ASX Announcement

25 OCTOBER 2021

Great Boulder RESOURCES LIMITED

MULGA BILL: HIGH GRADES CONTINUE AS GEOPHYSICS UPGRADES SIZE POTENTIAL

HIGHLIGHTS

- **Priority Phase 4 RC hole intersects 6m @ 39.15g/t Au from 101m in 21MBRC050, confirming the continuity & dip of extremely high-grade mineralisation in 21MBRC034**
- **High-grade vein intersections confirmed in diamond hole 21MBRCD042**
- **Interpretation of gravity and EM data has identified a high-priority target immediately south of current high-grade gold intersections**
- **A coincident gravity and EM feature defines a broad 3km-long corridor extending south and thickening at depth, untested by drilling and coincident with the Bismuth pathfinder runway**
- **Phase 5 RC drilling is ongoing and a concurrent AC drill program has now commenced, with approvals in progress to test the new targets at Mulga Bill and the new Ironbark discovery as soon as possible**

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

Interpretation of the recent high-resolution gravity survey combined with reprocessing of previous VTEM data has emphasised the scale of the Mulga Bill mineralised corridor, particularly a 3km-long section where coincident gravity and conductive features present a high priority exploration target extending to depth (Figures 1 and 2).

In parallel to this, recent assays from diamond core and a single RC scissor hole have confirmed the orientation of high-grade quartz veins such as that recently intersected in 21MBRC034 (**14m @ 36.12g/t Au** from 91m, including **3m @ 149.89g/t Au**).

Great Boulder's Managing Director, Andrew Paterson commented:

"This is a significant development in our understanding of Mulga Bill. The geophysical interpretation has sharpened our focus on the 3km zone between the two Proterozoic dykes.

So far we've only drilled the first 900m of strike in this area with extremely high-grade gold intersections. Our new model suggests the most prospective area is further south, where we have gold and bismuth pathfinders in AC drilling but we haven't yet tested it with any RC drilling.

If we have a tabular subvertical zone over 3km long and 50m wide, open at both ends with strong copper-gold-silver enrichment and a stacked set of high-grade quartz-pyrite-gold veins, this deposit has potential for a very significant metal endowment."

Drilling Results

During the Phase 4 RC program one hole was drilled between holes 21MBRC002 (**6m @ 31.25g/t Au** from 130m) and 21MBRC034 (**14m @ 36.12g/t Au** from 91m) in order to test Great Boulder's theory that high-grade mineralisation is associated with stacked, shallowly west-dipping pyrite-rich quartz veins. Hole 21MBRC050 was completed on 10 September and a section of the hole was submitted for immediate assay as a high priority. The hole was drilled in the opposite direction in order to optimise the intersection angle with interpreted west-dipping veins, and collared 150m west of 21MBRC034.

Hole 21MBRC050 successfully intersected **6m @ 39.15g/t Au** from 101m including **3m @ 74.51g/t Au** from 91m. This appears to support Great Boulder's theory, and additional test holes are being drilled to continue to build confidence in the Company's geological model (Figure 1).

Assays received to date for the diamond program completed in mid-August have also confirmed the high-grade vein-related mineralisation, with intersections including **0.65m @ 42.20g/t Au** from 253.2m and **0.61m @ 41.30g/t Au** from 289.09m in hole 21MBRCD042. Assays have been received for the first four diamond holes, and those for the final hole are expected imminently.

It should be noted that the 5-hole diamond drilling program was planned to intersect subvertical mineralisation and therefore not optimised to intersect the flat-lying quartz veins, and in fact the diamond core provided the first evidence of flat vein orientations. Future drilling programs, including diamond drilling, will be designed taking this new mineralisation model into account.

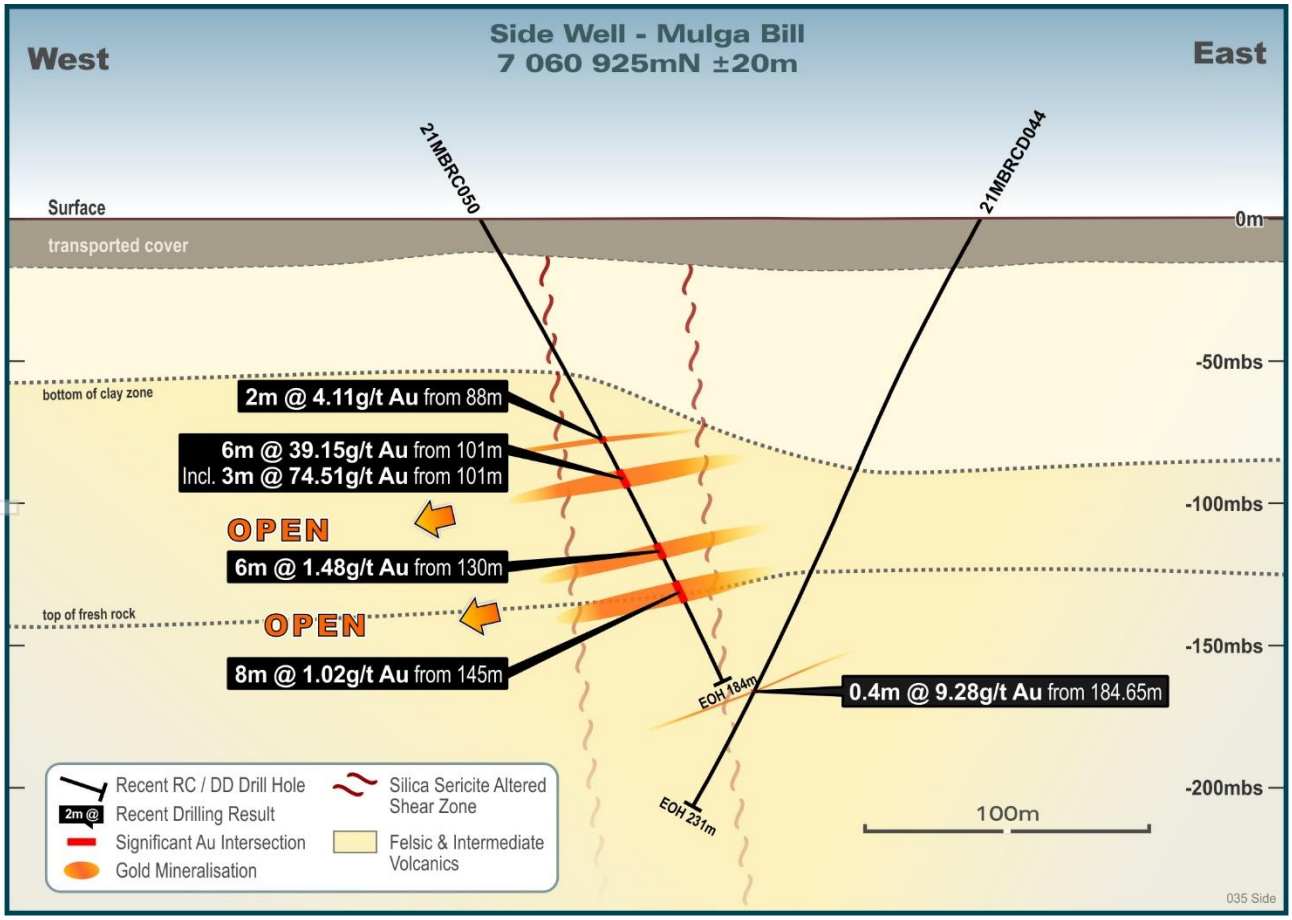

FIGURE 1: FLAT HIGH-GRADE QUARTZ-SULPHIDE VEINS INTERSECTED IN 21MBRC050.

Multi-element analysis of previous drilling has confirmed a strong copper-gold-silver association at Mulga Bill, with intersections such as **15m @ 2.53g/t Au, 1.54% Cu and 12.0g/t Ag** from 100m in 21MBRC017.This metal assemblage is related to pyrite-chalcopyrite rich stringer veins and disseminations within a subvertical zone that is approximately parallel to stratigraphy and in the direct hangingwall to the regional shear zone at Mulga Bill. This sulphide zone may be related to the north-south density anomaly observed in the gravity survey and represents a unique style of mineralisation at Mulga Bill when compared to the previously identified high grade gold veins (Figure 4). The Company is now re-submitting other sections of holes where portable XRF (pXRF) scans have indicated elevated copper grades to build up a comprehensive data set for base metals and silver through this zone (Figure 2).

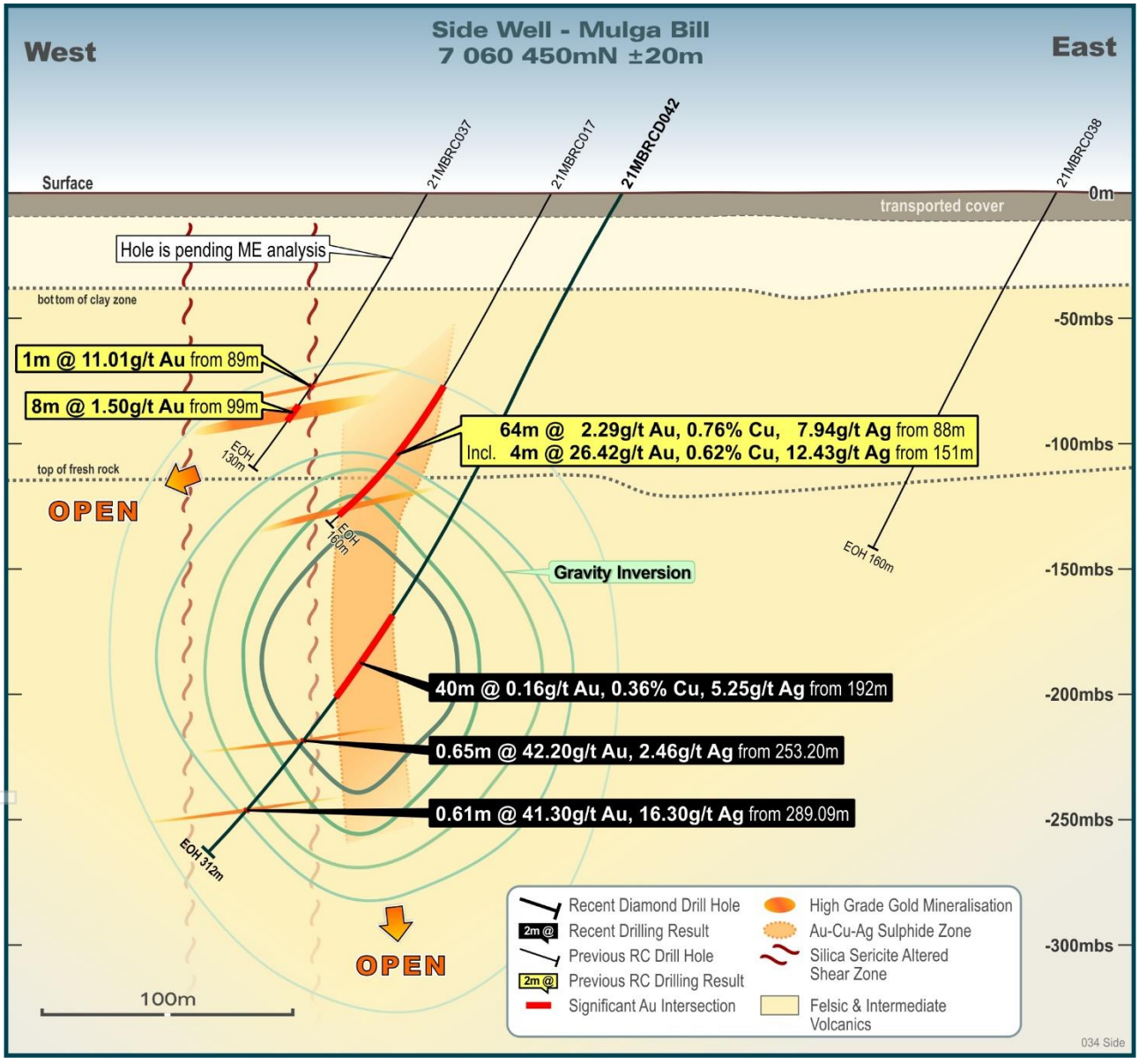

FIGURE 2: THIS SECTION ILLUSTRATES THE BROAD ZONE OF ELEVATED COPPER-GOLD MINERALISATION WITH ASSOCIATED SILVER ADJACENT TO THE REGIONAL SHEAR ZONE. THE FLAT HIGH-GRADE GOLD VEINS APPEAR TO PERSIST THROUGH THE SHEAR ZONE AND WITHIN THIS CU-AU-AG TREND.

Geophysical Survey Results

Geophysical consultants Terra Resources have reprocessed the Company's Side Well VTEM data and interpreted it in parallel with the recently-completed high-resolution gravity survey. By using the VTEM data to remove the overburden effect from the gravity data a much clearer image shows a high-gravity trend corresponding to the Mulga Bill corridor. This is thought to be caused by sulphide minerals, predominantly pyrite and chalcopyrite, associated with Mulga Bill mineralisation in sufficient quantities to cause a measurable increase in bulk density of the otherwise uniform rock mass.

It is significant that this zone of elevated gravity is coincident with a zone of increased conductivity seen in the EM data, an effect that is also thought to be caused by pyrite. The gravity anomaly and EM contours are shown in Figure 3.

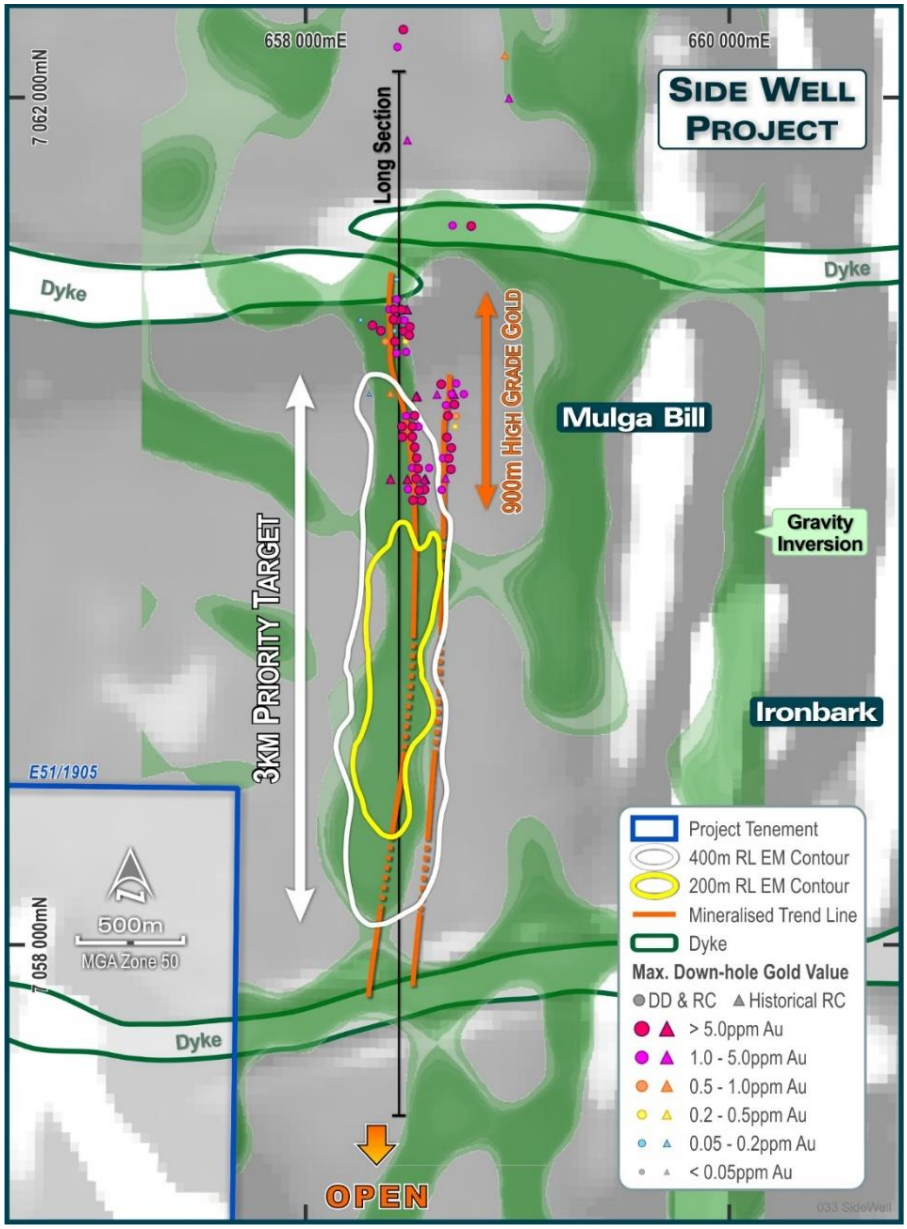

Figure 3: The gravity inversion (green) coincides with an EM conductivity corridor (contours) at Mulga Bill. The deepest EM zone is highlighted by the yellow contour in an area not yet tested by drilling.

Importantly, the geophysical data also indicates that this anomaly is strongest immediately south of the area drilled to date, extending to significant depth over a strike length 2km further south in an area not yet tested with RC drilling. The potential of this area is best shown in the long section in Figure 4 below, where the scale and depth of the untested priority target is in contrast to the small area currently tested by RC drilling.

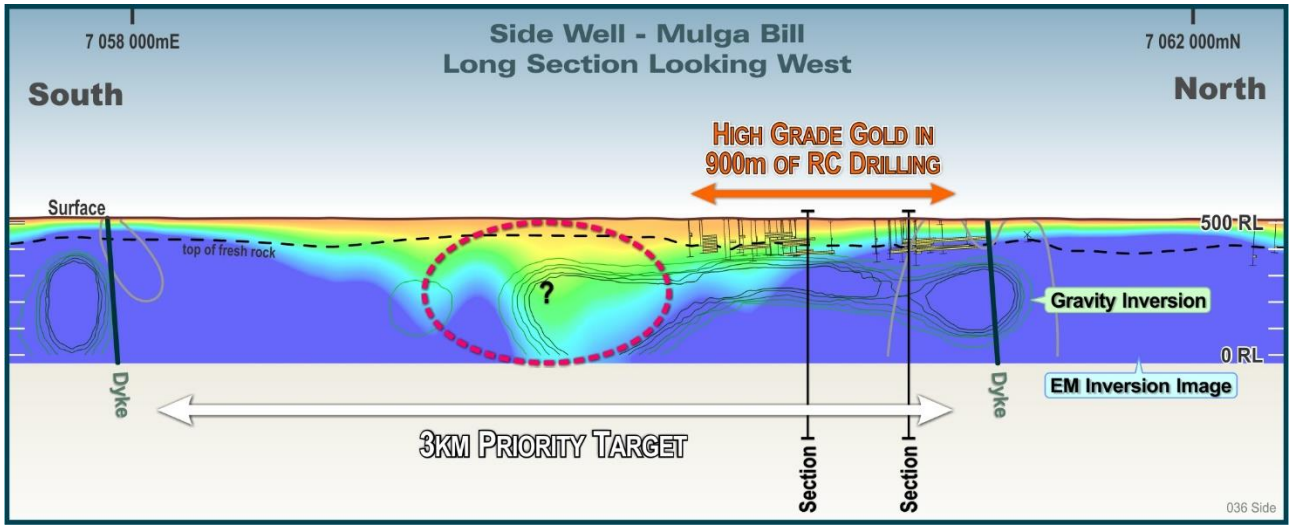

FIGURE 4: LONG SECTION THROUGH MULGA BILL. THE EM HEAT MAP AND GRAVITY CONTOURS HIGHLIGHT THE DEPTH POTENTIAL SOUTH OF CURRENT RC DRILL COVERAGE.

As discussed in previous ASX announcements, fences of AC drilling along this corridor have shown that gold and bismuth anomalism continue past the southern dyke, and the Mulga Bill trend remains open along strike in both directions.

The Company's understanding of Mulga Bill continues to evolve with every drillhole, however the diamond drilling and gravity survey have enabled a step change in understanding the deposit. The main elements of the current model are:

- A north-south trending, regional shear zone is present on the west of the prospect over a strike of at least 1km. This shear zone is sub-vertical to east dipping, strongly silica-sercite-albite altered and up to 50m in width.
- Within, and proximal to, this subvertical zone a stacked ladder array of flat-dipping high-grade quartz veins with coarse pyrite host the bulk of the gold endowment. The Company is still confirming the lateral and strike extent of these veins, as well as their strike continuity.
- A broad-subvertical zone of enriched Au-Cu-Ag striking north-south through Mulga Bill, with associated disseminated pyrite and chalcopyrite in an otherwise uniform rock mass which make this trend visible in EM data (due to increased conductivity) and gravity data (due to increased bulk density). This sulphide zone lies in the direct hangingwall to the regional shear.
- Analysis of EM and gravity inversions processed by geophysical consultants Terra Resources indicates the EM and gravity anomaly at Mulga Bill is coincident with high-grade gold results in RC drilling to date.

Next Steps

Phase 5 RC drilling is progressing well and is scheduled to be complete in the next two to three weeks. During this program the Company intends to start testing the deeper priority target shown in Figure 3 as well as some initial test holes into the new Ironbark and Loaded Dog prospects.

The next phase of AC drilling is now underway testing a range of targets on the Mulga Bill corridor as well as regional targets within the Side Well Gold Project.

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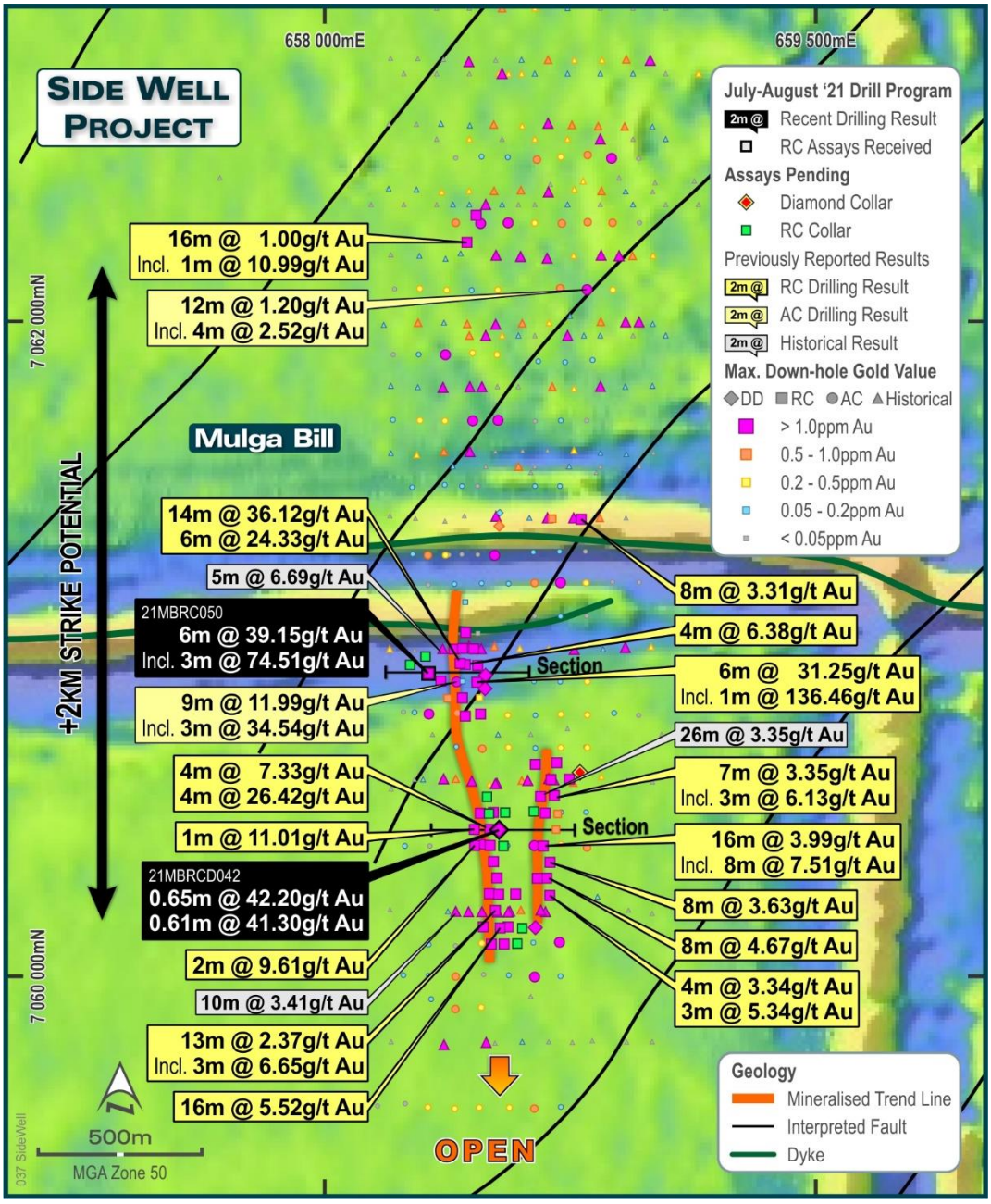

FIGURE 5: RECENT DRILLING RESULTS AND PENDING ASSAYS.

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.

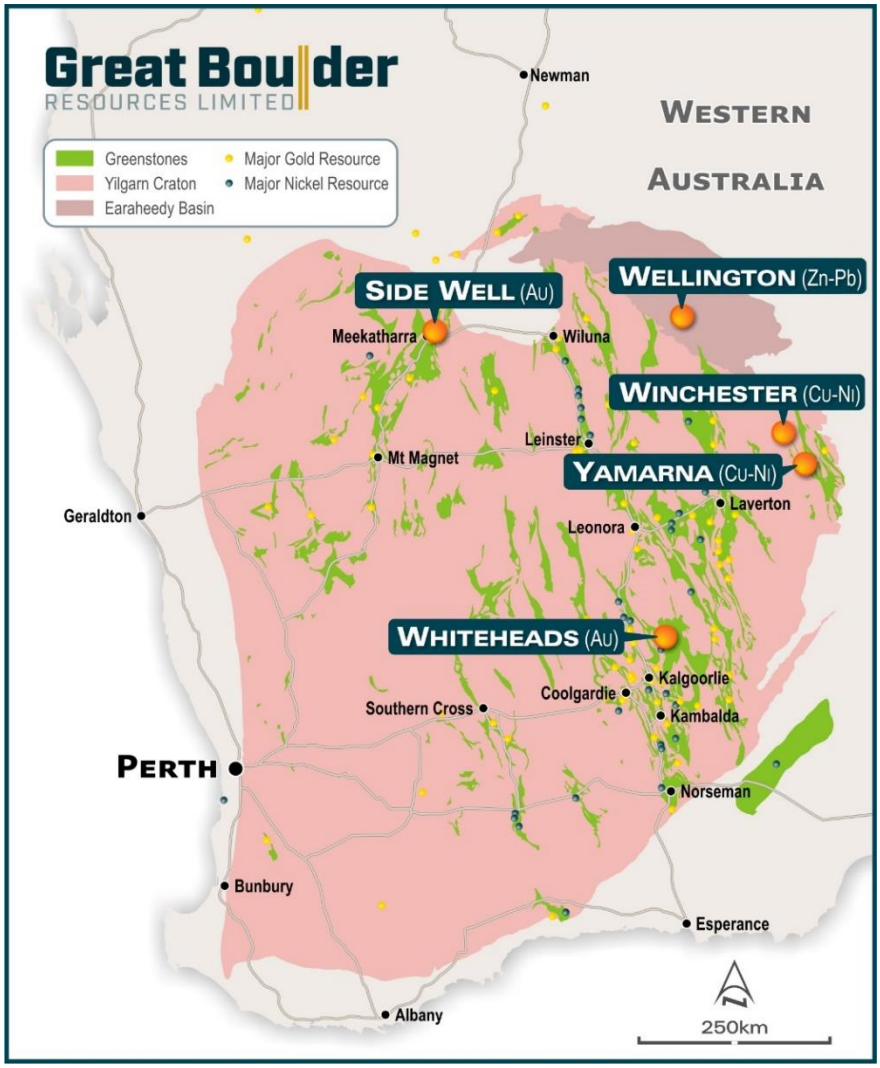

FIGURE 6: GREAT BOULDER'S PROJECTS

TABLE 1: SIGNIFICANT INTERSECTIONS REPORTED AT A 0.5G/T AU CUT-OFF.

Hole ID	Depth (m)	From (m)	To (m)	Width (m)	Grade g/t Au	Comments
21MBRC050	184	88	90	2	4.14	
		101	**107**	**6**	**39.15**	
Including		**101**	**104**	**3**	**74.51**	
		131	135	4	1.79	
		146	147	1	1.05	
		151	153	2	2.48	
21MBRCD041	369.5	185.5	186.5	1	0.58	
		192	193.1	1.1	0.84	
		202.55	202.3	0.75	2.37	
		205	206.5	1.5	0.63	
		212	213	1	1.34	
		241	242	1	0.68	
		290.25	298	7.75	1.20	
		303	304	1	1.59	
		320	324	4	0.88	
		328	329	1	1.19	
		342	343	1	1.85	
21MBRCD042	312.2	187	188	1	0.65	
		222	223	1	0.70	
		236	238.3	2.3	0.67	
		253.2	**253.85**	**0.65**	**42.20**	
		289.09	**289.7**	**0.61**	**41.30**	
		294	294.45	0.45	4.72	
21MBRD043	244.3	145.74	146.7	0.96	1.25	
		149	149.2	0.2	4.30	
		154.35	154.9	0.55	1.47	
		164.3	164.7	0.4	7.09	
		175.3	176.3	1	1.23	
		181.6	183.25	1.65	3.32	
21MBRCD044	230.9	153	154	1	0.99	
		163	164	1	1.52	
		172.5	173	0.5	0.89	
		184.65	185.05	0.4	9.29	

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
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 spear sample from each 1m bag. Core sample intervals were selected based on geological logging, cut and collected in calico bags. The sampling techniques used are deemed appropriate for the style of exploration.
Drilling techniques	RC Drilling was undertaken by KTE. Diamond drilling was undertaken by Topdrill. Industry standard drilling methods and equipment were utilised.
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. Significant ground water was encountered in drilling which resulted in numerous wet samples. 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. Bulk density measurements were taken on representative samples of selected lithologies from the diamond core using the wet & dry method.
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 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.
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 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.
Data spacing and distribution	The spacing and location of the majority of drilling in the projects is, by the nature of early exploration, variable. Gravity data was acquired on stations spaced 200m apart on east-west lines, with 400m between lines. Some areas around Mulga Bill were infilled with 200m-spaced lines. Data acquisition was completed by Atlas Geophysics using a CG-5 Autograv gravity meter, a CHC i70+ GNSS rover receiver and a CHC i70+ GNSS base receiver. 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 Internodal from Meekatharra to the laboratory in Perth.
Audits or reviews	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
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. The Explroation history by previous explorers has been described in the technical section of the announcement.
Geology	The Side Well tenement group covers a portion of the Meekatharra-Wydgee Greenstone Belt north of Meekatharra, WA. The north-north-easterly 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 0.8g/t Au with a maximum dilution of 2m. 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. 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.
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.