

# High grade copper in rock chips at Cyclops and Goodrich Prospects, Yeoval Project, NSW

- Assays from rock chip samples from around widespread historic workings at our Cyclops Prospect returned high grade copper with strong gold, silver, lead and zinc – results confirming the extent and tenor of mineralisation at Cyclops
- Cyclops Prospect rock chip highlights:
  - GRR0370 3.87% Cu, 0.31g/t Au, 20.7g/t Ag, 210ppm Mo
  - GRR0371 4.51% Cu, 11.2g/t Ag, 342ppm Mo, 1270ppm Zn
  - GRR0372 1.28% Cu, 13.4g/t Ag
- Samples GRR0370 and GRR0371 were taken from areas where there have been little or no historic drilling, which provides a considerable drill target opportunity for Godolphin
- Rock chip assays from historic workings at the Goodrich Prospect returned high grade copper and molybdenum with elevated gold, silver, lead and zinc and indicate the nature and tenor of the mineralisation style
- Goodrich prospect rock chips include:
  - GRR0366 1.54% Cu, 0.15g/t Au, 7.67g/t Ag
  - GRR0368 0.15% Cu, 3,320ppm Mo, 0.23% Pb,
- High resolution ground magnetic surveys have been completed across the Cyclops, Yeoval East and Goodrich Prospects, assisting with the definition of drill targets
- Infill soil sampling programs are being carried out across both the Goodrich and Yeoval East Prospects and are planned to be completed before the end of Q2 2023
- A comprehensive drill program, partially supported by recently secured NSW New Frontiers Drilling Grant funding, will be undertaken on all three prospects

Godolphin Resources Limited (ASX: GRL) ("**Godolphin**" or the "**Company**") is pleased to advise it has received high grade assay results from recent rock chips that were collected during field programs at the Company's 100%-owned Cyclops and Goodrich Prospects (**Prospects**) on the Yeoval Project in NSW. The Company has also completed a high-resolution ground magnetic geophysical survey over three prospect areas on the Yeoval Project in order assist with definition of drill targets.

## Management commentary:

### Managing Director Ms Jeneta Owens said:

"The Cyclops and Goodrich Prospects continue to produce highly encouraging results. The rock chip samples are exceptionally high grade and really point to the potential size and grade profile possible at these Prospects. The ongoing exploration across these copper targets is essential to provide the best quality data for the definition of drill targets at both Prospects.

Godolphin Resources

ASX Code: **GRL** ABN: 13 633 779 950 A: Unit 13, 11-19 William Street, Orange NSW 2800 P: +61 2 6318 8144 E: info@godolphinresources.com.au www.godolphinresources.com.au

As the world continues to transition to green technologies, copper will become pivotal. There will be a significant copper demand coupled with a dwindling supply, which is a major opportunity for Godolphin given the quality of the copper projects within our 100% owned portfolio. We look forward to providing updates as these projects progress over the coming months."

Rock chip sampling of historic workings at Goodrich, and a wide area at the Cyclops Prospect, were recently undertaken to determine the tenor of copper, gold and molybdenum and other metals associated with mineralisation and structural trends in the metal-rich Naringla Granodiorite.



Figure 1: Location of Cyclops, Goodrich and Yeoval East prospects on the larger Yeoval tenement, which contains the Yeoval MRE (refer Ardea Resources ASX announcement: 15 August 2019).

The assay results highlight the abundance of copper and, in particular, molybdenum mineralisation that occurs at the Goodrich Prospect. Historically, molybdenum was never processed at the Goodrich Mine, with copper and gold being the major ores extracted. The assays from the Cyclops Prospect confirm the significant copper mineralisation that occurs around the wide spaced old workings that targeted magnetite-chlorite-albite-quartz altered granodiorite host rock.



Both Prospects and the Yeoval East Prospect, have recently had high resolution ground magnetics surveys completed across the areas of interest to enable further exploration planned in the coming months.

A 50m x 50m soil sampling program was recently completed at Yeoval East. A similar spaced program is being planned for the Goodrich Prospect over areas that have no previous surface geochemistry. This soil program covers an area where copper mineralisation was intersected at depth by historic drilling, south of a small open pit, but has not yet been followed up.

Program overview and results of geophysical survey and rock chip assay results:

### **Cyclops Prospect**

Recent reconnaissance rock chip sampling of historic copper and gold workings at the Cyclops Prospect returned high grade copper results as well as highly anomalous gold, silver, molybdenum and zinc. Rock chip samples GRR0370 and GRR0371 were samples taken from mullock material associated with historic surface workings and returned the highest copper values of 3.87% and 4.51% respectively. Both areas have little or no historic drilling and represent outstanding drill targets.



Figure 2. Cyclops Prospect area with rock chip results and recent ground magnetics TMI imagery

A ground magnetic survey has recently been completed across the Cyclops Prospect area. The survey was designed to achieve a 25m line spacing to provide high resolution magnetic data (Figure 2). This data

combined with the recent rock chip results and previous historic drilling will enable the Company to plan follow-up drilling, which will be supported by the NSW New Frontiers Drilling Grant funding that was awarded to GRL.

#### **Goodrich Prospect**

At the Goodrich Prospect, reconnaissance rock chip sampling has been completed across the historic Goodrich mine area as well surface geological mapping of the area to the south of the historic mine. Rock chip sample GRR0368, taken from mullock material, returned very high molybdenum as well as lead and copper. GRR0366 returned 1.54% copper and 0.15g/t gold which is encouraging for future exploration in the area, as previous work focussed only on the copper at Goodrich.

The recent ground magnetic survey identified several strong NW trending structures associated with magnetic lows as well subtle NE trending structures. These cross-cutting structures are a prime structural target and common to accumulation of mineralisation in the Lachlan Fold Belt. A soil sampling program is being planned over areas that have not had surface geochemistry programs in the past, and to infill historic soils coverage across the prospect. The information gained from this work will inform drill plans at Goodrich.



Figure 3. Goodrich Prospect area with rock chip results and recent ground magnetics TMI imagery



#### **Yeoval Prospect**

A ground magnetics survey was also completed at the Yeoval East Prospect, which was initially identified by CRAE in the 1990s. Recent surface geological mapping at the prospect identified visible copper sulphides in outcropping variably sericite-chlorite-magnetite-albite altered granodiorite host rock.

The ground magnetic data identified several large NW trending negatively magnetised structures as well as north trending structures. The Yeoval East Prospect is highlighted by a semicircular feature of subdued magnetic response (Figure 4). A reduced magnetic response can be associated with magnetite destructive alteration zones associated with porphyry Cu-Au mineralisation, such as occurs at the nearby Northparkes porphyry Cu-Au deposit.

Recently, a 50m x 50m program of soil samples taken across the prospect area was completed with the aim of determining the extent of any anomalous surface geochemistry directly associated with copper mineralisation or identifying porphyry alterations systems. Assay results from this program are expected in April 2023.



Figure 4. Yeoval East Prospect area with showing recent ground magnetics TMI imagery and area of recent soil sampling



#### <<ENDS>>

This market announcement has been authorised for release to the market by the Board of Godolphin Resources Limited.

For further information regarding Godolphin, please visit <u>https://godolphinresources.com.au/</u>

or contact:

Jeneta Owens Managing Director +61 417 344 658 jowens@godolphinresources.com.au

Released through: Henry Jordan, Six Degrees Investor Relations, +61 431 271 538

## **About Godolphin Resources**

Godolphin Resources (ASX: GRL) is an ASX listed resources company, with 100% controlled Australian-based projects in the Lachlan Fold Belt (**"LFB"**) NSW, a world-class gold-copper province. Currently the Company's tenements cover 3,200km<sup>2</sup> of highly prospective ground focussed on the Lachlan Transverse Zone, one of the key structures which controlled the formation of copper and gold deposits within the LFB. Additional prospectivity attributes of GRL tenure include the McPhillamy's gold hosting Godolphin Fault and the Boda gold-copper hosting Molong Volcanic Belt.

Godolphin is exploring for structurally hosted, epithermal gold and base-metal deposits and large, goldcopper Cadia style porphyry deposits and is pleased to announce a re-focus of exploration efforts for unlocking the potential of its East Lachlan tenement holdings, including increasing the mineral resource of its advanced Lewis Ponds Project. Reinvigoration of the exploration efforts across the tenement package is the key to discovery and represents a transformational stage for the Company and its shareholders.

COMPLIANCE STATEMENT The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Ms Jeneta Owens, a Competent Person who is a Member of the Australian Institute of Geoscientists. Ms Owens is the Managing Director and full-time employee of Godolphin Resources Limited. Ms Owens has 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, Mineral Resources and Ore Reserves. Ms Owens consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

Information in this announcement is extracted from reports lodged as market announcements referred to above and available on the Company's website <u>www.qodolphinresources.com.au</u>.

The Company confirms that it is not aware of any new information that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.



## Appendix 1 – JORC Code, 2012 Edition, Table 1 report

Section 1 Sampling Techniques and Data (Criteria in this section applies 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> </ul>	<ul> <li>Rock chip samples of selected zones of outcrop or mullock from workings were collected based on geological determination</li> <li>All samples were between 1-4kg and were individually labelled and geologically documented.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details.</li> </ul>	No drilling methods were used to collect the samples.
Drill sample recovery	<ul> <li>Method of re</li> <li>cording and assessing core and chip sample recoveries and results assessed.</li> </ul>	No drilling methods were used to collect the samples.
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> </ul>	<ul> <li>No drilling methods were used to collect the samples.</li> <li>Geology of rock chip samples was recorded. Geological records have primarily been quantitative</li> </ul>

	NNOUNCEMENT	
Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> </ul>	No drilling methods were used to collect the samples.
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>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>Rock chip sample analysis was undertaken by ALS Laboratories in Brisbane, Australia. Samples were sorted, weighed, dried, crushed and pulverized to 85% passing 75 microns.</li> <li>Au was analysed using Fire Assay with ICP-AES Finish (Au-ICP21). All other elements analysed using four acid digest ICP-MS (ME-MS61).</li> <li>Due to the visible occurrence of copper sulphides and molybdenum in some of the rock samples, an Ore Grade Four Acid Digest was used</li> <li>Laboratory QAQC was undertaken.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</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>No drilling methods were used to collect the samples.</li> <li>Data was collected and documents by GRL geologists in the field.</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> </ul>	<ul> <li>Rock chip locations were surveyed using a handheld Garmin GPS</li> <li>Grid used was MGA Zone 55, datum GDA94</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</li> </ul>	<ul> <li>Distance between rock chip sample sites vary. Data spacing is dictated by availability of outcrop.</li> <li>Data spacing is not sufficient to determine geological and grade continuity. Sampling was of a reconnaissance nature. No composting of samples or results were applied.</li> </ul>

-

Criteria	JORC Code explanation	Commentary
	<ul> <li>appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</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> </ul>	Cyclops     No drilling methods were used to collect the samples.
Sample security	The measures taken to ensure sample security.	Samples collected in the field were transported by geological staff to the Company's Orange exploration shed, where they were processed and sent to the ALS laboratory Orange.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews were deemed necessary, as this work is purely qualitative assaying for first-pass exploration purposes.

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

Criteria	JORC Code explanation	Commentary
Mineral	• Type, reference	Yeoval Project Area - Cyclops and Yeoval East Prospect
tenement and land tenure	name/number, location and ownership including	The Yeoval project is located surrounding the township of Yeoval in NSW, and has an elevation between 200 m and 500 m above sea-level.
status	agreements or material issues	The exploration rights to the project are owned 100% by the Godolphin Resources through the granted exploration licence EL8358
	with third parties such as joint ventures, partnerships,	• The Cyclops deposit, on which the aforementioned results have been discussed is on private freehold land over which GRL holds the exploration rights.
	overriding royalties, native title	There is no joint venture or any other arrangements pertaining to this project, and there are no native title claims over the area.
	interests, historical sites, wilderness or national park	• The security deposit paid by GRL for EL8538 is \$10,000.
	and environmental settings.	Goodrich
	• The security of the tenure held	• The Goodrich project is located approximately 6km SW of the township of Yeoval in NSW, and has an elevation between 200 m and 500 m above sea-level.
	at the time of reporting along with any known impediments	The exploration rights to the project are owned 100% by the Godolphin Resources through the granted exploration licence EL9243
	to obtaining a license to	The land is owned by private land holders
	operate in the area.	• There is no Joint venture or any other arrangements pertaining to this project, and there are no native title claims over the area.
		• The security deposit paid by GRL for EL9243 is \$10,000.

# 

Criteria	JORC Code explanation	Commentary						
Exploration	Acknowledgment and	Yeoval & Cyclops						
done by other	appraisal of exploration by	Yeoval - See ASX appouncement by Ardea 15 August 2019 (ASX: ARL) GRL 7 October 2021 and 23 March 2022						
parties	other parties.	Cvclops – See ASX announcements by GRL 7 October 2021 and 23 March 2022						
		Goodrich						
		Table below outlines previous exploration across EL9243						
		Tenement         Company         Start Date         Elements         Units						
		ML811 Mr K Barker 1967 1988 Cu, Au, Mo 2						
		ML811 Peko-Wallsend/K Barker 1981 1984 Cu, Au, Mo 2						
		EPL491 Lynch Mining/K Barker 1988 1998 Cu, Au, Mo 2						
		ML811 Malachite Resources 1998 2002 Cu, Au, Mo 2						
		ML811 Augur Resources 2002 2012 Cu, Au, Mo 2						
Geology	• Deposit type, geological	Cyclops & Goodrich						
	setting and style of	Geology						
	mineralization.	El 8538 & El 9243 cover a large portion of the Early Devonian Yeoval Batholith including felsic to mafic intrusives of the Yeoval Intrusive Complex						
		The Yeoval Complex is strongly fractionated and comprised of various intermediate intrusive lithologies – granite, quartz monzodiorite, quartz diorite, microgranodiorite,						
		This Yeoval intrusive complex formed during a Late Silurian to Early Devonian melting and rifting event that split the Ordovician to Early Silurian Macquarie Arc. Its chemistry is						
		shoshonitic, in common with the Ordovician volcanic rocks that host the Cadia and Northparkes porphyry copper-gold deposits, and a similar mantle source and mineral potential						
		is interred. The south-eastern portion of the licence area hosts the Silurian aged Canowindra Volcanics - garnetiterous quartz-feldspar-cordierite tutts, ashstone and breccias. A						
		for low sulphidation Au-Ag mineralisation similar in style to the Ardea Mt Aubrey gold deposit to the south-west of the area.						
		Emplacement of intrusives and extrusives in the Early Devonian which are related to the Boggy Plain Supersuite have given rise to intrusive related mineralisation.						
		Numerous copper-gold occurrences are known in the Yeoval Complex. Mineralisation ranges from disseminated chalcopyrite-gold within altered granodiorite (Yeoval, Yeoval						
		South) to quartz-magnetite-chalcopyrite veining within structures inferred within the granodiorite, at the Goodrich Mine. The style of the mineral occurrences is indicative of a						
		porphyry copper-gold setting. Minor occurrences of copper ± gold mineralisation are present within the microgranite and granite of the Yeoval Complex. Minor molybdenum is						
		Yeoval Batholith.						
		Mineralisation hosted within the Yeoval complex is centred in and around quartz monzonite porphyry complexes which intruded the volcanic centres, composing of pipes, dykes						
		and stocks.						
Drill hole	• A summary of all information	No drilling was undertaken						
Information	material to the understanding							
	of the exploration results							
including a tabulation of the								
following information for all								
	Material drill holes:							

	X ANNOUNCEME	ΝΤ
Criteria	JORC Code 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> </ul>	No drilling was undertaken. No grade aggregation, weighting, or cut-off methods were used for this announcement.
Relationship between mineralization 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> </ul>	No drilling was undertaken. No geometry or width is reported with rock samples.
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>No drilling was undertaken.</li> <li>Sample locations are included in the figures within the body of this 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 Results.</li> </ul>	All results have been reported.

# 

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All meaningful and material exploration data has been reported.
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> </ul>	<ul> <li>Further planned work across the prospects mentioned in this announcement includes:         <ul> <li>Soil sampling Programs/ Mapping Programs/Rock Chip Programs.</li> <li>RC Drilling</li> <li>Diamond Drilling</li> </ul> </li> </ul>



**Appendix 2:** Table of Drill sample results discussed in this ASX release. (Note: This is a complete list of samples, but not of all the elements. A complete list can be requested and supplied pending GRL Board approval).

SampleID	Туре	East	North	Au_g/t	Ag_g/t	Cu_ppm	Cu_%	Mo_ppm	Pb_ppm	Zn_ppm
GRR0365	Rock	648432	6372393	<0.001	0.92	158.5	-	1.28	176.5	994
0000000	Deals	C 40 40C	0270000	0.45	7 07		4.54	4.4.4	400	054
GRRU300	ROCK	648426	6372969	0.15	1.07	-	1.54	1.14	190	254
GRR0367	Rock	648424	6372964	0.039	0.61	568	-	0.86	8.4	44
GRR0368	Rock	648413	6373008	0 071	5 57	1470	0 15	3320	2340	338
		010110	0010000	0.011	0.01		0.10	0020	2010	000
GRR0369	Rock	654155	6379678	0.033	3.83	4890	0.49	10.3	50.2	171
		_								
GRR0370	Rock	654123	6379669	0.31	20.7	-	3.87	210	24.5	165
CPP0371	Pock	653052	6370524	0.08	11.2	_	1 51	350	206	1270
UNNUJI I	RUCK	000902	0379324	0.00		-	4.31	552	200	1270
GRR0372	Rock	653912	6379622	0.01	13.4	-	1.28	64.8	109	367