

# IMPRESSIVE GOLD HITS IN AIRCORE DRILLING AT MULGA BILL NORTH

#### **HIGHLIGHTS**

- Air-core (AC) drilling at Mulga Bill North has added definition to gold mineralisation approximately 500m north of the resource area. Highlights include:
  - o 12m @ 2.61g/t Au from 88m, including 4m @ 4.27g/t Au from 93m in 24SWAC214
  - o 4m @ 5.03g/t Au from 84m and 3m @ 2.31g/t Au from 112m in 24SWAC216
  - o 3m @ 2.68g/t Au from 114m in 24SWAC211
  - o 9m @ 1.95g/t Au from 100m in 24SWAC220
- > These results will be used to target the next round of drilling at Mulga Bill North
- Assays pending on 45 AC holes recently drilled at the Polelle Project 5km southwest of Side Well
- > Drilling expected to resume in mid-July commencing with the testing of a high priority, 2km long geochemical anomaly located northwest of the Saltbush Prospect

Great Boulder Resources ("**Great Boulder**" or the "**Company**") (ASX: **GBR**) is pleased to announce recent exploration results from the Company's flagship Side Well Gold Project ("**Side Well**") near Meekatharra in Western Australia.

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

"We use AC drilling to identify pathfinder elements and gold anomalism, so intersecting high-grade mineralisation is always a great result. These results sit between 500m and 800m north of the 568k oz Au Mulga Bill mineral resource. There is very little effective drilling between this area and the high-grade drill results we announced last month from drilling further south, which highlights the scale and potential of the Mulga Bill North area."

"We're starting to see west-dipping high-grade veins, including the result in 24SWAC214 which hit 12m @ 2.61g/t Au from 88m, and we will be looking to extend these with further drilling."

"Another outcome from this program is the identification of a dacitic unit on the eastern margin of the drilling. This is significant because dacitic volcaniclastics host the high-grade mineralisation at Mulga Bill, suggesting we should extend our drilling further east."

"Meanwhile we have assays pending on 45 AC holes from Polelle, which is the first drilling we've completed there, and we'll be drilling again soon at Saltbush and Mulga Bill North."

At **Mulga Bill North** 14 AC holes for 2,137m were drilled to follow up previous results in an area between 500m and 800m north of the northern end of the Mulga Bill resource envelope. This program is part of the ongoing process of identifying and defining additional gold mineralisation to expand the existing 568k oz Au Mulga Bill Mineral Resource.

Highlights from the drilling include:

- 3m @ 2.68g/t Au from 114m in 24SWAC211
- 12m @ 2.61g/t Au from 88m, including 4m @ 4.27g/t Au from 93m in 24SWAC214
- 1m @ 2.35g/t Au from 59m, 4m @ 5.03g/t Au from 84m and 3m @ 2.31g/t Au from 112m in 24SWAC216
- 9m @ 1.95g/t Au from 100m in 24SWAC220

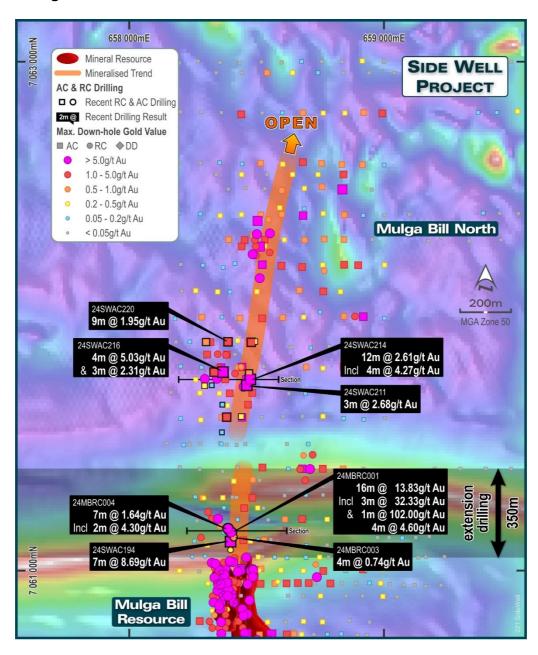


FIGURE 1: PLAN VIEW OF RECENT DRILLING AT MULGA BILL NORTH

In addition to this some holes returned indications of extensive widths of lower-grade mineralisation, however these are not regarded as high-quality assays due to problems in sections of these holes from groundwater ingress and reduced sample quality. Two examples noted in Table 2 below include 34m @ 1.02g/t Au from 84m in 24SWAC216, which includes areas of wet sample from 100 to 108m, and 75m @ 0.51g/t from 100m in 24SWAC220, which included several zones of wet sampling from 104 to 172m. Proper assessment of these areas will require RC drilling.

Analysis of bottom-of-hole multi-element assays identified a dacite (dacitic volcaniclastic) on the eastern side of the drill area, as shown in the cross-section at Figure 2. This is significant as dacite forms the core of high-grade mineralisation within the Mulga Bill resource area, and it suggests many holes drilled to date at Mulga Bill North may be too far west to test the equivalent stratigraphy. Previous GBR and historic drilling to the northeast indicates prospectivity in this direction, and this will be a key focus of ongoing drill testing.

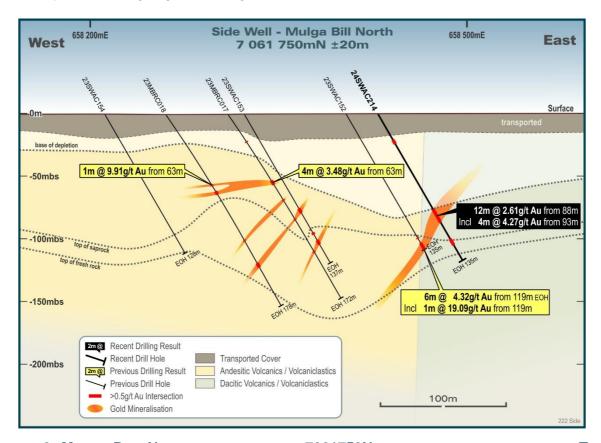


FIGURE 2: MULGA BILL NORTH CROSS SECTION 7061750N SHOWING INTERPRETED VEINS. THE MOST PROSPECTIVE AREA IS THE DACITIC UNIT ON THE EASTERN SIDE OF THIS SECTION.

Two RC holes were drilled at the northern end of **Mulga Bill** to confirm the orientation of a high-grade vein reported to the ASX on 12 June 2024. AC hole 24SWAC193 was also re-entered and extended by 15m to intersect the Proterozoic dyke, and re-labelled as 24MBRC005.

The two RC holes bracketing 24MBRC001 (16m @ 13.83g/t Au from 107m, including 3m @ 32.22g/t Au) intersected thick laminated and sulphide-bearing quartz veins corresponding to the interpreted west-dipping high-grade vein position, however the assays did not match visual expectations. On the west side of the high-grade result hole 24MBRC004 intersected 7m @ 1.64g/t Au from 113m including 2m @ 4.30g/t Au from 118m, while on the east side 24MBRC004 intersected 4m @ 0.74g/t Au from 136m. While nuggety gold distribution in this style of quartz-hosted system is not unusual it

might also be explained by a cross-cutting fault offsetting sections of the vein within the target area. Additional drilling into the high-grade structure is required to confirm continuity.

At the **Polelle Gold Project** approximately 5km southwest of Side Well 45 AC holes were drilled as an initial test of several areas of geochemical anomalism. As this program was based upon limited heritage clearances completed previously by Castle Minerals Ltd drill coverage was somewhat constrained, but the Company has scheduled additional heritage surveys to be completed at Polelle in the September quarter.

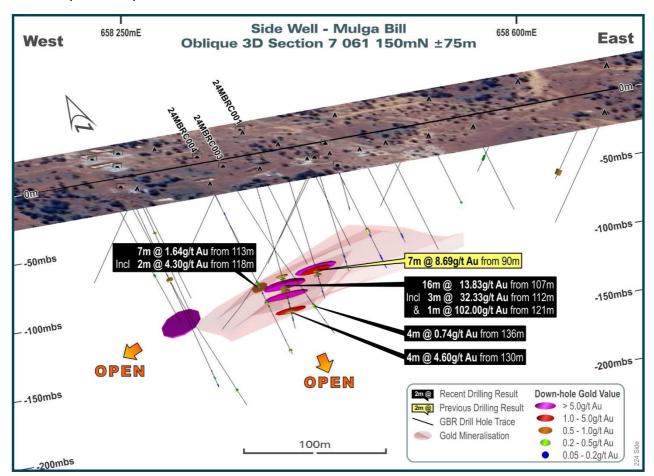


FIGURE 3: AN OBLIQUE VIEW THROUGH MULGA BILL SECTION 7061150N LOOKING NORTHEAST, SHOWING THE INTERPRETED VEIN DIPPING WEST AND PLUNGING TOWARDS THE NORTH.

#### **NEXT STEPS**

With initial drilling completed at Polelle the Company is expecting assays from this program to be available shortly.

Target generation and mapping is ongoing at Side Well South and over the southern part of Polelle, with updates expected for both areas in the coming weeks.

AC drilling is expected to resume at Saltbush in mid-July, with several fences of step-out holes testing the Au-As-Sb geochemical anomaly which extends over a strike extent of approximately 2km from Saltbush to the north-northwest.

RC and AC drilling is also being planned for Mulga Bill North to follow up these recent results. This is expected to commence once the Saltbush program is completed.

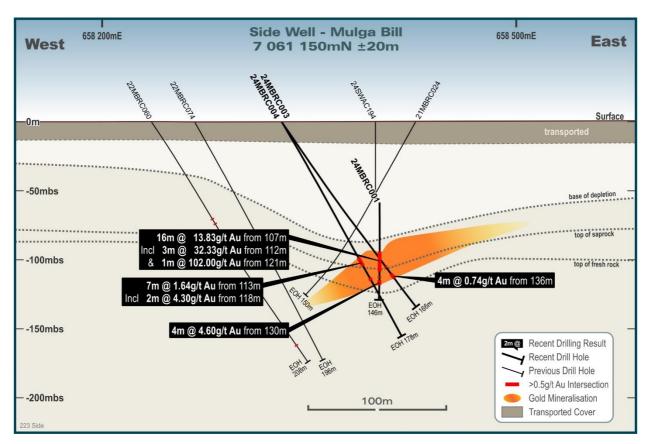


FIGURE 4: CROSS-SECTION AT MULGA BILL IMMEDIATELY NORTH OF THE PROTEROZOIC DYKE.

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

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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 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.

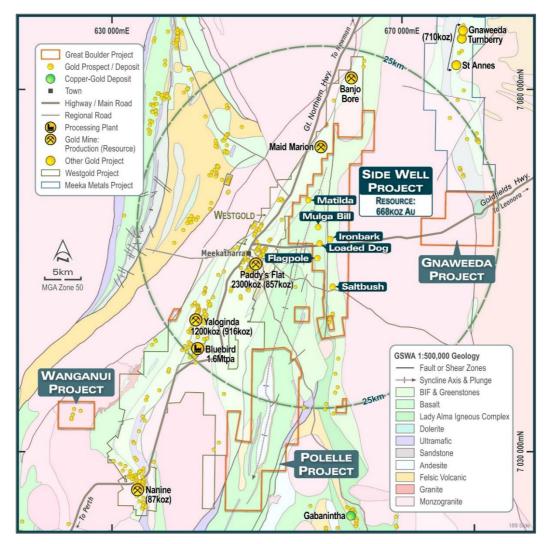


FIGURE 5: GBR'S MEEKATHARRA PROJECTS

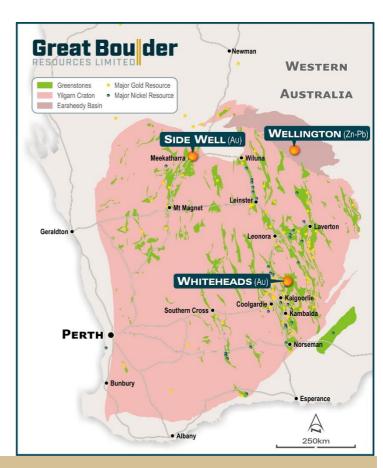
TABLE 1: SIDE WELL MINERAL RESOURCE SUMMARY, NOVEMBER 2023

			li	ndicate	d	Inferred			Total		
Deposit	Туре	Cut-off	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
	Total		3,152	3.4	340,000	4,298	2.4	327,000	7,450	2.8	668,000

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

## 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 advanced to exploration. The Company's core focus is Side Well Gold Project Meekatharra in the Murchison gold field, where exploration has defined a Mineral Resource of 7.45Mt @ 2.8g/t Au for 668,000oz 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**

606M

SHARES ON ISSUE

\$36M

MARKET CAP

~\$4M

**CASH** As at 31/03/24

NIE

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

\$1.0M

LISTED INVESTMENT
Cosmo Metals (ASX:CMO)

64.5M

UNLISTED OPTIONS

\$50k

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

~34%

**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 2 JULY 2024

**TABLE 2: SIGNIFICANT INTERSECTIONS** 

Prospect	Hole ID	From	То	Width	Grade	Comments
MB North AC	24SWAC207	0	144	144		No significant intersection
	24SWAC208	24	28	4	0.33	4m composite
	24SWAC209	115	116	1	1.42	·
	24SWAC210	24	28	4	0.12	4m comp; wet sample
	24SWAC211	24	28	4	0.27	4m composite
		84	88	4	0.30	4m composite
		114	117	3	2.68	
		122	123	1	0.76	
		114	125	11	0.97	Inc 7m @ 0.25g/t
	24SWAC212	32	36	4	0.16	4m composite
	24SWAC213	24	28	4	0.12	4m composite
		104	108	4	0.15	4m composite
	24SWAC214	24	28	4	0.23	4m composite
		88	100	12	2.61	Inc 4m comp 88-92m
	Including	93	97	4	4.27	
		115	118	3	0.59	
		120	121	1	0.79	
	24SWAC215	24	28	4	0.11	4m composite
		121	122	1	0.70	
	24SWAC216	24	28	4	0.10	4m composite
		59	60	1	2.35	
		84	88	4	5.03	4m composite
		91	94	3	0.83	
	*	112 <b>84</b>	115 <b>118</b>	3 <b>34</b>	2.31 <b>1.02</b>	Inc intervals of wet sample
				J4 		from 100 to 108m
	24SWAC217	100	112	12	0.92	4m composites
		122	123	1	0.63	_
		137	139	2	0.53	Wet samples
	24SWAC218	40	44	4	0.15	4m composite
		52	56	4	0.20	4m composite
		60	68	8	0.13	4m composites
		88	92	4	0.12	4m composite
	245\4\46240	108	112	4	0.13	4m composite
	24SWAC219	36	40	4	0.11	4m composite
		124 152	128 153	4	0.11	4m composite
	24SWAC220	88	96	8	2.18 0.21	4m composites
	243VVAC22U	100	96 109	9	1.95	Inc 4m composites
		111	113	2	0.98	comps to 100m
		116	117	1	0.63	
		122	124	2	0.81	
		135	136	1	0.51	
		138	139	1	0.51	
		147	149	2	1.01	

	*	100	<i>175</i>	<i>75</i>	0.51	Inc intervals of wet sample from 104m to 172m
	24SWAC221	60	64	4	0.62	4m composite
		112	116	4	0.19	4m composite
	24SWAC222	104	112	8	0.13	4m composites
Mulga Bill RC	24MBRC003	136	140	4	0.74	
	24MBRC004	113	120	7	1.64	
	Including	118	120	2	4.30	
		130	132	2	1.33	
		174	175	1	1.34	
	24MBRC005 <sup>+</sup>	75	76	1	0.81	

Significant intersections include 4m composite samples > 0.1g/t Au and 1m samples > 0.5g/t Au.

Intervals marked \* are included for additional information as they give indications of broad mineralised zones, however these include areas where wet samples and poor sample recovery mean these intersections are not reliable assay information and will not be included in any subsequent Mineral Resource Estimate calculation.

TABLE 3: RE-SPLIT ASSAYS PREVIOUSLY REPORTED AS 4M COMPOSITES

Prospect	Hole ID	From	То	Width	Grade	Comments
Mulga Bill	24MBRC001	107	123	16	13.83	Re-splits
	Including	112	115	3	32.33	
	And	121	122	1	102.00	Reported previously
		127	128	1	0.69	Re-splits
		130	134	4	4.60	Re-splits
	24SWAC194	90	97	7	8.69	Re-splits

**TABLE 4: COLLAR DETAILS** 

Hole ID	Prospect	Easting	Northing	RL	Dip	Azi (Mag)	Total Depth
24MBRC003	Mulga Bill	658330	7061134	510	-55	090	166
24MBRC004		658330	7061164	510	-58	090	178
24MBRC005		658398	7061117	510	-60	180	84

Coordinates are in GDA94 projection, Zone 50. AC collar details were included in the ASX announcement of 12/06/2024.

<sup>+</sup> Hole 24MBRC005 is a 15m RC tail on the bottom of AC hole 24SWAC193

### 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
Sampling techniques	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.
	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.
	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.
	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 a 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. Fire assay for gold; four-acid digest and aqua regia for multi-element analysis.
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.
Location of data points	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.
	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.
	This accuracy is sufficient for the intended purpose of the data.
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. Wherever possible, cross sections are shown to give a visual indication of the relationship between intersection width and lode thickness.  The spacing and location of the data is currently only being considered for exploration purposes.
Sample security	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.
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 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.