



ASX ANNOUNCEMENT

23 November 2021

Archive search reveals more than 40 untested gold anomalies

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

Marmota is pleased to advise that, subsequent to its completion of the acquisition of the Jumbuck Gold project [ASX:MEU 15 Nov 2021], Marmota has been carrying out a comprehensive search of archival and historical gold-in-calcrete sampling across Marmota's Gawler Craton Gold project (including the newly acquired tenements and gold interests).

Key Points

- Search of archives and historical results has already yielded **more than 40 untested gold-in-calcrete anomalies** on the tenements adjacent/near to the Challenger gold mine (which produced 1.2 million ounces) and Marmota's Aurora Tank discovery.
- The calcrete sampling extends back to the days of Dominion and Resolute and the discovery of the Challenger gold mine. **Remarkably, these anomalies have never been followed up, and they remain untested.**

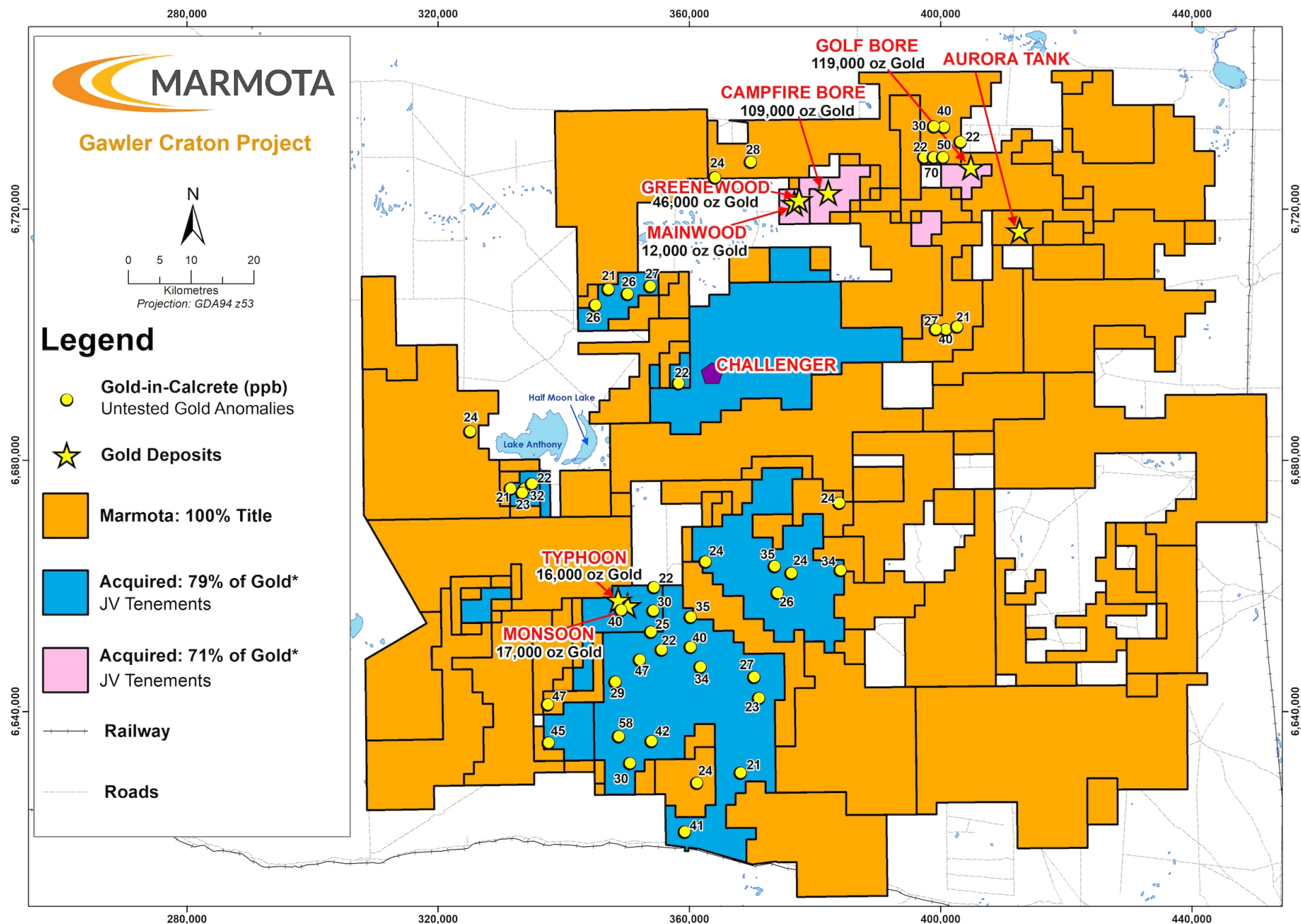


Figure 1: More than 40 *untested* significant Gold-in-calcrete anomalies in Marmota's Gawler Craton project

Continued

- Dominion Mining originally identified anomalous gold-in-calcrete near the surface to be an indicator of gold below surface in the area. Both Challenger and Aurora Tank were found by testing near surface calcrete for anomalous gold.
- Marmota has already yielded multiple outstanding intersections exceeding 100 g/t gold over 1m at the Aurora Tank gold discovery, all close to surface, including most recently our best ever result of 165 g/t gold over 1m (approx. 57m from surface) [ASX:MEU 4 Feb 2021] .
- An assay of 10ppb gold-in-calcrete is considered to be anomalous in gold (Au). The gold-in-calcrete anomalies plotted in Figure 1 lie in the range of 20ppb to 70ppb Au. For comparison, the highest ever gold-in-calcrete result recorded at the Aurora Tank (Goshawk) discovery was 38ppb Au (including all detailed in-fill sampling down to a 50m grid size).
- The summary provided above represents 'work in progress' to date in Marmota's checking of the archives. This work is on-going.

Company	1996	1997	1998	1999	2003	2018	2020	2021	Grand Total
CRA EXPLORATION PTY LTD				1					1
DOMINION MINING LTD		19	13	6	1				39
RESOLUTE RESOURCES LTD		1							1
Unknown	2				1				3
Marmota						1	2	1	4
Grand Total	2	20	13	7	2	1	2	1	48

UNTESTED Gold-in-calcrete anomalies in Figure 1 (by year of discovery) (>20ppb Au)

Marmota Chairman, Dr Colin Rose, said:

“ Marmota is sitting on a remarkable bundle of gold anomalies, across an area that is already blossoming with gold discoveries ... ”

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About Marmota Limited

Marmota Limited (ASX: MEU) is a South Australian mining exploration company, focused on gold, copper and uranium. Gold exploration is centred on the Company's dominant tenement holding in the highly prospective and significantly underexplored Gawler Craton, near the Challenger gold mine, in the Woomera Prohibited Defence Area. The Company's copper project is based at the Melton project on the Yorke Peninsula. The Company's uranium JORC 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 Dr Kevin Wills, who is a Fellow of the Australasian Institute of Mining and Metallurgy. He has sufficient experience which is 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." Dr Wills consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

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.

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	<ul style="list-style-type: none"> <i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i> 	<ul style="list-style-type: none"> This compilation of data contains the results of calcrete sampling programs conducted from 1996 to 2021. Sample collection has been carried out by at least 4 companies including Marmota Limited, CRA Exploration, Dominion Mining and Resolute Resources, along with some samples within the compiled database without the Company listed. Sampling density varies from 1.6 km regional spaced sampling to infill sampling down to 50m. Samples were collected at varying depths with the most calcareous sample collected at each location. Samples collected were ~1-2kg in weight. Information related to the samples all include sample location and number. Various levels of detail regarding the type of calcrete, terrain, and level of HCL reaction were recorded by different companies.
Drilling techniques	<ul style="list-style-type: none"> <i>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).</i> 	<ul style="list-style-type: none"> Samples were collected by various techniques including float sampling, hand auger and mechanised auger sampling.
Drill sample recovery	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>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.</i> 	<ul style="list-style-type: none"> Samples averaged 1-2kg in weight, which is sufficient to be considered representative for this sample medium.
Logging	<ul style="list-style-type: none"> <i>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.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections</i> 	<ul style="list-style-type: none"> Recorded data at each sample point includes sample number, and sample location, with a variety of additional information such as the calcrete type, sample depth, level of HCl reaction, terrain, rock outcrop or float occurrence along with notes relating to potential contamination, is recorded for most of the samples.

Criteria	JORC Code explanation	Commentary
	<i>logged.</i>	
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> No subsampling was undertaken during calcrete sampling.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> Samples were submitted to certified laboratories for analysis including AMDEL, Bureau Veritas and Genalysis. Samples were milled and a sub-sample was digested by Aqua Regia and analysed for Au, along with a range of other elements which varied from program to program. Additional elements assayed for include Ag, As, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Li, Mg, Mn, Mo, Ni, Pb, Pd, Pt, Sb, Se, S, Sn, Sr, Te, U, V, W, and Zn. QA/QC checks comprised on standards and duplicates inserted by the various companies occur at intervals of at least 1 in 50 samples. Assays returned reported acceptable levels of accuracy and precision.
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> Sampling data was recorded on field sheets and checked and digitised upon completion of sampling. No adjustments have been made to the laboratory assays.
Location of data points	<ul style="list-style-type: none"> <i>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.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> Sample locations were recorded by handheld GPS. For earlier sampling programs accuracy was +/- 50m with an improvement to +/- 5m accuracy for sampling carried out since 2007. Locations are recorded in several Grid systems with all data converted to GDA94 Zone 53 coordinates.
Data spacing and distribution	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity</i> 	<ul style="list-style-type: none"> Samples were collected at a range of spacings, from 1.6km regional sampling down to 50m infill sampling over areas of interest (where infill sampling has occurred). These spacings are

Criteria	JORC Code explanation	Commentary
	<p><i>appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> <i>Whether sample compositing has been applied.</i> 	<p>considered sufficient for both 1st pass, and subsequent infill calcrete sampling, as relevant.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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.</i> 	<ul style="list-style-type: none"> The orientation of regional and infill sampling is considered sufficient to provide unbiased sampling with respect to known structures and considering the target deposit type.
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> As far as can be ascertained samples were transported from site by company personnel or contractors and securely delivered to the nominated laboratory for analysis.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> N/A

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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Samples have been collected over many historic tenements, all data presented in this announcement lies within tenements now owned by Marmota Limited or in JV agreements with other parties. The tenements are located approximately 100 km southwest of Coober Pedy in South Australia. Exploration is conducted within lands of the Antakirinja Matu-Yankunytjatjara Native Title Determination Area. The tenements are in good standing.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Exploration based on calcrete sampling has been conducted in the area since 1996 including sampling programs by Marmota Ltd, CRA Exploration, Dominion Mining, and Resolute Resources.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The majority of the areas sampled lie within the Christie Domain of the Archaean Mulgathing Complex which comprises of meta-sedimentary successions interlayered with Banded Iron Formations (BIF), chert, carbonates and calc-silicates. Marmota is targeting Challenger-style Late Archaean gold whilst being open for occurrence of a variety of other mineralisation styles which may also exist in the tenement area.
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> N/A
Data aggregation methods	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> No data aggregation methods have been applied

Criteria	JORC Code explanation	Commentary
	<p><i>procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i> 	<ul style="list-style-type: none"> No new drilling results in this announcement
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Sample locations are shown in Figure 1 of this release.
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> All assay data has been grouped and shown within Figure1.
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> N/A
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> See attached release.