



**PADBURY**  
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**AURIUM**  
RESOURCES  
LIMITED

## SUCCESSFUL DRILLING PROGRAM CONFIRMS PEAK HILL PROSPECTIVITY

### Highlights:

- **Successful RC drilling program completed at Peak Hill Joint Venture targeting Magnetite and Direct Shipping Ore (DSO) iron mineralisation**
- **Results confirm the presence of significant magnetite mineralisation in the Robertson Range Formation**
- **Best intersection in hole HRC046 of 128 metres at 30.6% Fe**
- **Approximately 2km of strike has been tested, an additional 12km remains to be tested**
- **Drilling results support exploration target<sup>1</sup> of 3.5-5 Billion tonnes of magnetite iron ore**

Padbury Mining Ltd and its Joint Venture (JV) partner, Aurium Resources Limited are pleased to announce the results of the recent RC Drilling program at the Peak Hill Joint venture. A 20 hole RC drilling program was completed in April 2010 to investigate the Magnetite and DSO iron ore potential at the Western Flank and Telecom Hill target areas of the Peak Hill Joint Venture (see Table 1 and Figure 2). The program was highly successful at delineating significant magnetite mineralisation.

In addition to the recent positive drilling results, CSA Global Pty Ltd. was commissioned to undertake a review of the project and assist the company with its exploration strategy into the future. The outcome of the review confirmed the potential for the project to host DSO and large magnetite iron ore deposits.

### **Western Flank Target**

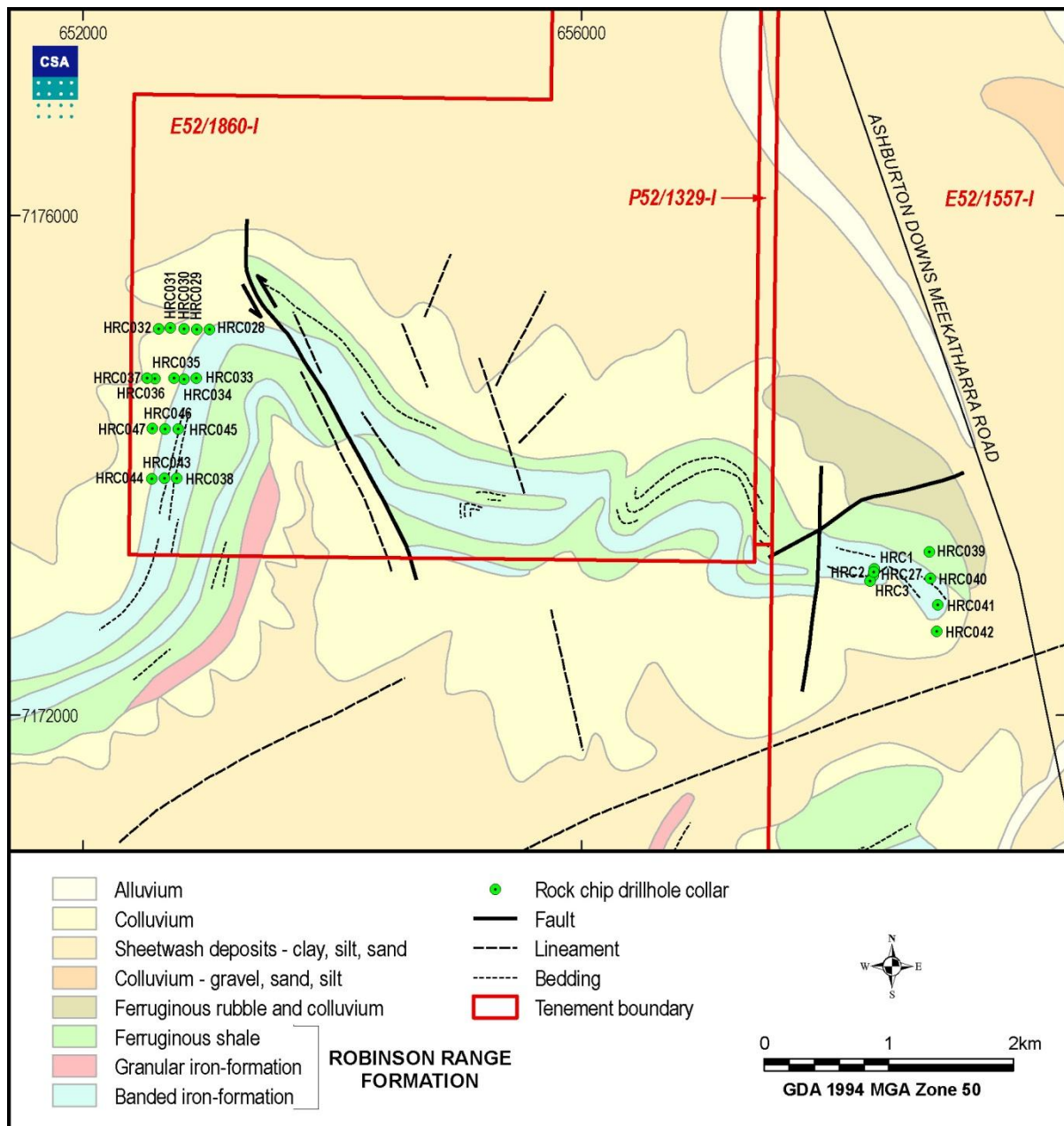
The holes in the Western Flank target area were designed with the dual purpose of testing the DSO potential of hematite-goethite enrichment located at surface and the magnetite potential within the host rocks beneath over a strike length of approximately 1 kilometre.

The deeper holes tested the magnetite potential within a banded iron formation (BIF) with a true thickness of up to two hundred metres. The BIF unit which crops out to the east and extends under shallow scree cover to the west is a member of the Robinson Range Formation which is locally dipping steeply to the west. The best results occurred on section 7174300 mN where three deeper holes were drilled to test for DSO near surface and magnetite at depth.

<sup>1</sup> The potential quantity and grade is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

The magnetite unit was intersected in three holes drilled on 100m centres to a depth of 258m below surface (see Figure 2). In the fresh rock (50-80m below surface) the BIF displays favourable uniform iron grades and deleterious element chemistry.

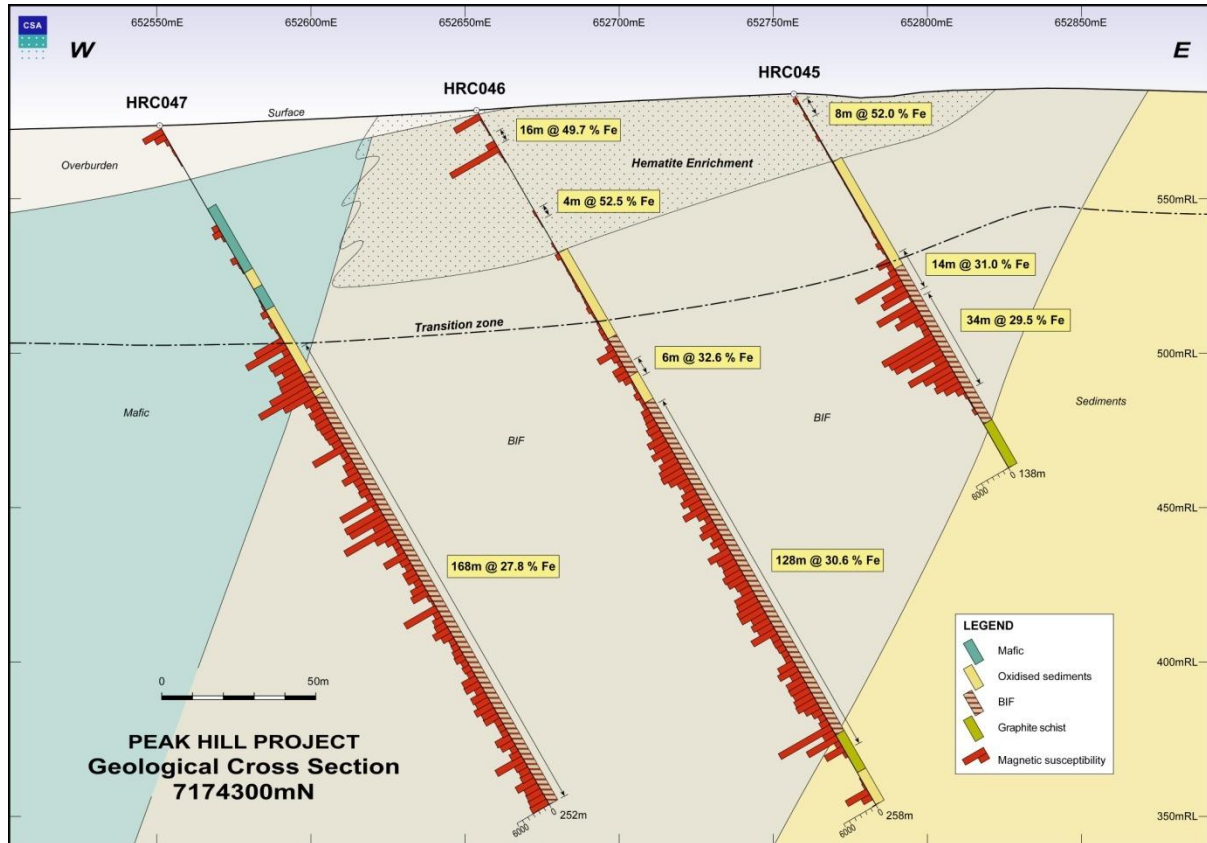
The best hole, HC046, intersected magnetite bearing BIF from 110 - 238m with an average grade of 30.6% Fe, based on a cutoff grade of 20% Fe and a magnetic susceptibility reading above  $1000 \times 10^{-4}$  SI units with up to four metres internal dilution. The other holes on section 7174300mN, HC045 and HC047, intersected significant magnetite mineralisation with 48m and 168m respectively (see Figure 2 and Table 2).



**Figure 1 Collar Location Plan**

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Another 13 holes were designed to assess the potential of hematite-geothite enriched material. These holes were drilled to depths ranging from 50-150m and intersected zones of hematite and goethite enrichment within the oxide zone up to 30m depths. It appears the enriched hematite occurs as a relatively thin, supergene derived, veneer over the BIF unit and the best results occurred from 0-8m in hole HRC045 at 52% Fe.



**Figure 2. Schematic Cross-section through the Western Flank target**

Several of the deeper DSO holes also intersect magnetite mineralisation within BIF units within the Robinson Range Formation. These were relatively thin intercepts near the bottom of hole. The presence of BIF in this area supports the aeromagnetic interpretation which indicates the Robinson Range stratigraphy is continuous in this area.

The thickness and continuity of magnetite mineralisation intersected during drilling has confirmed the strong potential for large magnetite deposits within the project. Given the potential size of these deposits future exploration will be focused on gaining a better understanding of the extent of the magnetite mineralisation. The hematite/goethite enrichment intersected during this program is lower grade than expected, however several other DSO targets have been delineated and these will be assessed in more detail as the project develops.

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## Telecom Hill

Four holes were drilled at the Telecom Hill area targeting magnetite mineralisation. The holes were entirely within the Robinson Range formation to assess the tenor of the magnetite. All four holes intersected significant magnetite mineralisation (see Table 2). The best intersection occurred in hole HC040 from 24-124m with a grade of 26.13%Fe.

The positive magnetite drill results from both the Western Flank and Telecom Hill areas along with results from recent reconnaissance mapping and sampling, and interpretation of airborne magnetic data supports the proposed exploration target<sup>1</sup> of 3.5 to 5 billion tonnes being hosted in the Robinson Range and Horseshoe Formations within the project area.

**Table 1. Drill Hole Location 2010 Drilling**

Hole No	Easting	Northing	mRL	Drilled depth (m)	Azimuth	Dip	Target Area
HRC028	653010	7175092	575	60	90	-60	Western Flank
HRC029	652909	7175093	576	150	90	-60	Western Flank
HRC030	652810	7175097	571	78	90	-60	Western Flank
HRC031	652699	7175104	561	90	90	-60	Western Flank
HRC032	652604	7175097	567	110	90	-60	Western Flank
HRC033	652904	7174702	596	108	90	-60	Western Flank
HRC034	652809	7174696	580	84	90	-60	Western Flank
HRC035	652729	7174702	576	84	90	-60	Western Flank
HRC036	652576	7174701	568	102	90	-60	Western Flank
HRC037	652513	7174703	567	128	90	-60	Western Flank
HRC038	652750	7173900	584	50	90	-60	Western Flank
HRC039	658790	7173309	574	84	90	-60	Telecom Hill

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<b>HRC040</b>	658800	7173100	582	132	90	-60	Telecom Hill
<b>HRC041</b>	658858	7172885	582	132	90	-60	Telecom Hill
<b>HRC042</b>	658852	7172676	592	150	90	-60	Telecom Hill
<b>HRC043</b>	652650	7173900	582	150	90	-60	Western Flank
<b>HRC044</b>	652549	7173894	570	96	90	-60	Western Flank
<b>HRC045</b>	652760	7174296	N/A	138	90	-60	Western Flank
<b>HRC046</b>	652657	7174298	N/A	258	90	-60	Western Flank
<b>HRC047</b>	652554	7174300	N/A	252	90	-60	Western Flank

**Table 2. Significant intersections 2010 RC Drilling**

<b>Hole</b>	<b>From</b>	<b>To</b>	<b>Interval</b>	<b>Fe%</b>	<b>Al2O3%</b>	<b>SiO2%</b>	<b>P%</b>	<b>Mineralisation type</b>
<b>HRC028</b>	10	18	8	51.4	5.05	9.72	0.076	Hematite/goethite
<b>HRC029</b>	4	10	6	52.4	5.13	9.55	0.072	Hematite/goethite
<b>HRC036</b>	6	10	4	48.0	10.60	14.93	0.026	Hematite/goethite
<b>HRC044</b>	36	44	8	51.0	3.68	12.85	0.163	Hematite/goethite
<b>HRC045</b>	0	8	8	52.1	1.90	14.82	0.202	Hematite/goethite
<b>HRC046</b>	36	40	4	52.6	3.65	11.98	0.267	Hematite/goethite
<b>HRC029</b>	126	150	24	25.9	2.72	44.48	0.078	Magnetite
<b>HRC030</b>	56	78	22	32.9	1.02	43.08	0.199	Magnetite

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<b>HRC031</b>	74	90	16	29.0	1.74	45.08	0.152	Magnetite
<b>HRC032</b>	58	72	14	25.4	4.54	52.89	0.022	Magnetite
<b>HRC035</b>	68	84	16	31.8	1.02	43.52	0.220	Magnetite
<b>HRC037</b>	65	81	16	21.6	5.58	53.05	0.168	Magnetite
<b>HRC037</b>	82	114	32	23.4	4.31	49.55	0.199	Magnetite
<b>HRC039</b>	0	84	84	29.5	3.41	46.67	0.409	Magnetite
<b>HRC040</b>	24	124	100	26.1	3.90	51.32	0.238	Magnetite
<b>HRC041</b>	64	132	68	22.9	5.17	49.97	0.199	Magnetite
<b>HRC042</b>	118	144	26	22.0	6.37	50.38	0.163	Magnetite
<b>HRC043</b>	58	76	18	33.2	1.27	43.76	0.195	Magnetite
<b>HRC043</b>	78	112	34	34.2	1.36	42.27	0.184	Magnetite
<b>HRC045</b>	60	74	14	31.0	0.96	48.05	0.230	Magnetite
<b>HRC045</b>	76	110	34	29.5	1.37	45.02	0.154	Magnetite
<b>HRC046</b>	94	100	6	32.7	1.02	46.04	0.186	Magnetite
<b>HRC046</b>	110	238	128	30.6	1.22	45.44	0.200	Magnetite
<b>HRC047</b>	84	252	168	27.8	2.65	45.82	0.142	Magnetite

*Hematite intersections are based on a 45% Fe cutoff with up to 4m internal dilution.*

*Magnetite Intersections based on a 20% Fe cutoff, and a magnetic susceptibility greater than  $1000 \times 10^{-4}$  SI units and up to 4m internal dilution.*

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## **Future Project Work**

The recent project review report by CSA has confirmed the prospectivity of the Peak Hill project and delineated a number of targets for DSO and magnetite iron ore. Given the positive results of the CSA review and the successful results from the recent drilling the JV partners intend to complete a series of evaluation programs aimed at better defining the magnetite iron ore potential of the project. The partners intend to take a staged approach with the aim of delineating a large maiden resource before the end of the year.

The first stage will be additional analytical and metallurgical testwork programs to better understand the beneficiation requirements of the magnetite material. Initially this will involve a program of Davis tube recovery (DTR) testwork using samples collected during the recent drilling. Based on the results of the DTR work bench scale metallurgical testwork will follow.

Davis tube recovery testwork completed on samples collected during previous drilling suggest the Robinson Range magnetite mineralisation upgrades well, at the relatively coarse grind size of 80 microns. The DTR work being undertaken for this drill program will be conducted at various grind sizes to assess the optimum beneficiation characteristics.

A series of field based programs will be undertaken in Q3 2010. Initially this will involve detailed mapping of the Robinson Range formation to ensure effective targeting of future drilling campaigns. The next stage will be to mobilize a rig to the project and commence drilling aimed at delineating a maiden Inferred Resource for the project.

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### *Competent Persons Statement*

*The geological modelling and estimation of the Exploration Target<sup>1</sup> for Padbury's Peak Hill Project was completed under the overall supervision of Mr. Mark Gunther BSc, who is a full time employee of CSA Global Pty Ltd and is a Competent Person as defined by the Australasian Code for the Reporting of Mineral Resources and Ore Reserves (JORC Code) 2004 Edition. Mark Gunther consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

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