

# FURTHER HIGH GRADE GOLD IN PHASE 4 RC DRILLING AT MULGA BILL

## HIGHLIGHTS

- Remaining assays from Phase 4 RC drilling at Mulga Bill continue to define high-grade gold mineralisation. Highlights include:
  - 9m @ 24.19g/t Au from 193m to end of hole, including 1m @ 184.78g/t Au from 193m in 21MBRC054
  - 3m @ 24.05g/t Au from 117m in 21MBRC051
  - 4m @ 10.11g/t Au from 180m and 8m @ 2.63g/t Au from 189m in 21MBRC046
- These results are in addition to 6m @ 39.15g/t Au from 101m (including 3m @ 74.51g/t Au from 91m) in 21MBRC050 announced on 25 October 2021
- 21MBRC054 is the southern-most high grade RC intersection drilled at Mulga Bill, highlighting the untested bedrock potential as drilling continues to move south along the 5km footprint defined by gold and pathfinder geochemistry and geophysics
- Strong near term newsflow with assays awaiting from Mulga Bill AC and RC drilling, AC drilling at Ironbark (new discovery), soil samples from high priority regional prospect Jones Well and the Whiteheads regional AC drilling program

---

Great Boulder Resources (“**Great Boulder**” or the “**Company**”) (ASX: **GBR**) is pleased to announce the remaining assay results from Phase 4 RC drilling at the Side Well Gold Project (“**Side Well**”) in Western Australia.

Phase 4 was a small campaign of ten RC holes drilled in early to mid-September, with three holes drilled back towards the east to test GBR’s new theory of west-dipping high-grade veins. Highlights from the program include:

- **9m @ 24.19g/t Au** from 193m to end of hole, including **1m @ 184.78g/t Au** from 193m in 21MBRC054
- **2m @ 9.96g/t Au** from 87m, **3m @ 24.05g/t Au** from 117m and **6m @ 3.08g/t Au** from 166m in 21MBRC051
- **4m @ 10.11g/t Au** from 180m and **8m @ 2.63g/t Au** from 189m in 21MBRC046

Hole 21MBRC050 was assayed individually and submitted as a priority, with the intersection of **6m @ 39.15g/t Au** from 101m (including 3m @ 74.51g/t Au from 91m) previously announced on 25 October 2021.

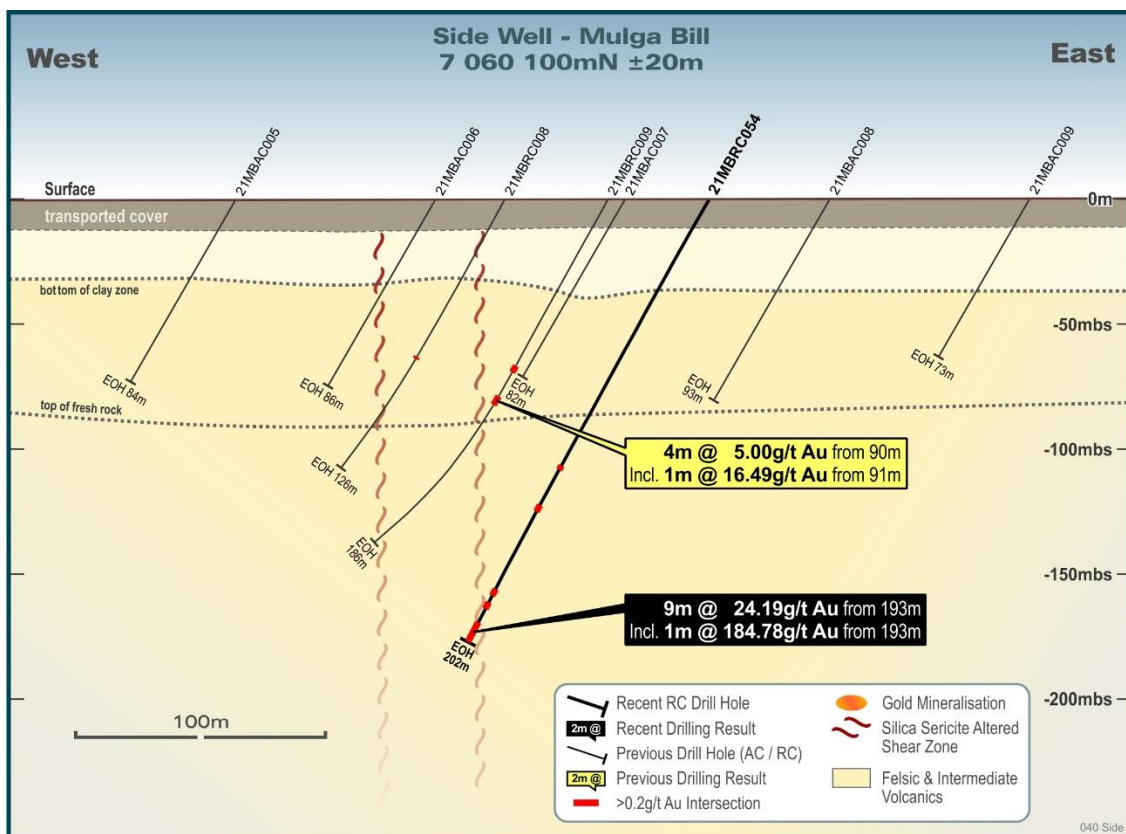
The result in hole 21MBRC054 (9m @ 24.19g/t Au) is particularly significant as it appears to be shear-related mineralisation rather than the flat-dipping, pyrite rich quartz vein-hosted mineralisation seen in previous high-grade holes further north. As such the orientation of this zone is uncertain, with diamond drilling planned to gain structural and stratigraphic data in this area as soon as a rig is available.

**Great Boulder’s Managing Director, Andrew Paterson commented:**

*“These results have helped confirm the orientation of stacked, west-dipping high grade quartz veins which we first observed in the diamond core drilling immediately before this phase of RC work. We’ve since drilled more holes on this orientation to test this area during the Phase 5 program which concluded last week.*

*The intersection in 21MBRC054 is approximately 850m further south from the high grades reported in holes 21MBRC050 and 21MBRC051. It’s hosted within the north-south shear zone, and it may represent a different orientation or style of high-grade mineralisation, possibly steeply dipping. We aim to be completing additional drilling in that area as soon as possible in the New Year.*

*Phase 5 was the biggest RC program yet completed by Great Boulder. We drilled 41 holes for 7,822m over a five-week program. Our sample turnaround time is now around ten weeks, so we should start seeing the first assays by New Year.”*



**FIGURE 1: THE HIGH-GRADE RESULT IN 21MBRC054 IS CURRENTLY THE SOUTHERN-MOST HIGH-GRADE INTERSECTION AT MULGA BILL.**

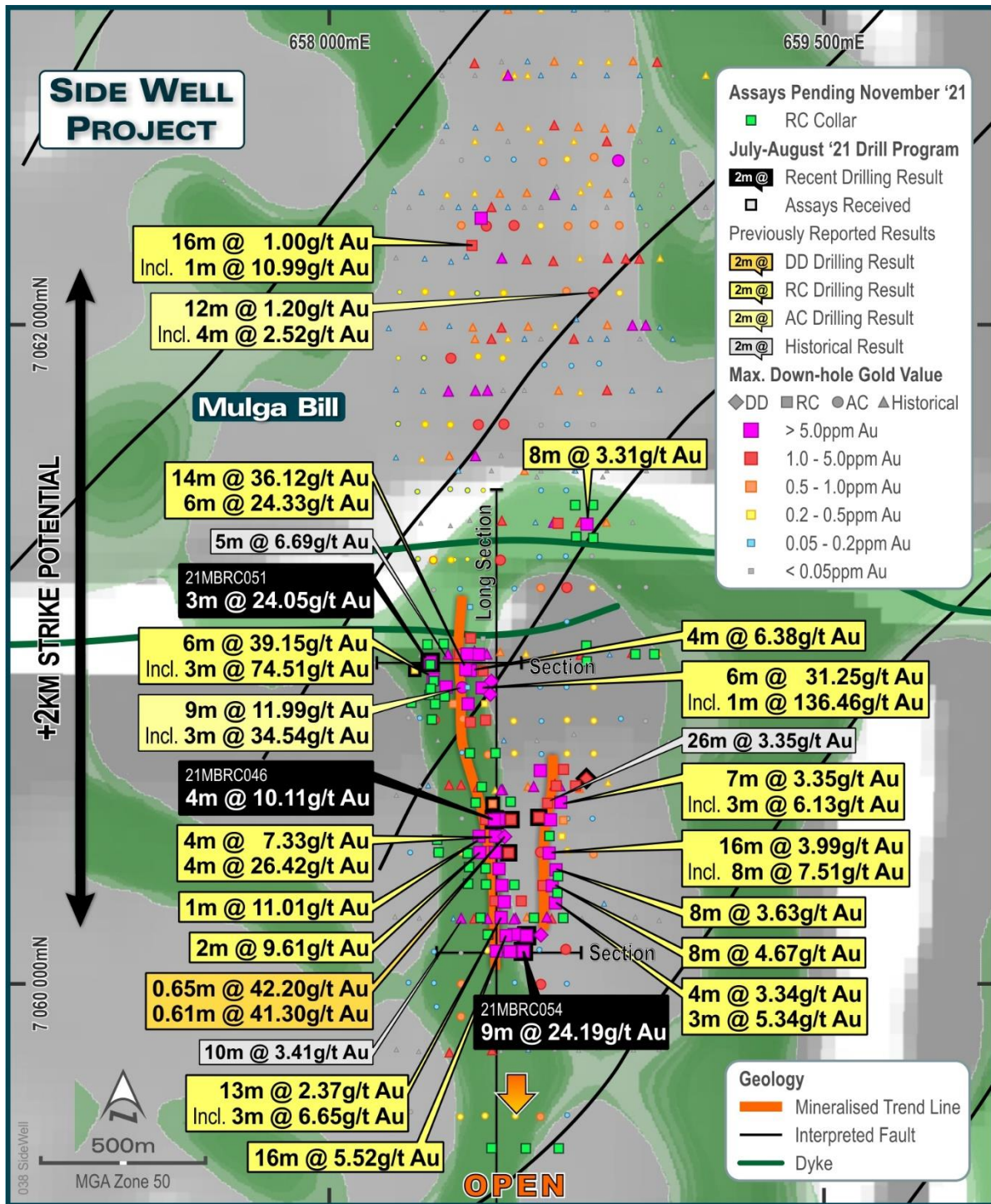
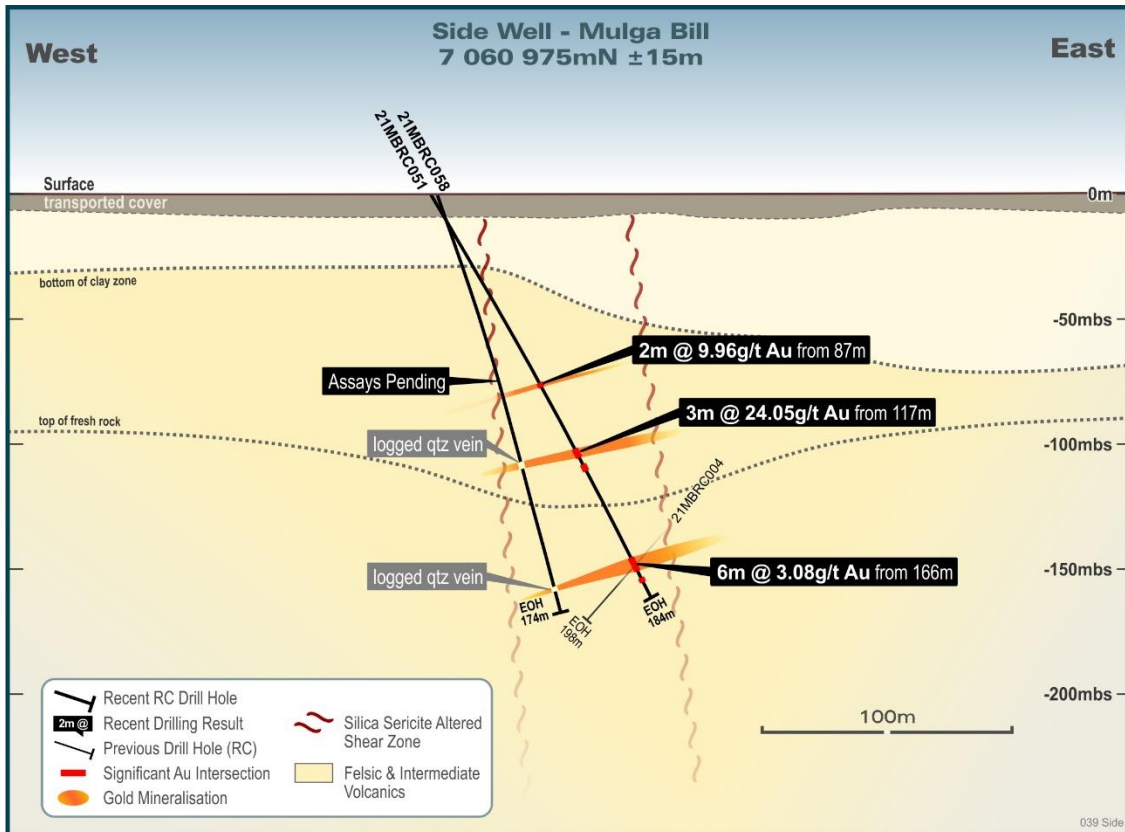
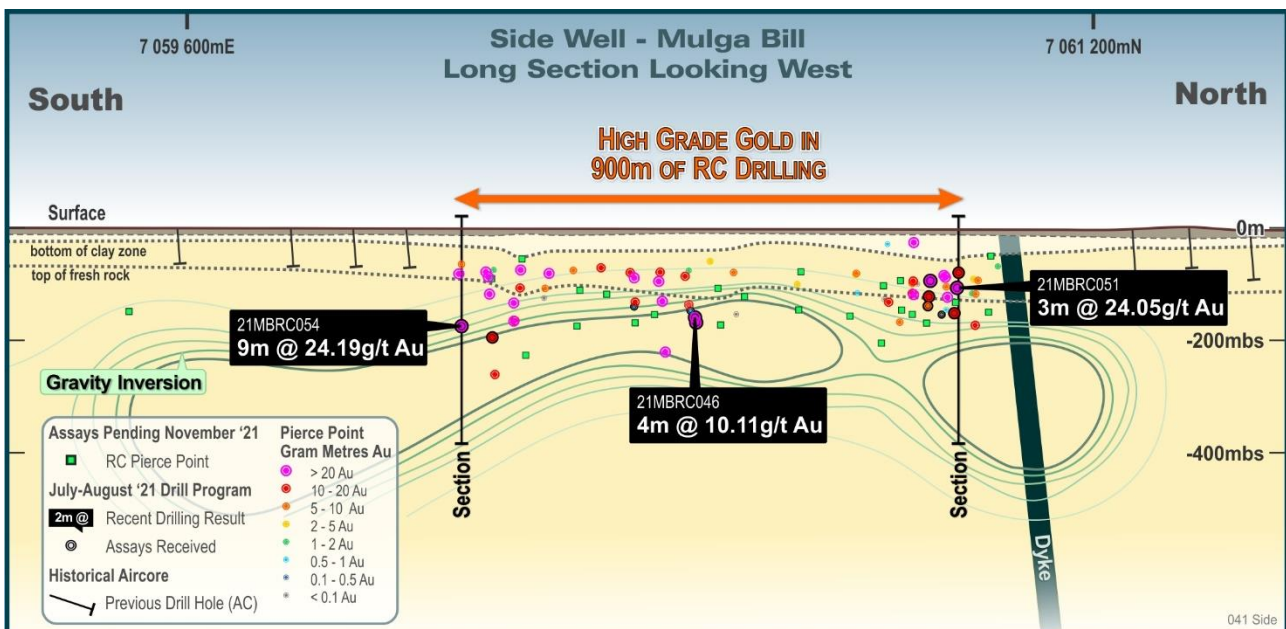


FIGURE 2: MULGA BILL DRILLING HIGHLIGHTS SHOWING SECTION LOCATIONS. THE BACKGROUND OF THIS IMAGE IS GRAVITY (GREEN SHADING) AND MAGNETIC (GREYSCALE) GEOPHYSICS.





**FIGURE 3: PHASE 4 DRILLING HAS INCREASED CONFIDENCE IN THE INTERPRETATION OF STACKED HIGH-GRADE VEINS. THE FULL STRIKE AND DEPTH EXTENT OF THESE REMAINS UNTESTED.**



**FIGURE 4: DRILL PIERCE POINTS AT MULGA BILL PROJECTED ONTO A LONG SECTION, COLOURED BY GRAM-METRES (GRADE X WIDTH). GAPS IN DRILL COVERAGE REMAIN IN THE CENTRAL MULGA BILL AREA, WITH THE WHOLE SYSTEM OPEN AT DEPTH AND TO THE SOUTH WHERE PATHFINDER GEOCHEMISTRY REMAINS STRONGLY ANOMALOUS. THE AREA NORTH OF THE DYKE ALSO REQUIRES FURTHER DRILLING.**

## Next Steps

Great Boulder is currently waiting for assay results from multiple programs, all of which will be used to plan ongoing work in 2022. These include:

- Soil samples from a recent program infilling possible gold-arsenic anomalies at Jones Well, on the northern end of the Side Well project;
- Assays from regional AC drilling on a number of prospects at Whiteheads (drilling concluded 2/10/21);
- Assays from extensional AC drilling at Mulga Bill and Ironbark at Side Well (drilling concluded on 2/11/2021); and
- Assays from Phase 5 at Mulga Bill, which concluded on 21 November 2021.

A 3D induced polarisation (IP) survey is planned to commence over Mulga Bill during December, testing the chargeability response of disseminated pyrite that has now been observed in a number of RC holes. This is unlikely to be completed until January. The IP data should be another useful targeting tool for mineralisation related to disseminated sulphides.

In the New Year the Company will continue to prioritise RC and diamond drilling at Mulga Bill, adding further definition to the stacked high-grade quartz veins while simultaneously stepping out to the south to test continuity of north-south trending gold-copper-silver mineralisation. Deeper diamond holes are being planned to test the centre of the coincident gravity and electromagnetic (EM) anomaly highlighted in GBR's ASX announcement of 25 October 2021.

**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

[www.greatboulder.com.au](http://www.greatboulder.com.au)

 [Follow GBR on LinkedIn](#)

**Media**

For further information, please contact:

Lucas Robinson

Corporate Storytime +61 408 228 889

[lucas@corporatestorytime.com](mailto:lucas@corporatestorytime.com)

 [Follow GBR on Twitter](#)

TABLE 1: COLLAR DETAILS. COORDINATES ARE IN GDA94 PROJECTION, ZONE 50

Hole ID	Easting	Northing	RL	Depth	Dip	Azimuth
21MBRC045	658544	7060397	512	230	-60	270
21MBRC046	658501	7060498	512	200	-60	270
21MBRC047	658551	7060498	512	200	-60	270
21MBRC048*	658634	7060500	512	40	-60	270
21MBRC049	658259	7060951	510	202	-60	90
21MBRC050	658315	7060925	511	184	-60	90
21MBRC051	658306	7060975	510	184	-60	90
21MBRC052	658496	7060545	512	196	-60	270
21MBRC053	658636	7060505	512	178	-60	270
21MBRC054	658589	7060098	512	202	-60	270
21MBRC055	658598	7060146	512	232	-60	270

\* Hole 048 was abandoned at 40m due to complications with an adjacent AC hole very close to the rig.

TABLE 2: SIGNIFICANT INTERSECTIONS CALCULATED AT A 0.5G/T AU LOWER CUT WITH A MAXIMUM 1M OF INTERNAL DILUTION

Hole ID	From (m)	To (m)	Width (m)	Grade (g/t Au)	Notes
21MBRC045	88	90	2	2.17	
	162	163	1	0.5	
21MBRC046	76	83	7	2.25	
	92	96	4	0.71	
	180	184	4	10.11	
<i>including</i>	180	181	1	33.29	
	189	197	8	2.63	
<i>including</i>	196	197	1	9.39	
21MBRC047	91	92	1	1.26	
	95	96	1	1.16	
	169	170	1	0.52	
21MBRC048	Hole abandoned at 40m				
21MBRC049	No Significant Intersection				
21MBRC050	88	90	2	4.14	
	101	107	6	39.15	
<i>including</i>	101	104	3	74.51	
	130	141	11	0.99	
	145	148	3	0.88	
	151	157	6	1.13	
	161	162	1	0.89	
21MBRC051	87	89	2	9.96	
	117	120	3	24.05	
	124	127	3	1.12	
	166	172	6	3.08	
	175	177	2	1.07	

Hole ID	From (m)	To (m)	Width (m)	Grade (g/t Au)	Notes
<b>21MBRC052</b>	64	68	4	0.68	4m composite
	80	84	4	0.62	4m composite
<b>21MBRC053</b>	92	94	2	2.31	
	101	102	1	0.78	
	109	111	2	1.11	
<b>21MBRC054</b>	122	124	2	1.71	
	140	143	3	1.39	
	178	181	3	1.12	
	184	187	3	1.45	
	193	194	<b>1</b>	<b>184.78</b>	
<i>Within</i>	193	202	<b>9</b>	<b>24.19</b>	To End of Hole
<b>21MBRC055</b>	203	205	2	0.59	
	210	211	1	4.71	
	216	228	12	1.18	

### 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.

## 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.

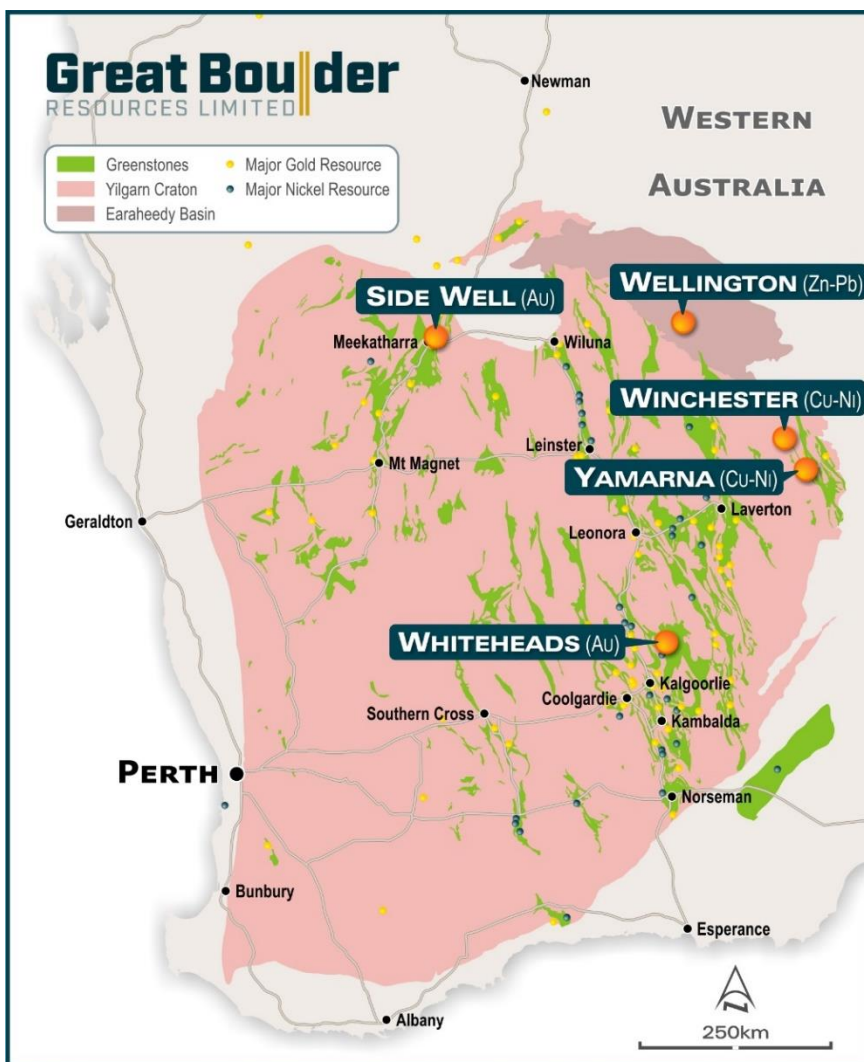


FIGURE 5: GREAT BOULDER’S PROJECTS



## Appendix 1 - JORC Code, 2012 Edition Table 1

## 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 spear sample from each 1m bag.
<b>Drilling techniques</b>	RC Drilling was undertaken by Orlando Drilling. Industry standard drilling methods and equipment were utilised.
<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. Significant ground water was encountered in drilling which resulted in numerous wet samples. 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 Genalysis Assay Laboratories Perth. Samples were pulverized so that each samples had a nominal 85% passing 75 microns. Au analysis was undertaken using FA50/OE involving 50g lead collection fire assay and Inductively Coupled Plasma Optical Emission Spectrometry (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 40 samples. No QAQC problems were identified in the results. No twinned drilling has been undertaken. The gravity data was checked and verified independently by a consulting geophysicist.
<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 Intermodal from Meekatharra to the laboratory in Perth.
<b>Audits or reviews</b>	Data review and interpretation by an independent consulting geophysicist.

## 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 Meekatharra.
<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.</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 0.8g/t Au with a maximum dilution of 2m.</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. Diamond drilling has confirmed a mineralised intrusive body at Side Well has a near vertical dip and trends broadly north-south. Due to the wide spacing of drill lines exact orientation is not clear.
<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.