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3D-IP HIGHLIGHTS EXTENSIVE SULPHIDE ZONES AT MULGA BILL

HIGHLIGHTS

- > 3D IP has confirmed large zones of disseminated sulphide at Mulga Bill
- > The defined zones correlate well with the gravity anomaly identified by GBR last year
- A positive relationship between gold mineralisation and pyrite has been established at Mulga Bill hence any areas where sulphides exist form high priority gold targets
- > The identified chargeable sulphide bodies will form additional high priority targets to be tested in ongoing drilling
- Phase 6 RC drilling is progressing well, AC drilling to recommence in mid/ late May and diamond drill results expected in May/ June

Great Boulder Resources ("**Great Boulder**" or the "**Company**") (ASX: **GBR**) is pleased to announce results from a recently-completed offset pole-dipole Induced Polarisation (3D-IP) survey at Mulga Bill, within the Side Well Gold Project ("**Side Well**") in Western Australia.

The survey has identified large chargeable zones that are interpreted to be disseminated sulphide bodies beneath the central 3km strike of Mulga Bill. These zones correlate very closely with the gravity anomaly identified by GBR's survey last year (ASX announcement 25/10/2021). Importantly, the previously-recognised correlation between gold and sulphur in GBR's assay data suggests sulphide zones are an important target for gold mineralisation.

Great Boulder's Managing Director, Andrew Paterson commented:

"By completing the 3D-IP survey we now have a three-dimensional model of chargeable sulphide along the central area of Mulga Bill that we will start testing with RC drilling. The chargeable surface shown in Figure 1 of this announcement represents areas of approximately 1 to 2% sulphide in the rock mass."

"This is a very large target volume, adding to our confidence in the scale of the Mulga Bill system."

"The significance of the sulphide target is that we've already identified a relationship between pyrite and gold mineralisation, so any areas where sulphides have been identified are a priority exploration target for gold."

The IP survey was completed in mid-April by Moombarriga Geoscience, with data processed by Terra Resources. Terra produced a series of isosurfaces of the modelled chargeable zones, with

chargeability measured in units of millivolts per volt (mv/v). Chargeability of 10 to 12mv/v is thought to correlate to 1 to 2% disseminated sulphide.

The survey results indicate the presence of cross-cutting structures that intersect Mulga Bill, explaining breaks in both the strike and depth of the sulphide zones. In the area where a gravity-EM "bullseye" target was tested by three RC holes late last year (ASX announcement 31/1/2022) the chargeable response sits deeper than GBR's RC holes, meaning this area requires deeper drilling to properly test the sulphide target. Interpretation of structures using the combined IP and gravity data is ongoing.



FIGURE 1: CHARGEABLE SURFACES OVER GRAVITY SHOWING RC & DD COLLARS AND THE BISMUTH PATHFINDER ANOMALY

This announcement has been approved by the Great Boulder Board.

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FIGURE 2: SIDE WELL PROJECT LOCATION PLAN.

About Great Boulder Resources

Great Boulder is a mineral exploration company with a portfolio of highly prospective gold and base metals assets ranging from greenfields through to advanced exploration located in Western Australia. The Company's core focus is advancing the Whiteheads and Side Well gold projects while progressing initial exploration at the earlier stage Wellington Base Metal Project located in an emerging MVT province. With a portfolio of highly prospective assets plus the backing of a strong technical team, the Company is well positioned for future success.





Competent Person's Statement

Exploration information in this Announcement is based upon work undertaken by Mr Andrew Paterson who is a Member of the Australasian Institute of Geoscientists (AIG). Mr Paterson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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' (JORC Code). Mr Paterson is an employee of Great Boulder Resources and consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

10 MAY 2022

Appendix 1 - JORC Code, 2012 Edition Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Sampling techniques	The IP survey discussed in this announcement consisted of two north-south transmitter lines bracketed by three receiver lines in an offset pole-dipole array. Receivers were spaced at 100m intervals along each line. The survey utilized a Search-Ex WB50 50kvA IP transmitter and EMIT SmarTEM 16-channel 24-bit receivers.
Drilling techniques	Not relevant – the exploration results in this announcement relate to geophysical survey techniques and results.
Drill sample recovery	Not applicable
Logging	Geophysical data was checked and validated daily by a geophysicist.
Sub-sampling techniques and sample preparation	Not applicable
Quality of assay data and laboratory tests	Not applicable
Verification of sampling and assaying	Geophysical data was checked and validated daily by a geophysicist.
Data spacing and distribution	Transmitter and receiver spacing were optimised for a 3D survey along the strike of the deposit.
Orientation of data in relation to geological structure	The data has produced a 3D inversion model which relates to the presence of chargeable sulphides oriented in geospatial grid GDA94 zone 50.
Sample security	Not applicable.
Audits or reviews	Data review and interpretation by an independent consulting geophysicist.

Section 2 Reporting of Exploration Results

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

Criteria	Commentary
Mineral tenement and	Side Well tenement E51/1905 is a 48-block exploration license covering an area of 131.8km2
land tenure status	immediately east and northeast of Meekatharra in the Murchison province. The tenement is a 75:25
	joint venture between Great Boulder and Zebina Minerals Pty Ltd.
Exploration done by	Tenement E51/1905 has a protracted exploration history but is relatively unexplored compared to
other parties	other regions surrounding Meekathara. The Explroation history by previous explorers has been
	described in the technical section of the announcement.
Geology	The Side Well tenement group covers a portion of the Meekatharra-Wydgee Greenstone Belt north
	of Meekatharra, WA. The north-north-easterly trending Archaean Meekatharra-Wydgee Greenstone
	Belt, comprises a succession of metamorphosed mafic to ultramafic and felsic and sedimentary rocks
	belonging to the Luke Creek and Mount Farmer Groups.
	Over the northern extensions of the belt, sediments belonging to the Proterozoic Yerrida Basin
	unconformably overlie Archaean granite-greenstone terrain. Structurally, the belt takes the form of
	a syncline known as the Polelle syncline. Younger Archaean granitoids have intrusive contacts with
	the greenstone succession and have intersected several zones particularly in the Side Well area.
	Within the Side Well tenement group, a largely concealed portion of the north-north-easterly
	trending Greenstone Belt is defined, on the basis of drilling and airborne magnetic data, to underlie
	the area. The greenstone succession is interpreted to be tightly folded into a south plunging syncline
	and is cut by easterly trending Proterozoic dolerite dykes.
	There is little to no rock exposure at the Side Well prospect. This area is covered by alluvium and
	lacustrine clays, commonly up to 60 metres thick.
Drill hole Information	Not applicable.
Data aggregation	Not applicable
methods	Not applicable
	While the ID survey shareschilds signal strength consoleton to the shunderes of subbide using all
Relationship between mineralisation widths	While the IP survey chargeability signal strength correlates to the abundance of sulphide mineral
	grains within the rock mass the relationship between sulphide abundance and gold grade is
and intercept lengths	uncertain. Gold mineralisation may be present without sulphides, and vice versa. Further drilling is
	required to ascertain the extent of gold mineralisation within the sulphide target areas.
Diagrams	Refer to figures in announcement.
Balanced reporting	It is not practical to report all historical exploration results from the Side Well project. Selected
	historical intercepts have been re-reported by GBR to highlight the prospectivity of the region. Full
	drillhole details can be found in publicly available historical annual reports.
Other substantive	Subsequent to Doray Minerals Limited exiting the project in 2015, private companies have held the
other substantive	
exploration data	ground with no significant work being undertaken.