

**LARGE TUNGSTEN ZONE DISCOVERED IN MAIDEN DRILLING AT MOONBI PROSPECT,  
GAWLER CRATON (SA)**

- Extensive tungsten mineralisation intercepted at shallow depths in multiple holes during Moonbi maiden drilling program – a PACE supported project
- Tungsten intercepted in widely spaced holes over significant strike
- Nickel sulphides also intercepted, one drill hole with nickel, chromium and cobalt concentrations elevated over 39 metre interval to end of hole
- Follow up work commenced

**Moonbi prospect (SA)**

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

**RC Drilling program results**

Marmota Energy (ASX:MEU) is pleased to announce that recent RC drilling of targets located at its Moonbi prospect has intercepted large intervals of tungsten mineralisation. The drilling was part of a PACE co-funded project to investigate geophysical anomalies identified by the Company at the Moonbi prospect. Fourteen vertical Reverse Circulation (RC) drillholes for a total of 2100 metres were completed at the target area, which is located within Marmota's Indooroopilly tenement in the highly prospective Gawler Craton west of Challenger gold mine.

**Moonbi geology**

Units identified from the RC drill chips are predominantly leucocratic Christie Gneiss, comprising, quartz, plagioclase, K feldspar, biotite and garnet with cordierite identified in several holes. Pyrite is the dominant sulphide, with arsenopyrite and pyrrhotite identified. Granites and fractionated melts are logged throughout the drill holes at Moonbi and where noted grade in and out of each other, due to synorogenic emplacement of the granites. Investigation is underway to determine the potential relationship of these granites to the tungsten mineralisation observed in drill holes at Moonbi. It is not uncommon for tungsten deposits to be associated with granites for example the intra-granitic wolframite vein deposits in China. Tungsten occurrences flank the Cookes Creek Granite in Western Australia, which is considered the source of tungsten mineralisation at Cookes Creek tungsten project. Further work is underway to confirm the method of tungsten emplacement at Moonbi.

Mafic intrusions were identified in several drillholes, and in MRC010 the mafic unit revealed elevated Ni, Cr, Co mineralisation over a significant interval. The mafic unit is dark green to black and very fine grained containing sulphides. Samples have been submitted for petrological analysis.

**Tungsten facts**

- A rare metal: 50 times rarer than copper.
- Unique metal: with physical properties that limit substitution.
- Tungsten mineralisation commonly occurs as either wolframite, which is an iron manganese tungstate mineral ( $[\text{Fe}, \text{Mn}]\text{WO}_4$ ) or scheelite ( $\text{CaWO}_4$ ).
- As a point of reference, a grade of 0.10% Tungsten equates to 1 kg of Tungsten per tonne. The current average spot price of tungsten is \$47.00 USD/kg (2 July 2013).
- Tungsten resource average grades of deposits in Australia can range from 0.08%  $\text{WO}_3$  with cut off grades of 0.05%  $\text{WO}_3$ .
- Tungsten has a wide range of uses, the largest of which is as tungsten carbide, a wear-resistant material used by the metalworking, mining, petroleum, military construction, medical and jewellery industries. Also utilised in flat screen technology LCD and LED and Solar Energy.

## RC Drilling program assay results

Six widely spaced drill holes (Table 1) have intercepted tungsten mineralisation at shallow depths in Phase 1 drilling completed at the Moonbi target area (Figure 1). The bulk of the drill holes that have intercepted tungsten lie along a large geophysical target extending for approximately 1.6 km (Figure 1).

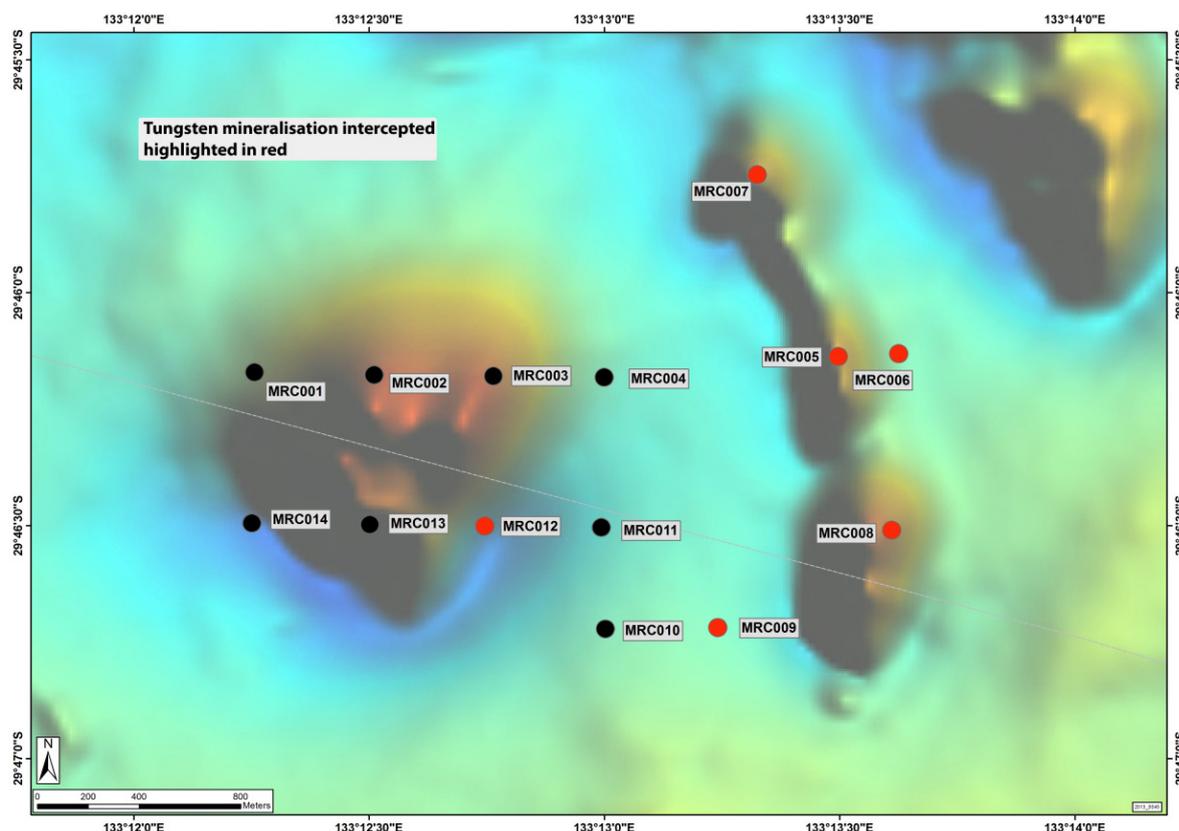


Figure 1: Moonbi target, drill hole locations over processed magnetic image.

## Indooroopilly tungsten discovery

Tungsten mineralisation was intercepted in six drill holes with the largest intercept extending for more than 50 metres to end of hole in drill hole MRC006. The results from hole MRC006 have higher grade tungsten intervals located within significant widths of lower grade. Three wide spaced drill holes MRC005, 6 and 8 end in tungsten mineralisation with grades ranging up to 0.12%  $WO_3$  (Figure 2). This is a very positive sign for more mineralisation potential to be realised with further drilling. The zone of tungsten mineralisation intercepted in the Phase 1 drilling appears to be dipping to the west.

Petrological assessment is being undertaken to determine which species of tungsten-bearing mineral has been intercepted in drilling. Immediate priority has also been placed on the submission of individual metre intervals for further assay. Lithium Borate Fusion ICP-MS will be utilised as the assay method for individual one metre sample to be submitted.

As noted in the tungsten facts above, the average grade of tungsten resources in Australia can range from 0.08%  $WO_3$ , which makes the zone intercepted in the Phase 1 drilling at Moonbi a significant discovery. Tungsten has been listed as 'critical metal'. Critical metals are defined as those metals with a critical risk to supply, on which humans are highly dependent for survival, and which are necessary for the continuation of a modern way of life. With the current high contract price for tungsten and with demand increasing this provides a favorable environment for new discoveries.

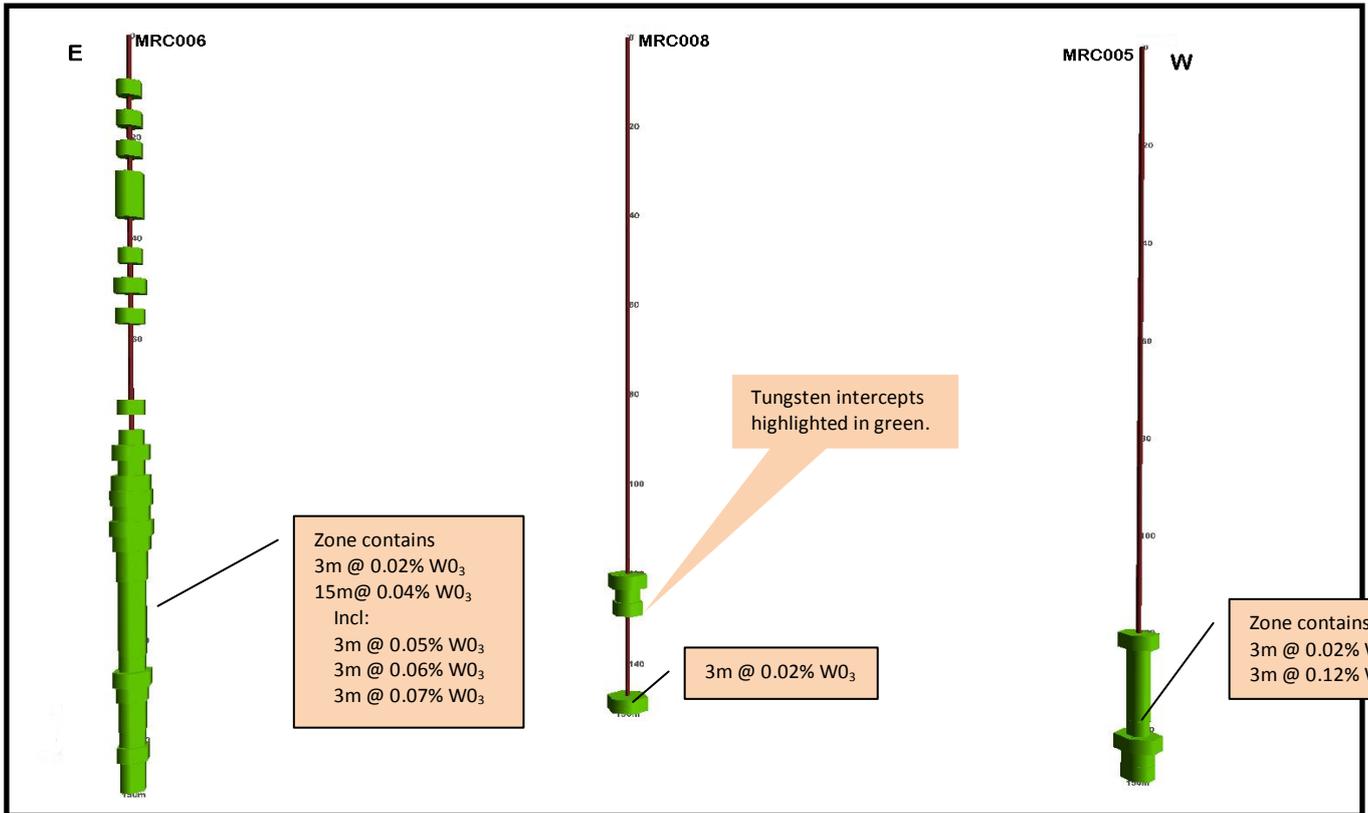


Figure 2: Drill hole schematic diagram with all tungsten intercepts highlighted in green. View is east to west looking back to south. MRC008 is located approximately 800 metres south of MRC005 and 6.

### Broad zone of nickel sulphide intercepted

Mafic intrusions were logged in several drillholes, and in MRC010 the mafic unit revealed elevated Ni, Cr, Co mineralisation.

39 metres of anomalous nickel sulphide in mafic rock was intercepted in drill hole MRC010. The upper intervals of the hole were barren until the depth of 111 metres where a sudden increase in nickel and sulphur concentrations occur until end of hole. This is considered unusual, as this part of the Gawler Craton is not known for its nickel potential.

Further detailed investigation of the nickel mineralisation intercepted in this hole is currently underway. This will involve the resubmission of individual one metre intervals to be analysed for nickel along with other elements, including platinum and palladium not completed in this first round.

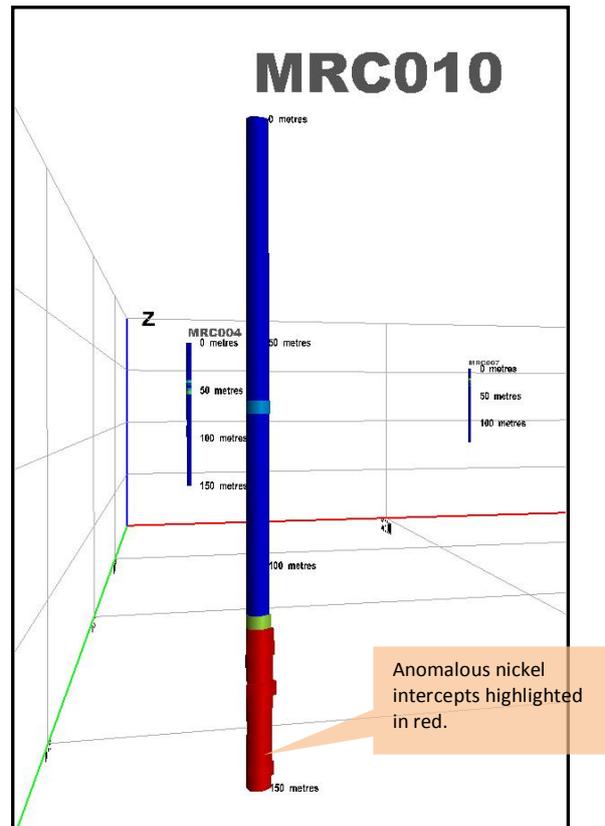


Figure 3: MRC010 drill hole schematic diagram with anomalous Ni and S intercepts highlighted in red. View is from south to north.

## Forward plan

The interception of broad zones of tungsten mineralisation, along with a strong likelihood of further mineralisation nearby is considered a high priority for Marmota. The close proximity of the mineralisation to existing mining infrastructure and ease of access make this a high priority for low cost follow up exploration.

A low cost follow up exploration program is planned including:

- Reassaying of key intervals from the tungsten intercepts using Lithium Borate Fusion ICP-MS.
- Submitting 1 metre split samples of key intervals from hole MRC010 where anomalous nickel was intercepted in mafic rock.
- Submission of sample for petrological assessment.
- Reassessment of geophysical data with emphasis on tungsten corridors.
- Results dependent, shallow low cost step out RC drilling program to continue to define potential tungsten zone of mineralisation (7 drill holes).

*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**

**5 July 2013**

Cautionary Statement: Early stage exploration at the Moonbi prospect is underway and thus, there has been insufficient exploration to define the extent of exploration potential at the target area. It is uncertain if further exploration will result in the determination of a Mineral Resource.

Table 1: Anomalous tungsten greater than 100 ppm and nickel intercepts from Phase 1 drilling:

Hole ID	GDA94 Easting	GDA94 Northing	Zone	Dip	Total Depth	From (m)	To (m)	Int (m)	WO <sub>3</sub> ppm	Fe %	Mn ppm	Ca %
MRC005	328403	6705491	53	-90	150	120	123	3	235.8	3.73	340	2.1
						141	150	9	<b>419.9</b>	3.10	227	1.8
						incl 141	144	3	<b>1147.5</b>	3.94	269	2.5
MRC006	328599	6705500	53	-90	150	81	102	21	337.9	5.37	569.9	1.5
						incl 96	102	6	<b>672.7</b>	5.07	556.5	1.4
						126	129	3	211.8	5.01	392	2.0
MRC007	328100	6706200	53	-90	135	114	117	3	112.2	4.55	537	1.8
MRC008	328600	6704800	53	-90	150	120	123	3	145	2.68	216	2.4
						144	147	3	192.9	5.12	517	2.3
						147	150	3	201.7	4.93	472	2.3
MRC009	328000	6704400	53	-90	150	93	96	3	114.8	4.75	545	1.3
						138	141	3	302.6	3.15	314	1.5
MRC012	327200	6704800	53	-90	162	75	78	3	248.4	3.28	414	1.3
						138	141	3	143.8	3.06	447	1.4
						159	162	3	<b>778.03</b>	2.38	333	1.5

Hole ID	GDA94 Easting	GDA94 Northing	Zone	Dip	Total Depth	From (m)	To (m)	Int (m)	Ni ppm	Cr ppm	Co ppm	Mg %	P ppm
MRC002	326817	6705433	53	-90	150	69	78	9	244	257	37	5.2	1516
MRC008	328600	6704800	53	-90	150	21	48	27	175	262	34.8	2.3	4603
MRC010	327600	6704400	53	-90	150	111	150	39	370	674	48.9	7.7	1529
						incl 117	129	12	525	905	58	9.9	1753
						incl 126	129	3	720	1141	62	11.9	545

All holes drilled vertically, widths are true widths. Sample submitted as 3 metre composites, with the following analysis techniques applied:  
 4A/OE – Multi-acid digest including Hydrofluoric, Nitric, Perchloric and Hydrochloric acids in Teflon Tubes.  
 Analysed by Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry.  
 FA25/AA – 25g Lead collection fire assay. Analysed by Flame Atomic Absorption Spectrometry.

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