



St Barbara
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Significant gold intersection at Copperhead, Southern Cross, WA

Recent drilling at Copperhead, approximately 85km to the north of St Barbara's mining operations at Marvel Loch, Southern Cross, in Western Australia, has provided encouraging initial results, intersecting 22.3m @ 7.6 grams per tonne of gold (g/t Au) (including 11.1m @ 12.6g/t Au) from 784.6m to 806.9m down-hole interval.



The former Copperhead mine was one of the largest mines in the Yilgarn Greenstone belt and has a long history of gold production commencing in 1909. It is estimated that historically Copperhead mine produced over 1.5 million ounces of gold from 13 million tonnes of ore.



The Copperhead deposit comprises three lode series, namely the Western Series, Southern Series and Northern Series, each of which contributed to mine production from historic open cut and underground operations. The Northern and Southern Series lodes were both mined to approximately 670 metres below surface (mbs). The Western Series lode was mined from surface to a depth of approximately 150mbs, but underground development at the time indicated its possible extension to at least 600mbs. Recent remodelling by St Barbara of historic data has indicated the likely continuation of all lodes to depths in excess of 800mbs (refer Figures 2 and 3).



St Barbara's immediate drilling objective at Copperhead is to demonstrate the possible extension of both the Northern Series and high grade Southern Series lodes by directional drilling, and to define a high grade zone within the un-mined Western Series lode upon which a potential underground mining operation could commence, prior to reaching the Northern and Southern Series lodes at depth. Ongoing drilling will continue in June 2011.

Drilling to date has included the completion of three diamond holes which have intersected the lode system at depths ranging from 750 to 950mbs. Holes CHR005 and CHR002B/C returned lode intersections with low level gold values and are interpreted to have passed through marginal sections of a tightly folded lode system.

The most recent drill hole, CHR002D, encountered a significant high grade zone within the Western Series lode, intersecting 22.3m @ 7.6g/t Au (including 11.1m @ 12.6g/t Au with visible gold) from 784.6m to 806.9m down-hole thickness. This result is considered to be highly encouraging, indicating potentially at least a 700m extension of the Western Series which is yet to be delineated by further drilling.

The area surrounding Copperhead is home to several producing mines including Catalpa's Edna May operations, as illustrated in Figure 1. On 13 May 2011 St Barbara announced a proposal to merge with Catalpa Resources Limited.

A handwritten signature in black ink, appearing to read 'Tim Lehany', on a light-colored background.

Tim Lehany

Managing Director and Chief Executive Officer

23 May 2011

Figure 1: Map of Southern Cross Region, Western Australia.

St Barbara holds most of the prospective land positions on the greenstone belt in the Southern Cross district, a highly mineralised region in the Eastern Goldfields of Western Australia. Priority targets are around historic mining operations to the north of Marvel Loch at Copperhead, Corinthian and Frasers South.

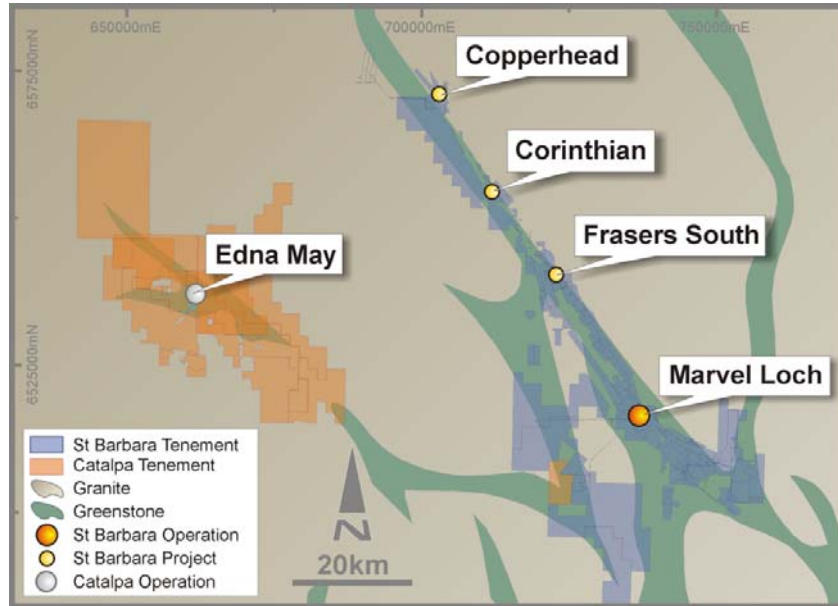


Figure 2: Plan view of the Copperhead Deposit, Western Australia.

Target lodes consist of the Western Series Banded Iron Formation (BIF), Southern Series and Northern Series, each of which contributed to historic mine production from open cut and underground operations.

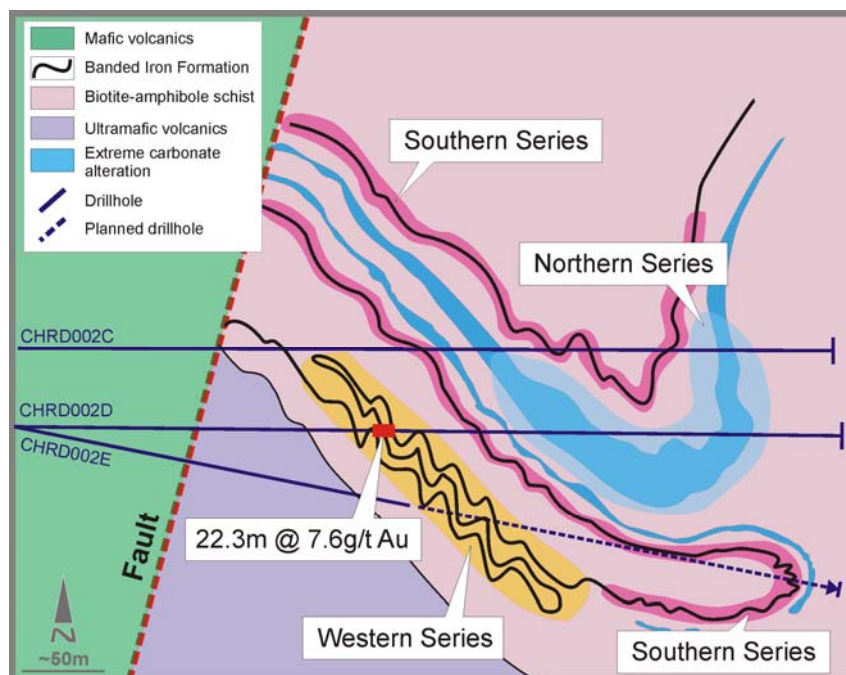
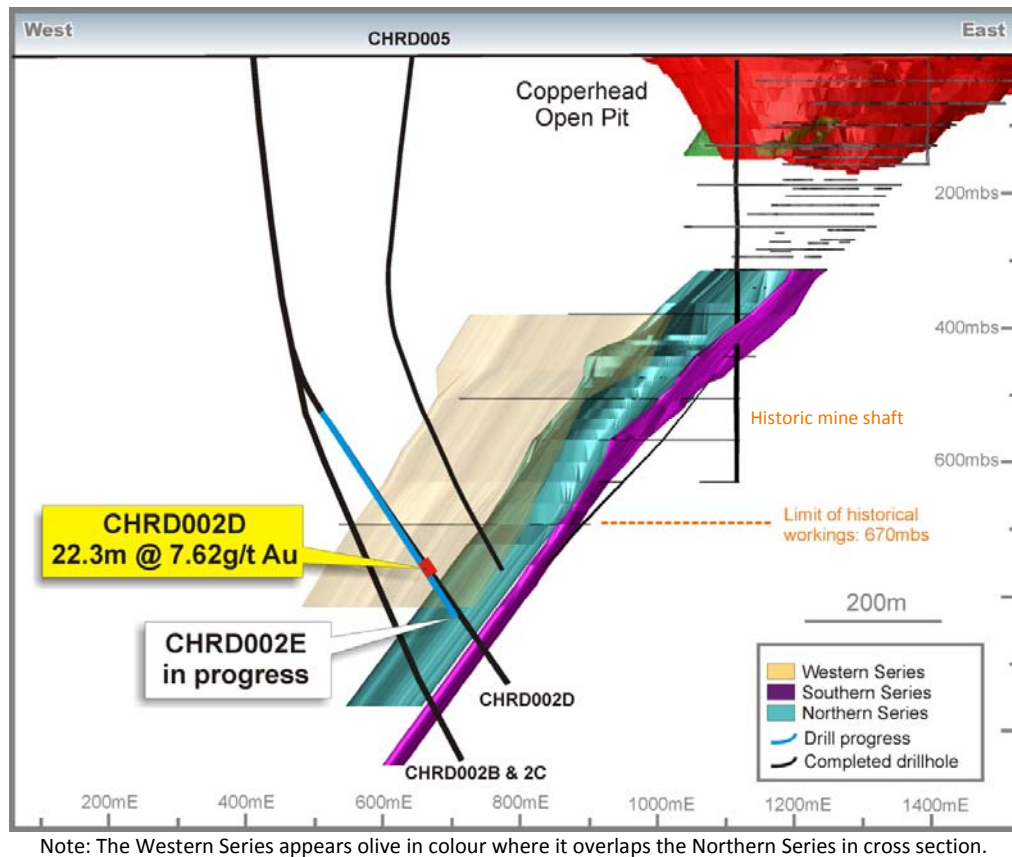


Figure 3: Cross-section of drilling at Copperhead, Western Australia.



Competent Persons Statement

References to Exploration Results including significant gold intersections and geological interpretations contained in this report have been compiled by Mr Phillip Uttley. Mr Uttley is a Fellow of The Australasian Institute of Mining and Metallurgy and is a full time employee of the company. Mr Uttley has sufficient experience relevant to the style of mineralisation, type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person in accordance with The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, December 2004 (JORC Code). Mr Uttley consents to the inclusion in the report of the matters based on his information, in the form and context in which they appear.