ASX Announcement

10 JULY 2023

Great Boulder
RESOURCES LIMITED

SAM SURVEY DEFINES MULTIPLE NEW TARGETS AT IRONBARK

HIGHLIGHTS

- **Sub-audio magnetics (SAM) survey completed over a 2km area centered on the Ironbark deposit (MRE 87k oz @ 2.9g/t Au)**
- **The SAM data indicates potential for strike extensions offset to the northeast**
- **In addition, a new EM conductor target is identified northeast of Ironbark, unexplained by geology & untested by drilling or geochemistry**
  - **AC drilling is currently being planned to test this new high priority target area**
- **AC drilling is continuing at Ironbark South with first diamond core assays due shortly**

Great Boulder Resources ("**Great Boulder**" or the "**Company**") (ASX: **GBR**) is pleased to provide an update on recent exploration activity at the Company's flagship Side Well Gold Project ("**Side Well**") near Meekatharra in Western Australia.

A SAM survey has been completed over a 2.2km area centred on the Ironbark deposit. The SAM technique produces high-resolution images of conductivity and magnetic susceptibility in the regolith and bedrock, which is intended to provide additional context to the position of mineralisation at Ironbark and generate new targets by extrapolation.

Great Boulder's Managing Director, Andrew Paterson commented:

"This survey is the first time we've used SAM at Side Well. It's given us a lot of useful data as well as a couple of immediate targets close to Ironbark."

"The conductivity data shows Ironbark mineralisation sits in a resistive zone adjacent to a linear conductor which is probably a shear zone. The images also confirm our theory that Ironbark is offset to the north by a cross-cutting fault, with potential for strike extensions to the northeast."

"Secondly we have identified an unexplained and untested conductor northeast of Ironbark that may be caused by sulphides. We plan to test that with a small AC program in the near future."

"The data also shows interesting deformation in the shear south of Ironbark where the conductive trends bend from north-northeast to a north-northwest strike orientation. That's the area we're currently testing with AC drilling, so we're looking forward to seeing the results from that program."

SAM Survey

The survey covered an area, 2.2km long and 680m wide, centred on the 87,000oz Au Ironbark resource. Line spacing over the survey area was 50m with lines oriented east-west, with a handheld magnetometer reading Total Magnetic Intensity (TMI), Magnetometric Conductivity (MMC) and Total Field Electromagnetics (TFE). In addition to providing high-resolution images of magnetic and conductive/resistive features the data also allows cross-cutting structures to be identified with a high degree of confidence.

The gold mineralisation at Ironbark occurs within a relatively resistive zone which may correlate to silica alteration during the mineralising event. A conductive zone interpreted to represent a sheared contact is located proximal to the Ironbark mineralisation. This shear zone is traceable north of Ironbark where it is offset to the east, and to the south where is flexes to a southerly easterly strike (Figure 2). There may be potential for additional mineralisation in the offset zone to the north.

A previously unrecognised bedrock conductor immediately northeast of Ironbark is unexplained by geology and untested by drilling or surface geochemistry. This conductive feature is adjacent to a resistor similar to that at Ironbark. AC drilling will be planned to test this area.

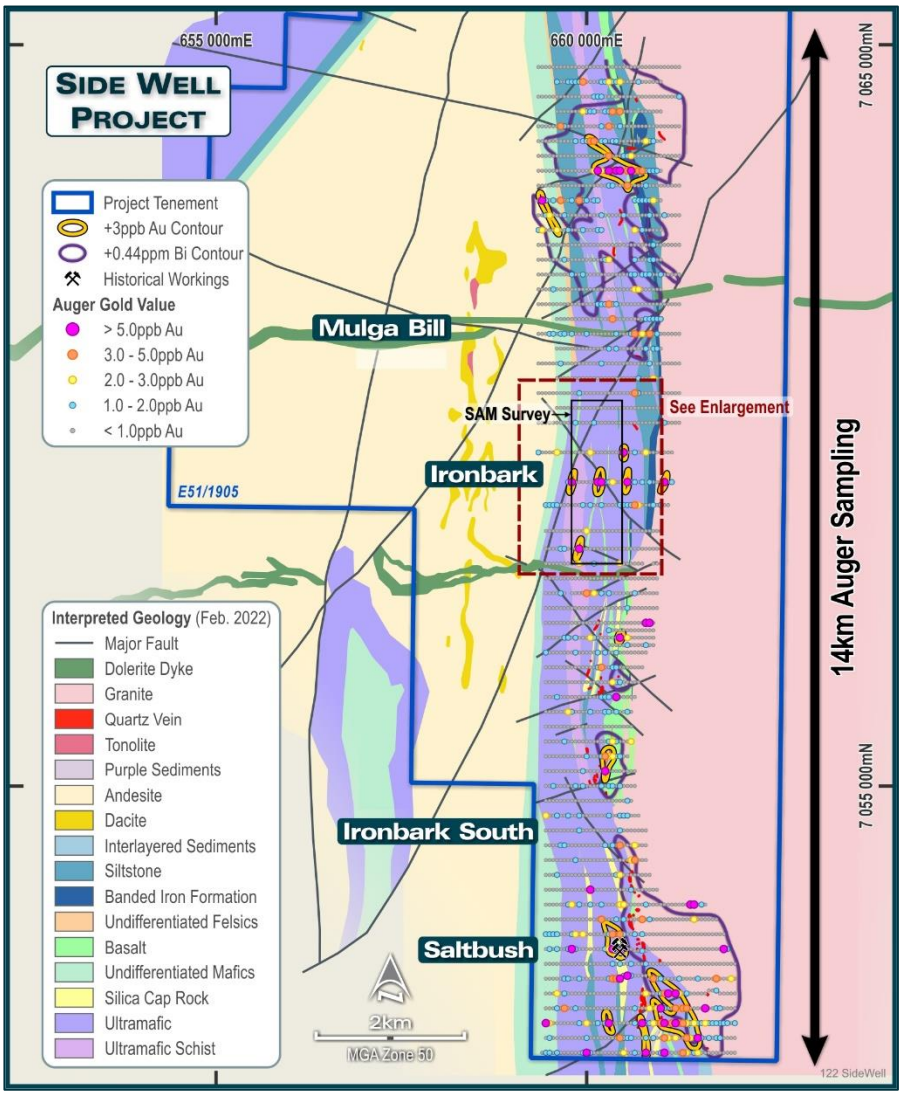

FIGURE 1: THE SAM SURVEY COVERS 2.2KM OF THE 14KM IRONBARK CORRIDOR.

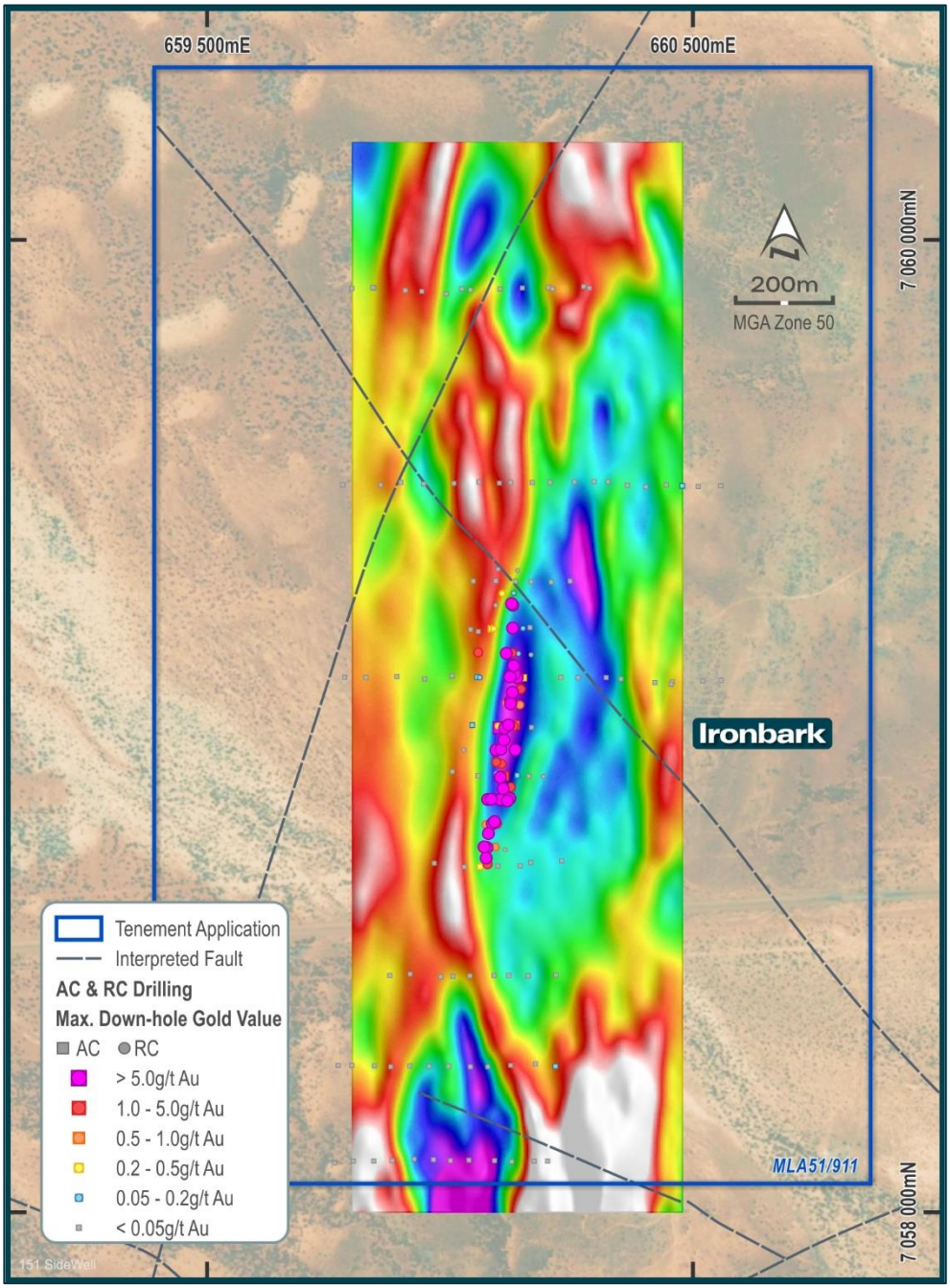

FIGURE 2: DRILL COLLARS OVER MAGNETOMETRIC CONDUCTIVITY (MMC). IRONBARK MINERALISATION SITS WITHIN A RELATIVELY RESISTIVE ZONE ADJACENT TO A LINEAR CONDUCTIVE FEATURE LIKELY CAUSED BY SHEARING. A SMALLER RESISTIVE ZONE IS LOCATED IMMEDIATELY NORTHEAST OF IRONBARK.

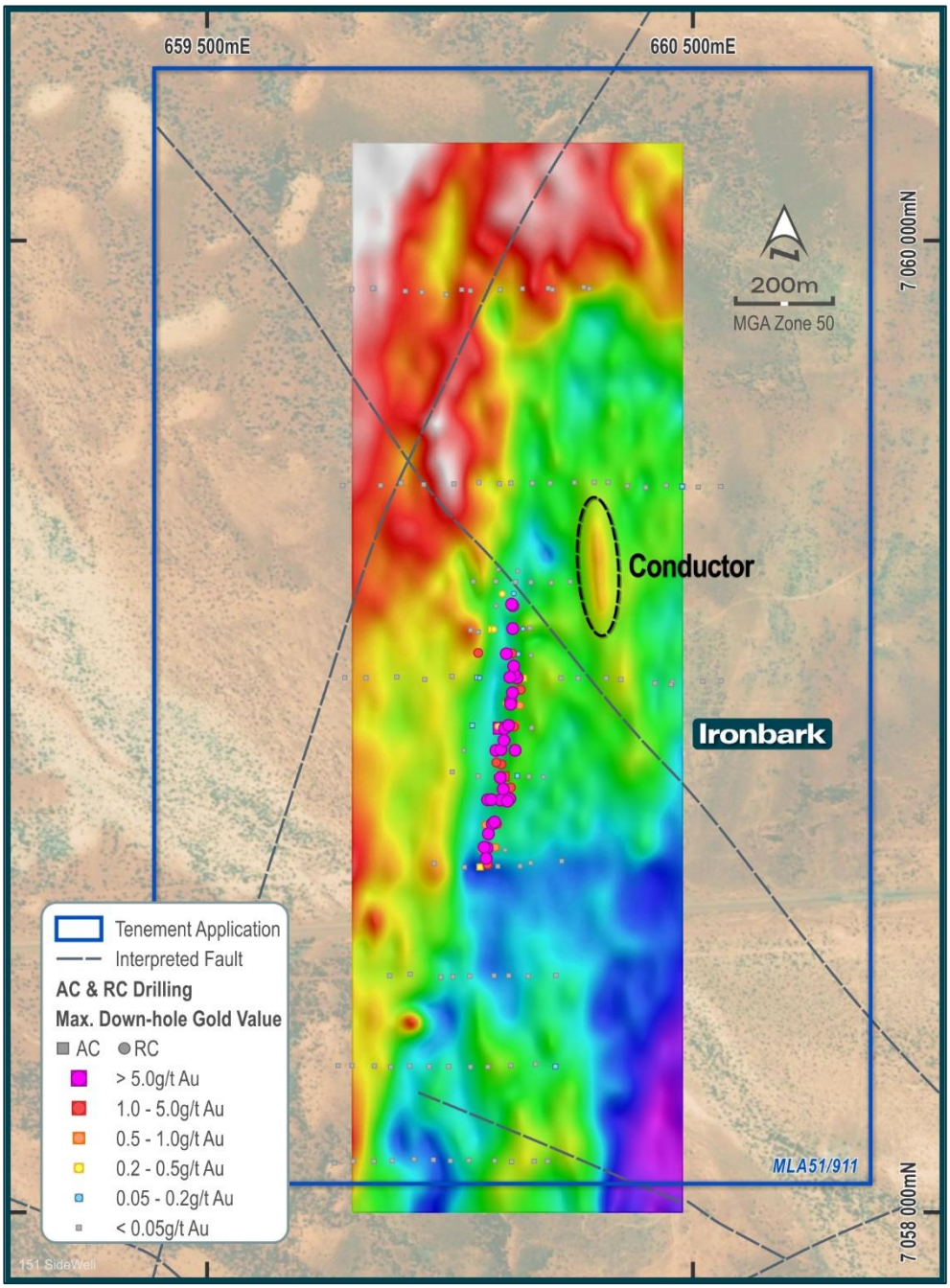

FIGURE 3: AN UNEXPLAINED EM CONDUCTOR CAN BE SEEN NORTHEAST OF IRONBARK ADJACENT TO THE NORTHEAST RESISTOR SHOWN IN FIGURE 2. THIS 200M-LONG FEATURE IS BRACKETED BY 400M-SPACED AC DRILL LINES.

Next Steps

Additional AC drilling and auger geochemistry is being designed to test targets north and northeast of Ironbark.

Initial assays from the recent diamond program at Ironbark and Mulga Bill are expected to be received shortly, however assays for the fifth and final hole are not expected until late July or early August.

AC drilling at Ironbark South is ongoing, after which the rig will move to Mulga Bill North.

This announcement has been approved by the Great Boulder Board.

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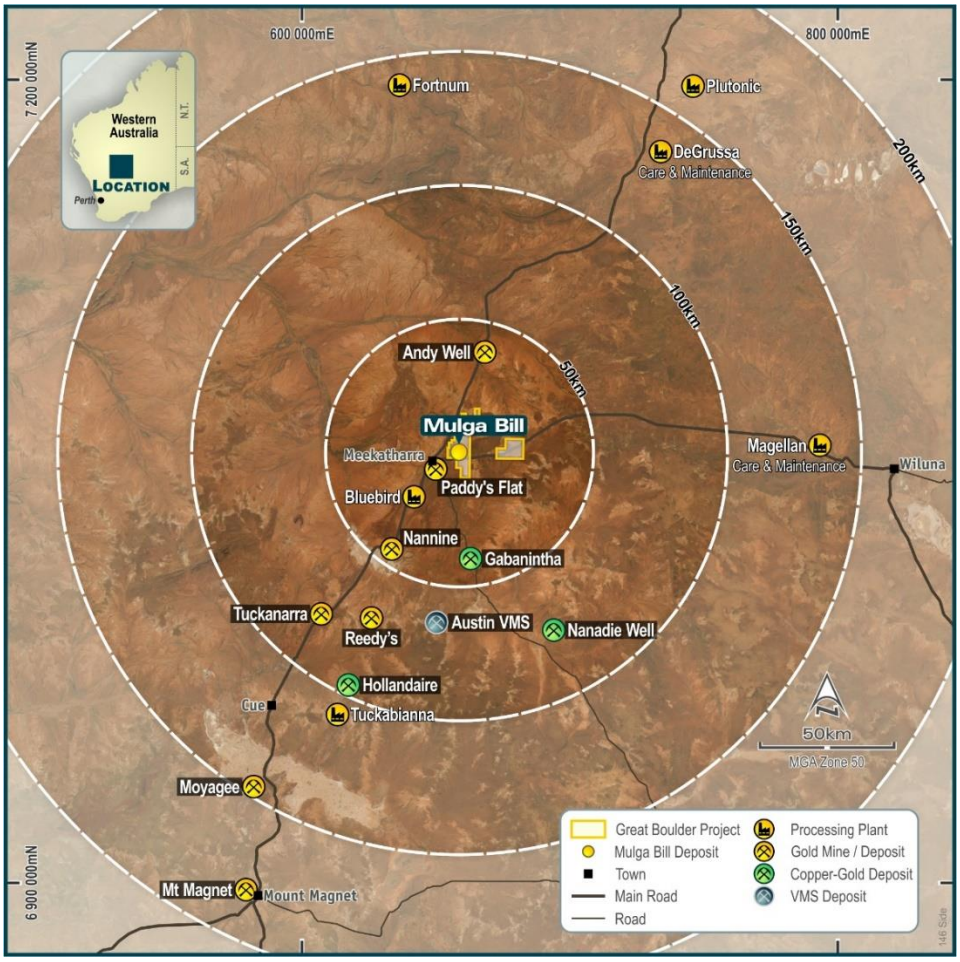


FIGURE 4: SIDE WELL IS STRATEGICALLY LOCATED CLOSE TO EXISTING MINES AND INFRASTRUCTURE

TABLE 1: SIDE WELL INFERRED MINERAL RESOURCE (ASX 1 FEB 2023)

Deposit	Category	Tonnes	Grade (g/t Au)	Au (Koz)
Mulga Bill	Inferred	5,258,000	2.5	431,000
Ironbark	Inferred	934,000	2.9	87,000
Global Resource	**Total**	**6,192,000**	**2.6**	**518,000**
Resources reported at a cut-off grade of 0.5g/t gold for open pit and 1.0g/t for underground				

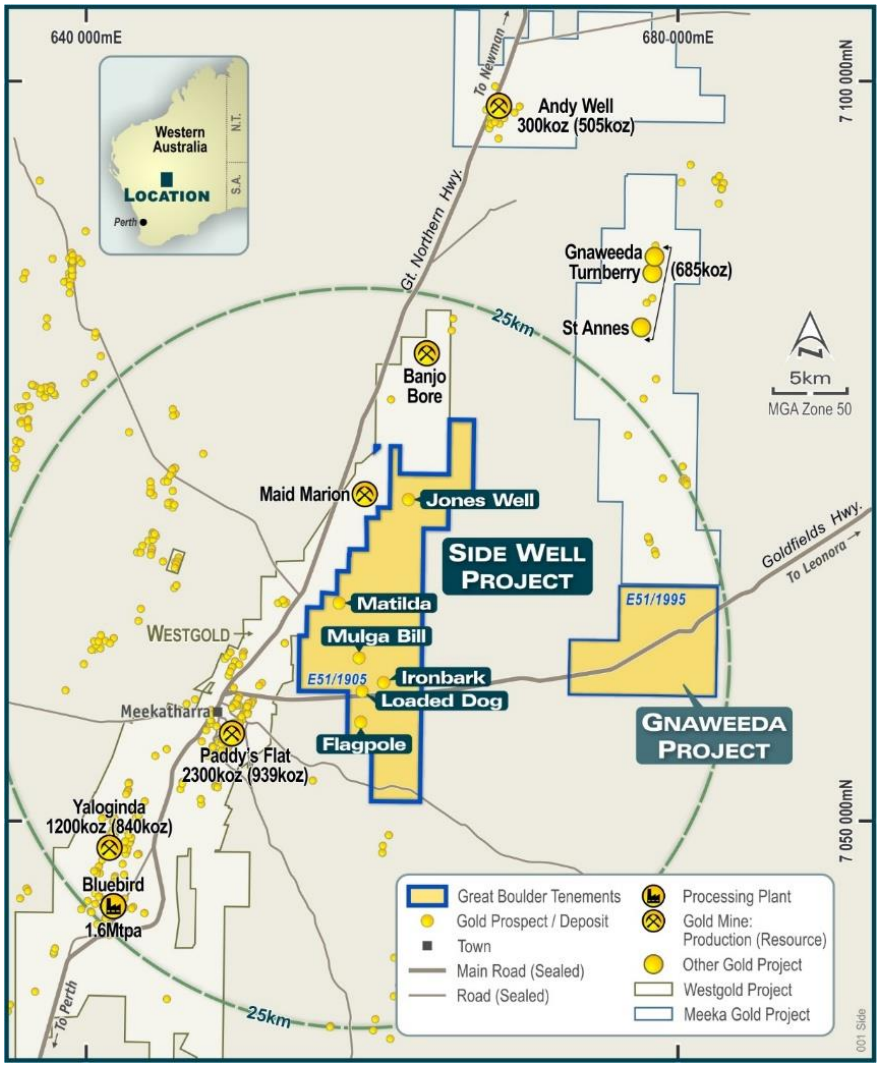


FIGURE 5: SIDE WELL LOCATION

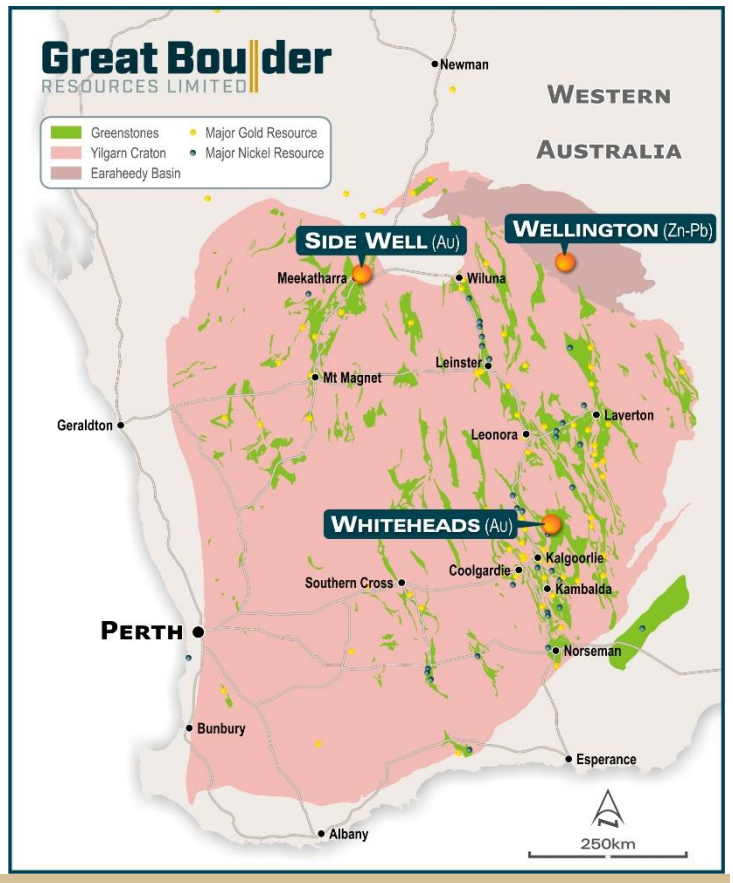
COMPETENT PERSON'S STATEMENT

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.

The information that relates to Mineral Resources was first reported by the Company in its announcement to the ASX on 1 February 2023. The Company is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not material changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

ABOUT GREAT BOULDER RESOURCES

Great Boulder is a mineral exploration company with a portfolio of highly prospective gold and base metals assets in Western Australia ranging from greenfields through to advanced exploration. The Company's core focus is the Side Well Gold Project at Meekatharra in the Murchison gold field, where the Company has an Inferred Mineral Resource of 6.192Mt @ 2.6g/t Au for 518,000oz Au. The Company is also progressing early-stage exploration at 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.



CAPITAL STRUCTURE

504.3M	**$6.5M**	**$2.3M**	**$50k**
SHARES ON ISSUE	**CASH**	**LISTED INVESTMENT**	**DAILY LIQUIDITY**
ASX: GBR	Post Entitlement Issue April 2023	Cosmo Metals (ASX:CMO)	Average 30-day value traded
$40.3M	**Nil**	**30.1M**	**30.1%**
MARKET CAP	**DEBT**	**UNLISTED OPTIONS**	**TOP 20 OWNERSHIP**
At $0.080/sh	As at 31 Mar 2023		

Exploring WA Gold & Base Metal assets, located in proximity to operating mines & infrastructure

Developing a significant high grade, large scale gold system at Side Well

Technically focused exploration team with a strong track record of discovery

Undertaking smart, innovative & systematic exploration

Ongoing drilling at multiple projects providing consistent, material newsflow

Appendix 1 - JORC Code, 2012 Edition Table 1 (Side Well Project)

Section 1 Sampling Techniques and Data

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

Criteria	Commentary
Sampling techniques	RC samples were collected into calico bags over 1m intervals using a cyclone splitter. The residual bulk samples are placed in lines of piles on the ground. 2 cone splits are taken off the rig splitter for RC drilling. Visually prospective zones were sampled over 1m intervals and sent for analysis while the rest of the hole was composited over 4m intervals by taking a scoop sample from each 1m bag. AC samples were placed in piles on the ground with 4m composite samples taken using a scoop. Auger samples are recovered from the auger at blade refusal depth. Auger drilling is an open-hole technique. The geophysical survey discussed in this announcement was a galvanic-source SAM survey conducted by Gap Geophysics using a single transmit dipole. A Gap GeoPak IPTX-2500 transmitter paired with a Gap GeoPak DC14HV genset was used to energise the dipole. A Gap GeoPak TM-7 controller paired with a Geometrics caesium vapour magnetometer was used as the SAM receiver.

Roving Magnetometer Acquisition System	
Instrument	Gap Geophysics TM-7 SAM receiver
Sensor	Geometrics G-822 Cs vaopur
Software	SAMui v24.1
Sample rate	2400Hz
Components	Total B-field
Powerline frequency	50Hz
Magnetometer Base Station	
Magnetometer	Gap Geophysics TM-7 SAM receiver
Sample rate	2400Hz
Sample resolution	0.1 pT
Navigation and Positioning	
GPS	Ublox 9
Sample rate	1Hz
Coordinate system	GDA94 MGA Zone 50

Data Processing Parameters	
TMI sample interval after stacking	~0.8m
TFMMC sample interval after stacking	~6.4m
TFEM sample interval after stacking	~6.4m
Gridding	Minimum curvature
Grid cell size	1/16 of line spacing
TFMMC/TFEM filtering	FIR stacking
TMI filtering	FIT stacking
Magnetic inclination	-59.8
Magnetic declination	0.6

	Transmitter System
	Transmitter — IPTX-2500
	Controller — Internal
	Power supply — DC14HV
	Timing — GPS synchronization
	Duty cycle — 50%
Drilling techniques	Industry standard drilling methods and equipment were utilised. Auger drilling was completed using a petrol-powered hand-held auger.
Drill sample recovery	Sample recovery data is noted in geological comments as part of the logging process. Sample condition has been logged for every geological interval as part of the logging process. Water was encountered during drilling resulting in minor wet and moist samples with the majority being dry. No quantitative twinned drilling analysis has been undertaken.
Logging	Geological logging of drilling followed established company procedures. Qualitative logging of samples includes lithology, mineralogy, alteration, veining and weathering. Abundant geological comments supplement logged intervals.
Sub-sampling techniques and sample preparation	1m cyclone splits and 4m speared composite samples were taken in the field. Samples were prepared and analysed at ALS Laboratories Perth for the RC drilling and Intertek Laboratories for the AC drilling. Samples were pulverized so that each samples had a nominal 85% passing 75 microns. Au analysis was undertaken using Au-AA26 involving 50g lead collection fire assay and Atomic Adsorption Spectrometry (AAS) finish. For AC drilling, Au analysis was undertaken using a 50g lead collection fire assay with ICP-OES finish. Multi-element analysis was completed at both ALS and Intertek Laboratories. Digestion was completed using both 4 Acid and Aqua-regia and analysed by ICP-AES and ICP-MS (Intertek code 4A/MS48, ALS codes ME-MS61, ME-ICP41-ABC).
Quality of assay data and laboratory tests	All samples were assayed by industry standard techniques.
Verification of sampling and assaying	The standard GBR protocol was followed for insertion of standards and blanks with a blank and standard inserted per 25 for RC drilling and 40 samples for AC drilling. Analysis of ME was typically done on master pulps after standard gold analysis with a company multi-element standard inserted every 50 samples. No QAQC problems were identified in the results. No twinned drilling has been undertaken.
Data spacing and distribution	The spacing and location of the majority of drilling in the projects is, by the nature of early exploration, variable. The spacing and location of data is currently only being considered for exploration purposes.
Orientation of data in relation to geological structure	Drilling is dominantly perpendicular to regional geological trends where interpreted and practical. True width and orientation of intersected mineralisation is currently unknown or not clear. The spacing and location of the data is currently only being considered for exploration purposes.
Sample security	GBR personnel were responsible for delivery of samples from the drill site to the courier companies dispatch center in Meekatharra. Samples were transported by Toll Ipec from Meekatharra to the laboratories in Perth.
Audits or reviews	Data review and interpretation by independent consultants on a regular basis. Group technical meetings are usually held monthly.

Section 2 Reporting of Exploration Results

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

Criteria	Commentary
Mineral tenement and land tenure status	Side Well tenement E51/1905 is a 48-block exploration license covering an area of 131.8km2 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 other parties	Tenement E51/1905 has a protracted exploration history but is relatively unexplored compared to other regions surrounding Meekathara.
Geology	The Side Well tenement group covers a portion of the Meekatharra-Wydgee Greenstone Belt north of Meekatharra, WA. The north-northeasterly-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	A list of the drill hole coordinates, orientations and intersections reported in this announcement are provided as an appended table.
Data aggregation methods	Results were reported using cut-off levels relevant to the sample type. For composited samples significant intercepts were reported for grades greater than 0.1g/t Au with a maximum dilution of 4m. For single metre splits, significant intercepts were reported for grades greater than 0.5g/t Au with a maximum dilution of 3m. A weighted average calculation was used to allow for bottom of hole composites that were less than the standard 4m and when intervals contain composited samples plus 1m split samples. No metal equivalents are used.
Relationship between mineralisation widths and intercept lengths	The orientation of structures and mineralisation is not known with certainty, but majority of the drilling drilling was conducted using appropriate perpendicular orientations for interpreted mineralisation. Stratigraphy appears to be steeply dipping to the west however mineralisation may have a different orientation.
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 exploration data	Subsequent to Doray Minerals Limited exiting the project in 2015, private companies have held the ground with no significant work being undertaken.
Further work	Further work is discussed in the document.