

23 January 2023

Ground Magnetic Surveying Commenced at Highly Prospective Yeoval & Goodrich Copper-Gold Projects

- High-resolution ground magnetic surveying is underway at three copper-gold prospect areas, Cyclops, Yeoval East and Goodrich, all located near Yeoval township, Central West NSW
 - The objective at all three Prospects is to map ductile shear zones and disseminated mineralisation within the Naringla Granodiorite, which is known to host significant copper-molybdenum+/- gold mineralisation associated with magnetite
 - The detailed ground magnetic data will be used to identify magnetite-quartz-chlorite rich northwest trending shear zones, which hosted historic copper mines
 - Target zones for disseminated porphyry copper style mineralisation will be defined when the detailed ground magnetic data is combined with existing exploration data
 - The three Prospects have the potential to host a cluster of porphyry copper-gold mineralised intrusions in close proximity, as occurs at several mining operations within the Lachlan Fold Belt
 - Results are expected to be reported this quarter, with follow up drill programs to occur shortly thereafter
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Godolphin Resources Limited (ASX: GRL) (“**Godolphin**” or the “**Company**”) is pleased to advise that it has commenced a detailed ground magnetic survey at its 100%-owned Yeoval and Goodrich Copper-Gold Prospects, respectively situated to the north and south of the Yeoval township in central west NSW (refer Figure 1 on page 2).

The program of closely spaced high resolution ground magnetics is being undertaken at the Cyclops and Yeoval East Prospects on EL 8538 and the Goodrich Prospect on EL9243. All Prospects contain significant copper, molybdenum and gold mineralisation, identified by Godolphin through recent exploration and historic mining in the late 1800’s.

Closely spaced ground magnetic surveys have not been completed on any of the Yeoval Prospects since the 1990’s, while the Cyclops Prospect has never been surveyed with modern geophysical equipment. Data will be utilised to identify potential drill targets at each Prospect, for planned drill programs in the near future.

Management commentary

Managing Director Ms Jeneta Owens said: *“It is pleasing to have commenced this modern, detailed ground magnetic survey at these exciting copper Prospects. The three target areas all host minerals and structures that should be detectable with ground magnetics, and the results of will be used in conjunction with the existing surface geochemical data and drilling data to provide potential targets for follow-up drilling at each Prospect.*



"This is an important step in Godolphin's exploration process, particularly for these types of copper deposits. We anticipate that results will be delivered this quarter and look forward to providing further updates on how the Company will use the results from the ground magnetics to progress future work."

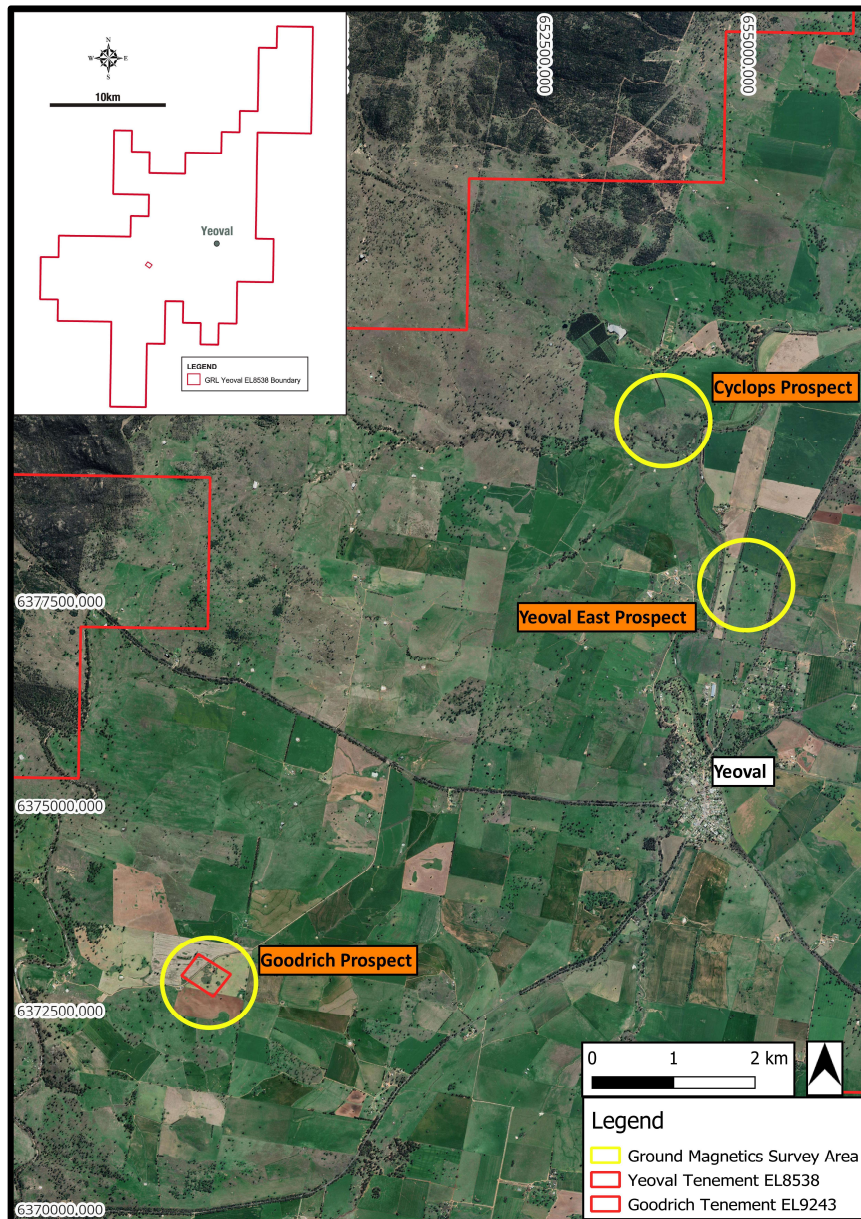


Figure 1: Location of the ground magnetics surveys at Goodrich on EL9243 and the Cyclops and Yeoval East Prospects on the EL8538

Proposed target areas and historic exploration

The three survey areas, Cyclops, Yeoval East and Goodrich Prospects, have been chosen due to the structural regime of historic copper mines located within the northwest trending shear zones in the area and copper mineralisation identified in historic and modern drilling. There is a lack of modern ground geophysical data despite results from drilling showing a clear association of magnetite with the copper sulphide mineralisation. The survey areas have been designed to test linear zones of shearing and faulting within the Naringla Granodiorite, which have historically been explored for copper and gold with the known mineralisation typically associated with intense magnetite-chlorite alteration. The ground magnetic technique is particularly



useful in detecting magnetic minerals, such as magnetite and pyrrhotite, both near surface and at depth, which are often associated with economic mineralisation, such as copper and gold.

The acquisition of the magnetic data at each of the Prospects will allow target generation for future drill hole planning in the coming months.

Cyclops Prospect

No modern ground geophysical surveys have ever been completed at the Cyclops Prospect. The Prospect was drilled by Godolphin in 2022 (see ASX announcements: ASX: GRL: 13 April 2022 “Drilling Completed at Cyclops Prospect at Yeoval” & 9 August 2022 “Shallow high-grade copper mineralisation at Cyclops, Yeoval”) with excellent results obtained from drill hole GYDD001:

- **18m @ 0.52% Cu from 118m, including:**
 - **8m @ 1.01% Cu from 118m**
 - **4m @ 1.75% Cu from 122m;**

Multiple zones of high-grade copper mineralisation were intersected in the drill hole at shallow depths. Due to the nature of the massive magnetite associated with the high-grade copper mineralisation intersected in drill hole GYD0001, a magnetic survey has the potential to identify similar zones across the area and map extensions to the mineralisation intersected.

Follow-up exploration work at the Prospect is a priority for Godolphin and the commencement of the high-resolution ground magnetics survey will provide Godolphin with potential drill targets for future exploration work.



Figure 2 : Ground Magnetics survey underway at the Cyclops Prospect on EL8538, Yeoval



Yeoval East Prospect

The Yeoval East Prospect is located approximately 1km to the east of the Yeoval Prospect, which has an existing JORC 2012 Mineral Resource Estimate of **12.8Mt at 0.38% copper, 0.14g/t gold, 2.2g/t silver & 120ppm molybdenum** as a porphyry-style system (refer Ardea Resources ASX announcement: ASX: ARL 15 August 2019 “Yeoval Copper-Gold Resource Update”).

Yeoval East was discovered as a narrow +400ppm copper in soil anomaly. Six widely spaced RC drill holes were completed across the area in 1994, however, due to the spacing, the drilling did not adequately test the Prospect. Drillhole RC94Y42 was designed to test a mineralised and altered Naringla Granodiorite outcrop and returned a best copper interval of **21m @ 0.34% Cu and 0.04g/t Au from 30m**.

Godolphin is confident that the current ground magnetic survey will provide a sharper focus to the mineralised structures identified in regional aeromagnetic data and historic geological mapping, due to the higher quality of the data.

Goodrich Prospect

The Goodrich Prospect (EL9243) is located approximately 8km to the southwest of Yeoval and is surrounded by the Yeoval tenement. Historic exploration was focused on vein-style quartz-magnetite-chalcopyrite (with gold and molybdenum) mineralisation that occurred beneath the historic Goodrich Mine. The mine was worked during the mid-late 1800’s and comprised a small central open cut pit and numerous shafts.

Recent core logging by GRL at the GSNSW Londonderry Core Library identified evidence of favourable porphyry-style hydrothermal alteration comprising potassic feldspar infill quartz veins with visible copper sulphides in unsampled drill core (refer ASX announcement: ASX: GRL 22 November 2022 “Exploration update Yeoval, Goodrich and Burra Road”).

High grade copper and molybdenum mineralisation is associated with zones of shearing and faulting with abundant magnetite.

Follow-up drilling by previous explorers in the 1990’s intersected further copper mineralisation that has not been fully followed up. Copper grades from drill hole **GRDD001** at the Goodrich Prospect include;

- **200m @ 0.14% Cu from 2.7m**, including:
 - **49m @ 0.40% Cu from 153m**
- **2m @ 1.1% Cu from 183m**

The ground magnetics survey will help in identifying any areas of increased magnetic response, potentially associated with copper and gold mineralisation.

<<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 <https://godolphinresources.com.au/> or contact:

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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. A strategic focus on critical minerals and green metals through ongoing exploration and development in central west NSW. Currently the Company’s tenements cover 3,400km² of highly prospective ground focussed on the Lachlan Fold Belt, a highly regarded province for the discovery of REE, copper and gold deposits. Additional prospectivity attributes of GRL tenure include the McPhillamys gold hosting Godolphin Fault and the Boda gold-copper hosting Molong Volcanic Belt.

Godolphin is exploring for REE, structurally hosted, epithermal gold and base-metal deposits and large, gold-copper 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 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, shareholder 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 www.godolphinresources.com.au.

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.