Great Boulder
RESOURCES LIMITED

COPPER & SILVER EXPLORATION TARGET AT MULGA BILL

HIGHLIGHTS

- **Exploration Target defined for intrusive-related Copper (Cu) – Silver (Ag) mineralisation at Mulga Bill**
- **The target has been generated by retrospective assaying for multiple elements of drill holes completed from 2021 to present, with intervals selected using pXRF data and visual observations**
- **Highlights from within the Cu-Au-Ag zones include:**
  - **55m @ 0.75% Cu, 2.72g/t Au and 7.6g/t Ag from 100m in 21MBRC017**
  - **31m @ 1.11% Cu, 1.72g/t Au and 18.8g/t Ag from 82m in 22MBRC003**
  - **57m @ 0.49% Cu, 5.07g/t Au and 16.7g/t Ag from 96m in 22MBRC067**
  - **65m @ 0.37% Cu, 0.62g/t Au and 7.8g/t Ag from 98m in 23MBRC007**
  - **18m @ 1.15% Cu, 0.30g/t Au and 8.5g/t Ag from 83m in 21MBRC046**
- **The Company is compiling Cu and Ag assays from existing drillholes along strike**
- **The Cu-Ag mineralisation is partially coincident with gold mineralisation defined within the 518koz Side Well Mineral Resource Estimate (MRE) announced in February 2023**
- **Potential for the Cu-Ag mineralisation to form an accretive and complimentary by-product credit to any future gold mining scenario at the Side Well Project**
- **An average gold grade has not been included in the Exploration Target due to the presence of high-grade gold in flat-dipping lodes cross-cutting the Cu-Au-Ag zone**
- **This data will be included in the next MRE update**

Great Boulder Resources ("**Great Boulder**" or the "**Company**") (ASX: **GBR**) is pleased to announce an initial Exploration Target for intrusive-related copper-gold-silver mineralisation at the Side Well Gold Project ("**Side Well**") near Meekatharra in Western Australia.

Great Boulder's Managing Director, Andrew Paterson commented:

"We have been working on this process for several months, identifying copper-rich intervals in the pXRF data in and around the gold lodes and resubmitting those samples for base metals analysis. We've now compiled a significant data set which underpins the exploration target expectations."

"The Exploration Target doesn't include gold because there are two different populations of gold data within Mulga Bill. The high-grade cross-cutting veins contrast with bulk tonnage low-grade gold mineralisation within the copper sulphide lodes, so we are treating both styles of mineralisation

separately at this stage. Once the gold, copper and silver data is compiled into a formal resource estimate we will be able to quantify the different styles of mineralisation.".

"This work demonstrates Mulga Bill has potential for a significant Cu-Au-Ag endowment in addition to the high-grade gold structures. This could be a significant value-add for an eventual production scenario."

The Exploration Target range for copper is **8 to 10Mt** at between **0.2%** and **0.4% Cu** for **16,000t to 40,000t** of contained metal (Table 1).

TABLE 1: EXPLORATION TARGET SUMMARY TABLE FOR MULGA BILL

Lower					Upper				
Tonnes	Cu (%)	Ag (g/t)	Cu (t)	Ag (oz)	**Tonnes**	Cu (%)	Ag (g/t)	Cu (t)	Ag (oz)
8,000,000	0.2	3.0	16,000	770,000	**10,000,000**	0.4	6.0	40,000	1,930,000

The potential quantity and grade of the Exploration Target is conceptual in nature and therefore is an approximation. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code.

Assays, geological logging and pXRF analyses of drilling completed at Mulga Bill to date have resulted in the interpretation of four subvertical north-south Cu-Au-Ag lodes, collectively referred to as the copper sulphide lodes, capped by a semi-horizontal supergene layer. This interpretation is supported by 1,543 multi-element assays selected from 90 holes within a strike length of approximately 380m. The Cu-Au-Ag lodes are proximal to the subvertical gold lodes and higher-grade shallow-dipping gold lodes modelled during the 518,000oz Au Mineral Resource Estimate.

The supergene enrichment layer occurs at the base of oxidation, where copper minerals such as malachite (copper carbonate) in the upper supergene grade into chalcopyrite (copper sulphide) in the lower supergene. Chalcopyrite is the dominant copper mineral within the subvertical lodes below this horizon. There have been very few visual observations of other copper minerals, although ocurrences of copper-bismuth sulphide minerals were noted in analysis by the CSIRO during their research work in 2021.

Anomalous copper and silver grades have been observed in run-of-program multi-element analyses along strike from the sulphide zones, and it is likely that further retrospective multi-element assaying will lead to growth in the mineral inventory. The data will be incorporated into a combined Mineral Resource Estimate in the future, which will enable interpolation of each component based upon individual variography. This approach will allow the high-grade gold lodes to be modelled separately, as they are in the current MRE, without artificially smearing gold values into the surrounding low-grade areas.

Mulga Bill was identified as an intrusive-related gold system early in Great Boulder's exploration at Side Well, highighted by the pathfinder mineral assemblage of Au-Bi-Cu-Ag +/- Mo-Sb. The Company is still working to refine this definition and gain a greater understanding of the mineral system responsible for the known gold endowments at Mulga Bill and Ironbark, as well as the other mineralised targets seen in surface geochemistry along the Ironbark trend.

It is likely that there are at least two mineralising events at Side Well: the early intrusive-related pulse of Cu-Au-Ag mineralisation and associated pathfinders; and a later remobilisation of gold into high-grade orogenic positions such as that discovered at Ironbark. It appears that the gold remobilisation event may also have remobilised higher grade (0.5-1%) copper mineralisation into these domains. Copper and silver has not been estimated within the MRE gold lodes, and future resource estimation will consider the various orientations of mineralisation and domain the different minralisation styles appropriately.

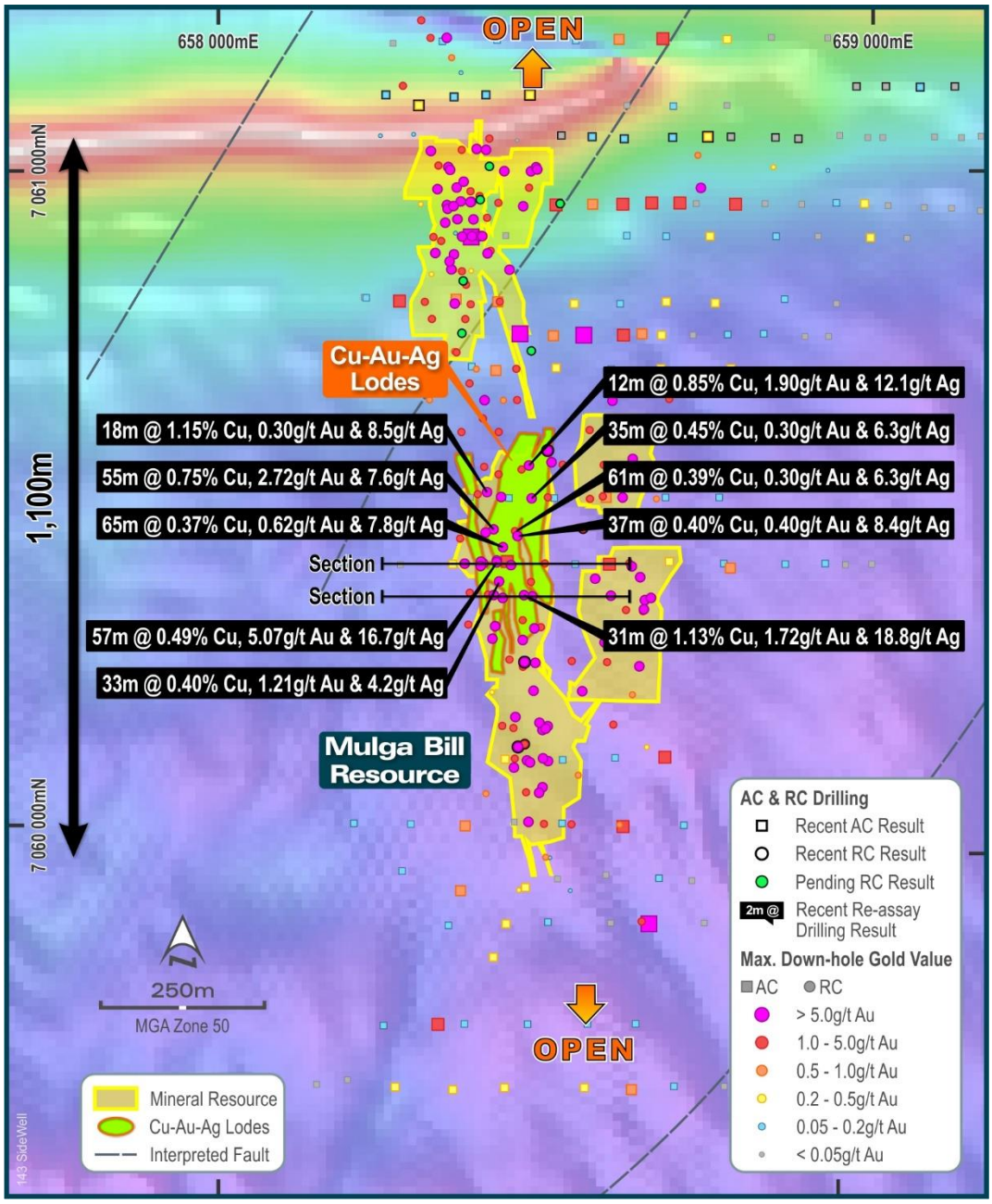

FIGURE 1: INTERPRETED COPPER-GOLD-SILVER LODES AND THE GOLD RESOURCE WIREFRAMES AT MULGA BILL

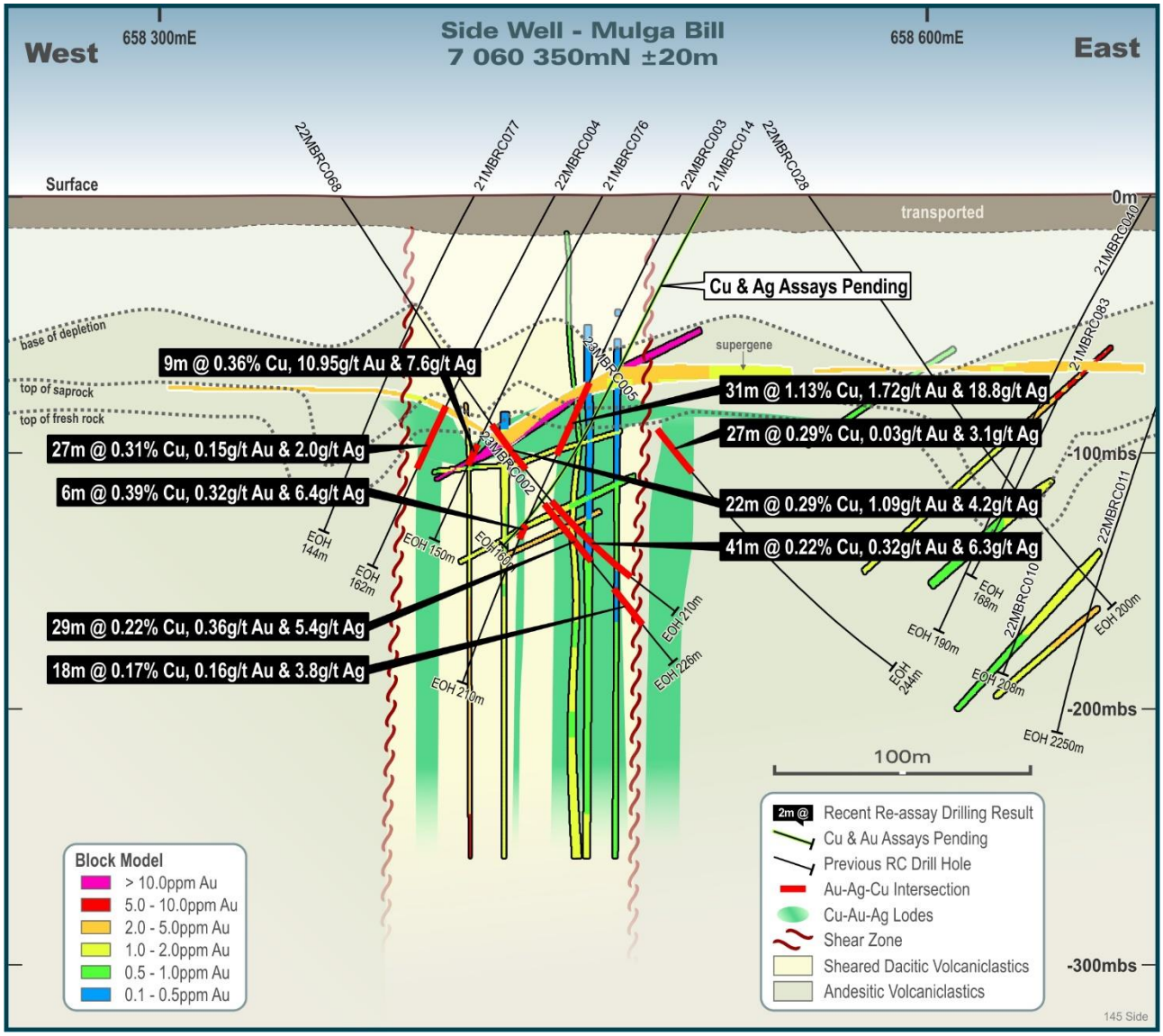

FIGURE 2: SECTION 7060350N SHOWS THE COPPER SULPHIDE LODE POSITIONS

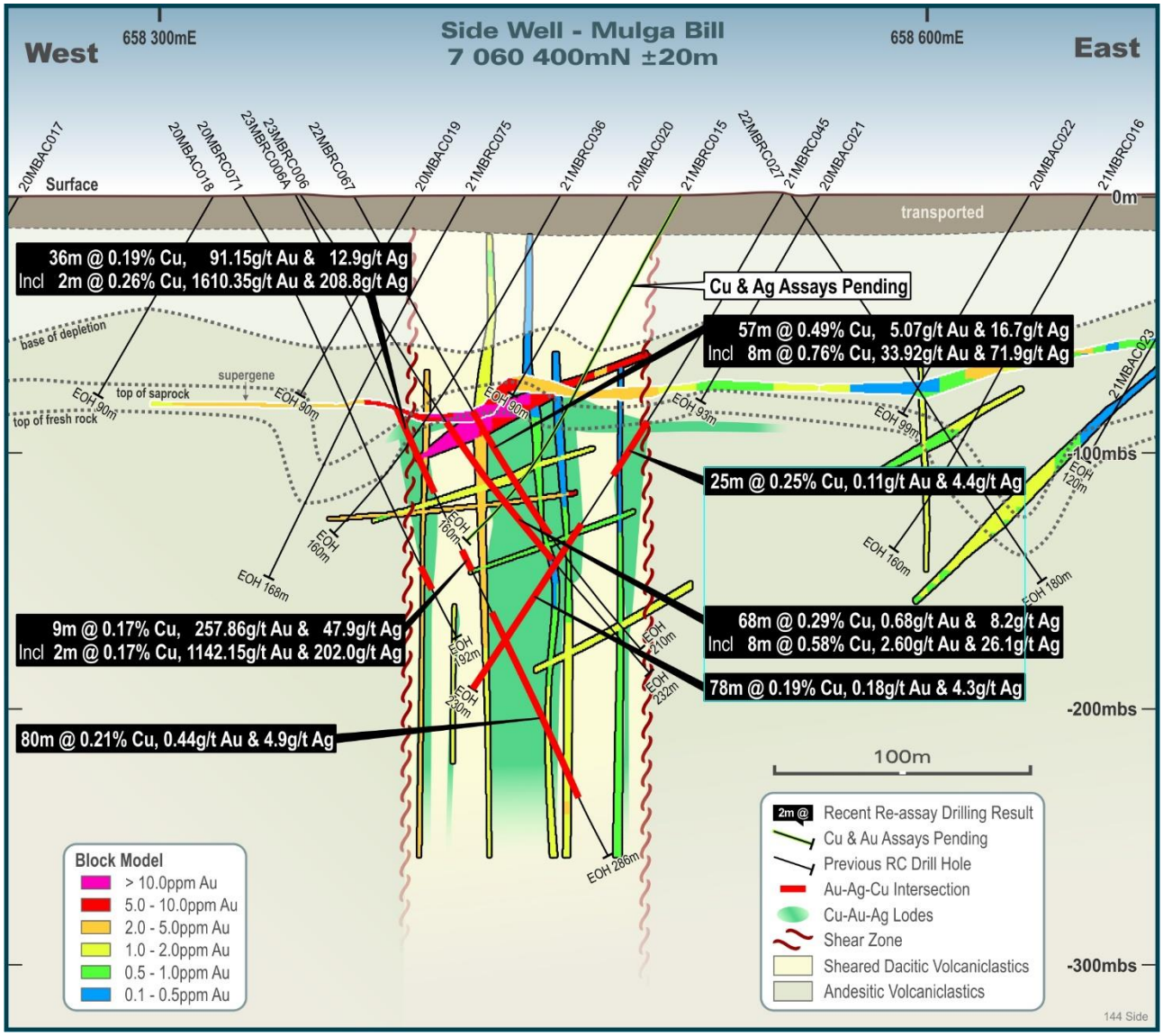

FIGURE 3: SECTION 7060400N

This announcement has been approved by the Great Boulder Board.

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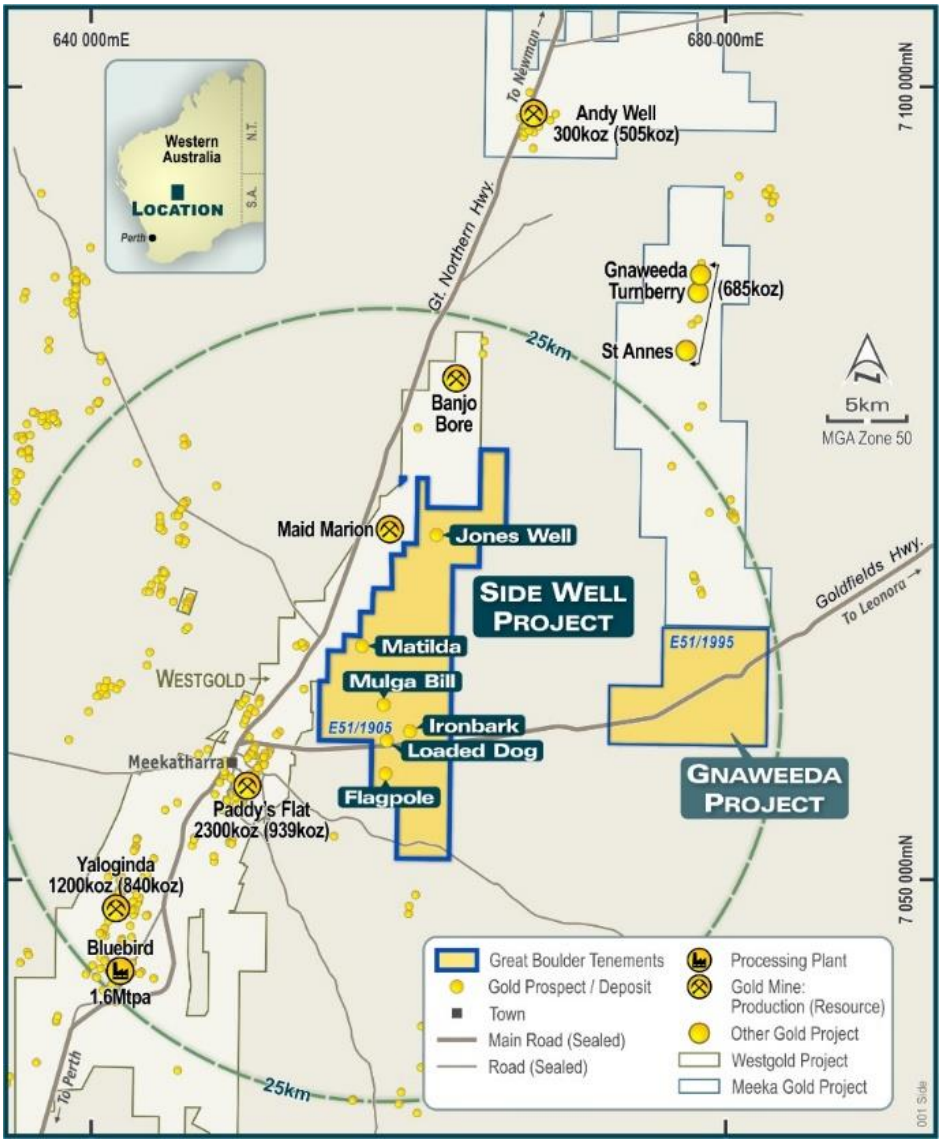

FIGURE 4: SIDE WELL LOCATION PLAN

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.

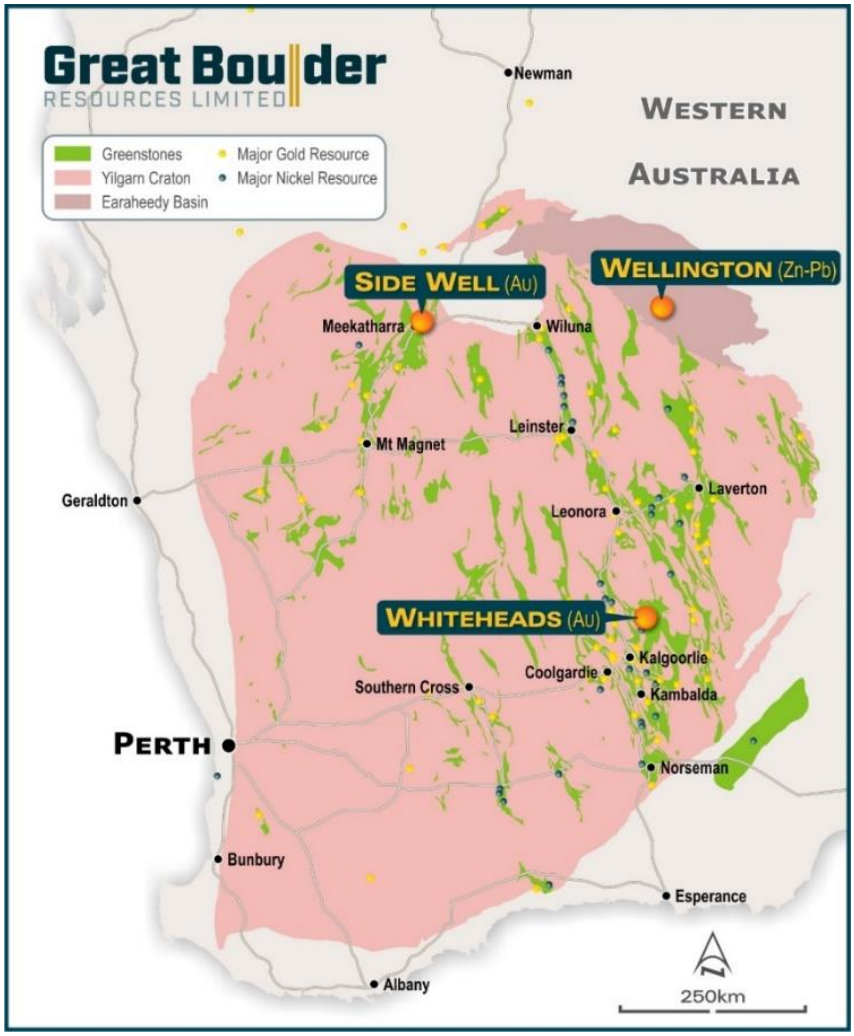

FIGURE 5: GREAT BOULDER'S PROJECTS

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.

TABLE 2: 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

TABLE 3: SELECTED SIGNIFICANT INTERSECTIONS FROM THE CU-AU-AG LODES

Hole ID	From	To	Width	Au g/t	Ag ppm	Cu %
21MBRC017	100	155	**55**	**2.72**	**7.6**	**0.75**
21MBRC034	129	150	21	7.47	3.8	0.25
21MBRC037	115	125	10	0.10	6.7	0.82
21MBRC046	83	101	**18**	**0.30**	**8.5**	**1.15**
21MBRC047	95	124	30	0.09	4.3	0.29
	168	192	25	0.13	3.7	0.23
21MBRC065	86	110	24	1.88	8.3	0.23
21MBRCD042	181	246	**65**	**0.20**	**4.6**	**0.29**
21MBRC045	104	129	25	0.11	4.4	0.25
	152	230	78	0.18	4.3	0.19
21MBRC051	100	112	12	0.08	25.5	0.62
21MBRC093	100	126	**26**	**0.20**	**1.6**	**0.44**
22MBRC003	82	113	**31**	**1.72**	**18.8**	**1.13**
22MBRC004	93	120	27	0.15	2.0	0.31
22MBRC025	89	101	12	1.90	12.1	0.85
	101	134	33	0.10	1.7	0.32
22MBRC045	115	125	**10**	**0.37**	**4.7**	**1.01**
22MBRC047	117	138	21	0.20	0.6	0.25
22MBRC061	101	126	25	13.97	3.3	0.27
22MBRC062	161	188	27	0.16	6.6	0.24
22MBRC064	96	131	**35**	**0.30**	**6.3**	**0.45**
22MBRC065	226	263	**37**	**0.40**	**8.4**	**0.40**
22MBRC066	94	155	**61**	**0.30**	**6.3**	**0.39**
including	133	143	10	0.70	13.2	0.72
22MBRC067	96	153	**57**	**5.07**	**16.7**	**0.49**
including	96	104	**8**	**33.92**	**71.9**	**0.76**
22MBRC068	107	129	22	1.09	4.2	0.29
	145	186	41	0.32	6.3	0.22
including	150	160	10	0.50	9.7	0.50
22MBRC069	157	198	41	0.20	7.0	0.27
22MBDD001	178	228	**50**	**0.70**	**6.4**	**0.35**
23MBRC002	107	140	33	1.21	4.2	0.40
	146	175	29	0.36	5.4	0.22
23MBRC003	103	130	27	0.32	2.9	0.31

	159	204	45	0.40	5.8	0.26
including	170	181	11	0.50	8.4	0.53
23MBRC004	93	132	39	0.11	3.5	0.26
23MBRC005	107	134	27	0.03	3.1	0.29
23MBRC006	105	173	**68**	**0.68**	**8.2**	**0.29**
23MBRC006A	93	129	36	91.15	12.9	0.19
23MBRC006A	181	261	**80**	**0.44**	**4.9**	**0.21**
23MBRC007	98	163	**65**	**0.62**	**7.8**	**0.37**

Intersections are selected at a lower cut-off of 5% Cu.m (e.g. 5m @ 1% Cu or 10m @ 0.5% Cu)

TABLE 4: COLLAR DETAILS. COORDINATES ARE IN GDA94, ZONE 50 PROJECTION.

Hole ID	Easting	Northing	RL	Depth	Dip	Azimuth
21MBRC017	658504	7060447	512	160	-60	270
21MBRC034	658414	7060953	511	150	-60	270
21MBRC037	658454	7060447	512	130	-60	270
21MBRC045	658544	7060397	513	230	-60	270
21MBRC046	658500	7060497	512	200	-60	270
21MBRC047	658551	7060497	512	200	-60	270
21MBRC065	658309	7060801	511	240	-70	270
21MBRCD042	658532	7060446	512	312.2	-60	270
21MBRC051	658306	7060975	510	184	-60	90
21MBRC093	658548	7060552	512	204	-60	270
22MBRC003	658504	7060351	512	210	-60	270
22MBRC004	658455	7060351	512	162	-60	270
22MBRC025	658417	7060548	511	186	-55	87
22MBRC045	658340	7060968	510	130	-55	87
22MBRC047	658398	7060647	511	142	-55	87
22MBRC061	658331	7060999	511	292	-55	87
22MBRC062	658393	7060599	510	262	-60	87
22MBRC064	658401	7060500	511	204	-60	87
22MBRC065	658284	7060460	511	282	-55	87
22MBRC066	658385	7060455	511	210	-65	87
22MBRC067	658376	7060401	511	210	-60	87
22MBRC068	658371	7060347	511	210	-55	87
22MBRC069	658364	7060303	511	232	-55	87
22MBDD001	658342	7060484	510	240.4	-60	88
23MBRC002	658369	7060374	512	226	-55	90
23MBRC003	658363	7060324	512	226	-55	90
23MBRC004	658334	7060296	511	316	-55	90
23MBRC005	658430	7060373	512	244	-55	90
23MBRC006	658355	7060399	511	232	-55	90
23MBRC006A	658352	7060394	512	286	-62	90
23MBRC007	658375	7060423	512	244	-62	90

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.
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.