

ASX ANNOUNCEMENT

First Assays from Koka Drilling



Chalice Gold Mines Limited ABN 47 116 648 956

22 December 2009

Highlights

- First assays from latest infill drilling confirm widths, grades and continuity of the rich Koka Gold Deposit at the Zara Project in Eritrea.
- Intersections include 31 metres at 6.48 grams of gold per tonne
- Narrow high grade zones intersected in the hangingwall grading up to 100.5 grams of gold per tonne
- Close to 50% of infill drilling program now completed with assays pending.



Chalice Gold Mines Limited (ASX: **CHN**) is pleased to advise that the first results from the latest round of infill drilling at its Koka Gold Deposit in Eritrea have highlighted the continuity and high grade nature of the ore body.

The results from diamond drill hole ZARD 128 intersected the Koka Main Zone between 44 and 75 metres down-hole, with 31 metres of quartz stockwork mineralisation grading 6.48 grams of gold per tonne. This included intervals of up to 2 metres grading 38.2 grams of gold per tonne (Table 1).

Additional narrow intervals of high grade mineralisation were also intersected in the hanging wall, with up to 1 metre grading 100.5 grading grams of gold per tonne encountered.

These assays are the first from a planned thirty one (31) diamond drill hole infill programme, designed to bring further confidence to the high grade mineralisation of the Koka Main Zone and to be used as part of the final resource estimation for the Koka Bankable Feasibility Study.

Koka, which is the flagship deposit at Chalice's 80 per cent-owned Zara Project, has JORC resources of 944,000 ounces.

A total of 13 diamond drill holes have now been completed and further assay results will be released to the market as they become available (Figure 2).

INVESTMENT HIGHLIGHTS

High grade gold deposit
(944,000 oz @ 5.8 g/t)

Scoping study completed

Feasibility study by Mid-2010

Medium term production potential

Large underexplored ground position with potential for discovery of additional resources

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Chalice Managing Director Doug Jones said: “The results from this first hole have further demonstrated the overall continuity of the Koka ore body and we expect additional good results over the coming weeks as the programme advances and we start to receive a steady flow of assays”.

The current resource estimate of 944,000oz @ 5.8g/t is based on a 40 metre x 20 metre drill pattern and the current programme will infill most of the Koka Main Zone to 20 metres x 20 metres. The deposit extends over 570 metres along strike and the resource remains open both along strike to the south and at depth.

Following completion of this infill drilling program the drill rigs will focus on exploration of nearby targets, particularly the Koka South and Koka East zones.

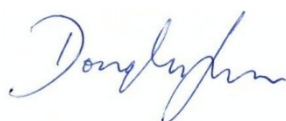
Table 1: Significant Koka Prospect Diamond Drill Assay Intercepts:

Hole	Depth (m)	North (Local)	East (Local)	Azimuth (°)	Dip (°)	From (m)	To (m)	Interval (m)	Gold (g/t)
ZARD128	170.1	9740	4960	102	-52	44	75	31	6.48
including						44	46	2	38.22
including						52	55	3	18.68
						79	82	3	7.78
						104	108	4	3.25
						116	117	1	31.48
						143	144	1	100.54

Note: The metres quoted are down hole metres and gold grades are uncut with up to 2 metres of internal dilution (<0.25g/t gold). All samples are prepared at the Africa Horn Laboratory in Asmara, Eritrea and then analysed by Genalysis Laboratories in Perth, Western Australia.

About the Zara Gold Project

The Zara Joint Venture comprises four Exploration Licenses and two Prospecting Licenses covering an area of 615km² situated in northern Eritrea, approximately 160km northwest of Asmara city (Figure 1). Chalice holds an 80% interest in the project with the remaining 20% held by Dragon Mining (ASX: DRA). The Koka Gold Deposit within the project contains an estimated resource of 5 million tonnes of ore containing 944,000ozs gold, grading 5.8grams of gold per tonne. Metallurgical test work indicates +95% recovery with ~60% recovered by gravity.



DR DOUG JONES
Managing Director

22 December 2009

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.

The Independent Resource Estimate for the Koka deposit was prepared by Mr Brian Wolfe, whilst employed as a Specialist Resource Geologist for Coffey Mining Pty Ltd. Mr Wolfe, who is a Member of the Australasian Institute of Mining and Metallurgy, has sufficient experience in the field of Resource Estimation 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.

The break-down between Indicated and Inferred Resource categories at Koka is as shown in the Table below.

Category	Lower Grade cut-off (g/t)	Tonnes (Mt)	Gold (g/t)	Metal (Koz)
Indicated	1.2	4.55	5.9	867
Inferred	1.2	0.49	4.9	77
TOTAL	1.2	5.04	5.8	944

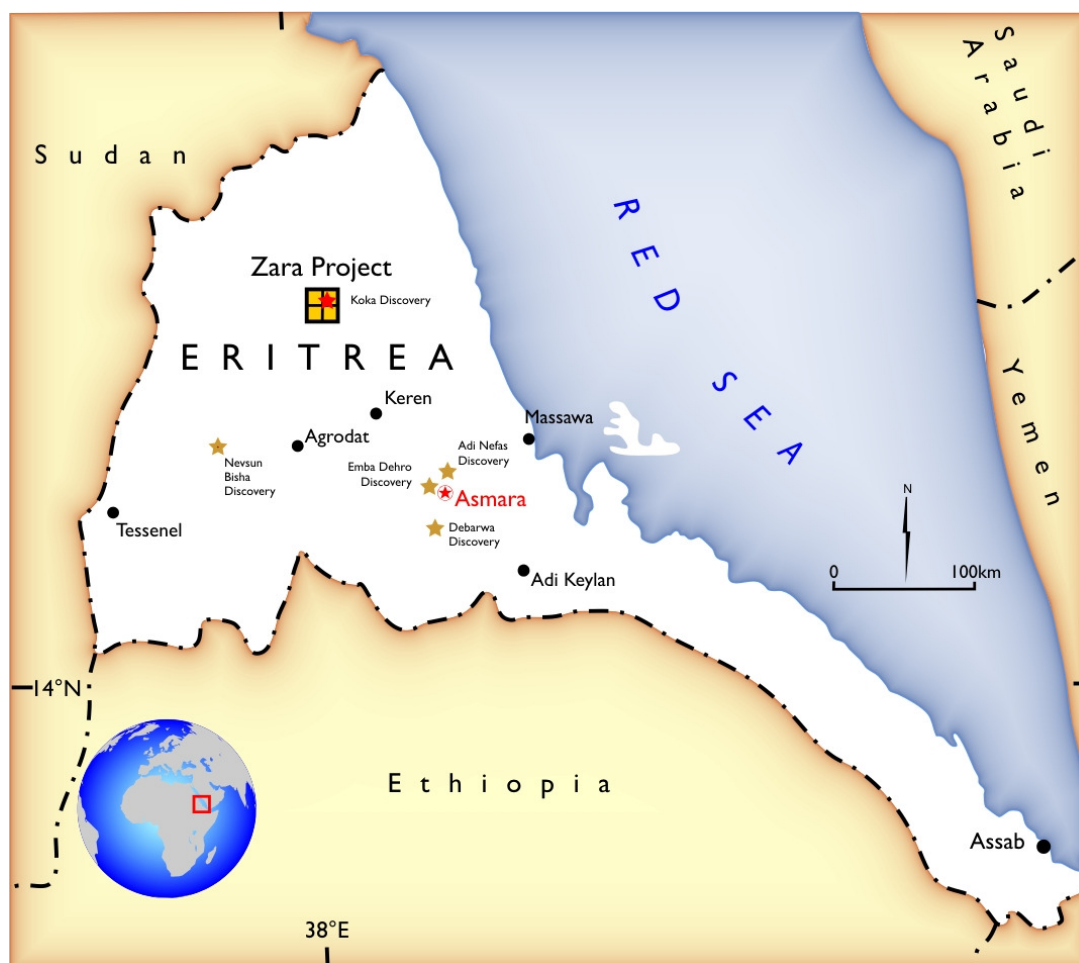


Figure 1 – Zara Project Location Map

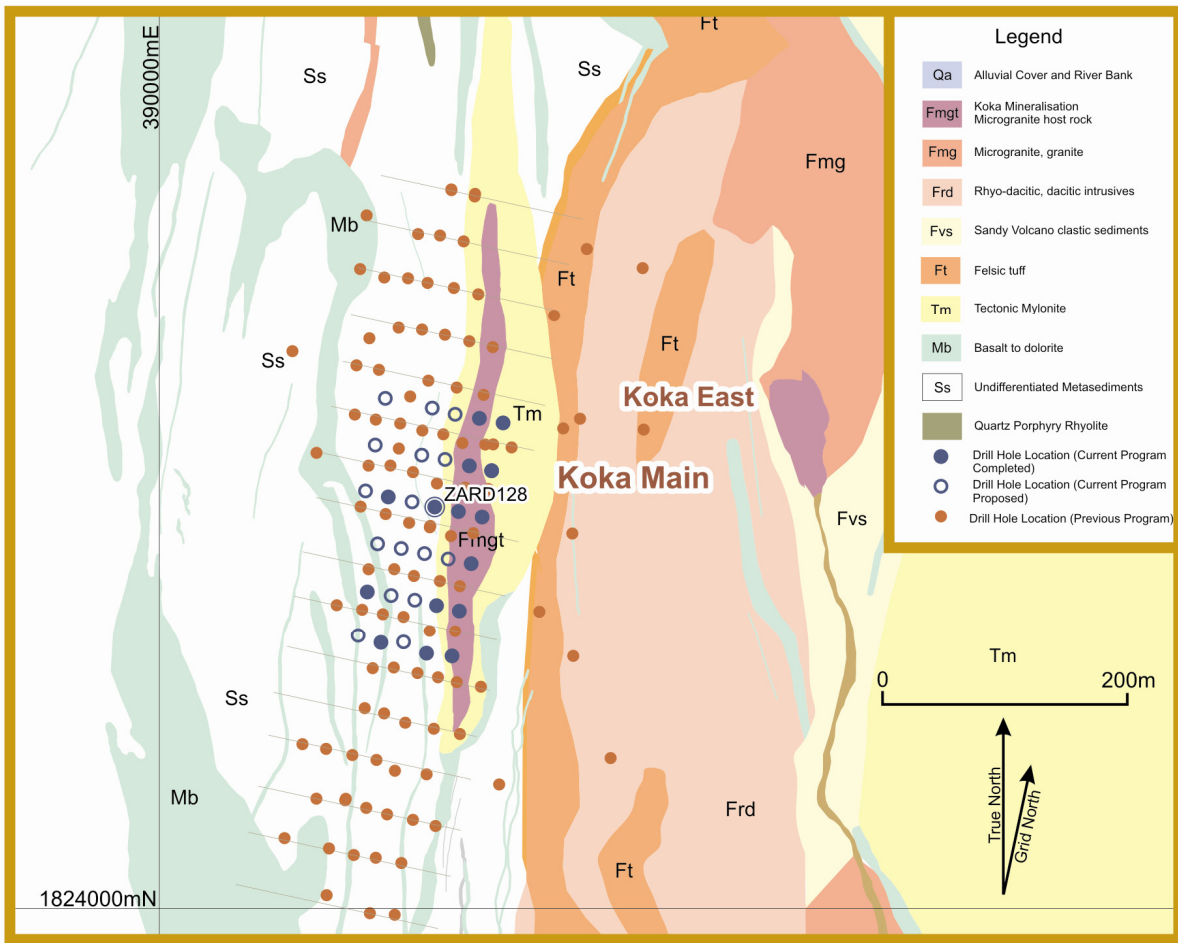


Figure 2 – Zara Project – Koka Drill Hole Location Plan