



**Zara Mining**  
Share Company



# Koka Gold Mine Project

Asmara Mining Conference - October 2014

CHALTYCE GOLD MINES

# ZMSC – SOLID GOLD



# Koka Gold Mine Project – Project Overview

- **Zara Mining Share Company is a gold focused mining company in Eritrea**
  - *Owned 60% by China SFECO Group (Shanghai) and 40% by ENAMCO*
- **Mining License awarded to develop and mine the deposit**
  - *Mining License – January 2012*
  - *Business License – March 2012*
  - *Socio – Environmental Clearance - July 2012*
- ***Purchase by SFECO - November 2013***
- **Loan Exim Bank - Loan Approved – July 2013**
- **Mine Construction Project well underway**
  - *EPC being carried out by SFECO*
  - *Official Commencement Ceremony – 25<sup>th</sup> September 2013.*
- **Significant exploration upside**
  - *376 km<sup>2</sup> exploration license area and a 16.4km<sup>2</sup> mining license.*
  - *Drill-ready targets and an exploration program underway*

# Koka Gold Mine Project – Business Partners

- SFECO China – 60% Stakeholder
- ENAMCO – 40% Stakeholder
- Exim Bank – Project Financing Loan
- Housing & Commerce Bank – Project Financing Loan in Eritrea
- Willis Insurance Brokers Co. Ltd. – Insurance Broker
- National Insurance Corporation of Eritrea Share Co. – Insurance Provider
- Red Sea Trading Corporation, Eritrea
- Transhorn Eritrea
- Eritrean Petroleum Corporation
- Segen Construction Company, Eritrea
- Eriequip , Eritrea
- Eritrean Core Well Drilling
- Public Government Garage – Ashagolgol, Eritrea
- and other international partners
  - *Caterpillar, Sinotruk, XCMG, Shantui, Atlas Copco, BME, Total, Suez Chemicals,*

# Regional Focus: the Arabian-Nubian Shield

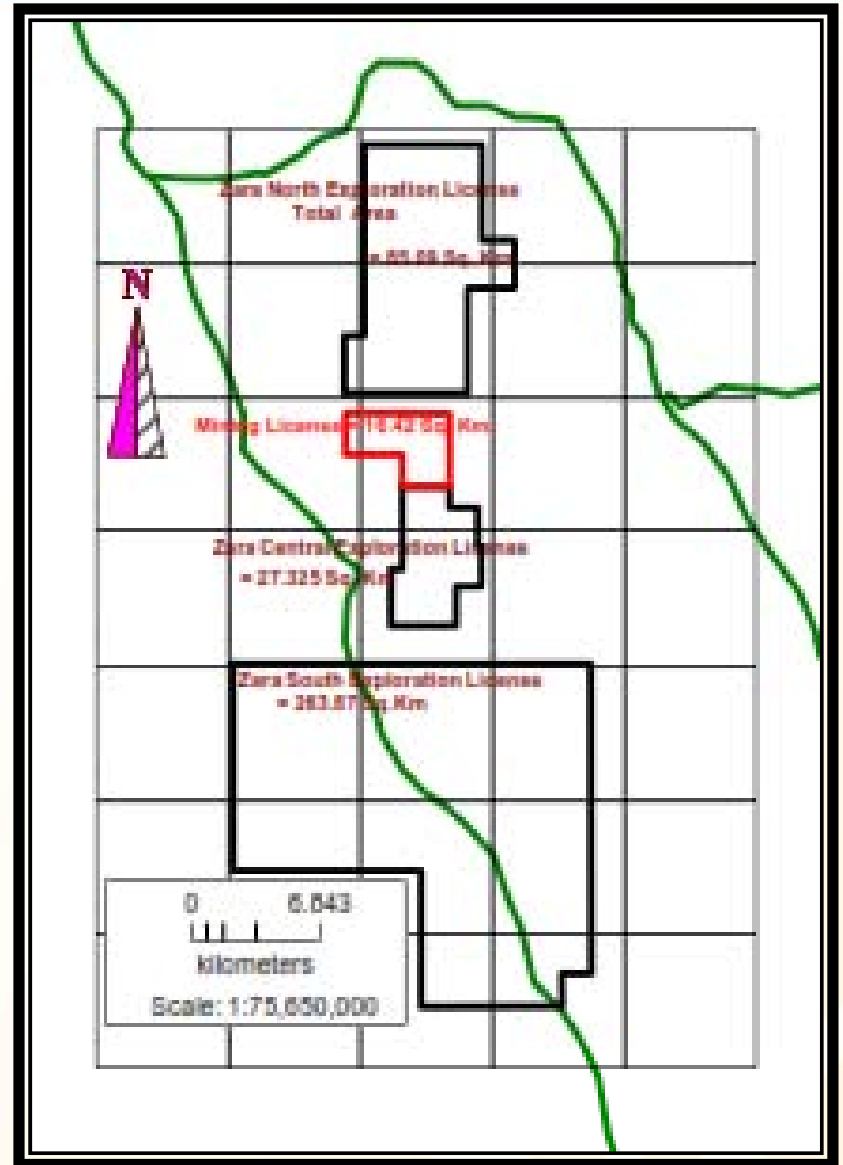
Strong strategic position in one of the world's exploration "hot spots"



- Long Mining History
- Minimal modern exploration
- Hosts resources of +20Moz gold
- World Class projects now being developed



# Strong Position to increase Resource Base



- 3 Exploration Licenses within 25km of Mine Infrastructure.
- Plan to Drill over 10,000 m each year – 5 Years.
- Increase Life of Mine to over 10 Years

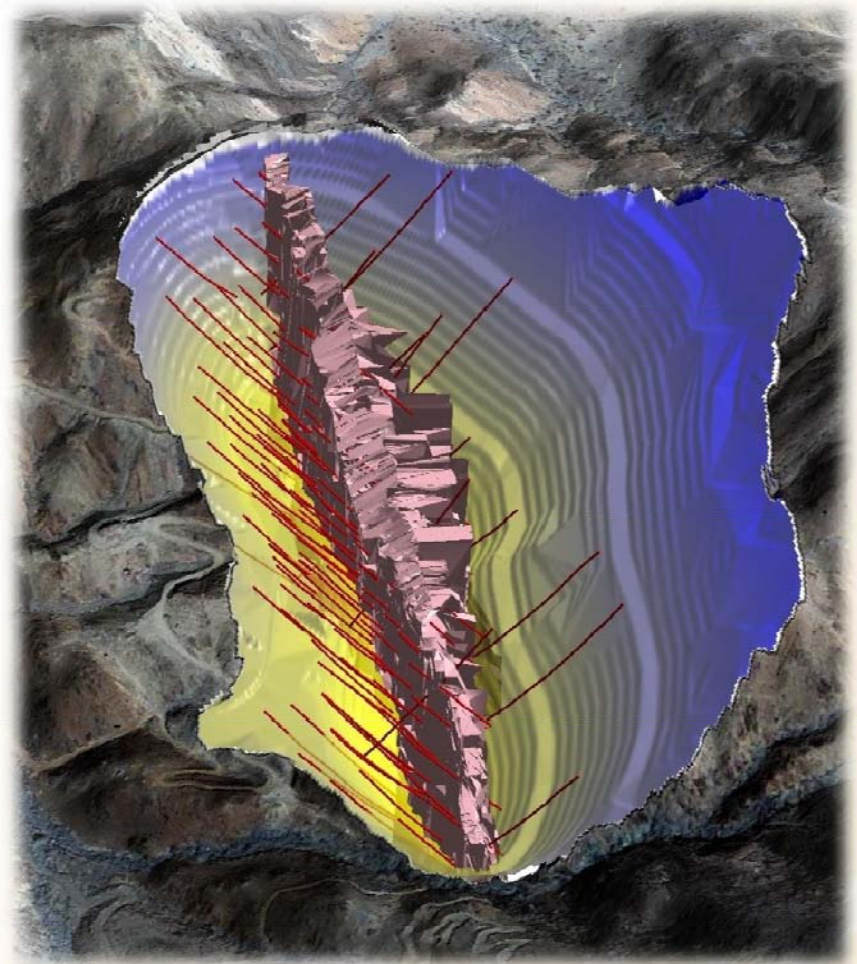
# Koka – Outstanding Returns, Outstanding Potential

|                            |                       |
|----------------------------|-----------------------|
| Average gold production    | ~100,000 oz per annum |
| Life of mine               | ~ 7 years             |
| Total capital cost         | US\$145 million       |
| Total gold mined (Reserve) | 750,000 oz            |
| Gold recoveries            | 93%                   |
| Gold produced              | 700,000 oz            |
| Plant capacity             | 2,000 tpd             |
| Total Material to Mine     | 44 million tonnes     |
| Mining Rate                | 25,000 tpd            |
| Ore milled                 | 4.6 million tonnes    |
| Head Grade                 | 5.1 grammes/tonne     |



# Koka Gold Deposit

- Quartz stock work system in microgranite
- JORC-compliant Indicated Resource of 5.0Mt @ 5.3 g/t Au for 850,000oz gold
- Probable reserve – 4.6Mt @ 5.1g/t
- Based on results from 137 diamond drill holes (~21,000m drilled)
- ~600m strike length, 20-30m wide
- Bulk of resource shallower than 150m depth



| Category           | Lower grade cut-off (g/t Au) | Tonnes (Mt) | Grade (g/t Au) | Contained Gold (Oz) |
|--------------------|------------------------------|-------------|----------------|---------------------|
| Indicated Resource | 1.2                          | 5           | 5.3            | 850,000             |
| Probable Reserve   | 1.2                          | 4.6         | 5.1            | 750,000             |



# Koka Mine Camp – Past



# The Project Site – Koka Mine Village



# Site Dining Room - Past



# The Project Site – Dining Room



# EPC Project



# General Layout – Mine & Process Plant



# The Project Site – Process Plant



# Construction Schedule

- EPC being undertaken by SFECO.
  - *Process Plant*
  - *Services – Fuel, Water, Power*
  - *Mine Village*
- Work progressing as per schedule.
- Installation to be complete by year end.
  - *Power Plant, Water Supply, Fuel Farm*
  - *Installation of major items of Process Plant equipment*
- First Gold Pour targeted – Q3 - 2015



# EPC CONTRACT – Current Progress

- Concrete work on ROM retaining completed.
- Installing feeder and primary crusher.
- Ball Mill Installed
- Leach tanks are in stage of erection
- Steel structure and side-walls for thickener being assembled.
- Both Cone Crushers now installed
- Installation of steel structure for thickeners
- Mine Village construction proceeding well. ZMSC taken partial occupation.
- Pipe laying and welding in progress for water supply from Zara river.
- Concrete structures being installed at Fuel storage area and power station.
- Concrete works for footing being done on Heavy Equipment workshop.

# Koka Gold Mine – Crude Ore Bin / ROM Pad



# The Project Site – Crushing



# The Project Site – Ball Mill Installation



# The Project Site – Reagent Storage



# The Project Site – Fuel Storage Tank



# Mine Services

- Power supply – 4 x 1,800 kW owner operated Generators for power supply.
- Water - Development of a bore field of four bores to produce 30 litres/sec.
- Camp – Temporary Construction Camp constructed to house construction teams
- Mine Village – To house upto 400 workers. Partially commissioned

# MINING





# Koka Gold Mine – Mining Overview



- **Equipment Fleet**
  - *Primary Fleet of: Atlas Copco Drills, Caterpillar Excavators and SinoTruk Haul Trucks.*
  - *Ancillary Fleet: XCMG, Shantui and Sino Truck*
- **Pre-Strip**
  - *Started in July 2014*
  - *Blasting started early September*
- **Maintenance Planning – Daily Monitoring**
  - *Excel S/Sheet --- > Pronto Xi*
- **Mine Planning**
  - *SURPAC – Grade Control , Survey & Mine Design.*

# Owner Mining

- Owner Responsible for
  - *Mine Roads*
  - *Open Pit Access Roads*
  - *Waste Dump Preparation*
  - *Pre-Strip*
  - *TSF Construction*
- Using Segen as contractor

# Mining - Mine Planning

- Mine Planning, Survey and Grade Control
  - *SURPAC as primary tool.*
- 10m Benches in Waste, 5 m benches in Ore.
- Grade Control Drilling
  - *Initially using Blast Holes.*
  - *Option to covert D65 for Grade Control drilling.*
- Two Waste Dumps are located within 1 km of the pit.
- Maximum mining rate of 9 Mtpa (25,000 tpd)

# Mining – MMU Loading Blast holes



# Mining– Excavator in the Clouds



# Mining– Haulage Trucks



# Mining – Access Road Construction

