

**GOLDEN STAR**



**RESOURCES LTD.**

**Bogoso/Prestea Tour**

**February 9, 2013**

# Legal and Other Matters

**SAFE HARBOR:** The statements contained in this presentation are both historical and forward-looking in nature. The United States Private Securities Litigation Reform Act of 1995 provides a “safe harbor” for certain forward-looking statements. Investors are cautioned that forward-looking statements are inherently uncertain and involve risks and uncertainties that could cause actual results to differ materially. Such forward-looking statements include statements as to our 2012 and 2013 production and operating cash cost estimates, capital expenditure estimates, planned exploration spending and activities, anticipated grades and recoveries and production at all of our mines, reserve and resource projections and production projections, and the availability of cash. The forward-looking statements involve risks and uncertainties and other factors that could cause actual results to differ materially including those relating to exploration; the establishment of reserves; the recovery of any reserves; future gold production and production costs; future permitting dates for additional sources of ore; realization of synergies and other benefits and the timing of such realization; timing of and unexpected events during construction, expansion and start-up of certain Golden Star projects; variations in ore grade, tonnes mined, crushed or milled; variations in relative amounts of refractory, non-refractory and transition ores; delay or failure to receive board or government approvals and permits, the timing and availability of external financing on acceptable terms; technical, permitting, mining or processing issues; fluctuations in gold price and costs which may be more difficult, time-consuming or costly than expected. Please refer to a discussion of some of these and other risk factors in Golden Star’s Form 10-K and other Securities and Exchange Commission filings. The forecasts contained in this presentation constitute management’s current estimates, as of the date of this presentation, with respect to the matters covered thereby. We expect that these estimates will change as new information is received and that actual results will vary from these estimates, possibly by material amounts. While we may elect to update these estimates at any time, we do not undertake to update any estimate at any particular time or in response to any particular event. Investors and others should not assume that any forecasts in this presentation represent management’s estimate as of any date other than the date of this presentation.

**INFORMATION:** The information contained in this presentation has been obtained by Golden Star from its own records and from other sources deemed reliable, however no representation or warranty is made as to its accuracy or completeness. The technical information relating to Golden Star’s material properties disclosed herein is based upon previously filed technical reports prepared and filed pursuant to National Instrument 43-101.

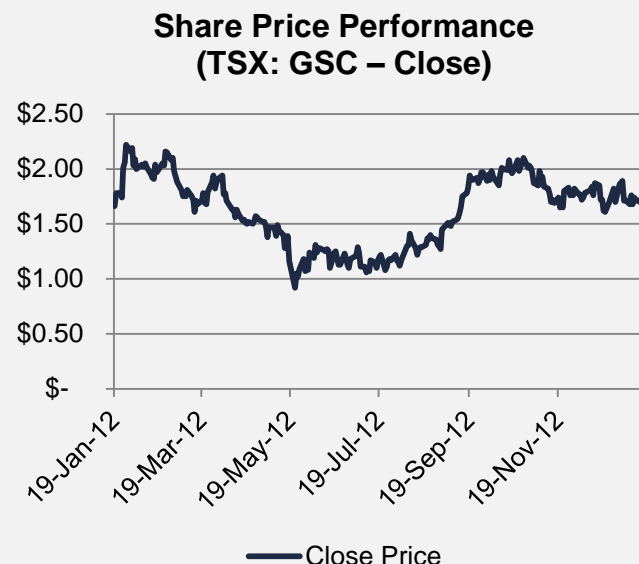
**CURRENCY:** All monetary amounts refer to United States dollars unless otherwise indicated.

**CAUTIONARY NOTE TO US INVESTORS REGARDING ESTIMATES OF MEASURED, INDICATED AND INFERRED RESOURCES:** This presentation uses the terms “Measured,” “Indicated” and “Inferred” Resources. United States investors are advised that while such terms are recognized and required by Canadian regulators, the SEC does not recognize them. “Inferred Resources” have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred resource will ever be upgraded to a higher category. Under certain non U.S. rules, estimates of Inferred Resources may not form the basis of feasibility or other economic studies. United States investors are cautioned not to assume that all or any part of Measured or Indicated Resources will ever be converted into reserves. United States Investors are also cautioned not to assume that all or any part of an Inferred Mineral Resource exists, or is economically or legally mineable.

# Corporate Profile



Capital Structure	Millions (Except Share Price Information)
Share price (Last close) (CAD\$) (as of Jan 18, 2013)	1.75
Shares Outstanding (as of Nov 7, 2012)	259.0
Options (as of Nov 7, 2012)	12.5
Convertible Notes (as of Nov 7, 2012)	55.8
Fully Diluted Shares Outstanding	327.3
<b>Market Capitalization (CAD\$)</b>	<b>453.3</b>
Cash and Equivalents (CAD\$) (as of Dec 31, 2012) <sup>(1)</sup>	77.5
Total Debt (CAD\$) (as of Dec 31, 2012) <sup>(1)</sup>	77.0
<b>Total Enterprise Value (CAD\$)</b>	<b>452.8</b>



Major Shareholders <sup>(2)</sup>		
Holders	%	Shares
Van Eck Associates Corp.	13.5	34,931,483
Sentry Select Capital Corp.	11.8	30,588,600
Heartland Advisors INC.	10.5	27,312,800
Blackrock	4.1	10,552,099
Arcadian Asset Management	2.4	6,295,123

(1) Assuming US\$ 1 = C\$ 0.9935

(2) As of January 18, 2013, the directors and executive officers of the Corporation, as a group, beneficially owned, or controlled or directed, directly or indirectly, approximately 1.3 million Common Shares, representing approximately 0.5% of the outstanding **Common Shares**

# Ghana – A Top African Mining Jurisdiction



## ✦ Attractive investment destination

- Stable democracy with well-established laws
- Strong mining culture and trained personnel
- Ghana is 2nd largest producer of gold in Africa
- Standard and Poor's credit rating for Ghana is B and expects it to be stable

## ✦ Significant gold endowment

- Over 70 million ounces of gold produced since the 1880s
- Past exploration and mining barely scratched surface

## ✦ Golden Star well positioned

- One of the largest property positions in Ghana
- Best geological knowledge base of SW Ghana
- Good and long lasting relationship with the government
- EVP Operations is the President of the Chamber of Mines

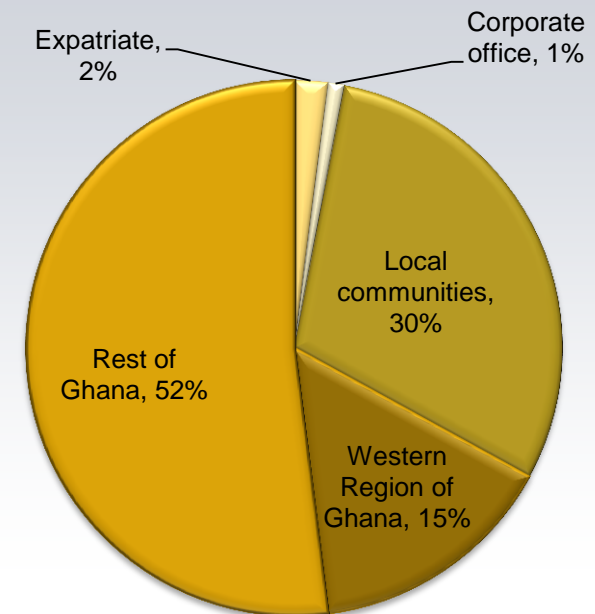
# Operating in Ghana Responsibly

**Golden Star has a favourable profile with the local community, the Government of Ghana and the Ghanaian regulatory agencies.**

## Initiatives

- ★ Supported the Extractive Industry Transparency Initiative by publishing total payments made to the Government of Ghana throughout 2011
- ★ Skills training program for communities aimed at local economic development
- ★ An anti-discrimination training program was initiated within Golden Star, major suppliers were provided with the same training material for their staff.
- ★ During 2011, the Golden Star Development Foundation worked with the local Community Mine Consultation Committees to fund and sponsor several community-driven projects including schools and continuing scholarships for local students etc.

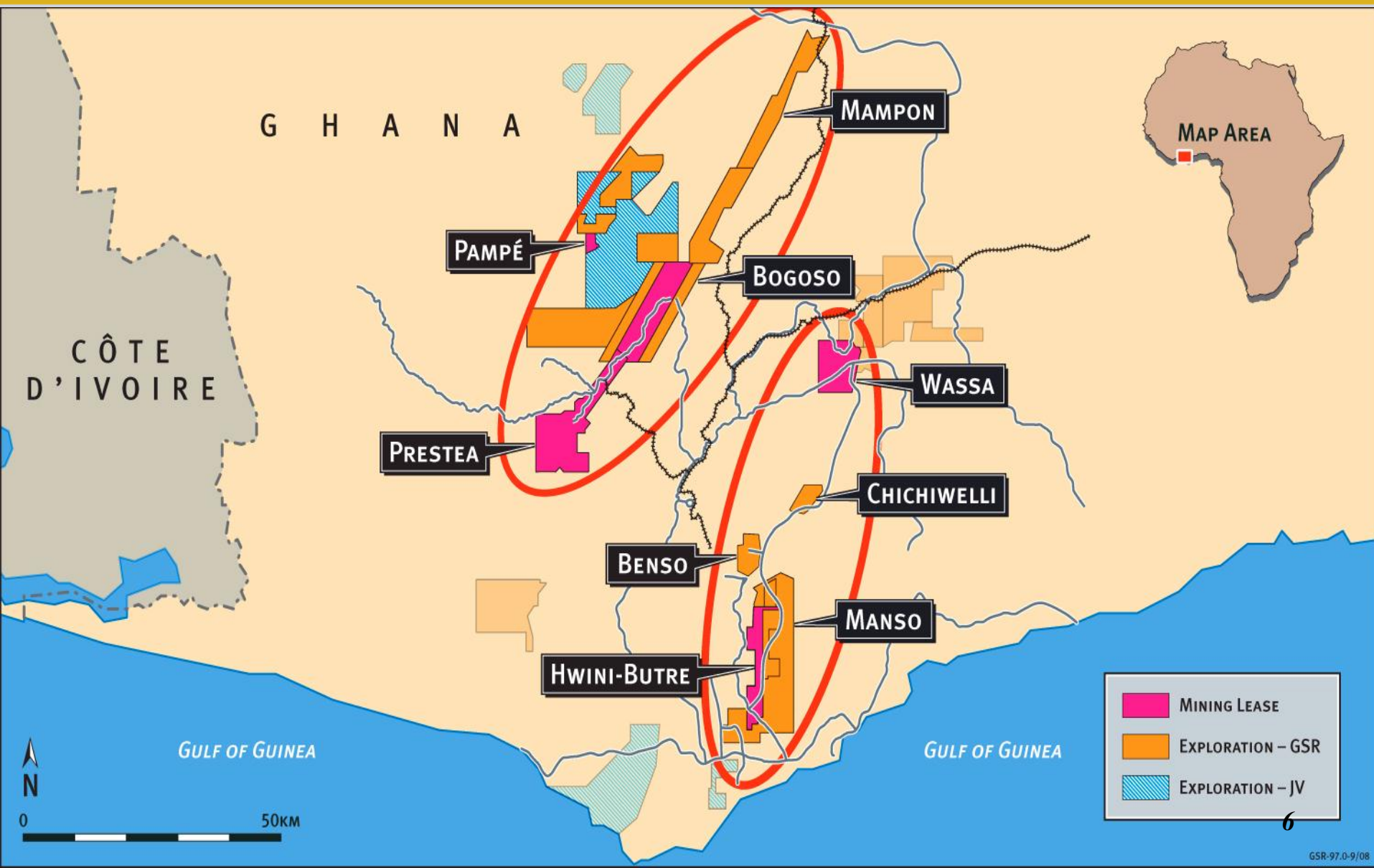
## Local Employment - 2011 Direct Employees



**Local employment contributes to regional prosperity and pride** 5



# Bogoso/Prestea Location in Ghana



# Bogoso/Prestea History

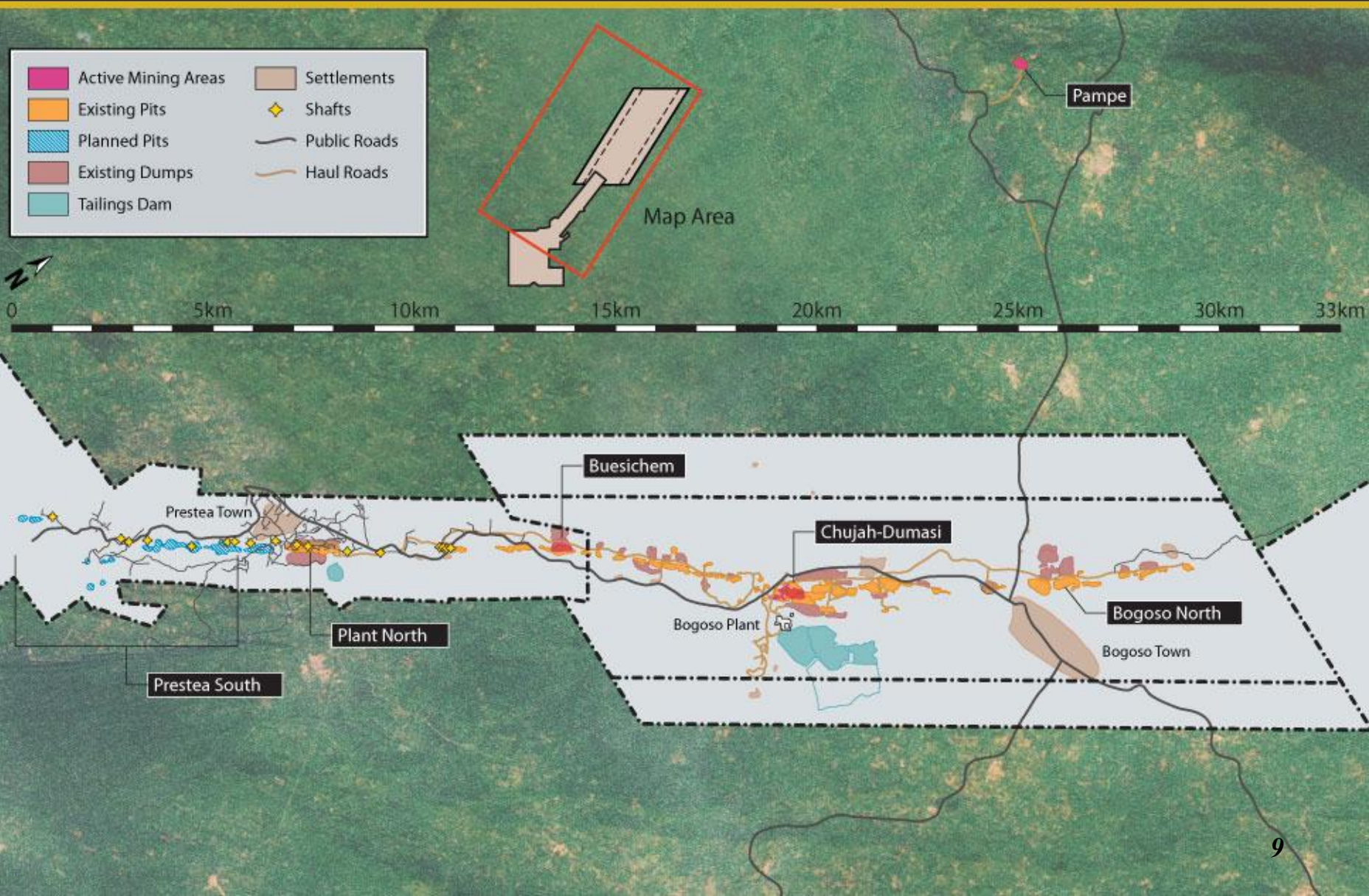
- 1990** Developed by Canadian Bogosu Limited  
Billiton/Gencor – 1.5Mtpa conventional CIL  
plant constructed
- 1999** Golden Star acquires Bogoso
- 2001** Bogoso acquires Prestea surface rights
- 2002** Bogoso entered into Joint Venture on Prestea  
Underground
- 2005** Sulphide feasibility study completed
- 2007** Sulphide plant with BIOX<sup>®</sup> circuit  
commissioned in July

The map displays the Bogoso Mining Lease area in Liberia. Key locations marked include Pampe, Bogoso North, Bogoso Town, Dumasi, Chujah Main, Process Plant, Buesichem, Bogoso Plant, Prestea UG, Beta Boundary South, Bondaye, and Tuapim. A scale bar at the bottom right indicates distances up to 10 km.

8



# Bogoso/Prestea Concession



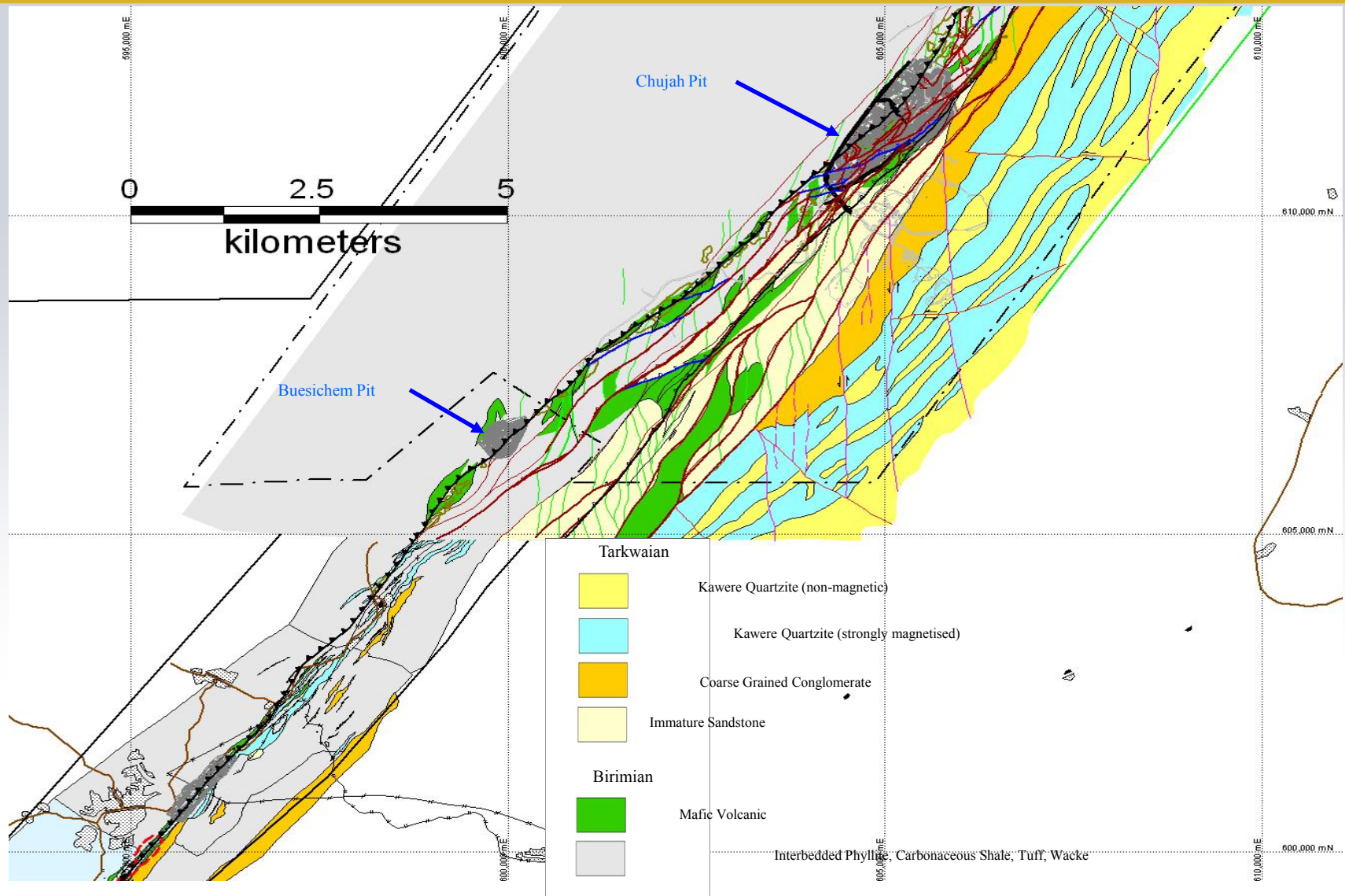
- ★ **Signing of corporate social responsibility agreements with mine local communities on:**
  - Relationship and sustainable livelihoods agreement
  - Local employment agreement
  - Golden Star (Bogoso/Prestea) Development Foundation
- ★ **Startup of Non Refractory treatment plant**
- ★ **Continued improvement in the performance of the refractory treatment stream**
- ★ **Risk Management processes training and usage in the business areas**
- ★ **Implementation of INX management database for safety and environment**

# 2012 Achievements

- ★ Improved the results of the EPA environmental audit over previous two years
- ★ No reportable environmental incident to regulatory bodies since January 2012
- ★ Obtained approval to discharge PWTP water to the environment
- ★ Significantly reduced water levels at TSF 2 Cell 2A
- ★ Grassing and erosion control measures in place at Plant North pit after successfully backfilling it



# Geology - Bogoso



# Refractory and Free Gold – Bogoso Prestea

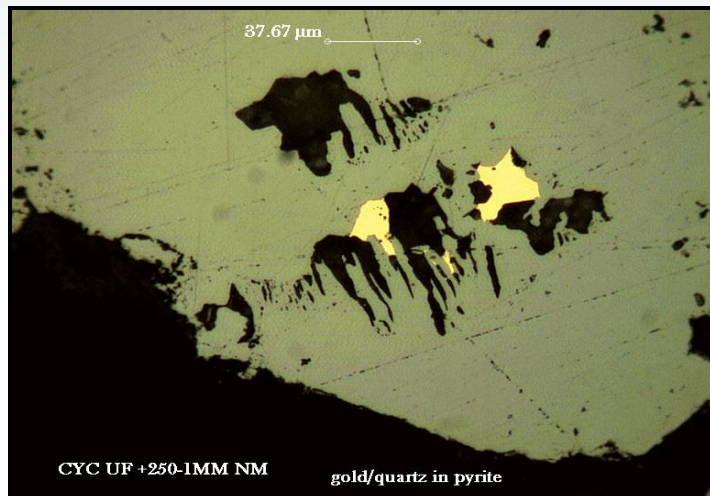
**Native Au - Prestea**



**Qtz veining - Prestea**



**Refractory Au - Bogoso**



**Aspy - Prestea**





# 2012 Reserves - GSBPL

BOGOSO	Dec 31, 2012 Ore Reserve			Dec 31, 2011 Ore Reserve		
	tonnes (000)	grade	ounces (000)	tonnes (000)	grade	ounces (000)
CHM	4,670	2.61	392	6,719	2.51	542
BOG	1,874	2.59	156	2,565	2.23	184
BUE	4,332	2.88	401	6,335	2.81	572
PAM	1,192	2.94	113	1,618	3.55	185
DUM	15,330	2.19	1,078	13,672	2.32	1,020
ABL	923	1.80	53	1,193	1.68	64
MAM	1,627	4.56	239	1,610	4.62	239
BET	1,497	2.43	117	2,385	2.07	159
BON	1,832	2.42	142	1,868	2.39	144
TUA	1,233	2.61	103	1,798	2.66	154
CHS				377	2.42	29
Stockpiles	691	1.93	43	627	2.21	44
<b>TOTAL</b>	<b>35,200</b>	<b>2.51</b>	<b>2,838</b>	<b>40,767</b>	<b>2.55</b>	<b>3,336</b>

# 2012 YE Resources-GSBPL

Property	2012 M&I Resources			2011 M&I Resources		
	Tonnes	Grade	Ozs	Tonnes	Grade	Ozs
	(000)	(g/t)	(000)	(000)	(g/t)	(000)
Bogoso/Prestea	19,026	2.13	1,303	18,375	1.94	1,146
Prestea UG	1,557	13.20	661	1,641	12.63	666
Buesichem UG	0	0.00	0	1,219	3.73	146
<b>Total Measured and Indicated</b>	<b>20,583</b>	<b>2.97</b>	<b>1,964</b>	<b>21,235</b>	<b>2.87</b>	<b>1,959</b>

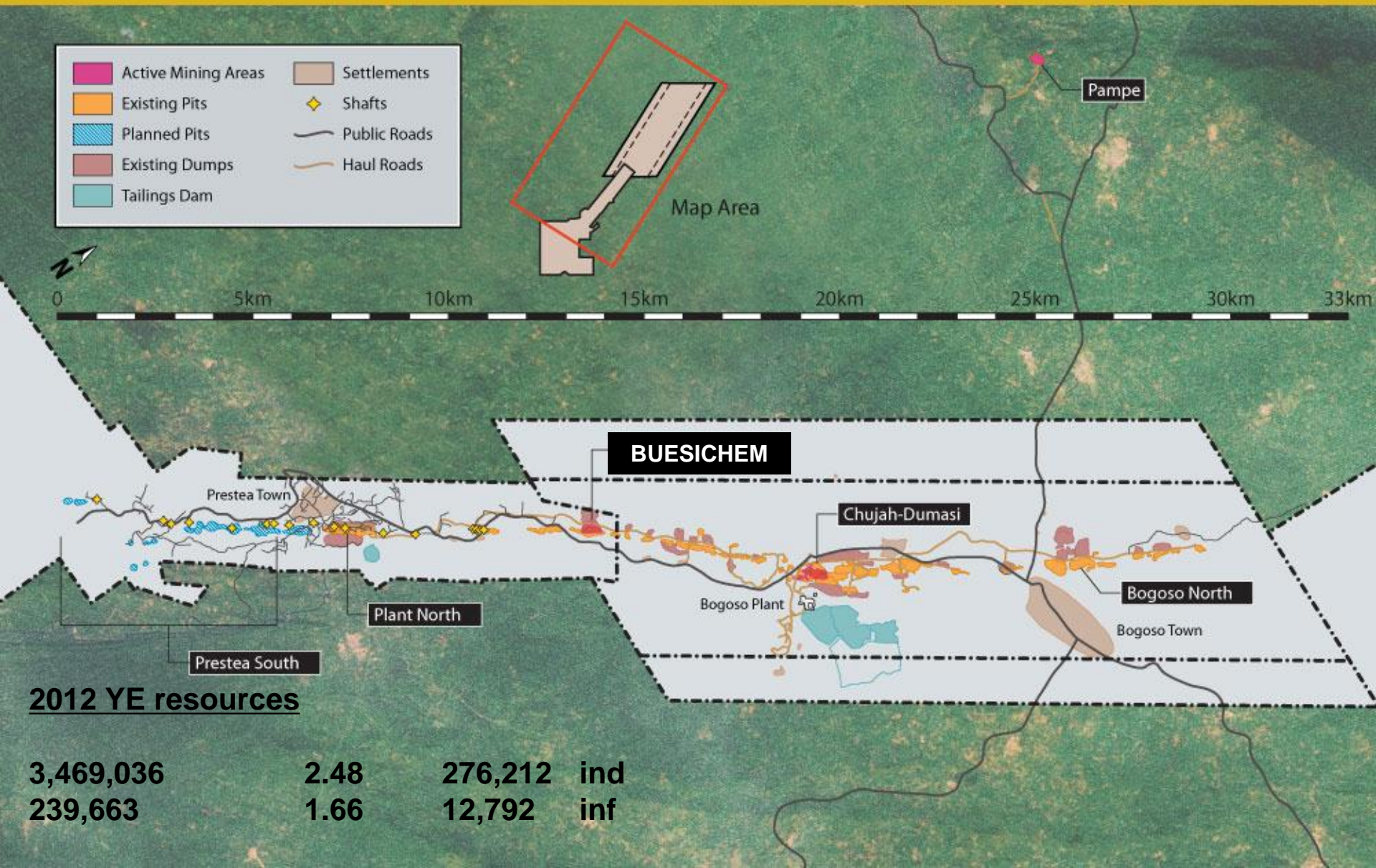
Property	2012 Inferred Resources			2011 Inferred Resources		
	Tonnes	Grade	Ozs	Tonnes	Grade	Ozs
	(000)	(g/t)	(000)	(000)	(g/t)	(000)
Bogoso/Prestea	3,772	3.05	370	5,147	2.46	407
Prestea Underground	5,181	7.43	1,237	5,243	7.28	1,228
Buesichem UG				850	4.08	112
<b>Total Inferred</b>	<b>8,952</b>	<b>5.58</b>	<b>1,607</b>	<b>11,240</b>	<b>4.83</b>	<b>1,746</b>





# Buesichem Location Map

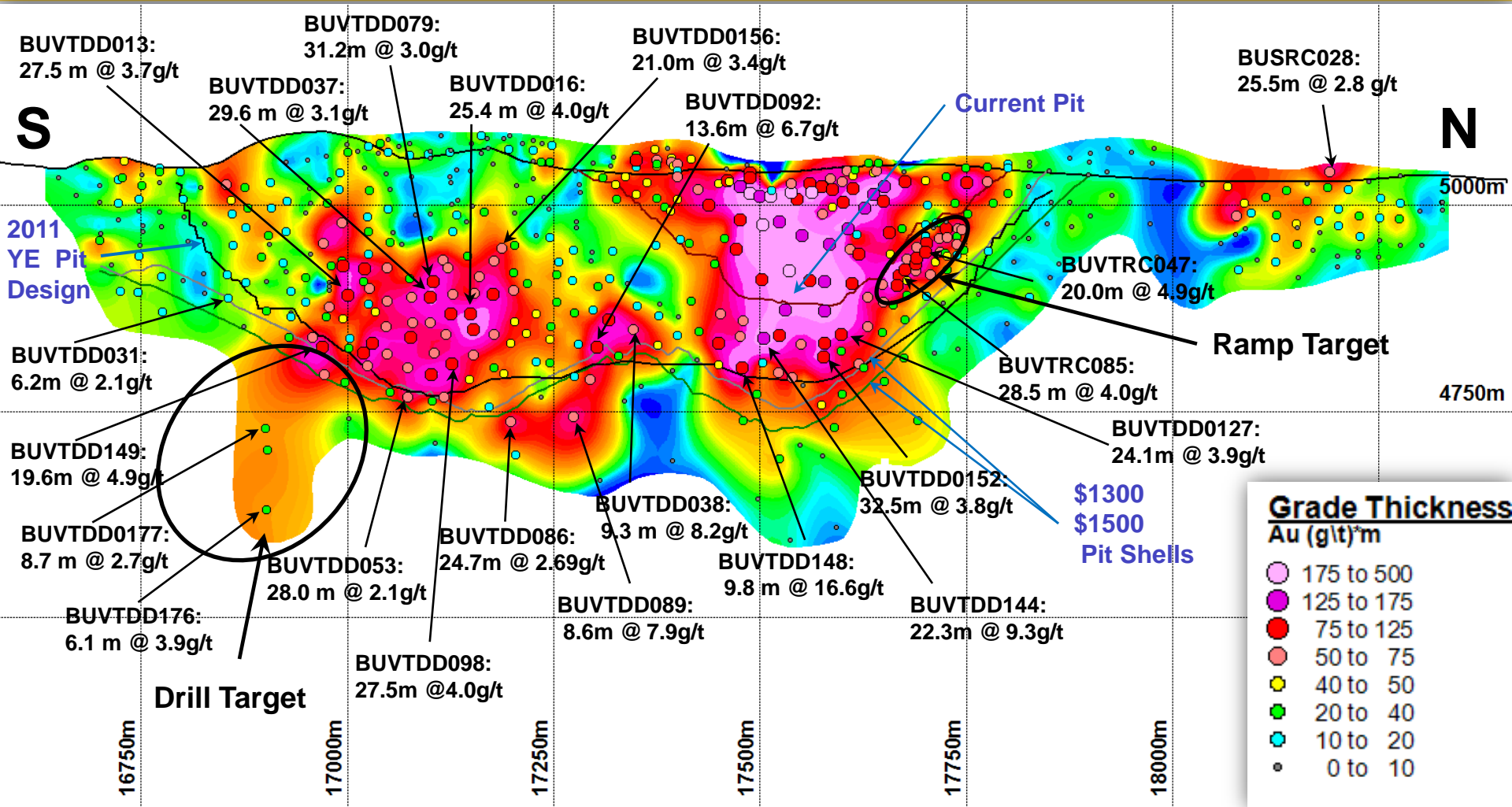
## Reserves - 4.3 Mt @ 2.9 g.t – 401k Ozs



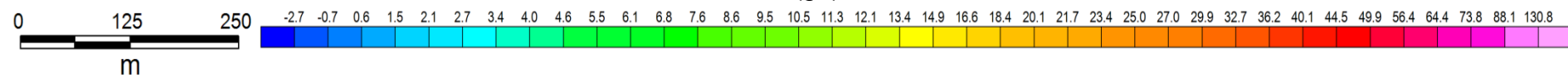
### 2012 YE resources

3,469,036	2.48	276,212	ind
239,663	1.66	12,792	inf

# Buesichem Au Grade Thickness Long Section True Width



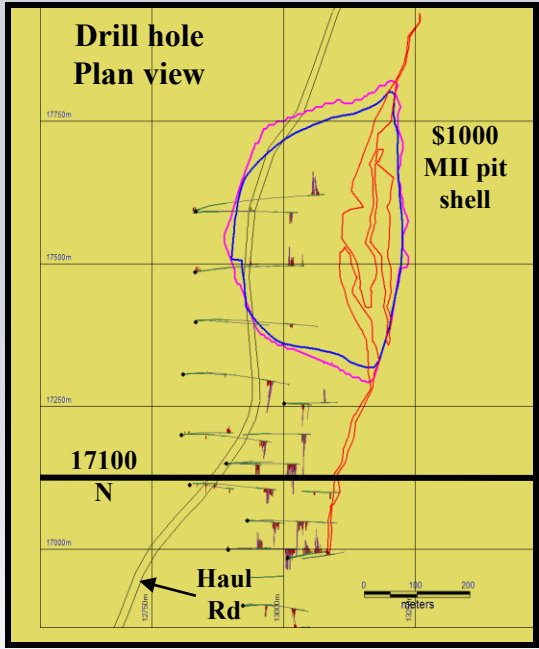
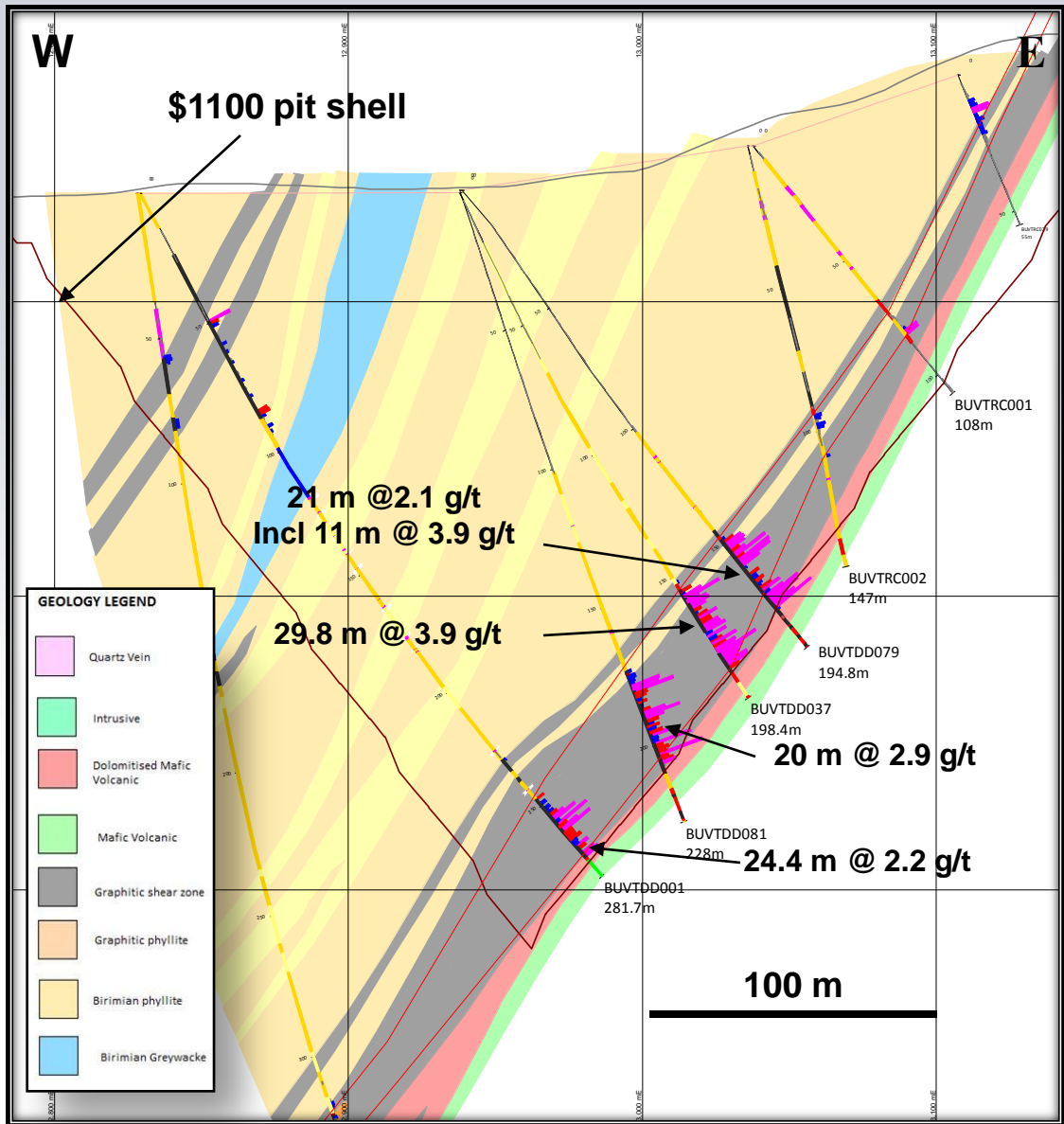
**Buesichem Grade Thickness (g/t)\*m**





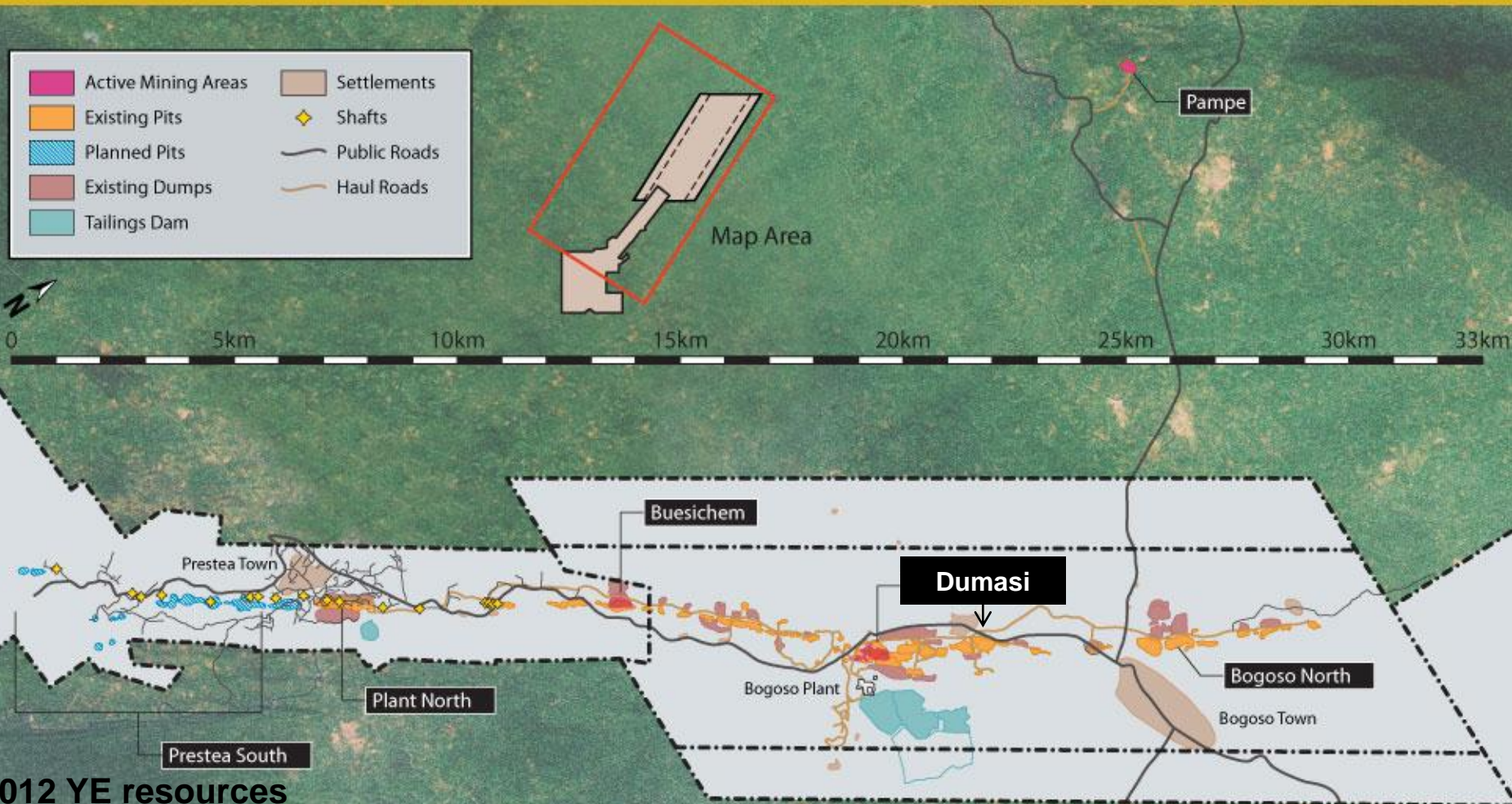
# Buesichem South

## Drill X - Section 17,100N



# Dumasi Location Map

Reserves - 15.3 Mt @ 2.2 g.t – 1,078k Ozs

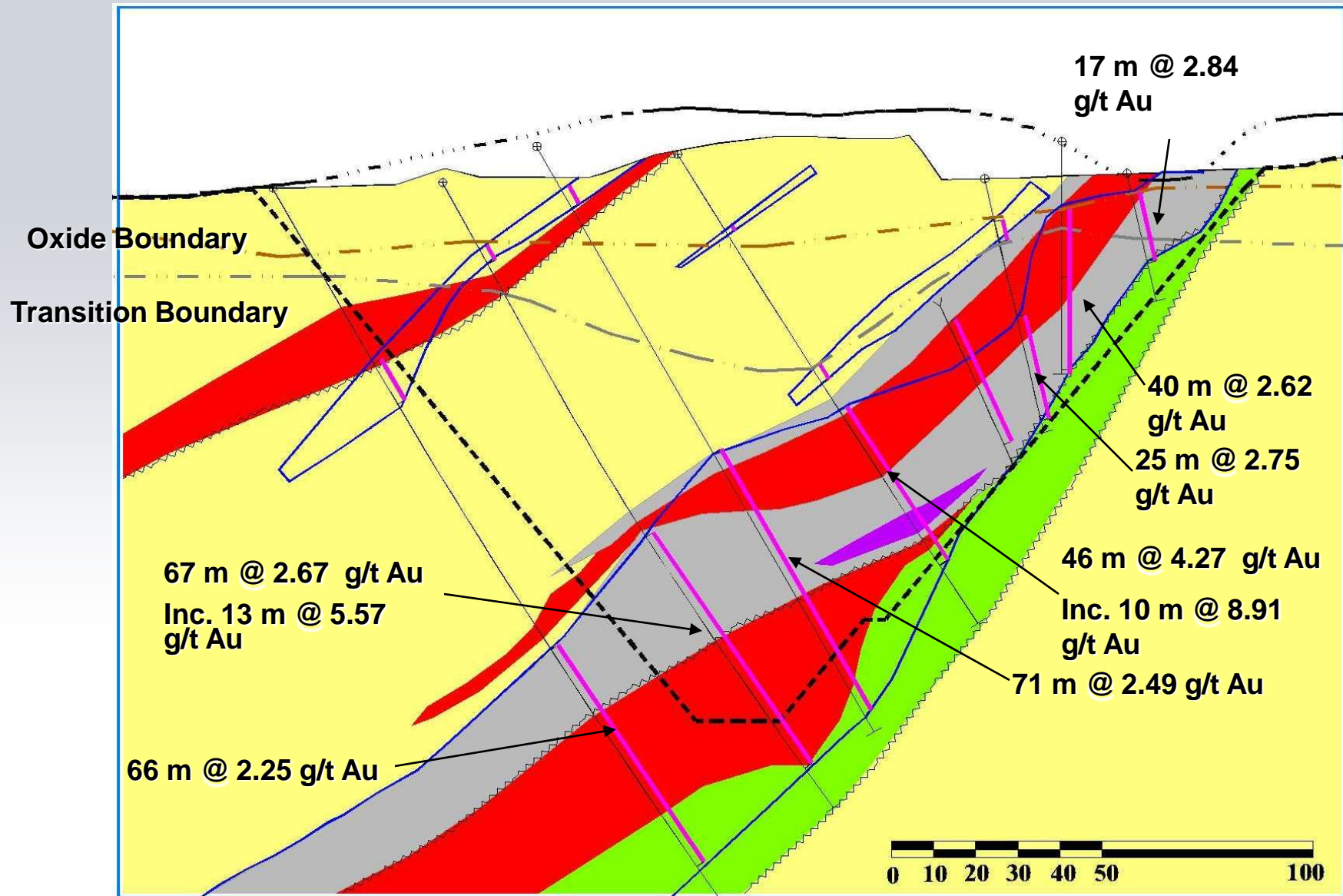


## 2012 YE resources

461,819	1.68	24,995	mes
3,189,314	2.01	206,297	ind
107,133	1.93	6,632	inf

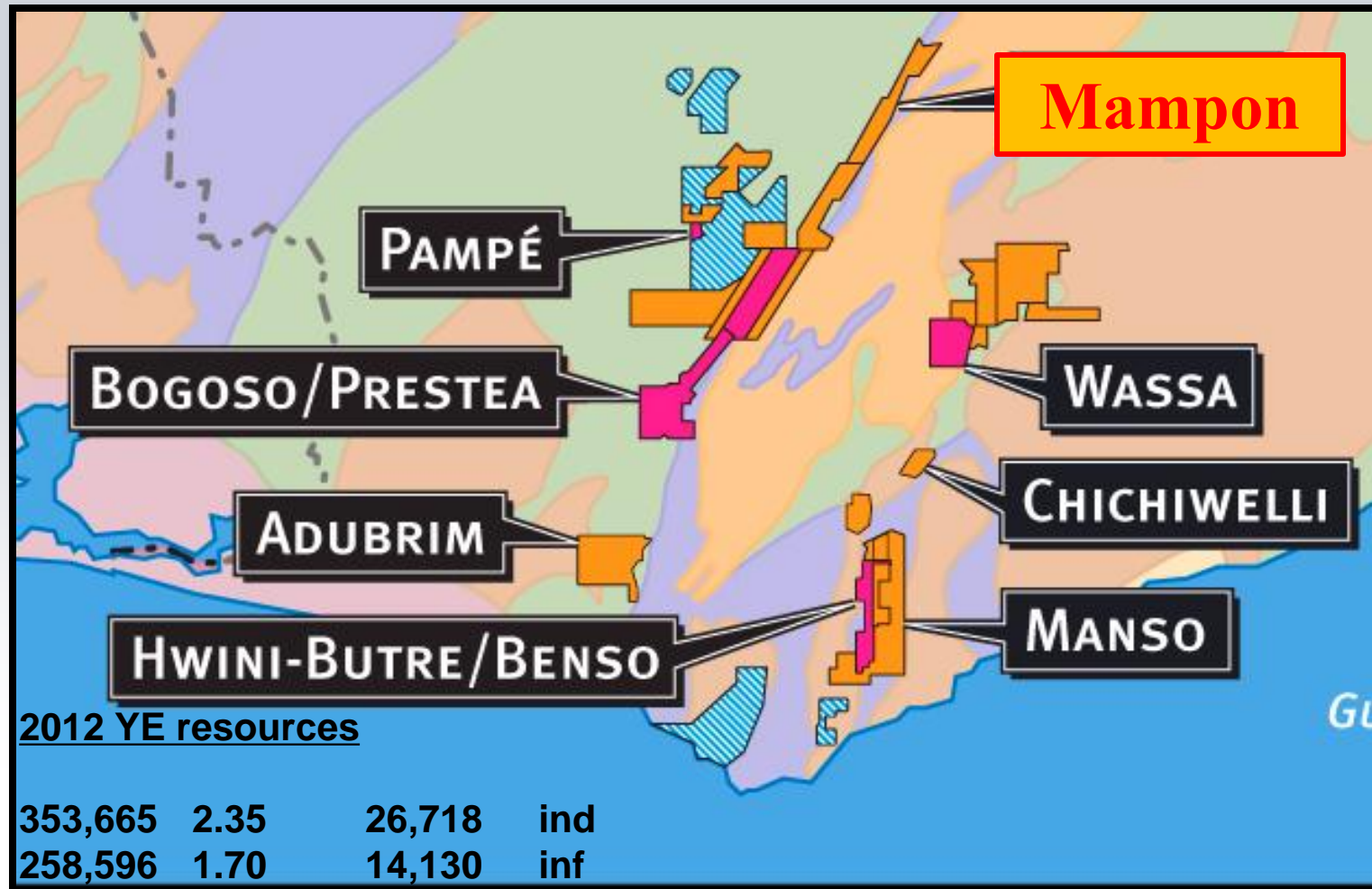


# Dumasi X-Section 25925 N

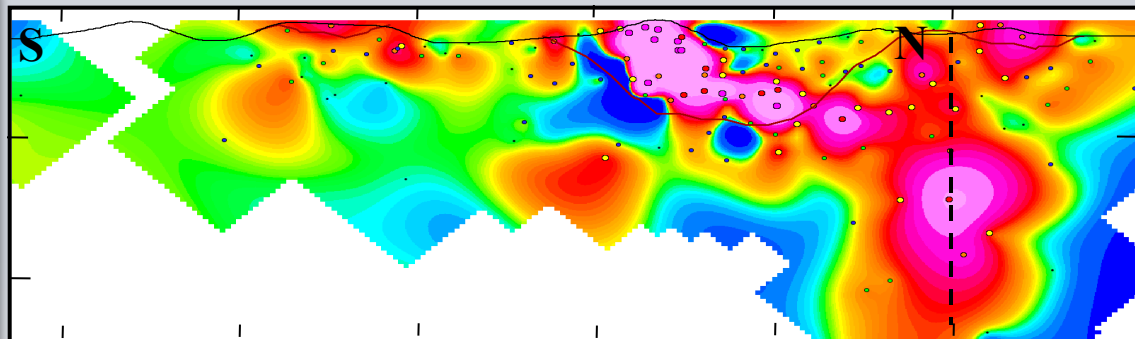
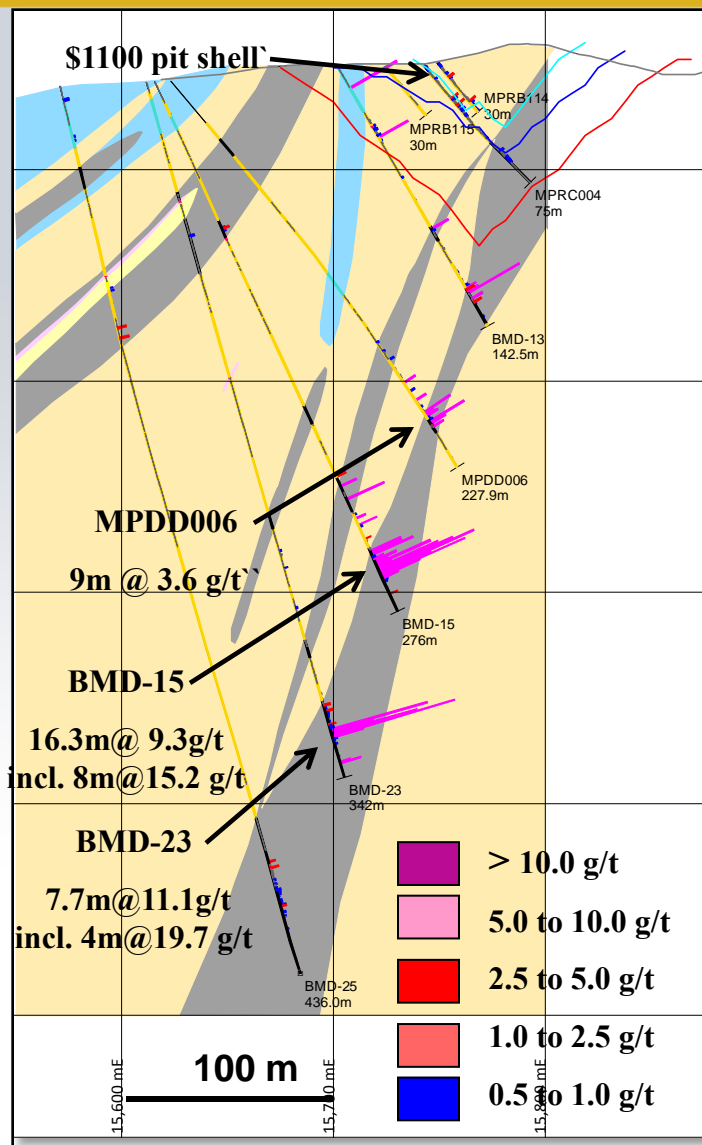


# Mampon Location Map

## Reserves – 1.6 Mt @ 4.6 g.t – 239k Ozs



# Mampon: X- Section 62800N



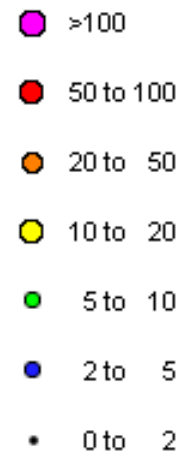
## GEOLOGY LEGEND



## GxT Long Section Mampon

62,800 N

## Grade \* Thickness



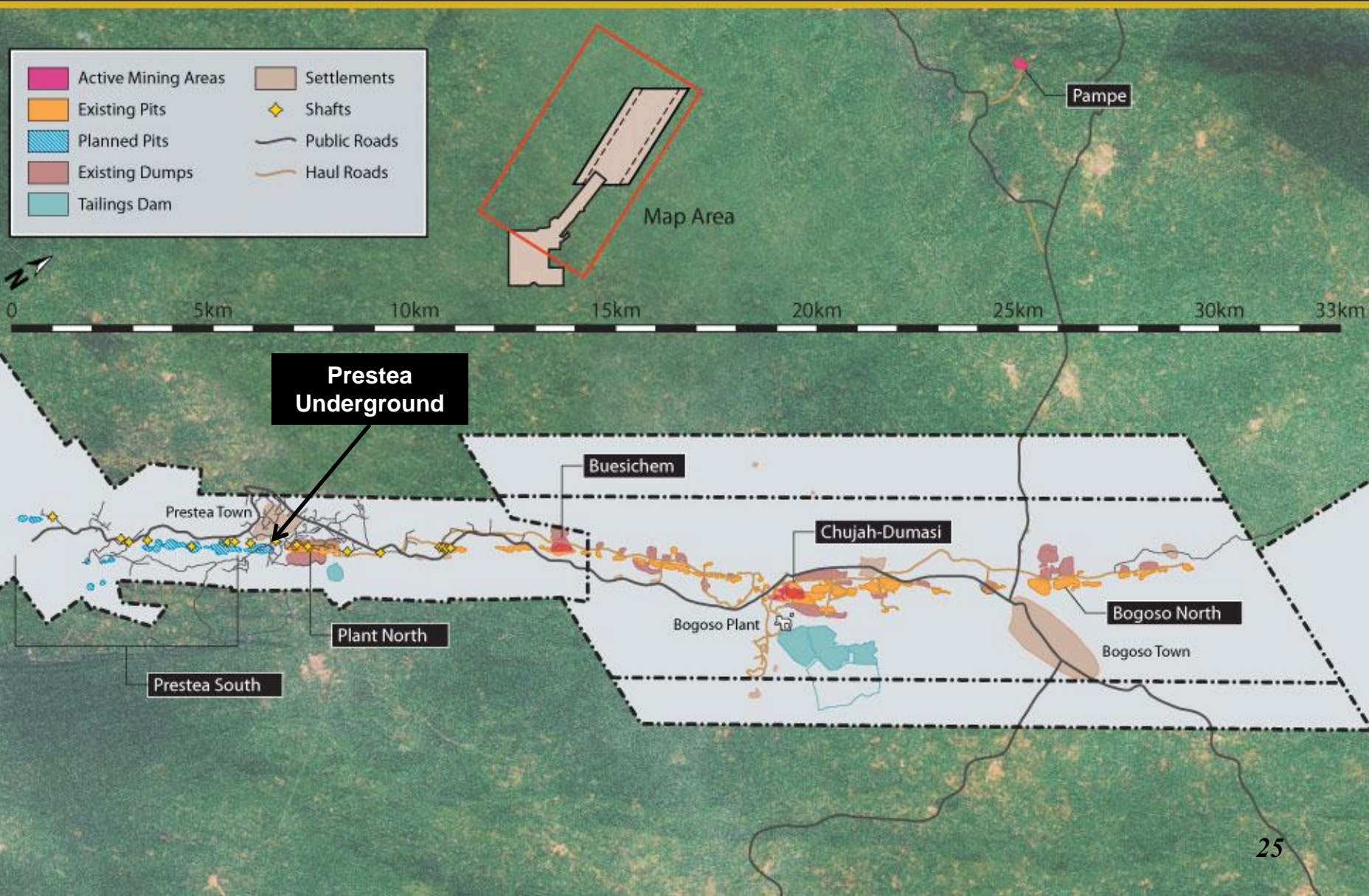


# Prestea Underground Mine

- ✦ 9M oz produced since 1880s
- ✦ 9,000 metres of strike length
- ✦ Deepest extent of workings ~1,300m
- ✦ Drilled 263 holes; took 117 channel samples from 2 drives in West Reef
- ✦ West Reef resource approximately 1.25Mt grading 16g/t for 650,000 oz
- ✦ Current total resource of 6.9Mt @ 8.6g/t for 1.9Moz



# Bogoso/Prestea Concession





# Prestea Underground



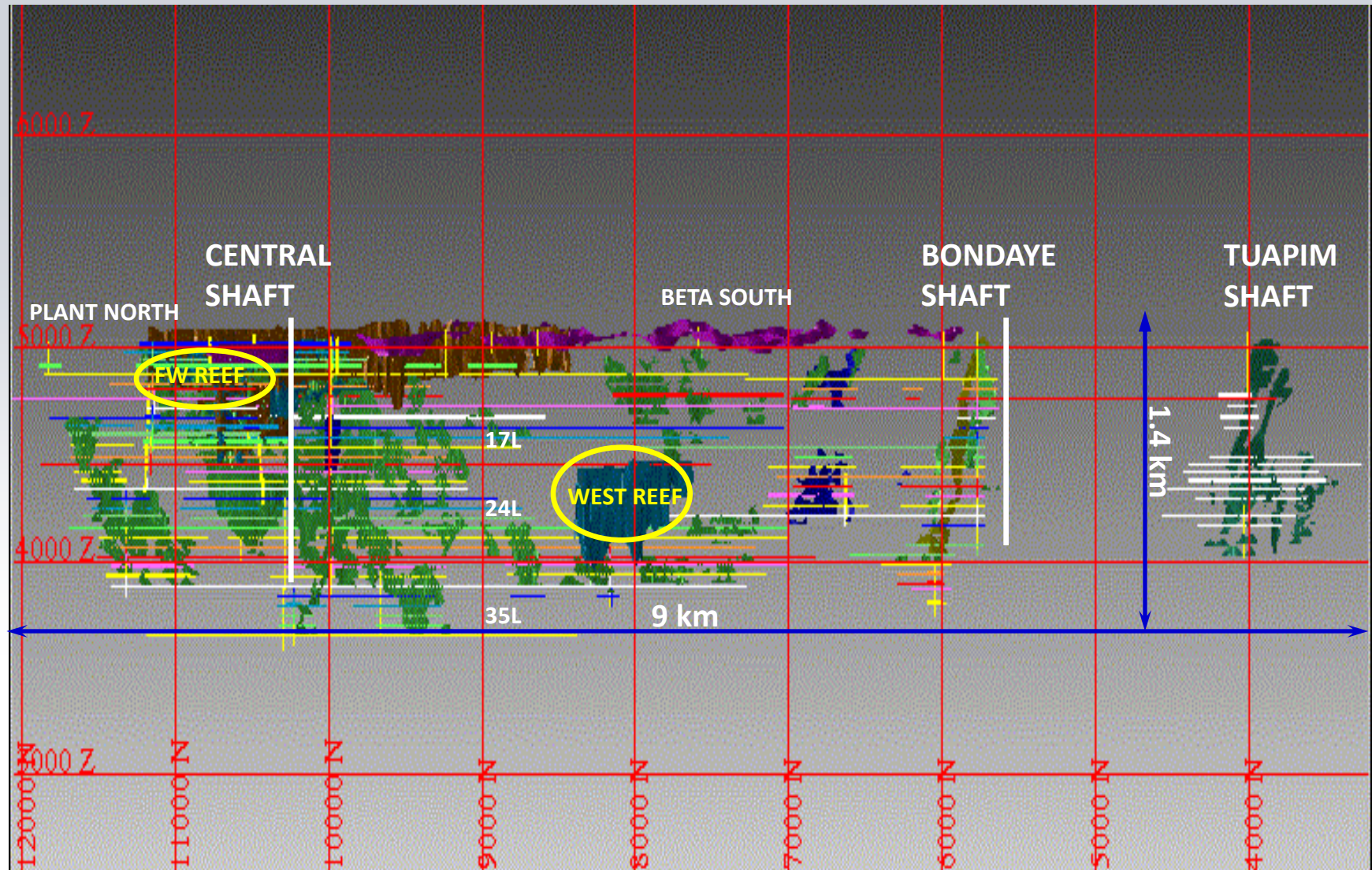


# Prestea Underground

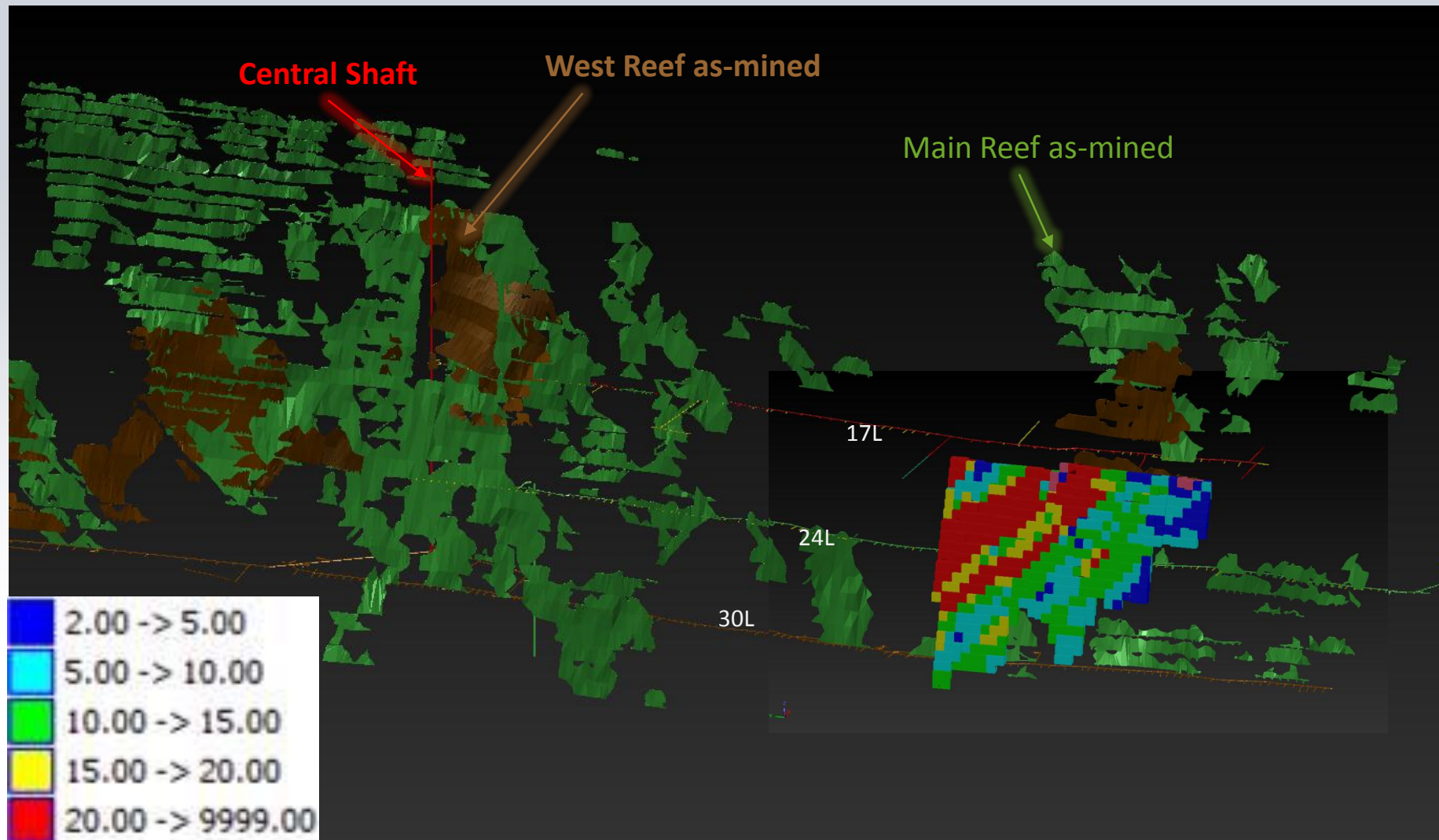




# Prestea Underground Long Section



# Prestea Underground Mine Strategy

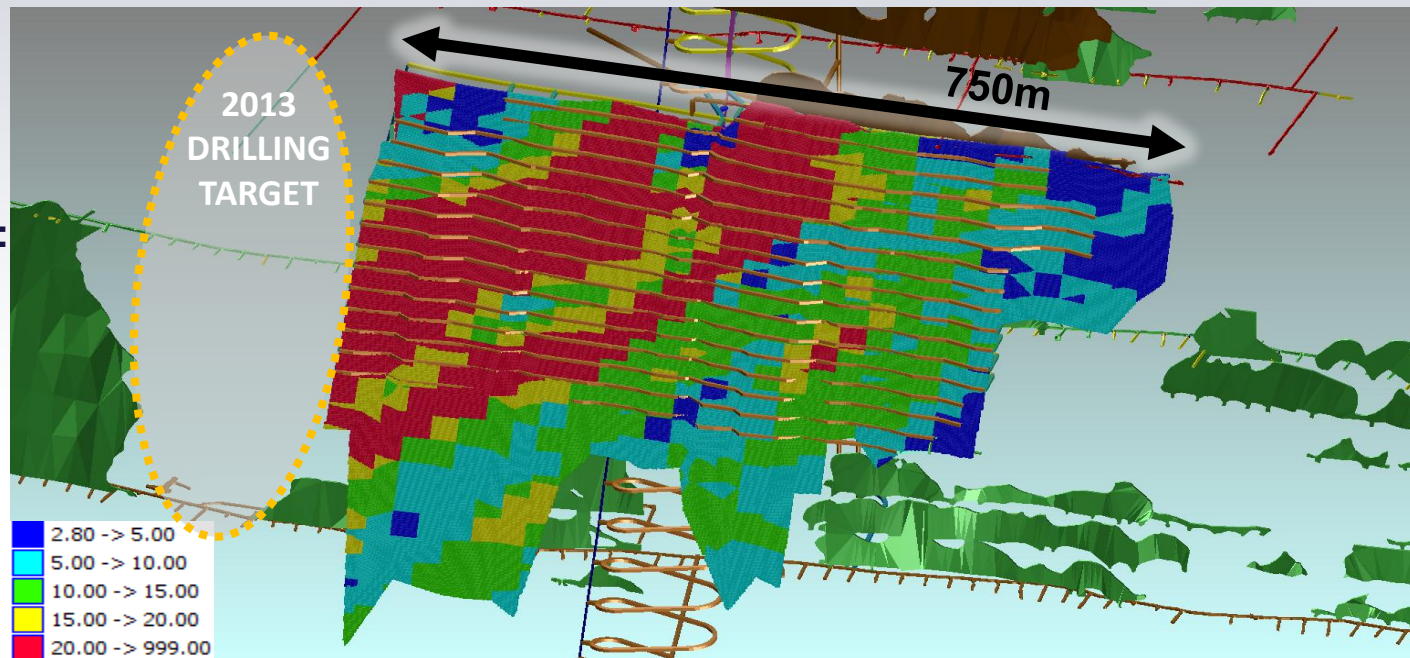




# Prestea Underground West Reef – PEA Highlights

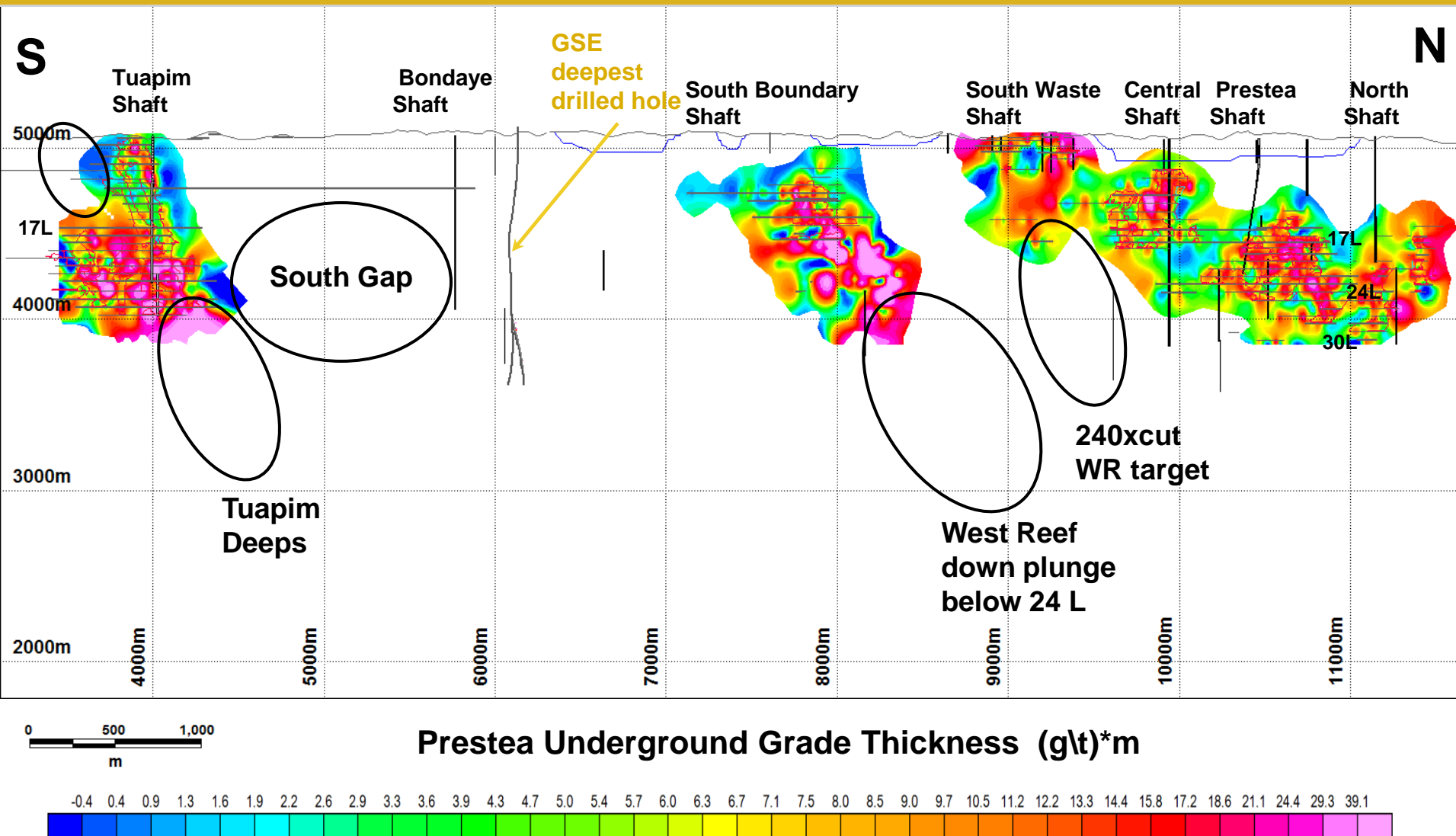
- ★ Resource is expanding with ongoing drilling
- ★ Production rate of 90,000 to 100,000 oz Au per year
- ★ 15 km haul along dedicated existing haul road to the Bogoso Processing Complex
- ★ PEA contemplates West Reef resource of 1.25 Mt grading 16 g/t Au for 650,000 oz Au
- ★ Project Economics (based on 2012 PEA):

- Production: 437,000 oz Au
- Recovery: 85%
- Operating costs: \$620/oz Au
- Capex: \$115M
- NPV(5%) @ \$1,600: \$132M
- IRR: 24%

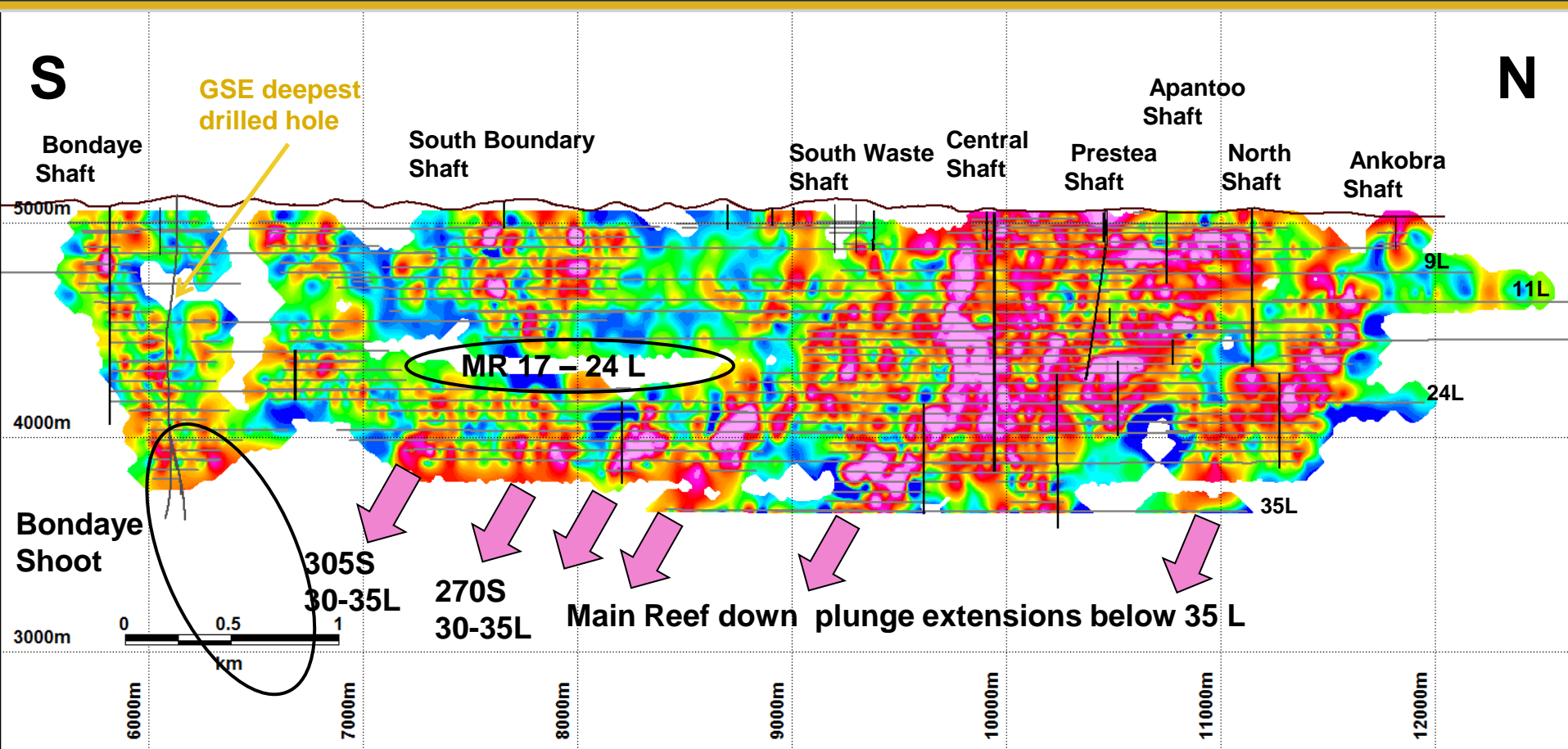




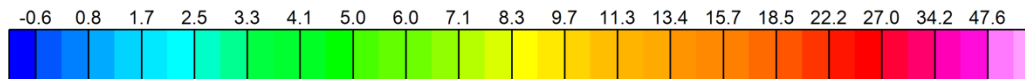
# West Reef drilling targets



# Prestea UG Main Reef Targets June 2012



Prestea Underground Grade Thickness (g/t)\*m



## ★ Active Pits:

- Chujah
- Bogoso North
- Pampe



Pampe Pit



## ★ Chujah and Bogoso North

- Conventional truck and shovel operations
- GSBPL equipment with some additional contractor resources
- Main source of refractory ore

## ★ Future Resources

- Dumasi, Prestea Surface, Mampon
- Expansion/Reopening of previously mined areas Ablifa, Beppo, Buesichem, etc.
- Continued exploration



Bogoso North Pit

# Mining Fleet

- ✦ 3 x Liebherr 994 Excavators
- ✦ 1 x Liebherr 984 Excavator
- ✦ 26 x Cat 777 Dump Trucks (90t)
- ✦ 2 x Cat 992 Wheel Loaders
- ✦ 2 x Cat 988 Wheel Loaders
- ✦ 5 x Cat D9 & D10, Track Dozers
- ✦ 1 x Cat 844 Wheel Dozer
- ✦ 2 x Cat 16G Graders
- ✦ 1 x Cat 14H Graders





# Bogoso Treatment Plant Area

LANDSCAPE - G S B P L





# Bogoso Process Plant - Overview

- ★ **Bogoso processes ore in two distinct streams**
- ★ **Non-Refractory Plant**
  - Ceased 'full time' operation in 2007
  - Occasionally used to batch non-refractory material 2008-2011
  - Recommissioned January 2012; non-refractory ore feed from Pampe
- ★ **Refractory (BIOX<sup>®</sup>) Plant**
  - Commenced operations in July 2007
  - Consists of Comminution/Flotation/BIOX<sup>®</sup>/CIL
  - Performance (particularly recovery) dependent on ore characteristics

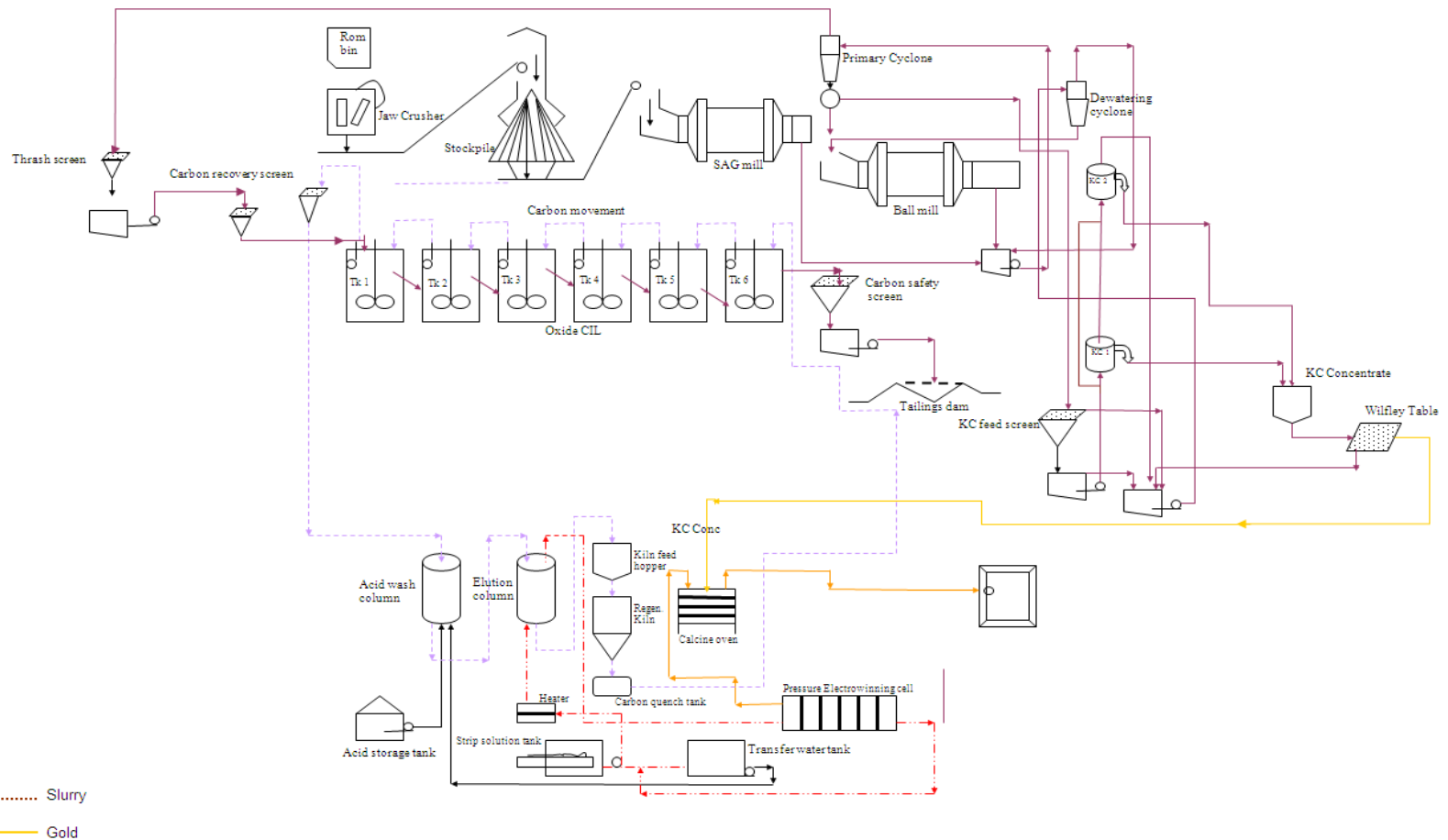
# Non-Refractory Plant

- ✦ **1.5Mtpa oxides or 0.9Mtpa sulphides**
- ✦ **Single stage jaw crusher**
- ✦ **SAG Mill x 1**
  - 5.05m diameter x 4.4m – 1.5MW
- ✦ **Ball Mill x 1**
  - 4.2m diameter x 5.4m – 1.5MW
- ✦ **Grind 80% -75 micron**
- ✦ **6 stage Standard CIL Process**



# Process Flow

## GOLDEN STAR BOGOSO / PRESTEA LIMITED NON REFRACTORY TREATMENT PLANT FLOW CHART



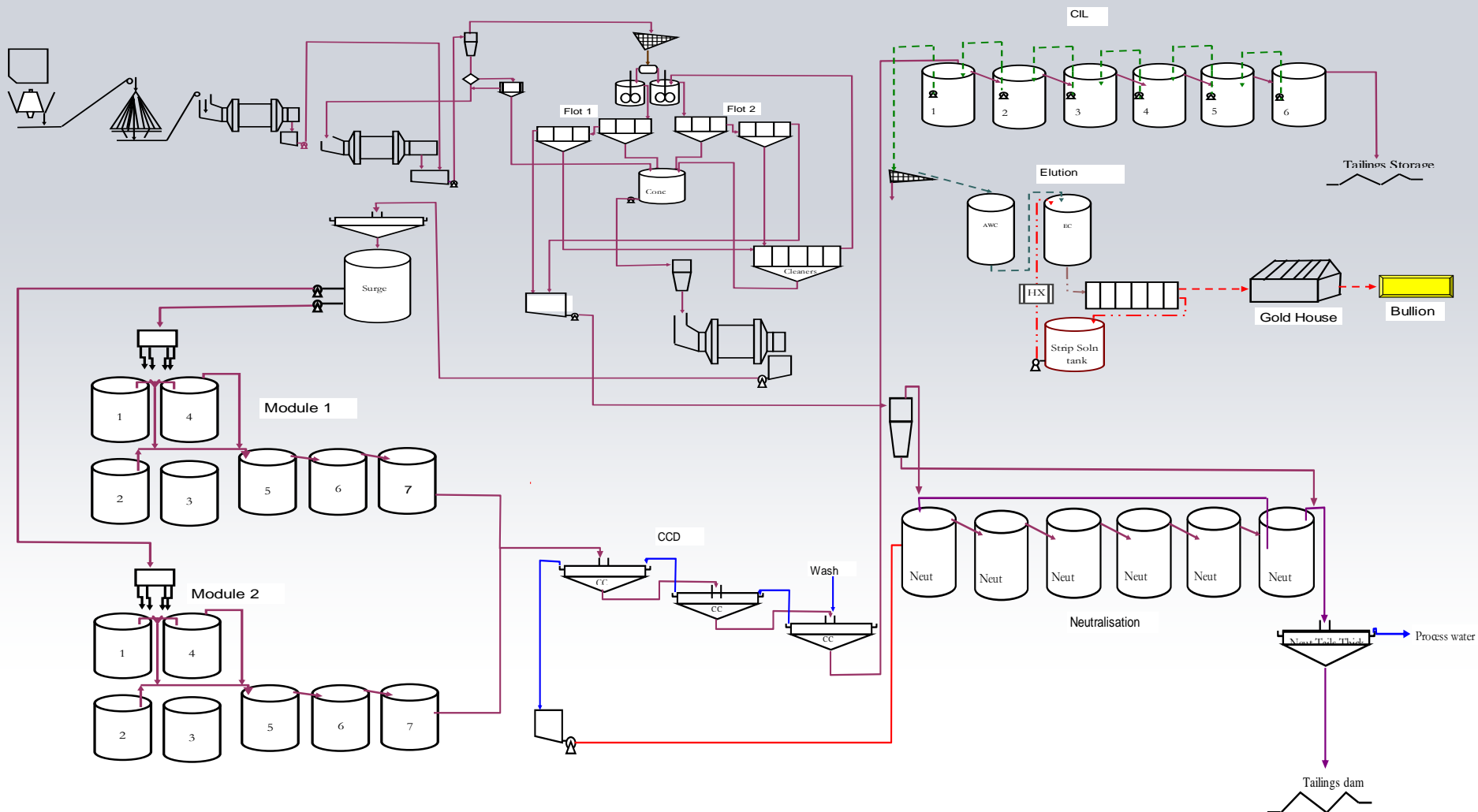


# Processing- Refractory Plant

- ✦ Crusher - 60x89 Fuller Traylor Gyratory 600kW
- ✦ SAG Mill -5.5MW FFE 22 x 26
- ✦ Ball Mill - 3.3MW 20' Obotan
- ✦ Flotation cells- Outotec roughers, scavengers & cleaners
- ✦ 14 Biological Oxidation Reactors
- ✦ CCD wash circuit
- ✦ Conventional CIL recovery circuit



# Process Flow – Refractory Circuit



# Bogoso/Prestea 2012 Production Summary

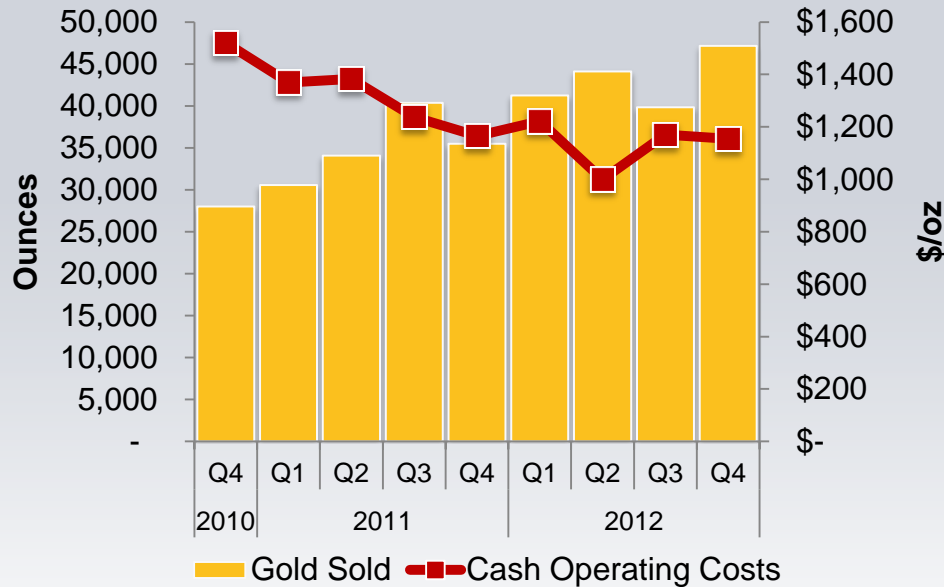
- ★ Full year gold sales of 172,379 oz at CoC of \$1,135/oz
- ★ Substantial gains in mining productivity
- ★ Bogoso oxide plant in service
- ★ Suitable ore stockpiles at year-end





# Bogoso Production Profile

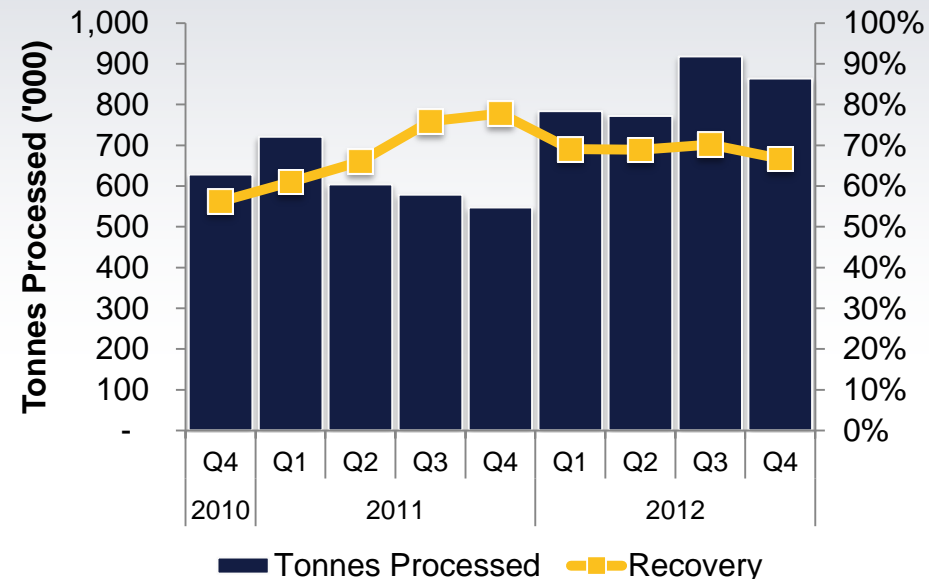
**Bogoso Production and Costs**



**Bogoso mill throughput, recovery and gold production has increased**

**Bogoso operating costs trending downwards since 2010**

**Bogoso Processing**



# Health and Safety

- ★ 410 days LTI free (27/12/2012)
- ★ New Rescue safety and health facilities
- ★ Risk Management Process
- ★ Implementation of INX system,
- ★ Embedding Risk Management processes
- ★ New safe production campaign

## **SAFE PRODUCTION RULE**

**IF IT IS NOT SAFE, DON'T DO IT !!!**

**What this means is:**



- If you think the job is not safe, don't do it, talk with your supervisor and team mates.
- If you are tired, tell your boss you are and have a quick rest.
- If you don't fully understand the job, don't do it until you do understand the risk that are in the job.
- If you see people working unsafe, stop them and explain what is wrong.
- If something does not look safe then consider it unsafe.

**Please, it is time to be our brother's keeper and keep our focus on safe production.  
Be positive and report unsafe conditions and hazards to your supervisor.**

## ★ EPA Environmental Audit (Akoben)

- Orange rating after 2 years of Red.

## ★ Extensive monitoring program

## ★ Rehabilitation

- Plant North
- Chujah Waste Dump
- Bogoso North Waste Dump





# Community– Stakeholder Engagements

- ✦ **Corporate Social Responsibility Agreements with Mine Local Communities on:**
  - Relationship and Sustainable Livelihoods Agreement
  - Local Employment Agreement
  - Golden Star (Bogoso/Prestea) Development Foundation
- ✦ **Extensive Public Consultations across all stakeholder areas**
- ✦ **Community Engagement and projects**
  - Scholarship Program
  - Community employment skills training
  - Infrastructure
- ✦ **Media Engagements & Exposure Visits to community and project areas**
- ✦ **Resolution of Stakeholder Complaints**

## Buildings and Infrastructure

- Bogoso Town Library
- Prestea Secondary Tech College
- School Projects
- Day Care Centre
- Medical Facilities
- Project Cure
- Aqua Privies
- Water Project
- Water management training programs
- Partnership with Local councils



# Golden Star Oil Plantation Project

- ✦ Generate employment and help reduce poverty through promotion of sustainable agri-business



Farmers engaged with the first crop harvest



Nursery workers



Intercropping of vegetables encouraged as alternate source of income



**GOLDEN STAR**



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**Thank You - Medase**