

# SIDE WELL EXPLORATION UPDATE

## HIGHLIGHTS

- Auger data analysis from Ironbark North & South indicates a large hydrothermal gold camp comparable in size to the Paddy's Flat gold camp stretching over 12km of strike
  - Rock chip samples up to 7g/t Au confirm prospectivity at Ironbark South
- High-grade gold assays received from Phase 6 RC drilling at Mulga Bill, including:
  - 8m @ 6.51g/t Au from 96m in 22MBRC094
- Further shallow gold intersections in RC drilling at Ironbark, including:
  - 24m @ 1.19g/t Au from 68m in hole 22IBRC039
  - 4m @ 1.15g/t Au from surface in hole 22IBRC043
- Maiden Mineral Resource Estimate (MRE) at Mulga Bill & Ironbark expected Q1 CY2023

---

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

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

*"These are the final batches of assays from RC drilling at Mulga Bill and Ironbark. We have demobilised the rig to give our field team a chance to complete geological mapping down the eastern side of Side Well including Ironbark and Ironbark South."*

*"We have priority drill targets for the next round of drilling, including the new eastern zone at Mulga Bill as well as depth and strike extensions at Ironbark. We will also be testing further extensions of the HGV area at Mulga Bill, looking to extend the HGV along strike to the north and south."*

*"The infill auger sampling south of Ironbark has provided increased definition on multiple targets. Further assessment of all the data by Dr Scott Halley supports our long-standing view that we are starting to uncover a significant hydrothermal gold camp which is comparable in scale to the Meekatharra gold camp with a 12km long strike footprint. This represents an opportunity of enormous untested potential."*

*"We have also started fine-tuning mineralisation wireframes for Mulga Bill and Ironbark in preparation for a maiden mineral resource estimate in the first quarter of 2023. That estimate will be an important step for Great Boulder as it will draw a line under the work we have already done and provide a clear benchmark for the potential of current and untested target areas."*

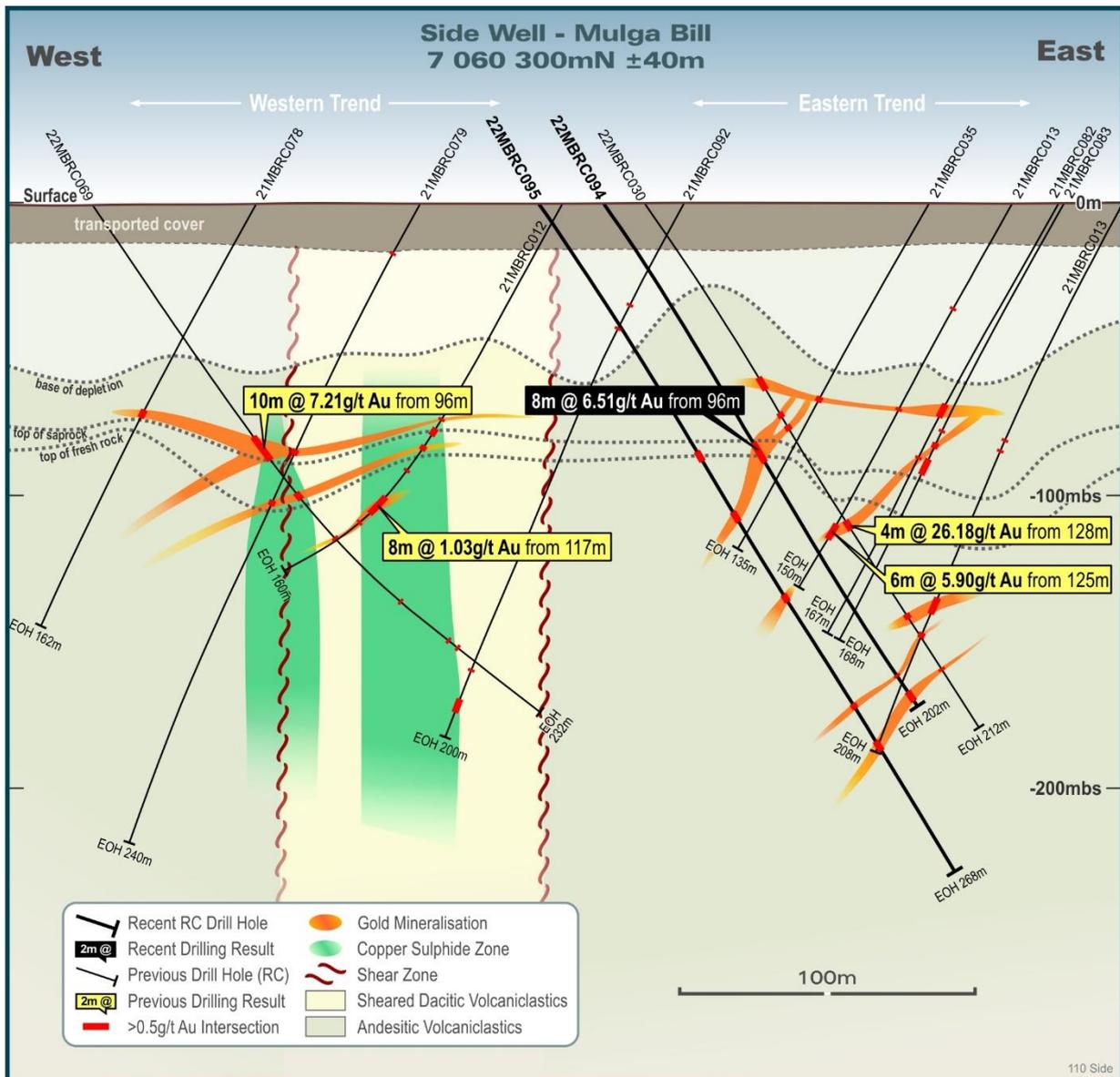


FIGURE 1: SECTION 7060300N SHOWING RECENT RESULTS IN THE EASTERN ZONE AT MULGA BILL.

**RC Drilling**

Results have been received from drilling at Mulga Bill (12 holes) and Ironbark (9 holes) up to the end of October. Significant results include:

- **8m @ 6.51g/t from 96m**, including 4m @ 11.85g/t from 96m, in 22MBRC094 within the recently discovered eastern high-grade zone at Mulga Bill
- 24m @ 1.19g/t Au from 68m, including 8m @ 2.76g/t Au from 76m in 22IBRC039 at Ironbark
- 4m @ 1.15g/t Au from surface in 22IBRC043 at Ironbark.

These results represent the final round of RC drilling at Side Well, as the rig has demobilised from site to give the field team time to complete mapping, interpretation of results, preparation of mineralisation wireframes and additional auger sampling prior to the next round of drilling.

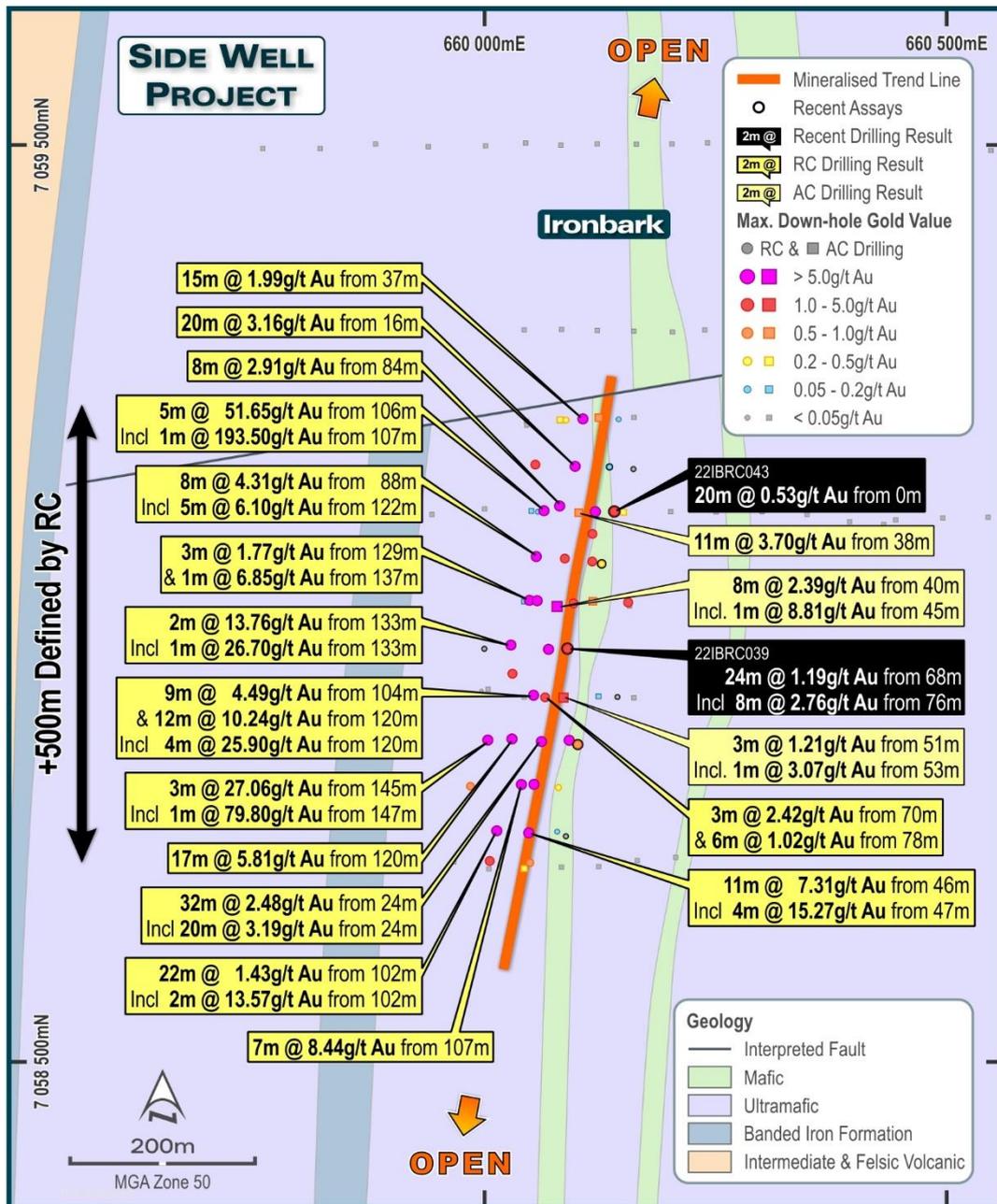
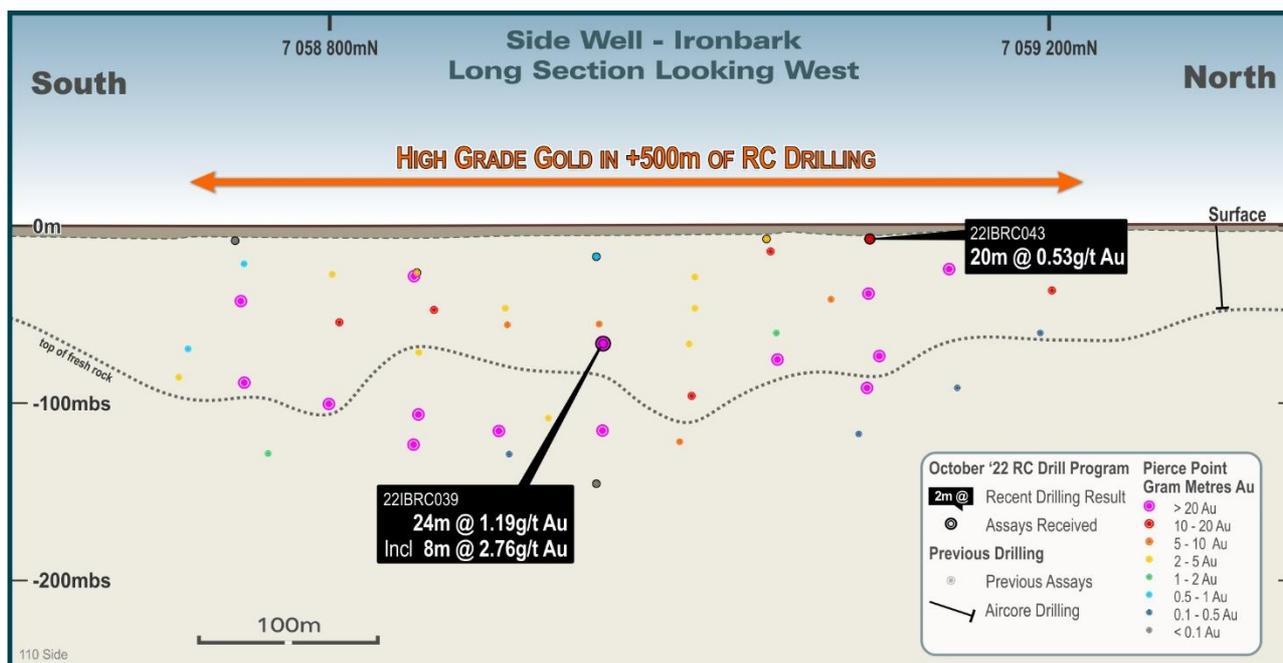


FIGURE 2: RECENT RC RESULTS FROM THE IRONBARK DEPOSIT

Seven of the nine holes drilled at Ironbark tested positions to the east of the high-grade zone. As noted in Table 1 below the majority of the assay results from Mulga Bill and Ironbark are from 4m composite samples, with anomalous results now being re-assayed in 1m splits.



**FIGURE 3: A LONG SECTION THROUGH IRONBARK SHOWING ALL RC DRILL INTERSECTIONS TO DATE.**

### Ironbark South: pathfinder anomalism over 12km of strike

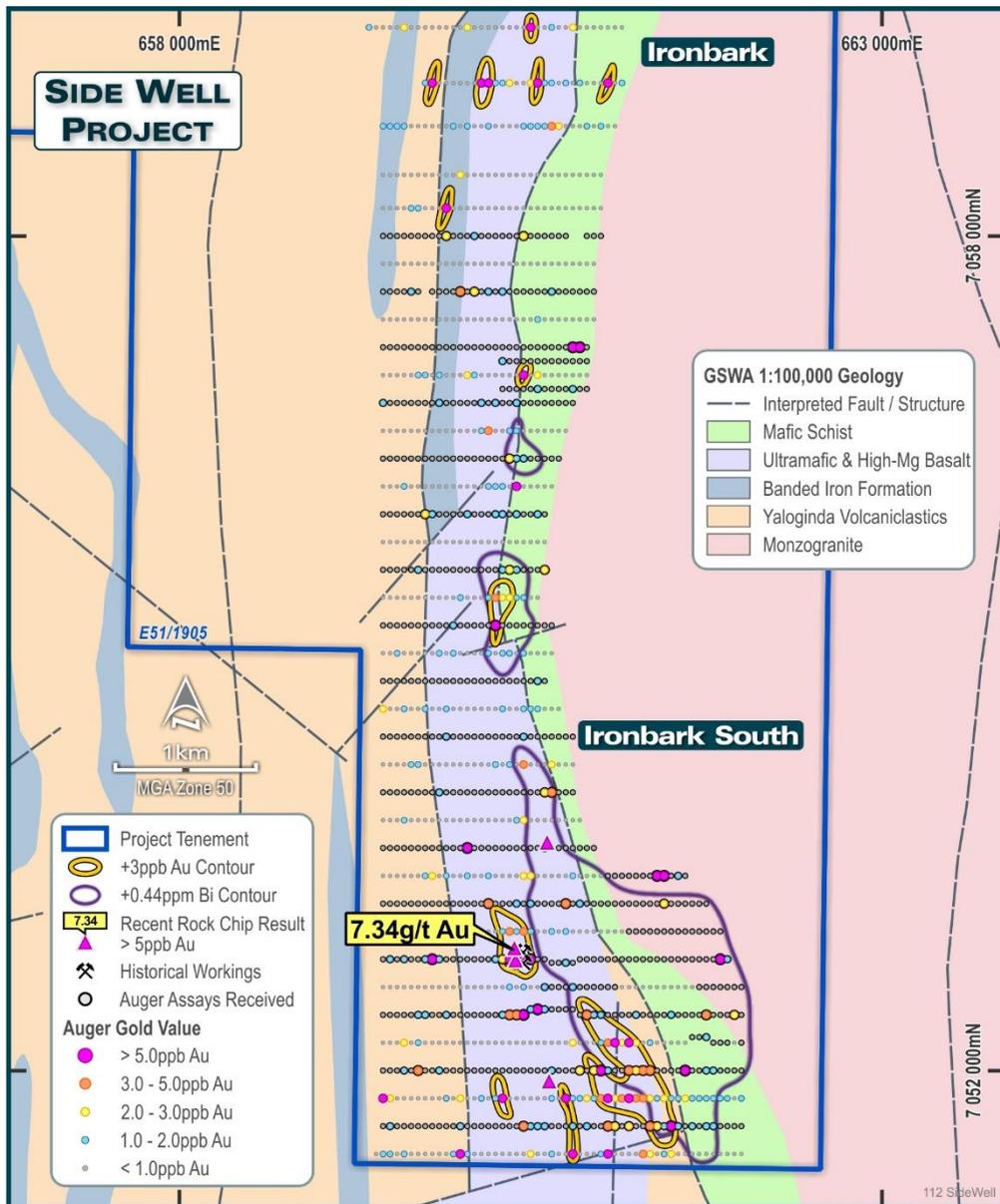
On 28 September 2022 GBR announced a series of new exploration targets in the area between Ironbark and the southern tenement boundary. This outcome represents a significant breakthrough in the Company's regional exploration program as the new targets highlight the potential scale of gold mineralisation along the eastern limb of the syncline, comparable in strike extent to the Paddy's Flat gold camp hosted on the western limb.

GBR has now completed infill auger sampling over the Ironbark South grid, with over 1,300 auger samples collected at a 200 x 50m grid cell size. The additional data density has confirmed and refined the new targets, which will be tested by air-core (AC) drilling in 2023.

Analysis of the auger data by Dr Scott Halley provides some extremely significant conclusions relevant to the regional mineral system at Side Well, including:

- The monzogranite abutting the greenstones east of Ironbark South appears to be the source of mineralising fluids, with a strong temperature gradient of pathfinder elements moving away from the granite contact into the mafic/ultramafic package. **Mo** is strongest on the granite contact followed by very high **Bi** with arsenic (**As**) anomalism and then antimony (**Sb**) further west into the mafic and ultramafic rocks that surround the granite. This is a zoning pattern that is typical of temperature gradients formed around mineralized intrusions in all sorts of geological settings.
- The presence of broad pathfinder anomalism together with Au, As and some Cu suggests Side Well is a large-scale hydrothermal camp.
- The scale of the anomalism over 12km is now equivalent to the strike extent of the Meekatharra camp.
- This hypothesis explains both the intrusive-related characteristics of Mulga Bill and the orogenic style of Ironbark, which is likely to represent remobilisation of mineralising fluids into a ductile environment inboard from the granite contact.

This interpretation of the Side Well mineral system expands the Company’s search radius even further.



**FIGURE 4: AUGER SAMPLING (AU) PLUS ANOMALIES OVER 7.5KM OF STRIKE AT IRONBARK SOUTH.**

**Ironbark South rock chip samples up to 7.34g/t Au**

During October rock chip samples were taken during field reconnaissance at Ironbark South. Two samples taken from a cluster of shallow historic workings approximately 1.5km from the southern tenement boundary include smoky quartz material assaying 7.34g/t Au (Table 3 below).

The significance of this is twofold: firstly, it confirms the presence of high-grade gold-bearing structures at Ironbark South (as indicated by the auger geochemistry); and secondly it confirms gold close to surface. The latter observation is based on the fact that the shafts from which the quartz sample originated are less than 10m deep.



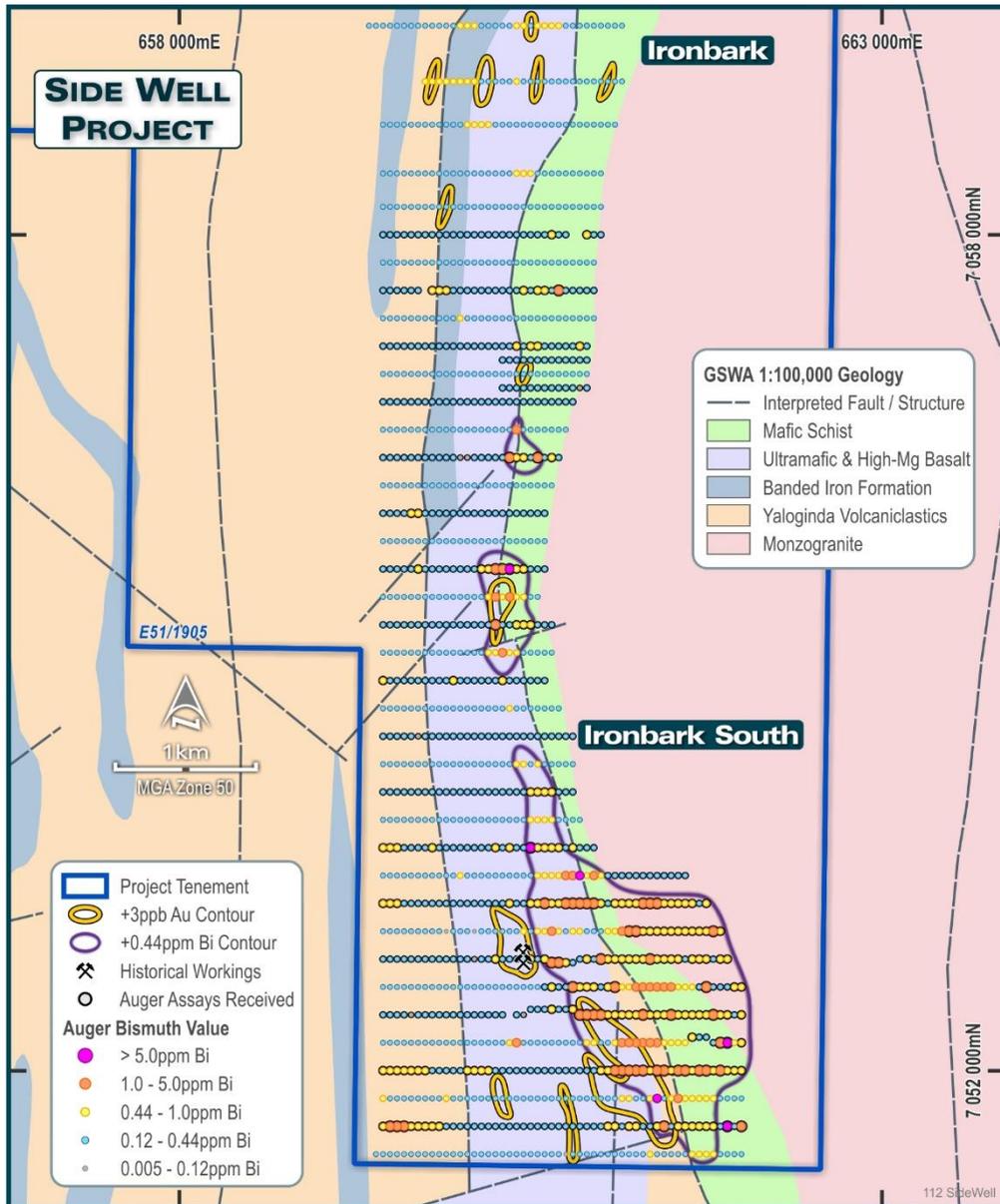
**FIGURE 5: HISTORIC WORKINGS AT IRONBARK SOUTH**

### Next Steps

Great Boulder's field team has commenced geological mapping of structure and stratigraphy from Ironbark to the southern tenement boundary to improve the Company's understanding of the Polelle Syncline. This mapping will assist in prioritising new areas for further exploration. The team will also start mapping north from Ironbark in an ongoing program, as time permits.

Regional auger sampling over the eastern stratigraphy, including the area north of Ironbark, will continue to infill the previous 400 x 50m grid to 200 x 50m coverage.

The geological team is also working to incorporate recent drilling results into the mineralisation models for Mulga Bill and Ironbark in order to update and refine wireframes of all mineralisation defined to date. These wireframes will be used as the basis for a maiden Mineral Resource Estimate that the Company is aiming to finalise during Q1 of 2023.



**FIGURE 6: BISMUTH ANOMALISM IS PARTICULARLY STRONG AND WIDESPREAD IN THE SOUTH-EASTERN AREA OF THE AUGER GRID WITH A MAXIMUM VALUE OF 47PPM BI.**

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

*For further information contact:*

**Andrew Paterson**  
 Managing Director  
 Great Boulder Resources Limited  
[admin@greatboulder.com.au](mailto:admin@greatboulder.com.au)  
[www.greatboulder.com.au](http://www.greatboulder.com.au)

**Media**  
 Lucas Robinson  
 Corporate Storytime  
 +61 408 228 889  
[lucas@corporatestorytime.com](mailto:lucas@corporatestorytime.com)

Follow GBR on LinkedIn

Follow GBR on Twitter

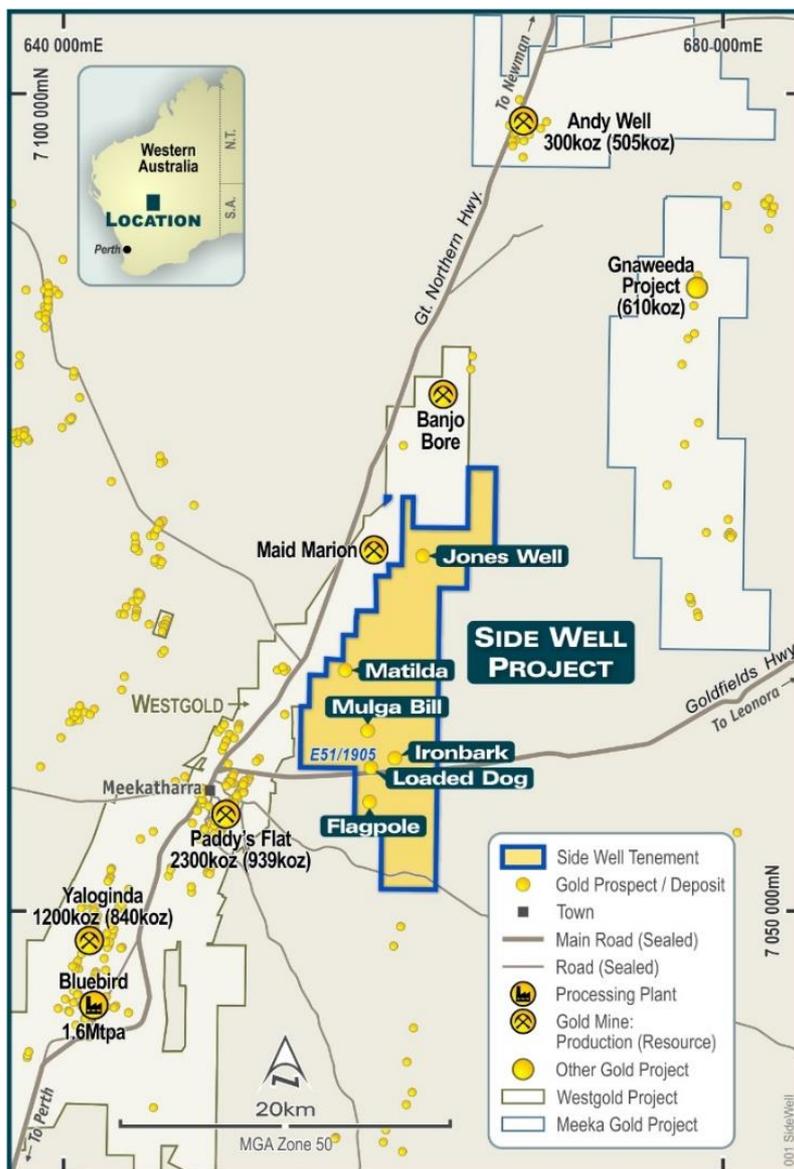


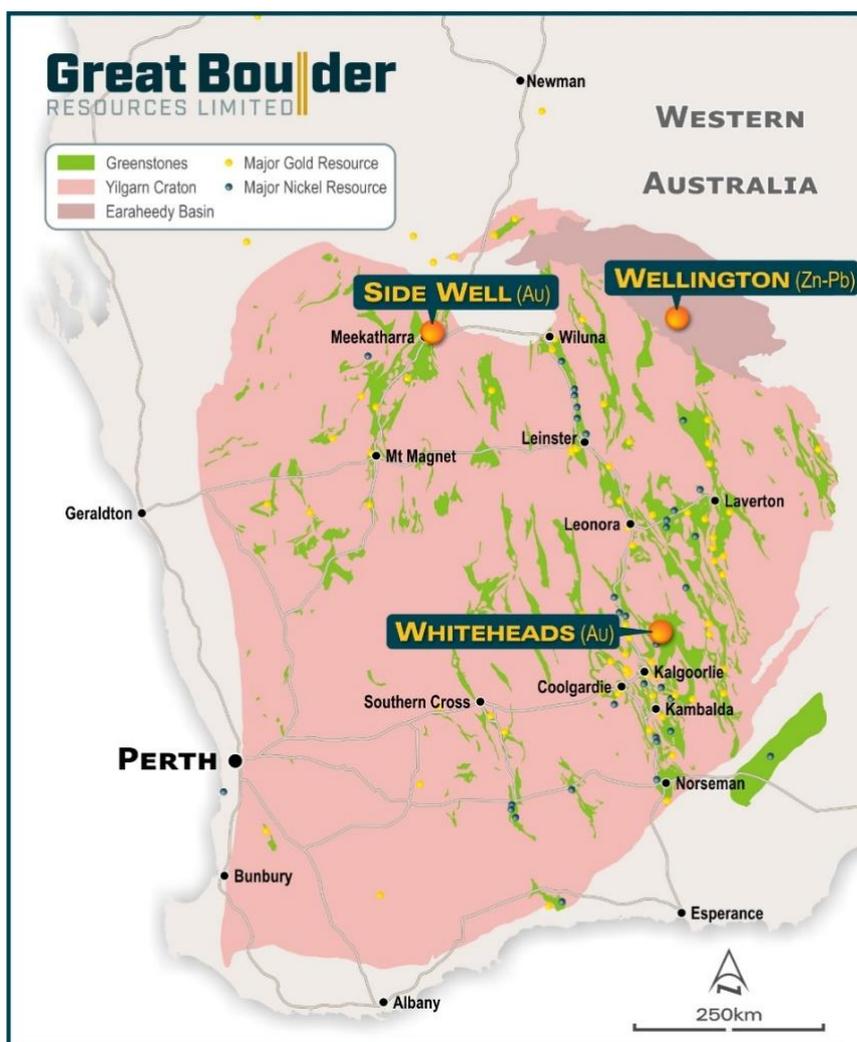
FIGURE 7: SIDE WELL LOCATION PLAN

**ABOUT GREAT BOULDER RESOURCES**

Great Boulder is a mineral exploration company with a portfolio of highly prospective gold and base metals assets 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.



**FIGURE 8: GREAT BOULDER’S PROJECTS**

TABLE 1: SIGNIFICANT INTERSECTIONS FROM SIDE WELL RC DRILLING

Prospect	Hole ID	From	To	Width	Au g/t	Comments
Mulga Bill	22MBRC086	0	262			No significant intersection
	22MBRC087	92	96	4	0.19	4m composite
	22MBRC088	48	60	12	0.14	4m composites
		68	76	8	0.49	4m composites
		88	104	16	0.39	4m composites
		116	120	4	0.15	4m composite
		128	132	4	0.91	4m composite
		155	157	2	2.08	
		164	179	15	1.03	
	22MBRC089	44	48	4	0.19	4m composite
		84	88	4	0.28	4m composite
		121	122	1	1.94	
		130	131	1	0.81	
		152	156	4	0.24	4m composite
		171	178	7	0.57	
		208	220	12	0.15	4m composites, EOH
	22MBRC090	0	208			No significant intersection
	22MBRC091	0	202			No significant intersection
	22MBRC092	80	89	9	0.34	4m composites
	22MBRC093	184	188	4	0.1	4m composite
	22MBRC094	72	76	4	0.25	4m composite
		<b>96</b>	<b>104</b>	<b>8</b>	<b>6.51</b>	4m composites
		<i>Including</i> <b>96</b>	<b>100</b>	<b>4</b>	<b>11.85</b>	4m composite
184		190	6	1.27	4m composite	
196		202	6	0.8	4m composite, EOH	
22MBRC095		100	104	4	0.54	4m composite
22MBRC096	112	128	16	0.27	4m composites	
	157	160	3	1.59		
	201	203	2	2.89		
	216	220	4	0.6	4m composite	
	228	232	4	0.28	4m composite	
	252	260	8	0.26	4m composite	
	22MBRC097	80	88	8	0.51	4m composites
22MBRC097	104	116	12	1.28	4m composites	
	92	96	4	0.47	4m composite	
	108	112	4	0.13	4m composite	
	153	168	15	1.22	4m composite	
	including	153	158	5	2.16	
	176	180	4	0.58	4m composite	
	208	216	8	0.31	4m composites	
	236	240	4	0.48	4m composite	
Ironbark	22IBRC037	28	36	8	0.57	4m composites

Prospect	Hole ID	From	To	Width	Au g/t	Comments
	22IBRC038	0	88			No significant intersection
	22IBRC039	20	24	4	0.14	4m composite
		36	40	4	0.18	4m composite
		48	55	7	0.25	4m composites
		68	92	24	1.19	4m composites
		including	76	84	8	2.76
	22IBRC040	0	220			No significant intersection
	22IBRC041	0	190			No significant intersection
	22IBRC042	4	16	12	0.27	4m composites
		28	32	4	0.23	4m composite
	22IBRC043	0	20	20	0.53	4m composites
	including	0	4	4	1.15	4m composite
	22IBRC044	0	88			No significant intersection
	22IBRC045	0	114			No significant intersection

Significant intersections are selected using a 0.1g/t Au cut-off for 4m composites and a 0.5g/t Au cut-off for 1m samples. Anomalous composite samples are being re-assayed in 1m intervals.

**TABLE 2: SIDE WELL COLLAR DETAILS. COORDINATES ARE IN GDA94, ZONE 50 PROJECTION.**

Hole ID	Prospect	Easting	Northing	RL	Dip	Azimuth	Depth
Mulga Bill	22MBRC086	658239.7	7060599	510.63	-60	87	262
Mulga Bill	22MBRC087	658264.2	7060550	510.97	-60	87	208
Mulga Bill	22MBRC088	658365.3	7060249	511.45	-55	87	226
Mulga Bill	22MBRC089	658402.2	7060048	512.04	-55	87	220
Mulga Bill	22MBRC090	658473.5	7059949	511.63	-55	87	190
Mulga Bill	22MBRC091	658473.2	7059900	511.87	-55	87	208
Mulga Bill	22MBRC092	658505.1	7060075	512.11	-55	87	202
Mulga Bill	22MBRC093	658544.5	7060124	512.13	-55	87	250
Mulga Bill	22MBRC094	658537.6	7060276	511.8	-55	87	202
Mulga Bill	22MBRC095	658515.7	7060325	511.7	-55	87	268
Mulga Bill	22MBRC096	658587.4	7060376	511.68	-55	87	220
Mulga Bill	22MBRC097	658524.5	7060375	511.62	-55	87	268
Ironbark	22IBRC037	660100.9	7058846	517.31	-55	90	232
Ironbark	22IBRC038	660143.8	7058898	517.51	-55	90	88
Ironbark	22IBRC039	660089.7	7058951	517.2	-55	90	94
Ironbark	22IBRC040	659999.7	7058950	517.01	-55	90	220
Ironbark	22IBRC041	660088	7058746	517.35	-55	90	190
Ironbark	22IBRC042	660126.8	7059043	517.58	-55	90	190
Ironbark	22IBRC043	660140.4	7059100	518	-55	90	208
Ironbark	22IBRC044	660161.1	7059146	518.2	-55	90	88
Ironbark	22IBRC045	660135.2	7059149	518.15	-55	90	114

**TABLE 3: ROCK CHIP DETAILS. COORDINATES ARE IN GDA94, ZONE 50.**

Sample ID	Easting	Northing	RL	Comments	Au (ppb)	Au (g/t)
22SWG021	660418	7052778	508	Smokey quartz vein, old workings	53	
22SWG022	660409	7052865	508	Smokey qtz with carbonate and boxworks.	7,343	7.34
22SWG023	660287	7058051	506		14	
22SWG024	660340	7058035	506	Opaque white groundmass strongly overprinted by goethite.	5	
22SWG025	660405	7057958	501	Massive texture slightly porphyritic.	35	
22SWG026	660402	7057959	498	Iron rich hematitic quartz.	4	
22SWG027	660271	7057593	506	Sugary crystalline Qtz with iron alt and poss manganese veinlets.	2	
22SWG028	660320	7057625	510		40	
22SWG029	660387	7057952	502	Manganese-rich outcrop	3	
22SWG030	661013	7051881	515	Outcropping quartz vein. Sugary	2	
22SWG031	660984	7051864	509	Schistose goethite mica rich rock. Unsure of protolith.	5	
22SWG032	660810	7051935	510	Grey orange siliceous f.g 1cm bedded felsic	2	
22SWG033	660632	7051942	503	Porphyritic mafic volcanic Rock.	3	
22SWG034	660631	7051908	509	Tremolite ultramafic schist	49	
22SWG035	660617	7053625	510		17	
22SWG036	660615	7053651	510		4	
22SWG037	660606	7053722	510		4	
22SWG038	660600	7053200	510	Bucky quartz veining with large boxworks.	3	
22SWG039	660700	7052775	510	Smokey quartz-carbonate-hematite veining.	2	
22SWG040	660800	7052775	510	Bucky quartz veining.	2	
22SWG041	660100	7052400	510	Bucky quartz veining minor boxworks.	2	
22SWG042	660400	7052000	510	Pale cream rock with iron oxides (after calcite?)	2	
22SWG043	660750	7052000	510	Quartz veining with iron oxides managanese staining and boxworks.	2	
22SWG044	660400	7052000	510	Hematite stained bucky quartz veining.	2	

## 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
<b>Sampling techniques</b>	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.
<b>Drilling techniques</b>	Industry standard drilling methods and equipment were utilised. Auger drilling was completed using a petrol-powered hand-held auger.
<b>Drill sample recovery</b>	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.
<b>Logging</b>	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.
<b>Sub-sampling techniques and sample preparation</b>	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.
<b>Quality of assay data and laboratory tests</b>	All samples were assayed by industry standard techniques.
<b>Verification of sampling and assaying</b>	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. No QAQC problems were identified in the results. No twinned drilling has been undertaken.
<b>Data spacing and distribution</b>	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.
<b>Orientation of data in relation to geological structure</b>	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.
<b>Sample security</b>	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.
<b>Audits or reviews</b>	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
<b>Mineral tenement and land tenure status</b>	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.

<b>Exploration done by other parties</b>	Tenement E51/1905 has a protracted exploration history but is relatively unexplored compared to other regions surrounding Meekathara.
<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. 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.</p>
<b>Drill hole Information</b>	A list of the drill hole coordinates, orientations and intersections reported in this announcement are provided as an appended table.
<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 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.</p> <p>No metal equivalents are used.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	The orientation of structures and mineralisation is not known with certainty, but majority of the 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.
<b>Diagrams</b>	Refer to figures in announcement.
<b>Balanced reporting</b>	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.
<b>Other substantive exploration data</b>	Subsequent to Doray Minerals Limited exiting the project in 2015, private companies have held the ground with no significant work being undertaken.
<b>Further work</b>	Further work is discussed in the document.