GOLDEN STAR



RESOURCES LTD.

European Gold Forum April 14, 2010

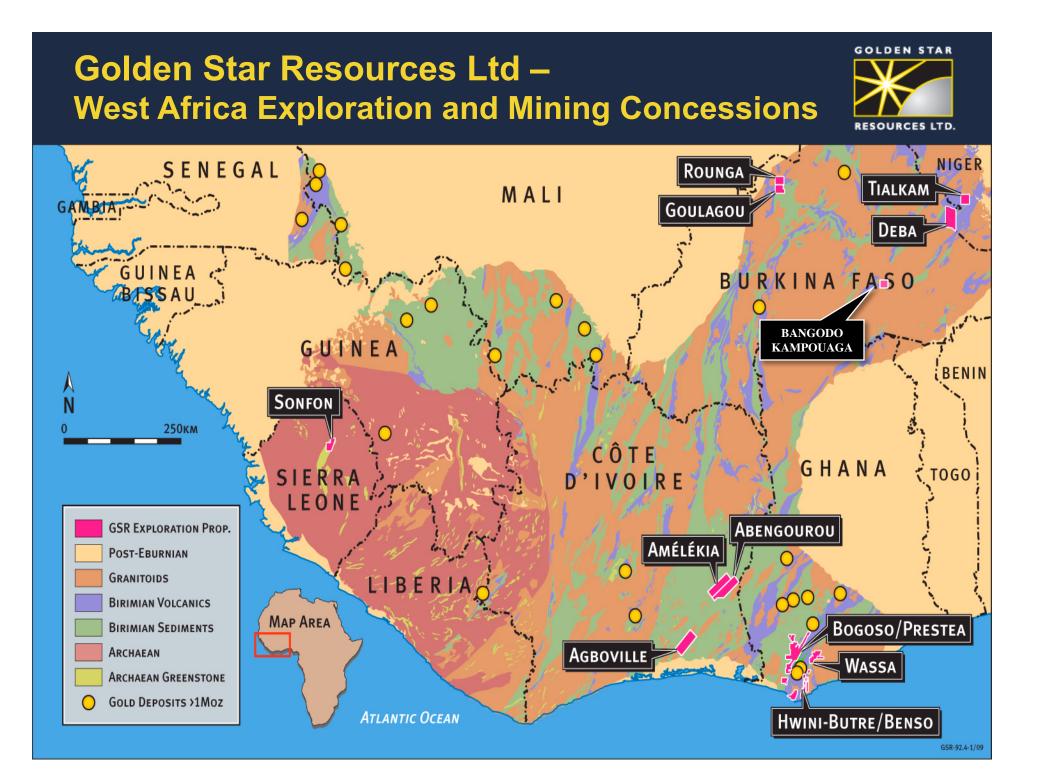
Bruce Higson-Smith

Vice President Corporate Development

Legal and Other Matters



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- **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 any part of an Inferred Mineral Resource exists, or is economically or legally mineable.



Corporate Overview



+ Gold explorer, developer, producer

- Current production focus in Ghana: 409,902 oz in 2009 at CoC of \$564/oz
- 2010 guidance of 400,000 oz @ CoC of \$585/oz

Denver-based

• NYSE Amex: GSS; TSX: GSC; GSE: GSR

Widely held, good liquidity

• Average volume on North American markets of 4.6 M shares per day (3 month average)

Market cap of ~\$1 billion

• 257 M shares outstanding

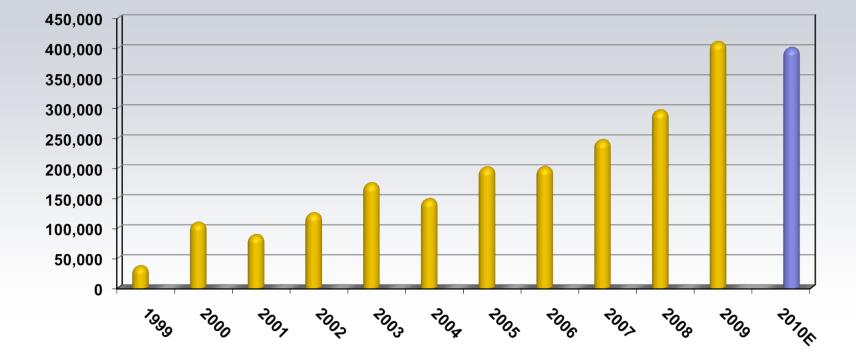
2009 Summary



- + Record annual gold sales of 409,902 oz, up 39% over 2008
 - Surpassed guidance for 2009
- Cash operating costs of \$564/oz, an improvement of 21% over 2008
- + Gold revenues of \$400.7M, up 58% over 2008
- Cash flow from operations before working capital changes of \$123.0M or \$0.518/sh
- + Net cash from operating activities of \$104.6M or \$0.441/sh
- + Free cash flow of \$55.3M or \$0.233 per share
- Year-end cash balance of \$154.1M, vs \$33.6M at end of 2008
- Net income of \$16.5M or \$0.070/sh

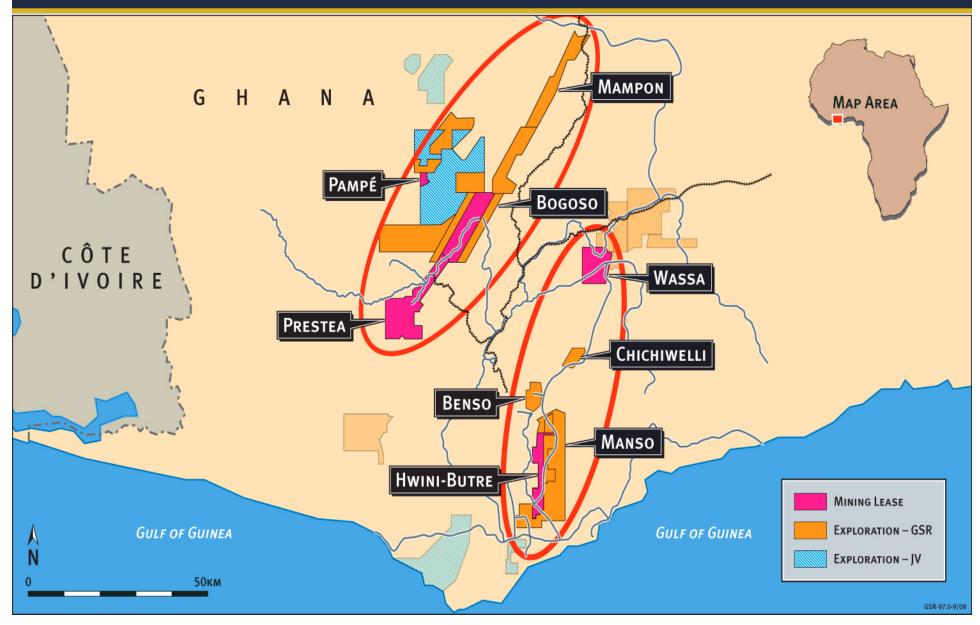
Golden Star Historical Gold Production





Production Focus in Ghana

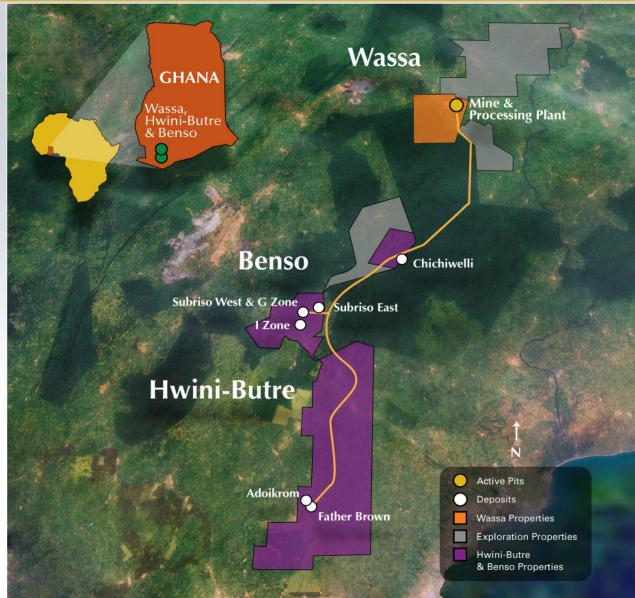




Wassa - HBB



- Conventional CIL
 2.7Mtpa plant
 commissioned in 2005
- Ore from both Benso and Hwini-Butre being blended with Wassa ore
- Excellent exploration potential
 - Manso property proximal to Hwini-Butre
 - Chichiwelli situated on the HBB haul road
 - Extensive drilling ongoing in all HBB areas



Wassa 2009 Results



+ Gold sales of 223,848 oz, up 78% over 2008

• 4Q2009 gold sales of 59,807 oz, up 30% over 4Q2008

+ Cash operating cost of \$447/oz, improved 19% from 2008

• 4Q2009 cash operating cost of \$424/oz, down 15% from 4Q2008

+ Ore grade processed of 2.76 g/t, 2008 grade of 1.33 g/t

• 4Q2009 ore grade of 2.74 g/t, 4Q2008 grade of 2.19 g/t

Ore from both Benso and Hwini-Butre being blended with Wassa ore

Wassa Reserves & Resources Dec 31, 2009



+ Proven & Probable Reserves

• 17.1M tonnes grading 1.79 g/t for 0.99M oz gold

+ Measured & Indicated Resources

• 4.9M tonnes grading 1.20 g/t gold

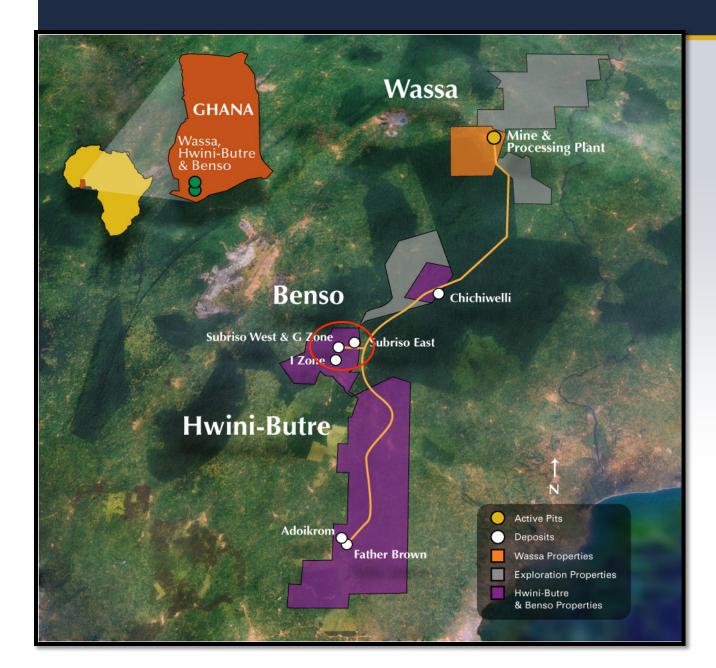
Inferred Resources

• 0.8M tonnes grading 4.35 g/t gold

+ Total Reserves & Resources of 1.3M oz gold

Wassa – HBB Mining Lease Location Map





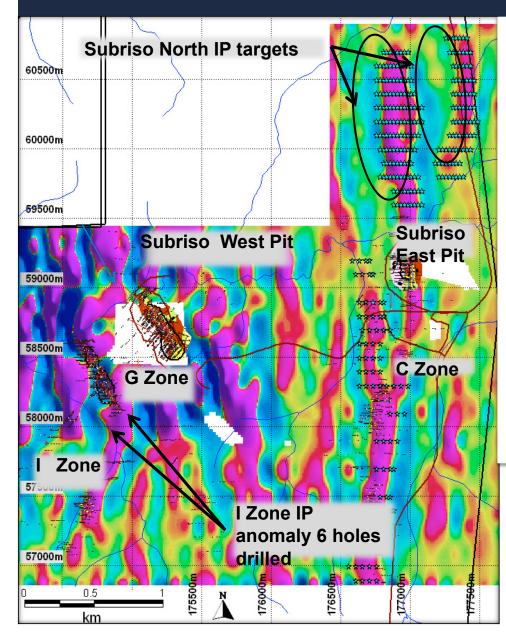
Wassa lease exploration in 2010 - drilling of the inferred material at the 419 and South East Pits

Initial RC drilling of several targets located North of the lease

Continued evaluation of the HBB satellite deposits south of the plant.

Benso IP Preliminary Chargeability – Initial Proposed Follow up Drilling





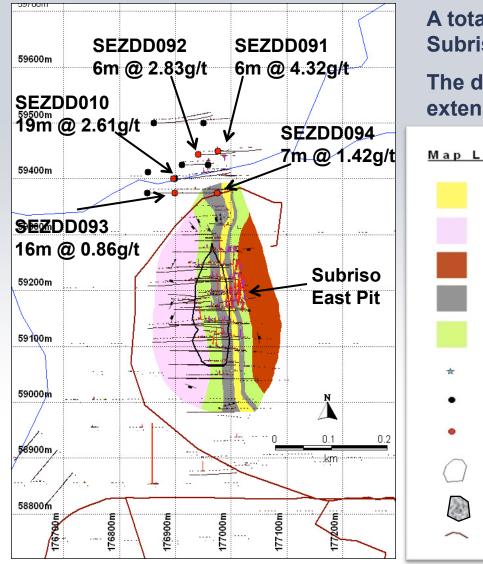
 Preliminary IP survey at Benso delineated several targets. The Subriso East - North structure extends ~ 1.2 Km and will be tested in 2010.

• Six holes drilled to test the strong resistivity anomaly NE of I zone and intersected gold mineralization associated with sulfides and silicification

• Expect more targets generated from this IP survey

Subriso East 2009 Drilling and Significant Intersections





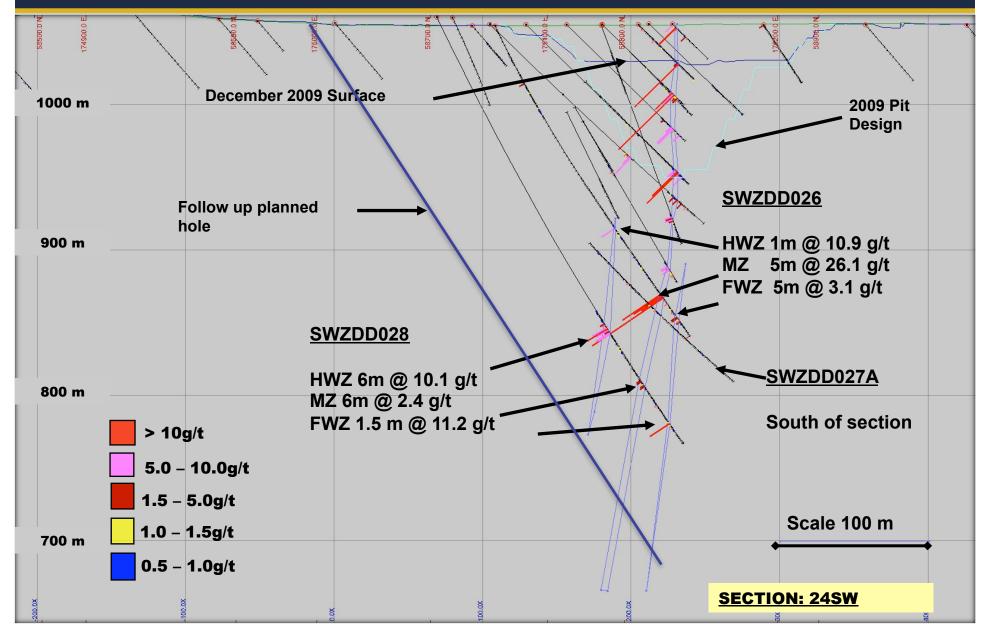
A total of 1100m of RC/DD had been drilled at Subriso East (SBE) in 2009

The drilling program targeted the Northern extension of the SBE deposit



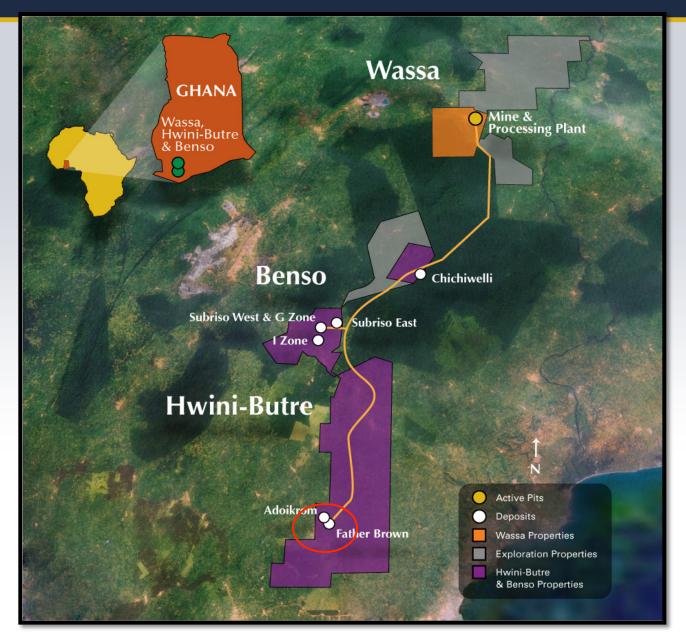
Subriso West Deeps Target – Section 24 SW





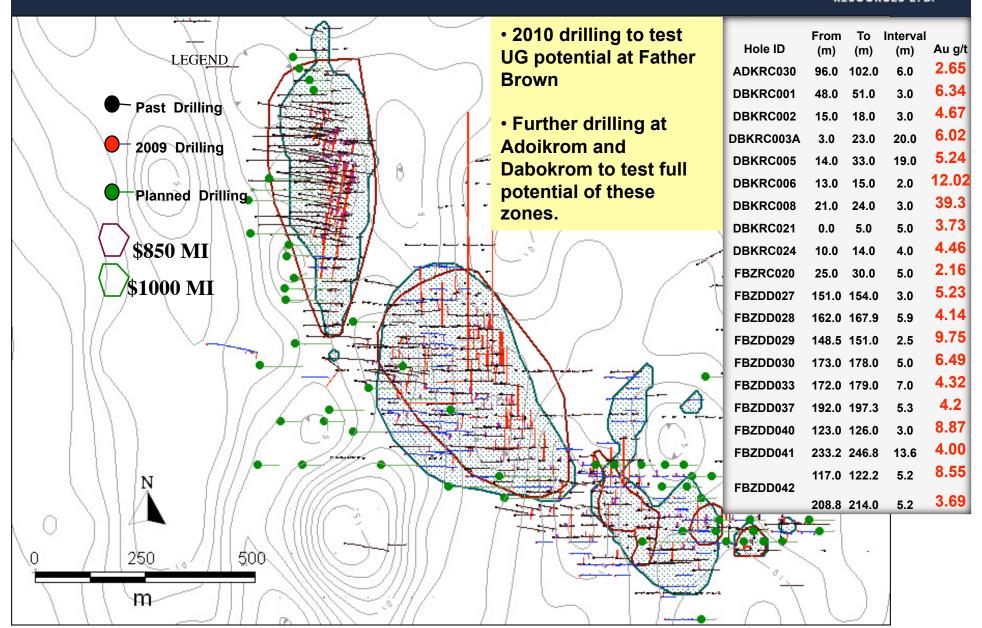
Wassa – HBB Mining Lease Location Map





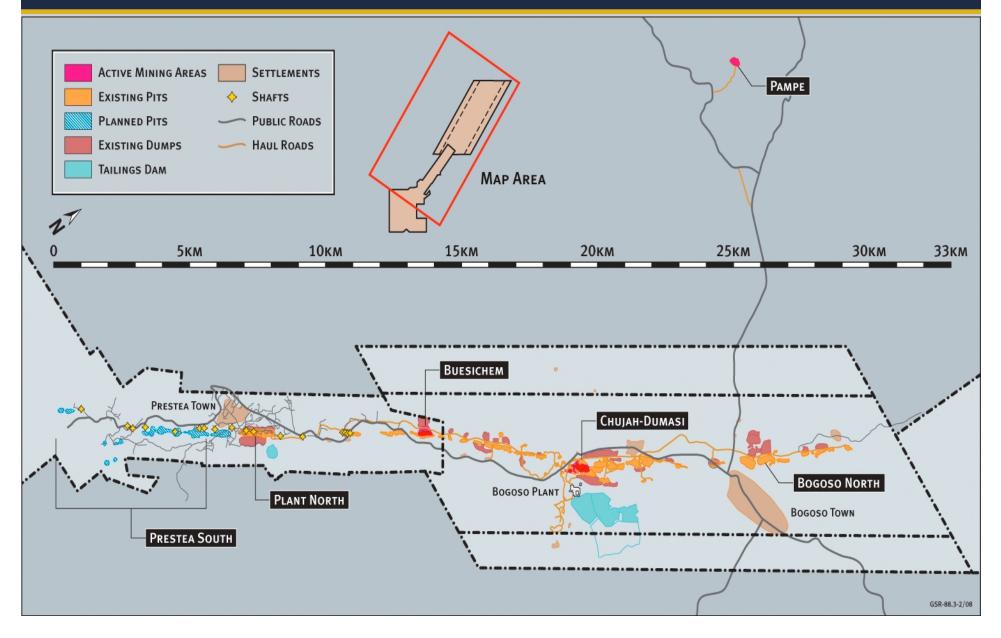
Hwini Butre 2009 Drilled and 2010 planned holes





Bogoso/Prestea Plan Map





Bogoso/Prestea 2009 Results



+ Gold sales of 186,054 oz, up 9% over 2008

- 4Q2009 gold sales of 46,679 oz, up 16% over 4Q2008
- Cash operating cost of \$705/oz, improved 16% from 2008
 - 4Q2009 cash operating cost of \$693/oz, improved 13% from 4Q2008
 - Cost reduction efforts still showing results

Increased metallurgical recovery rate to 70.7% for 2009 vs 66.5% for 2008 and 52.1% for 2007



+ Care and maintenance since August 2008

- Oxide mill is kept in good operating order
- When sulfide mill is on maintenance shut down, oxide mill processes sulfide ore

Prestea South Project will allow restart of oxide processing

- Investment of \$5M to build haul road and mine development work
- Expected additional production of 75,000 to 100,000 oz per year
- Permitting process ongoing

Bogoso Reserves & Resources Dec 31, 2009



+ Proven & Probable Reserves

• 31.2M tonnes grading 2.74 g/t gold for 2.75M oz

+ Measured & Indicated Resources

• 4.7M tonnes grading 1.90 g/t gold

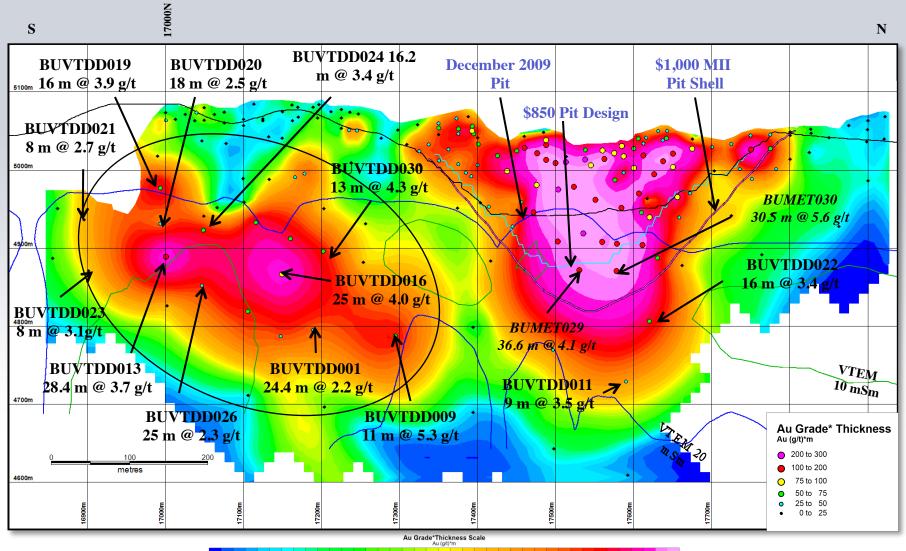
Inferred Resources

• 7.9M tonnes grading 5.53 g/t gold

+ Total Reserves & Resources of 4.4M oz gold

Buesichem (g/t*m) Long Section Showing New Drilling

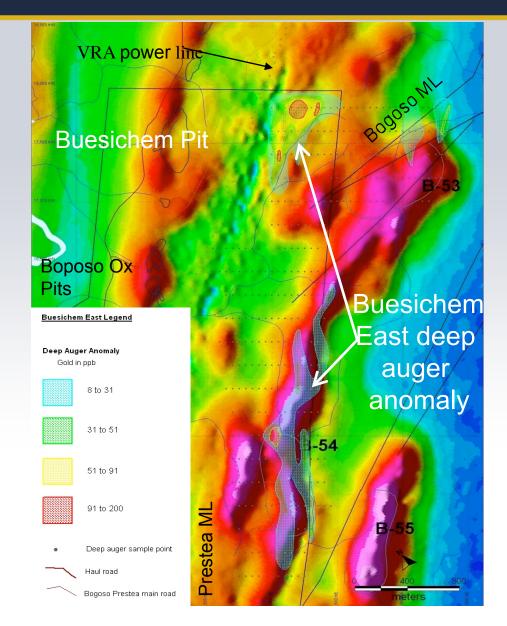




-59 -27 -03 13 25 37 47 57 70 8.1 9.3 104 11.5 12.8 14.0 15.1 16.0 17.1 18.2 19.4 20.8 22.6 24.3 26.9 29.3 31.7 34.4 37.4 41.1 44.7 47.8 52.1 58.0 65.0 72.8 65.2 112.7

Buesichem East Surface VTEM Target

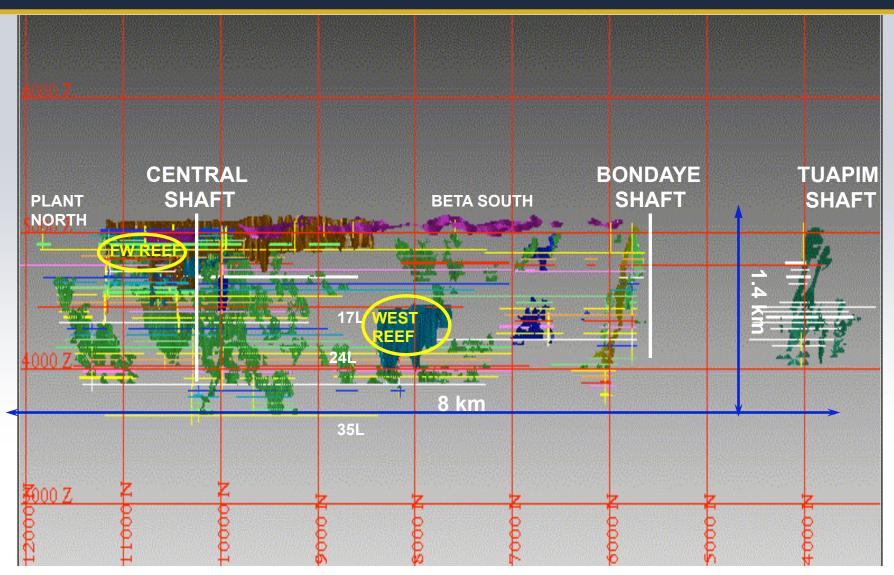




- Deep auger anomalies over Buesichem SE VTEM anomaly
- Deep auger generated gold anomaly along a conductive zone along Birimian – Tarkwaian contact
- Deep auger anomaly east of Buesichem pit will be followed up with RAB drilling

Prestea Underground Overview





Prestea Underground Resources Dec 31, 2009

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Indicated Resources

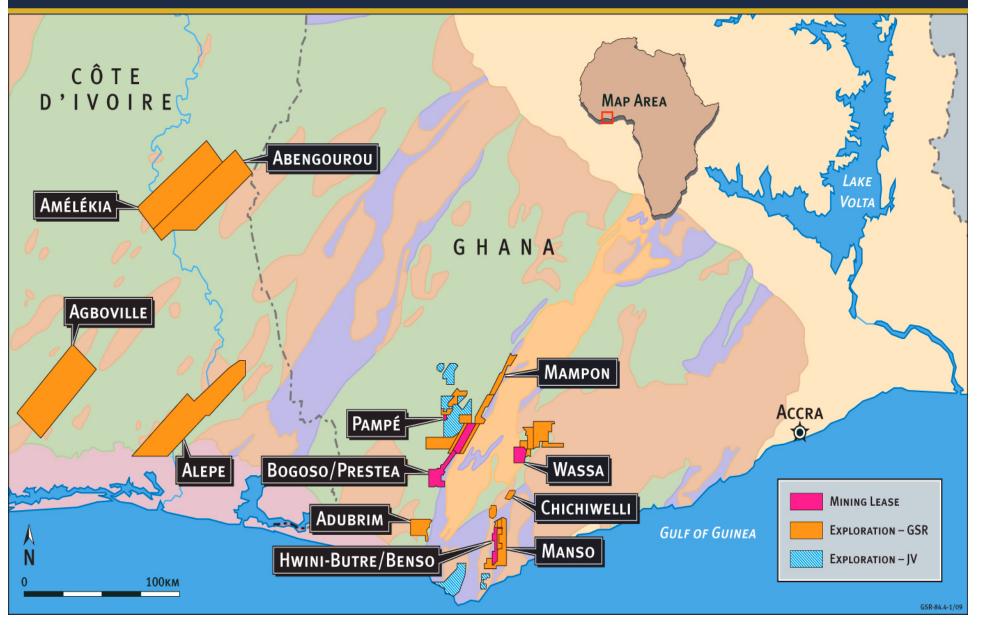
• 1.4M tonnes grading 13.36 g/t gold

Inferred Resources

- 4.1M tonnes grading 7.79 g/t gold
- + Total Resource of 1.6M oz gold

West Africa Exploration





Exploration Update



+ Exploration budget doubled in 2010 to \$18M

 85% of this will be spent on brownfields exploration around Bogoso and Wassa-HBB

+ Ghana

- Resource delineation and definition
- Significant exploration upside at surface and underground along the Ashanti Trend
- Follow up on previous geochemical and geophysics programs including deep target drilling

+ Côte d'Ivoire

 Infill soil geochemical study continuing on Amélékia and Abengourou to identify future drill targets

Exploration Update continued



+ Sierra Leone

 Have earned 51% on the JV with African Aura Mining on the Sonfon project

+ Burkina Faso

- Riverstone Resources continues work on Goulagou and Rounga
- + Niger
 - AMI Resources earning in to our Deba/Tialkam properties

+ Brazil

Continue project generation and evaluations for expanding property portfolio

+ Suriname

Sold interest in Saramacca JV to Newmont for ~\$8.0M

+ French Guiana

• Sold Paul Isnard and other projects to Auplata for ~\$2.1M

Sustainability



Committed to best practices for safety, health and environment

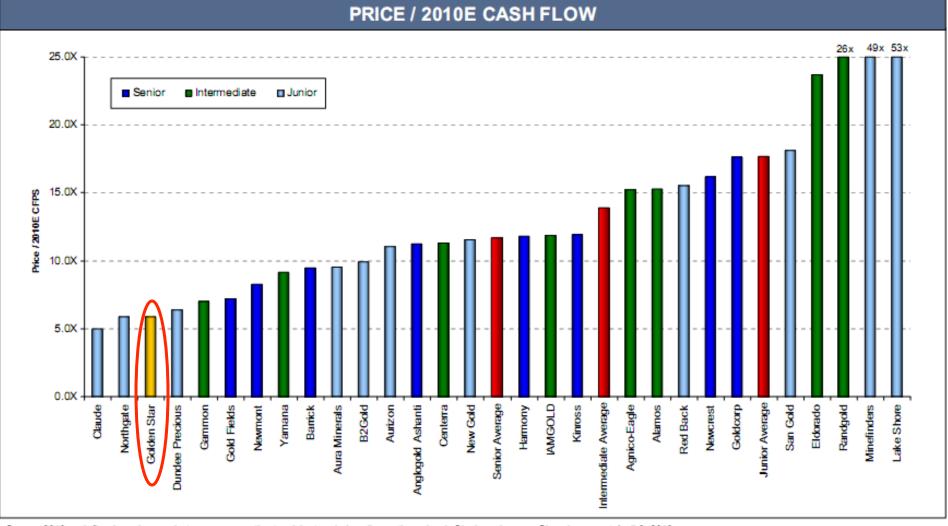
- UN Global Compact
- International Cyanide Management Code
 - Both mines have conditional certification from ICMC

Community development programs in place since 1999

- Focus on water, health, education
- Oil palm plantation
- Received Nedbank Capital Green award in 2008
 - First non-South African company to be awarded this honor

Comparables - Price to Cash Flow

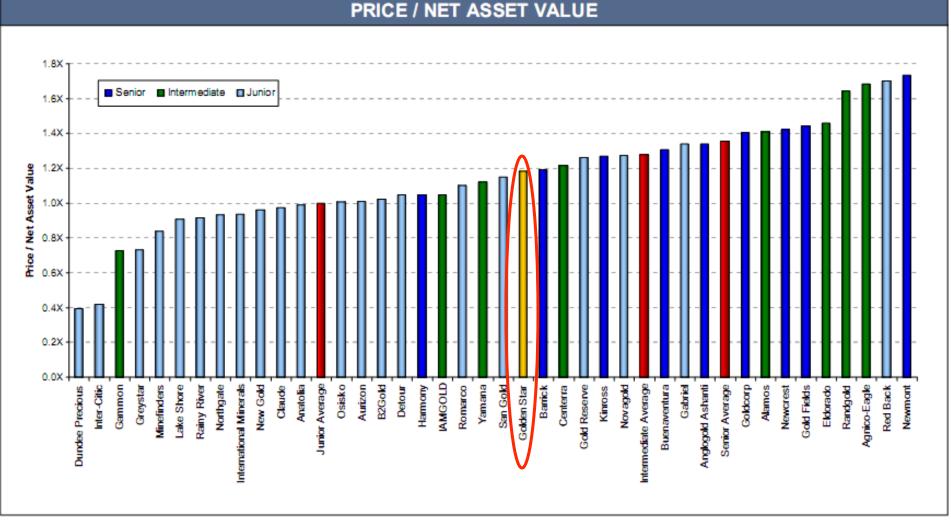




Source: 2010 cash flow based on analyst consensus estimates (chart excludes all negative values). Closing prices per Bloomberg as at April 6, 2010

Comparables - NAV Multiple Spectrum

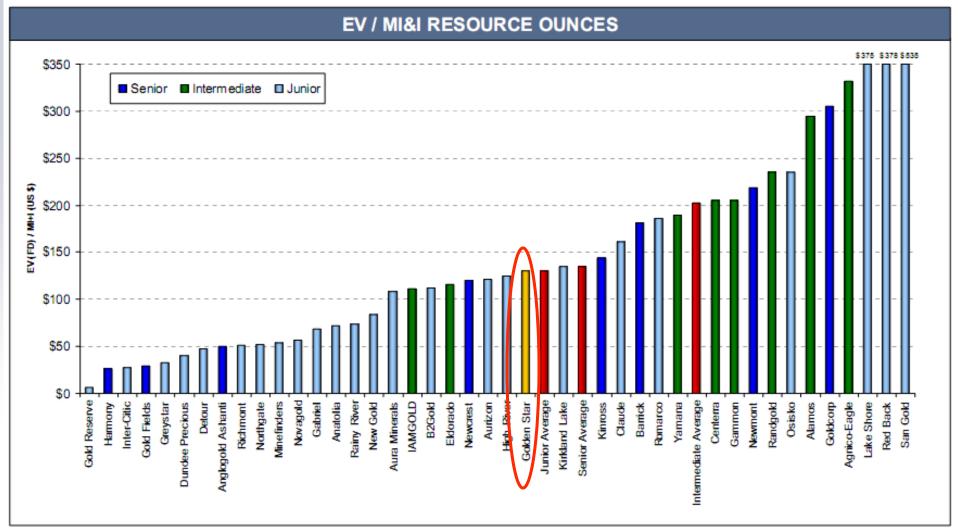




Source: Net asset values based on research analyst consensus estimates; closing prices per Bloomberg as at April 6, 2010

Comparables - EV per Ounce of Resource







- Finalize permit and develop Prestea South orebodies this will add 75,000 oz to 100,000 oz per year production
- Continue developing reserve/resource potential around both mine sites
- Examine options at Prestea Underground potential to 25,000 oz to 50,000 oz per year production

Need More Information?



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Investor relations at Golden Star Web <u>www.gsr.com</u> Phone 1-303-830-9000

