# Highlights

#### Junction Dam uranium project

- > Phase 3 drilling program completed.
- Significant uranium mineralisation expansion potential identified at the large scale Bridget and Yolanda prospects immediately adjacent to the 2km long Saffron prospect. Zone of mineralisation extended to a **15km** strike length.
- Marmota Energy set to increase its share of the uranium rights from 74.5% on the uranium project at Junction Dam nearby to the Honeymoon uranium mine.

#### Western Spur iron ore project

Independent assessment underway to determine a maiden exploration target.

#### Melton copper-gold project (Yorke Peninsula - SA)

- Significant copper grades intersected in drilling at the Melton copper-gold project on South Australia's Yorke Peninsula.
- Results include 9 metres at 1.03% copper including 1 metre at 2.25% copper and 0.46 g/tonne gold intersected in drill hole MIRDD08.
- Significant grades of silver up to 112.1 g/tonne with elevated rare earths also returned from assay.
- Broad zone of copper mineralisation extending for at least 1.3 km defined in the partially drill tested Miranda target.

#### Nevada gold project

> Drilling completed at Big Blue and Angel Wing gold projects.

#### Indooroopilly IOCG project

Potential 'Olympic Dam' style IOCG targets identified on Marmota's Indooroopilly project in South Australia.



Marmota Energy tenement locations

# **Review of Operations**

#### **Corporate Activities**

In the September Quarter of 2011, the Company continued exploration across three high potential and strategic projects in South Australia. At Junction Dam, Phase 3 drilling program has confirmed uranium mineralisation on the project's Bridget and Yolanda prospects. These adjoin the Saffron prospect to the north and south respectively with the new zones adding significant potential uranium inventory to what has been defined at Saffron.

Assay results from Phase 2 drill testing at the Company's Melton Project on the northern Yorke Peninsula returned significant grades of copper, gold, and silver.

Marmota is continuing to focus its resources on a strategy to develop a pipeline of projects that will offer a combination of short-term and sustainable longer term revenue potential. This strategy will assist in maintaining Marmota's strong cash position while promoting an expanded program of focused exploration.

#### Finance

As at 30 September 2011, Marmota Energy had available funds of \$4.7 million, of which the majority is held in term deposits with Australian banks. During the June Quarter, total net operating expenditure by the company was \$1 million.

# **Exploration Activities**

#### Junction Dam uranium project (SA)

(Marmota 74.5% of uranium under JV Agreement with Teck Australia Pty Ltd (Teck), PlatSearch NL and Eaglehawk Geological Consulting Pty Ltd)

Uranium mineralisation within the Saffron Prospect at Junction Dam predominantly occurs as coffinite, with uraninite and uranium phosphates (autunite). This is considered to be very encouraging for the project as this is similar to the mineral assemblages at the nearby Honeymoon in-situ leach uranium mine. 2011

Phase 3 drilling has been completed, which intersected significant grades of uranium mineralisation across three target regions along an approximate **15km strike length** (Figure 3).

Downhole gamma readings indicating uranium mineralisation of potential economic significance returned from Eyre Formation sediments. This formation hosts the nearby Honeymoon Uranium Mine and the uranium rich Beverley Four Mile project to the north of Junction Dam.

Phase 3 drill holes were completed across the Saffron, Bridget and Yolanda prospects at Junction Dam with drillholes in the last third of the program utilising Boart Longyear's sonic drilling technique.

The sonic drilling technique has enabled recovery of good quality sample from critical mineralised zones across the Saffron and Bridget prospects. The samples obtained provide a statistically representative sample which will be submitted for chemical assay and mineralogical testing. The results are expected to assist with disequilibrium corrections to be applied in the future.



Figure 1: Sonic drilling at Junction Dam – August 2011.



Figure 2: Example of good quality mineralised drill core sample intercept from sonic drill hole SASO001 located at Saffron . Mineralised interval within organic rich sediments.



Figure 3: Junction Dam project with areas of confirmed mineralisation highlighted. New zone of mineralisation highlighted on the Bridget prospect open in all directions. Third zone of uranium potential highlighted on the Yolanda prospect for future drill testing.

The presence of good mineralisation within a significant strike length open to the north and south offers **substantial expansion potential** to the existing 2 km long Saffron prospect. Marmota is delighted with the results achieved during the Phase 3 drilling program which is expected to add significantly to the inventory of mineralisation defined at Saffron.

Marmota has earned a **74.5%** interest in the uranium rights on this highly prospective project and is set to earn an additional interest for the uranium rights.



Work is underway to outline a potential maiden inferred resource at the Saffron prospect only on Junction Dam. From the results achieved to date, Marmota believes there is significant potential for further expansion of its uranium mineralisation inventory complimenting what has been defined at the Saffron prospect.

#### Western Spur iron ore project (SA)

#### (100% Marmota Energy ASX: MEU)

Significant assay results were returned from consecutive rock chip sampling programs completed at its 100% owned Western Spur (EL 4528) project during previous Quarters.

Western Spur is located approximately 60 km north west of Lake Frome in the north east of South Australia covering approximately 393 square kilometres. The project is adjacent to Marmota's significant tenement position in the uranium rich Frome Embayment. Western Spur is considered to be prospective for both uranium and base metals.

Grades ranging up to **58.94% Fe**, and **28.07% Mn** were returned from samples covering a number of outcrops (Figure 5). Samples have now been obtained from outcropping units at locations 1, 4 and 6 (Figure 5a). Outcrop at location 4 has a continuous strike length of approximately three kilometres.



Figure 5: EL 4528 locations (red areas) with Western Spur iron discovery area circled in red.



Figure 6: Visible iron outcrop sample site.

Old exploration mine shafts containing visible iron mineralisation in the form of goethite and massive haematite (Figure 5) have been sampled. One 20 metre shaft ends in visible iron mineralisation was sampled returning significant grades of iron.

The grades of iron encountered from sampling the outcrops and mine shaft walls are considered significant. The levels of deleterious factors (aluminium, silica, phosphorus and loss of ignition) are comparable to those in commercial iron ore operations.



Figure 7a: Example of goethite/haematite iron mineralisation at Western Spur

Figure 7b: Example of massive haematite sample from Western Spur



The project area has good access to road infrastructure with outcrops located **less than 15km** from the Strzelecki Track considered a major arterial road servicing gas fields further to the north. Potential mineralised outcrops occur in gently undulating terrain facilitating good access.

The initial results from Western Spur have demonstrated very good iron/manganese exploration potential for the project. An independent geologist has been commissioned to determine an exploration target and to assist in assessing the scale of a potential development.

### Melton Copper Project (SA)

(Marmota 50% under Melton JV Agreement with Monax Mining Limited)

Marmota Energy Limited and its joint venture partner Monax Mining Limited (ASX: MOX) completed Phase 2 reconnaissance drill testing of the Miranda target at Melton. Four diamond drill holes designed to follow up on results achieved during the 2010 Phase 1 program were completed at the Miranda target, located at the southern end of the project area (Figure 2).

All four Phase 2 drill holes intersected copper mineralisation in addition to the Phase 1 drill holes that intercepted broad zones of low grade copper at the Miranda target in 2010. The drill hole intercepts across both Phases of drilling at the Miranda target define an interpreted zone of copper mineralisation that extends for at least 1.3 km open to the north. Drilling has only partially tested the prospective Miranda target with further exploration planned on the project over coming months.

Assay results from Miranda are interpreted to have intersected a broad zone of copper mineralisation, containing a potential high grade zone encompassed in a broad lower grade halo (Figure 1). The mineralisation appears to be shallowing toward the northern end of the target area.

The majority of the eight drill holes completed across both phases only tested the southern end of the Miranda copper target. Drill hole MIRDD08 tested the central part of the target, with best intercepts achieved at what is interpreted to be a contact between the Miranda target and a larger adjoining mafic body (Figure 2).

Hole	East	North	From	Interval	Cu %	Au	Ag
						g/t	g/t
MIRDD01 (Phase 1)	773860	6219295	451	21	0.11		1.02
MIRDD04 (Phase 1)	773835	6219245	432	4	0.15		1
			463	4	0.13		0.9
			487	3	0.26		3.56
MIRDD05 (Phase 2)	773832	6219146	438	1	0.21		0.4
MIRDD06 (Phase 2)	773762	6219294	373	3	0.25		

Significant results from Phase 1 and 2 of drilling of the Miranda target include:

			466	12	0.23		
Including				1	1.2		
and				1	0.65		
MIRDD08 (Phase2)	773930	6219630	461	9	1.03		
including				1	2.25	.46	112.1
and				1	1.25		
and				6	0.61		

Interval widths are downhole widths. Individual samples include both 1m and 3m composite samples. Cu determined by multi-acid digest including Hydrofluoric, Nitric, Perchloric and Hydrochloric acids in Teflon Tubes. Analysed by Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry. Ag determined by Inductively Coupled Plasma Mass Spectrometry. Au determined by Lead collection fire assay and analysed by Flame Atomic Absorption Spectrometry.



Figure 8: Miranda target Phase 1 and 2 assay results schematic. Miranda total magnetic intensity image with drill hole locations shown and copper intercepts down hole displayed as coloured disks. Interpreted zones of grade displayed as shaded transparent fill.



Figure 9: Example of copper mineralisation (chalcopyrite) observed in Miranda drill hole MIRDD07 during 2010 Phase 1 drilling.

The Miranda target is interpreted to be analogous to three other potential targets across the Melton and Marmota's 100% owned West Melton projects (Figure 2). These three prospective targets are interpreted to be shallower than the Miranda target. The large host mafic body at the centre of the targets is interpreted to have undergone faulting with uplift of the north western half of the body. This uplifted section potentially offers shallower targets for drill testing.

Further exploration is planned at the Miranda target, which will include petrological assessment of mineralised samples from key drillholes along with reassessment of shallower intervals of drillholes for potential further assay. Planning for exploration along with drill testing of targets across both projects is underway.



Figure 10: West Melton and Melton projects merged total magnetic intensity image. Miranda target and new targets of similar signature interpreted to be at shallow depth highlighted.

#### Angel Wing gold project (Nevada)

(Ramelius Resources (ASX: RMS) + Marmota Energy Limited (ASX: MEU) earning 70%)

A follow up drill program was completed at Angel Wing, sediment hosted and epithermal vein gold project in Elko County, Nevada. RC and diamond drilling was completed at Angel Wing during the Quarter. An aggregate 240.17m of HQ diamond core and 1,652.50m of RC drilling was drilled to test below the known gold anomalous veins (including DaVinci) and various strong resistive trends.

Diamond drill hole AW11-C03 terminated in potentially mineralised argillic clay altered limestone displaying brecciation and quartz-carbonate veinlets plus trace to 1% disseminated euhedral pyrite crystals. Samples have been submitted for assay.

### Big Blue gold project (Nevada)

(Ramelius Resources (ASX: RMS) + Marmota Energy Limited (ASX: MEU) earning 70%)

RC drilling was completed at Big Blue during the Quarter. Three holes were completed for 580.6m, testing below the 56g/t Au surface rock chip response that was inaccessible during the February/March drilling campaign. The drilling was targeting high grade Carlin Style vertical feeder structures below surface rock chip assays up to 56g/t Au. The drilling intersected interpreted Upper Plate siliciclastic rocks displaying an apparent easterly dip of 200°. The siliciclastics overlie the interpreted Lower Plate limestone sequence.

A zone of quartz veining, weak silica alteration and finely disseminated pyrite was intersected in BBR11-06 between 125m to 131m. This interval is consistent with the vertical projection of the 56g/t Au surface jasperoidal rock chip sample. Assay results are awaited.

Figure 11 below: Isometric section through Big Blue drill holes BBR11-01, 05, 06 and 07. Yellow polygons represent plus 32ppb gold in soil contours and the red line indicates the interpreted Roberts Mountain Thrust intersected in the drill holes. Mapping from Tom Kilbey 2010. Weak anomalous gold mineralisation (1.5m @ 0.31g/t Au) was intersected below 80m in BBR11-01 coincident with the Roberts Mountain Thrust. Downhole depths in metres are annotated along the hole traces.





Figure 12: Angel Wing and Big Blue project location map

### Indooroopilly IOCG project (Gawler Craton)

Potential 'Olympic Dam' style targets have been identified on Marmota's Indooroopilly project in South Australia's Gawler Craton located west of the challenger gold mine. The targets are associated with interpreted structures and large discrete magnetic anomalies coincident with copper and gold anomalism.

The Indooroopilly project area (EL 4702) is located approximately 170km southwest of Coober Pedy and covers an area of approximately 570 square kilometres.

Additional copper-gold targets on regional structures are also observed and will be further assessed for their potential.

Basement geology of the exploration license area consists of Archean Mulgathing Complex of the Christie Sub-domain of the Northwest Gawler Craton. Lithotypes are predominantly variably deformed quartz-feldspar rich metamorphic rocks of the Kenella Gneiss and quartzites and quartz-magnetite-diopside-iron formations of the Christie Gneiss.



Figure 13: Indooroopilly copper in calcrete results image.



Figure 14: Indooroopilly gold in calcrete results image.



Figure 15: Indooroopilly copper, gold and uranium ternary image overlain with magnetic data contours. Coincident copper and gold regions highlighted by yellow, Coincident copper, gold and uranium regions highlighted by white. Target 1, which is the highest priority target for further testing has a significant response for copper, gold and uranium (denoted by white) and also coincident with a discrete large magnetic feature as shown in the above diagram. This is considered to be prospective for IOCGU mineralisation.

The magnetic anomaly at 'target 1' is interpreted to be analogous to other IOCG projects elsewhere in the Gawler Craton such as Carrapateena.



Figure 16a: Carrapateena total magnetic intensity (TMI) image, image from Teck presentation 2007.

Figure 16b: Indooroopilly 'Target 1' total magnetic intensity image, coincident with anomalous gold, copper and uranium in calcrete interpreted to be of IOCGU potential comparable in size to Carrapateena.

#### **Forward Program**

The 2011 drilling program was completed in the Third Quarter of 2011 at the Junction Dam uranium project. Ground EM surveys are planned over the Yolanda prospect on the project during October 2011. This data is expected to assist in defining the continuation of the extent of the Yarramba palaeochannel that hosts the Saffron and Bridget target areas to the north. These three target areas combined represent a zone of mineralisation with an approximate 15km strike length.

Results from all phases of drilling will be assessed and modelled for suitability to calculate an inferred resource at the Saffron prospect.

Final high resolution magnetic data was delivered in July for the West Melton project on the Yorke Peninsula. The data will be modelled with further ground surveys planned to augment this data for target assessment for drill testing. Further testing of the high grade copper intercept zones from drilling completed at the Miranda target at Melton is planned during October and November 2011.

An independent assessment and development of an exploration target is underway for the Western Spur iron ore project in preparation for the next phase of exploration.

Timing	Project	Project
May 2011	West Melton	Airborne magnetic survey acquisition
July 2011	Angel Wing -	IP survey
July 2011	Angel Wing -	Recomence drill testing of gold targets
September 2011	U Nunction Rahw	Phase 3 drilling completed
October 2011	Junction Dam	<ul> <li>IP survey Ground TEM survey over Yolanda target area.</li> </ul>
November 2011	Angel Wing – Nevada Gold	Assay results due from drilling
December 2011	West Melton	Ground magnetic survey over West Melton copper target areas.

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Mr Dom Calandro MANAGING DIRECTOR

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr D J Calandro, who is a Member of the Australian Institute of Geoscientists. Mr Calandro is employed full time by the Company as Managing Director and, has a minimum of five years relevant experience in the style of mineralisation and type of deposit under consideration and qualifies as a Competent Person as defined in the 2004 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" Mr Calandro consents to the inclusion of the information in this report in the form and context in which it appears.

Rule 5.3

# Appendix 5B

## Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001, 01/06/10.

Marmota Energy Limited

ABN

38 119 270 816

Quarter ended ("current quarter") 30 September 2011

#### Consolidated statement of cash flows

		Current quarter	Year to date (3
Cash f	lows related to operating activities	\$A'ooo	months)
			\$A'ooo
1.1	Receipts from product sales and related		
	debtors	-	-
1.2	Payments for (a) exploration & evaluation	(960)	(960)
	(b) development	-	-
	(c) production	-	-
	(d) administration	(201)	(201)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature		
	received	82	82
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Other (provide details if material)		
	GST	35	35
	Other	-	-
	Net Operating Cash Flows	(1,044)	(1,044)
	Cash flows related to investing activities		
1.8	Payment for purchases of: (a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	-	-
1.9	Proceeds from sale of: (a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	-	-
1.10	Loans to other entities	(1)	(1)
1.11	Loans repaid by other entities	-	-
1.12	Other (provide details if material)	-	-
	Net investing cash flows	(1)	(1)
1.13	Total operating and investing cash flows		
	(carried forward)	(1,045)	(1,045)

<sup>+</sup> See chapter 19 for defined terms.

1.13	Total operating and investing cash flows (brought forward)	(1,045)	(1,045)
1.14 1.15 1.16 1.17 1.18 1.19	Cash flows related to financing activities Proceeds from issues of shares, options, etc. Proceeds from sale of forfeited shares Proceeds from borrowings Repayment of borrowings Dividends paid Other (provide details if material)	- - - - -	
	Net financing cash flows	-	-
	Net increase (decrease) in cash held	(1,045)	(1,045)
1.20 1.21	Cash at beginning of quarter/year to date Exchange rate adjustments to item 1.20	5,779 -	5,779 -
1.22	Cash at end of quarter	4,734	4,734

#### Payments to directors of the entity and associates of the directors Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	(314)
1.24	Aggregate amount of loans to the parties included in item 1.10	(1)

#### 1.25 Explanation necessary for an understanding of the transactions

The amount at 1.23 above represents non executive directors' fees and executive director's salary (including SGC superannuation), legal fees paid to a legal firm in which a director is a partner, exploration costs reimbursed to a director related entity and payments to a related party for shared facilities and staff.

The amount at 1.24 above represents costs to be recovered in relation to shared facilities, from a related entity.

#### Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

<sup>+</sup> See chapter 19 for defined terms.

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

\$Nil contributed by Monax Mining Limited for exploration under joint venture agreement, for all minerals on EL 4000 and EL 3911.

USD 248,913 Contributed by Ramelius Nevada LLC for exploration on Big Blue and Angel Wing projects in Nevada.

#### Financing facilities available

Add notes as necessary for an understanding of the position.

		Amount available \$A'ooo	Amount used \$A'000
3.1	Loan facilities	Nil	Nil
3.2	Credit standby arrangements	Nil	Nil

#### Estimated cash outflows for next quarter

		\$A'ooo
4.1	Exploration and evaluation	500
4.2	Development	-
4.3	Production	-
4.4	Administration	250
	<b>T</b> - 1	
	Total	750

## **Reconciliation of cash**

Reconstruction Recons	nciliation of cash at the end of the quarter (as n in the consolidated statement of cash ) to the related items in the accounts is as ws.	Current quarter \$A'ooo	Previous quarter \$A'ooo
5.1	Cash on hand and at bank	414	459
5.2	Deposits at call	4,320	5,320
5.3	Bank overdraft	-	-
5.4	Other (provide details)	-	-
	Total: cash at end of quarter (item 1.22)	4,734	5,779

<sup>+</sup> See chapter 19 for defined terms.

#### Changes in interests in mining tenements

		Tenement reference	Nature of interest (note (2))	Interest at beginning	Interest at end of
				of quarter	quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed				
6.2	Interests in mining tenements acquired or increased				

<sup>+</sup> See chapter 19 for defined terms.

# **Issued and quoted securities at end of current quarter** Description includes rate of interest and any redemption or conversion rights together with prices and dates.

		Total number	Number quoted	Issue price per security (see	Amount paid up per security (see
				note 3) (cents)	note 3) (cents)
7.1	Preference				
	+securities				
	(description)				
7.2	Changes during				
	quarter				
	(a) Increases				
	through issues				
	(b) Decreases				
	of capital buy-				
	backs				
	redemptions				
7.3	+Ordinary	151,149,490	151,149,490		
12	securities	, ,			
7.4	Changes during				
	quarter				
	(a) Increases	700,000	700,000		
	through issues				
	(b) Decreases				
	through returns				
	of capital, buy-				
	+Convertible				
1.2	debt				
	securities				
	(description)				
7.6	Changes during				
	quarter				
	(a) Increases				
	through issues				
	(b) Decreases				
	through				
	securities				
	converted				
7.7	Options			Exercise price	Expiry date
1.1	(description and	28,000,000	-	\$0.40	11/07/12
	conversion	250,000	-	\$0.04	23/12/13
	factor)	400,000	-	\$0.1016	05/03/15
		125,000	-	\$0.083	21/12/15
7.8	Issued during				
	quarter				
7.9	Exercised				
	auring quarter				
7.10	Expired during				
- 11	Debentures				1
/.11	(totals only)				

<sup>+</sup> See chapter 19 for defined terms.

7.12	<b>Unsecured</b> <b>notes</b> (totals only)		
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## Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does /<del>does not</del>\* (*delete one*) give a true and fair view of the matters disclosed.

TITU

Sign here:

(<del>Director</del>/Company secretary)

Date: 31/10/2011

Print name: Virginia Suttell.....

#### Notes

- The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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<sup>+</sup> See chapter 19 for defined terms.