

# PRIORITY TARGETS HIGHLIGHT UNTESTED POTENTIAL AT POLELLE

## HIGHLIGHTS

- **Surface geochemistry at the Polelle Project has highlighted several large, high-tenor pathfinder anomalies**
- **The targets at Polelle display the same geochemical associations as Mulga Bill and Ironbark**
- **GBR is applying the targeting techniques used successfully at GBR's Side Well Project**
- **Initial AC drill testing of Polelle to commence shortly**
- **AC drilling is ongoing at Side Well, with the rig currently testing geochemical targets along the Ironbark corridor**

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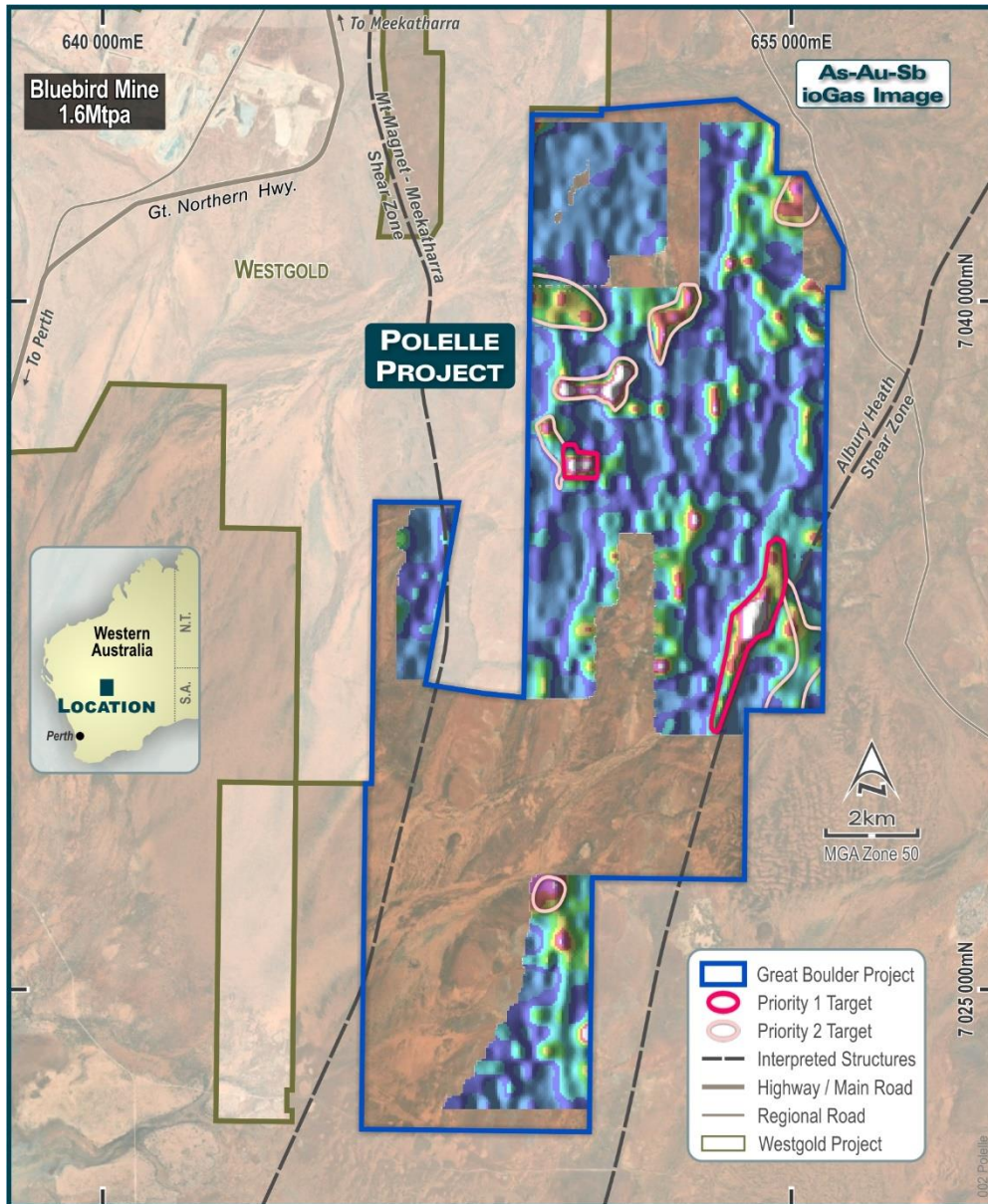
Great Boulder Resources (“**Great Boulder**” or the “**Company**”) (ASX: **GBR**) is pleased to provide an update on the Polelle Gold Project (“**Polelle**”) near Meekatharra in Western Australia. Great Boulder is currently exploring Polelle under an agreement with Castle Minerals Ltd (ASX:CDT) which gives GBR an option to acquire 75% of the project.

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

*“The targeting techniques we've used successfully at Side Well have highlighted some exciting targets with the same pathfinder geochemistry as our Mulga Bill and Ironbark deposits. This assessment is on the back of earlier sampling and target generation by Castle Minerals.”*

*“Because Polelle has had so little drilling many of these targets have never been tested. One example is a 4km-long zone with both Ironbark-type and Mulga Bill-type pathfinder elements that runs parallel to the mineralised Albury Heath shear. This coincidence of geochemical anomalism over a structural feeder zone is an exciting target and we're looking forward to drilling it.”*

*“We think our experience at Side Well has given us the secret sauce for finding gold around Meekatharra, so it will be exciting to test those theories in a new area.”*

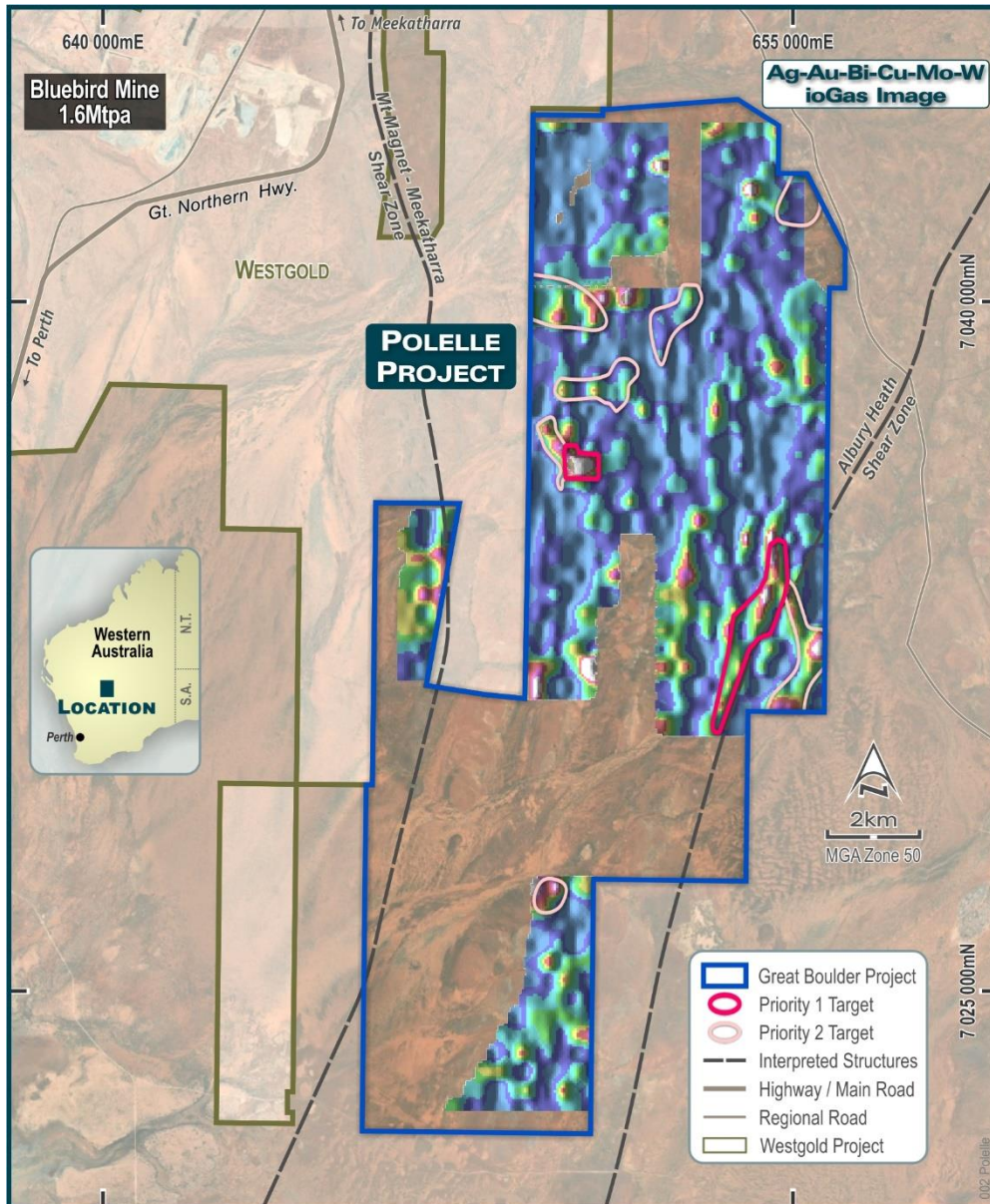


**FIGURE 1: AU-AS-SB ANOMALISM (IRONBARK STYLE) SHOWS A LARGE PRIORITY TARGET ALONG THE ALBURY HEATH SHEAR ON THE EASTERN SIDE OF POLELLE**

Prior to Great Boulder's participation in the Polelle Project, Castle Minerals Ltd ('Castle') collected approximately 3,000 auger samples and 1,000 soil samples using an 80m sample spacing on 400m lines, infilled in some areas to 40m by 200m. All samples were assayed using an aqua regia digest followed by ICP-MS analysis. This work was reported by Castle in ASX announcements on 28/4/2020 and 12/1/2021.

Subsequent analysis of Castle's sampling data by Sugden Geoscience defined a large number of targets for drilling (internal CDT reports, September 2021 and May 2022). The Sugden work also compared the Polelle geochemistry to Side Well based upon early exploration results reported from Mulga Bill by GBR, particularly GBR's early reliance on bismuth as a stable pathfinder element with a strong correlation to gold mineralisation.



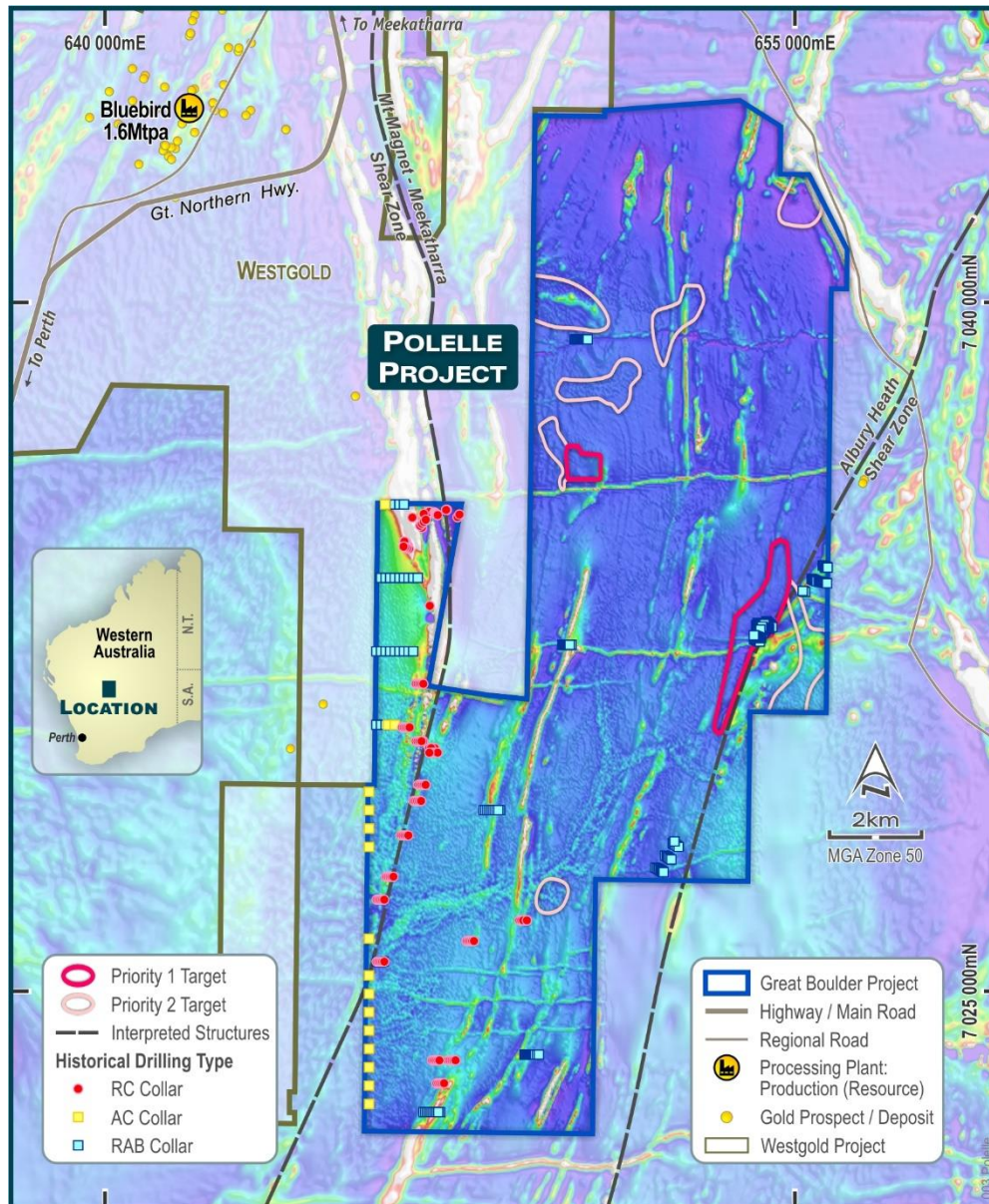


**FIGURE 2: MULGA BILL-STYLE AU-AG-BI-CU-MO-W ANOMALISM IS ALSO DEFINED ON THE ALBURY HEATH SHEAR AS WELL AS OTHER TARGETS TO THE NORTHWEST**

In May 2022 Castle conducted a heritage survey over priority target areas on the eastern side of Polelle in preparation for an AC drilling program. With Castle's strategic focus shifting to their Kambale graphite project in Ghana, the drilling was never completed.

Recent work by Great Boulder along the Ironbark Corridor at Side Well has led to a more sophisticated targeting approach, using combined assays for gold with silver, bismuth, copper, molybdenum and tungsten (Au-Ag-Bi-Cu-Mo-W) to target intrusive-related Mulga Bill-style gold mineralisation, and gold with arsenic and antimony (Au-As-Sb) to target orogenic Ironbark-style gold mineralisation. This model appears to have been validated by initial drilling at the Saltbush prospect, which intersected 9m @ 5.20g/t Au from 15m in the second RC hole in the same mafic-ultramafic lithological setting as Ironbark.

GBR has now extrapolated this technique across the Polelle project to update and rank Castle's targets. Desktop analysis has been completed in parallel with field mapping, rock chip sampling of available outcrop and multi-element analysis of a small number of historic drill spoils found in the area.



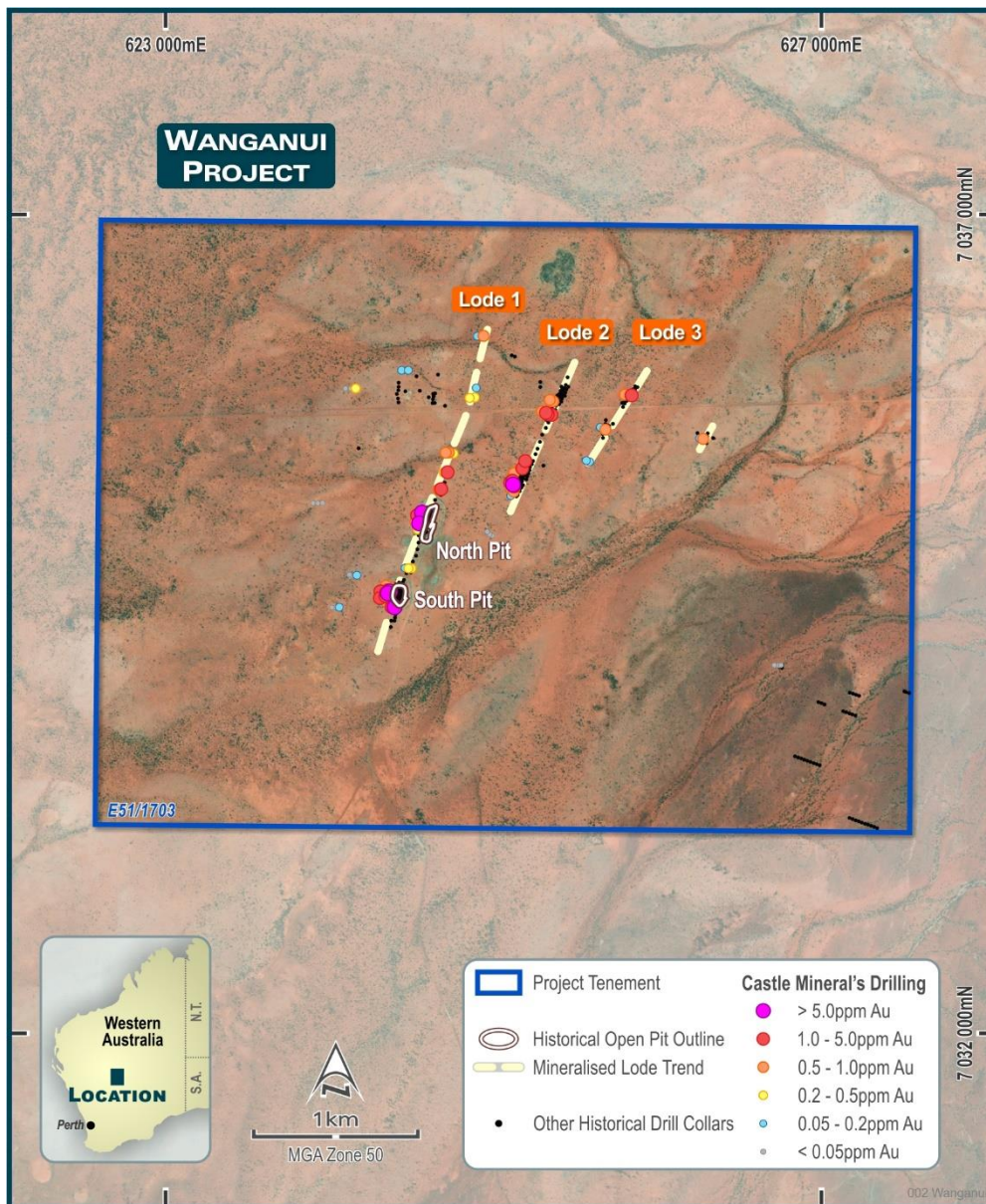
**FIGURE 3: A COLLAR PLAN SHOWING ALL PREVIOUS DRILLING AT POLELLE. THE MAJORITY OF HISTORIC WORK TARGETED STRUCTURES ON THE WESTERN SIDE OF THE PROJECT.**

### Wanganui Project

At Wanganui at least 3 mineralised shear zones have been delineated by previous drilling, and aeromagnetic and geochemical interpretation indicates good potential for parallel structures. To date only one of these shears has been mined in the modern era: St Barbara Mines produced 329,146t @ 1.62g/t Au for 5,701oz from the Wanganui North and Wanganui South pits (WAMEX report A066033). Relatively shallow, high-grade drill intersections remain to be tested at depth with the potential to delineate shallow oxide resources. The granitoid-mafic contact in the southeastern area



of the Wanganui tenement has not been drill tested, and further work needs to be undertaken to evaluate the potential for mineralisation along this zone.



**FIGURE 4: PLAN VIEW OF WANGANUI SHOWING PRE-CASTLE DRILLING (BLACK) WITH CASTLE'S DRILLING COLOURED BY MAXIMUM DOWN-HOLE GOLD VALUE.**

**Next Steps**

Great Boulder will commence a limited program of AC drilling within the heritage clearances completed by Castle in 2022. In parallel with this, the Company has lodged a heritage survey request with the Yugunga Nya Traditional Owners to clear access to other priority targets at Polelle.

GBR's geologists will finish field reconnaissance and mapping over the southern part of the Polelle project as time permits and assess the suitability of this area for auger sampling. The Company intends to extend auger coverage where possible, infilling gaps in coverage shown in Figures 1 and 2 above.

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The Company is also continuing field assessment and target generation for the Wanganui Project, situated approximately 18km west of Polelle. More information about this work will be provided in due course.

AC drilling is ongoing at Side Well, with the rig currently testing geochemical targets between 2km and 4km north of Ironbark. The rig will soon move south to test the new target recently discovered in outcrop 400m north-northeast of Saltbush (ASX announcement 26/2/2024) and complete additional drilling around the Saltbush prospect.

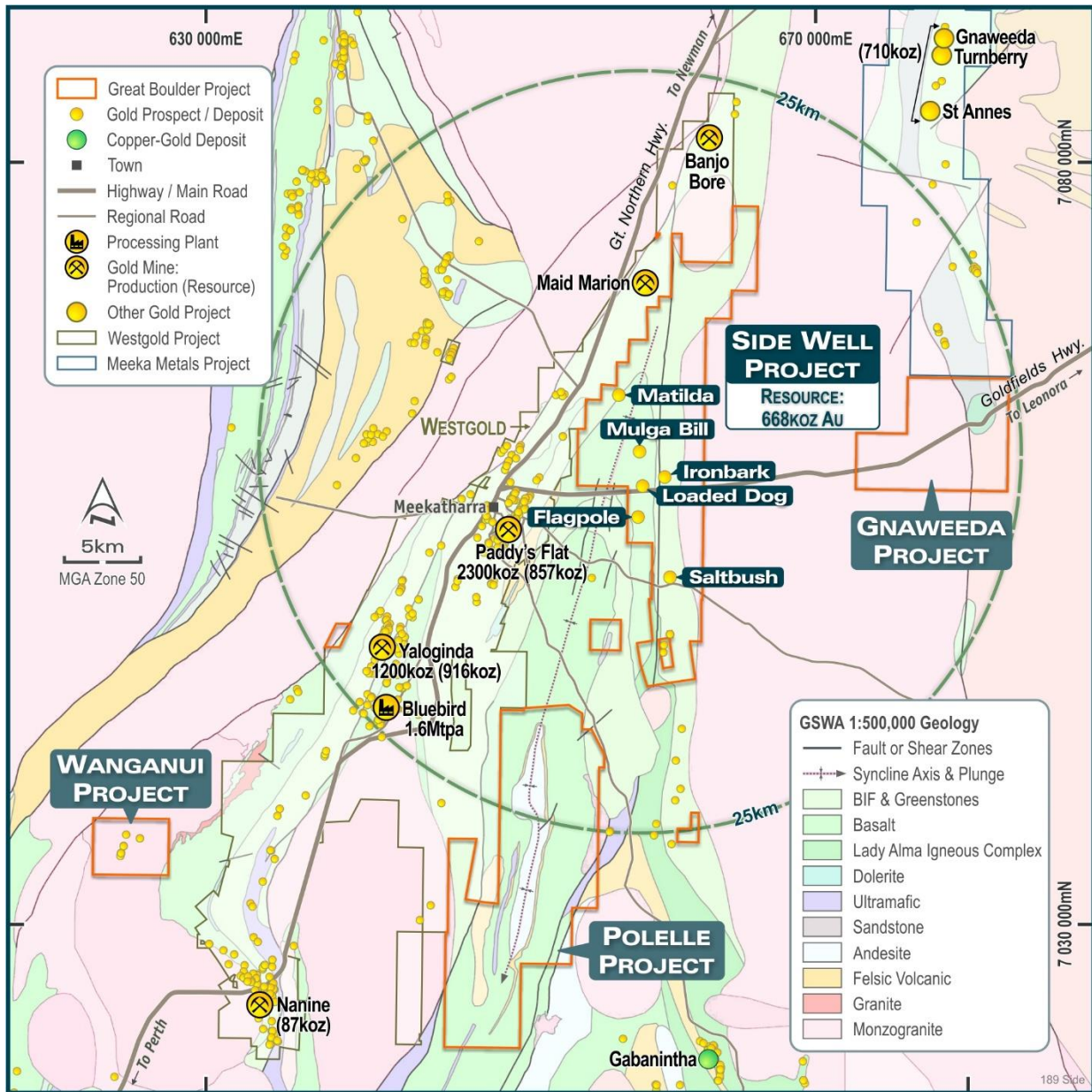


FIGURE 5: GBR'S MEEKATHARRA PROJECTS OVER GSWA REGIONAL GEOLOGY

This announcement has been approved by the Great Boulder Board.



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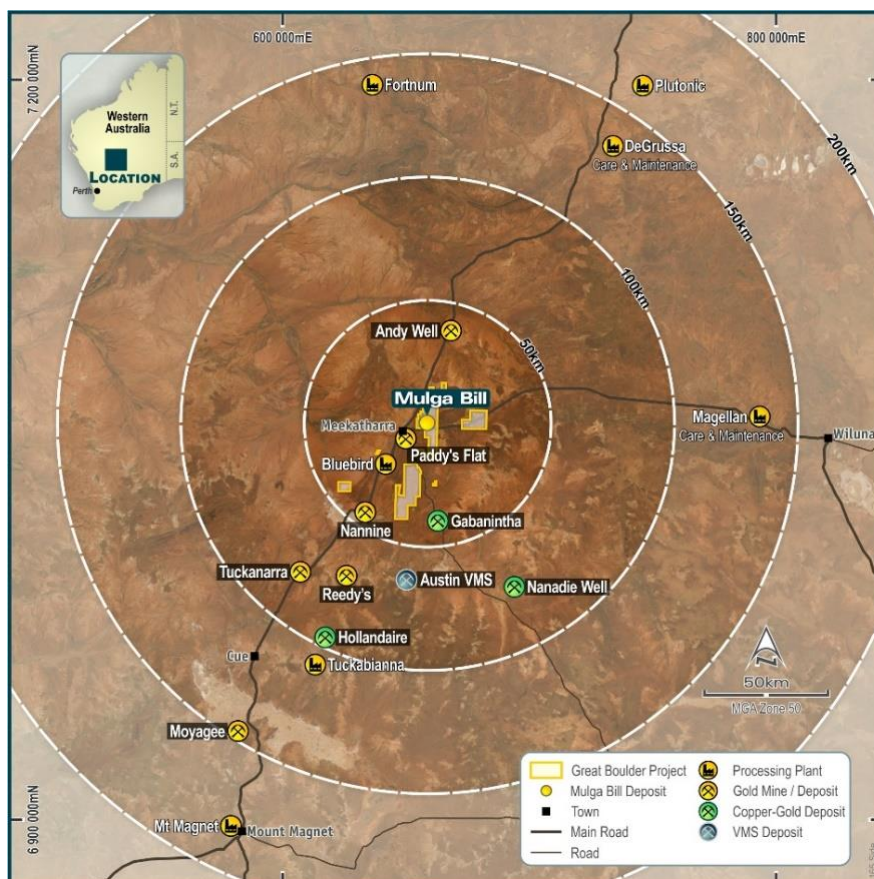
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**TABLE 1: SIDE WELL MINERAL RESOURCE SUMMARY, NOVEMBER 2023**

Deposit	Type	Category	Tonnes	Grade g/t Au	Oz Au
Mulga Bill	Open Pit	Indicated	1,667,000	3.1	169,000
		Inferred	2,982,000	1.9	183,000
	Underground	Indicated	733,000	3.5	83,000
		Inferred	1,130,000	3.6	132,000
	<i>Subtotal Indicated</i>			<i>2,399,000</i>	<i>3.3</i>
<i>Subtotal Inferred</i>			<i>4,112,000</i>	<i>2.4</i>	<i>316,000</i>
Ironbark	Open Pit	Indicated	753,000	3.7	88,000
		Inferred	186,000	1.9	11,000
<b>Total</b>			<b>7,450,000</b>	<b>2.8</b>	<b>668,000</b>

Reported at a cut-off grade of 0.5g/t gold for open pit and 1.0g/t for underground. Rounding errors may occur. There is no underground component (+150mbs) for Ironbark.



**FIGURE 6: SIDE WELL IS STRATEGICALLY LOCATED CLOSE TO EXISTING MINES AND INFRASTRUCTURE**

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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.

In order to comply with Listing Rule 5.7 and the associated FAQ 36 (Announcements of material acquisitions – former owners' Exploration Results) GBR has chosen to only report detailed results from drilling completed by Castle Minerals Ltd. Castle's drilling results from the Wanganui project depicted in Figure 4 of this announcement and in the JORC Table 1 below are taken from their ASX announcement dated 19/8/2020, which includes Castle's Competent Person statement applicable to those results.

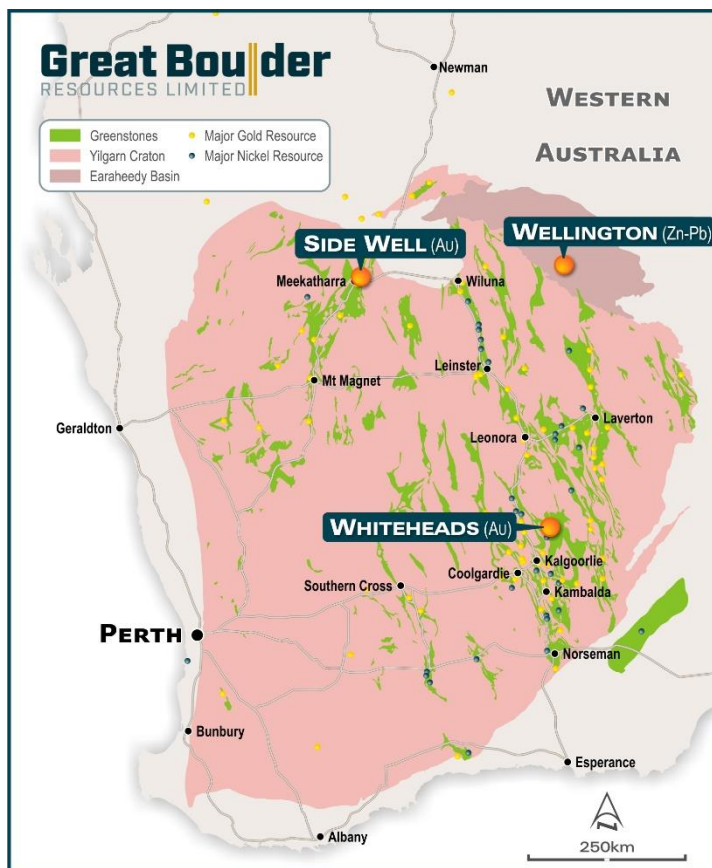
Details of earlier exploration programs by companies prior to Castle are summarised in the JORC Table 1, Section 2 below and referenced with the source WAMEX report A-number. These WAMEX reports can be accessed online at <https://geoview.dmp.wa.gov.au/GeoView>. Each WAMEX report includes a technical explanation of the work completed and results achieved. Great Boulder has chosen not to quote any results or conclusions from these phases of exploration as the Company has been unable to assess each dataset's compliance relative to the 2012 JORC Code in the time available. Additional information on each phase of historic exploration prior to Castle's tenure is provided in the JORC Table 1 in GBR's ASX announcement of 30 November 2023.

The information that relates to Mineral Resources was first reported by the Company in its announcement to the ASX on 17 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.



## 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. 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

**600M**

SHARES ON ISSUE  
ASX:GBR

**\$4.95M**

CASH  
As at 31 Dec 2023

**\$1.3M**

LISTED INVESTMENT  
Cosmo Metals (ASX:CMO)

**\$35k**

DAILY LIQUIDITY  
Average 30-day value traded

**\$36.0M**

MARKET CAP  
At \$0.06c/sh

**Nil**

DEBT  
As at 31 Dec 2023

**25.3M**

UNLISTED OPTIONS

**~31%**

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

### Section 1 Sampling Techniques and Data

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

Criteria	Commentary
<b>Sampling techniques</b>	Castle Minerals Drilling at Wanganui: RC samples were collected into calico bags over 1m intervals using a cyclone splitter. 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.
<b>Drilling techniques</b>	Castle Minerals: RC Drilling using a standard 5.25 inch down hole hammer and face sampling bit.
<b>Drill sample recovery</b>	Castle Minerals: Sample recovery data is noted in geological comments as part of the logging process. Efforts were taken to ensure the cyclone was level and cleaned regularly during drilling. Driller paused on metre interval to allow the hole to clear of sample.  It is unknown at this stage whether there is a relationship between sample weight and grade in RC drilling.
<b>Logging</b>	Castle Minerals: Drill chips were logged in detail over the entire hole at 1m intervals. Qualitative logging of samples includes lithology, colour, degree of oxidation and depth of water table.
<b>Sub-sampling techniques and sample preparation</b>	Castle Minerals: 1m cyclone splits and 4m speared composite samples were taken in the field. Samples were pulverized so that each sample had a nominal 85% passing 75 microns. Samples weighing approximately 2kg - 3kg were collected which is an industry standard considered appropriate for homogenised distribution and grain size of the material sampled. A number of higher grade results were returned from the current programme suggesting there may be coarse gold present which will require additional sampling to verify.
<b>Quality of assay data and laboratory tests</b>	Castle Minerals: The analytical technique used was fire-assay with an atomic-absorption finish (FA50/AAS) which is industry standard for gold. This is generally considered to be a total digestion
<b>Verification of sampling and assaying</b>	Castle Minerals: Certified reference blank and analytical standards were inserted into the sample stream during field operations at a rate of 1 every 25 samples. No twinned drilling was undertaken
<b>Location of data points</b>	Castle Minerals: Drill collar locations were recorded electronically using a handheld GPS. Coordinates were recorded in GDA94 grid in Zone 50, which is the GDA94 zone for the Meekatharra area. This accuracy is sufficient for the intended purpose of the data.
<b>Data spacing and distribution</b>	Castle Minerals: Collar locations were selected and plotted relative to historic drill holes. Collars were typically spaced 20m apart and no collar was located closer than 12m from the nearest historic drill hole. The collar locations of all holes were located using a hand-held GPS (accurate to $\pm 5m$ ). RC drilling detailed in this report is from a number of prospects in the Wanganui Project. Each of the prospects has been previously drilled and the current drilling was designed to follow up the earlier drilling. Further drilling would be required before a Resource Estimation could be calculated
<b>Orientation of data in relation to geological structure</b>	Castle Minerals: Drilling was orientated parallel to most historic drill holes and perpendicular to the interpreted strike of the mineralisation. No orientation-based sampling bias has been identified in the data based on the interpreted mineralised structures.
<b>Sample security</b>	Castle Minerals: Samples were delivered to the freight company depot by site personnel for transport to the laboratory. Samples submission sheets were sent separately to the laboratory and checked off once the samples were received used to track the progress of every batch of samples.
<b>Audits or reviews</b>	Castle Minerals: No independent auditing of the sampling procedures and data has been undertaken

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## 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><b>Polelle:</b></p> <p>Tenements E51/1843, P51/3190,3191,3192,3193,3194,3195,3196,3197 and 3198 are all granted and lie approximately 15km south of Meekatharra.</p> <p>P 51/3190, P51/3191, P51/3192, P 51/3195, P51/3197, P51/3198 have current applications for expenditure exemptions lodged. All other tenements are in good standing.</p> <p><b>Wanganui:</b></p> <p>The Project area is located approximately 35km southwest of Meekatharra in the Northern Goldfields, Western Australia. The tenement (E51/1703) is wholly owned by Castle Minerals. An application for expenditure exemption is in process for E51/1703.</p>																
<b>Exploration done by other parties</b>	<p>The information below is based on annual technical reports submitted to DMIRS and available through the online WAMEX portal: <a href="https://geoview.dmp.wa.gov.au/GeoView">https://geoview.dmp.wa.gov.au/GeoView</a>. Each report is identified by its unique A-number (e.g. Shell Company of Australia report A11039). The annual technical reports contain detailed context about the work completed and results achieved, including digital data for more recent reports.</p> <p><b>Polelle:</b></p> <p>The tenement area has had minimal historical prospecting and mining with only two shallow shafts and a few loam piles identified to date.</p> <p>During the 1970's exploration in the district was directed toward discovery of nickel sulphide and volcanogenic massive sulphide (VMS) mineralisation. Exploration work included geological mapping, ground magnetics, rock chip sampling, ground IP across targets and percussion drill testing of targets. Most of the work was carried out on local grids and is difficult to accurately position on current maps.</p> <p><i>A11039, A13651-13654 The Shell Company of Australia Metals Division 1974-1976.</i></p> <p><i>A33855 Giralia Resources 1987-1989</i></p> <p><i>A33275, A36539, A38334, A33366 Sons Of Gwalia NL 1990 -1993</i></p> <p><i>A66860 St. Barbara Mines Limited Polelle Project 2003</i></p> <p><i>A71007 Elara Mining Limited 2005 Polelle Project Annual Report.</i></p> <p><i>A75321 Jindalee Resources Limited Polelle Project Surrender Report 2007</i></p> <p><i>A88685 T.E. Johnstone and Associates 2010</i></p> <p><i>A92377 Corporate and Resource Consultants 2012</i></p> <p><i>A98086 Alchemy Resources 2013 Final Surrender Report</i></p> <p><b>Wanganui E51/1703:</b></p> <p>The tenement covers a number historical gold mines that were worked during the turn of the 1900's century. Table 2 tabulates historical production from available government records.</p> <p style="text-align: center;"><b>TABLE 2: WANGANUI HISTORICAL GOLD PRODUCTION</b></p> <table border="1"> <thead> <tr> <th>GML</th> <th>Name</th> <th>Ore Treated (tons)</th> <th>Gold Produced (oz)</th> </tr> </thead> <tbody> <tr> <td>946/2455</td> <td>Keep it Dark</td> <td>50</td> <td>42.9</td> </tr> <tr> <td>330N</td> <td>Granite King</td> <td>75</td> <td>98.99</td> </tr> <tr> <td><b>421N</b></td> <td>Granite King</td> <td>33</td> <td>24.01</td> </tr> </tbody> </table>	GML	Name	Ore Treated (tons)	Gold Produced (oz)	946/2455	Keep it Dark	50	42.9	330N	Granite King	75	98.99	<b>421N</b>	Granite King	33	24.01
GML	Name	Ore Treated (tons)	Gold Produced (oz)														
946/2455	Keep it Dark	50	42.9														
330N	Granite King	75	98.99														
<b>421N</b>	Granite King	33	24.01														

	<b>785N/2456</b>	Queenslander	54	70.47
	<b>343N</b>	Referendum	41	42.97
	<b>415N</b>	Wanganui	265	85.4
	<b>415N</b>	Wanganui	190	196.32
	<b>415N</b>	Wanganui Gold Mining Co	1,657	488
	<b>Total</b>			<b>1049.06</b>
	<p>The area has been held by a number of explorers/ developers since the mid 1980's. Details are provided below:</p> <p><i>A24205 Endeavour Resources 1986 -1988</i></p> <p><i>A035065 Giralia Resources NL 1988</i></p> <p><i>A031718 Dominion Gold Operations Pty 1990</i></p> <p><i>A72236 St Barbara Mines Ltd 1988 -2003</i>            In 2002 St Barbara commenced open pit mining on the Wanganui North and South Deposits on the Main Wanganui Line. Available mine records are incomplete however production is believed to be 109,188 tonnes grading 1.62 g/t Au for 5,701oz between the two pits with the ore trucked to the Bluebird plant for treatment.</p> <p><i>A75447 Mercator Gold Limited 2006-2007</i></p>			
<b>Geology</b>	<p><b>Polelle:</b></p> <p>The tenement is located within the Meekatharra-Wydege Greenstone Belt. Within the tenement area ultramafic, basalt, high Mg basalt, felsic volcanic and sediment have been mapped. Structurally the area is bound by the Albury Health shear to the east and Mt Magnet Shear to the west. A regional syncline has formed in the central part of the tenement. There are several North South and NNW striking faults cutting the stratigraphy. The company believes the area is prospective for shear-hosted gold mineralisation, volcanogenic massive sulfide and possibly SEDEX base metal mineralisation.</p> <p><b>Wanganui:</b></p> <p>Wanganui tenement largely resides on a Granodiorite/Tonalite pluton to the immediate west of the Meekatharra-Wydege Greenstone Belt. The tenement is traversed by multiple, SSW-NNE trending, high angle, Quartz/Mylonite shears that have (from previous exploration and mining activities) demonstrated a capacity for localized, high to very high grade mesothermal lode mineralisation.</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>	Intercepts tabulated in Appendix 2 are based on a lower cut off of 0.3g/t Au and a maximum internal dilution of 1m < 0.3g/t Au No top assay cut was applied. No metal equivalents are used.			
<b>Relationship between mineralisation widths and intercept lengths</b>	All holes were drilled perpendicular to the interpreted orientation of known, mineralised structures.			
<b>Diagrams</b>	Refer to figures in announcement.			
<b>Balanced reporting</b>	It is not practical to report all historical exploration results from the Polelle/Wanganui 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>	All relevant and material exploration data has been referred to in the body of the text or on accompanying figures.			
<b>Further work</b>	Further work is discussed in the document.			