

# NEW HIGH-GRADE GOLD DISCOVERY AT MULGA BILL NORTH

Multiple exciting high-grade gold intersections to inform robust resource update at Side Well Gold Project

## HIGHLIGHTS

- Extensional RC drilling at Mulga Bill North has discovered broad high-grade gold in a new area, with significant intersections including:
  - 29m @ 3.15g/t Au from 91m, including 8m @ 6.03g/t from 91m in 24MBRC047
  - 8m @ 5.67g/t Au from 103m, including 3m @ 12.67g/t Au from 103m in 24MBRC053
- High-grade intersections are within the same host lithology as Mulga Bill. The majority of the drilling at Mulga Bill North is located further west of this unit, meaning that the potential high grade host unit hasn't yet been fully explored or tested
- Latest drilling has confirmed further mineralisation to be incorporated into the Mulga Bill North maiden Mineral Resource Estimate.
- Mulga Bill North mineralisation now extends over a strike of 1,500m, remains open, and sits just to the north of the 568koz @ 2.7 g/t Au Mulga Bill deposit
- Results from latest drilling, geochemical and geophysical programs expected over the next 4 weeks providing strong news flow into the New Year.

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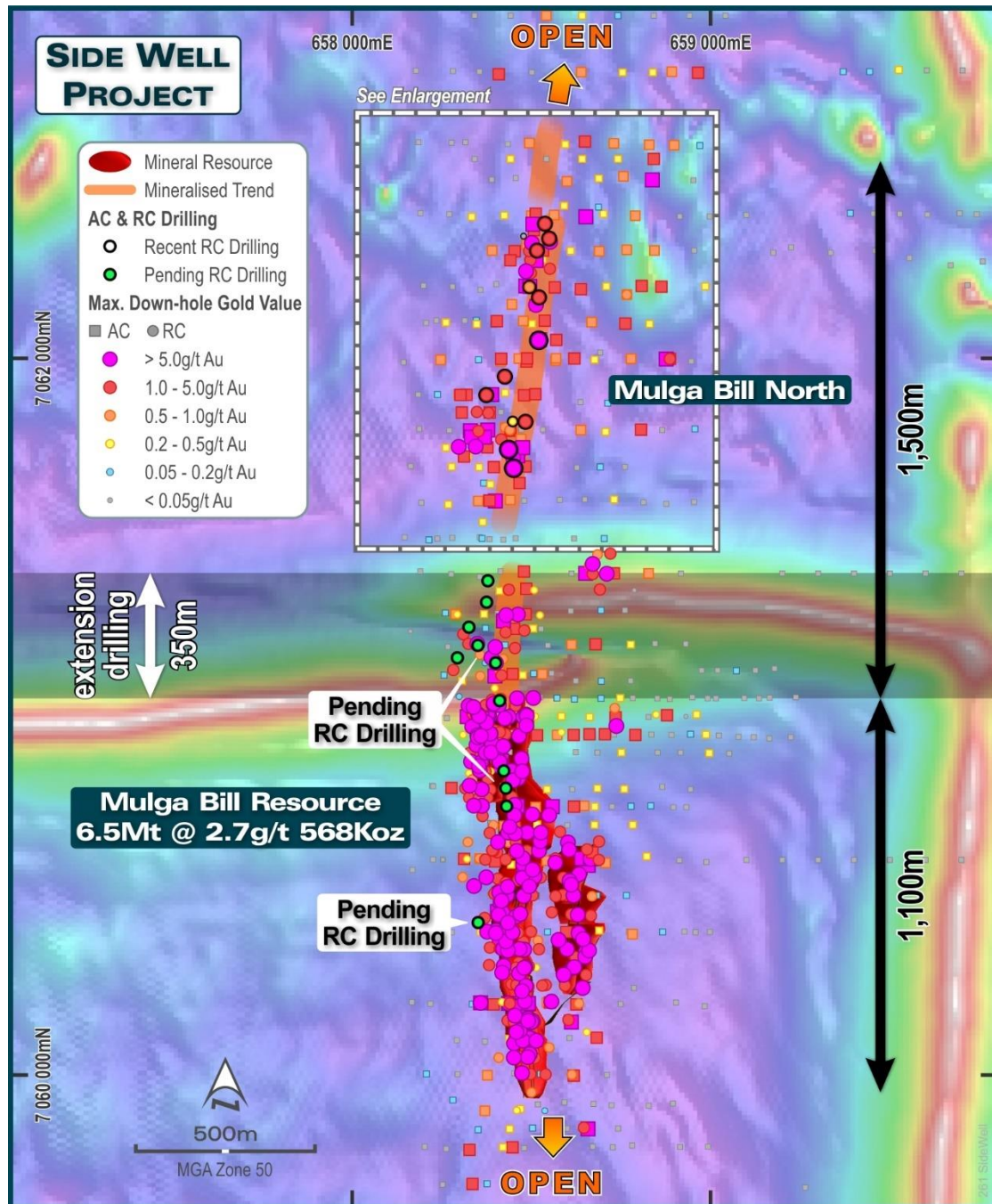
Great Boulder Resources ("Great Boulder" or the "Company") (ASX: **GBR**) is pleased to provide an update on exploration activity at the Company's flagship Side Well Gold Project ("**Side Well**") near Meekatharra in Western Australia which hosts a Mineral Resource Estimate ("**MRE**") of 668,000oz @ 2.8 g/t Au.

### Great Boulder's Managing Director, Andrew Paterson commented:

*"This is an exciting development at Mulga Bill North, with a new zone discovered that includes wide, high-grade gold intersections. The newly discovered mineralisation is hosted within the same unit as Mulga Bill, reinforcing our view that the overall Mulga Bill system has potential for more than a million ounces within the 2.5km of strike we've drilled to date."*

*"The team has completed several rounds of RC drilling in the Mulga Bill north area as we continue to bring this area into an expanded mineral resource estimate for the Side Well Project. There is still an additional 1km of strike further to the north which to date has only been tested by shallow AC drilling. We believe that there is the potential for substantial resource growth in the north, particularly considering that we have now discovered and defined high grade gold in the Mulga Bill host unit, and we have only just begun to test this trend."*

“Meanwhile, we have metallurgical test work ongoing, and the mining agreement negotiation is underway which will allow us to have mining leases granted. These workstreams will assist with derisking the Side Well Project and will provide a framework for development studies.”



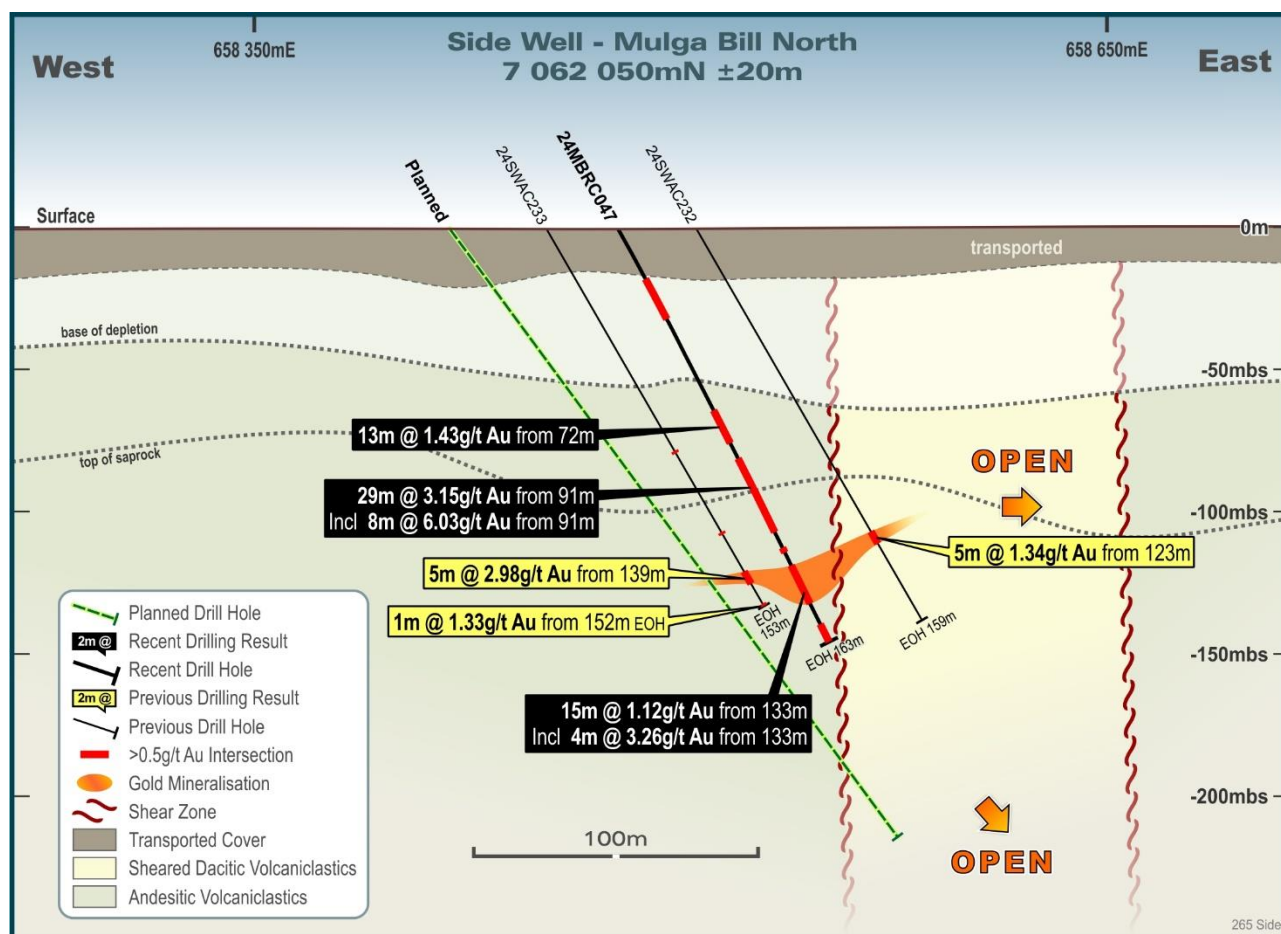
**FIGURE 1: RECENT DRILL RESULTS FROM THE MULGA BILL NORTH PROSPECT AND PENDING RESULTS FROM RC DRILLING AT MULGA BILL**

#### Mulga Bill North RC

13 RC holes for a total of 1,932m were drilled at Mulga Bill North (Figure 1). The drill program was designed to both confirm and infill known mineralisation, and test prospective target areas where previous drilling was wider spaced and/or sub-optimally oriented.

Drillhole 24MBRC047 was planned to test up-dip of an anomalous aircore result drilled earlier in 2024 (Figure 2). This RC hole has intersected a new high-grade zone of mineralisation not previously recognised at the prospect. Multiple zones of significant grade gold were intersected within the drillhole, with a best intersection of **29m @ 3.15g/t Au from 91m including 8m @ 6.03g/t Au**. Other broad significant intersections within the drillhole include **13m @ 1.43g/t from 72m** and **15m @ 1.12g/t from 133m, including 4m @ 3.26g/t**.

This latest result represents a significant upgrade to the neighbouring AC holes and opens up a broad area for follow-up extensional RC drilling both down-dip and along strike (Figure 2). High grade gold mineralisation was observed to be associated with significant zones of quartz veining; however supergene enrichment may also be contributing to the high grade nature of mineralisation, due to the mineralisation being located above the fresh rock boundary.



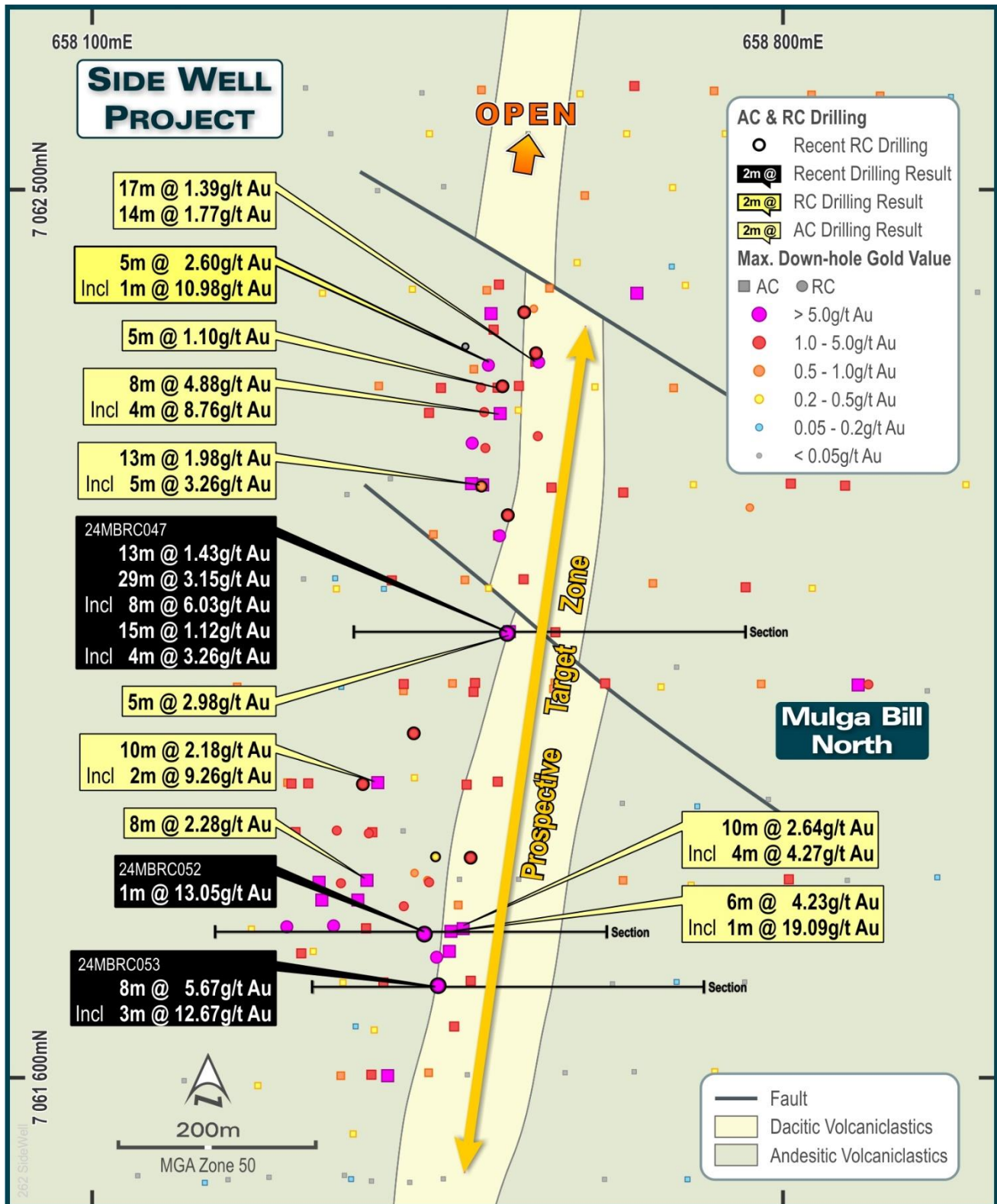
**FIGURE 2: MULGA BILL NORTH CROSS SECTION 7062050mN SHOWING BROAD NEW ZONES OF MINERALISATION AND DACITE CORRIDOR.**

This new intersection is interpreted to lie on the western boundary of the sheared dacite volcaniclastic corridor which is the main host of high-grade gold mineralisation further to the south at Mulga Bill. Drilling completed to date at Mulga Bill North has been focussed to the west of this unit, so the prospectivity of this corridor remains high and relatively poorly tested (Figure 3). This corridor can now be traced over 1,000m north of the Mulga Bill deposit, with its extension to the north limited only by the lack of drill data.

In support of this target area, additional high-grade results were reported from the western edge of the dacite corridor in drillholes 24MBRC052 (**8m @ 5.67g/t from 103m**) and 24MBRC053 (**1m @ 13.05g/t from 152m**) (Figures 4 and 5). These results are interpreted to represent west dipping high-



grade vein sets controlled by shearing along the dacite contact. Further drilling to the east and along strike of these intersections targeting the dacite corridor is a high priority for the company.



**FIGURE 3: GEOLOGICAL INTERPRETATION SHOWING LOCATION OF RECENT DRILLING. IMPORTANTLY, MOST OF THE CURRENT DRILL COVERAGE IS FOCUSED OUTSIDE OF THE DACITE CORRIDOR WHICH HOSTS MULGA BILL, MEANING THAT THE MULGA BILL ZONE REMAINS UNTESTED.**

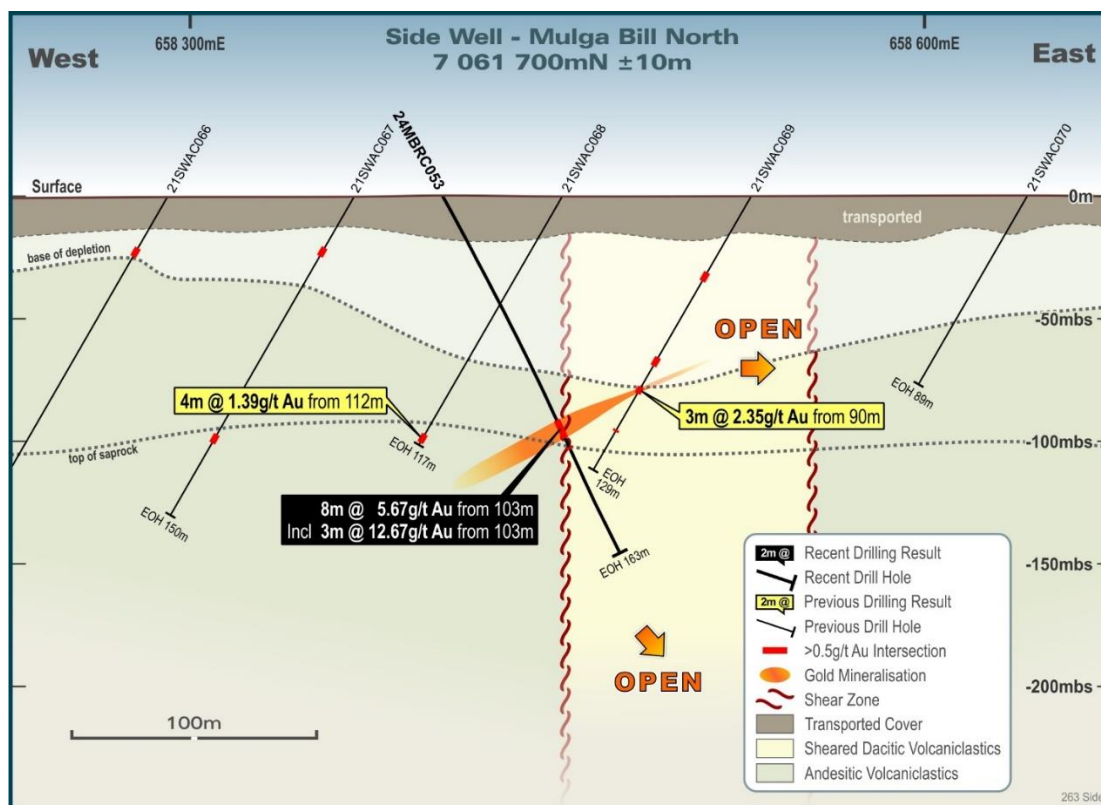


FIGURE 4: MULGA BILL NORTH CROSS SECTION 7061700MN SHOWING HIGH GRADE RESULTS AT DACITE CORRIDOR CONTACT.

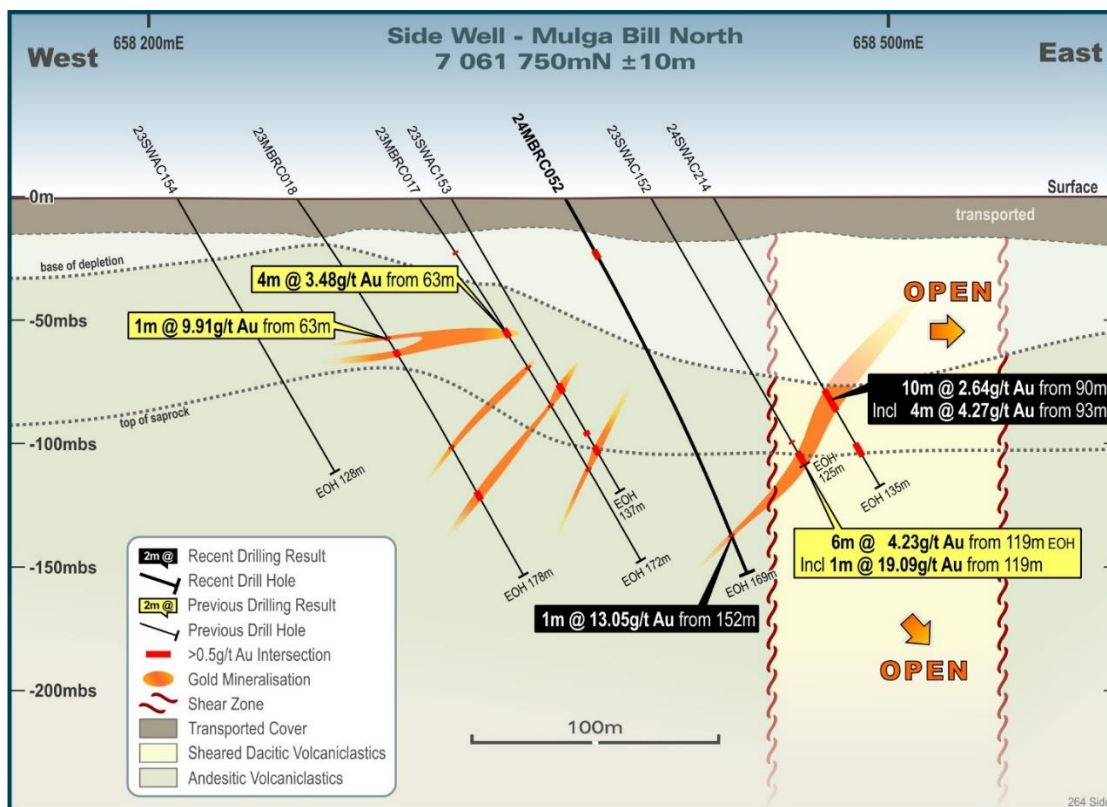


FIGURE 5: MULGA BILL NORTH CROSS SECTION 7062050MN SHOWING HIGH-GRADE RESULTS AT DACITE CORRIDOR CONTACT.

## Next Steps

Results from this latest round of results will be used to inform mineralisation interpretation for the Mulga Bill North maiden mineral resource estimate. Further priority drilling in the New Year is planned to better define these newly discovered zones of mineralisation and to target the highly prospective dacite corridor.

Following completion of drilling activities for 2024, GBR's field team has commenced auger sampling over the newly acquired Wanbana Joint Venture tenements at the southern end of the Side Well project to define new gold and pathfinder targets. Heritage surveying in Q1 will then allow drill testing of these new areas.

A team of geophysical contractors is currently on site, extending coverage of GBR's gravity survey over these new tenements, with results and analysis anticipated in January 2025.

Metallurgical test work on a range of samples from Mulga Bill is progressing well with results expected in January 2025.

**This announcement has been approved by the Great Boulder Board.**

*For further information contact:*

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*Managing Director*

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## 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 16 November 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 materially 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.



12th December 2024

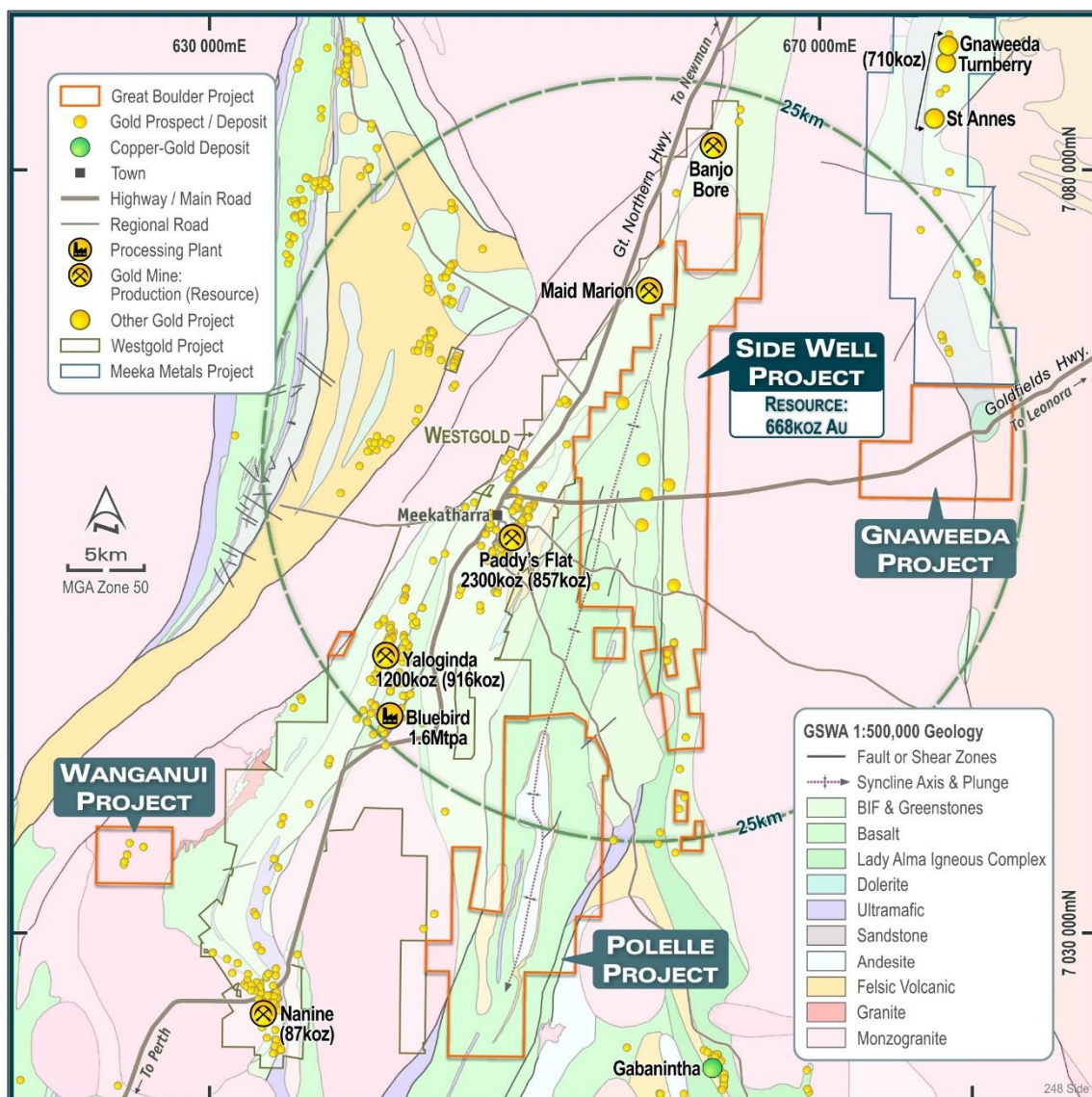


FIGURE 6: GBR'S MEEKATHARRA PROJECTS

TABLE 1: SIDE WELL MINERAL RESOURCE SUMMARY, NOVEMBER 2023

Deposit	Type	Cut-off	Indicated			Inferred			Total		
			Tonnes (kt)	Au (g/t)	Ounces	Tonnes (kt)	Au (g/t)	Ounces	Tonnes (kt)	Au (g/t)	Ounces
Mulga Bill	Open Pit	0.5	1,667	3.1	169,000	2,982	1.9	183,000	4,649	2.4	352,000
	U/ground	1.0	733	3.5	83,000	1,130	3.6	132,000	1,863	3.6	216,000
	Subtotal		2,399	3.3	252,000	4,112	2.4	316,000	6,511	2.7	568,000
Ironbark	Open Pit	0.5	753	3.7	88,000	186	1.9	11,000	938	3.3	100,000
	U/ground	1.0	0	0.0	0	0	0.0	0	0	0.0	0
	Subtotal		753	3.7	88,000	186	1.9	11,000	938	3.3	100,000
<b>Total</b>			<b>3,152</b>	<b>3.4</b>	<b>340,000</b>	<b>4,298</b>	<b>2.4</b>	<b>327,000</b>	<b>7,450</b>	<b>2.8</b>	<b>668,000</b>

Subtotals are rounded for reporting purposes. Rounding errors may occur.

TABLE 2: MULGA BILL NORTH SIGNIFICANT INTERSECTIONS

Prospect	Hole ID	From	To	Width	Grade	Comments
Mulga Bill North	24MBRC041	113	114	1	1.28	
		144	147	3	0.95	
	24MBRC042	0	12	12	Hole abandoned - No significant intersections	
	24MBRC043	12	20	8	0.19	4m composites
		56	74	18	0.38	4m composites
		80	81	1	0.80	
		84	88	4	0.89	
		95	96	1	1.13	
		113	114	1	0.52	
		128	132	4	0.14	4m composite
		148	168	20	0.58	4m composites
	24MBRC044	20	24	4	0.13	4m composite
		32	39	7	0.41	4m composite
		68	72	4	0.20	4m composite
	24MBRC045	20	24	4	0.17	4m composite
		58	59	1	0.79	
	24MBRC046	16	24	8	0.14	4m composite
		67	68	1	0.56	
		132	133	1	0.77	
		165	168	3	1.28	
		172	176	4	0.10	4m composite
	24MBRC047	20	36	16	0.16	4m composite
		60	64	4	0.14	4m composite
		72	85	13	1.43	
		91	120	29	3.15	Several wet samples with poor recovery
	including	91	99	8	6.03	
		126	128	2	1.04	
		133	148	15	1.12	4m composites
	including	133	137	4	3.26	
		156	163	7	0.16	Composites to EOH
	24MBRC048	88	92	4	0.13	4m composite
		108	111	3	0.90	
		128	176	48	0.30	4m composites
		179	180	1	1.90	
		184	188	4	1.27	
	24MBRC049	92	96	4	0.16	
		104	112	8	0.29	4m composites
		127	133	6	0.81	



	148	163	15	0.15	Composites to EOH
24MBRC050	60	64	4	0.30	4m composite
	76	92	16	0.27	4m composites
	100	104	4	0.21	4m composite
	109	111	2	1.20	
	129	131	2	0.69	
24MBRC051	28	32	4	0.13	4m composite
24MBRC052	24	28	4	0.13	4m composite
	152	153	1	13.05	
24MBRC053	103	111	8	5.67	
including	103	106	3	12.67	
	115	116	1	0.90	

Significant intersections are reported at a 0.1g/t Au cut-off for 4m composite samples and a 0.5g/t Au cut-off for 1m samples

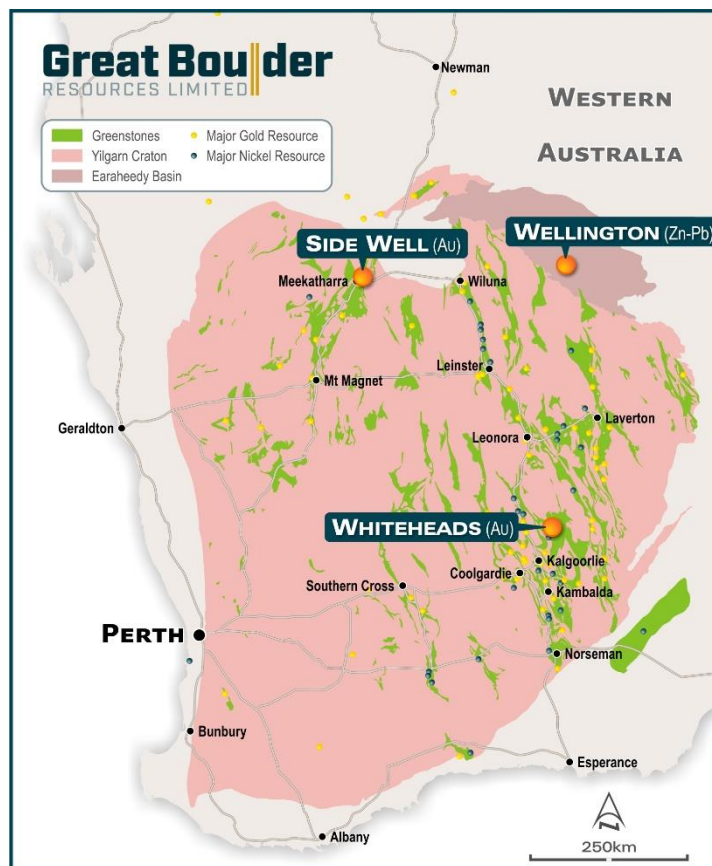
**TABLE 3: COLLAR DETAILS: MULGA BILL NORTH RC DRILLING**

Hole ID	Prospect	Easting	Northing	RL	Dip	Azi (Mag)	Total Depth
24MBRC041	Mulga Bill North	658467	7062375	509	-60	90	169
24MBRC042	Mulga Bill North	658477	7062341	509	-60	90	12
24MBRC043	Mulga Bill North	658477	7062337	509	-60	90	169
24MBRC044	Mulga Bill North	658497	7062301	509	-60	90	103
24MBRC045	Mulga Bill North	658466	7062200	509	-60	90	115
24MBRC046	Mulga Bill North	658478	7062051	509	-60	90	181
24MBRC047	Mulga Bill North	658447	7062175	509	-60	90	163
24MBRC048	Mulga Bill North	658338	7061951	509	-60	90	205
24MBRC049	Mulga Bill North	658312	7061900	509	-60	90	163
24MBRC050	Mulga Bill North	658434	7061825	509	-60	90	139
24MBRC051	Mulga Bill North	658390	7061825	509	-60	90	181
24MBRC052	Mulga Bill North	658369	7061750	509	-60	90	169
24MBRC053	Mulga Bill North	658403	7061694	510	-60	90	163

Collar coordinates are in GDA94 Zone 50 projection.

## 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 exploration has defined a Mineral Resource of 7.45Mt @ 2.8g/t Au for 668,000oz Au (340koz @ 3.4g/t Au Indicated, 327koz @ 2.4g/t Au Inferred). 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

**759M**

**SHARES ON ISSUE**  
ASX:GBR

**\$33M**

**MARKET CAP**  
At \$0.05/sh

**~\$7.5M**

**CASH**  
As at 30/06/24

**Nil**

**DEBT**  
As at 31/3/2024

**\$1.0M**

**LISTED INVESTMENT**  
Cosmo Metals (ASX:CMO)

**58.5M**

**UNLISTED OPTIONS**

**\$61k**

**DAILY LIQUIDITY**  
Average 30-day value traded

**~38%**

**TOP 20 OWNERSHIP**



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 (GBR Drilling, Side Well Project)

### Section 1 Sampling Techniques and Data

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

Criteria	Commentary
<b>Sampling techniques</b>	<p>At the Side Well Project GBR has collected data from auger sampling and from AC, RC and Diamond drilling techniques. This section encompasses all four methods.</p> <p>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.</p> <p>Core samples are selected visually based on observations of alteration and mineralisation and sampled to contacts or metre intervals as appropriate. Once samples are marked the core is cut in half longitudinally with one half taken for assay and the other half returned to the core tray.</p> <p>AC samples were placed in piles on the ground with 4m composite samples taken using a scoop.</p> <p>Auger samples are recovered from the auger at blade refusal depth. Auger drilling is an open-hole technique.</p>
<b>Drilling techniques</b>	<p>Industry standard drilling methods and equipment were utilised.</p> <p>Auger drilling was completed using a petrol-powered hand-held auger.</p>
<b>Drill sample recovery</b>	<p>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.</p> <p>No quantitative twinned drilling analysis has been undertaken.</p>
<b>Logging</b>	<p>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.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p>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 a 50g lead collection fire assay and Atomic Adsorption Spectrometry (AAS) finish. For AC drilling, Au analysis was undertaken at Intertek using a 50g lead collection fire assay with ICP-OES finish (FA50/OE).</p> <p>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).</p>
<b>Quality of assay data and laboratory tests</b>	<p>All samples were assayed by industry standard techniques. Fire assay for gold; four-acid digest and aqua regia for multi-element analysis.</p>
<b>Verification of sampling and assaying</b>	<p>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. Field Duplicates as second cone splits are inserted within known ore zones to assess repeatability. 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.</p>
<b>Location of data points</b>	<p>Sample locations and mapping observations were located and recorded electronically using a handheld GPS. Coordinates were recorded in GDA94 grid in Zone 50, which is the GDA94 zone for the Meekatharra area.</p> <p>Drill holes were positioned using the same technique. Hole collars were initially picked up after drilling using a handheld GPS. RC and Diamond hole collars were subsequently surveyed with a DGPS for greater accuracy.</p> <p>This accuracy is sufficient for the intended purpose of the data.</p>



<b>Data spacing and distribution</b>	<p>The spacing and location of the majority of drilling in the projects is, by the nature of early exploration, variable.</p> <p>The spacing and location of data is currently only being considered for exploration purposes.</p>
<b>Orientation of data in relation to geological structure</b>	<p>Drilling is dominantly perpendicular to regional geological trends where interpreted and practical. Wherever possible, cross sections are shown to give a visual indication of the relationship between intersection width and lode thickness.</p> <p>The spacing and location of the data is currently only being considered for exploration purposes.</p>
<b>Sample security</b>	<p>GBR personnel are responsible for delivery of samples from the drill site to the Toll Ipec dispatch center in Meekatharra. Samples are transported by Toll Ipec from Meekatharra to the laboratories in Perth.</p>
<b>Audits or reviews</b>	<p>Data review and interpretation by independent consultants on a regular basis. Group technical meetings are usually held monthly with input from independent expert consultants in the fields of geochemistry, petrology, structural geology and geophysics.</p>

## Section 2 Reporting of Exploration Results

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

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<p>Side Well tenement E51/1905 is a 48-block exploration license covering an area of 131.8km<sup>2</sup> 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.</p> <p>Aircore drilling was completed on P51/3178 and P51/2978 located directly south of E51/1905. These tenements are held in a 80:20 joint venture between Great Boulder and Wanbanna Pty Ltd.</p>
<b>Exploration done by other parties</b>	<p>Tenement E51/1905, P51/3178 and P51/2978 have protracted exploration histories but are relatively unexplored compared to other regions surrounding Meekatharra.</p>
<b>Geology</b>	<p>The Side Well tenement group covers a portion of the Meekatharra-Wydege Greenstone Belt north of Meekatharra, WA. The north-northeasterly-trending Archaean Meekatharra-Wydege Greenstone Belt, comprises a succession of metamorphosed mafic to ultramafic and felsic and sedimentary rocks belonging to the Luke Creek and Mount Farmer Groups.</p> <p>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.</p> <p>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.</p> <p>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. Subcrop exposures of laterite, mafic and ultramafic rocks are present along the eastern side of the project, however exposure of outcrop is still relatively poor.</p>
<b>Drill hole Information</b>	<p>A list of the drill hole coordinates, orientations and intersections reported in this announcement are provided as an appended table in the relevant announcements for each drilling program.</p>
<b>Data aggregation methods</b>	<p>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.</p> <p>A weighted average calculation may be 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.</p> <p>No metal equivalents are used.</p>

<b><i>Relationship between mineralisation widths and intercept lengths</i></b>	The majority of 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. Cross sections are shown wherever possible to illustrate relationships between drilling and interpreted mineralisation.
<b><i>Diagrams</i></b>	Refer to figures in announcement.
<b><i>Balanced reporting</i></b>	It is not practical to report all historical exploration results from the Side Well project. Selected historical intercepts have previously been re-reported by GBR to highlight the prospectivity of the region, however the vast majority of work on the project has been completed by GBR and reported in ASX announcements since 14 July 2020.
<b><i>Other substantive exploration data</i></b>	Subsequent to Doray Minerals Limited exiting the project in 2015, private companies have held the ground with no significant work being undertaken. Wanbanna Pty Ltd has done limited work consisting mainly of AC drilling around the Burke's Reward and Golden Bracelet prospect's further south.
<b><i>Further work</i></b>	Further work is discussed in the document.