

## LARGE COPPER AND NICKEL ZONES INTERCEPTED IN DRILL HOLES OF FIRST PASS DRILLING AT DURKIN PROJECT, GAWLER CRATON (SA)

- Nickel and copper sulphides intercepted in seven holes at Durkin copper-nickel project during first stage drilling program in far west SA
- Includes continuous 75m in one hole amid multiple large intervals of copper and nickel in numerous holes along a 3km trend
- Further geophysical surveys and infill drill testing of defined nickel trend and deepening of holes planned

## Durkin copper/nickel prospect (SA)

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

## **RC Drilling program results**

Marmota Energy (ASX:MEU) is pleased to announce that recent RC drilling has intercepted large intervals of copper and nickel sulphides in targets located at its Durkin project. The new results follow previous announcements of sulphides being intercepted at targets located within and one outside the main Durkin area.

The maiden Durkin campaign totalled 2,200 metres of drilling to various depths of up to 300 metres.

The results have given the Company confidence to now plan an immediate follow-up geophysical survey and infill drill testing including deepening of several holes expected to intercept ultramafic rocks with greater potential for higher grades and massive sulphides (Figure 4).

Of the 13-holes, seven drill holes intercepted significant intervals of anomalous nickel and copper along with common associate elements such as gold, palladium, chromium and magnesium. The largest intercept of nickel is 75 metres thick in drill hole DRC012. Drilling was designed to test Cu-Ni anomalous zones of outcrop identified from previous surface sampling, in conjunction with specific geophysical and geochemical characteristics and structures identified through surveys completed over the area late in 2012.

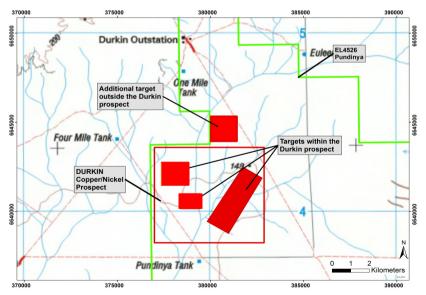


Figure 1: Location map of target zones drill tested during Phase 1 at Durkin.

The seven drill holes from this first stage program have intercepted **nickel and copper sulphide - bearing mafic rocks** from shallow depths, with sulphides being present throughout each hole. Assay results received from the RC holes drilled include concentrations of up to 0.1% nickel (Ni) and 308 ppm copper (Cu) from three metre composite samples. The results are most encouraging given the significant down hole intervals over

which copper and nickel have been intercepted and which extend over a large strike distance. The results continue to support the model for a layered mafic to ultramafic style of mineralisation, with the bulk of the first stage drilling intercepting mafic rock, with projected underlying utltramafic rocks having potential for higher grades yet to be fully tested. For example, drill hole DRC011 intercepted nickel from 39 metres to end of hole at 84 metres with nickel concentrations rising in the bottom 21 metres. There was also a significant increase in magnesium concentrations (>10% Mg) in the bottom 6 metres of DRC011, an indicative characteristic of ultramafic potential. DRC011 was halted at a depth of 84 metres due to drilling difficulties and is a candidate for follow up investigation with further intervals of mineralisation anticipated with deeper diamond drilling.

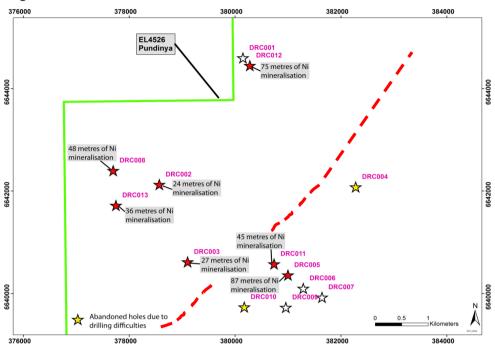
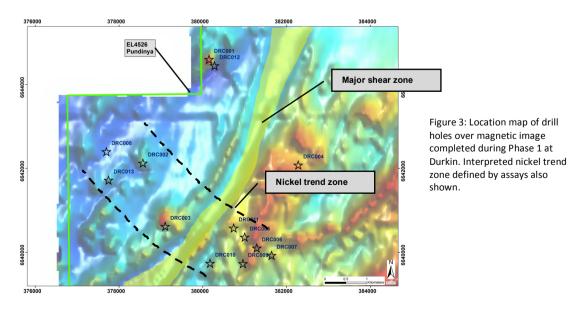


Figure 2: Location of drill holes from Phase 1, with holes containing anomalous nickel and copper denoted by red stars. Intercepts shown are total metres of Ni intercepted in holes along the defined nickel trend zone (see Table 1).

The similarity of observed geology and sulphide mineralisation throughout the widely spaced seven drill holes (denoted by the red stars) suggests that these targets are part of a wider large-scale mineralised intrusive system stretching over three kilometres. Marmota is very encouraged by the lithologies encountered with rocks comprising: mafics, diorites, felsic units and gneisses. These lithologies suggest that this Phase 1 drilling program did not fully encounter the projected deeper ultramafic units in the mineralisation model for this prospect (Figure 4). Deeper drilling will determine if nickel sulphides are present in the modelled basal ultramafic units.



A large shear zone cuts through the area drilled on a NE-SW trend and is clearly visible in the geophysical surveys acquired by Marmota (Figure 3). The more significant anomalism noted from this phase of drilling is located towards the shear zone. This deep seated shear has potentially been the conduit along which nickel and copper mineralisation have been mobilised from deeper in the system (Figure 4). A possible analogue for the geological model for the mineralisation at Durkin is the Avebury nickel deposit in Tasmania.

A number of key factors brought to light from the Phase 1 drilling at Durkin include:

- coincidence of anomalous Au, Ni, Pd at both Avebury and Durkin;
- structural similarities including the modeled steeply dipping nature of bodies at Durkin disrupted by faulting;
- presence of granites to provide fluids for mobilisation of base and precious metals as at Avebury; and
- Ni at both Avebury and Durkin is associated with minor magnetite.

Following further geophysical surveys, drill testing of the shear area along with deepening of some Phase 1 holes is planned for the next phase of drilling.

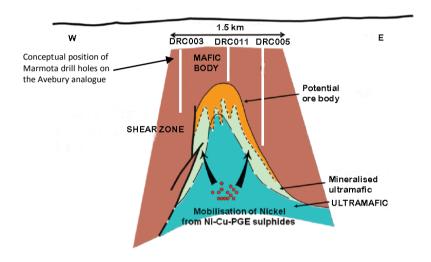


Figure 4: Schematic illustrating generalised model for Durkin (diagram not to scale). Avebury model proposed as an analogue for Durkin. Drill holes completed during Phase 1 intercepting predominantly sulphides in mafic rock shown. Ultramafics with potential for more massive sulphides and higher grades to be drill tested in the next Phase. Diagram adapted from published sources.

## Forward plan

Assessment of results is continuing with more samples planned for submission for further assay and mineralogical analysis. Resampling of some end of hole intervals will be completed and submitted for analysis with different chemical techniques to improve vectoring element detection. Further infill geophysical surveys are being planned in-line with the trend of the nickel mineralisation defined by the Phase 1 drilling to map zones of higher potential for further drill testing. Downhole geophysics is also planned with several holes cased during Phase 1 in preparation for further assessment.

The data will be used to assist in further determining areas for follow up drilling including deepening of several drill holes from Phase 1. Deepening of holes is expected to intercept ultramafic rocks with greater potential for higher grades and massive sulphides (Figure 4).

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.

Dom Calandro MANAGING DIRECTOR

13 June 2013

Cautionary Statement: Early stage exploration at the Durkin prospect is underway and thus, there has been insufficient exploration to define the extent of exploration potential at the target area.

Table 1: Anomalous intercepts from Phase 1 drilling:

Hole ID	GDA94 Easting	GDA94 Northing	Zone	Total depth	From (m)	To (m)	Int (m)	Au ppb	Ni ppm	Cu ppm	Cr ppm	Mg %	Pd ppb	Pt ppb
				33	45	12	3	134			1.2			
				81	87	6	2	314			2.3	14	8	
				126	132	6	3	240			1.8			
				69	90	21				239				
				120	141	21				179				
DRC003	379087	6640620	53	150	33	60	27	4	131	107	200	1.5	13	8
DRC005	380983	6640348	53	300	96	102	6			185	243			
					177	189	12			116				
					261	276	15			133				
					33	54	21		147		284		23	12
					81	90	9	1.5	177					
					96	102	6	2	407	186	243		15	6
					249	EOH	51	2	128			2.5	11	7
DRC008	377700	6642404	53	150	111	120	9			165				
					42	84	42	3	133			1	10	6
					108	114	6	4	167			1.7		7
					72	84	12	1			258	1		
					105	120	15				249			
					132	150	18				188			
DRC011	380739	6640577	53	84	48	66	18	†		122				
	300733	0010377	33	0.	39	EOH	45	3	187	1	803	2.1	15	6
				inc	78	EOH	6	<del>                                     </del>	10.			17	130	+ -
					70		-	†						
DRC012	380281	6644448	53	150	24	EOH	126	1			211		1	
	300201	3044440	133	130	36	111	75	3	133			2.3	11.5	6
			+		30	111	1,5	-	133			2.5	11.5	+
DRC013	377755	6641719	53	150	18	27	9	+		168				
	311133	0041719	J.J.	130	9	57	48	+		100	389		1	1
					18	54	36	3	297		363	1.3	15	7
		+		inc	10	34	30	3	231			1.3	13	+'-
		+		IIIC	21	24	3	6	1000	308	1291	1	11	12
					21	24	3	D	1000	308	1291	1 1	111	12

All holes drilled vertically, widths are true widths. Sample submitted as 3 metre composites, with the following analysis techniques applied:

AR25/MS - Aqua-Regia digest. Analysed by Inductively Coupled Plasma Mass Spectrometry.

AR25/OE - Aqua-Regia digest. Analysed by Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry.

FP1/MS – (only used on Y over range samples)

Sodium peroxide fusion (Zirconia crucibles) and Hydrochloric acid to dissolve the melt. Analysed by Inductively Coupled Plasma Mass Spectrometry.