

ASX ANNOUNCEMENT

Koka resource upgrade imminent after more high-grade results



Chalice Gold Mines Limited ABN 47 116 648 956

31 March 2010

Highlights

- Fresh infill drilling results provide more evidence of the high-grade mineralisation at Koka
- Latest results will form part of a new resource estimate (currently 944,000oz) expected next quarter
- Two rigs drilling double shifts at nearby Koka East Zone with results expected over coming weeks
- Drilling to start shortly at Koka South Zone



Chalice Gold Mines Limited (ASX: **CHN**) is pleased to advise that a resource upgrade at the Koka deposit at its Zara Gold Project in Eritrea is imminent following the receipt of more high-grade infill drilling results.

The new results, which are the last from the infill drilling program at Koka, come from diamond drill holes ZARD 143 and ZARD145 to 157 from within the Koka Main Zone. Significant intersections included:

- 7 metres grading 18.71 grams of gold per tonne in ZARD143;
- 5 metres grading 40.28 grams of gold per tonne in ZARD146;
- 23 metres grading 5.58 grams of gold per tonne in ZARD147B;
- 21 metres grading 9.30 grams of gold per tonne in ZARD147B;
- 16 metres grading 11.07 grams of gold per tonne in ZARD149, and;
- 9 metres grading 6.28 grams gold per tonne in ZARD153B.

A complete tabulation of significant results is provided in Table 1.

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

www.chalicegold.com

Assays have now been received from all 30 holes of a ~5,000 metre infill diamond drilling 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 estimate for the Koka Bankable Feasibility Study. All data is now undergoing validation as part of the revised resource estimate, which will be released during the next quarter (Figure 2).

Two diamond drill rigs are now drilling on double shift at the Koka East Zone, which lies 80-100 metres into the hanging wall of Koka Main Zone, with results pending from the seven holes completed to date. Site preparation for drilling of the Koka South Zone is in progress with drilling expected to commence there shortly.

Koka Main is the flagship gold deposit at Chalice's 80 per cent-owned Zara Project, which has a JORC compliant Indicated and Inferred resources of 944,000 ounces.

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)
ZARD143	194	9780	4960	102	-50	27	30	3	1.46
						46	53	7	18.71
including						47	50	3	39.04
						63	68	5	2.85
						76	78	2	43.99
						97	101	4	6.51
						160	161	1	15.93
ZARD145	173.4	9819	4956	102	-50	28	30	2	51.35
						46	51	5	2.23
						110	112	2	43.5
including						111	112	1	101.00
						123	126	3	4.97
ZARD146	170.5	9620	4965	102	-52	69	74	5	40.28
including						69	72	3	66.59
						116	118	2	8.65
ZARD147B	230.4	9780	4940	102	-51	52	75	23	5.58
including						53	54	1	36.93
including						73	74	1	27.45
						95	100	5	3.27
						106	127	21	9.30
including						108	109	1	73.75
including						113	114	1	28.54
including						117	118	1	53.23
including						123	124	1	14.58
						132	134	2	7.32
						141	146	5	3.51
						157	160	3	41.66
including						157	158	1	121.20
						183	186	3	8.73

ZARD148	167	9659	4962	102	-52	43	58	15	2.14
including						57	58	1	19.65
						62	64	2	4.91
						88	92	6	4.98
						116	117	1	19.72
ZARD149	216.6	9821	4938	102	-50	45	52	7	3.05
						82	98	16	11.07
including						82	84	2	21.52
including						88	89	1	37.82
including						94	95	1	81.54
						107	125	18	5.30
including						111	112	1	39.13
including						117	118	1	16.73
						132	133	1	9.81
						157	158	1	37.81
						166	169	3	4.26
						173	174	1	37.69
ZARD150	171.8	9700	4961	102	-50	68	75	7	4.02
						92	96	4	5.35
ZARD152	265.9	9740	4910	102	-50	137	138	1	6.09
ZARD153B	129.5	9698	4981	102	-50	35	40	5	3.79
						45	54	9	6.28
including						51	52	1	28.97
						69	77	8	2.31
						83	87	4	11.30
including						85	86	1	42.25
						116	117	1	13.68
ZARD154	188.4	9698	4942	102	-50	96	102	6	4.84
						123	124	1	9.52
ZARD155B	204.1	9660	4939	102	-52	107	109	2	20.63
						124	125	1	35.67
						146	147	1	18.66
ZARD156	229	9821	4901	102	-50	102	104	2	9.43
						144	148	4	2.05
						159	163	4	2.04
ZARD157	201.7	9739	4940	102	-52	77	81	4	24.89
including						80	81	1	84.63
						119	125	6	2.95

Note 1: 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 615 km² situated in northern Eritrea, approximately 160 km northwest of Asmara city (Figure 1). Chalice holds an 80% interest in the project and has an option to acquire the remaining 20% held by Dragon Mining (ASX: DRA). At a decision to mine the Government of Eritrea has a statutory right

to a 10% free carried interest and a further right, at its election, to purchase a further 30% based on an independently assessed NPV.

The Koka Gold Deposit within the Zara Joint Venture contains an estimated resource of 5 million tonnes of ore containing 944,000ozs gold, grading 5.8 grams of gold per tonne. Metallurgical test work indicates overall recoveries exceeding 95% with ~60% recovered by gravity.



DR DOUG JONES
Managing Director

31 March 2010

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

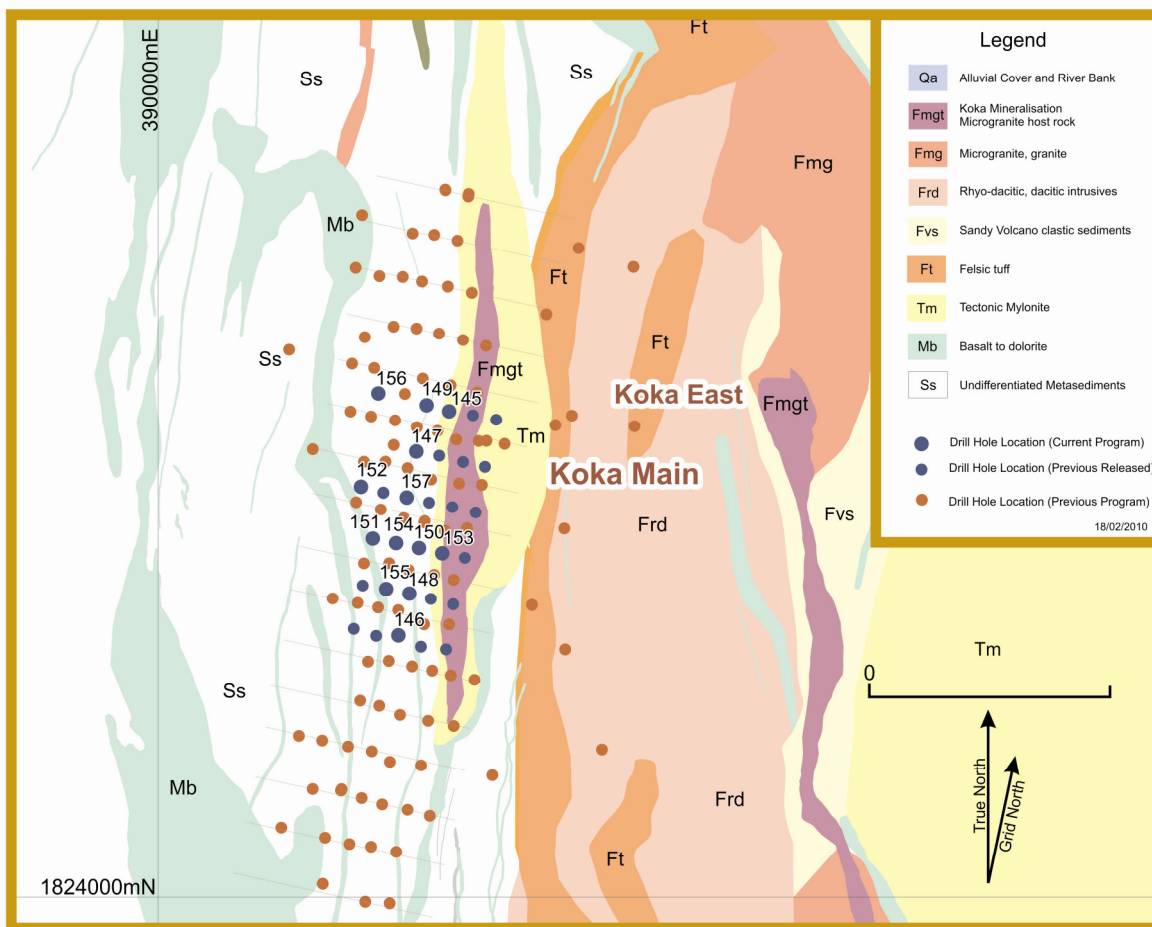


Figure 2 – Zara Project – Koka Drill Hole Location Plan