ASX ANNOUNCEMENT 13 September 2018

Reconnaissance Drilling intersects widespread gold mineralisation at CAR prospect

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

Marmota is pleased to announce that its August reconnaissance drilling program at the 'CAR' prospect [ASX:MEU 30 July 2018 and 10 Aug 2018] has **located widespread gold mineralisation in altered granite**.

The CAR prospect is located on Marmota's 100%-owned EL 6166 (Muckanippie): see Figure 1 – about 70 km SE of the Challenger Gold Mine in the Woomera Prohibited Defence Area of South Australia.

- 23 reconnaissance aircore holes were drilled at CAR, averaging 44 metres each (total of 1,008m)
- 20 of the 23 reconnaissance holes returned anomalous gold mineralisation, with 4m intervals of between 50 and 285 ppb gold [see Figure 3]
- Anomalous gold in granite was detected at CAR over an area approximately 1 km across (open in all directions)
- Many of the gold intercepts are associated with anomalous silver and arsenic – which are often associated with gold mineralisation
- The best gold intercepts were typically located either at the end of holes (where the rock was becoming harder to drill with air-core / slimline), and/or at the extremes of the tested zone, so that the extent of mineralisation is unknown and yet to be established.

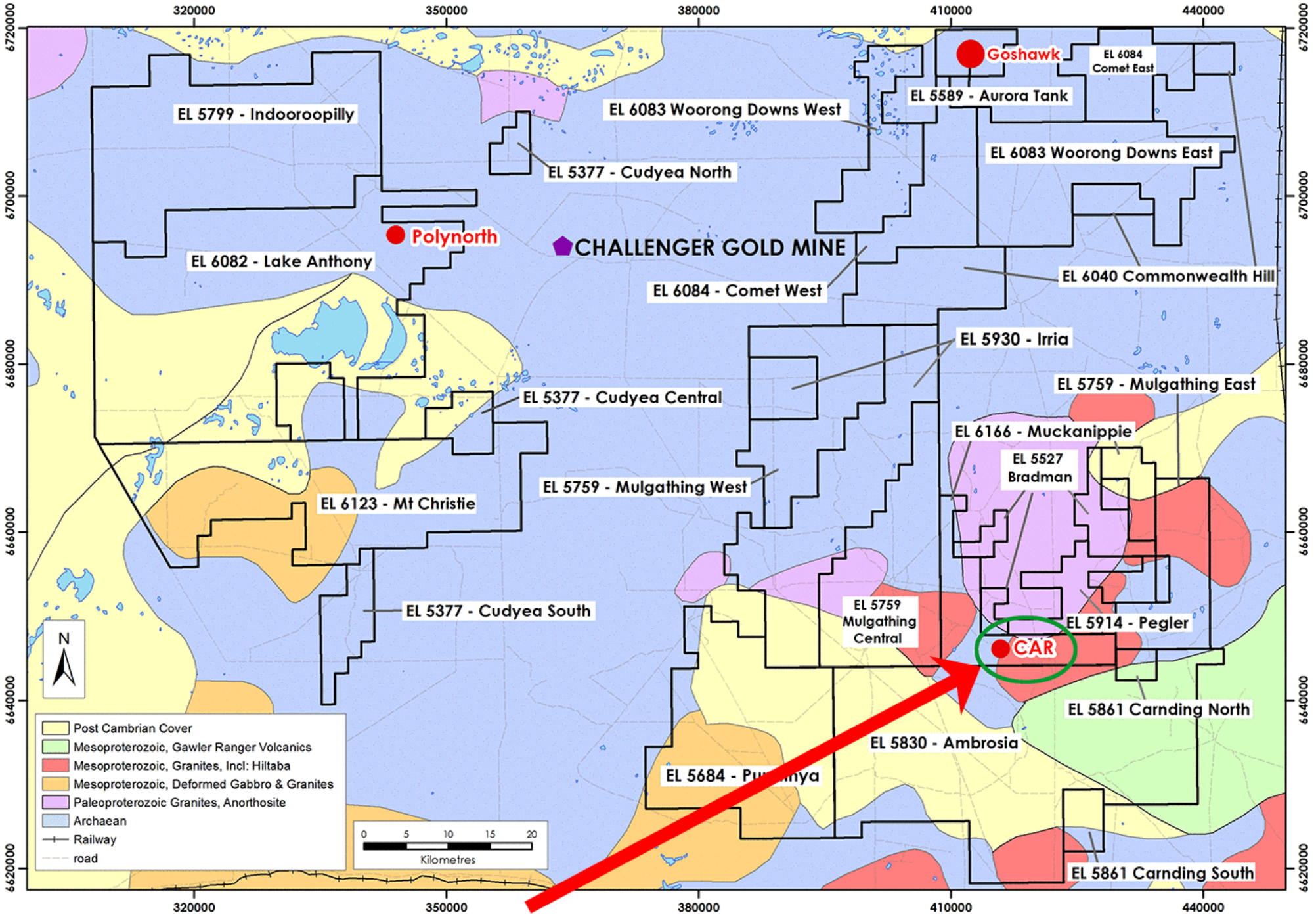

Figure 1: **Location of CAR prospect —— with Marmota's Goshawk Gold discovery at Aurora Tank to the north**

Background

Objective of the program:
As stated in ASX:MEU 30 July 2018:

> " The **objective of the program** is to detect gold mineralisation or secondary gold dispersion underneath the gold-in-calcrete anomalies discovered by Marmota. If gold mineralisation or secondary gold dispersion is detected below any of the gold-in-calcrete anomalies, a more intensive follow-up drill program will be implemented – this would have the potential to lead to a new gold discovery. "

The CAR Prospect features a coherent gold-in-calcrete anomaly [ASX:MEU 30 July 2018] which was tested by shallow air-core drilling. This is essentially the same method that led to the discovery of both the Challenger Gold Mine and the Aurora Tank Gold discovery.

Geology at CAR

- Sedimentary cover was found to be very thin. Relatively fresh granite was the predominant rock type in all holes drilled (with the exception of a few narrow mafic rock zones – probable basic intrusives unrelated to mineralisation). The most interesting aspect of the gold mineralisation intersected was that its presence continued to the end of the holes drilled, as the rock became fresher and more difficult to drill.

- Many of the most anomalous zones were associated with mafic mineral alteration such as chlorite, actinolite or tourmaline. **This suggests a high-temperature hydrothermal style of alteration over a large area**.

- Several of the holes such as 18CAAC03, 5, 8 and 16 (Figure 3) were not able to be drilled to the target depth of 50 metres due to rock becoming harder to drill with an aircore rig. They are interpreted to have probably stopped short of mineralisation (see Figure 2).

- Host rocks are granites composed predominantly of alkali feldspar, quartz and biotite. Textures do not seem metamorphosed or deformed. Together with locally overlying Gawler Range Volcanics, they are interpreted to belong to the Hiltaba Granite suite (rather than the older Kimban or Archaean granites which are also present in the area).

- Drilling and sampling details are described in the JORC Appendix 1.

Polynorth Prospect

The Polynorth prospect (located approximately 30 km west of the Challenger Gold Mine) also returned some interesting anomalous gold results. At Polynorth, two holes (18PNAC01 & 12) reported 4m composites with up to 60 ppb gold which may be related to mineralisation. Host rocks here are high grade metamorphics with mineralisation likely to be structurally controlled in shear zones.

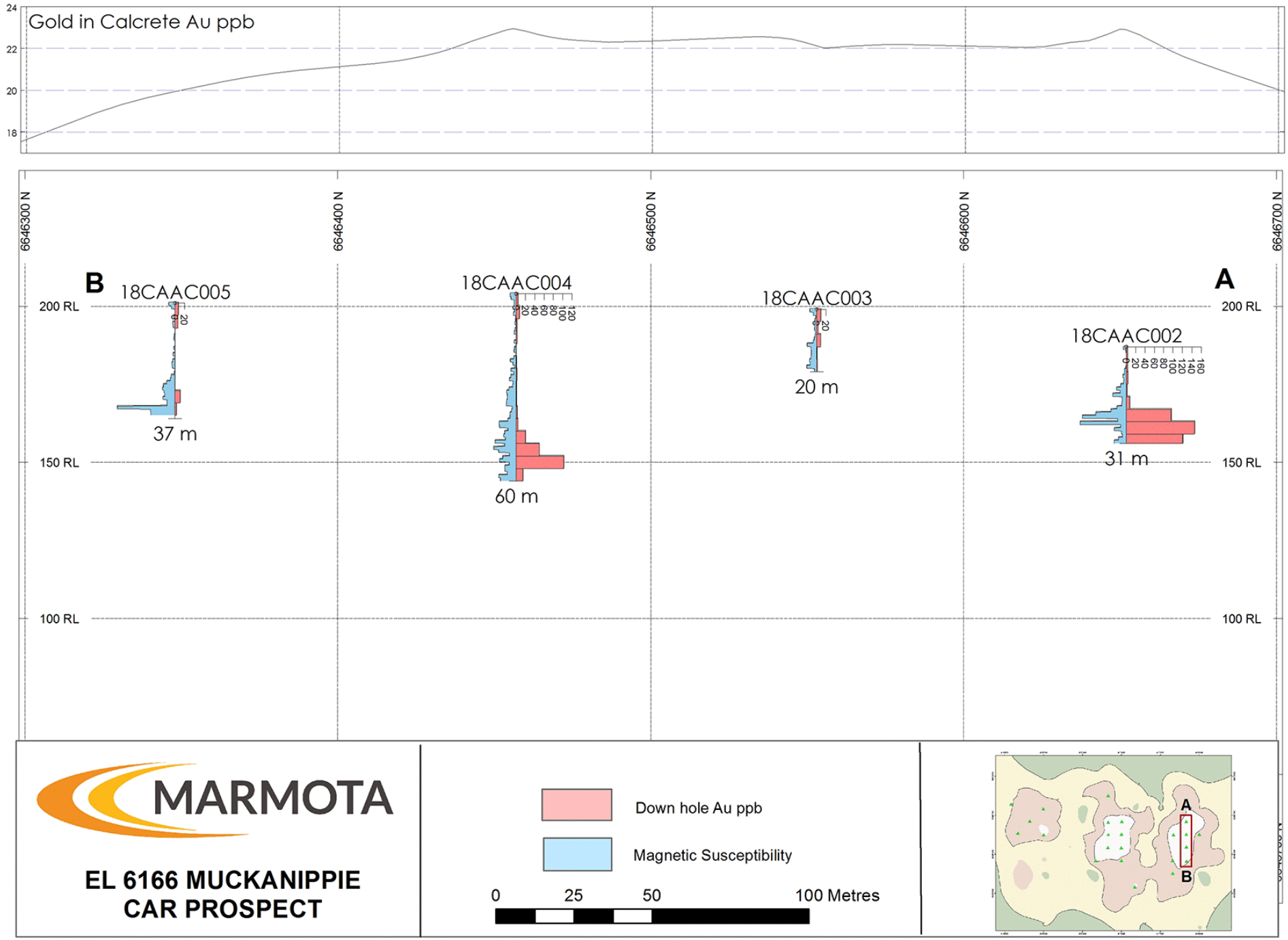

Figure 2: **Sample Cross section from first reconnaissance drilling at CAR prospect (marked A–B)**

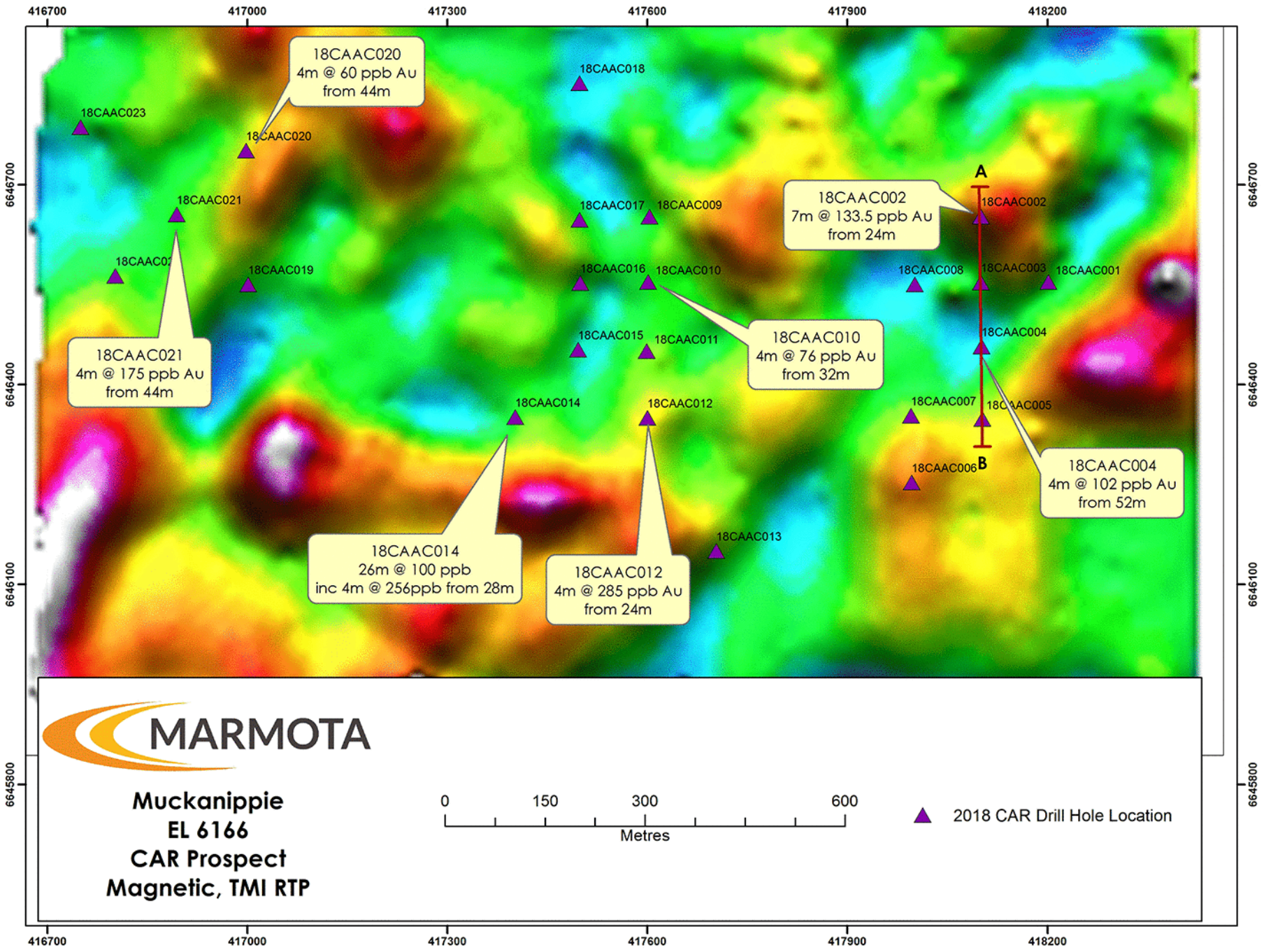

Figure 3: CAR prospect — TMI-RTP magnetics image with drill hole collars

Marmota Chairman, Dr Colin Rose, said:

> " These are early days, but the more our team looks at CAR,
> the more interesting it becomes …
> including the potential for large scale gold mineralisation. "

Next Stage: CAR

Widespread gold mineralisation has been identified over a broad area with wide-spaced, shallow, vertical drillholes. The initial priority is to drill some deeper RC holes in the 50–200m range at CAR to locate widths and grade of the deeper mineralisation.

Aurora Tank: Drilling to Commence

- RC Drilling is expected to commence **next week** at Aurora Tank.
- Marmota's team has already been mobilised to the field, and are now in transit.
- Details about the Aurora Tank drill program will be available shortly.

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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 project 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	• *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.*	• 61 AC holes were drilled to collect samples from the 11 different targets across three different tenements located in Marmota's tenement holdings on the Gawler Craton. • Samples were collected at 1m intervals from the drilling cyclone and stored in separate bags at the drill site. • Composite 4m samples were collected using a 50mm PVC tube 'spear' to collect representative samples from bags. Composite samples were an average weight of 2 kg which were pulverized to produce sub samples for lab assay (samples pulverized to produce a 40 g sample for Aqua Regia Digest and analysed by Inductively Coupled Mass Spectrometry and Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry). 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 consists of Aircore Drilling, Hole diameters are 90 mm.
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.*	• Drillholes and sample depths were recorded in hard copy format during drilling including description of lithology and sample intervals. • Qualitative assessment of sample recovery and moisture content of drill samples was recorded. • Sample recoveries were generally high, and moisture in samples minimal. In some instances, where ground water influx was high, wet/moist samples were collected. • The sample system cyclone was cleaned at the end of each hole

Criteria	JORC Code explanation	Commentary
		and as required to minimise up-hole and cross-hole contamination. • No relationship is known to exist between sample recovery and grade.
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.*	• All samples were geologically logged by the on-site geologist. The holes have not been geotechnically logged. • Geological logging is qualitative. • Chip trays containing 1 m 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.*	• Samples averaging 2 kg were collected for laboratory assay. Samples were collected with a 50mm tube by diagonally spearing individual samples within bags. • 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 um. • 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, while 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. • Both Company and laboratory introduced duplicate samples indicate acceptable analytical accuracy and precision. • Laboratory analytical charge sizes are standard sizes and considered adequate for the material being assayed.
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.*	• Bureau Veritas Minerals in Perth was used for analytical work. Samples were analysed in the following manner: ○ Aqua Regia Digest. Analysed by Inductively Coupled Plasma Mass Spectrometry for Ag, As, Au, Cu, Mo, Ni, Pb, Pd, Pt, U, W, Zn and Ca, Fe, K, Mg, Mn, Na, S, and V by Inductively coupled plasma atomic emission spectroscopy (ICP AES) • For laboratory samples, the Company introduced QA/QC samples at a ratio of one QA/QC sample for every 20 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 drill samples. • Both the Company introduced, and laboratory introduced QA/QC samples indicate acceptable levels of accuracy and precision have

Criteria	JORC Code explanation	Commentary
		been established.
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.*	• A Company geologist has checked the calculation of the quoted intersections in addition to the Competent Person. • No twinned holes were drilled in the program. • No adjustments have been made to the assay data.
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.*	• Drill hole coordinate information was collected using a digital GPS system with an autonomous accuracy of +/-5 metres utilising GDA 94 Zone 53. • Area is proximately flat lying and topographic control uses SRTM 90 DEM.
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.*	• Drill holes were advanced along traverse's setup perpendicular to the orientation of the geochemical anomaly. • Drill hole spacing varied between prospects.
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 were orientated to traverse gold in calcrete highs. No geological information regarding orientation of structure was available.
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.
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.*	• ELs 6166, 5799 and 6082 are 100% owned by Marmota Limited. The tenements are located approximately 100 km to 160 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.*	• Exploration near ELs 6166, 5799 and 6082 has been carried out by several exploration companies previously including;
		  • Rio Tinto Exploration Pty Ltd (1994 – 1999)
		  • Aztec Mining Company Ltd (1992 – 1997)
		  • Challenger Gold Operations Pty Ltd & Resolute Resources Pty Ltd (1995 – 2000)
		  • Mega Hindmarsh Pty Ltd (2005 – 2010)

Geology	• *Deposit type, geological setting and style of mineralisation.*	• ELs 5799 and 6082 are situated in the Christie Domain of the western Gawler Craton. The Christie Domain is largely underlain by late Archaean Mulgathing Complex which is composed 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. • EL 6166 is largely dominated by Granites thought to be Proterozoic in age and related to the Hiltaba Intrusive event. As such, multiple mineralisation styles are possible.

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 required information on drill holes is incorporated into Appendix 2 to the ASX Release.

Criteria	JORC Code explanation	Commentary
	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.	
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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Any intersections are calculated by simple averaging of 4 m assays. • 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.
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').*	• Drill coverage is not currently considered sufficient to establish true widths due to uncertainty regarding mineralisation dip and strike. • Mineralisation intersections are downhole lengths; true width is unknown.
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.*	• Levels of anomalous gold over 10-20 ppb were considered in reviewing assay results and are 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 attached ASX Release. Geological observations are included in that report.
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.*	• See attached release. • Marmota is currently reviewing results received to date from this drilling campaign and considering additional work programs including resampling mineralised zones at 1m intervals, petrological work and additional infill drilling.

APPENDIX 2 Drillhole collar summary

Hole ID	Easting (MGA94 z53)	Northing (MGA94 z53)	RL	Dip	Azimuth (Mag)	EOH Depth
18CAAC001	418201	6,646,554	192	-90	0	50
18CAAC002	418100	6,646,652	187	-90	0	31
18CAAC003	418100	6,646,553	199	-90	0	20
18CAAC004	418101	6,646,457	204	-90	0	60
18CAAC005	418102	6,646,348	201	-90	0	37
18CAAC006	417996	6,646,253	195	-90	0	54
18CAAC007	417995	6,646,353	192	-90	0	50
18CAAC008	418001	6,646,550	194	-90	0	22
18CAAC009	417603	6,646,652	195	-90	0	33
18CAAC010	417601	6,646,554	195	-90	0	33
18CAAC011	417599	6,646,450	196	-90	0	45
18CAAC012	417600	6,646,350	199	-90	0	32
18CAAC013	417703	6,646,150	206	-90	0	60
18CAAC014	417402	6,646,351	205	-90	0	50
18CAAC015	417496	6,646,452	202	-90	0	50
18CAAC016	417499	6,646,552	196	-90	0	37
18CAAC017	417498	6,646,647	197	-90	0	44
18CAAC018	417498	6,646,852	205	-90	0	50
18CAAC019	417001	6,646,550	210	-90	0	50
18CAAC020	416998	6,646,751	199	-90	0	50
18CAAC021	416894	6,646,655	199	-90	0	50
18CAAC022	416802	6,646,563	199	-90	0	50
18CAAC023	416750	6,646,786	197	-90	0	50
18TG2AC001	412998	6,647,049	193	-90	0	57
18TG2AC002	413003	6,646,844	208	-90	0	54
18TG2AC003	412994	6,646,650	193	-90	0	50
18TG2AC004	413003	6,646,445	205	-90	0	55
18TG2AC005	412474	6,646,435	210	-90	0	50

18TG3AC001	410006	6,645,443	205	-90	0	50
18TG3AC002	409994	6,644,949	207	-90	0	84
18TG4AC001	410598	6,649,249	214	-90	0	52
18TG4AC002	411208	6,649,648	244	-90	0	50
18TG4AC003	411297	6,649,652	198	-90	0	50
18TG4AC004	411300	6,649,754	204	-90	0	41
18TG4AC005	411302	6,649,852	218	-90	0	44
18TG4AC006	411395	6,649,856	218	-90	0	50
18TG5AC003	412999	6,654,459	206	-90	0	25
18TG5AC002	413002	6,654,659	207	-90	0	46
18TG5AC001	412997	6,654,851	199	-90	0	40
18TG6AC001	337600	6,705,800	196	-90	0	40
18TG6AC002	337801	6,705,600	194	-90	0	35
18TG6AC003	338607	6,705,601	194	-90	0	40
18TG7AC001	333798	6,702,402	224	-90	0	44
18TG7AC002	332200	6,703,200	220	-90	0	40
18TG7AC003	331399	6,700,802	214	-90	0	42
18PNAC001	342897	6,696,302	188	-90	0	52
18PNAC002	342899	6,696,100	197	-90	0	40
18PNAC003	342903	6,695,899	191	-90	0	45
18PNAC004	343205	6,695,902	189	-90	0	50
18PNAC005	343205	6,695,999	194	-90	0	50
18PNAC006	343199	6,696,098	187	-90	0	50
18PNAC007	343132	6,696,098	187	-90	0	34
18PNAC008	343197	6,696,203	195	-90	0	38
18PNAC009	343201	6,696,301	193	-90	0	50
18PNAC012	343322	6,695,943	187	-90	0	58
18PNAC010	343700	6,696,003	185	-90	0	30
18PNAC011	343700	6,695,805	194	-90	0	35
18TG9AC001	343001	6,694,804	180	-90	0	38
18TG10AC001	345801	6,691,990	197	-90	0	50
18TG11AC001	348996	6,691,998	199	-90	0	33
18TG11AC002	349203	6,692,003	187	-90	0	31