioned a pre-feasibility study into the development of a standalone cathode copper operation at Lady Annie. In June 2004, Avon Resources was renamed to CopperCo Limited (CopperCo) and acquired 100% of the Lady Annie Project from Buka. The Lady Annie Project was developed by CopperCo and mining commenced at Mount Clarke with pre-stripping in April 2007 and at Lady Annie in October 2008. The Mount Kelly process plant was commissioned in October 2007.</p> <p>Exploration primarily utilised RC and diamond drilling to test the Lady Annie, Mt Kelly and Anthill areas.</p> <p>Drilling at Lady Annie and Mt Kelly was conducted from 1964 to present-day with the majority of the drilling completed in 2004 using predominantly modern reverse circulation (61% of drilling) and diamond drilling (11% of drilling) methods. The rest of the drilling is predominately rotary air blast (RAB 12% of drilling) and unspecified drilling methods (10%).</p> <p>Drilling at the Anthill deposit was conducted from 1972 to 2012 with the majority completed in 2010 to 2012. Drilling is by predominantly modern reverse circulation (70% of drilling) and diamond drilling (14% of drilling) plus RC with diamond tail (12%) methods.</p>
Geology	<p>Deposit type, geological setting and style of mineralisation.</p>	<p>The Lady Annie mining area is contained within the north trending Lady Loretta High Strain Zone. The Lady Annie deposit is hosted by fault-bounded blocks of gently folded Paradise Creek and Upper Gunpowder Creek Formations. The Lady Brenda deposit is located approximately 300 m to the south-west of the Lady Annie deposit.</p> <p>Copper mineralisation at Lady Annie and Lady Brenda is hosted in dolomitic, carbonaceous and argillaceous sandstones and siltstones. Oxidation of these units has removed the dolomitic material leaving behind ferruginous silty sandstones or kaolinitic sandy siltstones. The primary copper sulphide mineralisation appears to be structurally controlled, being commonly associated with well-defined fault-related silicification.</p> <p>The Mount Kelly mining area, where Flying Horse Deposit is located, is dominated by early to mid-Proterozoic siltstones and dolomitic siltstones of the McNamara Group. Copper mineralisation occurs within units of the McNamara Group and is reportedly related to the north-west-trending Mount Kelly and Spinifex Faults, which intersect and cut the McNamara Fault. The known mineralisation is associated with multiple phases of brecciation and veining along the fault zones. The copper oxide mineralisation appears to be shear and fault controlled. The Swagman and McLeod Hill deposits occur within a few kilometres of the Mt Kelly mining area and have similar rock types and mineralisation styles. The mineralisation at both deposits is controlled by structural features such as shear zones and faults.</p> <p>The Anthill deposit is hosted predominately within the Esperanza Formation. The host lithologies of the ore body are mostly inferred to be dolomitic siltstones; however the strong weathering and oxidation process has resulted in the near complete loss of dolomite from the rock in the upper oxide zone. The mineralisation appears to be controlled by a combination of steep</p>

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		<p>structural elements and broad domal features. The Anthill transition is commonly hosted in structurally controlled silicified zones as well as in silicified sedimentary breccias in dolomite, which appear to have been a preferred permeability horizon for mineralising fluids.</p> <p>The Neptune project area occurs within the Mary Kathleen Zone and the Kalkadoon-Leichhardt Belt of the mid-Proterozoic Mount Isa Inlier. The stratigraphic succession within the area includes Magna Lynn Metabasalt, Argylla Formation, Ballara Quartzite, Corella Formation and Mount Philp Breccia/Agglomerate, intruded by the Wonga Batholith and meta-dolerites of various ages. During the Isan orogeny, these rocks were deformed by an early extensional phase (D1), followed by an east-west directed compressional phase (D2) and finally a late period of faulting (D3). Known gold and/or base metal mineralisation within the Mary Kathleen Zone includes shear and fault-controlled vein copper-gold mineralisation, Tick Hill-style gold-only mineralisation, and stratiform, sediment-hosted lead-zinc-silver mineralisation at Dugald River.</p>
Drillhole information	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: easting and northing of the drillhole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar dip and azimuth of the hole down hole length and interception depth hole length.</i></p> <p><i>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.</i></p>	Drillhole information is considered to be of a good standard.
Data aggregation methods	<p><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></p> <p><i>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.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>No data aggregation methods have been applied.</p> <p>No metal equivalents are used or presented</p>
Relationship between mineralisation widths and intercept lengths	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i></p> <p><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').</i></p>	Drill intersections are reported as downhole intersections and may not reflect true widths.
Diagrams	<p><i>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</i></p>	All diagrams contained in this document are generated from spatial data displayed in industry standard mining and GIS packages.



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	<i>of drill hole collar locations and appropriate sectional views.</i>	
Balanced reporting	<i>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.</i>	Balanced reporting principles are being applied.
Other substantive exploration data	<i>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.</i>	Historic geophysical data was reprocessed late 2021 to confirm projections and apply new processing methods where possible
Further work	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Detailed topographic surveys are recommended. Lag sampling methods are being compared to soil and rock chip sampling (where available) in gridded areas. Further work planned by Austral is detailed in the body of this report, and includes geophysical surveys, surface mapping and geochemical sampling and drilling as appropriate.

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