

# ASX ANNOUNCEMENT

## Chalice confirms high gold prospectivity over 10km of strike



Chalice Gold Mines Limited ABN 47 116 648 956

22 July 2010

**Chalice Gold Mines Limited** (ASX: **CHN**) is pleased to advise that the results from a recently completed regional sampling program from within the Zara Project in Eritrea have returned compelling results.

The highly promising finding stems from samples collected from streams that lie along strike from the flagship Koka Gold Deposit ("Koka"). The streams emanate from several major drainages, highlighting pronounced gold anomalism over a strike length of at least 10km.

These anomalies are not related to previously known gold occurrences (Figure 1), highlighting the significant prospectivity for further gold deposits at the Zara Project.

A feasibility study released last week on the development of Koka found it would be robust and viable based on production of 104,000 ounces of gold a year over seven years. Cash costs would average US\$338 an ounce. Further near mine discoveries will significantly add to the already solid economics of Koka.

In the latest results, a total of 59 samples were collected as part of a Bulk Leach Extractable Gold (BLEG) drainage sampling program completed over the Zara North and Zara South Prospecting Licenses.

Six samples contained greater than 10 parts per billion (ppb) gold, with the best sample returning 362ppb (Table 1) gold. A further seven samples gave values of between five and 10ppb gold, a level still considered anomalous.

The high-grade nature of these samples and their value as an indicator of extensive gold mineralisation is highlighted by the fact that similar sampling conducted around the Koka deposit returned a highest value of 75ppb gold.

The highest value of 362ppb from the recent program also represents the highest value obtained to date from all of the Zara Project BLEG samples and is an order of magnitude higher than most of those obtained in the lead up to the Koka discovery.

Significantly, the exploration potential is enhanced by the fact that this BLEG program has been the first to sample the areas showing anomalous results.



### INVESTMENT HIGHLIGHTS

High grade Indicated gold Resource (840,000 oz @ 5.3 g/t gold)

Feasibility Study completed:

- Low cash costs of \$338/oz
- 7 year mine life at >100,000 oz average production per year

Drilling at near mine Konate Prospect in progress

Large unexplored ground position in the Arabian Nubian Shield

[www.chalicegold.com](http://www.chalicegold.com)

BLEG samples greater than 10ppb gold			BLEG samples 5 to 10 ppb gold		
Sample number and PL	Value/ppb		Sample number and PL	Value/ppb	
540483	Zara South	14.8	540462	Zara South	7.36
540490	Zara North	11.36	540475	Zara South	9.16
540491	Zara North	52.8	540482	Zara South	6.18
540492	Zara North	82.4	540489	Zara North	5.74
540493	Zara North	362.0	540499	Zara North	6.4
540494	Zara North	61.4	540505	Zara North	9.1
			540506	Zara North	6.14

**Table 1: Significant BLEG results for Chalice Gold Zara Project**

The highest gold values from the BLEG samples show clustering in the northern drainages of Zara North, highlighting the substantial exploration potential for the areas upstream of the samples. Importantly, the best values have been obtained from streams draining from the same north-south trending package of rocks that hosts Koka.

A program of geological mapping, rock chip sampling and infill BLEG stream sediment sampling will now be undertaken upstream of the anomalous values to identify the sources of the anomalies.



DR DOUG JONES  
Managing Director

**For further information, please contact:**

Mr Tim Goyder, Executive Chairman  
Dr Doug Jones, Managing Director  
Chalice Gold Mines Limited – Telephone (+618) 9322 3960

**For media inquiries, please contact:**

Nicholas Read  
Read Corporate  
Telephone: (+618) 9388 1474

**Investor Relations (North America):**

Toni Davies  
Chalice Gold Mines Limited – Telephone +1 416 5664378

**Competent Persons Statement**

The information in this report that relates to Exploration Results is based on information compiled by Dr Doug Jones, a full-time employee and Director of Chalice Gold Mines Limited, who is a Member of the Australasian Institute of Mining and Metallurgy and is a Chartered Professional Geologist. Dr Jones has sufficient experience in the field of activity being reported to qualify as a Competent Person as defined in the 2004 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves, and consents to the release of information in the form and context in which it appears here.

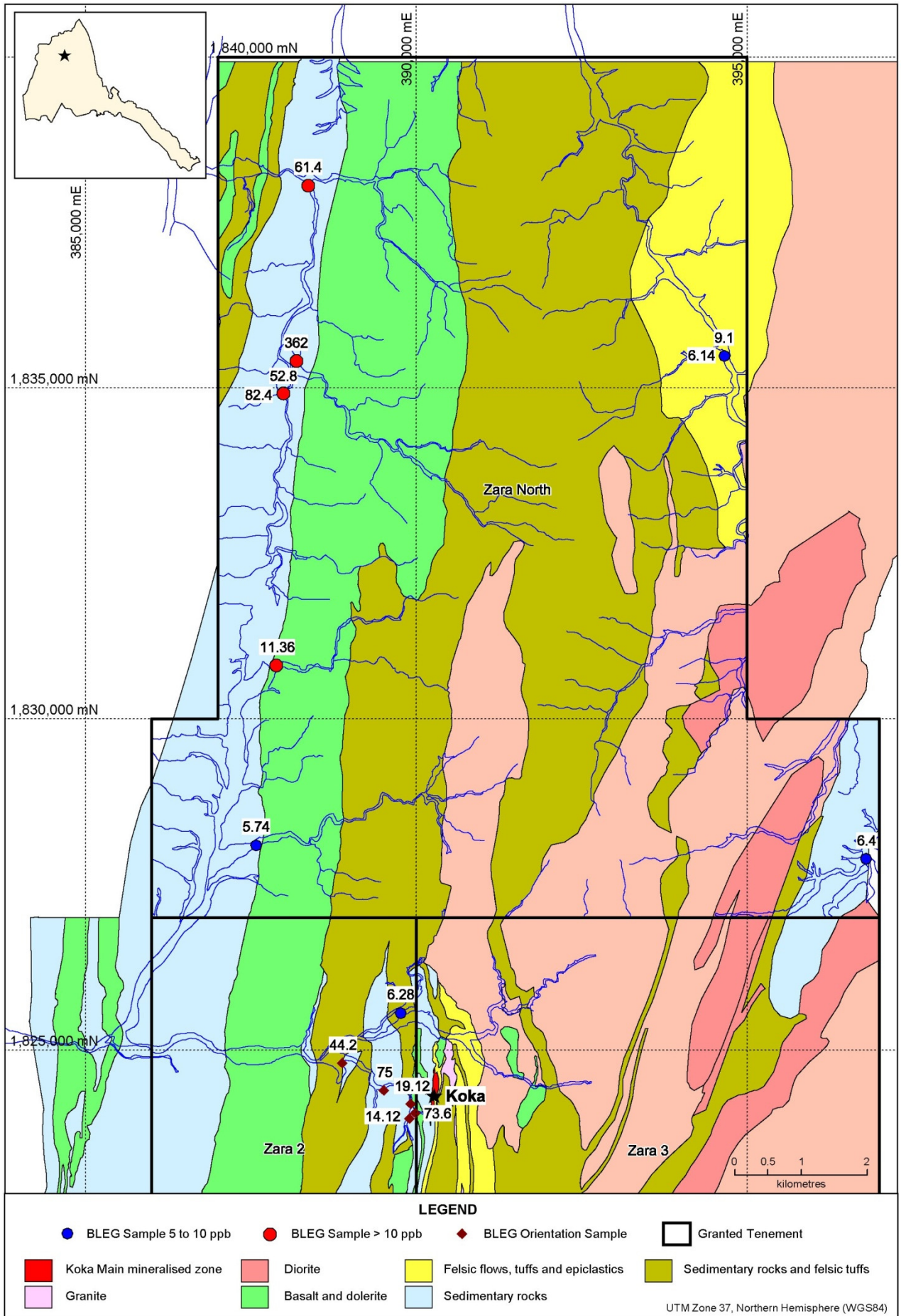


Figure 1: Regional geological map of the Zara Project showing significant BLEG sampling results