ASX ANNOUNCEMENT 30 September 2024

Marmota serves up gold at Goolagong

Marmota Limited (ASX: MEU) ("Marmota")

Marmota (ASX:MEU) is very pleased to announce that the first RC drilling at **Goolagong** on EL 5818 (100% owned) has **intersected significant gold in 11 out of 15 holes drilled**, with **grades up to 4.4 g/t over 1m**. The results clearly confirm Goolagong as a new gold discovery in South Australia.
The discovery is **open in all directions**, with potential scale and extent presently completely unknown.

Key Points

- Goolagong is located 20km NW of the Challenger Gold mine that produced over 1 million ounces of gold.
- Marmota carried out the first ever drilling at Goolagong as part of Project X [see ASX:MEU 30 April 2024] using shallow air-core (AC) drilling to test a NE striking gold-in-calcrete anomaly (~ 800m x 200m) that had previously never been tested by a drill hole.
- In that AC program [see ASX:MEU 30 April 2024], Hole 23MR184 was drilled to refusal at 38m (*i.e.* to the point where harder rock was reached beyond which the AC rig could not drill). The last 2 metres drilled in this hole returned 2m @ **0.64 g/t gold** (from 36m to end of hole), with the **grades increasing to the end of hole at 38m**, making the hole a potential gold discovery hole.
- Marmota then brought in a larger RC rig [see ASX:MEU 25 July 2024] for follow-up drilling, placing a 5 x 3 grid (*i.e.* 15 holes) over and around the discovery hole, seeking to confirm the existence of gold.
- Drilling returned significant gold mineralisation in 11 of the 15 holes in the grid, with **multiple gold grades over 1 g/t** including:
  - 1m @ **4.4 g/t gold** (from 65m downhole) in Hole 24GGRC013
  - 1m @ **2.8 g/t gold** (from 77m downhole) in Hole 24GGRC001
  - 1m @ **1.4 g/t gold** (from 50m downhole) in Hole 24GGRC005

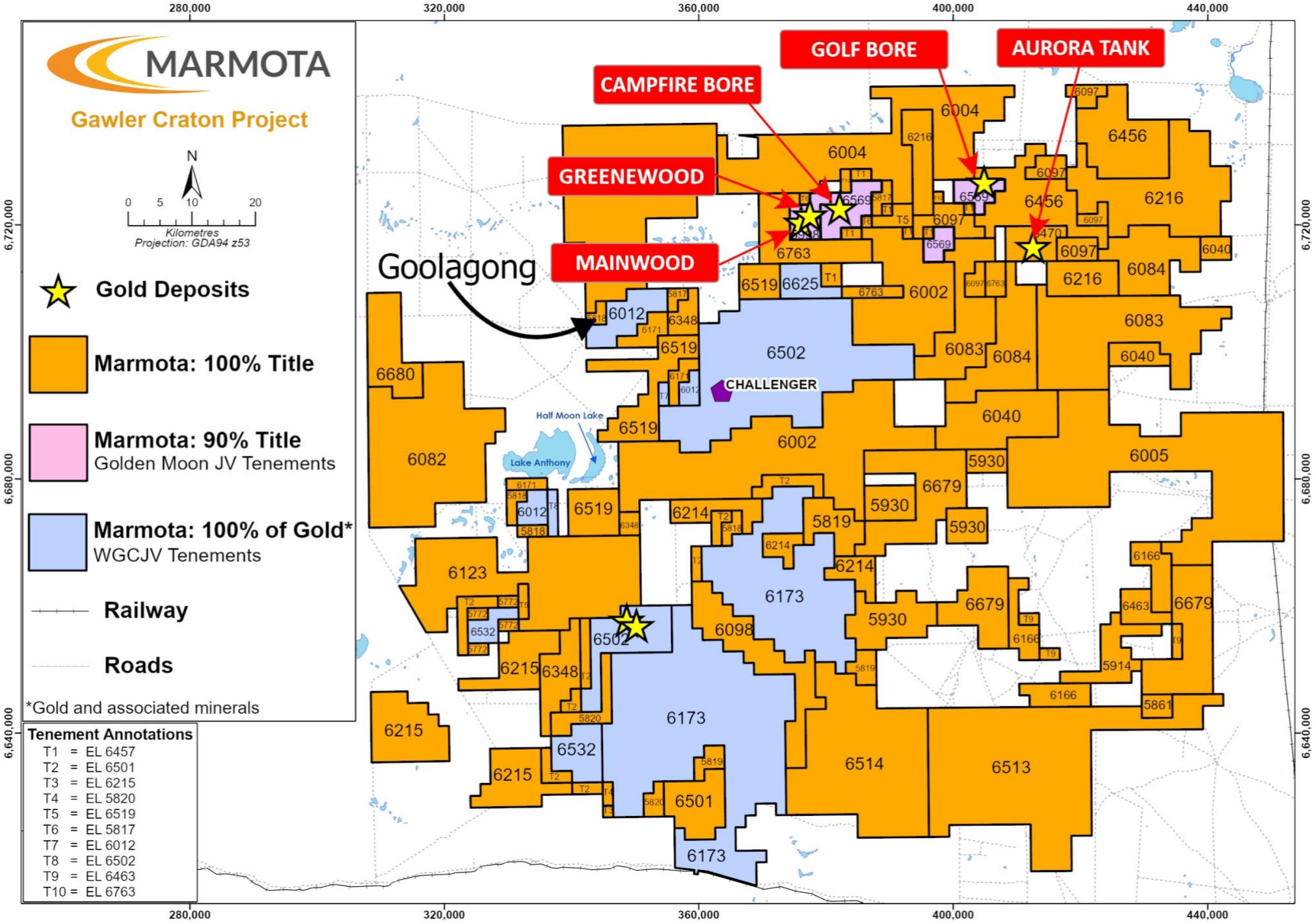

Figure 1: **Location of new gold discovery at Goolagong [on tenement EL 5818]**

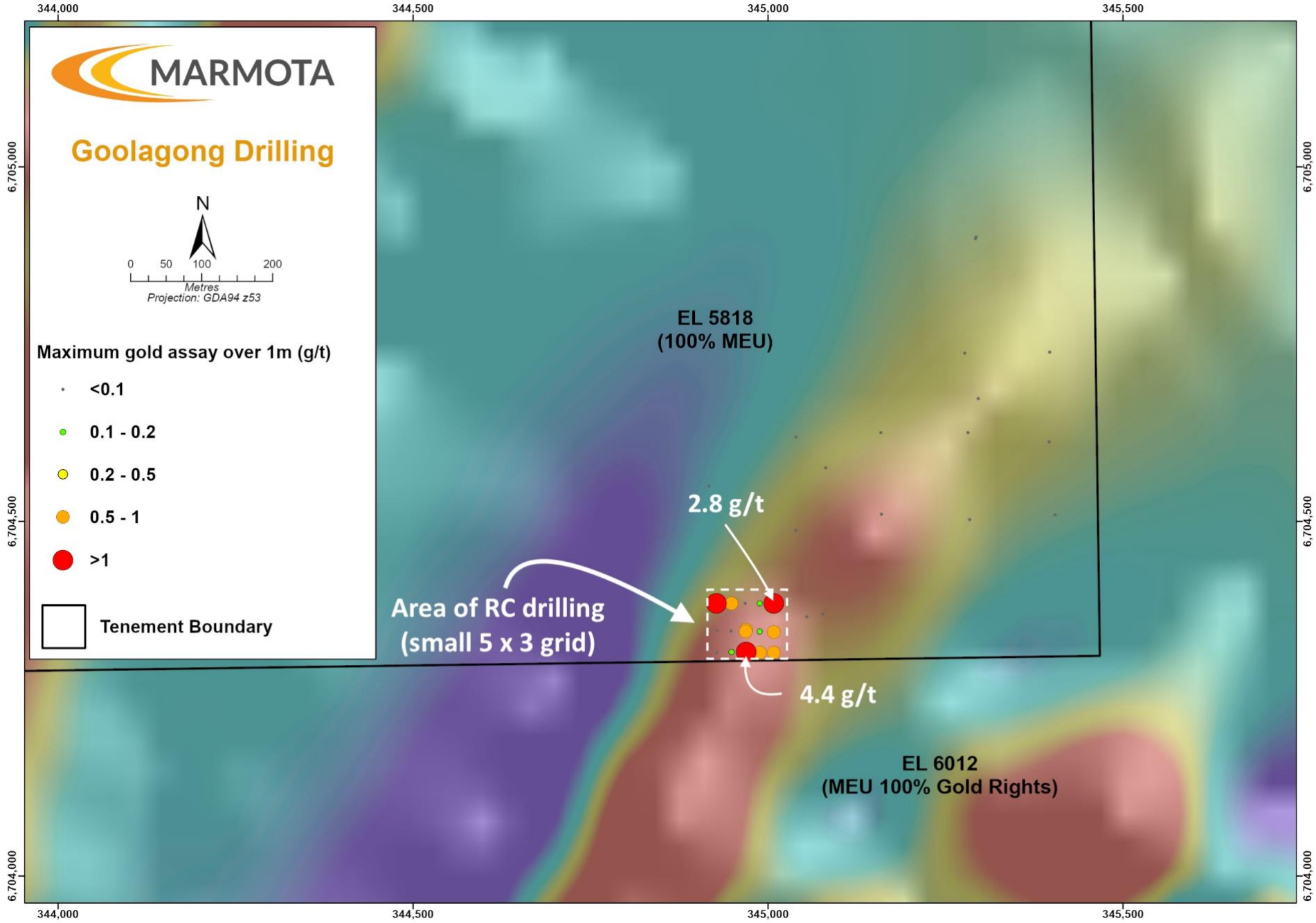

Figure 2: **Goolagong on EL 5818: Maximum downhole Au over Total Magnetic Intensity (TMI 1VD) image**

Additional Detail

Table 1 Goolagong: RC drilling program

Significant Gold Intersections > 0.5 g/t [over 1m or larger intervals]

Hole ID	Easting	Northing	DIP	AZM	EOH	Depth From (m)	Depth To (m)	Intercept Width (m)	Au g/t
24GGRC013	344,969	6,704,316	-90	0	84	65	66	1 m	**4.4**
24GGRC001	345,008	6,704,384	-90	0	84	77	78	1 m	**2.8**
24GGRC005	344,928	6,704,385	-90	0	84	50	51	1 m	**1.4**
24GGRC006	345,008	6,704,344	-90	0	84	50	51	1 m	**0.6**
and						55	56	1 m	**0.9**
and						81	82	1 m	**0.6**
24GGRC012	344,988	6,704,315	-90	0	84	69	70	1 m	**0.7**
24GGRC004	344,949	6,704,384	-90	0	84	46	47	1 m	**0.5**
24GGRC008	344,968	6,704,345	-90	0	84	40	41	1 m	**0.5**
24GGRC011	345,008	6,704,315	-90	0	84	73	74	1 m	**0.5**

[intersections over 1 g/t Gold in red]

- **Goolagong is 100% owned by Marmota. Marmota also owns 100% of the gold rights on the adjoining tenement**.
- Goolagong has a NE striking gold-in-calcrete anomaly with 26 ppb peak Au-in-calcrete.
- The calcrete anomaly is also coincident with a linear magnetic high [see Figure 2].
- 15 RC holes in 5 x 3 grid were drilled. A 16th RC hole was also drilled 600m to the NE as a wildcat hole, and to provide a background geological and geochemical comparison. Total RC drilling was 1,350m.
- Mineralisation is **open in all directions**.
- The mineralisation appears to be getting closer to surface to the south.
- Most of the previous recon AC holes were too shallow to intersect gold.

Comment

Marmota Chairman, Dr Colin Rose, said:

“ Marmota is delighted to make a new South Australian gold discovery. It is testament to the skills of our exploration team and the quality of our tenure.

We have only just scratched the surface at Goolagong with a tiny maiden RC program of just 15 holes … and already seeing *more than* a 5 times increase in grade compared to the initial discovery AC hole. Goolagong is open in every direction and is almost certain to extend into the adjoining tenement where Marmota also own 100% of the gold rights.

It is an exciting time at Marmota, with drilling at Goolagong, Aurora Tank and Campfire Bore. Next up will be the Aurora Tank gold drilling results. ”

Follow Marmota on X at: X.com/MarmotaLimited

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About Marmota Limited

Marmota Limited (ASX: MEU) is a South Australian mining exploration company focused on gold and uranium. Gold exploration is centred on the Company's gold discovery at Aurora Tank that is yielding outstanding intersections in the highly prospective and significantly underexplored Gawler Craton in the Woomera Prohibited Defence Area. The Company's flagship uranium resource is at Junction Dam adjacent to the Honeymoon mine.

For more information, please visit: www.marmota.com.au

Competent Persons Statement

Information in this Release relating to Exploration Results is based on information compiled by Aaron Brown, who is a Member of The Australian Institute of Geoscientists. He has sufficient experience relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Brown consents to the inclusion in this report of the matters based on this information in the form and context in which they appear.

Where results from previous announcements are quoted, Marmota confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

For the purpose of ASX Listing Rule 15.5, the Board has authorised for this announcement to be released.

APPENDIX 1 JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary

Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*
	• *Aspects of the determination of mineralisation that are Material to the Public Report.*
	• *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverized to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*
		• 15 Reverse Circulation (RC) holes were drilled in a 5x3 grid + 1 wildcat hole, for 1350m
		• Samples were collected at 1m intervals from the drilling cyclone and stored in separate bags at the drill site.
		• Composite 4m samples**:**
		  ○ 4m composites were first collected using a 50mm PVC tube 'spear' to collect representative samples from bags. Composite samples were an average weight of 2.3 kg which were pulverised to produce sub samples for lab assay at ALS using Aqua Regia.
		  ○ Aqua Regia: Following a 50g aqua regia gold digestion, an aliquot is removed from the resultant liquor and analysed by ICP-AES or ICP-MS for additional elements.
		• Splits 1m samples**:**
		  ○ 1m splits were collected using the drilling cyclone and kept at the drill site location until the list of 1m samples were prepared from the 4m composite results.
		  ○ Following testing of 4m composite samples down the entire length of the hole, selected 1 metre splits were sent for high-quality analysis by Fire Assay.
		  ○ 1m splits bags submitted for analysis were an average weight of 2.2kg which were pulverised to produce sub samples for lab analysis by ALS Adelaide, then transported to ALS Perth to complete samples using Fire Assay.
		  ○ For Fire Assay, a 50g samples was taken for fire assay and analysed by Atomic Absorption Spectroscopy (AAS) for Gold.

Criteria	JORC Code explanation	Commentary
		• Only laboratory assay results were used to compile the table of intersections that appears in the report.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Drill Method was Reverse Circulation (RC). • Hole diameters are 146mm.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Drill holes and sample depths were recorded in hard copy format during drilling including sample intervals. • Qualitative assessment of sample recovery of drill samples was recorded. • Sample recoveries were generally high, and moisture in samples minimal. • No relationship is known to exist between sample recovery and grade, in part due to in-ground variation in grade. A potential bias due to loss/gain of fine/coarse material is not suspected.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Representative drill holes were geologically examined by Marmota geologists. • The holes have not been geotechnically logged. • Geological logging is qualitative. • Chip trays containing 1m geological subsamples were collected. • 100% of any reported intersections in this announcement have had geological logging completed.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Composite samples averaging 2.3 kg were collected for laboratory assay. Samples were collected with a 50mm tube by diagonally spearing individual samples within bags. • 1m Spilt samples averaging 2.2kg were collected directly off the sample cyclone at 1 metre intervals down the length of the drill hole. The 1m split samples were kept at the drill site. Samples of interest were selected from initial 4m composite results. The 1m samples were then collected and dispatched to the lab. • It is considered representative samples were collected after homogenizing of sample through drilling cyclone and unbiased spearing of samples in bags. • Laboratory sample preparation includes drying and pulverizing of submitted sample to target of p80 at 75 µm. • No samples checked for size after pulverizing failed to meet sizing target in the sample batches relevant to the report. • Duplicate samples were introduced into the sample stream by the Company.

Criteria	JORC Code explanation	Commentary

Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*
		• Samples from exploratory holes at Goolagong were analysed in the following manner:
		• 4m Composites (ALS):
		  ○ ALS were used for analytical work of the 4m composite samples.
		  ○ ALS Adelaide (Sample Preparation) and ALS Perth (analytical) were used for analytical work of the 4m Composite samples.
		  ○ Aqua Regia Digest: Analysed by Inductively Coupled Plasma Mass Spectrometry (ICP-MS) or Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) for Au, Bi, Hg, Sb, Se, Sn, Te, Th, Tl, U, W, Ag, Al, As, B, Ba, Be, Ca, Cd, Ce, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sc, Sr, Ti, V and Zn.
		• 1m Splits (ALS):
		  ○ ALS were used for analytical work of the 1m composite samples.
		  ○ ALS Adelaide (Sample Preparation) and ALS Perth (analytical) were used for analytical work of the 4m Composite samples.
		  ○ Lead Collection Fire Assay was used for Au (50g) and analysed using Atomic Absorption Spectroscopy (AAS).
		• For all samples, the Company introduced QA/QC samples at a ratio of one QA/QC sample for every 30 drill samples. The laboratory introduced additional QA/QC samples (blanks, standards, checks) at a ratio of greater than 1 QA/QC sample for every 10 samples.
		• Both the Company and laboratory QA/QC samples indicate acceptable levels of accuracy and precision have been established.
		• Duplicates were introduced into the sample stream by the Company. The laboratory completed repeat assays on various samples.
		• Standard samples were introduced into the sample stream by the Company, while the laboratory completed standard assays also.

Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• An alternative company representative has checked the calculation of the quoted intersections. No twinned holes were drilled in the program. • No adjustments have been made to the assay data. • 24GGRC008 (RC) collar was drilled 7.4m to the SW of 23MR184 (Project X AC hole) to extend the drilling deeper than the refusal depth of the AC rig used during Project X.

Criteria	JORC Code explanation	Commentary
		• 24GGRC016 collar was drilled 2.4m SW of 23MR199 to extend the drilling deeper than the refusal depth of the AC rig used during Project X.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• For Phase 2 RC exploration holes on Goolagong, drillhole coordinate information was collected using a RTX Differential GPS System with an autonomous accuracy of ± 2.5 centimetres utilising GDA 94 Zone 53. • The area is generally of low topographic relief. Topographic control uses SRTM-derived Hydrological 1 Second Digital Elevation Model Version 1.0.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• In the southern portion of Goolagong, drill holes are spaced over 3 sections lines. Sections lines are 30 to 40 metres apart whilst the drill holes on each section line are spaced 20m apart, as shown in Fig. 3. • There is a single drill hole in the northern portion of Goolagong.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Drill lines are orientation to the north and south of the gold intersected in the AC drilling. Therefore, a sampling bias should not have occurred.
Sample security	• *The measures taken to ensure sample security.*	• Company staff collected all laboratory samples. • Samples submitted to the laboratory were transported and delivered by Company staff and/or freight contractors.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audit of data has been completed to date.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• EL 5818 is 100% owned by Half Moon Pty Ltd, a wholly owned subsidiary of Marmota Limited. The EL is located approximately 155 km southwest of Coober Pedy in South Australia. • There are no third-party agreements, non-government royalties, historical sites or environmental issues. • Exploration is conducted within lands of the Antakirinja Matu-Yankunytjatjara Native Title Determination Area. • The tenement is in good standing.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration within EL 5818 has been calcrete sampling by the following companies: ○ CRA Exploration Pty Ltd (1995) ○ Dominion Mining Ltd (1998) ○ Tyranna Resources Ltd (2016)
Geology	• *Deposit type, geological setting and style of mineralisation.*	• All drilling occurred within geology of the Christie Domain of the western Gawler Craton. The Christie Domain is largely underlain by late Archaean Mulgathing Complex which comprises meta-sedimentary successions interlayered with Banded Iron Formations (BIF), chert, carbonates and calc-silicates.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• The required information on drill holes is incorporated into Appendix 2 to the ASX Release.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	• Any intersections are calculated by simple averaging of 4m Samples. • Where aggregated intercepts are presented in the report, they may include shorter lengths of high-grade mineralisation; these shorter lengths are also tabulated. • No metal equivalents are reported.

Criteria	JORC Code explanation	Commentary
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• Drill coverage is considered sufficient to establish approximate true widths, given the current geological understanding of mineralisation dip and strike. • Mineralisation intersections are downhole lengths; exact true widths are unknown but are similar to the intersection lengths as the mineralised zones are approximately normal to hole inclinations.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See Figures within ASX release
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• A cut-off grade of 0.5 g/t (500 ppb) was applied in reviewing assay results and deemed to be appropriate at this stage in reporting of exploration results. • Reporting is considered balanced.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• See ASX Releases regarding Project X and Goolagong: 17 July 2023, 1 August 2023, 28 August 2023, 20 September 2023, 15 January 2024, 13 March 2024, 30 April 2024, 9 July 2024, 16 July 2024 and 25 July 2024.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Marmota is currently reviewing results received to date and will plan follow up work to determine the source, location and extent of the mineralisation.

APPENDIX 2 Drillhole collar summary: First RC Drilling at Goolagong (July 2024)

Tenement	Hole ID	Easting (MGA94 z53)	Northing (MGA94 z53)	RL	Dip	Azimuth (Mag)	EOH Depth
EL 5818	24GGRC001	345,008	6,704,384	178	-90	0	84
EL 5818	24GGRC002	344,989	6,704,384	178	-90	0	84
EL 5818	24GGRC003	344,968	6,704,384	178	-90	0	84
EL 5818	24GGRC004	344,949	6,704,384	178	-90	0	84
EL 5818	24GGRC005	344,928	6,704,385	178	-90	0	84
EL 5818	24GGRC006	345,008	6,704,344	178	-90	0	84
EL 5818	24GGRC007	344,988	6,704,344	178	-90	0	84
EL 5818	24GGRC008	344,968	6,704,345	178	-90	0	84
EL 5818	24GGRC009	344,948	6,704,346	178	-90	0	84
EL 5818	24GGRC010	344,928	6,704,346	178	-90	0	84
EL 5818	24GGRC011	345,008	6,704,315	178	-90	0	84
EL 5818	24GGRC012	344,988	6,704,315	178	-90	0	84
EL 5818	24GGRC013	344,969	6,704,316	178	-90	0	84
EL 5818	24GGRC014	344,948	6,704,316	178	-90	0	84
EL 5818	24GGRC015	344,928	6,704,315	178	-90	0	84
EL 5818	24GGRC016	345,292	6,704,899	179	-90	0	90

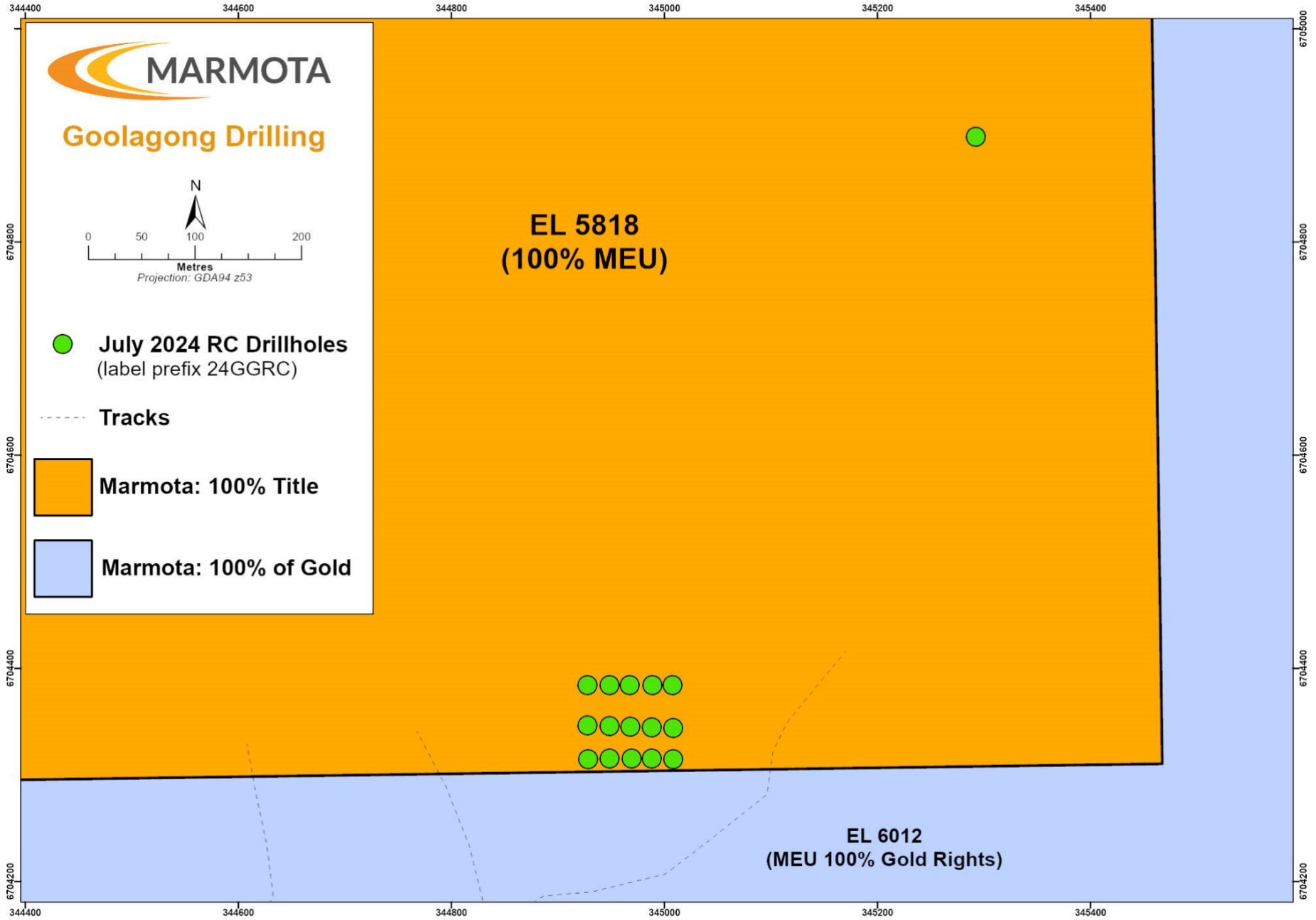

Figure 3: **Goolagong - RC drillhole collars** **July 2024** (on EL 5818)