

## **DURKIN COPPER/NICKEL PROJECT EXPLORATION UPDATE**

- Calcrete sample assay results for main Cu/Ni target area received with individual nickel results ranging up to 343 ppm, copper 129.8 ppm, cobalt 39.3 ppm and chromium 5224 ppm.
- Ground gravity survey data acquisition nearing completion.
- Airborne electromagnetic survey planned to commence within coming days.
- Further infill surface sampling planned.

# Durkin copper/nickel prospect – Pundinya project

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

## **Calcrete sampling results**

Marmota Energy (ASX:MEU) is pleased to announce that it has received calcrete sample assay results from sampling programs covering approximately 50% of the central target zone (Figure 1) at the Durkin copper/nickel prospect. Calcrete sampling is used to more accurately target priority drill zones through the detection of trace elements within a range of samples.

Results are from 197 samples submitted for assay covering the main target zone that extends for approximately 1.2 km, within a larger copper and nickel-in-calcrete anomaly previously defined that extends more than 5km (Figure 1). This is currently considered by the Company to be the highest priority zone for potential drill testing. Remaining assay results covering the northern half of this zone are expected to be received shortly.

The results continue to strongly support the potential for copper – nickel mineralisation at Durkin. The survey is designed to assist in identifying targets for drill testing within the large anomaly zone defined from previously acquired calcrete sampling.



Figure 1: Area of received calcrete assay results shown above within black outlined box.

Assay results\* from calcrete samples included anomalous grades for nickel of up to 343ppm with associated vectoring elements chromium and cobalt returning grades of up to 5224ppm and 39.3ppm respectively. The association of copper, nickel, cobalt and chromium is considered critical and a positive sign for the project as they are all very common in other Ni/Cu projects of this type. Coincident anomalous copper results with grades of up to 129.8ppm Cu were also returned from assay as well as anomalous silver ranging up to 0.78 g/t Ag.

Summary of values for key elements of nickel, cobalt, chromium and copper over the main Durkin target area for 197 calcrete samples are below:

Element	Samples	Min	Max	Mean
Cu ppm	197	2	129.8	26.49
Ni ppm	197	5	343	25.42
Co ppm	197	1.2	39.3	7.85
Cr ppm	197	8	5224	164.88

Results from calcrete samples covering the northern half of the main target, along with rock chip samples from outcrop are pending.

\* All analyses were undertaken by Genalysis Laboratory Services. The samples are pulverised to 85% passing 75 microns. An aqua-regia partial digest was used with multi-element assays based on ICP-OES (inductively coupled plasma optical (atomic) emission spectrometry) and ICP-MS (inductively coupled plasma mass spectrometry) methodology as appropriate.

### **Gravity survey**

High resolution ground gravity survey data over the project with a 500x500 metre fixed grid gravity station network is being acquired across the Durkin Cu/Ni prospect. The survey results will complement the multi component infill surface sampling which has focused on the large coincident copper and nickel-in-calcrete anomaly (Figure 2).



The new survey will replace regional spaced historic gravity data acquired at an approximate 4 mile spacing during the 1970's pre GPS. Acquisition is continuing on schedule with approximately 70% of the survey completed. It is estimated that the survey will be completed in coming days with final results expected to be delivered within a week of end of acquisition. The preliminary results over part of the area indicate that the

data will greatly improve the Company's understanding of the geological framework of the area and be a great aid in targeting drilling.

#### Airborne Electromagnetic Survey

Fugro Geophysics have mobilised a crew to the Durkin project area to commence a high resolution airborne electromagnetic (AEM) survey. The survey is scheduled to commence this weekend and will cover the northern half of the Pundinya tenement which hosts the Durkin Cu/Ni prospect.

The survey will be flown with Fugro's HELITEM System which is the world's most powerful helicopter time-

domain electromagnetic system. The high power of HELITEM, coupled with the low noise at the receiver due to its placement above and not in the centre of the transmitting loop, ensures the greatest depth of penetration possible for any electromagnetic system.

HELITEM is offered with a high sensitivity magnetometer to detect magnetic anomalies and map geologic units and structure. The survey is expected to define any conductive features which may be related to the potential copper and nickel or any other mineralisation.

The survey is also expected to provide vital information relating to the potential depth extent and shape of any conductive features mapped. The duration of the survey is planned to be 2 weeks.

Combining the gravity data with good quality conductivity data over the target area will significantly improve the potential for drilling success.



Figure 3: Fugro's HELITEM system in flight.

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.

Mr Dom Calandro MANAGING DIRECTOR

9 November 2012

Element	count	min	max	75Perc	90Perc	95Perc	98Perc
Cu ppm	197	2	129.8	32	49.55	73.575	100
Co ppm	197	1.2	39.3	9.2	13.38	16.62	23.02
Cr ppm	197	8	5224	170	329.6	516	920.96
Ni ppm	197	5	343	23	40.96	79.16	100.48
Fe %	197	0.43	36.96	9.53	18.6	23.542	30.3136
Mn ppm	197	16	1138	125	191.4	237	317.44
Mo ppm	197	0.1	6.7	0.5	1.01	1.4	2.1
Pd ppm	197	10	32	17.5	21	23.5	27.8
Ti ppm	197	5	>1000	68	152.8	231.1	338.64
U ppm	197	0.05	3.5	0.61	0.864	1.492	2.1816
V ppm	197	8	1038	171	335.4	454.8	724.68
Ag g/t	197	0.05	0.78	0.1175	0.345	0.4125	0.591

Appendix 1: Calcrete sample assay statistics for key elements

Easting	Northing	Zone	Sample Number	Ag ppm	Co ppm	Cr ppm	Си ррт	Fe %	Mn ppm	Мо ррт	Ni ppm	Pd ppm	Ti ppm	U ppm	V ppm
378700	6641700	53	203832	0.07	29.3	219	27	17.91	134	0.6	343	Х	87	0.55	211
378700	6641800	53	203821	х	5.5	326	50	10.96	111	0.7	32	18	457	0.67	347
378600	6641800	53	203820	0.09	16.5	356	81	19.55	295	0.6	43	15	162	0.58	306
378500	6641800	53	203819	0.07	5.8	238	68	14.53	139	0.7	21	11	129	0.69	349
378400	6641800	53	203818	0.43	8.7	320	73	10.14	122	1.4	24	Х	107	2.59	744
378200	6641900	53	203802	х	5.9	205	129	7.61	76	1.2	19	21	154	0.33	232
378700	6641900	53	203799	х	13.3	313	43	11.03	209	0.8	64	Х	52	0.28	164
378700	6642000	53	203782	0.09	12.7	502	51	23.67	233	0.4	78	х	163	0.37	244
378700	6642100	53	203777	х	16.2	900	10	34.27	122	0.2	106	15	348	0.52	212
378100	6642200	53	203754	х	6.1	198	122	19.02	115	0.5	32	х	78	0.85	374
378300	6642200	53	203752	х	15.6	5224	33	13.25	160	0.2	272	Х	>1000	1.15	251
378700	6642200	53	203736	х	2.9	338	67	20.02	88	0.4	23	Х	203	0.49	447
378900	6642200	53	203735	0.08	17.1	215	86	13.11	177	1	66	13	130	0.92	341
379000	6642200	53	203734	0.33	11.4	684	16	23.51	132	0.7	24	11	154	0.86	947
379000	6642300	53	203733	0.21	13.7	281	60	13.76	150	1.1	29	20	75	1.74	689
378800	6642300	53	203731	0.07	9.3	572	48	32.77	267	0.5	50	20	309	1.84	434
378600	6642300	53	203729	х	9.5	340	16	10.47	66	0.2	60	Х	61	1.75	108
378500	6642300	53	203728	х	8.4	770	40	18.69	70	0.2	78	Х	168	0.41	143
378100	6642300	53	203718	0.07	6.4	172	98	12.35	185	0.3	40	12	20	0.65	245
378000	6642400	53	203716	х	8.1	137	69	22.19	174	3.2	23	Х	85	0.5	171
378100	6642400	53	203715	х	22.7	1162	41	22.39	236	0.3	88	Х	259	0.85	427
378500	6642400	53	203711	Х	9.2	378	54	13.79	56	0.7	29	11	56	0.9	406
378800	6642400	53	203708	Х	26.7	156	53	9.14	215	0.3	34	х	66	0.79	295
378900	6642500	53	203706	0.08	12.2	132	32	2.88	143	0.2	100	Х	7	0.38	131
378200	6642500	53	203692	Х	5.1	144	79	18.39	155	4.7	16	14	118	0.67	188
378100	6642500	53	203691	Х	3.9	170	118	36.96	154	6.7	8	32	152	0.75	226
379000	6642800	53	203633	х	15.5	572	17.5	11.57	310	0.4	94.9	Х	126	0.48	102
379500	6642900	53	203628	0.06	9.5	701	16.6	19.47	211	1.9	12	х	11	2.23	1038
379200	6643200	53	203585	Х	17.2	1613	7.9	19.22	403	0.6	93.1	11	258	1.46	200
379500	6643200	53	203584	х	5.9	129	13.3	3.06	95	0.4	61.7	Х	16	0.42	43
379200	6643300	53	203555	0.06	39.3	2109	25.4	25.19	270	0.8	111.6	Х	56	0.81	239
379000	6643400	53	203552	х	29.5	223	129.8	29.31	1138	0.6	83.8	Х	91	1.21	278
379400	6643500	53	203517	х	21	405	75.3	18.54	688	1.3	33.4	Х	142	1.65	764
378200	6643500	53	203510	0.78	7.1	102	16.5	3.67	73	0.2	29.4	Х	18	0.4	65
378300	6643500	53	203511	Х	19.9	188	38.2	8.68	191	1.6	89.8	14	15	1.14	339

Appendix 2: Calcrete assay sample results from high priority target areas for drilling at the Durkin Cu/Ni prospect. Further results are pending.