ASX ANNOUNCEMENT 14 October 2015

STRONG GOLD ANOMALIES: Widgety prospect

Background

- In July 2015, Marmota Energy Limited (ASX: MEU) ("Marmota") commenced an aggressive gold exploration program across its prime tenement holdings around the Challenger gold mine.
- Marmota has adopted the same calcrete sampling methodology that was used to find Challenger itself.

Key Points

- Calcrete sampling at the Widgety prospect (50km SE of the Challenger gold mine) has returned strong gold anomalous assay results.
- 96 sample locations at Widgety have returned anomalous gold-in-calcrete readings ≥ 20 ppb (out of 331 samples taken at Widgety).
- For comparison, a gold-in-calcrete result of 20ppb is:
  - better than 98.4% of all calcrete sampling data recorded in the South Australian Government database of 192,677 samples
- RC drilling to commence at Widgety prospect in November 2015

WIDGETY PROSPECT

Existing data at Widgety highlighted a gold-in-calcrete geochemical anomaly, trending in the same north-east direction as other geochemical anomalies within the region. Widgety was highlighted as one of Marmota's gold target areas in the Gawler Craton [see ASX:MEU announcement: 6 July 2015]. Calcrete sampling via auger drilling was carried out at the Widgety prospect on a fine 50m x 50m grid pattern, in-filling existing anomalous data.

Assay results indicate the gold anomaly is coherent, with consistent results up to 60ppb gold (10ppb is considered anomalous) covering an area 1700m x 1000m (see Figures 1 and 2). The Widgety prospect also has associated aeromagnetic anomalies (see Figure 3).

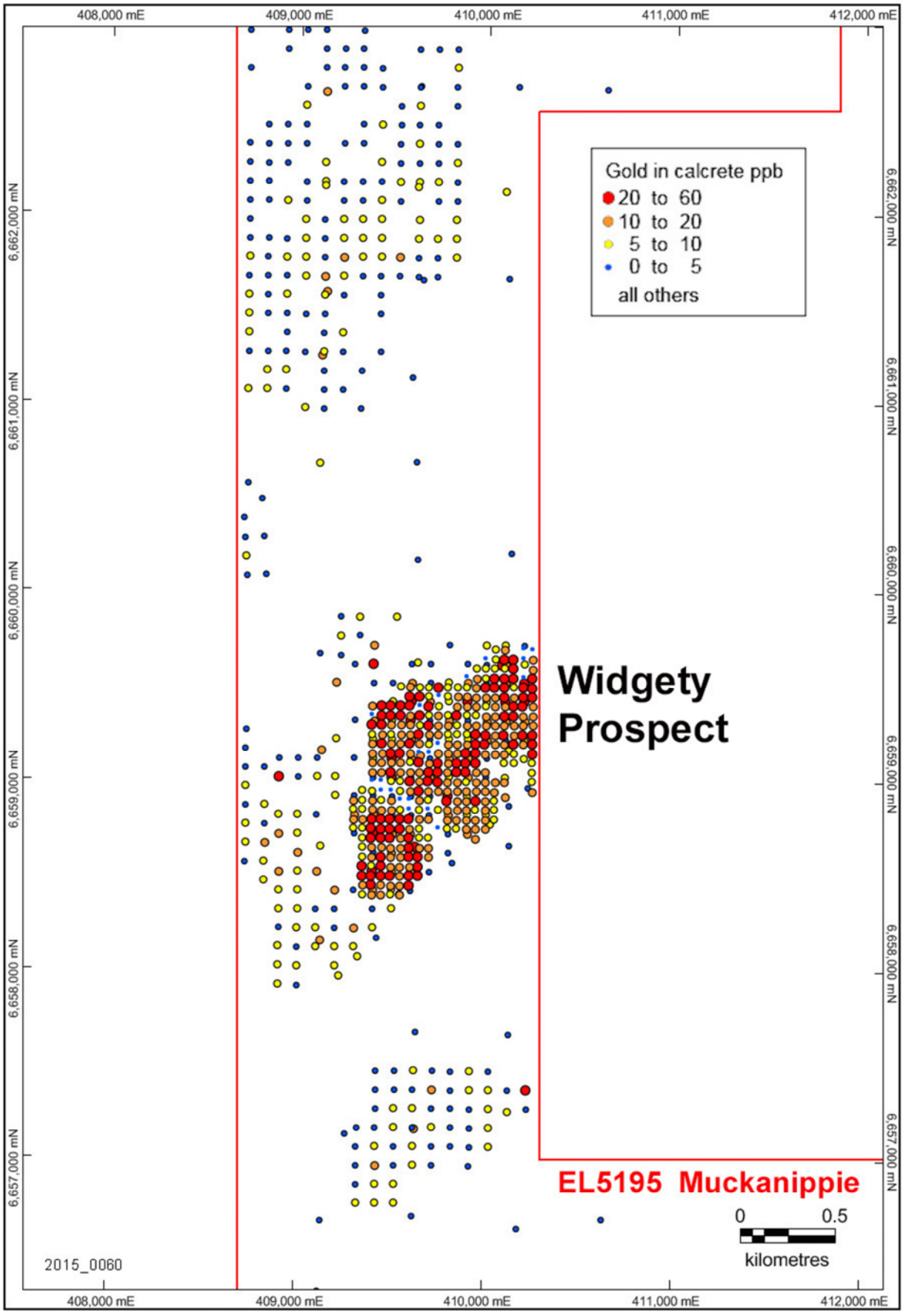

Figure 1: Plan of gold-in-calcrete results at Widgety
A coherent anomaly is apparent with a high number of samples achieving greater than 20ppb gold

Detail of Figure 1

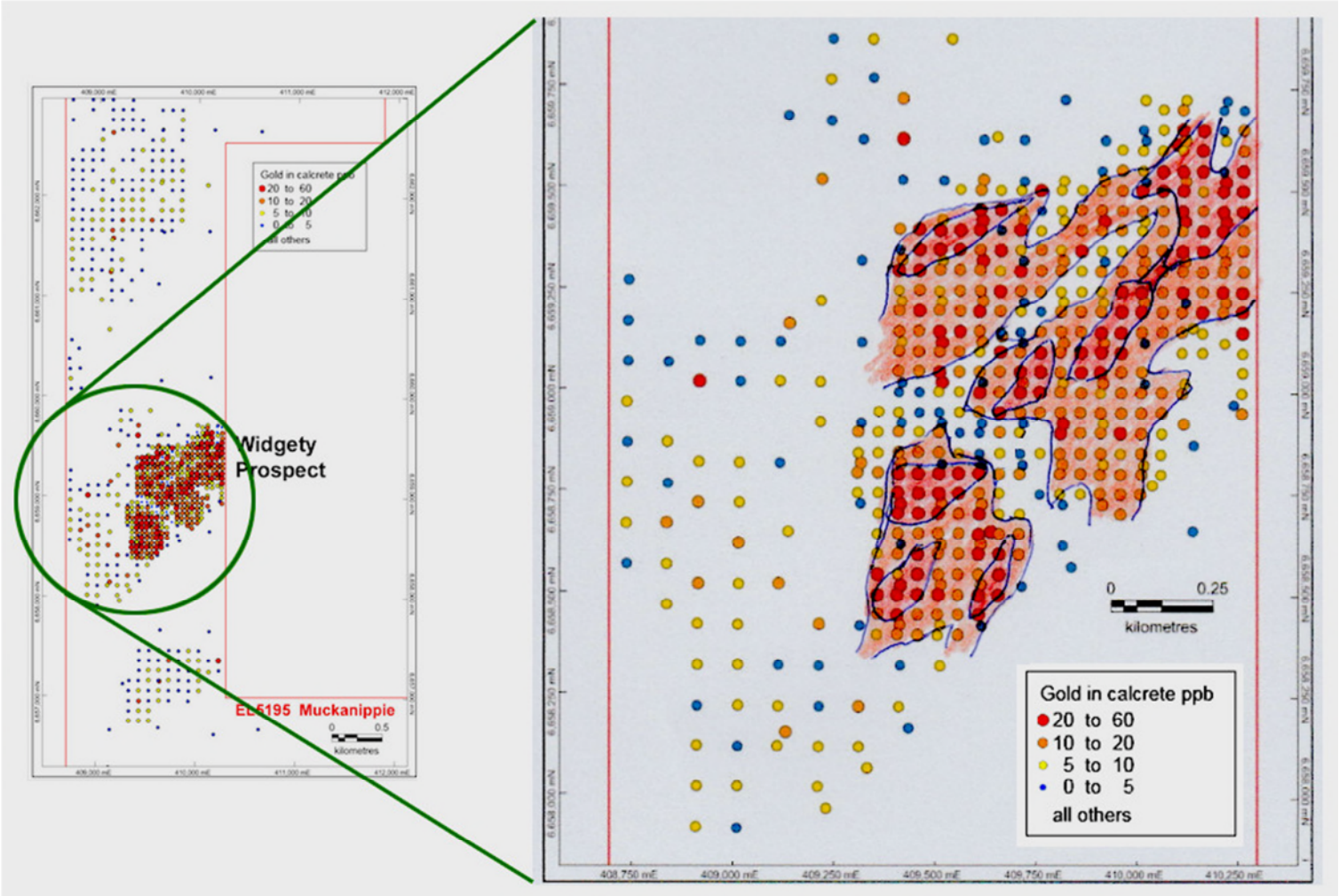

Figure 2: Widgety: Detail of gold-in-calcrete anomalism (contoured at 10ppb and 20ppb gold)

Marmota's Chairman, Dr Colin Rose, said:

" Marmota is searching for Challenger-style systems – Challenger itself has a small footprint, with narrow shoots. The calcrete sampling program at Widgety has identified not just one, but several anomalous clusters, each around 250m wide. Detailed ground magnetometry and gravity will be used to further refine targets in advance of RC drilling in November. "

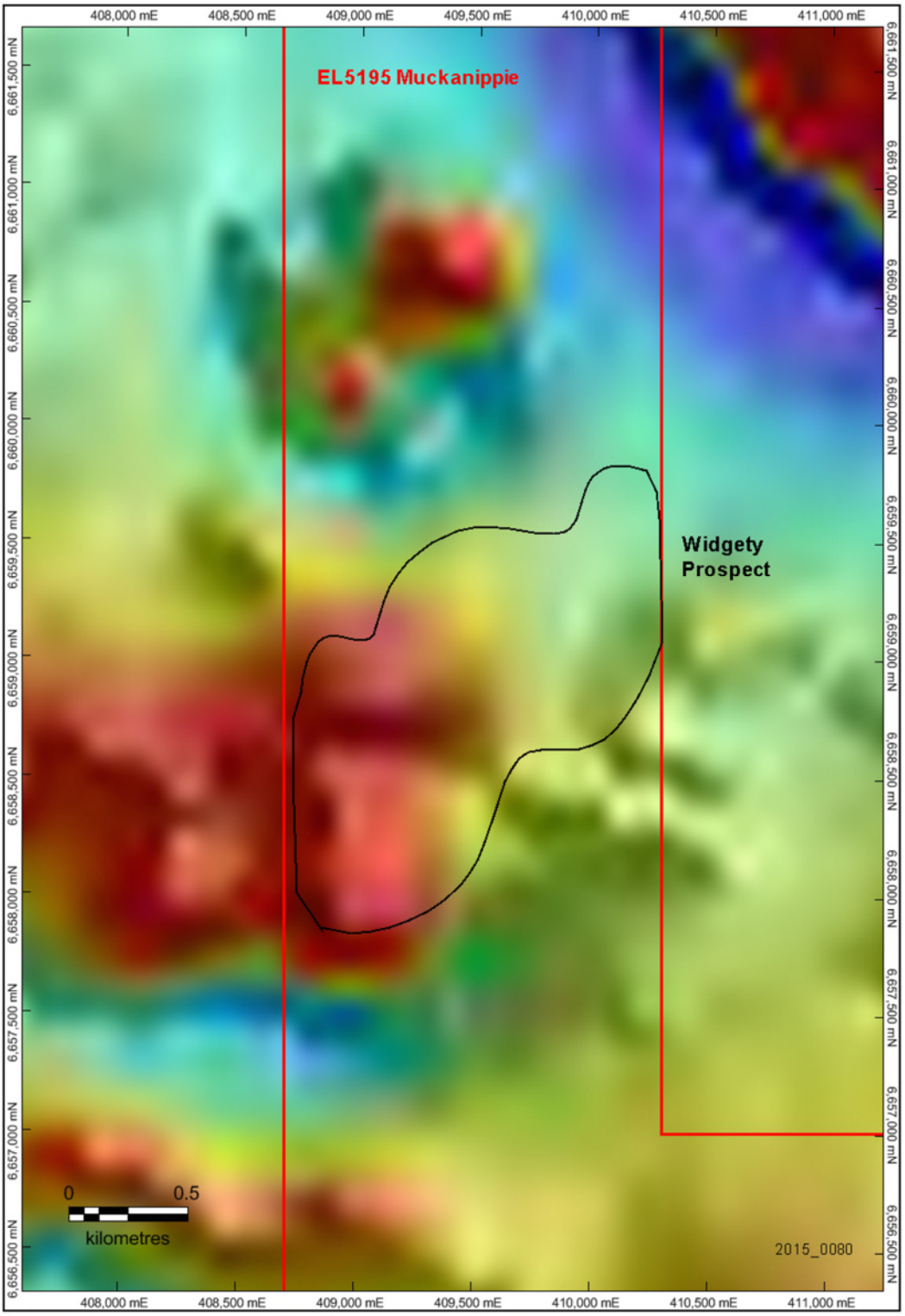

Figure 3: The Widgety prospect also has associated magnetic anomalies

Location of Widgety Prospect

The Widgety prospect is located about 50km south-east of the Challenger gold mine, in the 'neck' of Marmota's Muckanippie Tenement, in the Woomera Prohibited Defence Area, in the highly prospective and significantly underexplored Gawler Craton.

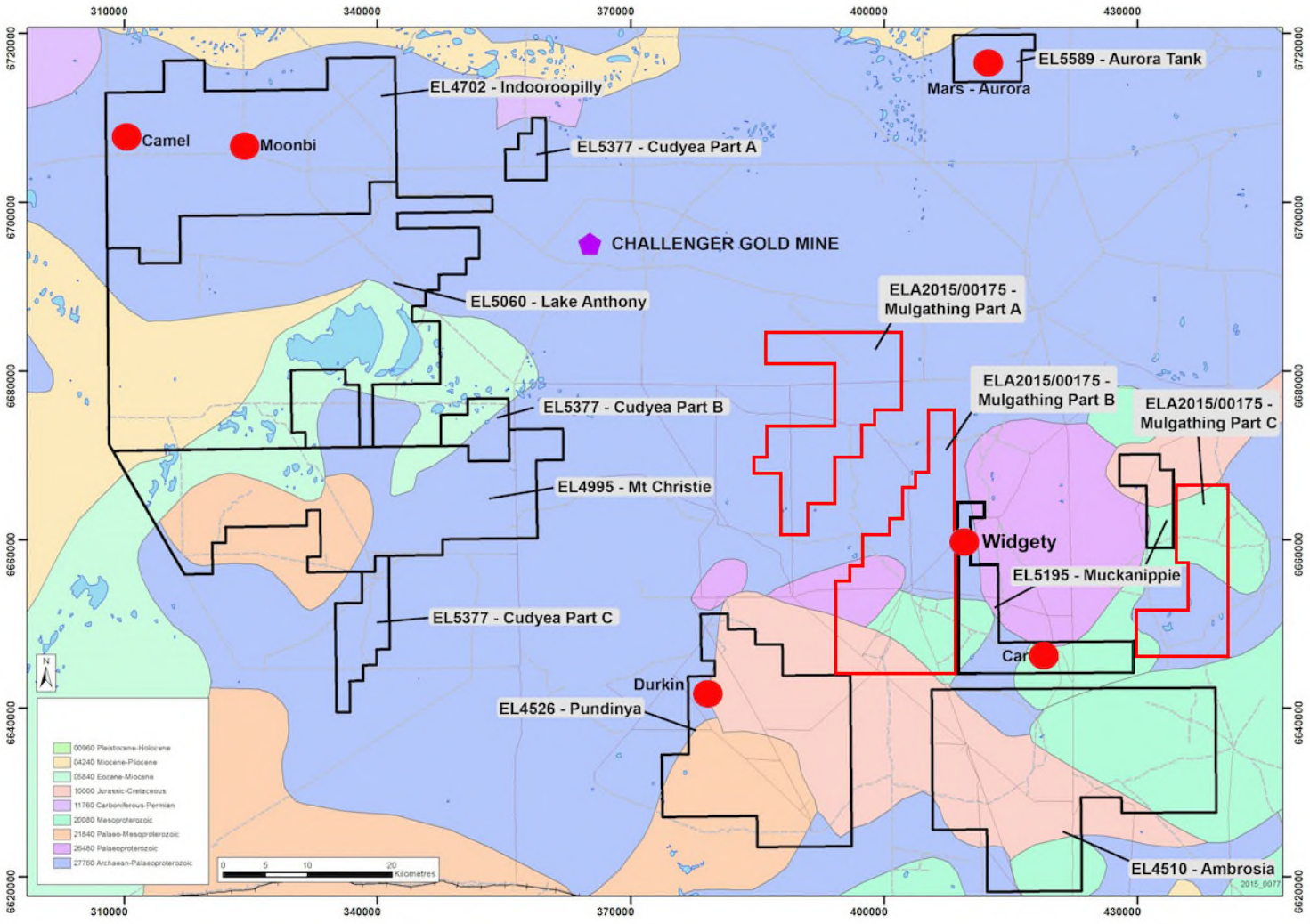

Figure 4: Marmota's Gawler Craton Gold Project, showing the location of Widgety and new tenements

Calcrete Sampling

Calcrete sampling is a useful exploration tool utilised to detect potential gold mineralisation hosted in basement rocks beneath the surface. It is the very method that was used to discover the Challenger Gold Mine. Calcrete is a calcium rich sedimentary rock type that typically forms just below the surface within the project region. It is typically formed by calcium carbonate precipitated from solution and re-deposited through the agency of infiltrating waters, or deposited by the escape of carbon dioxide from groundwater. It occurs in a variety of forms, where it can form a duricrust, can be pisolitic, nodular, pebbly, slabby or massive and powdery. It is a proven accumulator of gold and other metals in the Gawler Craton. Calcrete samples are obtained by auger drilling close to the surface.

Empirical Distribution of 'Gold-in-Calcrete'

The Gawler Craton data set

The South Australian Government maintains and collects a huge database of all registered calcrete samples, currently totaling 192,677 different calcrete samples taken in the Gawler Craton area. The database includes both random 1-mile grid data and massive in-fill data. To enable meaningful evaluation, Marmota has conducted a basic statistical analysis on both:

A: 'Pure random sampling' data set

Size: 3,691 calcrete samples [based on pure 1 mile grid data — no in-fill]

For this pure random sampling dataset, a gold-in-calcrete result of:

20 ppb is better than 99.8% of pure random data

B: Massive South Australia Government database The Gawler Craton data set

Size: 192,677 calcrete samples [based on: random data AND in-fill sampling]

For the complete data set (including in-fill sampling), a gold-in-calcrete result of:

20 ppb Au is better than 98.4% of all data collected
25 ppb Au is better than 98.9% of all data collected
30 ppb Au is better than 99.2% of all data collected

10 ppb gold-in-calcrete at a specified sample spacing is typically considered to be anomalous.

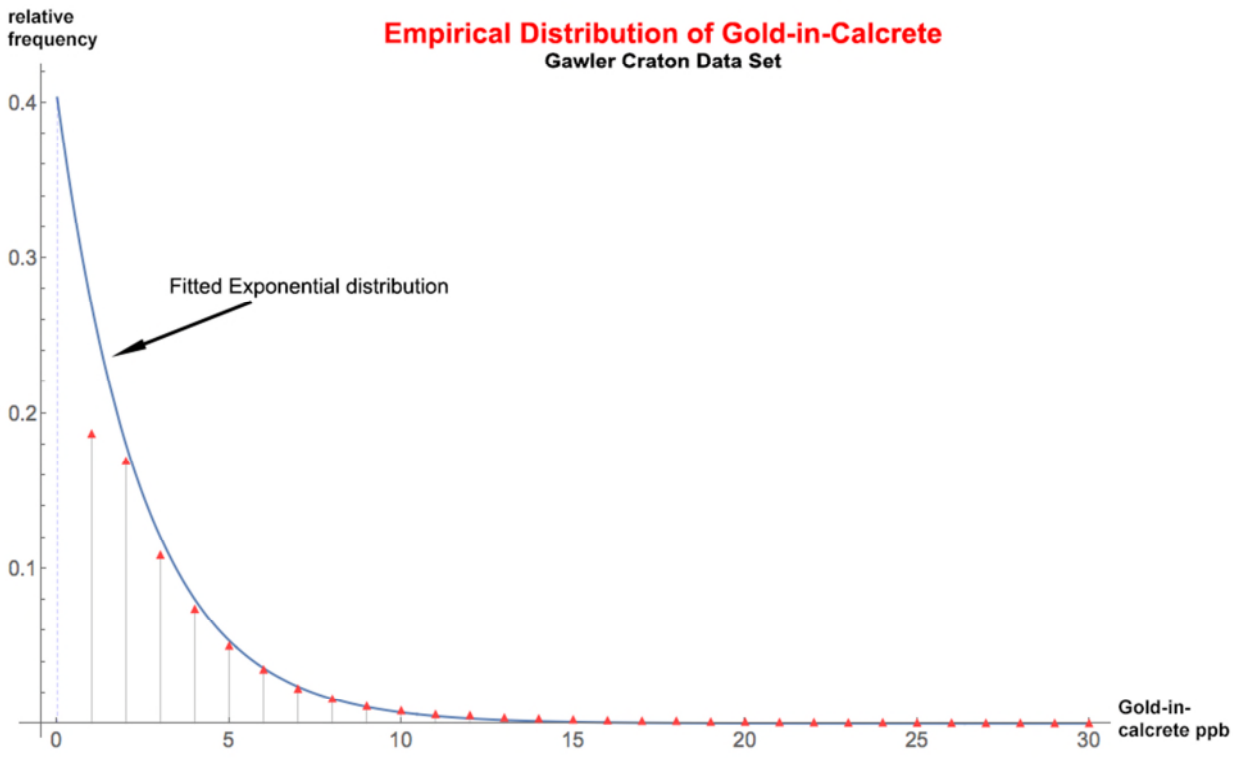

Figure 5: Gawler Craton data set: Empirical distribution (pmf) of gold-in-calcrete (▲)

Competent Persons Statement

The information in this release that relates to Exploration Results and Mineral Resources is based on information compiled by Dan Gray as Senior Project Geologist of Marmota Energy Limited who is a member of the Australasian Institute of Geoscientists. 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 for Reporting of Exploration Results, Mineral Resources and Ore Reserves*'. Mr Gray consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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About Marmota Energy Limited

Marmota Energy 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 cornerstone copper project is based at the Melton project on the Yorke Peninsula. The Company's largest uranium project is at Junction Dam adjacent to the Honeymoon mine.

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

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 (eg 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 (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised 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 (eg submarine nodules) may warrant disclosure of detailed information.*	• Calcrete samples were collected on a pre-planned grid pattern of varying dimensions depending upon target. The grids were oriented on an east-west/north-south direction. Occasional grab samples were obtained where calcrete outcrops were noted. • Calcrete samples were obtained from varying depths ranging from surface to 110cm the maximum achievable depth using a hand held mechanical auger. Samples were sieved and only good quality calcrete (nodular or massive) was taken for geochemical analysis. Samples obtained were ~1kg in weight. • Samples are annotated with descriptions including, location, type of calcrete, depth, level of HCl reaction, terrain, rock outcrop occurrence and any notes relating to potential contamination.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• Hand held mechanical auger was used to obtain calcrete samples. The auger blade is 20cm in diameter with a maximum reach of 110cm when utilizing an extension rod.
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.*	• Samples were taken by hand and sieved so that a good quality calcrete only sample obtained for geochemical analysis. • Samples averaging 1kg in weight were taken, which are considered to be representative for this sampling medium (calcrete).
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.*	• Recorded data at each sample point included sample number, GDA94 Zone 53 Co-ordinates, calcrete type, sample depth, level of HCl reaction, terrain, rock outcrop or float occurrence and any notes relating to potential contamination eg near roads.

Criteria	JORC Code explanation	Commentary
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.*	• No sub sampling was undertaken during the calcrete sampling program.
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 (ie lack of bias) and precision have been established.*	• A certified and accredited global laboratory (Intertek Genalysis) was used for all assays. • Samples from Widgety, were subject to analysis by FA25/MS; 25gram lead collection fire assay in new pots. Analysed by Inductively Coupled Plasma Mass Spectrometry. • Internal certified laboratory QA/QC is undertaken by Intertek Genalysis. • No additional standards, blanks or field duplicates were considered necessary for this calcrete sampling program.
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.*	• Field data is captured on field sheets and transferred to digital medium at the end of each day. All data is managed in-house by Marmota Energy. • Laboratory assay data is not adjusted.
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.*	• All samples are located using hand held GPS with an accuracy generally within +/- 5m. All coordinates are recorded in GDA94, Zone 53.
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.*	• Samples were collected at 50m x 50m grid spacing which is considered to be appropriate spacing for progressing the target to the next stage of exploration. • Calcrete sampling only – no association or reliance should be made on level of mineralisation • Samples were not composited.
Orientation of data in relation to geological	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• The calcrete sampling when undertaken on a close spaced grid (ie Widgety 50m x 50m) highlights trends in gold mineralisation, assumed to be structure related.

Criteria	JORC Code explanation	Commentary
structure	• *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.*	• It is not considered that the sampling method (grid calcrete sampling) should introduce a sampling bias.
Sample security	• *The measures taken to ensure sample security.*	• Each sample was put into individually numbered calico bags which were tied and placed into cable tied polyweave bags. • Samples remained at the remote field camps with Marmota staff until Marmota staff returned to Adelaide and the samples dropped off at the Intertek Genalysis Laboratory in Wingfield, Adelaide.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been undertaken.

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.*	• Muckanippie (EL5195) is 100% owned by Marmota Energy Limited. • The project is located in the Gawler Craton of South Australia. • There are no third party agreements, no government royalties, historical sites or environmental issues. • Underlying land title is Crown Lease. • EL 5195 is in good standing.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Marmota has reviewed past exploration data over the region. The region in which EL 5195 is located has been the subject of mineral exploration in the past by various companies including Normandy.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Style of mineralisation in the region is considered to be Challenger style gold mineralisation.
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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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.*	• N/A, no drilling conducted.
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*	• N/A, no drilling conducted.

Criteria	JORC Code explanation	Commentary
	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.* • *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 (eg 'down hole length, true width not known').*	• N/A, no drilling conducted.
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 in release attached.
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.*	• Geochemical data was gridded and contoured.
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 attached release.
Further work	• *The nature and scale of planned further work (eg 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.*	• See attached release.