

# MARMOTA ENERGY LIMITED MEU

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# Annual General Meeting November 2012

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#### **Forward Looking Statements**

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Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, the Company does not undertake any obligation to publicly update or revise any of the forward looking statements or any change in events, conditions or circumstances on which any such statement is based."



Marmota Energy (ASX: MEU) is a diversified mineral exploration and development company with key projects across the uranium, copper, gold and iron ore spaces.

# **Brief Corporate History**

- Listed on ASX November 2007
- 2008 9 Improved exploration licence position, obtaining tenements with listed precious metal and uranium occurrences (100% owned by Marmota)
- Entered into strategic alliance with Ramelius Resources for high grade gold project generation
- Entered into an option agreement on Junction Dam mid 2009
- Junction Dam high grade uranium discovery late 2009
- Earn-in met on Junction Dam 2010
- 2011 maiden Inferred resource at Junction Dam
- 2011 iron ore discovery at Western Spur
- 2011 significant copper, gold, silver intercepts Yorke Peninsula
- 2012 Durkin copper, nickel discovery Pundinya, Gawler Craton in SA

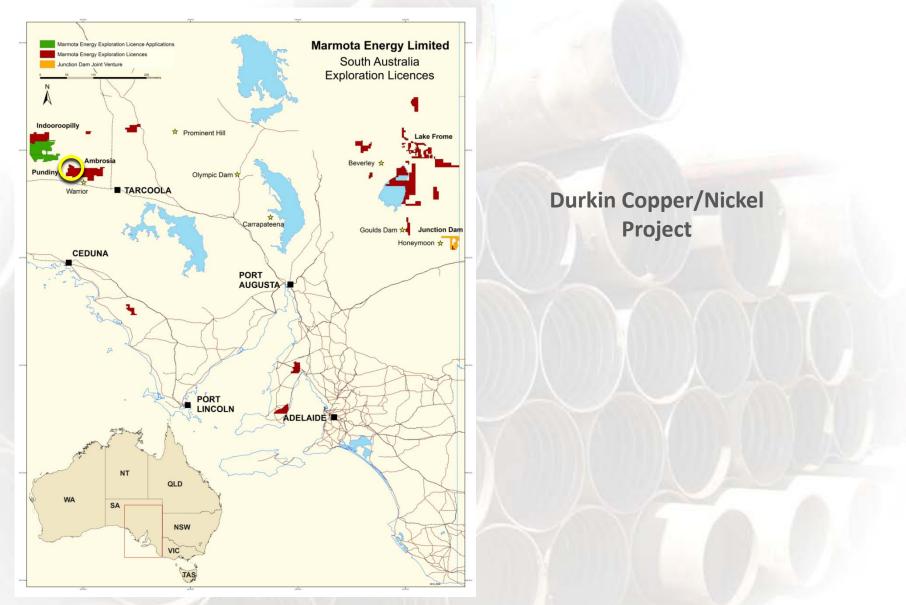
Stock Code	ASX: MEU
Shares	228 m
Market Cap (at 30 Sept 2012)	A\$20 m
Cash (at 30 Sept 2012)	A\$4.2 m



# **Today's presentation**

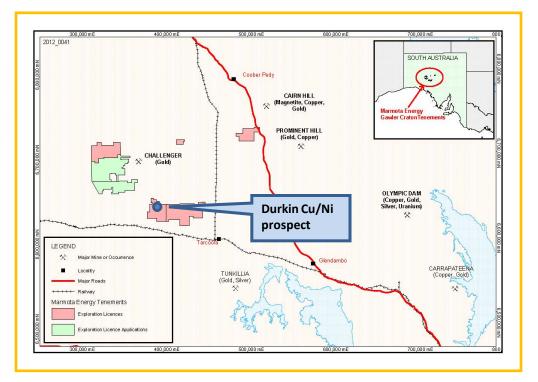






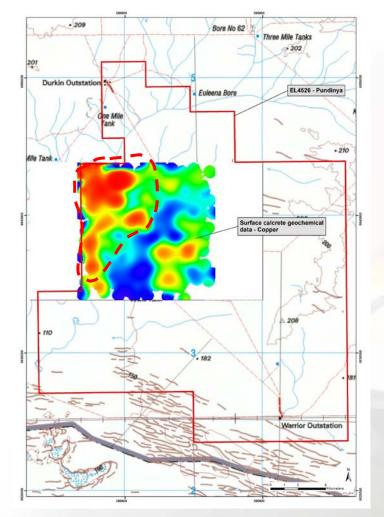


- 100% owned by MEU
- Durkin copper/nickel prospect located on the Pundinya Tenement
- Potential new nickel province in South Australia
- A zone of strong coincident Ni and Cu in calcrete has been defined on the project from calcrete sampling programs. The maximum copper in calcrete value is 175 ppm Cu and the corresponding maximum nickel in calcrete value is 330 ppm Ni.
- This is very analogous to the geochemical in soils results from the recently announced Sirius Resources Nova nickel discovery. The copper in soils at Nova reaches a maximum of 175 ppm Cu and the maximum nickel in soils reaches 373 ppm Ni

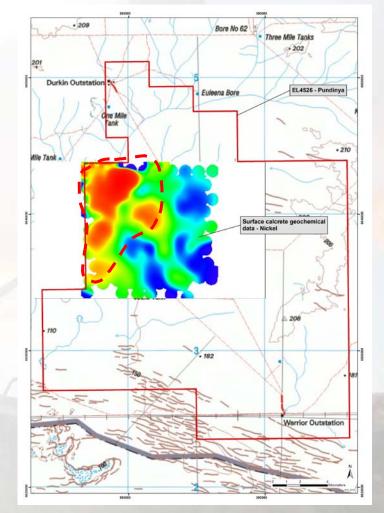




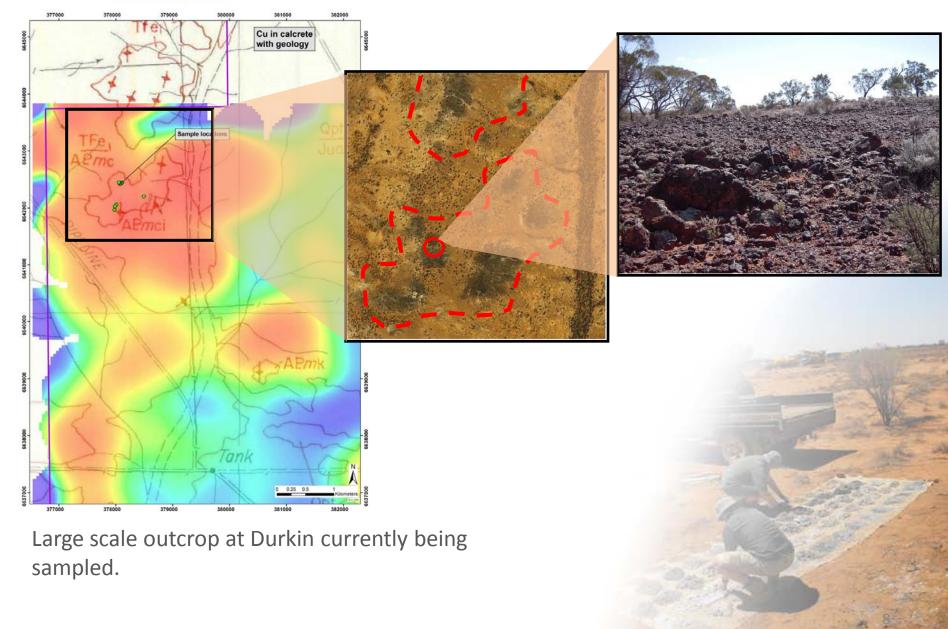
# **Copper in calcrete anomaly**



# Nickel in calcrete anomaly





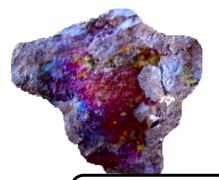






### Surface sample results

Easting	Northing	Ag (ppm)	Al (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	Mn (ppm)	Mo (ppm)	Ni (ppm)	Pd (ppb)	Ti (ppm)
378880	6642662	х	15291	39.1	3931	57.4	36.69	231	0.2	360.8	Х	471
378880	6642662	х	7876	44.1	2194	47.1	30.12	189	0.1	367.9	х	279
378833	6643454	х	20239	3.6	934	103.3	33.09	68	1	32.3	24	276
378508	6642331	0.43	11975	10.3	493	2050	37.83	48	16.4	32	13	291
378157	6643783	х	29169	1.7	294	115.4	24.98	48	0.5	8.3	х	56
378157	6643783	х	11328	1.3	200	85.3	25.8	39	0.4	5.4	х	387
377986	6642026	0.18	3877	65.2	135	1924	20.59	101	1.8	19	х	169
377980	6641965	0.16	8444	69	123	1913	28.29	80	2	65	х	120
378490	6642282	х	5553	14.9	110	48.4	29.51	69	0.3	326.2	х	188
378498	6642295	х	10153	11.6	105	60.7	35.54	57	0.5	145.3	х	254
378508	6642331	0.09	9784	57.7	77	775	35.33	138	2.9	96	х	208
378518	6642352	х	4560	7.7	68	21.2	28.52	54	0.4	59.9	13	108
378092	6642427	0.12	8376	18.3	53	1043	44.57	180	4.4	14	х	148
378064	6642435	0.13	11121	71.2	52	1107	38.73	169	3.9	33	12	394
377500	6641350	х	8765	45.0	41	105	38.31	510	х	730	х	х
378011	6642053	0.15	2427	54.1	18	1835	9.76	107	1.6	14	Х	208

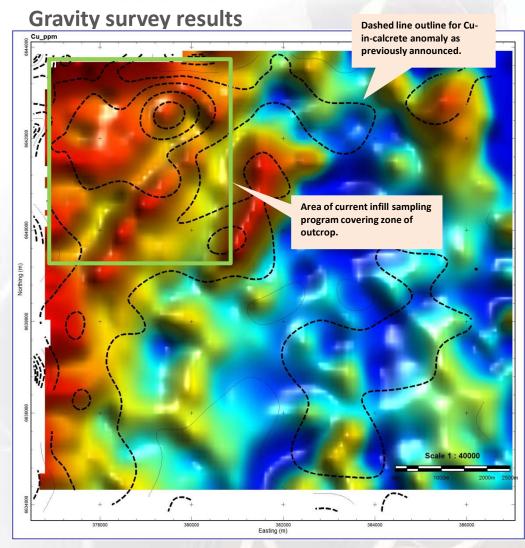


Example of copper mineralisation in surface sample. Assay result: anomalous copper grade of 2050 ppm (0.2% Cu)

Results above are from chemical assay of rock chip samples from the Durkin prospect area. For full table please see ASX announcement dated 19 November 2012.

- High resolution multi component infill surface sampling is continuing and is focused on the large zone of outcrop.
- High priority airborne EM underway.
- Ground Gravity survey completed.





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Durkin area 1VD gravity image with outline of copper in calcrete anomaly overlain. High priority target area where infill calcrete sampling is underway highlighted by green box.

- Large gravity high associated with Cu and Ni in calcrete anomaly.
- Additional targets identified beyond current Cu/Ni anomaly zone.
- AEM survey design adjusted to capture other potential targets.



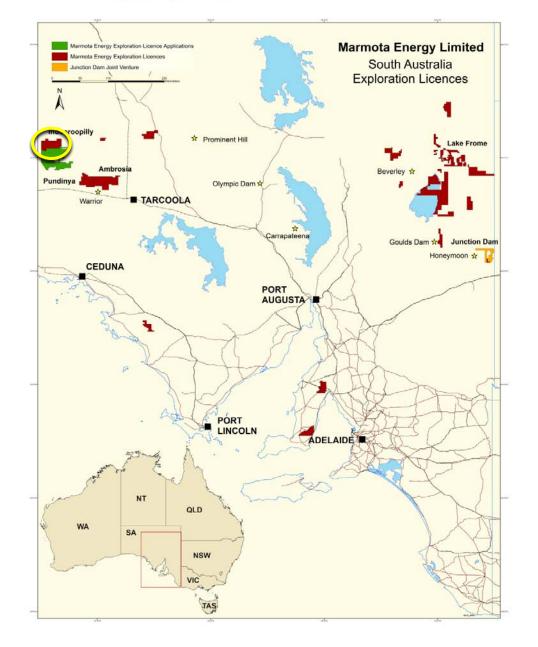
Fugro's HELITEM system in flight.

# **Durkin copper/nickel prospect**

**Forward Exploration Plan:** 

- Completion of surface sampling program and laboratory analysis
- Assessing and modeling of new gravity data
- Completion of AEM survey, then processing and modeling of results
- Compilation of surface sampling results to create a target zone specific geochemical anomaly map
- Approvals for drilling by the regulator
- Data and model results assessment for design of Stage 1 drilling program
- Stage 1 Reverse Circulation (RC) drill testing of targets
- Assessment of Stage 1 drilling results
- Result dependent follow-up Stage 2 drilling, diamond core holes





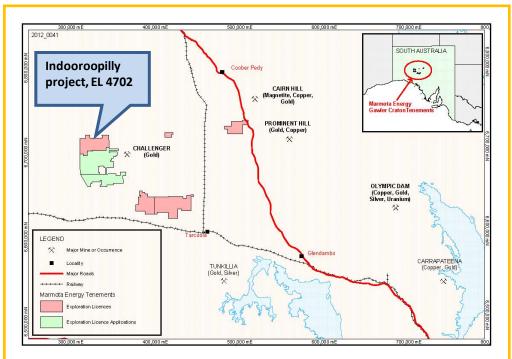
# **Indooroopilly Project**



 A number of ready to drill targets have been identified on the project with strong coincident geochemical and geophysical anomalism for copper and gold.

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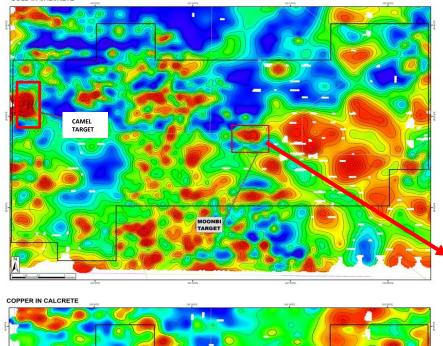
- The Moonbi target has been identified as the highest priority target with a magnetic high and coincident gold and copper in calcrete anomalies over a sizeable area covering 5.5km x 4.5km.
- The project is strategically located west of Kingsgate's Challenger Gold Mine, which produces 100,000oz gold annually.
- Good access to the 570km<sup>2</sup> tenement is gained along the Challenger Mine road and local station tracks.
- Project awarded funding by the Department for Manufacturing, Innovation, Trade, Resources and Energy (DMITRE).



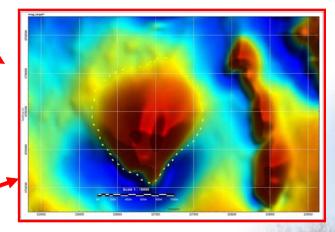


# Indooroopilly copper-gold project

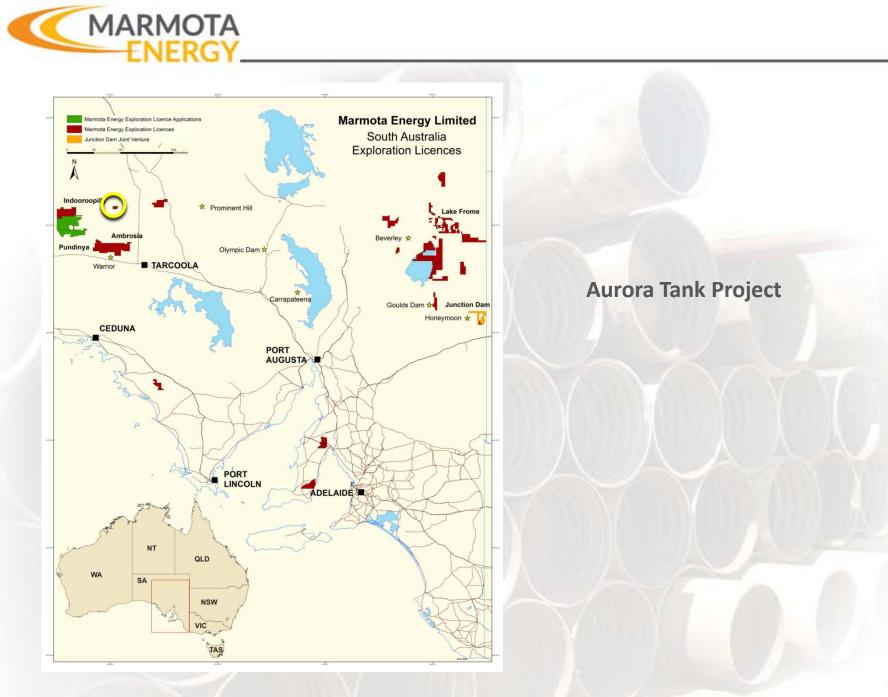
GOLD IN CALCRETE



Drill ready targets have been identified on the project with strong coincident geochemical and geophysical anomalism particularly for copper and gold.



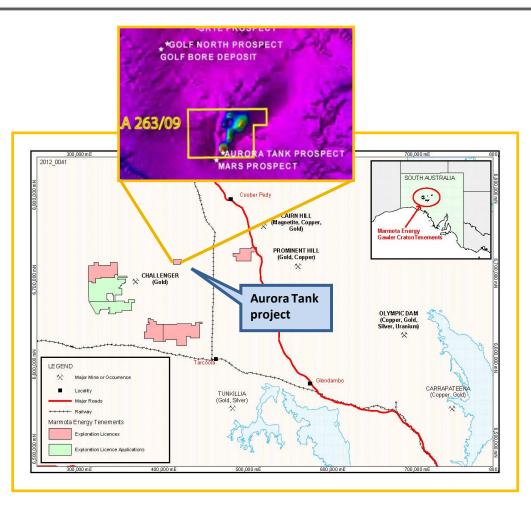
Moonbi target, strong gold and copper in calcrete anomalism (left) coincident with geophysical anomaly (right).



• 100% owned by MEU

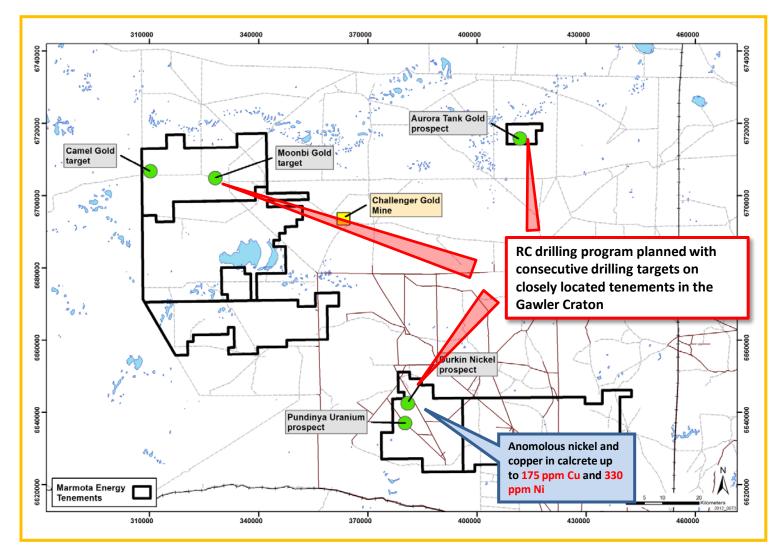
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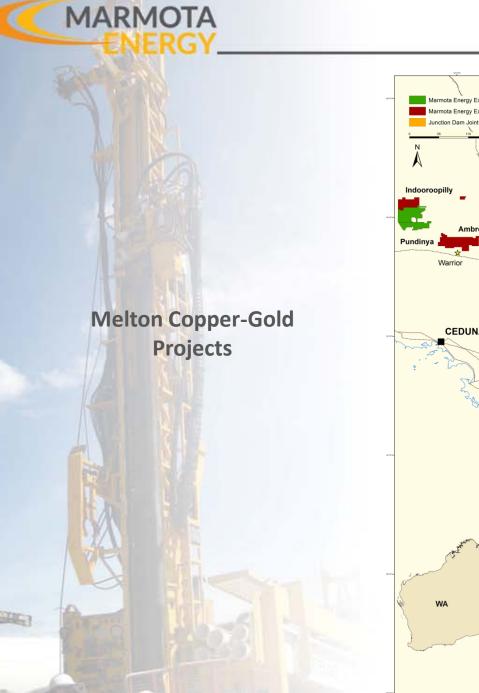
- 'Aurora Tank' is located northeast of Kingsgate's Challenger Gold Mine.
- Good potential for Archaean 'Challenger' style gold mineralisation and covers a prominent magnetic anomaly interpreted as banded iron formation within the Christie Gneiss.
- Calcrete sampling defined a 2200m long zone of anomalous gold.
- Previous drillholes intersected gold mineralised gneiss, RCAT-8 (4m @ 0.6g/t Au) and RCAT-13 (4m @ 1.6g/t Au).
- Further drill testing planned.

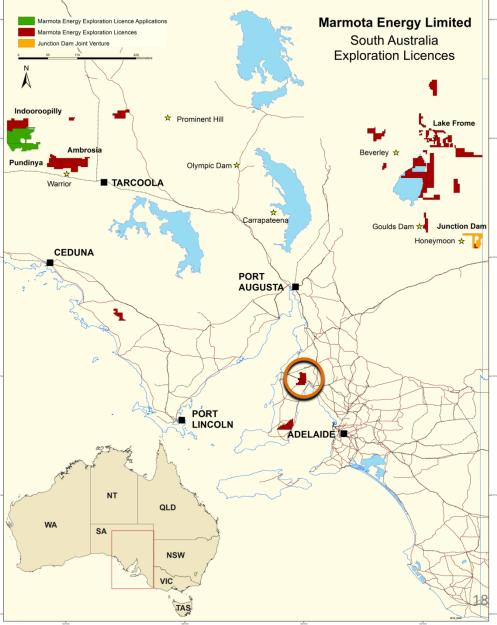




Contiguous drilling program planned for Gawler Craton cluster of Ni, Au and Cu projects





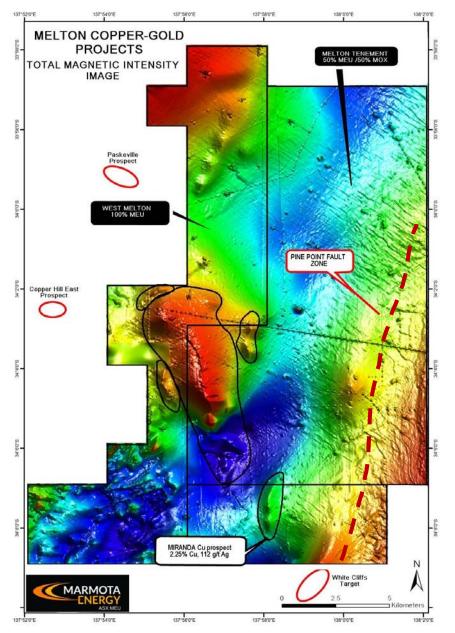




- Significant copper grades intersected in drilling at the Melton copper-gold project on South Australia's Yorke Peninsula.
- Results include 9 metres at 1.03% copper including 1 metre at 2.25% copper and 0.46 g/tonne gold intersected in drill hole MIRDD08.
- Significant grades of silver up to 112.1 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.





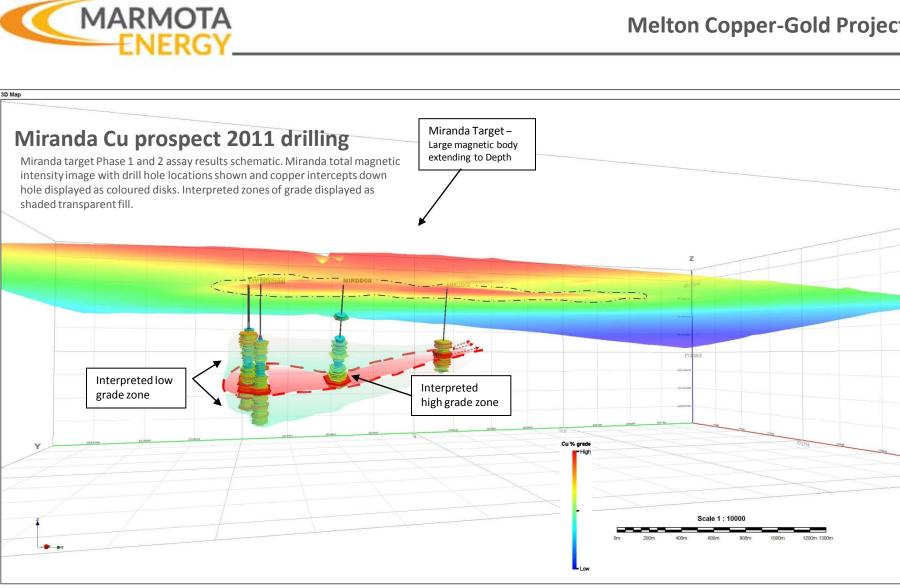


- Miranda prospect is up to 3 km in length.
- Eight drill holes have been completed at Miranda.
- Drill holes intersected observable sulphide mineralisation (pyrite and chalcopyrite).
- The Miranda target is interpreted to be analogous to three other potential targets across the Melton and Marmota's 100% owned West Melton projects.
- 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.

Melton: Marmota 50% under Melton JV Agreement with Monax Mining Limited

West Melton: 100% Marmota Energy





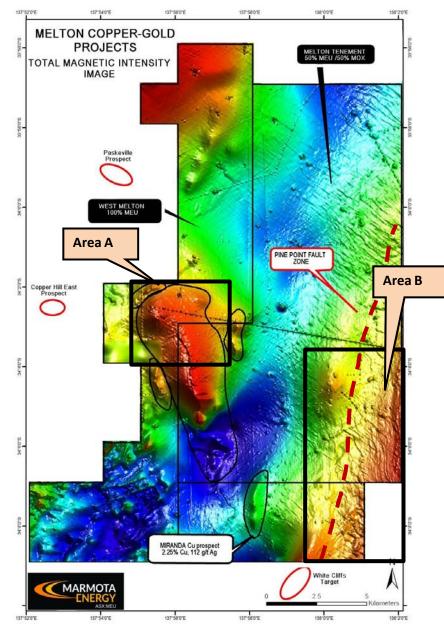
Hol	e	East	North	From m	Interval m	Cu %	Au g/t	Ag g/t	
MIRDD01 1)	(Phase	773860	6219295	451	21	0.11		1.02	
<b>MIRDD04</b> 1)	(Phase	773835	6219245	432	4	0.15		1	
-,				463	4	0.13		0.9	
				487	3	0.26		3.56	
<b>/IRDD05</b> ?)	(Phase	773832	6219146	438	1	0.21		0.4	
<b>VIRDD06</b> 2)	(Phase	773762	6219294	373	3	0.25			
-1				466	12	0.23			
ncluding					1	1.2			
and					1	0.65			
MIRDD08 (	Phase2)	773930	6219630	461	9	1.03*			NITON XRF READOU
including					4	1.5			Time 30.1 sec
including					1	1.35		4.3	Ele 8 ± 2σ
and					1	2.25	.46	112.1	Mn 0.015 0.017
Ind					1	1.5		3.2	Fe 23.60 0.63
/drochloric aci	ds in Teflon T	ubes. Analysed by Inc	mples include both 1m and ' ductively Coupled Plasma Op sed by Flame Atomic Absorp	otical (Atomic) Emission S				ectrometry. Au	Sn 0.037 0.019 Ag 0.080 0.057
ight: Examp	ole of cop	per mineralisatio	on Sin	2 3	,4 8m,5	6 7	8 9	- I wanter a start and a start of	Bal48.352.33Sr0.0110.004
halcopyrite	e) observe 06 during	ed in Miranda dr 2011 Phase 2 reading indicatin	ill		<b>MASS</b>				Se 0.006 0.003 Pb 0.006 0.004
0	the syste	m at Melton to	Contraction of States					Z STREET	$\frac{0.036\ 0.0.3}{10\ 27.82\ 1.70}$
				1					u 27.82 1.70

CAUTIONARY STATEMENT: NITON spot readings are an indicative result only, and is not a substitute to chemical assay.

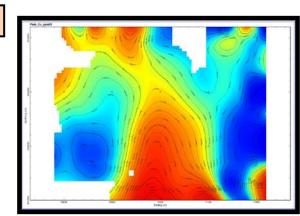
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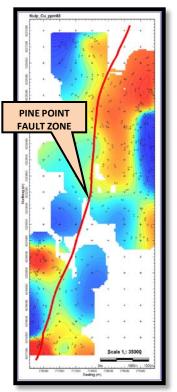


- 2012 calcrete sampling results
- 3.8 km long coincident copper/gold-in-calcrete anomaly and magnetic target on West Melton (Area A).
- Anomalous copper-in-calcrete also defined along the Pine Point Fault immediately north of Rex Minerals White Cliffs target area (Area B).
- Other zones of anomalous gold-in-calcrete defined.
- Further follow-up sampling being planned.



Above: Cu-in-calcrete colour filled contours – West Melton target **Area A**.

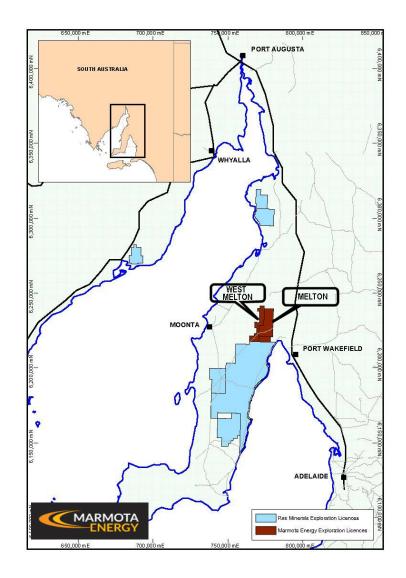
Right: Cu-in-calcrete colour filled contours – Kulpara **Area B** 





**Forward Plan** 

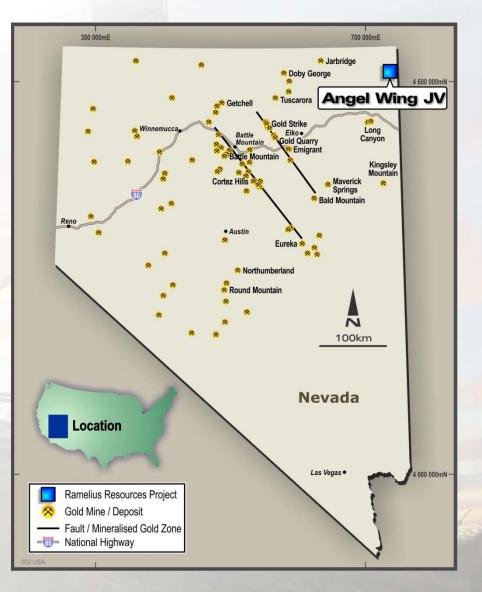
- Infill sampling at Areas A and B is planned at the copper anomalies to better define key zones of coincident copper and gold.
- Planning is underway to extend the survey south of Area A to cover the remainder of the geophysical anomaly across into the Melton tenement for an additional 4 kms.
- The results will be used in drill target assessment processes to define targets for aircore drilling after crops have been harvested.
- Landholder and community liaison currently underway.





#### **Angel Wing**

- Marmota Energy in strategic partnership with high grade gold producer Ramelius Resources Limited (ASX: RMS) for gold project generation in the gold fields of Nevada.
- The latest results, from the 2012 drilling program returned consistent gold intercepts in multiple holes supported by strong silver grades over large intervals.

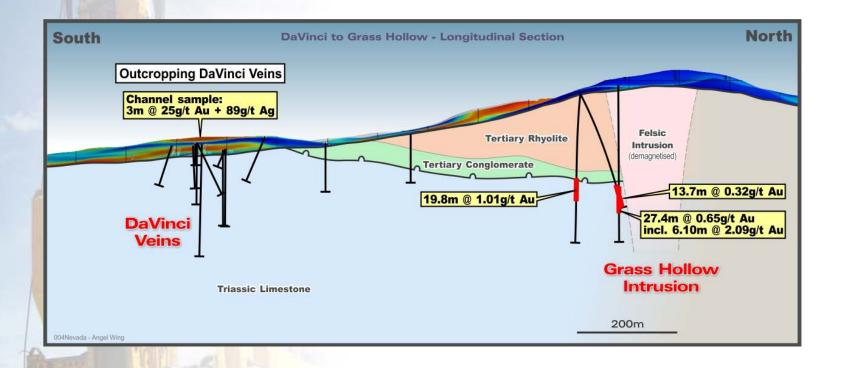


Encouraging assay results up to 3m @ 25.2g/t Au + 89.2g/t Ag.

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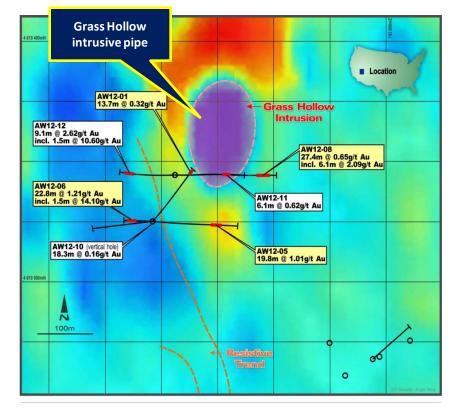
- Ramelius' 1m rock chip samples returned assays up to 57.7g/t Au with coincident elevated silver values (up to 232ppm Ag).
- The results of the 2011 drilling more than doubled the strike length and increased the depth extent of known gold mineralisation in the Da Vinci vein.



#### 2012 drilling results

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- All holes intersected gold at grades above 0.343 g/t Au with the best intercept returning 14.15 g/t Au.
- Gold intercepts are also complemented by large intercepts of silver with drillhole AW12-05 returning 122m @ 1.33 g/t Ag from 170.7m containing 20m @ 4.1 g/t Ag from 213m.
- The significant silver intercepts are expected to enhance the gold results by offering gold equivalent to improve grade.
- Further follow up drilling planned for 2013
  targeting an analogue for the Australian
  bulk-tonnage gold deposits hosted by subvolcanic breccia pipes, such as Kidston (>
   3.4 Moz), Mount Leyshon (> 2.5 Moz).

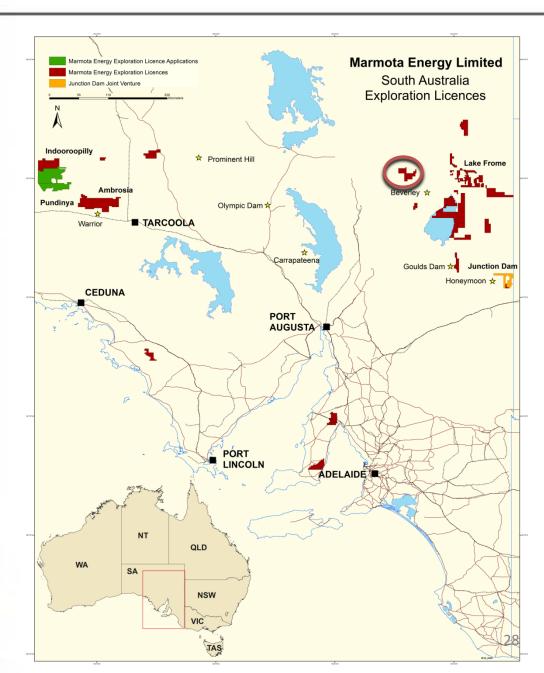


Extent of drill coverage over the non-magnetic Grass Hollow intrusive pipe. Image is 1VD-RTP ground magnetic data. Western Spur Iron Project

THE?

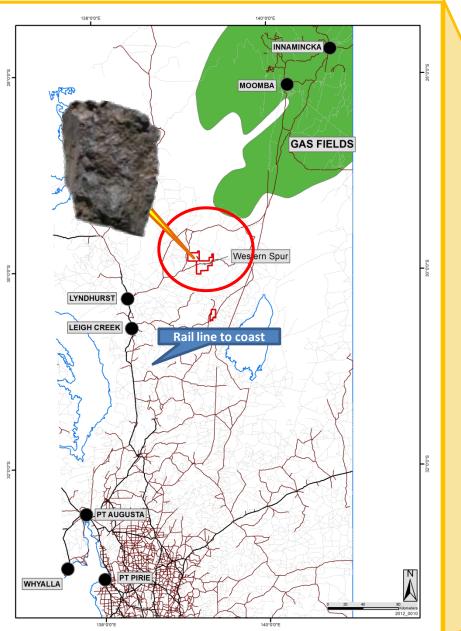
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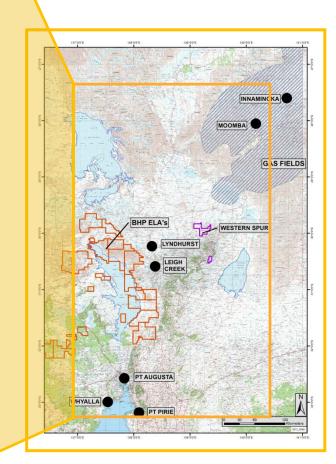


# Western Spur Iron Project





- Good road access
- Rail infrastructure nearby
- Gas fields to the north, coal mine to the south.

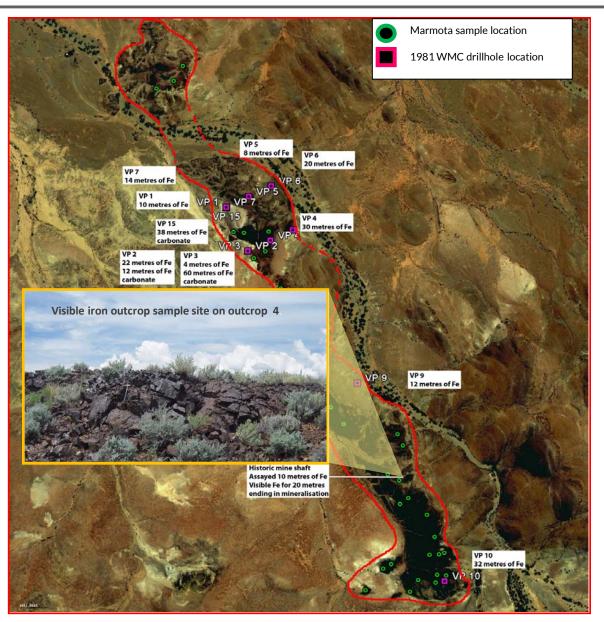




# Western Spur Iron Project

PROSPECTIVITY

- Iron outcrop 4 extends for approximately 3 km.
- Drill hole logs which define intervals of iron mineralisation intercepted by a number of holes completed by WMC in 1981.
- The logs show intervals of up to 30 metres of iron were intercepted in the WMC drill holes spread throughout the 3km long outcrop.
- The iron intervals logged are also augmented with further intervals of siderite (iron carbonate).
- Other significant iron outcrops on the project include outcrop number 6 to the south which has an approximate 1.5km strike length with grades of up to 58.94% iron returned from assay.





**IRON EXPLORATION TARGET ASSESSMENT** 

- Independent assessment of exploration results completed by Marmota during 2011 and previously by other exploration organisations including Western Mining Corp.
- Preliminary exploration target of 60 125 million tonnes at a grade of 40-59% Fe haematite potential was determined<sup>1</sup>.
- Iron mineralisation potential along an 8km strike.
- Deleterious elements, such as silica and aluminium within specifications for blast furnace feed.
- Significant intervals of siderite complement the intervals of haematite. Potential for additional iron inventory, since it is 48% iron and typically contains no sulfur or phosphorus.

SA Iron ore project	Туре	Size (Mt)	Grade (% Fe)
Iron Chieftain	haematite	18.2	58
Wilgerup	haematite	13.2	57.7
Peculiar Knob	haematite	19.2	64
Warramboo	magnetite	110.5	19.4
Hawks Nest	haematite and magnetite	102.5	37.4
Western Spur (exploration target)	haematite	<sup>1</sup> 60 -125	40 – 59

South Australia iron ore projects comparison table (Source: PIRSA M20 Information sheet – October 2011)

<sup>1</sup>The estimates of exploration target sizes mentioned above should not be misunderstood or misconstrued as estimates of Mineral Resources. The estimates of exploration target sizes are conceptual in nature and there has been insufficient results received from drilling completed to date to estimate a Mineral Resource compliant with the JORC Code (2004) guidelines. Furthermore, it is uncertain if further exploration will result in the determination of a Mineral Resource.

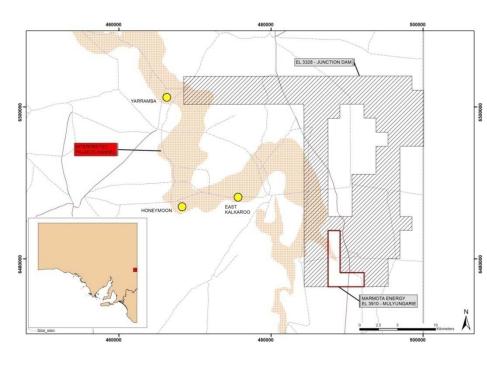


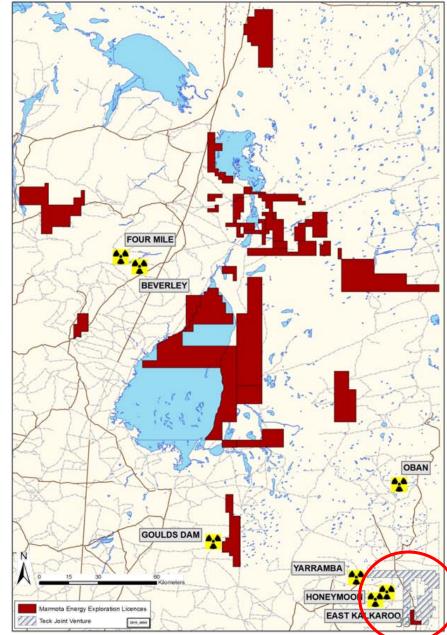
Junction Dam Uranium Project

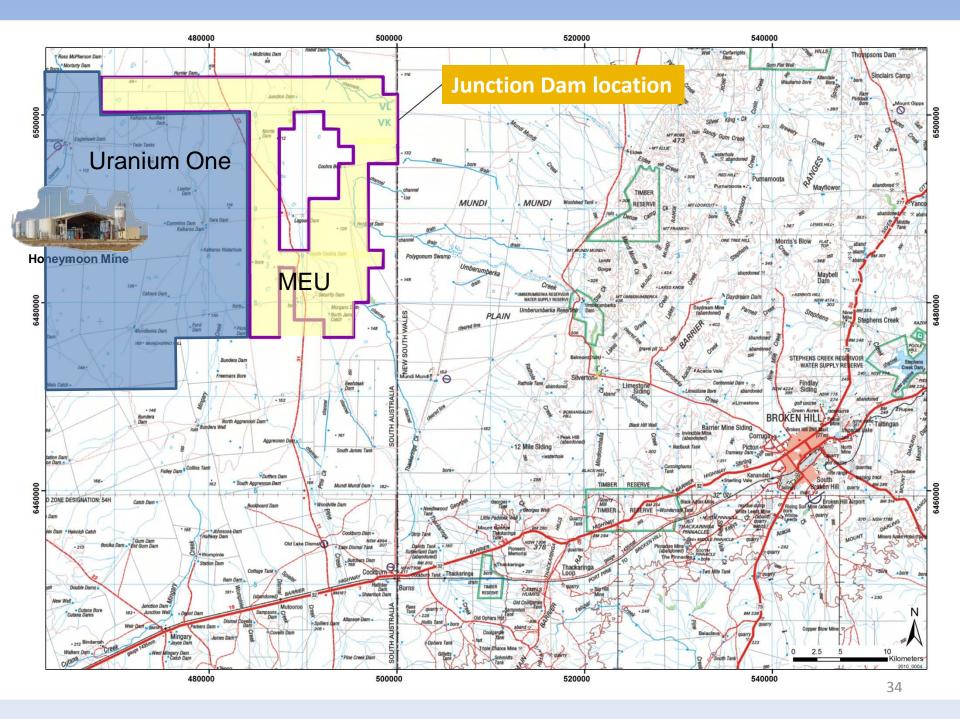
# Junction Dam Uranium JV



- High grades from assay of up to 8142 ppm U<sub>3</sub>O<sub>8</sub>, uranium deposit defined with significant expansion potential along a 15 km strike length.
- Adjacent to operating ISL mine, close to Broken Hill.
- Strong positive disequilibrium factor ranging up to 2.2 facilitating an upward revision of Saffron deposit size.
- JV with Teck Australia, PlatSearch, and Eaglehawk Consulting, where Marmota has earned 87.3% of the uranium rights on Junction Dam.







### Junction Dam Uranium JV



### **Maiden Inferred Resource for Saffron**

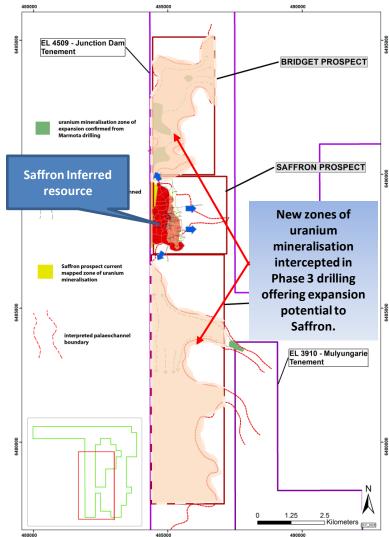
- 4.36 million tonnes of mineralisation\*
- Estimated to contain some 1,510 tonnes of U<sub>3</sub>O<sub>8</sub> (3.33 million pounds) with strong positive disequilibrium
- Two mineralised sand layers of the Eyre Formation (basal and upper) intersected
- Average grade 437 parts per million (.044%) eU<sub>3</sub>O<sub>8</sub> and 248 parts per million (.025%) eU<sub>3</sub>O<sub>8</sub> for the basal and upper layers respectively

High grade assay results:

- High grade results from assay up to 8142 ppm U<sub>3</sub>O<sub>8</sub> from sonic cored holes
- Strong positive disequilibrium ranging between 1.22 and 2.25 underpinning an upwards resource recalculation of the Saffron deposit with potential of 5.4 Mlb<sup>~</sup>.

Cautionary Statement: The initial estimate of  $U_3O_8$  potential within the Junction Dam project is based on conservative grade estimates applied over a sedimentary 'roll front' strike length of 15km. Marmota notes that this initial view on an exploration target is conceptual in nature. There has been insufficient exploration to define this exploration potential as a Mineral Resource and it is uncertain if further exploration will result in the determination of such a Mineral Resource.

\*It is uncertain if further exploration work or feasibility studies will result in the determination of an Ore Reserve ~Upward revision of the Saffron deposit Inferred resource size as indicated above follows the application of an average positive disequilibrium factor of 1.63. This is an indicative result and further assessment is underway.

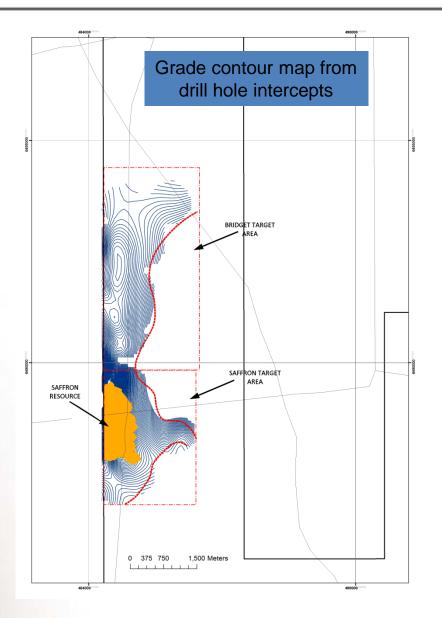




# **2012 drilling results**

- Saffron deposit footprint increases to approximately eight times the size of the nearby Honeymoon uranium deposit area.
- Campaign results also confirm contiguous grade continuity with adjoining Bridget deposit on Saffron's northern boundary, for a total combined strike length of 6.5km.
- Key areas of mineralisation identified at the large scale Yolanda prospect, including drill hole YORM028 achieving a significant 5.5 metre intercept of mineralisation with GT of 0.15 m%eU<sub>3</sub>O<sub>8</sub>.
- Further mineralisation inventory at Bridget and Yolanda offering significant expansion potential increasing exploration target for Junction Dam 15Mt to 25Mt @ approx 400 to 700 parts per million (ppm) U3O8, for 10,000t to 15,000t U3O8 or 22Mlb to 33Mlb U3O8 ~

**CAUTIONARY STATEMENT:** The estimates of exploration target sizes mentioned above should not be misunderstood or misconstrued as estimates of Mineral Resources. The estimates of exploration target sizes are conceptual in nature and there has been insufficient results received from drilling completed to date to estimate a Mineral Resource compliant with the JORC Code (2004) guidelines. Furthermore, it is uncertain if further exploration will result in the determination of a Mineral Resource.





# **Retention Lease Works – Saffron Deposit**

- Process required to meet regulatory approval to undertake field leach trials.
- RL works will include baseline investigations of:
  - Flora and fauna
  - Groundwater conditions, including aquifer conditions (quality, flow direction, modelling of potential impacts)
  - Noise and air quality impact
  - Storage and use of dangerous substances
  - Surface water management
  - Stakeholder engagement
  - · Visual impact
- Process expected to require 6 months to complete.
- Water bore permits for groundwater monitoring have been obtained by Marmota.

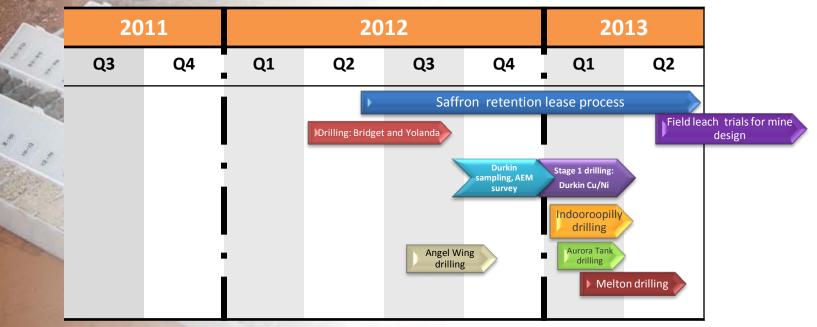


- Innovative, robust and successful exploration methodology
- Multipurpose drill rig being sought

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- Plan for contiguous drilling program planned to test targets across:
  - Durkin copper/nickel prospect
  - Indooroopilly copper and gold project
  - Aurora Tank gold project
  - Melton copper-gold project
- Undertake retention lease process for the Saffron uranium deposit
- Drilling to continue at Angel Wing gold project (Nevada USA) 2013





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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 sufficient 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.