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5 December 2011

Australian Securities Exchange Limited Exchange Plaza 2 The Esplanade Perth WA 6000

**Dear Sirs** 

#### **Corporate Presentation**

The attached presentation will be presented in its entirety at the Mine Africa Conference in London today, and an abbreviated version will be presented at Mines and Money London on 6 December 2011 by our Managing Director Dr Douglas Jones.

Yours faithfully

RICHARD HACKER Company Secretary

Molecker



# Developing a High Grade Gold Mine in Eritrea

**Corporate Presentation December 2011** 

TSX: CXN ASX: CHN

www.chalicegold.com

# Disclaimer and Competent Persons Statement chalice

- This presentation does not include all available Information on Chalice Gold Mines Limited and should not be used in isolation as a guide to investing in the Company. Any potential investor should also refer to Chalice Gold Mines Limited Annual Reports and to ASX releases and take independent professional advice before considering investing in the Company.
- For further information about Chalice Gold Mines Limited, visit the website at www.chalicegold.com
- 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 Mineral Resource estimate was prepared by Mr. John Tyrrell who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Tyrrell is a full time employee of AMC and has sufficient experience in gold resource estimation to act as Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code)'. Mr. Tyrrell consents to the inclusion of this information in the form and context in which it appears.
- The information in this statement of Ore Reserves is based on information compiled by Mr David Lee who is a Member of the Australasian Institute of Mining and Metallurgy and a full time employee of AMC. Mr Lee has sufficient relevant experience to be a Competent Person as defined in the JORC Code. Mr Lee consents to the inclusion of this information in the form and context in which it appears.

# **Chalice Summary ASX: CHN; TSX: CXN**



#### **Mine Development and Exploration in Eritrea**

·
High-grade, low cost gold development project (Koka)*:
☐ Open pittable 760,000 oz Probable Reserve @ 5.1g/t Au
☐ Forecast gold production of 104,000 oz p.a. over 7 years for Koka alone
☐ Lowest quartile cash operating costs of global cost curve - US\$ 338/oz
☐ Mining Agreement signed
☐ First gold pour estimated late 2013
Exploration Upside:
☐ Located in the highly prospective and underexplored Arabian-Nubian Shield
☐ 1372 km² of granted tenements
☐ Drilling underway to test targets in 'mine corridor'
☐ Significant new high-grade discovery at Koka South – drill-out underway
☐ Major regional exploration program underway

<sup>\* 60%</sup> owned by Chalice, 40% by ENAMCO (state-owned mining entity)

#### Corporate Snapshot ASX: CHN; TSX: CXN



#### **Capital Structure**

Share price	A\$0.30
Shares on issue	250 million
Market capitalisation	~A\$75 million
Options on issue	7 million
Debt	-
Cash	~A\$6.7 million



#### **Board & Senior Management**

Tim Goyder Executive Chairman

Dr Doug Jones Managing Director

Anthony Kiernan Non-Executive

Stephen Quin Non-Executive

Juan Jeffery COO

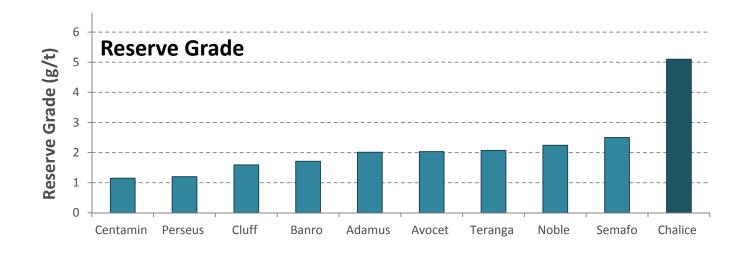
Richard Hacker CFO

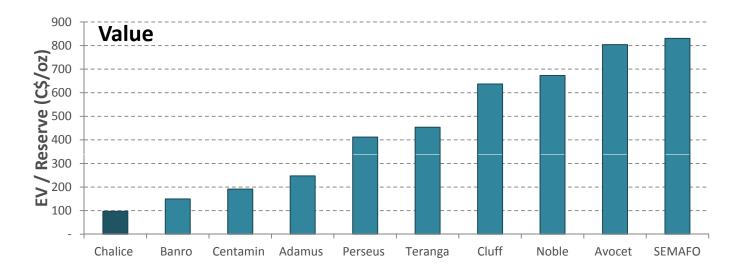
Dr Harry Wilhemij Exploration Manager

<b>Substantial Sharehold</b>	ers
Franklin Resources	12.4%
Directors & Management	12.4%
Lujeta Pty Ltd	7.8%
City Securities	6.1%
Acorn Capital	5.0%

## **Peer Comparisons**

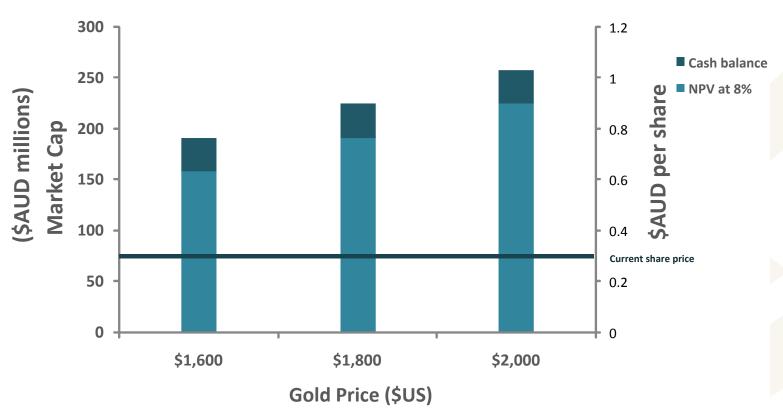






## **NPV vs Market Cap**





Cash balance: Approximately US\$ 9 million + US\$ 32 million ENAMCO payment (due on or before January 27, 2012),

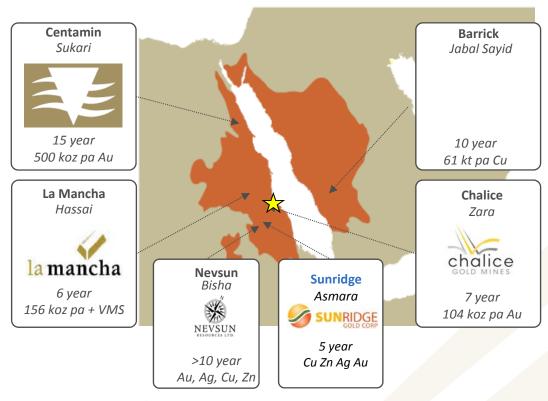
less taxes payable

NPV: Chalice's 60% share at 8% discount rate, based on 2010 Feasibility Study

US/AU forex rate: 1:1

#### The Arabian Nubian Shield

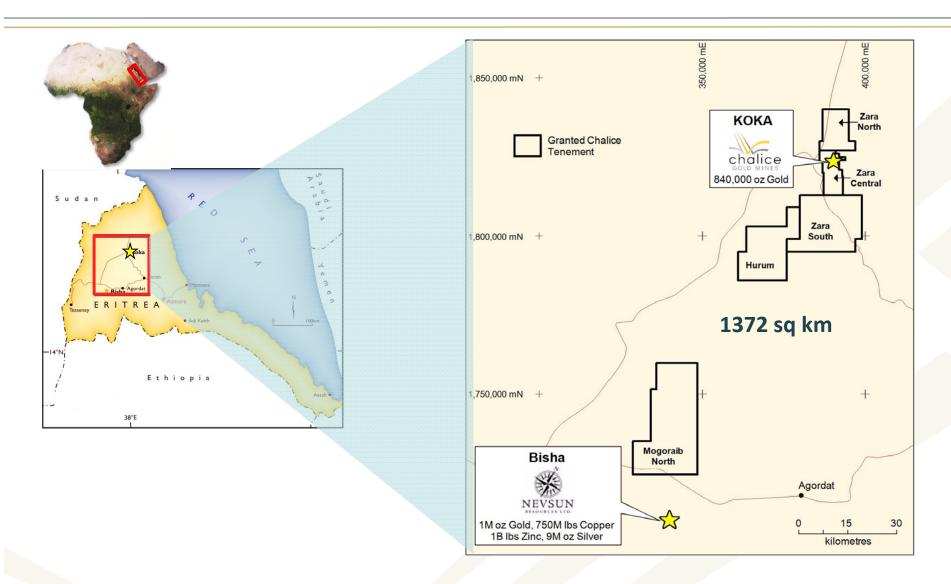




- ☐ Long mining history (>1,000 recorded ancient copper and gold mines)
- ☐ Minimal modern exploration
- ☐ Hosts resources of +20Moz gold
- World-class projects now being developed

#### **Current Ground Position**





# **Koka Gold Deposit**



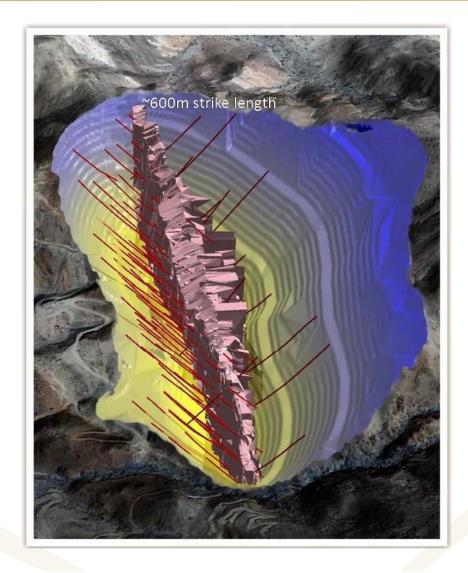






# **Koka Feasibility – Key Metrics**



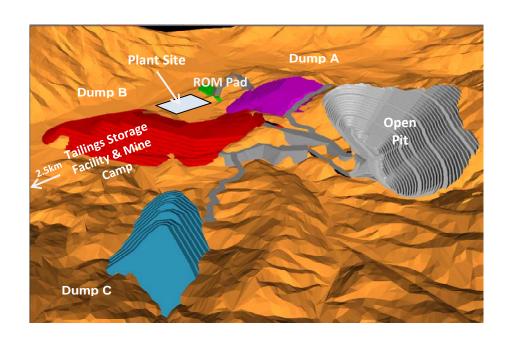


Gold price base case	US\$900
Ore milled	4.6 Mt
Grade	5.10g/t Au
Strip ratio	10.4:1
Gold recovery	96.30%
Life of mine	7 years
Mill throughput	700,000tpa
Average annual gold production	104,000 oz
Total gold produced	730,000 oz
Сарех	US\$122M
Average total cash cost per oz Au	US\$338

## **Koka Gold Mines – Development Strategy**



- Q4/2013 production target based on original feasibility
- □ Process and schedule optimisation through EPC contract strategy and contractor solutions (not goldplated....'fit for purpose')
- ☐ EPC Contract lump sum and target price
- Contractor accountable for turn-key solution and shares risk and reward
- ☐ Preferred contractor nominated subject to documentation

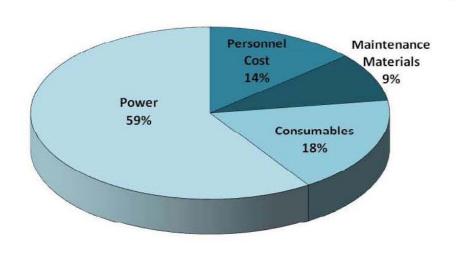


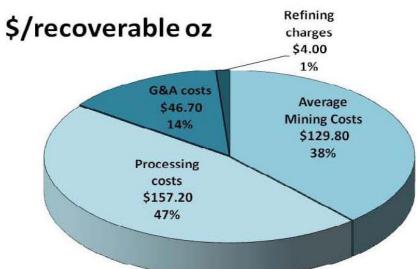
# **Koka – Feasibility Study Cost Profile**



Operating Cost Estimates		
Average mining costs (incl. pre-strip)	\$/t mined	2.01
Processing cost	\$/t milled	24.78
General and administration	\$/t milled	7.36
Refining charges	\$/t milled	0.63

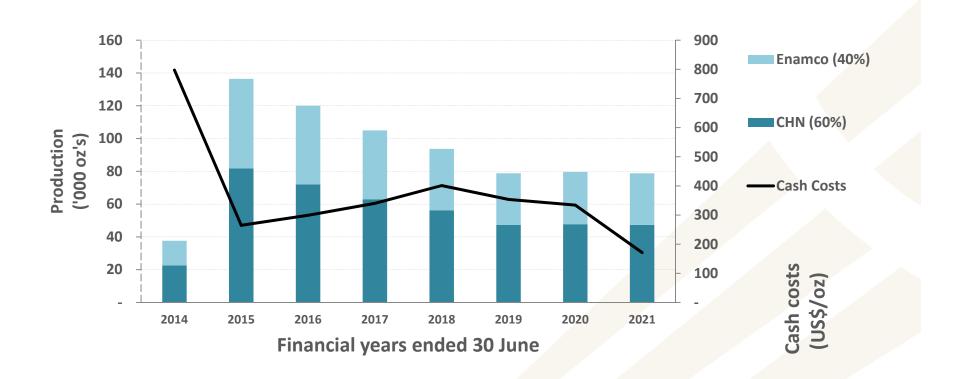
#### Processing costs (\$/t milled)





## **Koka – Feasibility Study Production Profile**





2.2 years payback

## **Koka generates significant cash for Chalice**



	2014	2015	2016	2017	2018	2019	2020	2021	Total
	US\$'m								
Revenue	38	139	120	101	90	76	76	76	716
Cash Costs	(19)	(23)	(22)	(22)	(23)	(17)	(16)	(8)	(150)
Royalties	(2)	(6)	(6)	(5)	(5)	(4)	(4)	(4)	(36)
Taxes	0	(27)	(26)	(19)	(24)	(21)	(22)	(25)	(164)
Total Net Chalice Cashflows (60%)	17	83	66	55	38	34	34	39	366

#### **Assumptions:**

Relates to Chalice's 60% share of cash flows US\$ 1600 gold price Uses 2010 Koka Feasibility Study

Financial years ended 30 June

Excludes Chalice's 2/3rd share of capital expenditure (project total: \$131m, Chalice's share \$87m)

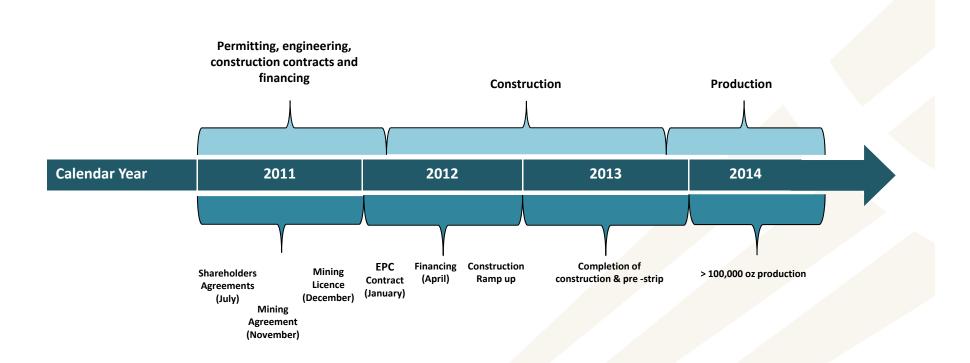
## **Koka Gold Mine – Financing Strategy**



□ Seeking a majority debt financing solution
 □ Aim is to limit equity component of financing
 □ Multiple interested financiers identified
 □ Chalice share of overall development costs ~US\$100 million
 □ Net proceeds from ENAMCO sale may be contributed to funding requirement

# **Koka Development Schedule**

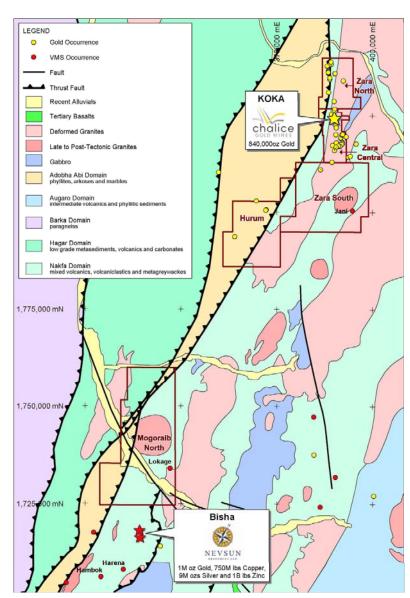




## **Eritrean Exploration Portfolio**

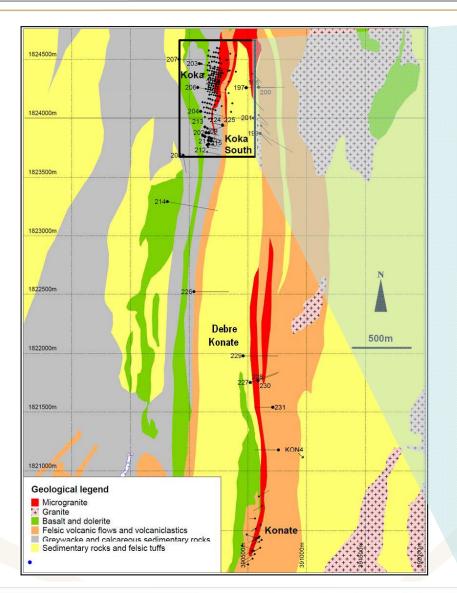


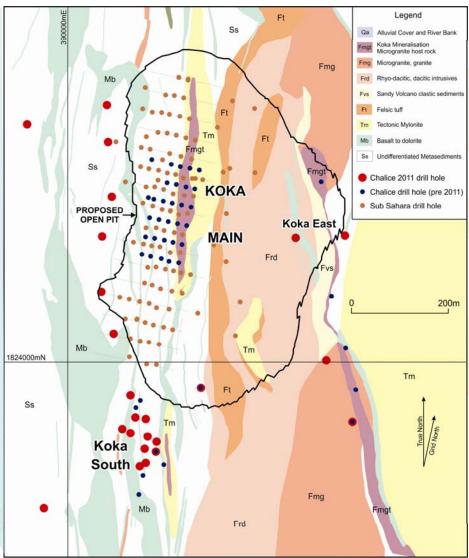
- **☐** Strategic Location
  - Properties straddle deep crustal-scale regional structure – gold 'fairway'
- **☐** Multiple high-grade gold targets
  - Koka South
  - Debre Tsaeda
  - Konate-Alidar
  - Zara North prospects
- ☐ Potential high tonnage, low-grade gold targets
  - Debre Konate
- ☐ Gold+base metal VMS targets
  - VTEM conductors on Mogoraib North
  - Jani prospect on Zara South



## **Koka-Konate Corridor – 2011 Drilling**



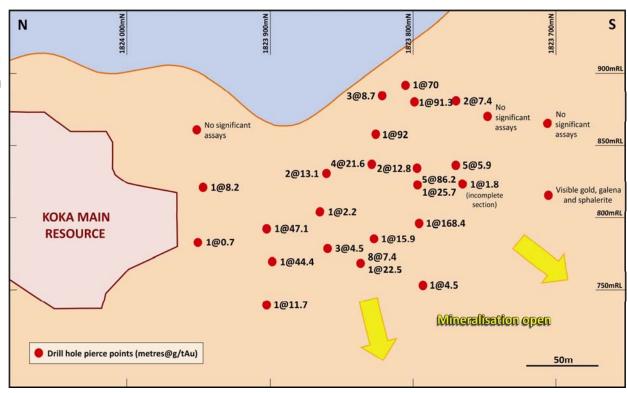




## **Koka South – Long Section**



- Narrow high grade system
- ☐ Drill-indicated strike length of 250m and open to south and at depth
- Drill results include:
  - 1m @168g/t Au
  - 5m @86.2g/t Au
  - 4m @29.6g/t Au
  - 8m @ 7.36g/t Au
- □ Diamond drilling ongoing until the end of 2011
- □ Conceptual exploration target of between 124,000 and 186,000 oz \*

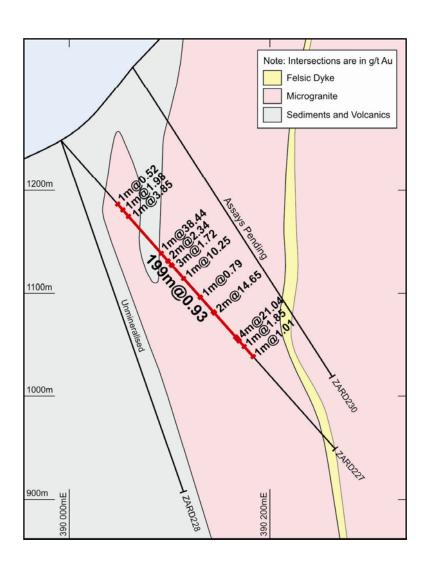


<sup>\*</sup> Assumptions include a strike length of 400m, depth of 200m, vein width of 2m, conceptual tonnes of ~384,000t, gold grade of between 10-15g/t. The potential quantity and grade is conceptual in nature. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

## Debre Konate – a new style of mineralisation? chalice

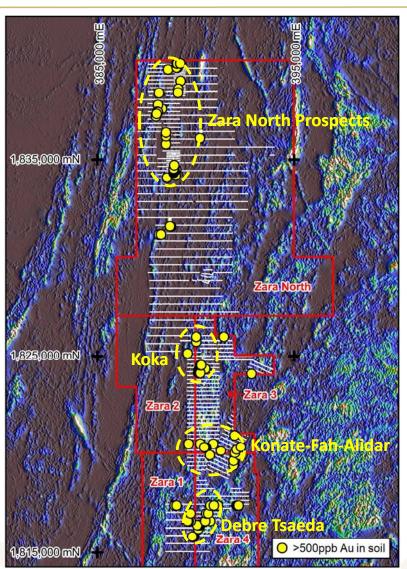


- Located 3km south of Koka within **Koka-Konate corridor**
- Coincident soil gold & lead anomalies, artisanal workings and IP resistivity target
- Multiple narrow mineralised veins intersected within broad alteration envelope
- Potential for large, low-grade, high tonnage target



# **Zara Tenements – Other Targets**





■ 3 - 8ppb Au
8 - 25ppb Au
25 - 75ppb Au
250 - 1000ppb Au
- 1,000ppb Au
- 1,000ppb Au
- 500m

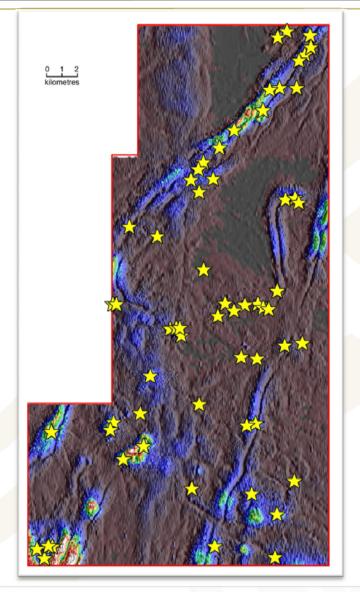
Debre Tsaeda Prospect – Soil Gold Geochemistry

Soil Gold Geochemistry on Analytic Signal Aeromagnetics

## **Mogoraib North Exploration Licence**



- □ Located ~10 km north of Nevsun's Bisha VHMS
   Project with similar geological setting
- □ VTEM survey completed mid 2011 ~3825 line kilometres
- Numerous bedrock conductor targets identified possible VHMS
- ☐ Follow-up ground geophysics and soil geochem underway to refine targets
- ☐ Drilling planned for early 2012



## **Summary**



- ☐ Low cost, high grade gold developer
- **☐** Production planned for late 2013
- ☐ Strategy to organically grow attributable production to >100,000 oz per year
- **☐** Aggressive exploration program underway



## **Analyst Coverage**



#### Australia

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Simon Tonkin
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#### **North America**

Haywood Securities Limited
Joe Mazumdar

**Stifel Nicolaus**Josh Wolfson

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#### Europe

Ambrian Partners Limited
Adam Kiley



## **Forward Looking Statements**



This document may contain forward-looking information within the meaning of Canadian securities legislation and forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 (collectively, forward-looking statements). These forward-looking statements are made as of the date of this document and Chalice Gold Mines Limited (the Company) does not intend, and does not assume any obligation, to update these forward-looking statements.

Forward-looking statements relate to future events or future performance and reflect Company management's expectations or beliefs regarding future events and include, but are not limited to, statements with respect to the estimation of mineral reserves and mineral resources, the realization of mineral reserve estimates, the likelihood of exploration success, the timing and amount of estimated future production, costs of production, capital expenditures, success of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims and limitations on insurance coverage. In certain cases, forward-looking statements can be identified by the use of words such as plans, expects or does not expect, is expected, budget, scheduled, estimates, forecasts, intends, anticipates or does not anticipate, or believes, or variations of such words and phrases or statements that certain actions, events or results may, could, would, might or will be taken, occur or be achieved or the negative of these terms or comparable terminology. By their very nature forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include, among others, risks related to actual results of current exploration activities; changes in project parameters as plans continue to be refined; future prices of mineral resources; possible variations in ore reserves, grade or recovery rates; accidents, labour disputes and other risks of the mining industry; delays in obtaining governmental approvals or financing or in the completion of development or construction activities; as well as those factors detailed from time to time in the Company's interim and annual financial statements and management's discussion and analysis of those statements, all of which are filed and available for review on SEDAR at sedar.com. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements.

Accordingly, readers should not place undue reliance on forward-looking statements.

## **Corporate Contact Details**



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## **Appendix 1: Eritrea Mining Act**



#### **Prospecting licence**

One year, not renewable & not transferrable Maximum size 100km<sup>2</sup>
Licence fee (US)\$33.33
Annual rental (US)\$3.33/km<sup>2</sup>

#### **Exploration licence**

3 year term
2 renewals for 1 year each - transferrable with approval
One quarter relinquishment of original licence area with each renewal
Maximum size 50km²
Licence fee (US)\$100
Annual rental (US)\$13.30/km²

#### Mining licence

Maximum of 20 years or life of deposit (whichever is shorter)
Renewable for 10 years
Maximum size 10km<sup>2</sup>
Licence fee is (US)\$400
Annual rental is (US)\$40/km<sup>2</sup>

#### **Royalties**

5% for precious metals and 3.5% for other metallic minerals

#### **Government Participation**

10% free-carried interest at the mining stage 30% participating interest acquired by Government based on fair value

#### **Taxes**

Corporate income tax 38%
20% flat tax on expatriate employee earnings
0.5% on all imports of machinery equipment, vehicles
and parts

No dividend tax

Straight line depreciation over 4 years with no salvage The right to carry forward operational losses and deduct them from gross income

# **Appendix 2: Joint Ownership Agreements with ENAMCO**

Signed July 27, 2011.
Chalice first in country to conclude partnership agreement with ENAMCO (as required by Mining Act). Represents a "green light" for financing & construction of the Koka Gold Project, subject to signing of Shareholder's Agreement and Mining License.
The Government of Eritrea, via the Eritrean National Mining Corporation (ENAMCO) acquired a 30% paid participating interest in the Koka Gold Project and surrounding exploration tenements (together "Zara Mining SC") for US\$ 34 million (due in January 2012).
Ownership in Zara Mining SC becomes Chalice (60% participating interest), ENAMCO (30% participating interest, 10% free carried interest). Ownership agreement excludes Hurum and Mogoraib North Licenses.
ENAMCO will, going forward, contribute 1/3 of capital costs of the mine, and 1/3 of exploration expenditures on surrounding exploration tenements.

## **Appendix 3: Eritrea Quick Facts**



- □ Independent since 1993
- □ Politics: transitional single party Republic
- □ Capital: Asmara
- ☐ Area: 121,144 square kilometers
- □ Population: ~5.9 Million
- □ Culture: 45% Islamic, 45% Coptic Christian, 10% Other
- ☐ Languages: Tigrinya, Arabic, Tigre, Afar, Kunama
- ☐ Business & Government language: English
- ☐ Legal system: mixed civil, customary, and Islamic religious law
- ☐ GDP: \$3.625 billion (2010 est.)
- ☐ GDP per Capita: U.S. \$700
- □ Exports: \$25 million (2010 est. pre Bisha production)
- ☐ Currency: Nakfa (Nkf) pegged to \$ USD (15Nkf = US\$1)
- ☐ Life Expectancy: 54
- □ Adult Literacy Rate: ~60%
- □ Proactive Government stance on mining developments modern (1995) Mining Code
- □ Increasing foreign exploration & mining investment 18 groups now active in country
- No corruption



