

MINOTAUR EXPLORATION LTD

247 Greenhill Road, Dulwich 5065, South Australia A.C.N. 108 483 601

Tel: +61 8 8366 6000 Fax: +61 8 8366 6001 Website: www.minotaurexploration.com.au Email: <u>admin@minotaurexploration.com.au</u> ASX Code: MEP

Friday 22nd September 2010

The Company Announcements Office Australian Securities Exchange Limited

Drilling Commences at Aphrodite IOCG Target

Minotaur Exploration (ASX: MEP) is pleased to advise that drilling has commenced at the Aphrodite IOCG Target, 35 kilometres southeast of Olympic Dam in South Australia. This is a key project in the Company's aggressive 4th Quarter 2010 drill program that also encompasses the Louth Base Metals Project, the Cloncurry IOCG Project, the Mutooroo Magnetite Project and the Border Base Metals Project (Figure 1).

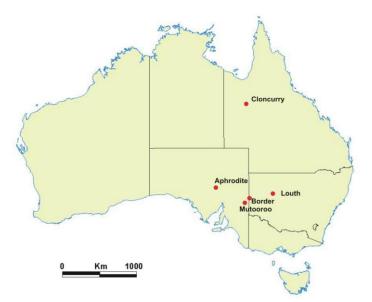


Figure 1: Location of Minotaur's 4th Quarter drill programs



MINOTAUR EXPLORATION LTD

The Aphrodite IOCG Project

Aphrodite is a significant, 6 kilometre-long, gravity-only target interpreted to represent a number of subvertical hydrothermal, haematite-rich breccias pipes. Initial drillhole AS09D03 drilled to a depth of 804 metres in 2009, intersected highly altered basement rocks cut by late-stage veinlets containing carbonate, fluorite, haematite bornite and chalcopyrite. Alteration and veining are indicative of a fertile IOCG hydrothermal system in the near vicinity.

Subsequent more detailed geophysical surveys resulted in a significant shift of the target and a new drillhole is now being collared 600m to the southwest of AS09D03 (Figures 2, 3). Diamond drilling is expected to continue for approximately 3 weeks, followed by core cutting and assaying as appropriate.

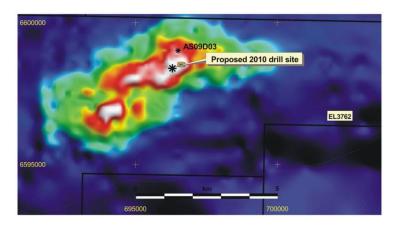


Figure 2: Gravity image of Aphrodite Target and proposed drillhole 600m south of AS09D03



Figure 3:Spudding drillhole AS10D04

For further information contact:

Andrew Woskett (Managing Director) or Tony Belperio (Exploration Director) Minotaur Exploration Ltd tel: 08 8366-6000