

# GOLDEN STAR

## ABOUT THE COVER

Golden Star has risen to and is meeting the challenge! After several years of restructuring and building value in a difficult gold market, we are now profitable and well-funded and looking to grow—to climb higher and to succeed.

The worker at Bogoso is planting creeping vines to rehabilitate pit walls. Even before we finish mining we begin the rehabilitation process (see page 6).

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## FORWARD LOOKING AND CAUTIONARY STATEMENT

*Statements Regarding Forward-Looking Information.* Some statements contained in this annual report are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and involve uncertainties or risks that could cause actual results to differ materially. Such statements include comments regarding production, grade, potential mine life, feasibility studies, development, costs, expenditures, mine re-opening and exploration. Factors that could cause actual results to differ materially include unexpected events during construction and start-up; variations in ore grade, tons mined, crushed or milled; technical, permitting, mining or processing issues, and fluctuations in gold price and costs. These and other factors are discussed in our Form 10-K for 2002, which accompanies and is incorporated into this annual report, under the headings "Statements Regarding Forward-Looking Information" beginning on page 2 of the Form 10-K and "Risk Factors" beginning on page 8 of the Form 10-K.

### **Cautionary Note to U.S. Investors concerning estimates of Measured and Indicated Mineral Resources**

This annual report uses the terms "measured mineral resources" and "indicated mineral resources". We advise U.S.

investors that while those terms are recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize them. U.S. investors are cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into reserves.

### **Cautionary Note to U.S. Investors concerning estimates of Inferred Mineral Resources**

This annual report uses the term "inferred mineral resources". We advise U.S. investors that while this term is recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize it. "Inferred mineral 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 the inferred mineral resources will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or other economic studies. U.S. investors are cautioned not to assume that part or all of the inferred mineral resource exists, or is economically or legally mineable.

# HIGHLIGHTS

“We have **evolved** as a junior gold producer with **broad** gold exploration, development and operational **skills**, which **position** us to continue our track record of **growth** with the **objective** of **achieving** our immediate term **goal** to become a **mid-tier** gold producer.”

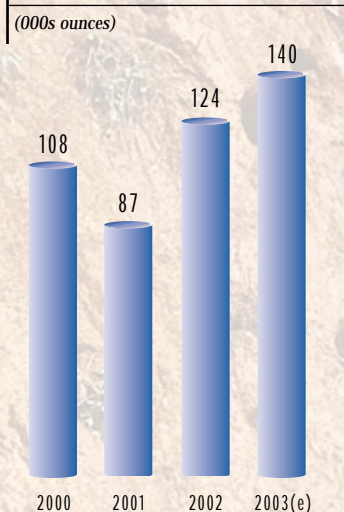
Our **achievements** in 2002 stand by themselves:

- ❖ *First ever net income reported of \$4.9 million, or 7 cents per share*
- ❖ *Cash flow generated from operations of \$5.8 million, or 8 cents per share*
- ❖ *Record gold production of 124,400 ounces at cash operating costs of \$193 per ounce*
- ❖ *Mineral Reserves at Bogoso/Prestea increased by 21% to 2.2 million ounces*
- ❖ *Acquired a 90% interest in Wassa*
- ❖ *Acquired a joint venture interest in the Prestea Underground*
- ❖ *Listed on the American Stock Exchange*

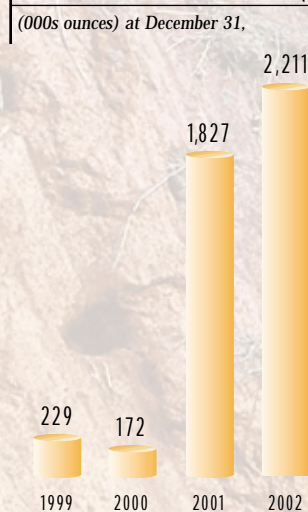
SHARE PRICE VS GOLD PRICE



GOLD PRODUCTION



BOGOSO/PRESTEA GOLD RESERVES (100%)



# SHAREHOLDERS

LETTER TO OUR SHAREHOLDERS

## 2002 was a stellar year for Golden Star with our company being profitable for the first time in its history, . . .



Bogoso processing plant and crushed ore stockpile.

2002 was a stellar year for Golden Star with our company being profitable for the first time in its history, both for the full year and for each of the four quarters. Our net income for the year was \$4.9 million, which was attributable to a number of factors, including record gold production, improved gold recovery, lower cash costs arising from the commencement of mining at Prestea and higher gold prices.

Commencement of mining at Prestea and the processing of Prestea ore at our processing facilities at Bogoso, marked a significant milestone in our multi-year strategy to consolidate the southern end of the Ashanti gold belt in Ghana. The combined Bogoso/Prestea operation has significant reserves, which will support ongoing production at an average annualized rate of 135,000 ounces per annum at cash operating costs of less than \$200 per ounce for more than ten years. This flagship gold mining operation provides an excellent platform for us to grow our business to become a mid-tier gold producer.

During the year we also completed the acquisition of the Wassa gold project in Ghana and commenced drilling and feasibility study work to determine the viability of developing a conventional milling operation at Wassa. We expect the feasibility study to be complete by mid-2003 and, if positive, to immediately there-

after commence construction work, with the aim of achieving first gold production in early 2004. Should the development proceed as expected, Wassa would deliver immediate-term growth, resulting in an increase to our group production to approximately 250,000 ounces in 2004 at sub-\$200 per ounce average cash operating costs.

Beyond the potential development of Wassa, we envisage that we will continue to increase our gold production through a combination of organic growth and acquisitions.

Perhaps the greatest opportunity for future organic growth lies in the Bogoso/Prestea complex where in excess of 11 million ounces have been historically mined. We have already established combined Mineral Reserves and Mineral Resources in open pit equivalent to about half of historical production. We believe that there is significant potential to increase this number through both an expanded surface exploration and the commencement of underground exploration at Prestea in 2003.

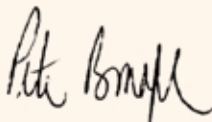
At Bogoso/Prestea we hold the majority of our rights through our 90% interest in our subsidiary, Bogoso Gold Limited; however, our rights to the Prestea underground are held via a joint venture in which our 90% subsidiary has a 54% interest. In accordance with this joint venture we have the right to manage any exploration and re-development. We commenced our assessment of the Prestea underground in 2002. We expect to commence exploration drilling in the second half of 2003, once all of the historical mining information has been assimilated into a digital model to give us a better understanding of the geology and mineralization. We are sole-funding this work and increasing our interest in

the joint venture accordingly. As at December 31, 2002 we had earned a 54% interest in the joint venture and, based on our forecast expenditure expect to increase our interest in the joint venture to 65% during 2003. We do have the right to increase our subsidiary's interest to 90% at any time through a pre-agreed payment to our joint venture partner (with the remaining 10% being held by the Government of Ghana).

The majority of our exploration focus has been, and we expect will continue to be, concentrated around our current and proposed processing operations. However, we may continue earlier stage exploration on our exploration properties elsewhere in Ghana and in the Guiana Shield in South America.

Corporately we raised a significant amount of funding during 2002 and in the first two months of 2003. As a result, our company is well funded with in excess of \$50 million of cash reserves. This strong cash position leaves us well placed to progress our near term organic growth development projects and to contemplate value-adding acquisition opportunities.

Sincerely,



**PETER BRADFORD**  
*President and CEO*

# RESERVES AND RESOURCES

## MINERAL RESERVES

Proven and Probable Mineral Reserves at Bogoso/Prestea as at December 31, 2002 are as follows:

Material	Tonnes (000)	Gold Grade (g/t)	Contained Ounces
<b>Proven Reserves</b>	<b>14,170</b>	<b>3.26</b>	<b>1,484,676</b>
<b>Probable Reserves</b>	<b>8,902</b>	<b>2.54</b>	<b>726,378</b>
<b>Total</b>	<b>23,072</b>	<b>2.98</b>	<b>2,211,054</b>
<b>Golden Star 90% Share</b>	<b>20,765</b>	<b>2.98</b>	<b>1,989,948</b>

1. The Mineral Reserves were determined at a gold price of \$300 per ounce.
2. The Mineral Reserves were estimated in conformance with the definitions contained in Canada's National Policy Instrument 43-101.
3. The Corporation's Qualified Person for the estimation of the Mineral Reserves is David Alexander, our employee.
4. Full details on the methodology used to estimate the Mineral Reserves is included on Page 28 of the Corporation's Form 10-K for the year ended December 31, 2002.

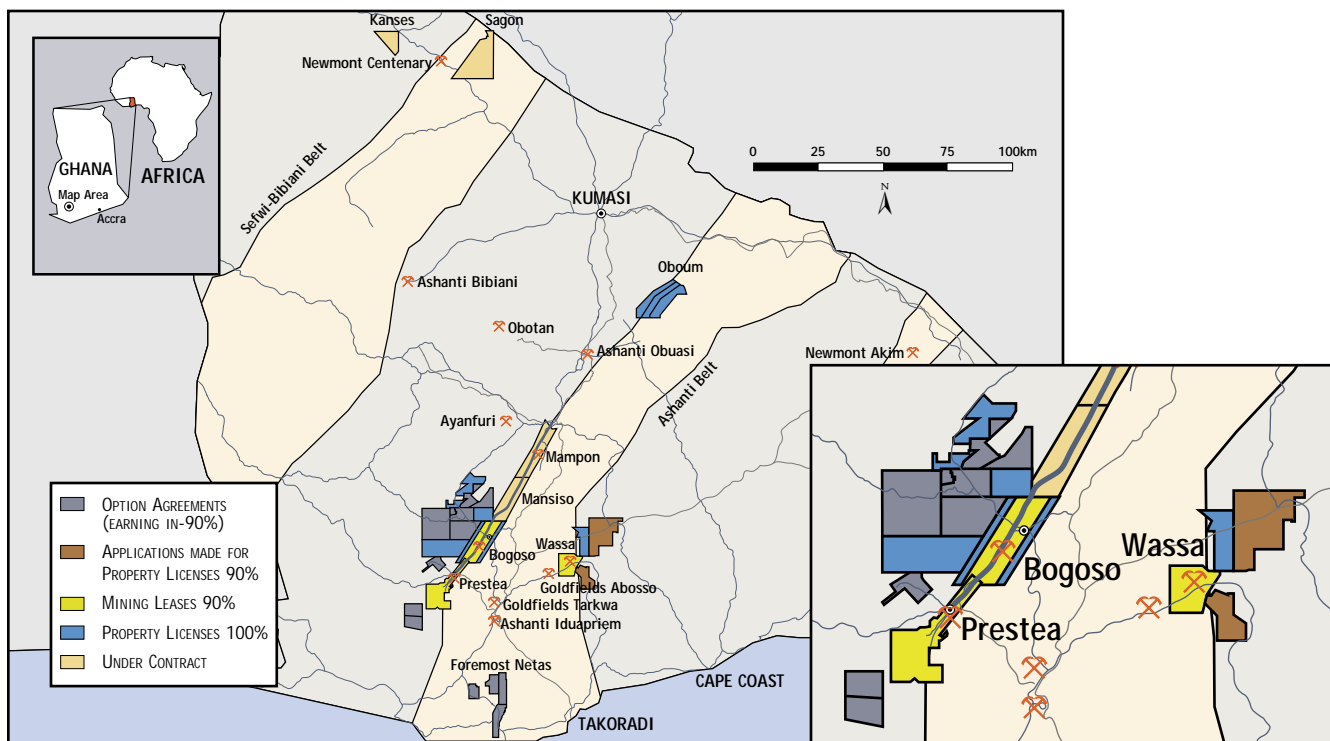
## MINERAL RESOURCES

Measured, Indicated and Inferred Mineral Resources as at December 31, 2002 for our Ghana properties are as follows:

Deposits	Measured		Indicated		Measured & Indicated		Inferred	
	Tonnes (000)	Grade (g/t)	Tonnes (000)	Grade (g/t)	Tonnes (000)	Grade (g/t)	Tonnes (000)	Grade (g/t)
<b>Bogoso/Prestea</b>	<b>5,861</b>	<b>3.64</b>	<b>14,101</b>	<b>2.69</b>	<b>19,962</b>	<b>2.97</b>	<b>23,960</b>	<b>2.91</b>
<b>Wassa</b>	<b>0</b>	<b>-</b>	<b>17,770</b>	<b>1.29</b>	<b>17,770</b>	<b>1.29</b>	<b>28,843</b>	<b>1.15</b>
<b>Total Ghana</b>	<b>5,861</b>	<b>3.64</b>	<b>31,871</b>	<b>1.91</b>	<b>37,732</b>	<b>2.18</b>	<b>52,803</b>	<b>1.95</b>
<b>Golden Star 90% Share</b>	<b>5,275</b>	<b>3.64</b>	<b>28,684</b>	<b>1.91</b>	<b>33,959</b>	<b>2.18</b>	<b>47,522</b>	<b>1.95</b>

1. The Mineral Resources were estimated at a gold price of \$325 per ounce.
2. The Mineral Resources were estimated in conformance with the definitions contained in Canada's National Policy Instrument 43-101.
3. The Mineral Resources are additional to the Mineral Reserves and not inclusive of the Mineral Reserves.
4. The Corporation's Qualified Person for the estimation of the Mineral Resources is Mitch Wasel, our employee.
5. Details on the methodology used to estimate the Mineral Resources is included on Pages 29 and 32 of the Corporation's Form 10-K for the year ended December 31, 2002.
6. US Investors should review the cautionary statements on pages 6 and 7 of the Corporation's Form 10-K for the year ended December 31, 2002.
7. Mineral Resources for the Corporation's South American properties can be found on Pages 7, 39 and 40 of the Corporation's Form 10-K for the year ended December 31, 2002.

## GOLDEN STAR PROPERTIES IN GHANA









# BOGOSO/PRESTEA GOLD MINE

We have a 90% interest in the Bogoso/Prestea open pit gold mining operation through our subsidiary, Bogoso Gold Limited.

Bogoso/Prestea has evolved, through our regional consolidation strategy, to bring together the modern processing facilities and well developed infrastructure at Bogoso, originally developed by Billiton in the early 1990s, with known open-pittable reserves at Prestea. Since the consolidation of Bogoso and Prestea, the proven and probable reserves for the combined property has increased to approximately 2.2 million ounces of reserves. There is significant opportunity to grow these reserves and we have committed significant additional funds to exploration and technical studies at Bogoso/Prestea in 2003.

## Operations

During 2002, we recorded our strongest year of operations since acquiring our initial interest in 1999. A record gold production level of 124,400 ounces was achieved at significantly improved gold prices resulting in record revenues. All gold production from Bogoso/Prestea in 2002 was uncommitted and sold into the spot gold market.

Our owner-operated mining equipment continued to work well, maintaining the supply of ore to the processing facility while developing new haulroads to connect the new Prestea deposits with the processing plant at Bogoso. In 2003, our mining activities will be concentrated at the Plant-North deposit on the Prestea concession, with no new work to develop haulroads, and we can therefore expect a commensurate improvement in mining efficiency and mining unit costs in 2003.

The processing plant performed well, achieving a record throughput of 2.27 million tonnes for the year at an improved gold recovery rate of 74%. Our gravity plant, installed in 2000, continued to perform well - processing Prestea ore, which has a higher component of gravity recoverable gold. In 2003



The end of the process - pouring gold at Bogoso.

During 2002, we recorded our **strongest** year of **operations** since acquiring our initial interest in 1999.

we will upgrade the gravity plant to further increase the percentage of gold recovered in this circuit. Plant availability continued at a high level of 98%.

## Prestea Underground

In 2002, we acquired an initial 45% joint venture interest in the Prestea underground and commenced a program to assimilate all of the historical mining information from the past 130 years of operations into a digital model. In parallel, we are carrying out check mapping, surveys and sampling to verify the historical record and are reinterpreting the structural geology. The aim is to create a digital model to be used as a targeting tool in readiness for exploration drilling in the second half of 2003.

We have also invested in the underground to improve the safety and efficiency of the existing underground infrastructure, including the dewatering pumps required to keep the mine dry and so preserve access.

Our ownership interest in the joint venture increases commensurate with our expenditure on work on the underground exploration and refurbishment. As at December 31, 2002, our joint venture interest was 54% and, based on our forecast expenditure for 2003, we expect our joint venture interest to increase to 65% in 2003.

## Outlook

In 2003 we expect to produce about 140,000 of gold from Bogoso/Prestea at a cash operating cost of approximately \$185 per ounce.

We will also plan to accelerate our surface exploration program and carry out the first underground exploration during 2003, with the aim of developing a better understanding of the Bogoso/Prestea potential. This will be a critical element in our studies to assess the viability of upgrading production capacity in the area.

◀ Mining in the Prestea Beposo pit. Note the early stages of revegetation in the pit walls.

# WASSA GOLD PROJECT GHANA

We have a 90% interest in the Wassa gold project in Ghana, which we hold through our subsidiary, Wexford Goldfields Limited.

We acquired Wassa out of receivership in 2002, having recognized the opportunity to re-engineer the project with conventional milling/carbon in leach ("CIL") processing technology. Laboratory testing has demonstrated significantly better metallurgical recoveries for conventional milling and CIL compared to heap leaching technology used previously.

Since acquiring Wassa, we have successfully carried out significant drilling to better understand the geology and to improve our confidence in the project's mineral resources. This was a forerunner to the current technical studies required to complete a feasibility study and demonstrate the viability of Wassa's redevelopment.

## **Exploration and Feasibility Study**

The focus of our exploration work at Wassa during 2002 has been the validation of the pre-existing reserve. Although this involved significantly more drilling than originally contemplated, we now have a good understanding of the Wassa geology and mineralization controls. From this platform of knowledge we plan to broaden our exploration activities at Wassa in 2003 to delineate new mineralization.

We commenced our feasibility study in late 2002, with the assistance of MDM (lead and process design), Lakefield Laboratories (metallurgical testing), SRK (geology and reserves), Scott Wilson (environmental) and Knight Piésold (tailings and geotechnical). As a result of the significant amount of existing equipment and infrastructure located on the property,

the scope of the feasibility study is relatively narrow and is aimed at determining the viability of developing a 3 million tonne per annum conventional milling/CIL operation at Wassa using the existing crushing circuit and gold room.

Metallurgical testwork is progressing well and has returned results the same or better than the metallurgical assumptions made in our acquisition due diligence.

The feasibility study is expected to be completed in mid-2003 and, subject to the project's viability, we expect to commence construction immediately thereafter.

## **Outlook**

A positive decision on Wassa's redevelopment should result in the first gold being produced from Wassa in early 2004, at an estimated construction cost, based on our work to date, of about \$14 million.

Recognizing that the expected timetable between the completion of the feasibility study and our planned commencement of production is relatively short, we have proceeded with the selection and acquisition of two second hand grinding mills which have subsequently been shipped to Ghana and are now stored on the property. The drive trains for these mills are currently being overhauled in South Africa.

We expect Wassa to produce at an average annualized gold production rate of about 120,000 ounces per annum and at average cash operating costs of about \$185 per ounce.

Since acquiring Wassa, we have **successfully** carried out **significant** drilling to **better** understand the geology and to **improve** our **confidence** in the project's mineral resources.

Our geologist mapping structures around one of the existing pits at Wassa.







# CORPORATE RESPONSIBILITY

## Safety

During 2002, we maintained our very high standard of safety, achieving an average Lost Time Injury Frequency Rate, which includes all regular employees, including contract employees, of 0.63 lost time injuries per million man-hours. This compares very well with the average for U.S. open pit mines of 9.4.

We believe our achievements in this area are a direct result of our continuing commitment to training and safety education programs.

## The Environment

Compliance with environmental monitoring, reporting and rehabilitation responsibilities is of primary importance to us and we work closely with and enjoy a positive and constructive relationship with the relevant agencies in the areas where we operate.

We continue to be at the forefront of the mining industry in Ghana with our rehabilitation initiatives. During 2002, we rehabilitated a total land area of approximately 34.5 hectares with nitrogen fixing and productive tree species. In addition, a further 37.5 hectares were planted with vetiveria zizanoides (vetiver grass) for erosion control purposes. Of particular interest was our new initiative to stabilize pit slopes during the mining phase using creeping vines along with seeds that germinate and grow *insitu*.

Significant milestones during the year were the completion of definitive environmental impact studies and permitting for the Beposo/Brumase and Plant-North areas of the Prestea property.

## Community Relations

Maintaining excellent community relations is a high priority to our operations, particularly at Prestea where we inherited an elevated level of unemployment and social disruption resulting from the curtailment of underground operations by the previous operator. We have made significant efforts over the



Early stages of waste dump stabilization immediately following the completion of mining.

In new mining areas, environmental **reclamation** commences as soon as the **first material** is removed from the new pit.

last two years to consult with community leaders and many stakeholder groups regarding the benefits and impacts of surface mining in the area.

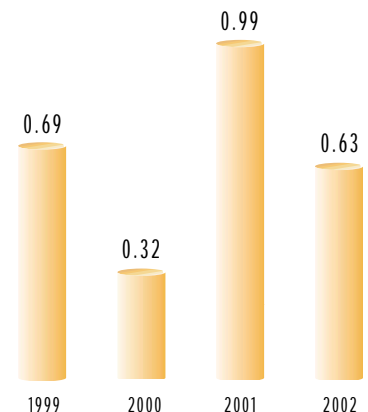
During 2002, we commenced a program to assist the development of sustainable alternative livelihoods and have increased our commitment to this program in 2003. Key programs which have been initiated in consultation and cooperation with a number of Governmental agencies and third party groups, include: our farming assistance program (consisting of both materials and training); apprenticeship scheme; and small scale community development projects. Other areas of concern to the communities where we have a continuing high level of involvement are water supply, education and sports facilities.

Perhaps the single greatest impact that we may have on employment in the area is the potential reopening of

the Prestea underground mine, which could follow our assessment and exploration activities. There is therefore keen community interest in our activities and progress in this area.

## SAFETY STATISTICS

(Incidents per million manhours)



The US open pit metal mine incidence rate for 2001 was 9.4

# DIRECTORS

# OFFICERS



**JAMES E. ASKEW**

*Jim Askew, a mining engineer, brings a wealth of experience in all facets of the mining industry to the Board.*



**PETER J. BRADFORD**

*Peter Bradford, President and Chief Executive Officer of the Corporation since 1999.*



**DAVID K. FAGIN**

*David Fagin has a long career in the North American mining industry and continues to be active as a corporate director and with a number of professional and non-profit organizations.*



**IAN MACGREGOR**

*Ian MacGregor has practiced law for over 35 years and brings an abundance of knowledge and experience to the Board in the area of public financings, mergers and acquisitions and international joint venture transactions.*



**ROBERT R. STONE**

*Robert Stone, Chairman of the Board of the Corporation, is a business consultant and corporate director with a strong financial background as CFO and director of a major Canadian base metal producer based in Vancouver.*

**PETER J. BRADFORD**

*Peter Bradford, President and Chief Executive Officer, is a seasoned manager with in excess of 20 years of operating and development experience in the mining industry, including eight years in Ghana.*



**RICHARD Q. GRAY**

*Richard Gray, Senior Vice President and Chief Operating Officer, is a qualified mining engineer with about 20 years experience in the gold mining industry, primarily in Africa.*



**ALLAN J. MARTER**

*Allan Marter, Senior Vice President and Chief Financial Officer, brings more than 20 years of experience in investment banking and financial management in the mining industry to Golden Star.*



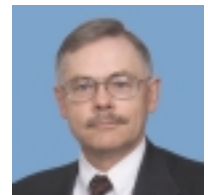
**DR. DOUGLAS A. JONES**

*Dr. Doug Jones, Vice President, Exploration, joined Golden Star in 2003 bringing some 20 years exploration experience in Africa, South America and Australia to our exploration efforts.*



**ROGER D. PALMER**

*Roger Palmer, Controller, has over 25 years experience in the mining business including exploration, mining and as a corporate controller for various publicly traded companies.*



**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, DC 20549**  
**FORM 10-K**

[ X ] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

**For the Fiscal Year ended December 31, 2002**

Commission file number 1-12284

**GOLDEN STAR RESOURCES LTD.**  
(Exact Name of Registrant as Specified in Its Charter)

**Canada**

(State or other Jurisdiction of  
Incorporation or Organization)

**98-0101955**

(I.R.S. Employer  
Identification No.)

**10579 Bradford Road, Suite 103**

**Littleton, Colorado**

(Address of Principal Executive Office)

**80127-4247**

(Zip Code)

Registrant's telephone number, including area code **(303) 830-9000**

Securities registered or to be registered pursuant to Section 12 (b) of the Act:

Title of Each Class

Common Shares

Name of each exchange on which registered

American Stock Exchange

Securities registered or to be registered pursuant to Section 12(g) of the Act:

Warrants Issued July 2002  
Warrants Issued February 2003

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act).  
Yes  No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant was approximately \$109.8 million as of June 28, 2002, based on the closing price of the shares on the American Stock Exchange of \$1.80 per share.

Number of Common Shares outstanding as at March 14, 2003: 106,317,535.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of our Definitive Proxy Statement to be filed with the Securities and Exchange Commission pursuant to Regulation 14A in connection with the 2003 Annual Meeting of Shareholders are incorporated by reference to Part III of this Report on Form 10-K.

## **REPORTING CURRENCY, FINANCIAL AND OTHER INFORMATION**

All amounts in this Report are expressed in United States dollars, unless otherwise indicated. Canadian currency is denoted as “Cdn\$”, French currency is denoted as “FF” in 2001 and as “Euro” afterward, and Ghanaian currency is denoted as “Cedi” or “Cedis”.

Financial information is presented in accordance with accounting principles generally accepted in Canada (“Cdn GAAP”). Differences between accounting principles generally accepted in the United States (“US GAAP”) and those applied in Canada, as applicable to the Registrant, are explained in Note 26 to the Consolidated Financial Statements.

Information in Part I of this report includes data expressed in various measurement units and contains numerous technical terms used in the mining industry. To assist readers in understanding this information, a conversion table and glossary are provided at the end of Item 1 of Part I.

References to “we”, “our”, and “us” mean Golden Star Resources Ltd., its predecessors and consolidated subsidiaries, or any one or more of them, as the context requires.

## **STATEMENTS REGARDING FORWARD-LOOKING INFORMATION**

This Form 10-K contains forward-looking statements, within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act, with respect to our financial condition, results of operations, business, prospects, plans, objectives, goals, strategies, future events, capital expenditure, and exploration and development efforts. Words such as “anticipates,” “expects,” “intends,” “plans,” “forecasts”, “budgets”, “believes,” “seeks,” “estimates,” “may,” “will,” and similar expressions identify forward-looking statements. Although we believe that our plans, intentions and expectations reflected in these forward-looking statements are reasonable, we cannot be certain that these plans, intentions or expectations will be achieved. Actual results, performance or achievements could differ materially from those contemplated, expressed or implied by the forward-looking statements contained or incorporated by reference in this Form 10-K.

The following, in addition to the factors described in “Risk Factors” discussed in this Form 10-K, are among the factors that could cause actual results to differ materially from the forward-looking statements:

- unexpected changes in business, legal, regulatory and economic conditions;
- significant increases or decreases in gold prices;
- timing and amount of production;
- unanticipated grade changes;
- unanticipated recovery or production problems;
- mining and milling costs;
- mining, metallurgy, processing, access, availability of materials and equipment, transportation of supplies and availability of utilities, including water and power;
- uncertainties associated with developing a new mining operation, including potential cost over-runs and unreliability of estimates in early stages of mine development
- determination of reserves;



- changes in project parameters;
- costs and timing of development of new reserves;
- results of current and future exploration activities;
- results of pending and future feasibility studies;
- joint venture relationships;
- political or economic instability, either globally or in the countries in which we operate;
- local and community impacts and issues;
- availability, terms, conditions and timing of receipt of government approvals;
- accidents and labor disputes;
- environmental costs and risks;
- competitive factors, including competition for property acquisitions; and
- financial market conditions and the availability of financing on reasonable terms.

These factors are not intended to represent a complete list of the general or specific factors that may affect us. We may note additional factors elsewhere in this Form 10-K and in any documents incorporated by reference into this Form 10-K. We undertake no obligation to update forward-looking statements.

## PART I

### **ITEM 1. DESCRIPTION OF BUSINESS**

#### **Overview**

We are an international gold mining and exploration company producing gold in Ghana in West Africa. Through our various subsidiaries and joint ventures we own a controlling interest in four gold properties in Ghana, the Bogoso property ("Bogoso"), the Prestea property ("Prestea"), the Wassa property ("Wassa") and the Prestea underground property ("Prestea Underground"). Bogoso and Prestea are adjoining properties and both are owned by our 90% owned subsidiary Bogoso Gold Limited ("BGL"). These two properties now function as a single operation referred to as ("Bogoso/Prestea") and are expected to produce approximately 140,000 ounces of gold in 2003.

We own a 90% equity interest in Wexford Goldfields Limited ("Wexford"), which owns the Wassa gold property, located some 35 kms east of Bogoso/Prestea. A feasibility study is currently underway which seeks to establish the economic viability of this property.

The Prestea Underground, acquired in 2002, is located on the Prestea property and consists of a currently inactive underground gold mine and associated support facilities, which ceased operating in early 2002 following a strike by workers. As of December 31, 2002 BGL owned a 54% operating interest in this mine, and studies are now underway to determine if the underground mine can be reactivated on a profitable basis.

We also hold other active exploration properties in Suriname and in Ghana and through our 73%-owned subsidiary, Guyanor Ressources S.A. ("Guyanor"), we have interests in several gold exploration properties in French Guiana.

#### **Business Strategy and Development**

**Bogoso/Prestea:** Faced with a continuing low gold price environment and the difficulty in raising funds from the equity markets for pure exploration, management decided in 1999 to change its business strategy from a pure exploration company to a production, development, and advanced stage exploration company. The first step in the implementation of our new strategy was the September 1999 acquisition of a 70% beneficial interest in Bogoso in Ghana. The Bogoso acquisition provided us with an operating gold mine and a source of internally generated cash flow. In 2001, we acquired an additional 20% beneficial interest in Bogoso, raising our ownership to 90%. The Government of Ghana retains a 10% interest.

Immediately after acquiring Bogoso, our focus shifted to the acquisition of additional oxide gold reserves in the immediate vicinity of Bogoso, which could be processed through the Bogoso mill once the Bogoso oxide and transition ore reserves were exhausted in late 2001. We were successful in this endeavor acquiring, in mid-2001, a surface mining lease for Prestea located adjacent to Bogoso. We commenced mining gold from Prestea in the third quarter of 2001.

We were successful, through exploration efforts in 2000 and 2001, in delineating several zones of sulfide gold mineralization at Bogoso. In late 2001 we completed a feasibility study that established a sulfide gold Mineral Reserve of approximately 0.8 million ounces. Approximately \$20 million of capital expenditures would be required at the Bogoso mill to allow processing of sulfide ore. In our current mining plan, mining of sulfide Mineral Reserves would not take place until oxide and other non-refractory Mineral Reserves from Bogoso/Prestea are exhausted, which is now expected to occur no earlier than 2007 at current production rates.

While most of the past production at Prestea came from underground operations, there are several zones of oxide and other non-refractory reserves which can be accessed via surface operations and which can be efficiently processed in the existing Bogoso mill. Currently our Mineral Reserves at Prestea are sufficient to provide non-refractory feed for the Bogoso mill for approximately five years. In addition, we have identified 0.3 million ounces of additional sulfide Mineral Reserves at Prestea and this material has been incorporated into the Bogoso sulfide feasibility study. Other zones of near-surface, oxide gold mineralization are known to exist within truckable distance of the Bogoso mill and efforts to evaluate and acquire more of these properties continues.

**Wassa:** On September 13, 2002, we completed the acquisition of a 90% beneficial interest in Wassa in Ghana, with the remaining 10% interest being retained by the Government of Ghana. Wassa was developed by its former owner in the late 1990s at a capital cost of approximately \$43 million as a conventional open pit, heap leach gold operation. Operations under the former owner ceased in mid-2001. While operating as a heap leach property, Wassa produced approximately 90,000 ounces of gold per annum for a period of just over two years. In mid-2001, the secured lenders to the project (“the Wassa Sellers”) enforced their security rights in the project and, following a bidding process, agreed to sell the Wassa asset to us.

We paid the Wassa Sellers an initial cash consideration of approximately \$1.6 million at closing, assumed approximately \$1.8 million of seller-financed five-year debt and agreed to pay a royalty on future production at a rate of \$8.00 per ounce up to a maximum of \$5.5 million. In addition, a second gold production royalty is payable to the Wassa Sellers on future gold production from Wassa. This royalty is to be paid quarterly and will be determined by multiplying the quarterly production from Wassa by a base royalty rate of \$7.00 per ounce. The royalty is increased above the base rate by \$1.00 per ounce for each \$10.00 increase in the average market price of gold above \$280 per ounce up to a maximum of \$15.00 per ounce at gold prices of \$350 and above.

We have initiated a drilling program at Wassa designed to evaluate its gold potential. Engineering studies are also underway to evaluate the feasibility of redeveloping Wassa as a conventional Carbon-in-Leach (“CIL”) operation. The feasibility study is scheduled for completion in mid-2003.

**Prestea Underground:** In March 2002, BGL formed a joint venture with Prestea Gold Resources Limited (“PGR”), former owner of the Prestea Underground, and the Government of Ghana to evaluate and, if warranted, to restart and operate the Prestea Underground mine. BGL is the managing partner in the joint venture and has the sole right to finance the exploration and development of, and operate the mine. BGL paid \$2.4 million to PGR for a 45% interest in the joint venture, and PGR contributed its ownership position in the Prestea Underground mine to earn its 45% interest. The Government of Ghana continues to hold the remaining 10% interest. Subsequent cash contributions to the joint venture by BGL have raised its interest in the joint venture to 54%. Geologic and engineering studies are now underway, and care and maintenance efforts have been undertaken to keep the mine and its shafts in a workable condition.

**Guiana Shield Transaction:** In May 2002, we sold our interests in the Gross Rosebel, Headleys and Thunder Mountain properties in Suriname, and our interest in Omai Gold Mines Limited (“OGML”) in Guyana, to Cambior Inc. (“Cambior”), our former partner in the exploration, development and/or operation of these properties.

We received \$5.0 million cash in 2002 and \$1.0 million in 2003 for the sale of the Gross Rosebel property and expect to receive two additional deferred payments of \$1.0 million each in 2004 and 2005 based on Cambior’s development and operation of Gross Rosebel. In addition, Cambior will pay us a royalty equal to 10% of the excess of the average quarterly market price above a gold price hurdle on the first 7 million ounces of gold production from Gross Rosebel. For soft and transitional rock the gold price hurdle is \$300 per ounce and for hard rock the gold price hurdle is \$350 per ounce.

For the Headleys and Thunder Mountain properties, we will receive a deferred consideration of \$0.5 million per property when and if Cambior commences commercial mining from each of these properties.

As payment for our 30% equity interest and preferred shares in OGML, we received a release and waiver from OGML, Cambior and the Guyana Government in respect of all liabilities, of any nature, related to the Omai gold mine. In the transaction we also acquired Cambior’s 50% interests in the Yaou and Dorlin exploration properties in French Guiana.

**Growth Strategy:** Since 1999, we have focused primarily on the acquisition of producing and development stage gold properties in Ghana and on the exploration, development and operation of these properties. As a result, we now have Proven and Probable Mineral Reserves, at Bogoso/Prestea, from which we expect to produce an average of approximately 135,000 ounces per annum for an estimated mine life in excess of ten years, assuming sulfide ores are processed as contemplated in the feasibility study. If the feasibility study at our Wassa property is favorable, we plan to commence development of Wassa in the third quarter of 2003. If we are able to fast-track development and start-up, we believe that Wassa could commence production in early 2004 at an estimated capital cost of \$14

million. However, there can be no assurance that the feasibility study will be favorable, that development and start-up can be completed in early 2004, or that our production goals will be achieved.

Our objective is to grow our business to become a mid-tier gold producer (which we understand to be a producer with annual production of approximately 500,000 ounces) over the next few years. Due to higher gold prices and our improved financial condition, we believe we are well placed to pursue the acquisition of producing, development and advanced stage exploration gold properties and companies, primarily in Ghana and elsewhere in Africa. We are actively investigating potential acquisition and merger candidates, some of which have indicated to potential acquirers or their advisors that they or certain of their properties may be available for acquisition. However, we presently have no agreement or understanding with respect to any potential transaction.

We also intend to significantly increase exploration activities and expenditures on our current exploration properties, primarily in Ghana, as well as on properties we may acquire.

## Reserves

The following table summarizes our estimated Proven and Probable Mineral Reserves of gold as of December 31, 2002, which have been prepared by qualified members of our staff.

PROVEN AND PROBABLE MINERAL RESERVES at December 31, 2002				
	Tonnes	Gold Grade g/t	Contained Ounces	Golden Star's 90% share of Contained Ounces
<u>Bogoso/Prestea</u>				
Proven Reserves	14,170,046	3.26	1,484,676	1,336,208
Probable Reserves	8,902,235	2.54	726,378	653,739
Total	23,072,281	2.98	2,211,054	1,989,947

The Proven and Probable Mineral Reserves at Bogoso/Prestea at December 31, 2002 of 23.1 million tonnes at an average grade of 2.98 g/t, representing approximately 2.2 million ounces, were determined using a gold price of \$300 per ounce, and are compared to Mineral Reserves at December 31, 2001 of 19.1 million tonnes at an average grade of 2.97 g/t, representing approximately 1.8 million ounces of gold, which were calculated at a gold price of \$275 per ounce. Included in the Proven Mineral Reserves category are 1.26 million tonnes of ores at an average grade of 1.47 g/t in stockpiles at Bogoso.

Our Proven and Probable Mineral Reserves are estimated in conformance with definitions set out in Canada's National Instrument 43-101 as more fully described "Item 2: Description of Properties". Also see our "Glossary of Terms". The Proven and Probable Mineral Reserves are those ore tonnages contained within either engineered pits or economically optimized pit envelopes, designed for the oxide, transition and refractory sulfide resources, and using current and predicted mine operating costs and performance parameters.

We consider that the definitions of Proven and Probable Mineral Reserves are consistent with the definition of proven and probable reserves prescribed for use in the United States by the U.S. Securities and Exchange Commission and set forth in SEC Industry Guide 7.

## Non-Reserves

### Cautionary Note to U.S. Investors concerning estimates of Measured and Indicated Mineral Resources

This section uses the terms "measured mineral resources" and "indicated mineral resources". We advise U.S. investors that while those terms are recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize them. **U.S. investors are cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into reserves.**

The following table summarizes our Measured and Indicated Mineral Resources as at December 31, 2002 which have been estimated by qualified members of our staff, unless otherwise indicated, in conformance with required standards as better set out in "Item 2. Description of Properties".

MEASURED AND INDICATED MINERAL RESOURCES at December 31, 2002				
Project	Tonnes (100%)	Golden Star's Ownership	Tonnes (Golden Star's share)	Gold Grade g/t
Bogoso/Prestea	19,962,000	90%	17,965,000	3.0
Wassa	17,770,000	90%	15,993,000	1.3
Yaou and Dorlin	13,800,000	87%	11,900,000	2.1
Paul Isnard	6,178,000	73%	4,485,000	2.8

Our Measured and Indicated Mineral Resources, which are reported exclusive of that part of the Mineral Resource converted to Proven and Probable Mineral Reserves, have been estimated in conformance with definitions set out in Canada's National Instrument 43-101 as more fully described in "Item 2: Description of Properties". Also see our "Glossary of Terms".

The Measured and Indicated Mineral Resource for our properties, with the exception of Yaou and Dorlin, have been estimated at an economic cut off grade based on a \$325 per ounce gold price and economic constraints that are believed to be realistic. At Yaou and Dorlin a gold price of \$300 per ounce was used.

#### *Inferred Mineral Resources*

#### **Cautionary Note to U.S. Investors concerning estimates of Inferred Mineral Resources**

This section uses the term "inferred mineral resources". We advise U.S. investors that while this term is recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize it. "Inferred mineral 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 the inferred mineral resources will ever be upgraded to a higher category. Under Canadian rules estimates of inferred mineral resources may not form the basis of feasibility or other economic studies. **U.S. investors are cautioned not to assume that part or all of the inferred mineral resource exists, or is economically or legally mineable.**

INFERRED MINERAL RESOURCES at December 31, 2002				
Project	Tonnes (100%)	Golden Star's Ownership	Tonnes (Golden Star's share)	Gold Grade g/t
Bogoso/Prestea	23,960,000	90%	21,564,000	2.9
Wassa	28,843,000	90%	25,958,000	1.2

#### **Employee Relations**

As of March 14, 2003, we had a total of 1,084 full-time employees and contract employees, an 82% increase from the 594 people employed at the end of 2001. The total includes seven employees at our headquarters in Littleton, Colorado.

#### **Customers**

As is customary in the gold mining business, all of our gold production is sold to a single customer in accordance with an annually negotiated contract. In accordance with the refining/sales agreement, cash payment for gold sold is

received in our account two to three working days after each shipment and gold is shipped weekly. The gold refining business is competitive with numerous refineries willing to buy on short notice. As such we believe that the loss of our customer would not materially delay or disrupt revenues.

## **Competition**

We compete with major mining companies and other natural resource companies in the acquisition, exploration, financing and development of new prospects. Many of these companies are larger and better capitalized than we are. There is significant competition for the limited number of gold acquisition and exploration opportunities. Our competitive position depends upon our ability to successfully and economically explore, acquire and develop new and existing mineral prospects. Factors that allow producers to remain competitive in the market over the long term include the quality and size of the ore body, cost of operation, and the acquisition and retention of qualified employees. We also compete with other mining companies for skilled mining engineers, mine and mill operators and mechanics, geologists, geophysicists and other technical personnel. This may result in higher turnover and greater labor costs.

## **Incorporation**

Golden Star Resources Ltd. was established under the *Canada Business Corporations Act* on May 15, 1992 as a result of the amalgamation of South American Goldfields Inc., a corporation incorporated under the federal laws of Canada, and Golden Star Resources Ltd., a corporation originally incorporated under the provisions of the *Alberta Business Corporations Act* on March 7, 1984 as Southern Star Resources Ltd. Our fiscal year ends on December 31.

Our head office is located at 10579 Bradford Road, Suite 103, Littleton, Colorado 80127-4247, and the registered and records office is located at 19th Floor, 885 West Georgia Street, Vancouver, British Columbia, Canada V6C 3H4.

## **Available Information**

We make available free of charge on or through our Internet website our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Our Internet address is <http://www.gsr.com>. Our Internet website and the information contained therein or connected thereto are not intended to be incorporated into this Annual Report on Form 10-K.

## **RISK FACTORS**

You should consider carefully the following discussions of risks, in addition to the other information contained in, or incorporated by reference into, this report.

### **Financial Risks**

#### **Our business is substantially dependent on gold prices.**

The price of our common shares, our financial results and our exploration, development and mining activities have previously been, and may in the future be, significantly adversely affected by declines in the price of gold. The price of gold is volatile and is affected by numerous factors beyond our control such as the sale or purchase of gold by various central banks and financial institutions, inflation or deflation, fluctuation in the value of the United States dollar and foreign currencies, global and regional demand, and the political and economic conditions of major gold-producing countries throughout the world. If gold prices were to decline significantly or for an extended period of time, we might be unable to continue our operations, develop our properties or fulfill our obligations under our agreements with our partners or under our permits and licenses. As a result, we could lose our interest in, or may be forced to sell, some of our properties.

Furthermore, reserve calculations and life-of-mine plans using significantly lower gold prices could result in material write-downs of our investment in mining properties and increased amortization, reclamation and closure charges.

**We have recorded substantial losses in recent years.**

While we were profitable in 2002, we reported net losses of \$20.6 million in 2001, \$14.9 million in 2000, \$24.4 million in 1999 and \$22.2 million in 1998. Numerous factors, including declining gold prices, lower than expected ore grades or higher than expected operating costs, and impairment write-offs of mine property and/or exploration property costs could cause us to become unprofitable in the future. Any future operating losses may make financing our operations and our business strategy, or raising additional capital, difficult or impossible and may materially and adversely affect our operating results and financial condition.

**Our obligations may strain our financial position and impede our business strategy.**

We have total debts and liabilities as of December 31, 2002 of \$19.8 million, including \$3.3 million payable to financial institutions, \$2.0 million due to the former owners of BGL, \$7.3 million of current trade payables and accrued current liabilities and \$7.2 million in environmental rehabilitation liabilities. We expect that our liabilities will increase as a result of our corporate development activities. This indebtedness may have important consequences, including the following:

- increasing our vulnerability to general adverse economic and industry conditions;
- limiting our ability to obtain additional financing to fund future working capital, capital expenditures, operating and exploration costs and other general corporate requirements;
- requiring us to dedicate a significant portion of our cash flow from operations to make debt service payments, which would reduce our ability to fund working capital, capital expenditures, operating and exploration costs and other general corporate requirements;
- limiting our flexibility in planning for, or reacting to, changes in our business and the industry; and
- placing us at a disadvantage when compared to our competitors that have less debt relative to their market capitalization.

**Our estimates of reserves and mineralized material may be inaccurate.**

There are numerous uncertainties inherent in estimating proven and probable reserves and mineralized material, including many factors beyond our control. The estimation of mineralized material and reserves is a subjective process, and the accuracy of any such estimates are a function of the quantity and quality of available data and of the assumptions made and judgments used in engineering and geological interpretation, which may prove to be unreliable. There can be no assurance that these estimates will be accurate, that reserves and other mineralization figures will be accurate, or that reserves or mineralization could be mined or processed profitably. In 1998, we had to revise estimates of mineralized material disclosed with respect to two of our projects.

Fluctuation in gold prices, results of drilling, metallurgical testing and production and the evaluation of mine plans subsequent to the date of any estimate may require revision of such estimate. The volume and grade of reserves mined and processed and recovery rates may not be the same as currently anticipated. Any material reductions in estimates of our reserves and other mineralization, or of our ability to extract these reserves or mineralization, could have a material adverse effect on our results of operations and financial condition.

**We currently have only one source of operational cash flows.**

While we have recently received significant infusions of cash from sales of equity, our only internal source of funds is operational cash flows from Bogoso/Pretea. The anticipated continuing exploration and development of our properties will require significant expenditures over the next several years. We expect that these expenditures will exceed free cash flows generated by Bogoso/Pretea during that period, and therefore we may be required to use our excess cash and may in the future require additional outside capital. Lower gold prices during the five years prior to 2002 adversely affected our ability to obtain financing, and recurring lower gold prices could have similar effects in the future. We cannot assure you that in the future we will be able to obtain adequate financing on acceptable terms. If we are unable to obtain additional financing, we may need to delay or indefinitely postpone further exploration

and development of our properties, and as a result, we could lose our interest in, or may be forced to sell, some of our properties.

**Implementation of a hedging program might be unsuccessful and incur losses.**

We continue to review whether or not, in light of the potential for gold prices to fall, if it would be appropriate to establish a hedging program. To date, we have not decided to implement a hedging program, although we have purchased and expect to continue to purchase puts from time to time, which give us the right to sell gold in the future at a fixed price. The implementation of a hedging program may not, however, protect adequately against declines in the price of gold.

In addition, although a hedging program may protect us from a decline in the price of gold, it might also prevent us from benefiting fully from price increases. For example, as part of a hedging program, we could be obligated to sell gold at a price lower than the then-current market price. Finally, if unsuccessful, the costs of any hedging program may further deplete our financial resources.

**We are subject to fluctuations in currency exchange rates, which could materially adversely affect our financial position.**

Our revenues are in United States dollars, and we maintain most of our working capital in United States dollars or United States dollar-denominated securities. We convert funds to foreign currencies as payment obligations become due. A significant portion of the operating costs at Bogoso/Pretea is based on the Ghanaian currency, the Cedi. BGL is required to convert only 20% of the foreign exchange proceeds that BGL receives from selling gold into Cedis, but the Government of Ghana could require BGL to convert a higher percentage of such sales proceeds into Cedis in the future. In addition, we currently have future obligations that are payable in Euros, and receivables collectible in Euros. Accordingly, we are subject to fluctuations in the rates of currency exchange between the United States dollar and these currencies, and such fluctuations may materially affect our financial position and results of operations. We currently do not hedge against currency exchange risks.

**There may be no opportunity to evaluate the merits or risks of any future acquisition undertaken by us.**

As a key element of our growth strategy, we have stepped up the active pursuit of acquisitions of producing, development and advanced stage exploration properties and companies. We are actively investigating potential acquisition and merger candidates. Acquisition and merger transactions in our business are often initiated and completed over a particularly short period of time. Risks related to acquiring and operating acquired properties and companies, could have a material adverse effect on our results of operations and financial condition. In addition, to acquire properties and companies, we would use available cash, incur debt, issue our common shares or other securities, or a combination of any one or more of these. This could limit our flexibility to raise capital, to operate, explore and develop our properties and to make additional acquisitions, and could further dilute and decrease the trading price of our common shares. There may be no opportunity for our shareholders to evaluate the merits or risks of any future acquisition undertaken by us except as required by applicable laws and regulations.

**Risks inherent in acquisitions that we may undertake could adversely affect our growth and financial condition.**

We are actively pursuing the acquisition of producing, development and advanced stage exploration properties and companies. Acquisition transactions involve inherent risks, including:

- accurately assessing the value, strengths, weaknesses, contingent and other liabilities and potential profitability of acquisition candidates;
- ability to achieve identified and anticipated operating and financial synergies;
- unanticipated costs;
- diversion of management attention from existing business;
- potential loss of our key employees or the key employees of any business we acquire; and
- unanticipated changes in business, industry or general economic conditions that affect the assumptions underlying the acquisition.



Any one or more of these factors or other risks could cause us not to realize the benefits anticipated to result from the acquisition of properties or companies, and could have a material adverse effect on our ability to grow and on our financial condition.

**We are subject to litigation risks.**

All industries, including the mining industry, are subject to legal claims, with and without merit. We are involved in various routine legal proceedings incidental to our business. We believe it is unlikely that the final outcome of these legal proceedings will have a material adverse effect on our financial position or results of operation. However, defense and settlement costs can be substantial, even with respect to claims that have no merit. Due to the inherent uncertainty of the litigation process, there can be no assurance that the resolution of any particular legal proceeding will not have a material effect on our financial position or results of operations.

**Operational Risks**

**The technology, capital costs and cost of production of sulfide reserves and mineralized material at Bogoso/Prestea are still subject to a number of uncertainties, including funding uncertainties.**

Based upon the completion of our Bogoso sulfide mining feasibility study in 2001 and its subsequent review by a qualified, independent mineral reserves consultant, the sulfide material on Bogoso and on various portions of Prestea has been included in our proven and probable reserves and constitutes approximately 40% of our reserves. While the sulfide feasibility study indicates that sulfide reserves can be profitably mined and processed at gold prices at or above \$275 per ounce, the cost to retrofit the Bogoso mill to process sulfide ore would require a minimum of \$20 million of new capital. We cannot assure you that we will have access to capital, whether from internal or external sources, in the required amounts or on acceptable terms. While the processing technology envisioned in the feasibility study has been successfully utilized at other mines, we cannot assure you, in spite of our testing, engineering and analysis, that the technology will perform successfully at commercial production levels on the Bogoso/Prestea ores. However, we do not presently anticipate start-up of sulfide processing operations prior to 2007, after currently known oxide and non-refractory ores are exhausted.

**Development of Wassa in Ghana is subject to a number of uncertainties.**

We are in the process of completing a feasibility study regarding the possible development of and commencement of production at Wassa in Ghana using conventional carbon-in-leach processing techniques. We cannot assure you that the results of the Wassa feasibility study will be favorable or that development or production will commence when we currently anticipate. If the feasibility study is favorable, we cannot assure you that development will be completed at the cost and on the schedule predicted in the feasibility study, or that production rates or costs anticipated in the feasibility study will be achieved. Any development of Wassa is subject to all of the risks described in this Form 10-K, including “Risk Factors — Operational Risks — The development and operation of our mining projects involve numerous uncertainties”.

**Declining gold prices could reduce our estimates of reserves and mineralized material and could result in delays in development until we can make new estimates and determine new potential economic development options under the lower gold price assumptions.**

In addition to adversely affecting our reserve estimates and our financial condition, declining gold prices can impact operations by requiring a reassessment of the feasibility of a particular project. Such a reassessment may be the result of a management decision or may be required under financing arrangements related to the project. Even if the project is ultimately determined to be economically viable, the need to conduct such a reassessment may cause substantial delays or may interrupt operations until the reassessment can be completed.

**We are subject to a number of operational hazards that can delay production or result in liability to us.**

Our activities are subject to a number of risks and hazards including:

- environmental hazards;
- discharge of pollutants or hazardous chemicals;
- industrial accidents;

- labor disputes;
- supply problems and delays;
- unusual or unexpected geological or operating conditions;
- slope failures;
- cave-ins of underground workings;
- failure of pit walls or dams;
- fire;
- changes in the regulatory environment; and
- natural phenomena such as inclement weather conditions, floods and earthquakes.

These or other occurrences could result in damage to, or destruction of, mineral properties or production facilities, personal injury or death, environmental damage, delays in mining, delayed production, monetary losses and possible legal liability. We may incur liability as a result of pollution and other casualties. Satisfying such liabilities may be very costly and could have a material adverse effect on our financial position and results of operations.

**Our mining operations are subject to numerous environmental laws and regulations that can adversely affect operating and development costs.**

We cannot assure you that compliance with existing regulations governing the discharge of materials into the environment, or otherwise relating to environmental protection, in the jurisdictions where we have projects will not have a material adverse effect on our exploration activities, results of operations or competitive position. New or expanded regulations, if adopted, could affect the exploration or development of our projects or otherwise have a material adverse effect on our operations.

As a result of the foregoing risks, project expenditures, production quantities and rates and cash operating costs, among other things, may be materially and adversely affected and may differ materially from anticipated expenditures, production quantities and rates, and costs. In addition, estimated production dates may be delayed materially. Any such events could materially and adversely affect our business, financial condition, results of operations and cash flows.

**The development and operation of our mining projects involve numerous uncertainties.**

Mine development projects, including our planned projects, typically require a number of years and significant expenditures during the development phase before production is possible.

Development projects are subject to the completion of successful feasibility studies, issuance of necessary governmental permits and receipt of adequate financing. The economic feasibility of development projects is based on many factors such as:

- estimation of reserves;
- anticipated metallurgical recoveries;
- future gold prices; and
- anticipated capital and operating costs of such projects.

Our mine development projects may have limited relevant operating history upon which to base estimates of future operating costs and capital requirements. Estimates of proven and probable reserves and operating costs determined in feasibility studies are based on geologic and engineering analyses.

Any of the following events, among others, could affect the profitability or economic feasibility of a project:

- unanticipated changes in grade and tonnage of ore to be mined and processed;
- unanticipated adverse geotechnical conditions;
- incorrect data on which engineering assumptions are made;
- costs of constructing and operating a mine in a specific environment;
- availability and cost of processing and refining facilities;
- availability of economic sources of power;

- adequacy of water supply;
- adequate access to the site;
- unanticipated transportation costs;
- government regulations (including regulations relating to prices, royalties, duties, taxes, restrictions on production, quotas on exportation of minerals, as well as the costs of protection of the environment and agricultural lands);
- fluctuations in gold prices; and
- accidents, labor actions and force majeure events.

Adverse effects on the operations or further development of a project may also adversely affect our business, financial condition, results of operations and cash flow.

**We need to continually obtain additional reserves for gold production.**

Because mines have limited lives based on proven and probable reserves, we must continually replace and expand our reserves as our mines produce gold. We currently estimate that Bogoso/Prestea has ten plus years of mine life remaining without the development of additional reserves, but our estimates may not be correct. Our ability to maintain or increase our annual production of gold will be dependent in significant part on our ability to bring new mines into production and to expand existing mines.

**Gold exploration is highly speculative, involves substantial expenditures, and is frequently non-productive.**

Gold exploration involves a high degree of risk and exploration projects are frequently unsuccessful. Few prospects that are explored end up being ultimately developed into producing mines. To the extent that we continue to be involved in gold exploration, the long-term success of our operations will be related to the cost and success of our exploration programs. We cannot assure you that our gold exploration efforts will be successful. The risks associated with gold exploration include:

- the identification of potential gold mineralization based on superficial analysis;
- the quality of our management and our geological and technical expertise; and
- the capital available for exploration and development.

Substantial expenditures are required to determine if a project has economically mineable mineralization. It may take several years to establish proven and probable reserves and to develop and construct mining and processing facilities. As a result of these uncertainties, we cannot assure you that current and future exploration programs will result in the discovery of reserves, the expansion of our existing reserves and the development of mines.

**We face competition from other mining companies in connection with the acquisition of properties.**

We face strong competition from other mining companies in connection with the acquisition of properties producing, or capable of producing, precious metals. Many of these companies have greater financial resources, operational experience and technical capabilities. As a result of this competition, we may be unable to maintain or acquire attractive mining properties on terms we consider acceptable or at all. Consequently, our revenues, operations and financial condition could be materially adversely affected.

**Title to our mineral properties may be challenged.**

Our policy is to seek to confirm the validity of our rights to title to, or contract rights with respect to, each mineral property in which we have a material interest. However, we cannot guarantee that title to our properties will not be challenged. Title insurance generally is not available, and our ability to ensure that we have obtained secure claim to individual mineral properties or mining concessions may be severely constrained. We may not have conducted surveys of all of the properties in which we hold direct or indirect interests and, therefore, the precise area and location of these claims may be in doubt. Accordingly, our mineral properties may be subject to prior unregistered agreements, transfers or claims, and title may be affected by, among other things, undetected defects. In addition, we may be unable to operate our properties as permitted or to enforce our rights with respect to our properties.

**We depend on the services of key executives.**

We are dependent on the services of key executives including our President and Chief Executive Officer and a small number of highly skilled and experienced executives and personnel. Due to the relatively small size of our company, the loss of these persons or our inability to attract and retain additional highly skilled employees may adversely affect the exploration and development of our properties, which could have a material adverse effect on our business and future operations.

**Our insurance coverage may be insufficient.**

Our business is subject to a number of risks and hazards generally, including:

- adverse environmental conditions;
- industrial accidents;
- labor disputes;
- unusual or unexpected geological conditions;
- ground or slope failures;
- cave-ins;
- changes in the regulatory environment; and
- natural phenomena such as inclement weather conditions, floods and earthquakes.

Such occurrences could result in:

- damage to mineral properties or production facilities;
- personal injury or death;
- environmental damage to our properties or the properties of others;
- delays in mining;
- monetary losses; and
- possible legal liability.

Although we maintain insurance in amounts that we believe to be reasonable, our insurance will not cover all the potential risks associated with our business. We may also be unable to maintain insurance to cover these risks at economically feasible premiums. Insurance coverage may not continue to be available or may not be adequate to cover any resulting liability. Moreover, insurance against risks such as environmental pollution or other hazards as a result of exploration and production is not generally available to us or to other companies in the mining industry on acceptable terms. We might also become subject to liability for pollution or other hazards which we cannot insure against or which we may elect not to insure against because of premium costs or other reasons. Losses from these events may cause us to incur significant costs that could have a material adverse effect upon our financial performance and results of operations.

**Governmental and Regulatory Risks**

**As a holding company, limitations on the ability of our operating subsidiaries to make distributions to us could adversely affect the funding of our operations.**

We are a holding company that conducts operations through foreign (principally African) subsidiaries and joint ventures, and substantially all of our assets consist of equity in such entities. Accordingly, any limitation on the transfer of cash or other assets between the parent corporation and such entities, or among such entities, could restrict our ability to fund our operations efficiently. Any such limitations, or the perception that such limitations may exist now or in the future, could have an adverse impact on our valuation and stock price.

**We are subject to changes in the regulatory environment in Ghana.**

Our mining operations and exploration activities in Ghana are subject to extensive regulation governing various matters, including:

- licensing
- production
- development
- exports

- taxes
- water disposal
- toxic substances
- mine safety
- imports
- labor standards
- occupational health and safety
- environmental protections

Compliance with these regulations increases the costs of the following:

- planning
- designing
- drilling
- operating
- developing
- constructing
- mine and other facilities closure

We believe that we are in substantial compliance with current laws and regulations in Ghana. However, these laws and regulations are subject to frequent change. For example, the Ghanaian government has adopted new, more stringent environmental regulations. Amendments to current laws and regulations governing operations and activities of mining companies or more stringent implementation or interpretation of these laws and regulations could have a material adverse impact on us, cause a reduction in levels of production and delay or prevent the development or expansion of our properties in Ghana.

Government regulations limit the proceeds from gold sales that may be withdrawn from Ghana. Changes in regulations that increase these restrictions could have a material adverse impact on us, as Bogoso/Prestea is our principal source of internally generated cash.

**The Government of Ghana has the right to participate in the ownership and control of BGL and Wexford.**

The Ghanaian government currently has a 10% carried interest in BGL, the Prestea Underground and Wexford. The Ghanaian government also has or will have the right to acquire up to an additional 20% equity interest in BGL and Wexford for a price to be determined by agreement or arbitration. We cannot assure you that the government will not seek to acquire additional equity interests in our Ghanaian operations, or as to the purchase price that the Government of Ghana would pay for any additional equity interest. A reduction in our equity interest could reduce our income or cash flows from Bogoso/Prestea and amounts available to us for reinvestment.

**We are subject to risks relating to exploration, development and operations in foreign countries.**

Certain laws, regulations and statutory provisions in certain countries in which we have mineral rights could, as they are currently written, have a material negative impact on our ability to develop or operate a commercial mine. For countries where we have exploration or development stage projects we intend to negotiate mineral agreements with the governments of these countries and seek variances or otherwise be exempted from the provisions of these laws, regulations and/or statutory provisions. We cannot assure you, however, that we will be successful in obtaining mineral agreements or variances or exemptions on commercially acceptable terms.

Our assets and operations are affected by various political and economic uncertainties, including:

- the risks of war or civil unrest;
- expropriation and nationalization;
- renegotiation or nullification of existing concessions, licenses, permits, and contracts;
- illegal mining;
- changes in taxation policies;
- restrictions on foreign exchange and repatriation; and
- changing political conditions, currency controls and governmental regulations that favor or require the awarding of contracts to local contractors or require foreign contractors to employ citizens of, or purchase supplies from, a particular jurisdiction.

**Illegal mining occurs on our properties, is difficult to control, can disrupt our business and expose us to liability.**

In Ghana and French Guiana, artisanal miners illegally work on our properties from time to time, despite the fact that we have hired security personnel to protect our properties. The presence of illegal miners could lead to project

delays and disputes regarding the development or operation of commercial gold deposits. The work performed by the illegal miners could cause environmental damage or other damage to our properties, or personal injury or death for which we could potentially be held responsible.

**Our activities are subject to complex laws, regulations and accounting standards that can adversely affect operating and development costs, the timing of operations, the ability to operate and financial results.**

Our business, mining operations and exploration and development activities are subject to extensive Canadian, U.S., Ghanaian and other foreign, federal, state, provincial, territorial and local laws and regulations governing exploration, development, production, exports, taxes, labor standards, waste disposal, protection of the environment, reclamation, historic and cultural resources preservation, mine safety and occupational health, toxic substances, reporting and other matters, as well as accounting standards. We are currently evaluating the impact of compliance with Statement of Financial Accounting Standards No. 143, "Accounting for Asset Retirement Obligations" ("SFAS No. 143"), which establishes a uniform methodology for accounting for estimated reclamation and abandonment costs under US GAAP. SFAS No. 143 will be required for our US GAAP reconciliation reporting for periods after January 1, 2003. We may also adopt the principles of SFAS No. 143 for our financial statements for periods after January 1, 2003, as it is expected that SFAS No. 143 will be mirrored by requirements under Cdn GAAP for periods ending after January 1, 2004.

### **Market Risks**

**The market price of our common shares may experience volatility and could decline significantly.**

Our common shares are listed on the American Stock Exchange, the Toronto Stock Exchange and the Berlin Stock Exchange. Securities of micro-cap and small-cap companies have experienced substantial volatility in the past, often based on factors unrelated to the financial performance or prospects of the companies involved. These factors include macroeconomic developments in North America and globally and market perceptions of the attractiveness of particular industries. Our share price is also likely to be significantly affected by short-term changes in gold prices or in our financial condition or results of operations as reflected in our quarterly earnings reports. Other factors unrelated to our performance that may have an effect on the price of our common shares include the following:

- the extent of analytical coverage available to investors concerning our business may be limited if investment banks with research capabilities do not continue to follow our securities;
- the limited trading volume and general market interest in our securities may affect an investor's ability to trade significant numbers of common shares;
- the relatively small size of the public float will limit the ability of some institutions to invest in our securities;
- under certain circumstances, our common shares could be classified as "penny stock" under applicable SEC rules; in that event, broker-dealers in the United States executing trades in our common shares would be subject to substantial administrative and procedural restrictions which could limit broker interest in involvement in our common shares; and
- a substantial decline in our stock price that persists for a significant period of time could cause our securities to be delisted from the American Stock Exchange, the Toronto Stock Exchange and the Berlin Stock Exchange, further reducing market liquidity.

As a result of any of these factors, the market price of our common shares at any given point in time may not accurately reflect our long-term value. Securities class action litigation often has been brought against companies following periods of volatility in the market price of their securities. We may in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management's attention and resources.

**You may have difficulty or be unable to enforce certain civil liabilities on us, certain of our directors and our experts.**

We are a Canadian corporation. Substantially all of our assets are located outside of Canada and the United States, and our head office is located in the United States. Additionally, a number of our directors and the experts named in this prospectus are residents of Canada. Although we have appointed Koffman Kalef, Suite 1900, 885 West Georgia

Street, Vancouver, British Columbia and Field Atkinson Perraton LLP, 1900, 350 - 7th Avenue S.W., Calgary, Alberta as our agents for service of process in the Provinces of British Columbia and Alberta respectively, it may not be possible for investors to collect judgments obtained in Canadian courts predicated on the civil liability provisions of securities legislation. It may also be difficult for you to effect service of process in connection with any action brought in the United States upon such directors and experts. Execution by United States courts of any judgment obtained against us, any of the directors, executive officers or experts named in this prospectus in United States courts would be limited to the assets of Golden Star Resources Ltd. or the assets of such persons or corporations, as the case may be, in the United States. The enforceability in Canada of United States judgments or liabilities in original actions in Canadian courts predicated solely upon the civil liability provisions of the federal securities laws of the United States is doubtful.

**We do not anticipate paying dividends in the foreseeable future.**

We anticipate that we will retain all future earnings and other cash resources for the future operation and development of our business. We do not intend to declare or pay any cash dividends in the foreseeable future. Payment of any future dividends will be at the discretion of our board of directors after taking into account many factors, including our operating results, financial condition, and current and anticipated cash needs.

**Future sales of our common shares by our existing shareholders could decrease the trading price of the common shares.**

Sales of a large number of our common shares in the public markets, or the potential for such sales, could decrease the trading price of our common shares and could impair our ability to raise capital through future sales of our common shares. We completed sales of units, comprised of common shares and warrants, in January, July and December 2002 at prices significantly less than the current market price of our common shares. Accordingly, a significant number of our shareholders have an investment profit in our securities that they may seek to liquidate. Substantially all of our common shares not held by affiliates can be resold without material restriction in the United States, and Canada.

**The existence of outstanding rights to purchase common shares may impair our ability to raise capital.**

As of March 14, 2003, approximately 29.3 million common shares are issuable on exercise of warrants, option or other rights to purchase common shares at prices ranging from Cdn\$1.02 to \$4.60. During the life of the warrants, options and other rights, the holders are given an opportunity to profit from a rise in the market price of our common shares with a resulting dilution in the interest of the other shareholders. Our ability to obtain additional financing during the period such rights are outstanding may be adversely affected, and the existence of the rights may have an adverse effect on the price of our common shares. The holders of the warrants, options and other rights can be expected to exercise them at a time when we would, in all likelihood, be able to obtain any needed capital by a new offering of securities on terms more favorable than those provided by the outstanding rights.

## CONVERSION FACTORS AND ABBREVIATIONS

For ease of reference, the following conversion factors are provided:

1 acre	= 0.4047 hectare	1 mile	= 1.6093 kilometers
1 foot	= 0.3048 meter	1 troy ounce	= 31.1035 grams
1 gram per tonne	= 0.0292 ounce per short ton	1 square mile	= 2.59 square kilometers
1 short ton (2000 pounds)	= 0.9072 tonne	1 square kilometer	= 100 hectares
1 metric tonne	= 1,000 kg or 2,204.6 pounds	1 kilogram	= 2.2 pounds or 32.151 troy ounces

The following abbreviations of measurements are used herein:

Au	= gold	m <sup>2</sup>	= square meter
g	= gram	m <sup>3</sup>	= cubic meter
g/t	= grams of gold per tonne	mg	= milligram
ha	= hectare	mg/m <sup>3</sup>	= milligrams per cubic meter
km	= kilometer	t	= metric tonne
kms	= square kilometers	oz	= troy ounce
kg	= kilogram	ppb	= parts per billion
M	= meter	Ma	= million years

Note: All units in the text are stated in metric measurements unless otherwise noted.

## GLOSSARY OF TERMS

Note: The definitions of Proven and Probable Mineral Reserves and the definitions for Measured, Indicated and Inferred Mineral Resources set forth below are those used in Canada as required in accordance with National Instrument 43-101. The definitions of Proven and Probable Mineral Reserves are consistent with those prescribed for use in the United States by the Securities and Exchange Commission and set forth in SEC Industry Guide 7.

**Mineral Reserve** A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

**Proven Mineral Reserves** A 'Proven Mineral Reserve' is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

**Probable Mineral Reserves** A 'Probable Mineral Reserve' is the economically mineable part of an Indicated, and in some circumstances a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

**Mineral Resource** A Mineral Resource is a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.



<b>Measured Mineral Resource</b>	A ‘Measured Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.
<b>Indicated Mineral Resource</b>	An ‘Indicated Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.
<b>Inferred Mineral Resource</b>	An ‘Inferred Mineral Resource’ is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
<b>Qualified Person</b>	A “Qualified Person” means an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development, production activities and project assessment, or any combination thereof, including experience relevant to the subject matter of the project or report and is a member in good standing of a Self-Regulating Organization.

We use the following definitions of the stages of the exploration and development process. There can be no assurance that the terminology used by us is consistent with the terminology used by other companies in the mining industry or by industry analysts.

<b>exploration stage</b>	an exploration stage prospect typically involves testing one or more targets within an area which have been determined to merit, first with a combination of geological, geochemical and geophysical analysis, and then, once better defined targets have been established, by testing at depth, typically by trenching and drilling, and generating the information necessary to develop a three dimensional geologic model of the mineralized zone, which may be used to demonstrate mineralized materials and/or reserves.
<b>feasibility stage</b>	during the feasibility stage, exploration continues to further increase confidence in mineralization while attempting to further expand them. During this stage, management develops in detail the necessary engineering and costing for mining, processing, power and infrastructure, as well as the designs for the plant and equipment required to construct and operate a modern mining operation. It is at the end of this stage that mineralization may be categorized as proven and/or probable reserves if a positive mining decision is justified. The feasibility stage normally incorporates several phases of work, which involve increasing levels of detail including (i) scoping study, (ii) pre-feasibility study, and (iii) bankable feasibility study.

## mine

mining is the process of transforming a reserve into benefits for its owners (debt, equity and employees), governments and communities. Exploration continues during the mining process and, in many cases, reserves are expanded during the life of the mine operations as the exploration potential of the deposit is realized.

**alteration** any change in the mineral composition of a rock brought about by physical or chemical means

**anomaly** a deviation from uniformity or regularity in geochemical or geophysical quantities

**assay** to analyze the proportions of metals in an ore

**basic** an igneous rock having a relatively low silica content, sometimes delimited arbitrarily as less than 54%

**bio-oxidation** a processing method that uses bacteria to oxidize refractory sulfide ore to make it amenable to normal oxide ore processing techniques such as carbon-in-leach

**Birimian** a thick and extensive sequence of Proterozoic age metamorphosed sediments and volcanics first identified in the Birim region of southern Ghana

**cash operating costs per ounce** includes direct mining and milling costs, stripping costs, mine site general and administrative costs, third party smelting and refining costs and by-product credits, but excludes royalties and production taxes. This is consistent with the Gold Institute's definition

**CIL or carbon-in-leach** an ore processing method involving the use of cyanide where activated carbon which has been added to the leach tanks is used to absorb gold containing solutions

**clastic** a rock or sediment composed of broken fragments derived from preexisting rocks or minerals

**diamond drilling** a variety of rotary drilling in which diamond bits are used as the rock-cutting tool to produce a recoverable core of rock for observation and assay

**dip** the angle that a structural surface, a bedding or fault plane, makes with the horizontal, measured perpendicular to the strike of the structure

**disseminated** where minerals occur as scattered particles in the rock

**dyke** a near vertical fracture in the earth's crust, which has been filled by an intrusive rock

**fault** a surface or zone of rock fracture along which there has been displacement

**felsic** an adjective describing an igneous rock having most light colored minerals and rich in Si, K and Na

**fold** a curve or bend of a planar structure such as rock strata, bedding planes, foliation, or cleavage

**formation** a distinct layer of sedimentary rock of similar composition

**geochemistry** the study of the distribution and amounts of the chemical elements in minerals, ores, rocks, solids, water, and the atmosphere

**geological mapping** the recording of geologic information such as the distribution and nature of rock units and the occurrence of structural features, mineral deposits, and fossil localities

**geophysics** the study of the earth; in particular the physics of the solid earth, the atmosphere and the earth's magnetosphere

**geotechnical** the study of ground stability

**granite** a medium to coarse grained igneous intrusive rock in which quartz constitutes 10 to 50 percent of the felsic components

**granodiorite** a medium to coarse-grained intrusive igneous rock, intermediate in composition between quartz diorite and quartz monzonite

**greenstone** a sequence of usually metamorphosed volcanic-sedimentary rock assemblages

**heap leach** a mineral processing method involving the crushing and stacking of an ore on an impermeable liner upon which solutions may be sprayed that dissolve metals i.e. gold/copper etc.; the solutions containing the metals are then collected and treated to recover the metals

**hydrothermal** the products of the actions of heated water, such as a mineral deposit precipitated from a hot solution

**intrusion; intrusive** molten rock which is intruded (injected) into spaces or fractures created in existing rock; spaces are created by a combination of melting and displacement

**laterite** highly weathered residual surficial soils and decomposed rocks, rich in iron and aluminum oxides that are characteristically developed in tropical climates

**mafic** an adjective describing an igneous rock composed mostly of one or more ferromagnesian, dark-colored minerals; also, said of those minerals

**massive** said of a mineral deposit, especially characterized by a great concentration of ore in one place, as opposed to a disseminated or vein-like deposit

**metasediment** a sedimentary rock which shows evidence of having been subjected to metamorphism

**metavolcanic** a volcanic rock which shows evidence of having been subjected to metamorphism

**mineral** a naturally formed chemical element or compound having a definite chemical composition and, usually, a characteristic crystal form

**mineralization** a natural occurrence in rocks or soil of one or more metalliferous minerals

**non-refractory** ore containing gold that can be satisfactorily recovered by basic gravity concentration or simple cyanidation

**outcrop** that part of a geologic formation or structure that appears at the surface of the earth

**Proterozoic** the more recent time division of the Precambrian; rocks aged between 2500 and 550 million years old

**puts** a financial instrument that provides the right but not the obligation, to sell a specified number of ounces of gold at a specified price.

**pyritization** the in situ alteration of a rock involving the additional of sulfur to the rock mass in fluids which reacts with both iron oxides and mafic minerals resulting in the formation of Iron Sulfide (Pyrite) often referred to as "fools gold"

**quartz** crystalline silica; silicon dioxide

**refractory** ore containing gold that cannot be satisfactorily recovered by basic gravity concentration or simple cyanidation

**reverse circulation drilling (RC)** a drilling method used in geological appraisals whereby air or drilling fluid passes inside the inner tube of a double tube system to a down-the-hole percussion bit and returns to the surface outside the inner tube but inside the outer tube carrying chips of rock

**rotary air blast drilling (RAB)**, a drilling method used in geological appraisals whereby the drilling fluid passes inside the drill stem to a down-the-hole precision bit and returns to the surface outside the drill stem carrying chips of rock

**saprolite** a soft, earthy, clay-rich and thoroughly decomposed rock formed in place by chemical weathering of igneous, sedimentary or metamorphic rocks which retains the original structure of the unweathered rock

**shear zone** a tabular zone of rock that has been crushed and brecciated by many parallel fractures due to shear strain

**shear** a form of strain resulting from stresses that cause or tend to cause contiguous parts of a body of rock to slide relatively to each other in a direction parallel to their plane of contact

**shield** a large area of exposed basement rocks often surrounded by younger rocks, e.g. Guyana Shield

**silicification** the in situ alteration of a rock which involves an increase in the proportion of silica minerals including quartz. The silica is frequently introduced by hydrothermal solutions as for example in hot springs.

**stock** an igneous intrusion that is less than 100 square kilometers in surface exposure

**stockwork** a mineral deposit in the form of a network of veinlets diffused in the country rock

**strike** the direction or trend that a structural surface, e.g. a bedding or fault plane, takes as it intersects the horizontal

**strip** to remove overburden in order to expose ore

**sulfide** a mineral including sulfur (S) and Iron (Fe) as well as other elements

**surficial** situated, formed, or occurring on or close to the Earth's surface

**syncline** a concave downward fold, the core of which contains the stratigraphically younger rocks

**Tarkwaian** a scattered group of mainly shallow water sedimentary rocks of Proterozoic age named after the town of Tarkwa in southern Ghana where they were found to be gold bearing

**total cash cost per ounce** equals cash operating cost per ounce plus royalties and production taxes. This is consistent with the Gold Institute's definition

**ultramafic** an igneous rock composed chiefly of mafic minerals with unusually high % of Mg, Ca and Fe

**vein** a thin, sheetlike crosscutting body of hydrothermal mineralization, principally quartz

**volcanic massive sulfide (VMS)** mineral deposits formed by volcanic processes and the activities of thermal springs at the bottom of bodies of water

**volcanics** those originally molten rocks, generally fine grained, that have reached or nearly reached the Earth's surface before solidifying

**volcano/sedimentary** rocks composed of materials of both volcanic and sedimentary origin

**wall rock** the rock adjacent to a vein

**weathering** the destructive process constituting that part of erosion whereby earthy and rocky materials on exposure to atmospheric agents at or near the Earth's surface are changed in character with little or no transport of the loosened or altered material

**ITEM 2. DESCRIPTION OF PROPERTIES**

**Introduction**

The maps below show the locations of Bogoso, Prestea, Wassa and the Prestea Underground in Ghana, and of our Paul-Isnard, Yaou and Dorlin exploration properties in French Guiana.

FIGURE 1

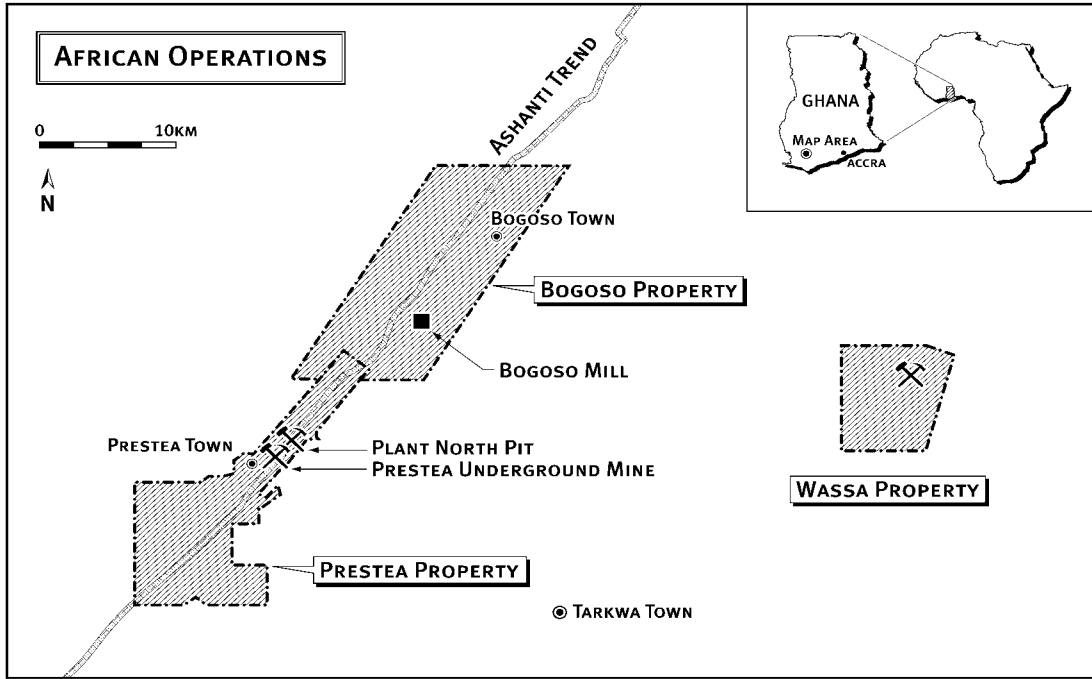
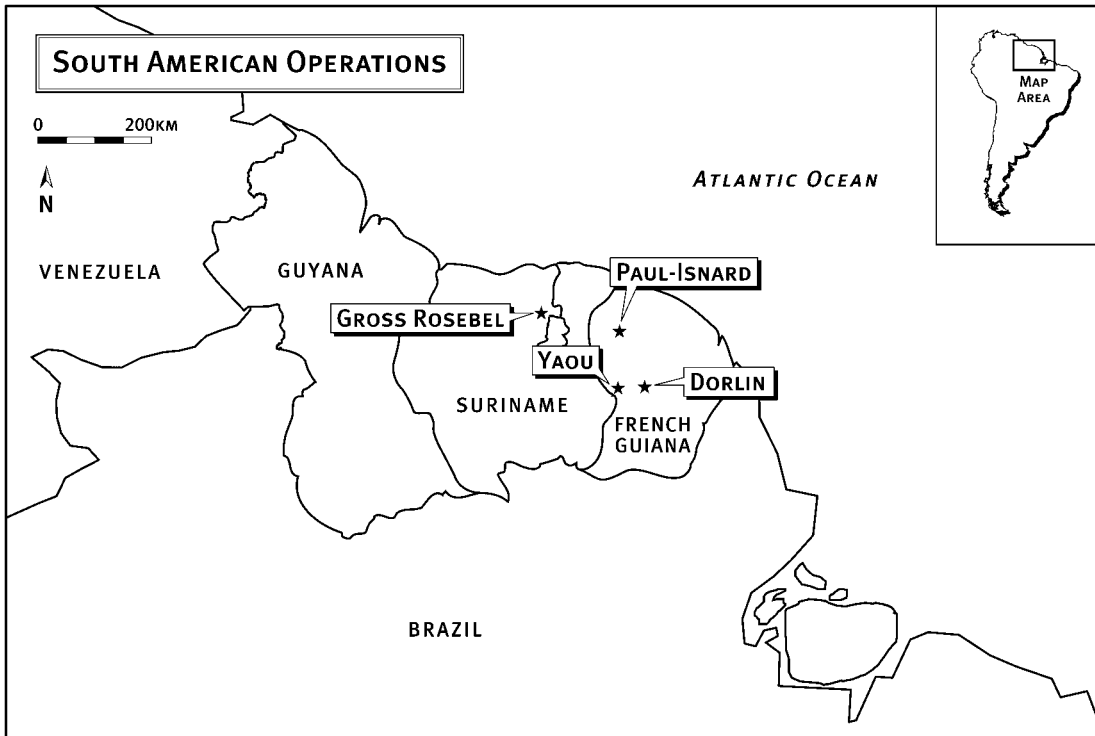


FIGURE 2



GSR-MP-10K-2/03

The table below summarizes information regarding certain of our properties, described in further detail below.

**Property Status Table at December 31, 2002:**

Property	Type of Interest	Expiration Date	Property size	Status	Comments
Bogoso	Government granted mining leases held by a 90% owned subsidiary	8/21/17 8/16/18	95 square kms	Operating mill facility	Sulfide feasibility study complete
Prestea	Government granted mining lease held by a 90% owned subsidiary	7/6/31	129 square kms	Operating open pit mine	Ore from Prestea processed at Bogoso
Wassa	Government granted mining lease held by a 90% owned subsidiary	9/16/22	102 square kms	Inactive open pit mine with past production. Feasibility stage	Feasibility study completion scheduled by mid-2003
Prestea Underground	Government granted mining lease, held by a 54% <sup>1</sup> managing interest in joint venture	7/6/31	129 square km	Inactive underground mine with extensive past production. Currently being evaluated for future production potential	Project managed by BGL
Akropong Trend	Option agreements. 100% ownership	Various	514 square km	Active exploration properties	Exploration stage
Obuom	56% interest in joint venture	Awaiting renewal	44 square kms	Active exploration property	Exploration stage
Dorlin <sup>2</sup>	PER (Permit Exclusif de Recherches). 87% including direct and indirect ownership	1/31/06	84 square kms	Care and maintenance	Exploration stage
Yaou <sup>2</sup>	PER (Permit Exclusif de Recherches). 87% including direct and indirect ownership	1/31/06	52 square kms	Care and maintenance	Exploration stage
Paul Isnard	8 Concessions. 73% ownership	12/31/18	150 square km	Care and maintenance	Exploration stage
	PER (Permit Exclusif de Recherches). 73% ownership	12/1/02 permit applied for	283 square kms	Care and maintenance	Exploration stage

1. Owned by BGL, our 90% owned subsidiary.

2. We own a 50% interest in Yaou and Dorlin and our 73% owned subsidiary, Guyanor owns a 50% interest.

**BOGOSO/PRESTEA**

Bogoso/Prestea consists of a gold mining/milling operation located along the Ashanti Trend in western Ghana, approximately 35 kms northwest of the town of Tarkwa from where it can be reached by paved roads. A paved road runs down most of the 18.5 kms length of the property and connects the town of Bogoso in the northeast with the town of Prestea in the southwest. Another paved road provides access to a sealed airstrip located at the town of Obuasi, some 115 kms to the north. The mining areas are connected by paved and gravel haul-roads to the Bogoso mill.

Bogoso/Prestea is owned by BGL, one of our 90% owned Ghanaian subsidiaries. The Government of Ghana owns the remaining 10% of BGL. The Government of Ghana is entitled at all times to hold a 10% carried interest in all

the rights and obligations of BGL. The Government of Ghana acquired this interest for no consideration and is not required to contribute any funds to pay any BGL expenses.

Equipment and facilities at Bogoso/Prestea include several open pit mines, a nominal 6,000 tonne per day CIL gold mill and a fleet of haul trucks, loaders and mining support equipment. In addition there are numerous ancillary support facilities such as power and water supply equipment, haul roads, housing for management and technical staff, a medical clinic, tailings storage facility, waste dumps, a warehouse, maintenance shops, offices and administrative facilities.

Between our 1999 acquisition of Bogoso and 2001, we mined gold from pits at Bogoso, processing the ore at the Bogoso mill to produce between 88,000 and 130,000 ounces of gold per year. In late 2001 we acquired Prestea located adjacent to Bogoso and have since mined gold ore from Prestea, transporting the Prestea ore by truck to the Bogoso mill for processing. Production in 2002, utilizing Prestea ores, was 124,000 ounces. We expect that the main source of ore to the Bogoso mill for at least the next five years will be from Prestea.

The Government of Ghana initially granted BGL a 30-year mining lease for Bogoso in August 1987, giving BGL the exclusive right to work, develop and produce gold in a mining area of 50 square kms. In August 1988, the Government of Ghana granted BGL a second 30-year gold mining lease covering an additional 45 square kms area adjacent to the first mining area.

In June 2001, BGL was granted a 30-year surface mining lease for Prestea by the Government of Ghana. The surface lease allows mining of ores down to a depth of 200 meters below the surface. Prestea is located immediately south of, and adjacent to Bogoso, and covers an aggregate area of 129 square kms. Under the three mining leases, BGL holds gold mining rights in a mining area totaling 224 square kms, subject to the payment of nominal annual rents.

#### *The Bogoso Acquisition*

On September 30, 1999, we and an unrelated company acquired 70% and 20%, respectively, of the common shares of BGL. Total acquisition cost, including initial payments, future payments, financing costs and administrative costs was \$14.7 million with the Government of Ghana retaining a 10% equity interest. The Bogoso sellers received \$6.5 million cash at September 30, 1999 and agreed to receive both contingent and non-contingent additional payments in the future. Payment of all non-contingent amounts was completed by mid-2002.

Two contingent payments were still outstanding as of December 31, 2002. The original 1999 purchase agreement required that a \$2.0 million reserve acquisition linked payment would be due the Bogoso sellers if mineable reserves equivalent to 50,000 ounces of gold or greater were to be acquired elsewhere in Ghana for processing at the Bogoso mill before September 30, 2001. Acquisition of the Prestea surface mining lease, with its contained reserves in excess of 50,000 ounces, triggered the reserve acquisition payment and in February 2003 we made the \$2.0 million payment to the Bogoso sellers.

We were also required to pay the Bogoso sellers an amount equal to \$5.0 million plus subsequent increases for inflation. The payment date is the first anniversary of the commencement of treatment of sulfide ore at the Bogoso Mine, which we presently expect by no earlier than 2007. The Bogoso sellers agreed to accept an immediate payment of \$2.0 million to satisfy this obligation and this payment was made in February 2003.

In June 2001 we purchased the 20% minority interest of BGL, thereby raising our ownership to 90%. We paid 3,000,000 shares of our common stock and we cancelled a \$1.9 million note receivable from the minority shareholder. The stock and note together brought the total purchase price of the 20% minority interest to \$2.9 million.

#### *The Prestea Acquisition*

A surface mining lease for Prestea was granted to us by the Government of Ghana on June 29, 2001, following extended negotiations with PGR, Barnato Exploration Limited ("Barnex") and the Government of Ghana. Two separate transactions, one with Barnex and one with PGR, were required to facilitate the granting of the lease. Both

transactions were required to remove all prior claims on the property, which thereby allowed the Government of Ghana to grant the new surface mining lease.

Pursuant to the agreement with Barnex, we issued to Barnex 3,333,333 common shares and 1,333,333 warrants to subscribe for our common shares at a price of \$0.70 per share for three years. In addition, we are paying a royalty to Barnex on the first 1,000,000 ounces of production from Bogoso/Prestea. The royalty will vary, according to a gold price formula, from a minimum of \$6.00 per ounce at gold prices less than \$260 per ounce to a maximum of \$16.80 per ounce at gold prices at or above \$340 per ounce. The royalty is to be paid quarterly and is determined by multiplying the production for the quarter by a royalty rate that varies depending on the average spot gold price for the quarter, as per the following table:

Average Spot Gold Price (\$/oz)	Royalty Rate (\$/oz)
Less than \$260	\$6.00
More than \$260 but less than \$270	\$7.20
More than \$270 but less than \$280	\$8.40
More than \$280 but less than \$290	\$9.60
More than \$290 but less than \$300	\$10.80
More than \$300 but less than \$310	\$12.00
More than \$310 but less than \$320	\$13.20
More than \$320 but less than \$330	\$14.40
More than \$330 but less than \$340	\$15.60
More than \$340	\$16.80

We also paid \$2.1 million in cash to PGR, in connection with the Prestea acquisition, including \$1.3 million in 2001 and \$0.8 million in January 2002.

The total cost of acquiring Prestea was \$8.0 million. This included \$2.2 million for our stock and warrants issued to Barnex, \$2.1 million of cash paid to PGR, \$2.0 million for the contingent liability to the Bogoso sellers which was triggered by the acquisition of Prestea, \$0.7 million of pre-production development costs and approximately \$1.0 million in transactions costs. In addition to the \$8.0 million of direct purchase costs listed above, \$0.4 million of unamortized Bogoso purchase costs and \$1.4 million of costs associated with the purchase of the 20% minority interest position in BGL during 2001, were included in the new Prestea amortization base, bringing the total amortizable cost basis to \$9.8 million.

#### *Geology of Bogoso/Prestea*

Bogoso/Prestea lies within the Eburnean Tectonic Province (1,800-2,166 Ma) in the West African Precambrian Shield. The paleoproterozoic rocks that comprise most of the West African craton and host the major gold mineralization in Ghana are subdivided into metasedimentary and volcanic rocks of the Lower Birimian, Upper Birimian and Tarkwaian sequences.

The Lower Birimian is composed largely of phyllites, schists, greywackes and volcanoclastics, and grades into the dominantly metavolcanic rocks (including lavas, pyroclastics, and some finer-grained metasedimentary rocks) of the Upper Birimian. Unconformably overlying the Birimian are the continental clastics of the Tarkwaian sequence. These clastics were derived from the weathering of Birimian rocks and granitic intrusions found within the Birimian.

The area is dominated by a major northeast-southwest trending structural fault zone referred to as the Ashanti Trend, which hosts the Prestea, Bogoso, Obuasi and Konongo gold deposits, among others. Parallel to the Ashanti Trend is the Akropong trend, which hosts the Ayanfuri deposit. The Akropong Trend is about 15 kms west of the Ashanti Trend in the Bogoso region, and gradually converges with it, coalescing at Obuasi and forming the basis for the world class Obuasi deposit, owned and operated by Ashanti Goldfields Company Limited.

In the Bogoso area, the faulted contact zone is known as the "Main Crush Zone" and passes through the central part of the Bogoso property for its entire 18.5 km length. The Main Crush Zone lies within a structural corridor that varies in width from 1,000 to 2,500 meters. Some 90% of the gold mined to date at Bogoso has come from the Main

Crush Zone with the larger deposits being located at bends and junctions along this major fault. Additional faults and splays in the structural corridor may also be prospective for gold. The oxide ores tend to have fine-grained free gold that has been liberated during the weathering of pre-existing sulfides and oxidation extends from surface down to the approximate elevation of the water table. Below this, a transition zone of up to 20 meters of partially oxidized material directly overlies fresh sulfide mineralization.

Prestea covers a 22 km stretch of the Ashanti Trend located immediately south of Bogoso. Within the concession, the fault belt comprises an anastomosing network of faults with a dominant set of three or more northeasterly striking faults that define a sinistral shear zone. These shears host the Prestea Main, East and West reef zones, in addition to other minor reefs. Towards the south, in the vicinity of the Bondaye-Tuapem shafts, the braided shear zone splits into two groups of discrete widely separated shears. The Tuapem mineralization continues along strike of the fault belt, whereas the Bondaye mineralization bends southwards towards a highly prospective mineralized target zone at Nsuta.

#### *Historical Mining Operations at Bogoso*

Initial commercial mining at Bogoso dates back to the early years of the 20th century, Marlu Gold Mining Areas Ltd. began the first major mining operation in the Bogoso area in 1935, mining high-grade oxide ore from a series of open pits extending along the north-east, south-west Ashanti trend at Bogoso. During its 20-year period of operations from 1935 to 1955, Marlu produced over 900,000 ounces of gold at an average recovered grade of 3.73 g/t.

Billiton International Metals took control of Bogoso in the late 1980's. Their initial feasibility study established a mineable reserve of 5.96 million tonnes grading 4.0 grams gold per tonne, of which 461,000 tonnes (or less than 8%) comprised oxide ore. The feasibility study forecast gold recoveries of 83% from sulfide ore and 78% from oxide ore and estimated a waste to ore ratio of 5.6:1. Construction of a mining and processing facility was completed in 1991. The facility was designed to process oxide ores by using conventional CIL technology at a design capacity of 1.36 million tonnes per year and to process sulfide ores by using flotation, fluid bed roasting and CIL technology at a design capacity of 0.9 million tonnes per year. Operational difficulties with the fluid bed roaster, forced closure of the flotation circuit and roaster in early 1994. Following closure of the roaster, Billiton focused the Bogoso operations on oxide ore. Billiton's exploration efforts were successful in adding to the available quantity of oxide ore and Bogoso has operated as an oxide-only operation since 1994.

#### *Historical Mining Operations at Prestea*

Underground mining has been conducted at Prestea for more than 130 years. From 1873 to 1965, Prestea was then comprised of a number of different licenses operated by independent mining companies, which, in 1965, were amalgamated by the Government of Ghana into Prestea Goldfields Limited, under the aegis of the State Gold Mining Corporation.

In 1994 JCI Limited ("JCI") won a bid for participation in the Prestea mining operation. Subject to an agreement between the Government of Ghana, JCI and Barnex, a subsidiary of JCI, assumed management of the Prestea Underground in June 1996. While improvements were made in the productivities and efficiencies of the underground operation, an exploration program aimed at delineating near surface resources amenable to open pit mining was commenced.

However, owing to the declining gold price and continued financial losses, JCI terminated its management role of the underground mining operation in September 1998, and elected to shut down the underground workings. This action was opposed by the Prestea workforce and management, who subsequently pooled their severance payments and formed PGR to operate the mine. They were granted a six-month permit by the Government of Ghana to run the mine in December 1998.

In response to local political pressure, and to the de facto continuation of underground operations by PGR, in November 2000 the Government of Ghana abrogated the Barnex lease over Prestea, and formally awarded it to PGR. This was followed in 2000 and 2001 by negotiations involving the Government of Ghana, PGR, BGL and JCI, over the mining potential of the Prestea area. The eventual outcome of these discussions was the issuance in



June 2001 of two separate leases for the property, one being for surface rights down to a depth of 200 meters below general ground elevation, and one for all mineralization below the 200 meters mark. The surface lease was awarded to BGL and the underground lease to PGR, with the joint commitment of both parties to work together to ensure effective and harmonious relations between the two operations.

BGL started surface mining operations on the Prestea concession in September 2001, with the first ore being processed at the Bogoso mill in October 2001. Total gold production from the Prestea area since recorded mining commenced in the 1870s is reported by the Ghana Chamber of Mines to be in excess of nine million ounces, making it the second largest historical gold producing area in Ghana, after the Obuasi mine.

### *Production*

Gold production from the existing Bogoso mill from start-up in 1991 through 2002 has totaled 1,227,384 ounces. Gold production from January to December 2002 was 124,400 ounces, compared to 87,936 ounces in 2001. This 41% increase in gold production for 2002 compared to 2001, is attributable to higher gold recoveries achieved when operating on Prestea ore during 2002 versus Bogoso transition ores during much of 2001.

Comparisons of operating parameters and production with previous years are as follows:

	Gold Produced Ounces	Cash Cost (excluding Royalties) \$/oz	Ore Tonnes Milled Tonnes	Ore Grade Milled g/t	Recovery %	Throughput tpd
2002	124,400	193	2,271,747	2.31	74.4	6,223
2001	87,936	263	2,098,165	2.69	49.6	5,748
2000	108,643	201	2,139,279	2.56	64.4	5,845

During 2002, all ore feed to the Bogoso process plant came from oxide and non-refractory deposits at Prestea. Until November 2002, the feed came from the Buesichem, Beposo and Brumasi pits, at the northern end of Prestea. In November 2002, an environmental permit was received to allow mining from the Plant North pit, in the center of Prestea, close to the Prestea township, and this has now become the sole producing pit, with the previously mined pits being rehabilitated.

### *Reserves*

The following table presents the estimated Proven and Probable Mineral Reserves for Bogoso/Prestea, including stockpile ores, as of December 31, 2002 and 2001. See "Item 2. - Bogoso/Prestea" for a description of Bogoso/Prestea and "Risk Factors" for a discussion of factors that could affect the following estimates.

Oxide, transition and non-refractory sulfide ores are suitable for processing in the existing Bogoso mill. Refractory transition and sulfide ores will be processed through the planned sulfide mill facility.

**Bogoso/Prestea Proven and Probable Mineral Reserves**

Ore type	December 31, 2002			December 31, 2001		
	Proven & Probable Reserves (tonnes)	Grade (g/t)	Contained Gold (oz)	Proven & Probable Reserves (tonnes)	Grade (g/t)	Contained Gold (oz)
Oxide	4,848,844	2.01	313,727	5,351,395	2.07	356,340
Transition	1,662,503	2.77	148,058	834,295	2.78	74,457
Non-refractory sulfide	4,921,864	3.62	572,834	3,600,781	3.29	380,305
Refractory Transition	1,938,718	2.92	181,720	1,987,397	3.01	192,582
Refractory Sulfide	9,700,352	3.19	994,715	7,322,678	3.50	823,642
Total	23,072,281	2.98	2,211,054	19,096,546	2.97	1,827,326
90% Share	20,765,052	2.98	1,989,948	17,186,891	2.97	1,644,593

We have reported Proven and Probable Mineral Reserves for year-end 2002 using a \$300 per ounce gold price versus \$275 per ounce which was used in 2001. The Mineral Reserves are those ore tonnages contained within practical design pit envelopes or within economically optimized pit envelopes, designed for the various ore types including oxide, transition, non-refractory sulfide and refractory sulfide mineralized material. Gold recovery assumptions vary by ore type: gold recovery from oxide ores are estimated to be 80% to 92%, for transition ores 79% to 85%, for non-refractory sulfides 83% to 85% and for refractory sulfides 83% to 89%. We have used appropriate current and predicted mine operating costs and performance parameters.

Our Proven and Probable Mineral Reserves are estimated in conformance with definitions set out in Canada's National Instrument 43-101. Also see our "Glossary of Terms". The definitions of Proven and Probable Mineral Reserves are considered consistent with the definitions for proven and probable reserves prescribed for use in the United States by the U.S. Securities and Exchange Commission and set forth in SEC Industry Guide 7. The Proven and Probable Mineral Reserves are those ore tonnages contained within economically optimized pit envelopes, designed for the oxide, transition and refractory sulfide mineral deposits.

The Proven and Probable Mineral Reserves at Bogoso/Prestea on December 31, 2002 stood at 23.1 million tonnes at an average grade of 2.98 g/t, representing approximately 2.2 million ounces of gold. This is compared to Proven and Probable Mineral Reserves at December 31, 2001 of 19.1 million tonnes at an average grade of 2.97 g/t, representing approximately 1.8 million ounces of gold. The Qualified Person responsible for supervising the estimation of reserves at Bogoso/Prestea is Mr. Dave Alexander, Projects Planning Manager. Mr. Alexander is a qualified mining engineer, is a member of the Institution of Mining and Metallurgy, and is a Chartered Engineer under the auspices of the Engineering Council of UK.

The increase in our Mineral Reserves since December 31, 2001 is the result of ongoing exploration work largely at Prestea. This work has identified significant additional mineralized material both along the strike of the deposits and at depth and resulted in greater certainty in some of the existing mineralized material. Drill results and test work carried out on samples from the Prestea mineral deposits indicates that the material can be successfully treated through the Bogoso mill and consequently this material has been converted into Mineral Reserves with due regard of the effects of mining losses and dilution, and incorporated into the current Bogoso/Prestea mining plan.

*Non Reserves*

**Cautionary Note to U.S. Investors concerning estimates of Measured and Indicated Mineral Resources**

This section uses the terms "measured mineral resources" and "indicated mineral resources". We advise U.S. investors that while those terms are recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize them. **U.S. investors are cautioned not to**

assume that any part or all of the mineral deposits in these categories will ever be converted into reserves.

**Cautionary Note to U.S. Investors concerning estimates of Inferred Mineral Resources**

This section uses the term “inferred mineral resources”. We advise U.S. investors that while this term is recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize it. “Inferred mineral 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 the inferred mineral resources will ever be upgraded to a higher category. Under Canadian rules estimates of inferred mineral resources may not form the basis of feasibility or other economic studies. **U.S investors are cautioned not to assume that part or all of the inferred mineral resource exists, or is economically or legally mineable.**

At December 31, 2002, the estimated Measured and Indicated Mineral Resources, exclusive of that part of the Mineral Resources converted to Proven and Probable Mineral Reserves, at Bogoso/Prestea was 19.9 million tonnes grading 2.97 g/t. In addition, there are 23.9 million tonnes of Inferred Mineral Resource at an average grade of 2.91 g/t.

**Bogoso/Prestea Mineral Resource Estimates as of December 31, 2002**

Deposits	Measured		Indicated		Measured & Indicated			Inferred	
	Tonnes (000)	Grade g/t	Tonnes (000)	Grade g/t	Tonnes (000)	Grade g/t	Ounces Gold (000)	Tonnes (000)	Grade g/t
Oxide	1,823	3.44	0	0	1,823	3.44	202	1,298	2.33
Transition	578	3.00	490	2.12	1,068	2.59	89	631	2.87
Non-refractory Sulfide	879	5.35	8,318	2.66	9,197	2.92	864	14,973	3.09
Refractory Transition	369	2.98	518	2.81	886	2.88	82	199	0.00
Refractory Sulfide	2,212	3.41	4,775	2.77	6,987	2.97	667	6,859	2.71
<b>Total</b>	<b>5,861</b>	<b>3.64</b>	<b>14,101</b>	<b>2.69</b>	<b>19,962</b>	<b>2.97</b>	<b>1,904</b>	<b>23,960</b>	<b>2.91</b>
90% Share	5,275	3.64	12,691	2.69	17,965	2.97	1,714	21,564	2.91

Our Mineral Resources for Bogoso/Prestea, which are reported exclusive of the Proven and Probable Mineral Reserves, have been estimated in conformance with definitions set out in Canada’s National Instrument 43-101. Also see our “Glossary of Terms”.

The Mineral Resources have been estimated using a \$325 per ounce gold price and historic and predicted mining and processing costs and metallurgical recoveries. The cut off grades used vary between 0.9 and 1.4 g/t for non-refractory oxide, transition and non-refractory sulfide resources and between 1.8 and 2.0 g/t for refractory sulfide and transition resources.

The Mineral Resource has been estimated using mining-processing costs between \$7.49 to \$9.16 per tonne for oxide material, between \$13.80 and \$15.17 per tonne for refractory transition material, between \$15.13 and \$15.41 per tonne for refractory sulfide material, between \$9.51 and \$9.96 per tonne for transitional material and between \$10.43 and \$10.88 per tonne for non-refractory sulfide material. Processing recoveries between 80% to 87%, 80% to 83%, and 83% to 86% were used for non-refractory oxide, transition, non-refractory sulfide, refractory transition and refractory sulfide material respectively. An overall mining recovery of 95% of the ore tonnes was also applied for all materials. Processing costs and recoveries for transition and oxide materials are based on historic numbers achieved with the existing CIL plant. Refractory sulfide processing costs and recoveries has been based on estimates for bio-oxidation based on variability and pilot test work conducted on drill core.

During October 2001, as required by the Ontario Securities Commission, an independent technical report was produced by Associated Mining Consultants Ltd (“AMC”) on our behalf. This report is still current under the guidelines contained in Canada’s National Instrument 43-101.

The Refractory sulfide portion of the Mineral Resource estimate was derived from 1,139 reverse circulation drill holes totaling 35,251 meters, 517 diamond drill holes totaling 52,654 meters and 5,941 rotary air blast holes totaling 137,677 meters. Included in the drilling above were 221 new drill holes totaling 24,450 meters which were drilled during 2000 and 2001 as part of our sulfide feasibility study, of which 8,187 meters were HQ or PQ core. This includes 1,110 meters of oriented core for geotechnical and hydrogeological modeling.

Resource estimates for Prestea are based on drilling carried out by JCI and Barnex, who completed 1,003 drill holes totaling 88,331 meters of diamond, reverse circulation and rotary air blast drilling between July 1995 and April 1999. This comprised 48,604 meters of reverse circulation drilling, 36,915 meters of diamond drilling and 2,813 meters of rotary air blast drilling and resulted in 95,182 analytical samples. During 2002 we completed additional drilling on the Prestea property including, 140 reverse circulation holes totaling 14,237 meters, 462 rotary air blast holes totaling 11,779 meters, and five diamond drill holes totaling 933 meters. This new drilling combined with the existing data has been used to produce the end of 2002 Mineral Resource estimates.

The information in this report that relates to the estimation of the Bogoso/Prestea Mineral Resource is based on information compiled and/or validated by Mr. S. Mitchel Wasel, Exploration Manager-Ghana. Mr. Wasel qualifies as the Qualified Person being a qualified geologist who has 15 years of experience in gold and base metal exploration and is a Member of the Australasian Institute of Mining and Metallurgy.

### **THE WASSA PROPERTY**

Wassa is located in western Ghana approximately 35 kms east of Bogoso/Prestea. Wassa is currently inactive but includes an open pit mine, heap leach pads, processing equipment (crusher, agglomeration plant, conveyors, and gold recovery plant), parts and supplies inventory, maintenance shops, administrative offices, an electric power generating facility, housing for employees, a community center and miscellaneous other ancillary facilities. All assets are less than five years old, functional and in good repair.

Paved roads are complete from Cape Coast to Twifu-Praso, some 28 kms from the project site. The laterite road from Twifu-Praso to Akyempim has been recently upgraded as far as Ateiku. The mine can be reached from Bogoso via Tarkwa via a paved road to the town of Abosso or via Insu which is a shorter un-paved route.

#### *Wassa Acquisition*

We acquired our 90% interest in Wassa on September 13, 2002. The remaining 10% interest is owned by the Government of Ghana. Wassa was developed by a former owner in the late 1990s at a capital cost of \$43 million as a conventional open pit, heap leach gold operation and operated for approximately two years producing approximately 90,000 ounces per year. Operations were suspended in mid-2001. In 2001, the secured lenders to the project enforced their security rights in the project and, following a bidding process, agreed to sell the Wassa asset to us.

We paid the Wassa Seller, a syndicate of banks led by Standard Bank London Limited, an initial consideration of \$1.6 million at closing and assumed debt of \$1.8 million. We also agreed to pay to the Wassa Sellers two separate royalties on future production. The seller-provided debt is repayable over a four-year term beginning on December 13, 2003 with installments following every three months thereafter, with the final payment on September 13, 2007. The interest rate is LIBOR plus 2.5% until gold production begins and LIBOR plus 2.0% after gold production begins. Interest on the initial \$1.8 million accruing prior to the initiation of gold production at Wassa will be capitalized into the loan.

The first royalty is to be paid quarterly and the amount of the payments will be determined by multiplying the production from Wassa for each quarter by a royalty rate of \$7.00 per ounce produced. The royalty rate is subject to increase by \$1.00 per ounce for each \$10.00 increase in the average market price for gold for each quarter above

\$280 per ounce up to a maximum of \$15.00 per ounce at gold prices of \$350 per ounce and above. The second royalty is a flat \$8.00 per ounce, and is capped at \$5.5 million.

We also assumed a reclamation liability of approximately \$2.3 million for restoration of the environmental disturbance at Wassa as of the date of the acquisition. The amount of the restoration liability was determined by an independent environmental engineering firm, commissioned by us to establish the amount of the liability.

### *Geology of Wassa*

Wassa lies within the Eburnean Tectonic Province (1,800-2,166 Ma) in the West African Precambrian Shield. The paleoproterozoic rocks that comprise most of the West African craton and host the major gold mineralization in Ghana are subdivided into metasedimentary and volcanic rocks of the Birimian, and Tarkwaian sequences.

Birimian rocks are composed largely of phyllites, schists, greywackes, volcanoclastics, and metavolcanic rocks (including lavas and pyroclastic rocks). Overlying the Birimian are the continental clastics of the Tarkwaian sequence. The Tarkwaian clastics were derived from the weathering of an uplifted continental edifice partially composed of Birimian rocks and granitic intrusions.

Wassa is hosted within the same Birimian volcano-sedimentary greenstone package as Bogoso/Prestea. Wassa is situated on the southeastern limb of the Tarkwa Syncline while Bogoso and Prestea occur along the northwestern limb. The northwestern belt hosts the Obuasi, Prestea, and Bogoso gold mines the southeastern limb also is characterized by gold mines and mineral occurrences. Tarkwaian hosted deposits along the south eastern limb include Goldfield's Tarkwa and Abosso mines, Birimian hosted gold occurrences include St. Jude's Hwini-Butre property and Wassa.

Birimian rocks at Wassa have been affected by at least three phases of deformation, producing a polyphase fold pattern in the region. Discrete high-strain zones locally dissect this fold system. The structural history of the Wassa area is important in that the various deformational events have been responsible for the emplacement of the gold mineralization as well as the current day geometry of the ore zones themselves. Ore shoots at the Wassa mine are related to vein swarms and associated sulfides that formed during the first and second phase of ductile deformation, some mineralization may also be hosted in tensional veins of the third phase of deformation.

Stratigraphically the Wassa area is underlain by mafic and felsic volcanics with minor interdigitated graphitic shales and terrigenous sediments (greywacke). The stratigraphy can be generally subdivided into three principal sequences from youngest to oldest: interlayered thin mafic and felsic volcanic flows; a relatively thick felsic volcanic flow; and interlayered greywacke, mafic volcanic flows and a basal diorite.

The first two phases of deformation have severely buckled the entire stratigraphic sequence underlying the region, producing tight fold patterns and discrete shear zones. The third phase of deformation is enigmatic in the sense that it produced a flat lying crenulation cleavage that can only be associated with a rock load that would have been superimposed onto the region. Rock loading likely was superimposed tectonically by the means of thrust faulting and the subsequent stacking of rock on top of the now exposed Wassa stratigraphic packages.

### *Non Reserves*

#### **Cautionary Note to U.S. Investors concerning estimates of Measured and Indicated Mineral Resources**

This section uses the terms "measured mineral resources" and "indicated mineral resources". We advise U.S. investors that while those terms are recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize them. **U.S. investors are cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into reserves.**

#### **Cautionary Note to U.S. Investors concerning estimates of Inferred Mineral Resources**

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recognize it. “Inferred mineral 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 the inferred mineral resources will ever be upgraded to a higher category. Under Canadian rules estimates of inferred mineral resources may not form the basis of feasibility or other economic studies. **U.S investors are cautioned not to assume that part or all of the inferred mineral resource exists, or is economically or legally mineable.**

At December 31, 2002, the estimated Measured and Indicated Mineral Resource at Wassa was 17.8 million tonnes grading 1.29 g/t. In addition, there are 26.0 million tonnes of Inferred Mineral Resource at an average grade of 1.15 g/t.

**Wassa Mineral Resource Estimates as of December 31, 2002**

Deposits	Measured		Indicated		Measured & Indicated			Inferred	
	Tonnes (000)	Grade g/t	Tonnes (000)	Grade g/t	Tonnes (000)	Grade g/t	Ounces Gold (000)	Tonnes (000)	Grade g/t
Oxide	0	0.00	3,305	1.13	3,305	1.13	120	3,319	1.07
Non-refractory Sulfide	0	0.00	9,287	1.64	9,287	1.64	489	25,523	1.16
Heap Leach Pads	0	0.00	5,177	0.75	5,177	0.75	126	0	0.00
Total	0	0.00	17,770	1.29	17,770	1.29	735	28,843	1.15
90% Share	0	0.00	15,993	1.29	15,993	1.29	661	25,958	1.15

Our Mineral Resource estimate for Wassa has been estimated in conformance with definitions set out in Canada’s National Instrument 43-101. Also see our “Glossary of Terms”.

The Mineral Resource has been estimated using a \$325 per ounce gold price and historic and predicted mining and processing costs and metallurgical recoveries. The cut off grades used vary between 0.4 g/t and 0.6 g/t. The resource estimates have been estimated using mining-processing costs between \$5.66 to \$6.40 per tonne and processing recoveries between 92 and 93%. An overall mining recovery of 95% of the ore tonnes was also applied for all materials.

As required by the Ontario Securities Commission, an independent technical report is currently being produced by Associated Mining Consultants Ltd (“AMC”) on our behalf and we expect it to be filed in Canada and the U.S. in April 2003.

Mineral Resource estimates for Wassa were based on the data set collected by SGL consisting of 934 reverse circulation drill holes totaling 74,485 meters, and 124 diamond drill holes totaling 17,822 meters. As part of the due diligence and ongoing feasibility exercise GSR completed 765 RAB holes totaling 18,710 meters, 295 RC holes totaling 15,198 meters, 5,215 meters of RC pre-collar and 76 diamond drill holes totaling 9,357 meters.

The information in this report that relates to the estimation of the Wassa Mineral Resource is based on information compiled and/or validated by Mr. S. Mitchel Wasel, Exploration Manager-Ghana. Mr. Wasel qualifies as the Qualified Person being a qualified geologist who has 15 years of experience in gold and base metal exploration and is a Member of the Australasian Institute of Mining and Metallurgy.

*Historical Mining Operations at Wassa*

Mechanized gold mining began at Wassa in 1999 following approximately 10 years of exploration work by various parties. The property was developed by a consortium of European mining entities under the name of Satellite Goldfields Ltd. (“Satellite”). The Satellite operation consisted of an open pit mine and a three million tonne per year conventional heap leach operation. Gold production was approximately 90,000 ounces per year in 2001 and

2000. Operations under the Satellite entity, ceased in mid-2001. See “Wassa Acquisition” above for subsequent details.

#### *Our Involvement*

We are currently working on a feasibility study to determine if Wassa can be reactivated on a profitable basis. A drilling program has been designed and carried out in conjunction with a feasibility study to evaluate the gold potential of the property. We are also conducting engineering and design studies which indicate that it may be possible to establish profitable operations at Wassa utilizing conventional CIL technology. CIL technology should provide better gold recovery and lower unit costs than was achieved during the earlier heap leach operational phase. We expect to complete the reserve analysis and feasibility study by mid-2003 and if warranted, construction of a CIL mill facility would begin immediately thereafter. The estimated capital cost of the CIL plant and associated start-up costs is expected to be approximately \$14 million. Gold production could begin by early 2004. Most of the existing infrastructure, including the crushers, conveyors, the power plant, haul roads and adsorption plant, as well as the town site and administrative facilities would be useable in a CIL operation.

#### **PRESTEA UNDERGROUND PROPERTY**

The Prestea Underground has produced approximately nine million ounces of gold during the last 130 years, the second highest output of any Ghanaian mine. The underground workings are extensive, reaching depths of approximately 1,400 meters and extending along strike for approximately ten kms. Underground workings can currently be accessed via two shafts, one near the town of Prestea and a second approximately four kms to the southwest. Past mining was concentrated along a steeply dipping tabular northeast trending shear zone that was mineralized with gold-bearing quartz veins. Gold was also disseminated in the crushed rock of shear zones. Cut-and-fill mining methods were employed in most of the past operations due to the rock conditions in the shear zones. Underground operations ceased in early 2002, following an extended period of low gold prices.

Access to the mine site is via a paved road maintained by the Ghanaian government. A rail line connects the town of Prestea to the town of Tarkwa, a major mining supply center approximately 25 kms to the east, but there is currently no service on the line.

We are currently engaged in a program to recondition the two shafts and their associated hoists, which are in good operational condition. Ancillary facilities include an administrative office, maintenance shops, a warehouse and electrical substations. The 70 year-old mill facility was demolished by BGL in 2002 to gain access to the surface reserves now being produced by BGL. Any potential future production from the Prestea Underground would likely be trucked to the Bogoso mill for processing.

The Prestea Underground is contained within a mining lease which covers the same area as the surface mining lease granted to BGL on June 29, 2001. The surface mining lease is restricted to a depth of 200 meters below the surface and the underground mining lease is restricted to material deeper than 200 meters below the surface. The underground mine lies directly beneath some of the surface reserves now being mined by BGL. The consolidation of the underground mine with the activities of BGL is therefore a natural progression to the orderly and economic development of the area.

#### *Prestea Underground Acquisition*

In March 2002, BGL entered into an agreement with PGR, the Ghana Mineworkers Union and the Ghana government, among others, relating to the Prestea Underground. The salient features of the agreement are as follows:

- (i) the Prestea Underground would be shut down and put on care and maintenance;
- (ii) the mining lease over the Prestea Underground would be transferred from PGR to BGL, to be held by BGL on behalf of a joint venture between BGL, PGR and Government. BGL had an initial 45% interest in the joint venture, as did PGR. The Government of Ghana retained a 10% interest;
- (iii) BGL would take over the management of the Prestea Underground;

- (iv) BGL would commence an assessment of the safety and economic viability of the underground mine, which could take as much as two years to complete; and
- (v) certain infrastructure associated with the Prestea Underground would be decommissioned and demolished by BGL to make way for the development of BGL's surface mining operations at Prestea.

Pursuant to the new agreement, BGL, on behalf of PGR, paid \$1.9 million of employee back pay and severance costs to PGR's former employees, each of whom entered into individual separation agreements with PGR. In addition, BGL paid approximately \$0.2 million cash to PGR during 2002 and made an additional payment of \$0.3 million, bringing the total cost of our initial 45% interest in the joint venture to \$2.4 million.

All aspects of the joint venture agreement as listed above, were carried out in 2002. BGL's subsequent spending on care and maintenance and on geological and engineering studies raised BGL's interest in the joint venture to 54% by the end of 2002.

#### *Geology of the Prestea Underground*

Three major Proterozoic stratigraphic units can be identified in the area: the Lower Birimian, made up mostly of argillaceous and arenaceous sediments, overlain by the Upper Birimian (basic to acid volcanics mixed with tuffaceous sediments) which are in turn overlain by the Tarkwaian Group (conglomerates, quartzites and phyllites). This sequence has been intruded by large Cape Coast and smaller Dixcove granitoids as well as by mafic dykes and sills. All these units have undergone low to moderate greenschist metamorphism at approximately 1.8 Ma during the waning stages of the Eburnean Orogeny. It is also during that period that ore-related folding and shearing occurred.

The Prestea deposits are associated with the same Konongo-Axim shear zone which extends over 220kms and which accounts for 80% to 90% of the total quartz lode-hosted gold extracted in Ghana. Other mines located along the same shear are the Bogoso pits, Obuasi and Konongo.

Prestea is located on the western limb of an overturned isoclinal mega syncline. The rocks strike NE-SW and dip steeply 65° to 75° to the NW. The younging direction is towards the SE. Both the Birimian and the Tarkwaian have been subjected to complex polyphase deformation. Folding is intense, tending to be isoclinal with the fold axis trending parallel to the rock units. Faulting also tends to follow the fold axis strike and lies close to the contact between the lower and upper Birimian units.

Two types of gold hosts have historically been recognized at Prestea: shear-related hydrothermal quartz veins; and disseminated sulfide-hosted gold mineralization associated with metavolcanic pods.

The veins are crack-and-seal types with country rock enclaves (generally phyllites which are often mineralized themselves) encapsulated within the composite vein mass. The veins (locally called "reefs") are intermittently developed, steeply plunging pod-shaped quartz lenses located either within the shear itself or in the extension joints in the footwall of the shear. They are typically narrow (1-2 meters) and have short strike length relative to their down plunge extension. The shear itself is marked by a carbonaceous or graphitic gouge horizon. Where the shear is devoid of quartz veining, it usually carries little or no gold.

Anastomosing branches from the main shear zone occur in places, giving rise to both footwall and hanging wall veins that transgress stratigraphy.

There are essentially three reefs which have been mined at Prestea, by decreasing order of importance:

- the Main Reef,
- the West Reef,
- the East Reef.

The Main Reef is the most laterally persistent of the three and has been extensively mined. The West Reef lies in the Main Reef's hanging wall whereas the East Reef is found in the footwall. Cross-sections show that the Main and



West Reefs diverge at depth. While the East Reef is a minor ore body in the Central Shaft sector, it is the principal source of gold in the southern portion of the mine around Bondaye Shaft.

Towards the south the shear splays out which may result in a greater number of ore bodies over a larger structural corridor.

The shear zone also encompasses altered metavolcanic pods within which stock work sulfide (mainly pyrite and acicular arsenopyrite) and associated gold mineralization have been recorded. These pods tend to be found in the footwall of the Main Reef and may have acted as buttresses against which the shear could jog and create dilatational traps for hydrothermal fluids to precipitate. The metavolcanics have en-echelon type arrangements and are elongated parallel to the shear strike while cross-sections show the pods pinching and swelling downdip. They range in thickness from a few meters to several 10's of meters. Their true nature is still open to question as some workers have categorized them as strongly carbonatized and sericitized greywackes while others have identified saussuritized glass shards and remnants of ferro-magnesian minerals that would qualify them as basic to intermediate tuffs.

## **MINING IN GHANA**

Ghana is situated on the West Coast of Africa, approximately 750 kms north of the equator on the Gulf of Guinea. Accra, the capital city of Ghana, is located on the Greenwich Meridian. After a period as a British colony, Ghana achieved independence in 1957 and it is now a republic with a democratically elected government. Ghana has a population of approximately 19 million people. English is the official and commercial language. The total land area of the country is approximately 238,000 square kms and the topography is relatively flat. Ghana has a tropical climate with two rainy seasons and two dry seasons.

Rights to explore and develop a mine are controlled through the Minerals Commission, a governmental organization designed to promote and control the development of Ghana's mineral wealth. A company or individual can apply to the Minerals Commission for a renewable exploration concession granting exclusive rights to explore for a particular mineral in a selected area for a period of two years. When exploration has successfully delineated a mineable reserve, an application is made to the Minerals Commission for conversion to a mining lease, granting a company the right to produce a specific product from the concession area for a period of normally 20 years. Production must begin within two years of the date of granting a mining lease.

### *Government of Ghana Special Rights*

The Government of Ghana has a 10% carried interest in BGL and Wexford and is entitled to acquire up to an additional 20% interest in BGL and/or Wexford. The carried interest entitles the Government of Ghana to a pro-rata share of future dividends, if any, from BGL and Wexford once all third party loans and shareholder loans owed to us are repaid. If the Government of Ghana wishes to exercise the additional acquisition right, it must first give reasonable notice. It must pay such purchase price for the additional 20% interest as the Government of Ghana and BGL and/or Wexford may agree at the time. If there is no agreement, the purchase price will be the fair market value of such interest at such time as determined by arbitration conducted by the International Center for the Settlement of Investment Disputes. The Government of Ghana may also acquire further interests in BGL and/or Wexford on terms mutually acceptable to the Government and BGL and/or Wexford. To date the government has indicated no desire to obtain additional ownership in any of our properties.

The Government of Ghana is entitled to acquire a special or golden share in any mining company at any time for no consideration or such consideration as the Government of Ghana and BGL and/or Wexford may agree. The special share will constitute a separate class of shares with such rights as the Government of Ghana and BGL and/or Wexford may agree. In the absence of such agreement, the special share will have the following rights:

- the special share will carry no voting rights, but the holder will be entitled to receive notice of and attend and speak at any general meeting of the members or any separate meeting of the holders of any class of shares;
- the special share may only be issued to, held by or transferred to the Government or a person acting on behalf of the Government;

- the written consent of the holder of such special share must be obtained for all amendments to the organizational documents of the company, the voluntary winding-up or liquidation of the company or the disposal of any mining lease or the whole or any material part of the assets of the company; and
- the holder of the special share will be entitled to the payment of a nominal sum of 1,000 Ghanaian Cedis in a winding-up or liquidation of the company in priority to any payment to other members and may require the company to redeem the special share at any time for a nominal sum of 1,000 Cedis.

BGL and Wexford have not issued or been requested to issue to date, any such special share to the Government of Ghana.

The Government of Ghana has a pre-emptive right to purchase all gold and other minerals produced by BGL and Wexford. The purchase price will be such price as the Government of Ghana and BGL and Wexford may agree on, or the price established by any gold hedging arrangement between BGL and any third party approved by the Government, or the publicly quoted market price prevailing for the minerals or products as delivered at the mine or plant where the right of preemption was exercised. The purchase price must be paid in foreign exchange. The Government of Ghana has agreed to take no preemptive action pursuant to its right to purchase such gold or other minerals so long as BGL and Wexford sells gold in accordance with certain procedures for selling gold approved by the Bank of Ghana.

#### *Government Royalties*

Under the laws of Ghana, a holder of a mining lease is required to pay a quarterly royalty of not less than 3% and not more than 12% of the total revenues earned from the lease area. The Government of Ghana determines the royalty percentage each year based on the ratio that the operating margin bears to the value of gold produced from the lease in that year. In 2002, 2001 and 2000 the royalty rate for BGL was 3% of revenues, and the amounts paid were \$1.2 million, \$0.7 million and \$0.9 million, respectively.

#### *Environment*

BGL and Wexford are in substantial compliance with the environmental requirements imposed by Ghanaian laws and guidelines and applicable guidelines and standards published by the World Bank. BGL completed significant work during 1999 to identify the outstanding reclamation liability and to prepare a rehabilitation work plan. Significant work has been performed during 2000, 2001 and 2002 to advance this plan and to reduce the outstanding reclamation liability. Expenditures for ongoing rehabilitation work, including the capping of sulfide material, backfilling of worked out pits, and the contouring and re-vegetation of waste dumps, were approximately \$0.5 million during 2002 and \$0.7 million during 2000. An additional \$0.2 million was spent on reclamation activities during 2001. As at December 31, 2002, BGL had \$3.3 million of restricted funds set aside for environmental reclamation of Bogoso.

A reclamation liability of \$2.3 million was recognized upon the acquisition of Wassa, such amount representing the estimated cost of reclamation as of the date of the acquisition.

### **EXPLORATION PROJECTS IN GHANA**

We have entered into five option agreements along the Akropong trend since the acquisition of BGL in September 1999. Each option agreement entitles BGL to acquire a 90% interest, with a 10% government carried interest, in mineral properties located on the Akropong trend and within approximately 20 to 25 kms from the BGL plant. In addition to the option agreements, BGL has been granted two prospecting licenses to the south and east of the Akropong trend and has one application for a prospecting license on the western side of the trend. The total surface area of the mineral properties covered in the option agreements and applications is approximately 514 square kms. The objective of this work is to acquire potential mining opportunities in the immediate vicinity of Bogoso/Prestea that may, in the future, provide additional sources of mill feed for the Bogoso mill. All these projects are at an early

stage of exploration and to date they do not have, and ultimately may not have, proven and probable reserves. The eight properties are referred to hereinafter as the “Akropong Projects”.

In 2002, exploration activities on the Akropong Projects involved regional stream sampling over the entire concession area. Anomalies were prioritized and follow-up soil geochemistry programs were planned. Initial RAB drilling of the Riyadh anomaly commenced in December and will continue into 2003. Exploration expenditures for the Akropong Projects totaled just over \$100,000 during 2002.

We expect to spend approximately \$300,000 on Akropong Projects during 2003. Exploration work for 2003 will involve soil geochemistry surveys, mechanized trenching and RAB drilling. Testing of positive deep auger anomalies and up dip extensions of mineralization intersected in previous diamond drill holes and a preliminary RAB drilling program will be initiated along the Pampe South anomaly. Follow up soil geochemistry will be conducted at Amenfi to delineate the source of the alluvial gold defined by the stream sampling program. Geochemical soil sampling is planned to test stream anomalies defined in 2002. Pending positive results from the soil geochemistry these anomalies will be RAB drilled in 2004. Expenditures given are estimates and may vary.

We signed letters of intent with seven Ghanaian concession holders in 2002. These concessions are located south of the Prestea property and south east of Tarkwa. As part of our due diligence we have conducted stream sediment and soil sampling surveys on the concessions and have signed joint venture agreements on five of these properties. The total land area encompassed by these five concessions totals 192 square kms. We expect to spend approximately \$180,000 on these projects in 2003, including property payments.

The Obuom concession is currently under reapplication which is expected to be granted in 2003. Exploration work scheduled for Obuom will involve confirmation of the gold in soil anomalies previously defined by JCI.

At Wassa, exploration efforts are planned to investigate the potential in the immediate vicinity of the existing infrastructure. Located just north of the Wassa property is the Adasse prospecting license. Exploration scheduled for Adasse includes regional stream sampling followed by wide spaced soil geochemistry. Any economic gold mineralization delineated at Adasse could be processed through at Wassa. We have applied for three reconnaissance permits east, southeast and north west of the Wassa mining lease. These concessions are currently under application and are expected to be granted in 2003.

Exploration activities at Prestea during 2002 concentrated on delineating additional zones of mineralized material amenable to open pit mining. Zones of mineralized materials were delineated along approximately 12 kms of the 22 km Ashanti trend on the Prestea property. These zones were delineated through soil geochemistry and then followed up by RAB and RC drilling. Mineralization on the remaining 10 km portion of Prestea has been defined with soil geochemistry and will be tested during the 2003 exploration programs.

Exploration for 2003 is expected to include both surface and underground evaluation at Prestea. RAB and RC drilling has been planned to test the continuity of mineralization between the Plant North and Beta Boundary pits. Additional drilling has also been planned to better define the Beta Boundary mineralization. RAB drilling to test the 10 km southern extension of the mineralized trend has also been budgeted for 2003.

Compilation of the Prestea Underground data commenced in 2002 and will continue for much of 2003. Underground drilling targets are currently being delineated and drilling is expected to commence in the second half of 2003.

## **EXPLORATION PROJECTS IN SOUTH AMERICA**

### *Guiana Shield Transaction*

In May 2002, we sold our interests in the Gross Rosebel, Headleys and Thunder Mountain properties in Suriname, and our interest in OGML in Guyana, to Cambior.

We received \$5.0 million cash in 2002 and \$1.0 million in 2003 for the sale of Gross Rosebel and expect to receive two additional deferred payments of \$1.0 million each in 2004 and 2005 based on Cambior’s development and operation of Gross Rosebel. In addition, Cambior will pay us a royalty equal to 10% of the excess of the average

quarterly market price above a gold price hurdle on the first 7 million ounces of gold production from Gross Rosebel. For soft and transitional rock the gold price hurdle is \$300 per ounce and for hard rock the gold price hurdle is \$350 per ounce.

For the Headleys and Thunder Mountain properties, we will receive a deferred consideration of \$0.5 million each, when and if Cambior commences commercial mining from these properties.

As payment for our 30% equity interest and preferred shares in OGML, we received a release and waiver from OGML, Cambior and the Guyana Government in respect of all liabilities, of any nature, related to the Omai gold mine. In the transaction we also acquired Cambior's 50% interests in the Yaou and Dorlin exploration properties in French Guiana.

### *French Guiana Properties*

Most of our properties in South America are now located in French Guiana and held through Guyanor, our 73% owned subsidiary, Guyanor Ressources S.A. ("Guyanor"). French Guiana is part of French national territory and has been an overseas "Département" of France since 1946. The Département, with an area of 90,000 square kms and a population of approximately 160,000, has two representatives in the French National Assembly and one representative in the French Senate. Under the French Constitution, French Guiana is governed by the same laws as metropolitan France, subject to modifications (including those affecting tax and mining laws and regulations) that may be adopted to reflect the historical, cultural, geographical and economic characteristics of French Guiana and provide for regional administration.

In French Guiana, artisanal miners illegally work on our properties from time to time. Local government authorities are striving to deal with the situation, but given the remote location of our properties, the situation has still not been fully resolved.

Guyanor is a société anonyme incorporated under the laws of France on April 20, 1993 with its head and registered offices located at 9 Lot. Mont Joyeux, B.P. 750, 97337 Cayenne-Cedex, French Guiana.

At December 31, 2002, Guyanor owned mineral rights (either directly or through its subsidiaries) for the Yaou, Dorlin and Paul Isnard properties. All of the properties are in the exploration stage. Application was made in September 2002 for a new 5 km by 5 km exploration permit for the Bois Canon exploration property in French Guiana.

On October 18, 2002, our subsidiary Societe des Mines de Saint-Elie s.a.r.l. was sold to Companie Miniere Esperance S.A for \$0.5 million.

During 2002 Guyanor spent approximately \$0.3 million on care and maintenance of its exploration properties. During 2001, Guyanor spent \$1.0 million on exploration and care and maintenance, of which \$0.8 million was furnished by a joint venture partner.

### YAOU AND DORLIN

#### *The Properties*

The Yaou exploration permit covers an area of 52 square kms located some 210 kms southwest of Cayenne, French Guiana. Access to the property is by helicopter or four-wheel drive vehicle on 17 kms of dirt road from the town of Maripasoula, which is accessible by chartered and daily scheduled fixed-wing aircraft from Cayenne.

The Dorlin exploration permit covers an area of 84 square kms located some 180 kms southwest of Cayenne and 60 kms east of Maripasoula. The property is accessible by helicopter and a 500 meter airstrip located on the property is suitable for fixed wing aircraft. Access is also available by boat during the rainy season.

Yaou and Dorlin are owned by an entity called Societe Miniere Yaou and Dorlin S.A.S. ("SMYD"). SMYD was originally established as a joint venture with Guyanor and Cambior each owning a 50% interest. In conjunction with

the Guiana Shield Transaction discussed above, Cambior transferred its 50% ownership of SMYD to us in May 2002. Guyanor, our 73% owned subsidiary, retained its 50% interest.

### *Geology*

The geology of the Yaou project area consists of a folded and sheared sequence of Lower "Paramaca" Proterozoic mafic and ultramafic volcanics and volcanoclastics, with minor intercalations of fine-grained clastic sediments. Prior to folding, these were intruded by dioritic bodies. Two generations of granitic plutons bound the property to the east and south. A north-north-west striking dolerite dyke of late Proterozoic age cuts through the property. Exploration has defined three principal zones of gold mineralization, mainly associated with narrow, deformed felsic intrusive bodies and finely laminated felsic tuffs. These zones have been evaluated by deep augering, trenching and core drilling.

The geology of the Dorlin project area consists of sheared and folded greenstone units of Lower Paramaca sequence. Exploration has identified an 11km long zone of soil geochemistry anomalies associated with a radiometric potassium anomaly. Within this anomalous zone one major, N-S trending gold mineralized system, Montagne Nivre, associated with tourmalinization, silicification and pyritization, has been intensively explored by deep auger, trenching and core drilling.

### *Work Program*

In 2002, the Yaou and Dorlin properties remained on care and maintenance. In 2002 and in 2001, expenditures on Yaou and Dorlin totaled less than \$0.1 million in each year.

### *Non Reserves*

#### **Cautionary Note to U.S. Investors concerning estimates of Measured and Indicated Mineral Resources**

This section uses the terms "measured mineral resources" and "indicated mineral resources". We advise U.S. investors that while those terms are recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize them. **U.S. investors are cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into reserves.**

Our current share of the Measured and Indicated Mineral Resources for Yaou and Dorlin, including 73% of Guyanor's 50% share and all of our 50% share, is estimated to be 11.9 million tonnes grading 2.1 g/t. This estimate was made at the end of 2000, using a long-term gold price assumption of \$300/oz. The Qualified Person responsible for the estimation of Mineral Resource for the Yaou and Dorlin project is Mr. Francis Clouston, our employee, who is a former project evaluation geologist for Cambior with over 20 years of experience in the modeling and assessment of gold and base metal projects. Mr. Clouston is a member of the Canadian Institute of Mining and Metallurgy and the Quebec Order of Engineers. The amount of the Mineral Resource which may have been removed by illegal mining is not known.

### PAUL ISNARD

On October 29, 1994, Guyanor acquired an interest in the Paul Isnard exploration projects by way of the acquisition of all of the outstanding shares of Société de Travaux Publics et de Mines Aurifères en Guyane ("SOTRAPMAG"). SOTRAPMAG holds eight mineral concessions which will expire on December 31, 2018 but which can be renewed for an additional 25 years. Total area of the original eight concessions is 150 square km.

Guyanor also has additional exploration permits known as Exclusive Exploration permits ("P.E.R."). They were granted to Guyanor on November 30, 1999 for an initial period of three years, covering an area of approximately 283 square kms. Their validity period expired on December 1, 2002. An application for renewal for a five-year period and reduced surface area (100 square km) was sent to the French Administration on July 30, 2002. The application is still under review, awaiting a final decision from the Ministry of Industry.

### *The Properties*

The Paul Isnard project is located in the western part of French Guiana, some 180 kms west of Cayenne. The property is accessible by air or from St-Laurent-du-Maroni, by means of a 115 kms lateritic road. The first 62 kms section of this road is maintained by the government and the remaining 53 kms section by SOTRAPMAG.

### *Geology*

The Paul Isnard project covers a Lower Proterozoic greenstone belt comprised dominantly of mafic metavolcanic rocks with lesser felsic meta volcanic rocks, metavolcaniclastics and meta sediments associated with intermediate, mafic and minor ultramafic intrusives of similar age.

The Decou-Decou mountains located to the south of the property are formed of volcanic rocks that, at the summit, are covered by degraded lateritic layers. The Lucifer mountains to the northeast are formed of basic intrusive rocks. The basin between the mountains is underlain by a Proterozoic sequence of mafic to felsic volcanics and clastic sediments of the Paramaca and Orapu groups, cut by ultramafic to felsic intrusives.

At Montagne D'Or, located on the northern slopes of Decou-Decou, the host stratigraphy for mineralization is a +400 meter thick section of bi-modal felsic and mafic volcanics with lesser volcanoclastics, particularly at the base. The eastern part of the section contains more mafic volcanics than the western section. The section is intruded by a largely post mineral and later deformation swarm of mafic dykes or sills. The section contains at least two unique time stratigraphic horizons marked by chemical sediments and thin lithologically distinctive flows designated as "favorable sequences".

Mineralization consists of two principal types: disseminated zones or stringer mineralization and semi-massive (SMS) mineralization. The SMS occurs mainly within the favorable sequences that can be reasonably correlated between the widely spaced (200 meter) drill sections. Both contain mainly pyrite with lesser pyrrhotite, chalcopyrite, sphalerite and arsenopyrite. A third more localized mineralization type, "highly chloritic one" has also been identified.

### *Work Program*

No work was carried out at Paul Isnard during 2002 other than routine maintenance, and total costs incurred were less than \$0.1 million. Total expenditures in 2001 were \$1.0 million for Paul Isnard. During 2001 the remaining \$6.9 million of deferred exploration costs were also written off bringing the capitalized basis to zero. There is currently no plan for further work in Paul Isnard during 2003.

### *Non Reserves*

#### **Cautionary Note to U.S. Investors concerning estimates of Measured and Indicated Mineral Resources**

This section uses the terms "measured mineral resources" and "indicated mineral resources". We advise U.S. investors that while those terms are recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize them. **U.S. investors are cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into reserves.**

In 1999 we have estimated our share of Measured and Indicated Mineral Resources to be 4.4 million tonnes grading 2.8 g/t, using a \$325 gold price. This reflects only Measured and Indicated Mineral Resource estimated to be present within open pits as modeled by our staff. The Qualified Person responsible for the estimation of resource for the Paul Isnard project was Declan Costelloe, former Manager Mining Geology, for Golden Star. The amount of the Mineral Resource which may have been removed by illegal mining is not known.

### *Exploitation Authorization Given for Alluvial Mining Titles by Third Parties*

Guyanor has granted the right to 16 small-scale mining companies or individuals to apply for Exploitation Authorization on specific areas located at Paul Isnard. The French government created this new type of mining title in connection with revisions to the Mining Code in 2000. This new title, referred to as an "AEX", grants to small-scale alluvial miners the right to mine alluvial deposits on our concessions and exploration permits, within a specific area of one square km. The title-holder of an AEX is responsible for all potential environmental damages. During the period 2000 to 2002, under separate agreements with each AEX applicant, Guyanor received a certain percentage of the value of the gold extracted. However, recent revisions in French Mining law may have exempted AEX holders from such payments. If this royalty exception becomes effective, our AEX royalty income may cease. Guyanor's AEX royalty income was approximately \$0.45 million in 2002.

### **ITEM 3. LEGAL PROCEEDINGS**

We are not currently subject to any material pending legal proceedings. We are, however, engaged in routine litigation incidental to our business. No material legal proceedings, involving us nor our business are pending, or, to our knowledge, contemplated, by any governmental authority. We are not aware of any material events of noncompliance with environmental laws and regulations.

### **ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS**

No matters were submitted to a vote of security holders during the fourth quarter of 2002.

## PART II

### **ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS**

In June 2002 our common shares began trading on the American Stock Exchange under the symbol GSS and on the Berlin exchange under the symbol "GS5". Our common shares also traded on the Toronto Stock Exchange ("TSX") throughout 2002 under the trading symbol "GSC". Prior to June 2002 our common shares had traded in the United States on the Nasdaq OTC Bulletin Board. As of March 14, 2003, 106,317,535 common shares were outstanding and we had 591 shareholders of record. On March 14, 2003, the closing price per share for our common shares, as reported by the TSX was Cdn\$2.50 and as reported by the American Stock Exchange was \$1.70.

The following table sets forth, for the periods indicated, the high and low market closing prices per share of our common shares as reported by the TSX, the OTC Bulletin Board and the American Stock Exchange.

	<u>Toronto Stock Exchange</u>		<u>OTC Bulletin Board</u>	
	<u>American Stock Exchange<sup>1</sup></u>			
	<u>Cdn\$</u>	<u>Cdn\$</u>	<u>\$</u>	<u>\$</u>
	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>
2002:				
Fourth Quarter	2.90	1.66	1.90	1.04
Third Quarter	2.70	1.34	1.80	0.84
Second Quarter	3.58	1.70	2.33	1.06
First Quarter	2.90	0.86	1.82	0.54

	<u>Toronto Stock Exchange</u>		<u>OTC Bulletin Board</u>	
	<u>American Stock Exchange<sup>1</sup></u>			
	<u>Cdn\$</u>	<u>Cdn\$</u>	<u>\$</u>	<u>\$</u>
	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>
2001:				
Fourth Quarter	1.53	0.88	0.97	0.55
Third Quarter	1.45	0.62	0.90	0.42
Second Quarter	1.15	0.45	0.72	0.29
First Quarter	0.76	0.43	0.50	0.28

1. During 2002 our stock traded on the OTC Bulletin Board until June 18, 2002 and on the American Stock Exchange from June 19, 2002.

We have not declared or paid cash dividends on our common shares since our inception and we expect for the foreseeable future to retain all of our earnings from operations for use in expanding and developing our business. Future dividend decisions will consider then current business results, cash requirements and our financial condition.

### **RECENT SALES OF UNREGISTERED SECURITIES**

The issuances discussed under this section were exempted from registration under Section 4(2) of the Securities Act or Rule 506 thereunder as indicated. All purchasers of the following securities acquired the shares for investment purposes only and all stock certificates reflect the appropriate legends.

#### Common Stock

1. In January 2002, we issued 300,000 shares as payment for financial advisory fees valued at \$150,000
2. In March 2002, we issued 150,000 shares as payment for financial advisory fees valued at \$250,000
3. In June 2002, we issued 515,160 shares as payment for financial advisory fees valued at \$360,000



4. In April 2002, 1,370,000 common shares were issued upon conversion of warrants. The warrants exercised were originally issued in January 2002 with a \$0.70 exercise price. Total value of shares issued was \$959,000.
5. In May 2002, 125,800 common shares were issued upon conversion of warrants. The warrants exercised were originally issued in January 2002 with a \$0.70 exercise price. Total value of shares issued was \$88,060.
6. In June 2002, 1,040,160 common shares were issued upon conversion of warrants. The warrants exercised were originally issued in January 2002 with a \$0.70 exercise price. Total value of shares issued was \$728,112.

#### Units

1. On January 11, 2002, we issued 11,516,000 units consisting of one common share and one half of one warrant in a private placement to a group of investors pursuant to Rule 506 under the Securities Act, for a purchase price of \$5.6 million. Each whole warrant provides the right to purchase one common share for \$0.70 until January 11, 2004.
2. On December 12, 2002, we issued 3,440,000 units consisting of one common share and one fourth of one warrant in a private placement to a group of investors pursuant to Rule 506 under the Securities Act, for a purchase price of \$4.3 million. Each whole warrant provides the right to purchase one common share for \$1.50 until December 12, 2004

#### Warrants

1. On July 19, 2002, we issued 333,334 warrants as payment for the purchase of the common shares of an acquired company. Each warrant provides the right to purchase one common share for \$0.70 until July 19, 2005.

### **CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS**

The following summarizes the principal Canadian federal income tax considerations applicable to the holding and disposition of a common share of the Company (a "Common Share") by a holder (the "Holder") of one or more Common Shares, for tax purposes, who is resident in the United States of America and holds the Common Shares as capital property. This summary is based on the current provisions of the Canada-United States Income Tax Convention (1980) (the "Treaty"), Income Tax Act (Canada) (the "Tax Act"), the regulations there under and all amendments to the Tax Act publicly proposed by the government of Canada to the date hereof. It is assumed that each such amendment will be enacted as proposed and there is no other relevant change in any governing law, although no assurance can be given in these respects.

Every Holder is liable to pay a withholding tax on every dividend that is or is deemed to be paid or credited to him on his Common Shares. Under the Act, every non-resident person shall pay a tax at 25%. Under the Treaty, the rate of withholding tax is reduced to 5% of the gross amount of the dividend where the Holder is a company that owns at least 10% of our voting stock and beneficially owns the dividend, and 15% in any other case.

Under the Tax Act, a Holder will not be subject to Canadian tax on any capital gain realized on an actual or deemed disposition of a Common Share, including a deemed disposition at death, provided that he did not hold the Common Share as capital property used in carrying on a business in Canada, and that neither he nor persons with whom he did not deal at arm's length alone or together owned 25% or more of the issued shares of any class of our stock at any time in the 60 month period immediately preceding the disposition.

A Holder who is liable under the Tax Act for Canadian tax in respect of a capital gain realized on an actual or deemed disposition of a Common Share may be relieved under the Treaty from such liability unless

- (a) the Common Share formed part of the business property of a permanent establishment or fixed base in Canada that the Holder has or had within the twelve-month period preceding the disposition, or
- (b) the Holder

- (i) was resident in Canada for 120 months during any period of 20 consecutive years preceding the disposition, and
- (ii) was resident in Canada at any time during the ten years immediately preceding the disposition, and
- (iii) owned the Common Share when he ceased to be a resident of Canada.

This summary is of a general nature and is not intended, nor should it be construed, to be legal or tax advice to any particular Shareholder. **SHAREHOLDERS SHOULD CONSULT THEIR OWN TAX ADVISERS AS TO THE INCOME AND OTHER TAX CONSEQUENCES ARISING IN THEIR PARTICULAR CIRCUMSTANCES.**

**ITEM 6.            SELECTED FINANCIAL DATA**

The selected financial data set forth below are derived from our audited consolidated financial statements for the years ended December 31, 2002, 2001, 2000, 1999 and 1998, and should be read in conjunction with those financial statements and the foot notes thereto. The consolidated financial statements have been prepared in accordance with Cdn GAAP. Selected financial data derived in accordance with US GAAP has also been provided and should be read in conjunction with footnote 26 to the financial statements. For US GAAP reconciliation items, see the attached consolidated financial statements and notes. Reference should also be made to “Item 7. Management's Discussion and Analysis of Financial Conditions and Results of Operations”.

**Summary of Financial Condition Data at End of Period:**

*(Amounts in thousands except per share data)*

Cdn GAAP	As of December 31, 2002	As of December 31, 2001	As of December 31, 2000	As of December 31, 1999	As of December 31, 1998
Working capital	\$ 21,963	\$ (5,149)	\$ 4,452	\$ 6,020	\$ 6,516
Current assets	32,843	9,636	12,960	13,957	8,216
Total assets	74,135	36,552	49,469	74,352	68,597
Current liabilities	10,880	14,785	8,508	7,937	1,700
Shareholders' equity	49,384	12,342	26,040	40,501	58,471

Cdn GAAP	For the Year Ended December 31, 2002	For the Year Ended December 31, 2001	For the Year Ended December 31, 2000	For the Year Ended December 31, 1999	For the Year Ended December 31, 1998
Revenue	\$ 38,802	\$ 24,658	\$ 31,171	\$ 11,254	\$ 635
Net income/(loss)	4,856	(20,584)	(14,881)	(24,366)	(22,248)
Net income/(loss) per share – basic	0.07	(0.49)	(0.40)	(0.76)	(0.74)

US GAAP	As of December 31, 2002	As of December 31, 2001	As of December 31, 2000	As of December 31, 1999	As of December 31, 1998
Working capital	\$22,511	\$(5,149)	\$ 4,452	\$ 6,020	\$ 3,901
Current assets	33,391	9,636	12,960	13,957	5,601
Total assets	62,644	24,232	24,020	45,635	27,240
Current liabilities	10,880	14,785	8,508	7,937	1,700
Shareholders' equity	41,069	1,533	(478)	11,145	16,899

US GAAP	For the Year Ended December 31, 2002	For the Year Ended December 31, 2001	For the Year Ended December 31, 2000	For the Year Ended December 31, 1999	For the Year Ended December 31, 1998
Revenue	\$38,802	\$24,658	\$31,171	\$11,254	\$ 635
Net income/(loss)	6,752	(5,352)	(12,465)	(11,335)	(15,395)
Net income/(loss) per share - basic	0.09	(0.13)	(0.33)	(0.35)	(0.51)

## **ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

The following discussion and analysis should be read in conjunction with the accompanying consolidated financial statements and related notes. The financial statements have been prepared in accordance with generally accepted accounting principles in Canada ("Cdn GAAP"). For a reconciliation of our financial statements to statements prepared in accordance with generally accepted accounting principles in the United States ("US GAAP"), see Note 26 to the accompanying consolidated financial statements and "Results of Operations".

### **INTRODUCTION**

#### **Acquisitions**

Since 1999, we have focused primarily on the acquisition of producing and development stage gold properties in Ghana and on the exploration, development and operation of these properties. We have acquired two operating properties since 1999 and two development stage properties which we are now evaluating for production potential.

Our acquisitions have included a 70% interest in Bogoso Gold Limited ("BGL") in 1999, which we increased to 90% in 2001. BGL provided us with an operating open pit gold mine and mill. We acquired a 90% interest in the adjoining Prestea gold property ("Prestea") in 2001, and commenced open-pit mining at Prestea in late 2001, with ore being processed at the Bogoso mill. We expect to produce approximately 140,000 ounces from our Bogoso/Prestea operations ("Bogoso/Prestea") in 2003. Mining at Bogoso/Prestea is expected to continue for approximately ten years, assuming sulfide ores are mined from Bogoso and Prestea, once the non-refractory ores have been mined, as is currently contemplated.

In September 2002, we acquired a 90% interest in the Wassa gold property ("Wassa"), previously operated by a former owner as an open pit, heap leach operation. We are currently conducting a feasibility study regarding a conventional carbon-in leach operation. If the feasibility study is favorable, we believe that Wassa could recommence production in early 2004. In 2001, via a joint venture agreement, our 90% owned subsidiary BGL, acquired a 45% managing interest in the Prestea underground gold property ("Prestea Underground"), which includes a currently inactive underground mine. We are evaluating the possibility of restarting underground production from this acquisition.

We are actively investigating the acquisition of producing, development and advanced stage exploration gold properties and companies, primarily in Ghana and elsewhere in Africa. We also intend to increase significantly our exploration activities on our current exploration properties in Ghana as well as in other areas in West Africa.

#### **Operating Results in 2002**

For the first time in the Company's history we recorded a profit for the full year. We earned \$4.9 million in 2002, versus a loss of \$20.6 million in 2001. There were no impairment write-offs in 2002 versus a \$15.0 million write-off in 2001. Earnings also improved on higher gold prices and better gold recovery as we commenced mining of Prestea ores. We received an average gold price of \$311 per ounce in 2002, \$40 per ounce higher than in 2001. Higher gold output, from improved gold recoveries, reduced our average cash operating costs from \$263 per ounce in 2001 to \$193 in 2002.

Future operating results are directly related to the price of gold, which can fluctuate widely and is affected by numerous factors beyond our control. If gold sales revenues fall for a substantial period below our cost of production, we could cease production at any or all of our operations and development of some or all of our projects.

#### **Financing Activities**

Our liquidity improved in 2002. Cash balances increased from \$0.5 million at the end of 2001 to \$20.0 million at year-end 2002. We raised net proceeds of approximately \$17.6 million in a public offering, \$ 9.3 million in two

private placements, and approximately \$5.5 million through the sale of certain exploration properties. And in February 2003, we completed a public offering for net proceeds of approximately \$31.5 million.

### **Significant Events During 2002 and Recent Developments**

**January 2002 Private Placement** – We sold 11,516,000 units in a private placement at a price of \$0.49, each unit consisting of one common share and one half warrant, for net proceeds of \$5.1 million. Each whole warrant is exercisable for one common share at an exercise price of \$0.70 until January 11, 2004.

**Guiana Shield Transaction** - In May 2002, we sold our interest in most of our exploration properties in Suriname and Guyana, including the Gross Rosebel property (“Gross Rosebel”), Headleys, Thunder Mountain and Omai Gold Mines Limited (“OGML”), to Cambior Inc. (“Cambior”), our former partner in exploration, development and/or operation of these properties.

We received \$5.0 million cash in 2002 and \$1.0 million of deferred payments in 2003 for the sale of Gross Rosebel and are entitled to receive two additional deferred payments of \$1.0 million each in 2004 and 2005. In addition, Cambior is obligated to pay us a royalty equal to 10% of the excess of the average quarterly market price above a gold price hurdle on the first 7 million ounces of gold production from Gross Rosebel. For soft and transitional rock the gold price hurdle is \$300 per ounce and for hard rock the gold price hurdle is \$350 per ounce.

For the Headleys and Thunder Mountain properties, we will receive a deferred consideration of \$0.5 million per property when and if, Cambior commences commercial mining from these properties. As payment for our 30% equity interest and preferred shares in OGML, we received a release and waiver from OGML, Cambior and the Guyana Government in respect of all liabilities, of any nature, related to the Omai gold mine. In the transaction we also acquired Cambior’s 50% interests in the Yaou and Dorlin exploration properties in French Guiana.

**Acquisition of an Interest in the Prestea Underground** – In March 2002, our 90% owned subsidiary, BGL entered into a joint venture agreement with Prestea Gold Resources Limited (“PGR”) and the Government of Ghana, relating to the Prestea Underground. The Prestea Underground operated for 130 years, producing approximately nine million ounces of gold prior to 2001.

The joint venture agreement called for the following: shutting down the Prestea Underground and putting it on a care and maintenance basis; the Prestea Underground mining lease was transferred from PGR to BGL, to be held by BGL on behalf of a joint venture; BGL and PGR would each own an initial 45% interest in the joint venture and the government of Ghana would have a 10% interest; and BGL would take over the day-to-day management of the Prestea Underground. Under BGL’s direction, an assessment of the safety and economic viability of the Prestea Underground is now underway. The assessment could take as much as two years to complete. The joint venture agreement also allowed certain infrastructure items, associated with the Prestea Underground, to be decommissioned and demolished to make way for the development of BGL’s surface mining operations at Prestea.

The Prestea Underground is contained within a mining lease which covers the same area as the Prestea surface mining lease granted to BGL on June 29, 2001. The surface mining lease is to a depth of 200 meters below the surface and the underground mining lease is restricted to material deeper than 200 meters below the surface.

BGL paid \$2.4 million for its initial 45% interest in the joint venture. Subsequent investments in the joint venture increased BGL’s ownership to 54% by December 31, 2002.

**Listings on the American Stock Exchange and the Berlin Stock Exchange** - Our common shares were listed on the American Stock Exchange and began trading on June 19, 2002 under the symbol “GSS”. Our shares were also listed on the Berlin Stock Exchange in June 2002 under the symbol “GS5”.

**Bogoso/Prestea Reserve Addition** – On June 20, 2002, we announced an increase in Proven and Probable Mineral Reserves at Bogoso/Prestea of 263,000 ounces contained in approximately 1.5 million tonnes of ore at an average grade of 5.32 grams per tonne. This increase is approximately two additional years production at Bogoso/Prestea.

**July 2002 Public Offering** - On July 24, 2002, we completed a public offering in the United States and Canada for the sale of 16.1 million units at Cdn\$1.90 (approximately \$1.20) per unit, to raise total gross proceeds of \$19.4 million or net cash of \$17.6 million. Each unit consisted of one common share and one-half of one common share purchase warrant. Each whole warrant is exercisable during the two year period ending July 24, 2004 at a price of Cdn\$2.28 (approximately \$1.46) to purchase an additional common share. The share purchase warrants have been listed with and trade on the Toronto Stock Exchange under the symbol "GSC.WT".

**Acquisition of Wassa** - On September 13, 2002, we completed the acquisition of a 90% interest in Wassa in Ghana. The remaining 10% interest was retained by the Government of Ghana. Prior to our purchase, Wassa had operated for approximately two years, as a conventional open pit, heap leach gold operation producing approximately 90,000 ounces per year. In 2001, following cessation of operation, the secured lenders to the project enforced their security rights in the project and, following a bidding process, agreed to sell the Wassa assets to us.

Wassa was acquired via our acquisition of a 90% equity position in Wexford Goldfields Limited ("Wexford"). Assets at Wassa include an open pit mine, heap leach pads, processing equipment (crusher, agglomeration plant, conveyors, and a gold recovery plant), parts and supplies inventory, maintenance shops, administrative offices, housing for employees, a community center and miscellaneous other ancillary facilities. Total cost of the Wassa assets was \$6.9 million, including approximately \$1.6 million in cash, assumption of \$1.8 million of debt provided by the seller, assumption of approximately \$2.3 million of liabilities and \$1.2 million of other costs. In addition we agreed to pay the Wassa sellers two separate royalties.

We are currently working on a feasibility study to determine if Wassa can be redeveloped on a profitable basis. A drilling program has been designed and carried out in conjunction with the feasibility study to evaluate the gold potential of the property. We are also conducting engineering and design studies which indicate that it may be possible to establish profitable operations at Wassa utilizing conventional CIL technology. CIL technology should provide better gold recovery and lower unit costs than was achieved during the earlier heap leach operational phase. We expect to complete the reserve analysis and feasibility study by mid-2003 and if warranted, construction of a CIL mill facility would begin immediately thereafter. The estimated capital cost of the CIL plant and associated start-up costs are expected to be approximately \$14 million. Gold production could begin by early 2004. Much of the existing infrastructure, including the crusher, conveyors, the power plant, haul roads and a gold recovery plant, as well as the town site and administrative facilities would be useable in a CIL operation.

**December 2002 Private Placement** - On December 12, 2002 we completed a private placement of 3.44 million units at a price of \$1.25 per unit for gross proceeds of \$4.3 million. Each unit consists of one common share and one-quarter of a warrant. Each whole warrant entitles the holder to the right, for a period of two years, to acquire one common share at an exercise price of \$1.50.

**February 2003 Equity Offering** - On February 14, 2003 we completed a fully underwritten public offering of 17,000,000 units at Cdn\$3.00 (approximately \$1.97) per unit, for gross proceeds of Cdn\$51 million (approximately \$33.5 million). Each unit consisted of one common share and one-half of one warrant to purchase a common share. Each whole warrant is exercisable for a period of 48 months from its date of issue and shall entitle the holder to purchase one common share for Cdn\$4.60 (approximately \$3.02) per share. The warrants have been listed with and trade on the Toronto Stock Exchange under the symbol GSC.WT.A.

**Payments to the Sellers of Bogoso** - Provisions of the 1999 Bogoso purchase agreement specified that if a sulfide mining operation was ever initiated at Bogoso, utilizing sulfide ores from Bogoso, an additional payment would be due to the original Bogoso sellers. The agreement called for a payment of \$5.0 million, plus the agreement provided for the amount to escalate each year by an inflation factor. Negotiations with the Bogoso sellers resulted in this potential future payment being extinguished by the payment of \$2.0 million in February 2003. On the same date, the remaining \$2.0 million liability due the Bogoso sellers, triggered by acquiring more than 50,000 ounces of gold from outside of Bogoso, was made, thereby liquidating and satisfying all liabilities to the Bogoso sellers associated with the original Bogoso purchase.

## RESULTS OF OPERATIONS

### 2002 Compared to 2001

We generated net income of \$4.9 million or \$0.07 per share for the twelve months ended December 31, 2002, compared to a loss of \$20.6 million or \$0.49 per share during the twelve months ended December 31, 2001. The major factors contributing to the marked improvement were higher gold production primarily from Prestea, an improvement in the gold prices, and completion of write-offs of deferred exploration costs in 2001.

During much of 2001, mill feed to the Bogoso mill consisted of transition ores mined from Bogoso. The chemical composition of the transition ores was not well suited for processing in the Bogoso mill, and a low gold recovery rate of 49.6% was experienced during 2001 as a result. During 2002 all of the Bogoso mill feed came from Prestea acquired in late 2001, and the milling characteristics of the Prestea ores are much better suited for processing in the Bogoso mill, resulting in a 74.4% recovery rate during 2002. The improved recovery added just over 41,000 ounces to our output versus what would have occurred had recoveries stayed at the 2001 rate of 49.6%.

### Bogoso/Prestea Operating Results

Revenues rose from \$24.7 million in 2001 to \$38.8 million in 2002. In addition to the higher gold output for the year, 2002 gold prices were significantly higher than in the prior year. Our realized sales price averaged \$311 per ounce in 2002, up \$40 per ounce from \$271 per ounce in 2001. The higher gold price contributed approximately \$5 million additional dollars to our revenues versus the average price in 2001. Gold shipments, all from Bogoso/Prestea, totaled 124,400 ounces during 2002. This 41% increase over 2001 was due to the better gold recoveries on the Prestea ores milled in 2002 and to an 8% increase in tonnes milled.

While the cost of mining operations, as shown on the income statement, increased 8% from the 2001 level, mostly due to an 8% increase in the number of tonnes milled, the improvement in gold output yielded a 27% decrease in cash operating cost per ounce, from \$263 in 2001 to \$193 in 2002. Improved gold recoveries were the most significant factor contributing to the lower cash operating cost per ounce.

Bogoso Operating Parameters	For the Twelve Months ended December 31,		
	2002	2001	2000
Ore milled (t)	2,271,747	2,098,165	2,139,279
Rate (t/day)	6,223	5,748	5,845
Grade (g/t)	2.31	2.69	2.56
Recovery %	74.4	49.6	64.4
Gold production (oz)	124,400	87,936	108,643
Cash operating cost (\$/oz)	193	263	201

Depreciation and depletion charges in 2002 were down substantially from 2001 levels because essentially all of the initial BGL purchase cost, which included the full purchase price of the Bogoso mill, mine equipment and other facilities, was amortized over ounces produced from Bogoso during the two year period between the September 1999 purchase and the September 2001 closure of the oxide mining from Bogoso. Ounces from Prestea incurred amortization and depreciation only to the extent of the Prestea purchase cost and for equipment purchased after September 1999.

Due to low gold prices between 1996 and 2001, the lack of funds to continue development work on many of our exploration properties and a new emphasis on operations rather than exploration after 1999, most of our capitalized deferred exploration costs were deemed impaired and written off between 1999 and 2001. Cumulative deferred acquisition and exploration write-offs during this three-year period totaled \$55.6 million, including \$15.0 million in 2001. Exploration property write-offs were the single largest contributing factor to the \$20.6 million loss in 2001. By the end of 2001, all of our deferred exploration properties had been written off or down to their recoverable values.

General and administrative costs rose from \$2.7 million in 2001 to \$3.9 million in 2002. Most of the increase was related to expanded investor relations spending and to operations at Guyanor where a lack of active exploration

projects required that certain costs be expensed as general and administrative costs that would have been capitalized as project costs in prior periods. Severance costs at Guyanor also contributed to the increase as down-sizing continued at Guyanor.

We recorded a \$0.4 million gain in 2002 on the sale of the St. Elie property in Guyanor. The property was sold to a mining company in French Guiana in October 2002 for \$0.5 million cash. Interest expense for 2002 was substantially lower than in 2001, due to reduced balances on the convertible debentures and other debt. Foreign exchange gains were mostly related to operations in Ghana where the local currency continues to devalue against the dollar.

## **2001 Compared to 2000**

We experienced a net loss of \$20.6 million during 2001 as compared to a net loss of \$14.9 million in 2000. The major factors contributing to the losses in both years, were non-cash write-offs of deferred exploration costs incurred in earlier years of our existence when our focus was on exploration. Given sharp decreases in gold prices, a lack of funds to continue development work on many of the exploration properties, unimpressive drill results and a new emphasis on operations rather than exploration, most of our deferred exploration projects suffered impairments and were written off in the three-year period beginning in 1999. Cumulative deferred acquisition and exploration write-offs have totaled \$31.7 million during 2000 and 2001.

Write-offs in 2001 included \$6.9 million at the Paul Isnard property, triggered by a joint venture partner's decision to withdraw from a multi-year joint exploration agreement because of disappointing drill results from work done during 2001. In addition, an \$8.1 million write-down of Gross Rosebel was made in 2001 to reflect its fair market value based upon the proposed sale of this property to Cambior.

Lower gold sales also contributed to the larger loss in 2001 than in 2000, mostly caused by lower gold production. For 2001, gold output dropped to 87,936 ounces from 108,643 ounces in 2000. As Bogoso neared the end of its oxide and transition ore reserves in 2001, more complex ores were mined which were not well suited to processing in the existing Bogoso mill. As a result, in the first nine months of 2001, when Bogoso was supplying ore to the Bogoso mill, mill feed grades actually increased slightly to 3.0 g/t from 2.6 g/t, but gold recovery dropped to 44.4% from 65.5% in the same periods of 2000. The net result was that gold production for the first nine months of 2001 dropped to 63,331 ounces from 89,447 ounces in 2000.

Once Prestea ores became available in the fourth quarter, ore grades dropped but recovery increased to more than off-set the lower grades and gold production in the fourth quarter increased to 24,605 ounces compared to an average of only 21,111 ounces in the first three quarters of 2001 and 19,195 ounces in the fourth quarter of 2000.

Realized gold prices averaged \$271 per ounce in 2001, down from \$280 in 2000. The impact on sales revenues of the lower gold prices was \$0.8 million. All sales in 2001 were at spot. There was no gold price hedging activity in 2001 or 2000. Total cash operating cost per ounce averaged \$271 per ounce in 2001, up from \$201 per ounce in 2000.

Cost of mining operations for 2001 fell 3% from the prior year. The more complex nature of the Bogoso ore resulted in higher processing costs, most notably for increased use of various chemical reagents in the milling process, but mining property depletion was sharply lower than in 2000, reflecting lower gold output and a lower mining property cost basis. BGL's mining property depletable basis was reduced by \$2.7 million in December 2000 after it became apparent that gold prices were trending lower than initially anticipated, which, per the terms of the original BGL purchase agreement, resulted in a lower ultimate cost basis for the mining property.

Exploration costs decreased further in 2001, reflecting our decision to temporarily de-emphasize exploration.

Deferred exploration spending in Ghana totaled \$1.4 million in 2001, down from \$2.6 million in 2000. In both 2001 and in 2000 the majority of the deferred exploration costs in Ghana were related to the sulfide feasibility study, with such costs tapering off in 2001 as the feasibility work came to its conclusion. In addition to the \$1.0 million spent on the feasibility study in 2001, \$0.4 million was spent on exploration activities at various properties in the



Bogoso/Prestea vicinity. Comparable costs for 2000 were \$2.4 million for the sulfide feasibility and \$0.2 million for work on exploration properties in Ghana.

Deferred exploration costs in South America, net of partner recoveries, totaled \$1.4 million, up from \$0.7 million in 2000. Of the total spent in 2001, \$1.0 million was related to the Paul Isnard property and the balance is related to the holding cost of Gross Rosebel.

## **LIQUIDITY AND CAPITAL RESOURCES**

Our liquidity situation experienced a marked improvement during 2002. While capital projects consumed much larger amounts of cash than was typical of the past few years, cash generated from operations, cash from the sale of assets and new equity more than compensated, leaving the December 31, 2002 cash balance at \$20.0 million, up from \$0.5 million at the end of 2001.

Operating activities generated \$5.8 million during the year, up from \$2.4 million in 2001. Higher gold prices and higher gold output were directly responsible for the improvement. Investing activities consumed \$16.7 million of cash during the year while the sale of Gross Rosebel in Suriname and St. Elie in French Guiana contributed \$5.4 million of cash. The acquisition and development of Wassa used \$5.9 million. Development work and new property, plant and equipment at Bogoso/Prestea consumed \$6.1 million. We also invested \$3.5 million in the Prestea Underground during 2002.

Issuance of new common shares contributed \$26.8 million of cash during 2002. Stock option exercises provided \$0.5 million during the year, and warrant exercises contributed an additional \$1.8 million of cash. Liquidation of several liabilities, including the amount due the Bogoso sellers, consumed \$6.5 million of cash.

At December 31, 2002, working capital stood at \$22.0 million, versus a working capital deficit of \$5.1 million at the end of 2001.

In February 2003 a fully underwritten equity offering raised gross proceeds of \$33.5 million bringing total cash on hand to approximately \$50 million by the end of February 2003.

It is possible, even with the current cash balances of approximately \$50 million, that additional funding could be required or desirable during 2003 to pursue acquisition and growth opportunities. While capital funding has become somewhat easier to acquire in the past year, we cannot assure you that we would be successful in raising additional amounts during 2003 if the need arose.

### **Outlook**

Our main objectives in 2003 are: (i) continued orderly and efficient mining of Prestea ore allowing an adequate flow of oxide and other non-refractory ores to the Bogoso mill; (ii) completion of the Wassa feasibility study and re-development of Wassa as a CIL operation if warranted by the feasibility study; (iii) evaluation of the Prestea Underground reserve potential, and (iv) a substantial increase in exploration efforts with a focus on Ghana and follow-up of certain properties in South America.

We will also continue to seek out and evaluate acquisition and growth opportunities in Ghana and elsewhere in Africa. We will strive to maximize the value of our South American assets via joint venture financed exploration activities and/or mergers and acquisitions where practical.

We expect gold production of approximately 140,000 ounces in 2003 at a projected cash operating cost of \$185 per ounce. Consolidated net exploration and development expenditures are forecast to be up to approximately \$11 million during 2003, most of which will be spent in Ghana. Meanwhile our activities in the Guiana Shield will be primarily care and maintenance, although we will continue to seek joint venture funded opportunities in Suriname and Guyana. There is no budgeted exploration spending at Guyanor in 2003, although we are actively seeking joint venture partners which could fund additional work at Paul Isnard or at our other properties.

During 2003 we expect to be able to fund currently anticipated expenditures from cash generated by operations and cash on hand.

As more fully disclosed under Risk Factors, numerous factors could cause our budget estimates to be wrong or could lead our management to make changes in our plans and budgets. Under any of these circumstances, the estimates described above would likely change materially.

## **RECENT ACCOUNTING PRONOUNCEMENTS**

In December 2001, the CICA issued AcG 13 - "Hedging Relationships" ("AcG 13"). The guideline presents the views of the Canadian Accounting Standards Board on the identification, designation, documentation and effectiveness of hedging relationships, for the purpose of applying hedge accounting. The guideline is effective for all fiscal years beginning on or after July 1, 2003, which is the fiscal year beginning January 1, 2004 in our case. We do not believe that the adoption of this guideline will have a material impact on our results of operations or financial position, unless we were to enter into significant hedging relationships prior to the implementation date.

In 2003, the CICA issued AcG 14 - "Disclosure of Guarantees" ("AcG 14"). The guideline presents the views of the Canadian Accounting Standards Board on financial statement disclosures to be made by a guarantor about its obligations under guarantees. The guideline is effective for all fiscal years beginning on or after January 1, 2003, which is the fiscal year beginning January 1, 2003 in our case. We believe that the adoption of this guideline will not have a material impact on our results of operations or financial position.

In 2002, the CICA issued Section 3063 - "Impairment of Long-Lived Assets" ("CICA 3063). The guidelines in CICA 3063 establish standards for the recognition, measurement and disclosure of the impairment of non-monetary long-lived assets held for use. The guideline is effective for all fiscal years beginning on or after April 1, 2003, which is the fiscal year beginning January 1, 2004 in our case. We have not yet determined the expected effect, if any, on our results of operations or financial position upon the implementation of this guideline.

In 2002, the CICA issued Section 3475 - "Disposal of Long-Lived Assets and Discontinued Operations" ("CICA 3475"). The guidelines in CICA 3475 establish standards for the recognition, measurement, presentation and disclosure of the disposal of long-lived assets. It also establishes standards for the presentation and disclosure of discontinued operations, whether or not they include long-lived assets. The guideline is effective for asset disposals after May 1, 2003. We have not yet determined the expected effect, if any, on our results of operations or financial position upon the implementation of this guideline.

In 2002, the CICA issued Section 3110 - "Asset retirement Obligations" ("CICA 3110). The guideline establishes standards for the recognition, measurement and disclosure of liabilities for asset retirement obligations and the associated costs. The guideline is effective for all fiscal years beginning on or after January 1, 2004, which is the fiscal year beginning January 1, 2004 in our case. We have not yet determined the expected effect on our results of operations or financial position upon the implementation of this standard.

## **SEASONALITY**

Most of our operations are in tropical climates which experience annual rainy seasons. Mining operations are not materially affected by the rainy seasons in Ghana but exploration efforts in Ghana and in the Guiana Shield are generally timed to avoid the rainy periods to ease transportation logistics associated with wet roads.

## **RELATED PARTY TRANSACTIONS**

Our President and CEO, Peter J. Bradford, participated in our private placement in January 2002, paying \$98,000 for 200,000 units, each unit consisting of one share of our common stock and one half warrant to purchase our common shares at \$0.70 until January 11, 2004.

During 2002 we obtained legal services from a legal firm in which one of our directors is of counsel. Our director did not personally perform any legal services for us.

During 1999, we, in conjunction with Anvil, acquired BGL. Our President and CEO, was then and still is a director of Anvil. Based on the heads of agreement with Anvil to effect the 1999 BGL acquisition, we provided Anvil with a promissory note for their share of the purchase price and also a note for their share of the acquisition costs. In June 2001, we acquired Anvil's 20% equity interest in BGL in return for the issuance of 3,000,000 common shares of our common stock, and forgave the remaining note receivable.

## **CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

Our financial statements reflect the application of Cdn GAAP, which is different in certain material respects from US GAAP. The accounting policies reflected therein are generally those applied by similarly situated mining companies in Canada. As disclosed in the notes to our financial statements, the assessment of our financial condition and results of operations reflected in our financial statements are significantly affected by estimates that we, or experts that we have retained, have made as to our proven and probable reserves and the value of our exploration properties. Reserve estimates involve the exercise of subjective judgment and are based on numerous assumptions that may prove to have been incorrect. Decisions to write off (or not to write off) all or a portion of our investment in various properties are based on our judgment as to the actual value of the properties and are therefore subjective in most cases. As noted elsewhere in this report, we have elected, over the past several years to write off substantially all of our investment in exploration properties even though we retain some of these properties and they may ultimately prove to have significant value.

### **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

Our exposure to market risk includes, but is not limited to, the following risks: changes in interest rates on our investment portfolio, changes in foreign currency exchange rates and commodity price fluctuations.

#### **Interest Rate Risk**

When appropriate we invest excess cash in short-term debt instruments of the United States Government and its agencies on a fixed interest rate basis. We may also invest in short term debt instruments of the government of Canada. Over time the rates received on such investments may fluctuate with changes in economic conditions. As a result our investment income may fall short of expectations during periods of lower interest rates. We may in the future actively manage our exposure to interest rate risk.

#### **Foreign Currency Exchange Rate Risk**

The price of gold is denominated in United States dollars and the majority of our revenues and expenses are denominated in United States dollars. As a result of the limited exposure, we believe that we are not exposed to a material risk as a result of any changes in foreign currency exchange rate changes, so we currently do not utilize market risk sensitive instruments to manage our exposure.

#### **Commodity Price Risk**

We are engaged in gold mining and related activities, including exploration, extraction, processing and reclamation. Gold bullion is our primary product and, as a result, changes in the price of gold could significantly affect results of operations and cash flows. According to current estimates, a \$25 change in the price of gold could result in a \$3.5 million effect on our results of operations and cash flows. In late 2002 we entered into put agreements which locked in a floor price of \$280 for 96,000 ounces of production (8,000 ounces per month) during 2003. The cost of the puts is equivalent to \$2.00 per ounce of gold for a total cost of \$192,000. Other than puts, we have no other program to hedge, or otherwise manage our exposure to commodity price risk. We may in the future more actively manage our exposure through hedging programs.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

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Golden Star Resources Ltd. and Subsidiaries

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## MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL INFORMATION

To the Shareholders of  
Golden Star Resources Ltd.

The consolidated financial statements and all information in the Annual Report are the responsibility of the Board of Directors and management. The consolidated financial statements have been prepared by management based on information available to March 19, 2003, and are in accordance with accounting principles generally accepted in Canada.

A system of internal accounting and administrative controls is maintained by management in order to provide reasonable assurance that financial information is accurate and reliable, and that our assets are safeguarded. Limitations exist in all cost effective systems of internal controls. Our systems have been designed to provide reasonable but not absolute assurance that financial records are adequate to allow for the completion of reliable financial information and the safeguarding of its assets. We believe that the systems are adequate to achieve the stated objectives.

The Audit Committee of the Board of Directors is comprised of three outside directors, operates in accordance with its charter and meets quarterly with management and the independent auditors to ensure that management is maintaining adequate internal controls and systems and to approve the annual and quarterly consolidated financial statements of the Company. The committee also reviews the audit plan of the independent auditors and discusses the results of their audit and their report prior to submitting the consolidated financial statements to the Board of Directors for approval.

The consolidated financial statements have been audited by PricewaterhouseCoopers LLP, Chartered Accountants, who were appointed by the shareholders. The auditors' report outlines the scope of their examination and their opinion on the consolidated financial statements.

/s/ Peter J. Bradford  
Peter J. Bradford  
President and  
Chief Executive Officer

/s/ Allan J. Marter  
Allan J. Marter  
Senior Vice President and  
Chief Financial Officer

March 19, 2003

## AUDITORS' REPORT

To the Shareholders of  
Golden Star Resources Ltd.

We have audited the consolidated balance sheets of Golden Star Resources Ltd. as of December 31, 2002 and 2001 and the consolidated statements of operations, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2002. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in Canada and in the United States of America. Those standards require that we plan and perform an audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2002 and 2001, and the consolidated results of its operations and cash flows for each of the three years in the period ended December 31, 2002, in accordance with accounting principles generally accepted in Canada.

/s/ PricewaterhouseCoopers LLP  
Chartered Accountants  
Calgary, Canada

March 19, 2003

**GOLDEN STAR RESOURCES LTD.**  
**CONSOLIDATED BALANCE SHEETS**

(Stated in thousands of United States dollars except share amounts)

<b>ASSETS</b>	As of December 31, 2002	As of December 31, 2001
<b>CURRENT ASSETS</b>		
Cash and short-term investments (Note 4)	\$ 20,016	\$ 509
Marketable securities (Note 3)	906	-
Accounts receivable	1,977	1,231
Inventories (Note 7)	8,421	7,666
Due from sale of property (Note 15)	1,000	-
Other current assets	523	230
Total Current Assets	32,843	9,636
RESTRICTED CASH (Note 24)	3,365	3,365
ACQUISITION, DEFERRED EXPLORATION AND DEVELOPMENT COSTS (Note 15)	4,743	12,280
DUE FROM SALE OF PROPERTY (Note 15)	2,000	-
INVESTMENT IN OMAI GOLD MINES LIMITED (Note 16)	-	141
MINING PROPERTIES (Net of accumulated depletion of \$12,608 and \$10,852, respectively) (Note 10)	21,513	8,353
PROPERTY, PLANT AND EQUIPMENT (Net of accumulated depreciation of \$5,837 and \$5,134, respectively) (Note 9)	9,100	2,268
OTHER ASSETS	571	509
Total Assets	\$ 74,135	\$ 36,552
<b>LIABILITIES</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable	\$ 4,109	\$ 4,365
Accrued liabilities	3,135	2,783
Accrued wages and payroll taxes	73	124
Current debt (Note 8)	3,563	7,513
Total Current Liabilities	10,880	14,785
CONVERTIBLE DEBENTURES (Note 8)	-	2,358
LONG TERM DEBT (Note 8)	1,727	-
ENVIRONMENTAL REHABILITATION LIABILITY (Note 24)	7,246	5,407
Total Liabilities	19,853	22,550
MINORITY INTEREST	4,898	1,660
COMMITMENTS AND CONTINGENCIES (Note 24)		
<b>SHAREHOLDERS' EQUITY</b>		
<b>SHARE CAPITAL</b>		
First Preferred Shares, without par value, unlimited shares authorized. No shares issued	-	-
Common shares, without par value, unlimited shares authorized. Shares issued and outstanding: 87,400,702 at December 31, 2002; 49,259,548 at December 31, 2001	201,039	168,308
Equity component of convertible debentures	-	545
DEFICIT	(151,655)	(156,511)
Total Shareholders' Equity	49,384	12,342
Total Liabilities and Shareholders' Equity	\$ 74,135	\$ 36,552

*The accompanying notes are an integral part of these consolidated financial statements.*

By: /s/ Robert R. Stone - Director

By: /s/ Peter J. Bradford - Director

**GOLDEN STAR RESOURCES LTD.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(Stated in thousands of United States dollars except per share amounts)

	For the Years ended December 31,		
	2002	2001	2000
<b>REVENUE</b>			
Gold sales	\$ 38,091	\$ 23,801	\$ 30,405
Interest and other	711	857	766
	<u>38,802</u>	<u>24,658</u>	<u>31,171</u>
<b>EXPENSES</b>			
Mining operations	26,747	24,824	21,693
Depreciation and depletion	2,459	3,420	7,289
Exploration expense	485	204	946
General and administrative	3,886	2,669	2,905
Abandonment and impairment of mineral properties	-	15,010	16,706
Gain on sale of assets	(425)	-	(50)
Interest expense	265	833	805
Foreign exchange gain	(139)	(50)	(254)
	<u>33,278</u>	<u>46,910</u>	<u>50,040</u>
<b>INCOME/(LOSS) BEFORE THE UNDERNOTED</b>	5,524	(22,252)	(18,869)
Omai preferred share redemption premium	170	583	479
Income/(loss) before minority interest	5,694	(21,669)	(18,390)
Minority interest	(838)	1,085	3,509
<b>NET INCOME/(LOSS)</b>	<u>\$ 4,856</u>	<u>\$ (20,584)</u>	<u>\$ (14,881)</u>
<b>NET INCOME/(LOSS) PER COMMON SHARE – BASIC (Note 22)</b>	\$ 0.07	\$ (0.49)	\$ (0.40)
<b>NET INCOME/(LOSS) PER COMMON SHARE – DILUTED (Note 22)</b>	\$ 0.06	\$ (0.49)	\$ (0.40)
<b>WEIGHTED AVERAGE SHARES OUTSTANDING</b>			
(in millions of shares)	72.4	42.2	37.5

*The accompanying notes are an integral part of these consolidated financial statements.*



**GOLDEN STAR RESOURCES LTD.**  
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY  
(Stated in thousands of United States dollars except share amounts)

	<b>Common Stock Number of Shares</b>	<b>Share Capital</b>	<b>Warrants</b>	<b>Equity Component of Convertible Debentures</b>	<b>Deficit</b>
<b>Balance at December 31, 1999</b>	36,943,731	\$ 159,161	\$ 1,341	\$ 1,045	\$ (121,046)
Shares Issued Under Options	62,400	66	-	-	-
Shares Issued Under Warrants	150,000	105	-	-	-
Stock Bonus	40,000	35	-	-	-
Debenture Conversions	392,857	275	-	(61)	-
Net Loss	-	-	-	-	(14,881)
<b>Balance at December 31, 2000</b>	37,588,988	159,642	1,341	984	(135,927)
Shares Issued Under Warrants	2,738,660	1,282	-	-	-
Warrants Issued	-	-	427	-	-
Debenture Conversions	2,098,567	1,469	-	(439)	-
Shares Issued	6,833,333	4,147	-	-	-
Net Loss	-	-	-	-	(20,584)
<b>Balance at December 31, 2001</b>	49,259,548	166,540	1,768	545	(156,511)
Shares Issued	31,506,000	29,355	-	-	-
Issue Costs	-	(2,558)	-	-	-
Shares Issued Under Options	547,916	520	-	-	-
Shares Issued Under Warrants	2,535,960	1,778	-	-	-
Stock Bonus	107,000	78	-	-	-
Debenture Conversions	2,994,278	2,903	-	(545)	-
Warrants Issued to Acquire Property	-	-	255	-	-
Other	450,000	400	-	-	-
Net Income	-	-	-	-	4,856
<b>Balance at December 31, 2002</b>	<u>87,400,702</u>	<u>\$ 199,016</u>	<u>\$ 2,023</u>	<u>\$ -</u>	<u>\$ (151,655)</u>

*The accompanying notes are an integral part of these consolidated financial statements.*

**GOLDEN STAR RESOURCES LTD.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(Stated in thousands of United States dollars)

	For the Years ended December 31,		
	2002	2001	2000
<b>Operating Activities:</b>			
<b>Net income/(loss)</b>	\$ 4,856	\$ (20,584)	\$ (14,881)
<b>Reconciliation of net income/(loss) to net cash used in operating activities:</b>			
Depreciation, depletion and amortization	2,459	3,423	7,289
Convertible debentures accretion (Note 8g)	46	209	209
Premium on Omai preferred share redemption (Note 16)	(170)	(583)	(479)
Non-cash employee compensation (Note 21a)	78	-	35
Abandonment and impairment of mineral properties	-	15,010	16,706
Gain on sale of assets (Note 14)	(425)	-	(50)
Change in note receivable	-	(89)	(215)
Restricted cash	-	782	-
Reclamation expenditures	(465)	(244)	(1,070)
Minority interest	838	(1,085)	(3,509)
Changes in assets and liabilities:			
Accounts receivable	(746)	(255)	1,000
Inventories	(424)	3,139	(1,900)
Accounts payable	45	2,742	(199)
Other	(293)	(36)	(407)
Total changes in non-cash operating working capital	(1,418)	5,590	(1,506)
Net Cash Provided by Operating Activities	5,799	2,429	2,529
<b>Investing Activities:</b>			
Expenditures on exploration properties	(208)	(2,798)	(3,224)
Expenditures on mining properties	(8,949)	(2,376)	(102)
Expenditures on fixed assets	(3,430)	(1,018)	(2,804)
Omai preferred share redemption (Note 16)	310	1,068	876
Investment in Prestea Underground Joint Venture (Note 13)	(3,126)	-	-
Marketable securities	(906)	-	-
Sale of property (Notes 14 and 15)	5,425	-	55
Releases from environmental rehabilitation fund	-	-	1,853
Other	(392)	(62)	57
Net Cash Used in Investing Activities	(11,276)	(5,186)	(3,289)
<b>Financing Activities:</b>			
Issuance of share capital, net of issue costs	29,095	2,282	171
Debt repayment (Note 8)	(6,502)	(1,068)	(2,286)
Increase in debt (Note 8)	2,384	826	947
Other	7	235	14
Net Cash Provided by/(Used in) Financing Activities	24,984	2,275	(1,154)
Increase/(decrease) in cash and short-term investments	19,507	(482)	(1,914)
Cash and short-term investments, beginning of period	509	991	2,905
Cash and short-term investments, end of period	\$ 20,016	\$ 509	\$ 991

*The accompanying notes are an integral part of these consolidated financial statements.*

**GOLDEN STAR RESOURCES LTD.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
*(All amounts in thousands of United States Dollars unless noted otherwise)*

**1. Formation of the Company**

In May 1992, the shareholders of Golden Star Resources Ltd. (“Golden Star” or the “Company” or “we”) and South American Goldfields Inc., respectively agreed to a business combination of the two companies. Neither company was under common control prior to the amalgamation. This combination was considered to be an amalgamation under the Canada Business Corporations Act and was effective May 15, 1992. The amalgamation was treated as a purchase for accounting purposes. Concurrent with the amalgamation, our common shares were consolidated on a one-for-two basis. Our fiscal year-end is December 31, and commencing on May 15, 1992 we changed our reporting currency to the United States dollar. However, if we were to declare a dividend to our shareholders, it would be paid in Canadian dollars.

**2. Description of Business**

We are an international gold mining and exploration company producing gold in Ghana in West Africa. Through our various subsidiaries and joint ventures we own a controlling interest in four gold properties in Ghana, the Bogoso property (“Bogoso”), the Prestea property (“Prestea”), the Wassa property (“Wassa”) and the Prestea underground property (“Prestea Underground”). Bogoso and Prestea are adjoining properties and both are owned by our 90% owned subsidiary Bogoso Gold Limited (“BGL”). These two properties now function as a single operation referred to as “Bogoso/Prestea”.

The Prestea Underground, acquired in 2002 via a joint venture, is located under our Prestea property and consists of a currently inactive, underground gold mine and associated support facilities, which ceased operating in mid-2001. BGL owns a 54% managing interest in this joint venture and studies are now underway, under our direction, to determine if the Prestea Underground can be profitably reactivated under our management.

We also own a 90% equity interest in Wexford Goldfields Limited (“Wexford”) which owns Wassa and associated mining rights, located some 35 kms east of Bogoso/Prestea. A feasibility study is currently underway which seeks to establish the economic viability of this property.

We hold active exploration properties in Suriname, and in Ghana and, through our 73%-owned subsidiary, Guyanor Ressources S.A. (“Guyanor”), we have interests in several gold exploration properties in French Guiana.

**3. Summary of Significant Accounting Policies**

These consolidated financial statements have been prepared in accordance with generally accepted accounting principles (“GAAP”) in Canada. We have adopted the following policies.

***Basis of Consolidation***

The consolidated financial statements include the accounts of the Company and its more than 50%-owned subsidiaries and joint ventures. All material inter-company balances and transactions have been eliminated. The consolidated group includes the following as of December 31, 2002 (all entities are 100%-owned, unless otherwise noted):

<b>2002:</b>	<b>2001:</b>
Caystar Holdings Bogoso Holdings Bogoso Gold Limited (90%) Prestea Underground JV (54%) Wasford Holdings Wexford Goldfields Limited (90%) GSR (IOM) Limited Barnex (Ghana) Limited Barnex (Prestea) Limited (90%) JCI Ghana Société des Mines de Yaou & Dorlin (“SMYD”) (50%) Guyanor Ressources S.A. (72.6%) Société de Travaux Publics et de Mines Aurifères en Guyane Société des Mines de Yaou & Dorlin (“SMYD”) (50%)	Caystar Holdings Bogoso Holdings Bogoso Gold Limited (90%) GSR (IOM) Limited Barnex (Ghana) Limited Barnex (Prestea) Limited (90%) Guyanor Ressources S.A. (72.6%) Société de Travaux Publics et de Mines Aurifères en Guyane Société des Mines de St-Elie (“SMSE”) Société des Mines de Yaou & Dorlin (“SMYD”) (50%)

### ***Fiscal Year***

Our fiscal year runs from January 1 to December 31.

### ***Use of Estimates***

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Significant estimates are required to establish ore reserves and reclamation accruals. Reserve estimates are based upon our professional assessment of all available data including drill results, geologic data, geophysical data and estimated future operating costs. Amortization expense of mine property is in turn based on the reserves estimates. Estimates are also required to develop projections of future reclamation costs. Actual results could differ materially from those estimates with corresponding material adjustments to our financial results.

### ***Cash and Short-term Investments***

We consider any liquid investments with an original maturity of three months or less to be cash equivalents.

### ***Inventories***

Stockpiled ore, in-process and finished inventory are recorded at the lower of cost or market, including direct production costs and attributable operating expenses. Materials and supplies are valued at the lower of average cost or replacement cost.

### ***Marketable Securities***

Short term investments in publicly traded marketable securities are recorded at the lower of cost or quoted market prices, with unrealized losses included in income. The market value of our marketable securities is based on the closing price at December 31, 2002, as reported on recognized securities exchanges. The quoted market value of the securities held at December 31, 2002 is \$1.5 million. The carrying value at December 31, 2002 was \$0.9 million.

### ***Restricted Cash***

In certain countries where we conduct business, governments may require performance bonds to be placed for certain amounts of the agreed-upon exploration and/or reclamation expenditures. The cash collateral for these bonds is shown as a non-current asset as the funds are not available for use in operations until the bond amounts are

reduced or released by the governments. In relation to BGL, funds are restricted in accordance with the BGL acquisition agreement for the final environmental rehabilitation of the mine site.

### ***Exploration Property Acquisition, Deferred Exploration and Development Costs***

Acquisition, exploration and development costs of properties are generally capitalized as incurred.

Management reviews the carrying value of its investments in acquisition, deferred exploration and development costs. A decision to abandon, reduce or expand a specific project is based upon many factors including general and specific assessments of reserves and mineralized material, anticipated future mineral prices, the anticipated future costs of exploring, developing and operating a producing mine, the expiration term and ongoing expenses of maintaining leased mineral properties and the general likelihood that we will continue exploration. We do not set a pre-determined holding period for properties with unproven reserves; however, properties which have not demonstrated suitable metal concentrations at the conclusion of each phase of an exploration program are re-evaluated to determine if future exploration is warranted and if their carrying values are appropriate.

If an exploration property is abandoned or it is determined that its carrying value cannot be supported by future production or sale, the related costs are charged against operations in the year of abandonment or determination of value. Any costs incurred for a particular project afterward are expensed as incurred.

The accumulated costs of mineral properties are depleted on a units-of-production basis at such time as production commences.

### ***Impairment of Long-Lived Assets***

We evaluate our long-lived assets for impairment whenever events or changes in circumstances indicate that the related carrying value may not be recoverable. If deemed impaired, an impairment loss is measured and recorded based upon the recoverable value of the asset which generally will be computed using undiscounted future cash flows. Estimates of future cash flows are subject to risks and uncertainties. Therefore, it is possible that changes could occur which may affect the recoverability of our investments in long-lived assets.

### ***Property, Plant and Equipment***

Property, plant and equipment assets are stated at cost and include buildings, machinery, equipment, facilities and vehicles. Depreciation is computed using the straight-line method at rates calculated to depreciate the cost of the assets less their anticipated residual values, if any, over the estimated useful lives. Buildings and processing facilities are depreciated over the life of the reserves of the associated mining property. Mining equipment, miscellaneous equipment and light vehicles are depreciated over five years. The net book value of property, plant and equipment assets at property locations is charged against income if the site is abandoned and it is determined that the assets cannot be economically transferred to another project or sold. Major overhauls of mining equipment that extend the life of such equipment are capitalized and depreciated on a straight-line basis.

### ***Environmental Rehabilitation***

Estimate of future reclamation and closure costs are based primarily upon environmental and regulatory requirements of the various jurisdiction in which we operate. Estimates of future costs are accrued, on a non-discounted basis, over the expected life of the reserves at each property. Cash costs incurred prior to the end of the properties productive life are netted against the accrual.

### ***Foreign Currencies and Foreign Currency Translation***

Our functional currency is the United States dollar. Monetary assets and liabilities are translated at the rate of exchange prevailing at the end of the period. Non-monetary assets and long-term liabilities are translated at the rates of exchange prevailing when the assets were acquired or the liabilities assumed. Revenue and expense items are translated at the average rate of exchange during the year. Translation gains or losses are included in the

determination of net income for the period. Fully integrated foreign subsidiary accounts are translated using the same method.

Canadian currency in these financial statements is denoted as “Cdn\$”, French currency is denoted as “FF” in 2001 and as “Euro” afterward, and Ghanaian currency is denoted as “Cedi” or “Cedis”.

### ***Net Income/ (Loss) per Share***

Basic earning (loss) per share is calculated by dividing net earnings (loss) available to common shareholders by the weighted average number of common shares outstanding during the period. The calculation of diluted earnings (loss) per common share uses the treasury stock method to compute the dilutive effects of stock options and warrants and the “if converted” method to compute the dilutive effect of convertible debentures.

### ***Revenue Recognition***

Revenue from the sale of gold is recognized when title and the risk of ownership passes to the buyer. Title and risk of ownership passes to the buyer on the day the gold dore is shipped from the mine site.

### ***Stock Based Compensation***

Effective January 1, 2002, we adopted the new Canadian Institute of Chartered Accountants' standard for stock-based compensation. Compensation awards not required to be expensed under the new standard, such as stock options, are accounted for as capital transactions when the options are exercised. Accordingly, no compensation cost has been recognized in the consolidated statement of operations for common share options granted.

The fair value of options is established at the date of the grant, using the Black-Scholes option-pricing model. Recognition of compensation costs occurs in the period in which the options vest.

## **4. Cash and Short Term Investments**

Following a July 2002 public offering we instituted a new cash investment policy to manage cash balances. The policy objectives, in order of importance, are safety of principal, liquidity as needed, and maximization of yields subject to the two prior objectives. Permitted investment vehicles include United States government securities including those of its agencies and all securities bearing the direct and indirect guarantee of the United States government. Each individual investment must have a maturity of less than one year and, collectively, all investments must have a maturity of less than nine months on a weighted average basis.

At December 31, 2002, all of our investments are in compliance with the new policy, with all amounts invested in a series of 90-day U.S. treasury notes.

## **5. Supplemental Cash Flow Information**

The following is a summary of non-cash transactions:

	<b>2002</b>	<b>2001</b>	<b>2000</b>
<b>Investing:</b>			
Depreciation charged to projects	\$ -	\$ 3	\$ 52
Repayment of note by minority interest holder	-	150	-
Adjustment to minority interest from note payments	-	(150)	-
Mining properties	-	85	-
Anvil Purchase transaction:			
Purchase of Anvil's minority interest	-	(1,549)	-
Stock issued for purchase of Anvil's minority interest	-	1,081	-
Mining property	-	(1,388)	-
Extinguishment of note receivable from Anvil	-	1,857	-
Mine property Prestea reserve liability (Note 11)	-	(2,000)	-

Mine property Prestea (Note 11)	-	(2,493)	-
Prestea acquisition costs paid with common shares	(400)	-	-
Shares issued for Prestea acquisition cost	400	-	-
Receivable on sale of property	(3,000)	-	-
Acquisition, deferred exploration and development	3,000	-	-
Wassa property acquisition (Note 12)			
Property, plant and equipment	(4,120)	-	-
Reclamation liability assumed	2,302		
Assumption of bank debt	1,818		
Minority interest in Prestea Underground (Note 13)	2,400	-	-
Mine property Prestea Underground (Note 13)	(2,400)	-	-
Warrants issued for Obuom acquisition	255		
Obuom property acquisition	(255)		
Acquisition of properties in French Guiana	(66)	-	-
Guiana Shield transaction property exchange	66	-	-
<b>Financing:</b>			
Equity component of convertible debentures	(545)	(439)	(61)
Shares issued upon conversion of convertible debentures (Note 8g)	2,903	1,469	275
Conversion of convertible debentures (Note 8g)	(2,358)	(1,030)	(214)
Adjustment of final amount due sellers of BGL	-	(85)	-
Accrual of liability due the sellers (Note 8f)	-	2,000	-
Common stock issued to Barnex for Prestea purchase	-	2,493	-

There was no cash paid for taxes during 2002 and 2001. Cash paid for interest was \$0.4 million during 2002 and \$0.4 million during 2001.

## **6. Financial Instruments**

(a) **Fair Value** - Our financial instruments are comprised of short-term investments, accounts receivable, restricted cash, accounts payable, accrued liabilities, accrued wages, payroll taxes and debt. The fair value of cash and short-term investments, accounts receivable, accounts payable, accrued liabilities and accrued wages, payroll taxes and debt equals their carrying value due to the short-term nature of these items. The fair value of restricted cash is equal to the carrying value as the cash is invested in short-term, high-quality instruments.

(b) **Commodity Instruments** - Put options contracts provide us the right, but not the obligation, to sell a specified number of ounces of gold at a specified price on a specified future transaction date. Put options thereby provide a floor price for a portion of our future production but they do not limit the upside potential of higher gold prices in excess of the specified price. If we opt to forego exercising a put option to sell at the put price, the put expires on its specified transaction date. In December 2002 we entered into put options for 96,000 ounces for delivery of 8,000 ounces per month during 2003 with a strike price of \$280 per ounce. The cost of the puts was \$0.2 million or \$2.00 per ounce. The cost of the puts was capitalized in current assets and one twelfth of the cost will be expensed each month during 2003. We have not entered into any hedging program nor do we currently otherwise manage exposure to commodity price risk other than through the puts described above. We may in the future more actively manage our commodity price exposure through hedging programs.

## **7. Inventories**

	December 31, 2002	December 31, 2001
Stockpiled ore	\$ 2,039	\$ 1,278
In-process	965	951
Materials and supplies	<u>5,417</u>	<u>5,437</u>
	<u>\$ 8,421</u>	<u>\$7,666</u>

## 8. Current Debt and Long Term Debt

	December 31, <u>2002</u>	December 31, <u>2001</u>
<u>Current Debt</u>		
Note due Omai Gold Mines Limited (Note 8a)	\$ -	\$ 310
Amounts due to the sellers of BGL (Note 8b)	-	2,874
Due financial institution (Note 8c)	-	500
Overdraft facility at BGL (Note 8d)	914	1,003
Bank loan at BGL (Note 8e)	534	826
Accrual of liability to Bogoso Sellers (Note 8f)	2,000	2,000
Current portion bank loan at Wassa (Note 8h)	<u>115</u>	<u>0</u>
Total Current debt	<u>\$ 3,563</u>	<u>\$ 7,513</u>
<u>Long Term debt</u>		
Convertible debentures (Note 8g)	\$ -	\$ 2,358
Bank loan at Wassa (Note 8h)	<u>1,727</u>	<u>-</u>
Total Long Term debt	<u>\$ 1,727</u>	<u>\$ 2,358</u>

(a) **Note due Omai Gold Mines Limited** - In December 1998, Omai Gold Mining Limited (“OGML”) advanced \$3.2 million to us as an unsecured loan to be repaid as and when Class I preferred shares of OGML held by us are redeemed by OGML. The loan was non-interest bearing until September 30, 2010. Subsequent redemption of preferred shares reduced this liability to zero by the time the final payment was made in the first quarter of 2002.

(b) **Amounts due to the Sellers of Bogoso Gold Limited** - Amounts owed to the sellers of BGL per terms of the September 1999 Bogoso purchase agreement. The final installment of \$2.9 million was paid in the first quarter of 2002.

(c) **Due to a Financial Institution** - Gold production related payment due to a financial institution retained in 1999 to provide bridge financing for the BGL acquisition. The final payment of \$0.25 million was made in September 30, 2002.

(d) **Overdraft facility at BGL** - Revolving Over-draft Facility at BGL from Barclays Bank (Ghana) in the amount of \$1.0 million.

(e) **BGL Bank Loan** - A term loan to BGL from CAL Merchant Bank in Ghana in the original amount of \$0.8 million. It is denominated in U.S. dollars, carries an interest rate of six-month LIBOR plus 3.5% and is repayable in six quarterly installments beginning September 2002.

(f) **Accrual of Liability to Bogoso Sellers** - The original BGL purchase agreement of September 1999 included a contingent \$2.0 million reserve-acquisition payment, due the Bogoso sellers, which was triggered by BGL’s acquisition of the Prestea reserves in late 2001. This liability was liquidated in February 2003 by a \$2.0 million cash payment to the Bogoso sellers.

(g) **Convertible Debentures** - On August 24, 1999, we issued \$4.15 million of subordinated convertible debentures to raise financing for the acquisition of BGL. The debentures had a maturity date of August 24, 2004 and bore interest at the rate of 7.5% per annum from the date of issue, payable semi-annually on February 15 and August 15, to the debenture-holders as of February 1 and August 1, respectively, commencing on February 15, 2000.

The debentures were convertible at the option of the holder into our common shares at a conversion price of \$0.70 per share, prior to the August 24, 2004 maturity date. Each \$1,000 principal amount of debentures also entitled the holder to warrants exercisable for 200 of our common shares at a price of \$1.50 per share until August 24, 2001 and \$1.75 per share for the remaining two years until August 24, 2003.



During 2002, debentures with a face value of \$2.4 million were converted into 3,444,278 shares of common stock. As of December 31, 2002, all of the outstanding debentures had been converted to common stock. All of the 831,000 associated warrants were still outstanding as of December 31, 2002.

**(h) Wassa Bank Loan** – A \$1.8 million term loan provided by the Wassa sellers. Repayment will begin on December 13, 2003 with installments following every three months thereafter, with the final payment on September 13, 2007. The interest rate is LIBOR plus 2.5% until gold production begins at Wassa and LIBOR plus 2.0% after gold production begins. Interest from September 13, 2002 until repayment begins will be capitalized into the loan.

## **9. Property, Plant & Equipment**

	As of December 31, 2002			As of December 31, 2001		
	Property, Plant and Equipment At Cost	Accumulated Depreciation	Property, Plant and Equipment Net Book Value	Property, Plant and Equipment At Cost	Accumulated Depreciation	Property, Plant and Equipment Net Book Value
Bogoso/Prestea	\$ 5,829	\$ 3,180	\$ 2,649	\$ 4,720	\$ 2,472	\$ 2,248
Prestea						
Underground	325	-	325	-	-	-
Guyanor	1,981	1,940	41	1,944	1,932	12
Wassa	6,070	-	6,070	-	-	-
Other	732	717	15	738	730	8
Total	\$ 14,937	\$ 5,837	\$ 9,100	\$ 7,420	\$ 5,134	\$ 2,268

## **10. Mine Property**

	As of December 31, 2002			As of December 31, 2001		
	Mine Property At Cost	Accumulated Amortization	Mine Property Net Book Value	Mine Property At Cost	Accumulated Amortization	Mine Property Net Book Value
Bogoso/Prestea	\$ 24,564	\$12,608	\$ 11,956	\$ 19,155	\$ 10,852	\$ 8,303
Prestea						
Underground	5,525	-	5,525	-	-	-
Guyanor	-	-	-	-	-	-
Wassa	4,032	-	4,032	50	-	50
Other	-	-	-	-	-	-
Total	\$ 34,121	\$12,608	\$ 21,513	\$ 19,205	\$ 10,852	\$ 8,353

## **11. Acquisition of Prestea**

We acquired Prestea in June 2001. Prestea lies immediately south of and adjacent to Bogoso and contains gold reserves suitable for processing in our Bogoso mill. Currently identified gold reserves at Prestea are expected to provide non-refractory feed for the Bogoso mill until at least 2007.

Two transactions were required to acquire Prestea, one with Barnato Exploration Limited (“Barnex”), and one with Prestea Gold Resources Limited (“PGR”). Both transactions were required to remove all prior claims on the property, which thereby allowed the Government of Ghana to grant BGL a new surface mining lease over the property, which it did in June 2001. As payment to Barnex we issued 3,333,333 common shares and 1,333,333 warrants to subscribe for our common shares at a price of \$0.70 per share for three years.

In addition, we agreed to pay a royalty to Barnex on the first 1,000,000 ounces of production from Bogoso/Prestea. The royalty will vary, according to a gold price formula, from a minimum of \$6.00 per ounce at gold prices less than

\$260 per ounce to a maximum of \$16.80 per ounce at gold prices at or above \$340 per ounce. The royalty is to be paid quarterly and is determined by multiplying the production for the quarter by a royalty rate that varies depending on the average spot gold price for the quarter.

The purchase accounting method was applied to the Prestea acquisition. Total direct costs of acquiring Prestea were \$8.0 million. This included \$2.2 million for our stock and warrants issued to Barnex, \$2.1 million of cash paid to PGR, \$2.0 million for the contingent liability to the Bogoso sellers which was triggered by obtaining the Prestea surface lease, \$0.7 million of pre-production development costs and approximately \$1.0 million in transactions costs. In addition to the \$8.0 million of direct purchase costs listed above, \$0.4 million of unamortized Bogoso purchase costs and \$1.4 million of costs associated with the purchase of the 20% minority interest position in BGL during 2001, were included in the new Prestea amortization base, bringing the total amortizable cost basis to \$9.8 million.

## **12. Acquisition of Wassa**

On September 13, 2002, we completed the acquisition of a 90% interest in Wassa in Ghana, the remaining 10% interest being retained by the Government of Ghana. Wassa was developed by a former owner in the late 1990s at a capital cost of \$43 million as a conventional open pit, heap leach gold operation and operated for approximately two years producing approximately 90,000 ounces per year. In 2001, the secured lenders to the project enforced their security rights in the project and, following a bidding process, agreed to sell the Wassa asset to us.

Wassa includes an open pit mine, heap leach pads, processing equipment (crusher, agglomeration plant, conveyors, and a gold recovery plant), parts and supplies inventory, maintenance shops, administrative offices, housing for employees, a community center and miscellaneous other ancillary facilities.

We paid the Wassa sellers, a syndicate of banks led by Standard Bank London Limited, an initial consideration of \$1.6 million at closing. We also assumed \$1.8 million of debt and we agreed in addition to pay two separate royalties on future production. The seller-provided debt is repayable over a four-year term beginning on December 13, 2003 with installments following every three months thereafter, with the final payment on September 13, 2007. The interest rate is LIBOR plus 2.5% until gold production begins and LIBOR plus 2.0% after gold production begins. Interest on the initial \$1.8 million accruing prior to the initiation of gold production at Wassa will be capitalized into the loan.

The first royalty is to be paid quarterly and the amount of the payments will be determined by multiplying the production from Wassa for each quarter by a royalty rate of \$7.00 per ounce produced. The royalty rate is subject to increase by \$1.00 per ounce for each \$10.00 increase in the average market price for gold for each quarter above \$280 per ounce up to a maximum of \$15.00 per ounce at gold prices of \$350 per ounce and above. The second royalty is a flat \$8.00 per ounce, and is capped at \$5.5 million.

We also assumed a \$2.3 million reclamation liability for restoration of the environmental disturbance at Wassa as of the date of the acquisition. The amount of the restoration liability was determined by an independent environmental engineering firm, commissioned by us to establish the amount of the liability.

Cost of the purchased assets was allocated as follows:

Purchase costs:	
Bank loan assumed	\$ 1,818
Cash payment at closing	1,584
Environmental liabilities assumed	2,302
Pre-acquisition costs incurred	<u>1,157</u>
Total purchase costs	<u>\$ 6,861</u>
Allocation of purchase costs:	
Inventory	\$ 331
Property, plant and equipment	5,460
Mine property	<u>1,070</u>
Total allocation	<u>\$ 6,861</u>

We have initiated a drilling program at Wassa designed to evaluate its gold potential. Engineering studies are also underway to evaluate the feasibility of redeveloping Wassa as a conventional CIL operation. The feasibility study is scheduled for completion in mid-2003 and if the study results are favorable, mill construction would begin shortly thereafter. Assuming favorable results from the feasibility study, gold production could begin at Wassa as early as the first quarter of 2004.

### **13. Acquisition of Prestea Underground**

In March 2002, our 90% owned subsidiary, BGL entered into a joint venture agreement with PGR and the Ghana Government, relating to the Prestea Underground. The Prestea Underground operated for 130 years, producing approximately nine million ounces of gold prior to its closure in 2001.

The joint venture agreement called for the following: shutting down the Prestea Underground and putting it on a care and maintenance basis; the Prestea Underground mining lease was transferred from PGR to BGL, to be held by BGL on behalf of a joint venture; BGL and PGR would each own an initial 45% interest in the joint venture and the government of Ghana would have a 10% interest; and BGL would take over the day-to-day management of the Prestea Underground. Under BGL's direction, an assessment of the safety and economic viability of the Prestea Underground is now underway. The assessment could take as much as two years to complete. The joint venture agreement also allowed certain infrastructure items, associated with the Prestea Underground, to be decommissioned and demolished to make way for the development of BGL's surface mining operations at Prestea.

The Prestea Underground is contained within a mining lease which covers the same area as the surface mining lease granted to BGL on June 29, 2001. The surface mining lease is restricted down to a depth of 200 meters below the surface and the underground mining lease is restricted to material deeper than 200 meters below the surface.

BGL paid \$2.4 million for its initial 45% interest in the joint venture. Subsequent investments in the joint venture increased BGL's ownership to 54% by December 31, 2002.

### **14. Sale of St Elie**

On October 21, 2002, Guyanor closed the transaction with Compagnie Minière Espérance S.A. ("CME") for the sale of Guyanor's 100% interest in Société des Mines de St-Elie SARL ("SMSE"), which holds the mining rights to the St. Elie gold property in French Guiana ("St Elie").

The total consideration was as follows:

- (1) \$0.5 million of cash at closing;
- (2) the release by CME of a royalty obligation (approximately 3,000 ounces of gold) owed by Guyanor on future production from St. Elie; and
- (3) the payment of a 2.5% royalty on all future gold production from St. Elie. In addition, at gold prices above \$350 per ounce, an additional royalty payment of 2.5% will be made by CME to Guyanor on the incremental revenue above \$350 per ounce. These payments are capped at the amount of the shareholder debt owed by SMSE to Guyanor at closing, provided that such shareholder debt does not exceed \$ 7.5 million.

Guyanor utilized the cash proceeds of the transaction to repay a portion of the inter-company advances received from us in the past.

## 15. Acquisition, Deferred Exploration and Development Costs

The consolidated property expenditures and abandonment costs for our exploration projects for the fiscal year ended December 31, 2002 were as follows:

	Acquisition, Deferred Exploration & Development Costs as of 12/31/01	Capitalized Exploration Expenditures 2002	Acquisitions 2002	Sale of Property 2002	Acquisition, Deferred Exploration & Development Costs as of 12/31/02
<b>SURINAME:</b>					
Gross Rosebel <sup>(1)</sup>	\$ 8,066	\$ -	\$ -	\$ (8,066)	\$ -
<b>FRENCH GUIANA</b>					
Yaou	-	-	33	-	33
Dorlin	-	-	33	-	33
<b>AFRICA:</b>					
<b>Obuom</b>	-	14	255	-	269
<b>Bogoso Gold Limited</b> <sup>(2)</sup>					
Bogoso Sulfide Project	3,572	49	-	-	3,621
Riyadh	274	13	-	-	287
Pampey Flag Base	330	25	-	-	355
Other Bogoso Projects	38	107	-	-	145
<b>TOTAL</b>	<b>\$ 12,280</b>	<b>\$ 208</b>	<b>\$ 321</b>	<b>\$ (8,066)</b>	<b>\$ 4,743</b>

(1) In May 2002 we sold our interest in most of our exploration properties in Suriname and Guyana, including Gross Rosebel, Headleys, Thunder Mountain and Omai Gold Mines Limited, to Cambior. We received \$5.0 million cash in 2002 and in early 2003, the first of three deferred \$1.0 million deferred payments for the sale of the Gross Rosebel property. We expect to receive two additional deferred payments of \$1.0 million each in 2004 and 2005. In addition, Cambior will pay us a royalty equal to 10% of the excess of the average quarterly market price above a gold price hurdle on the first 7 million ounces of gold production from Gross Rosebel. For soft and transitional rock the gold price hurdle is \$300 per ounce and for hard rock the hurdle is \$350 per ounce. For the Headleys and Thunder Mountain properties, we will receive a deferred consideration of \$0.5 million per property when and if, Cambior commences commercial mining from these properties. As payment for our 30% equity interest and preferred shares in OGML, we received a release and waiver from OGML, Cambior and the Guyana Government in respect of all liabilities, of any nature, related to the Omai gold mine and we received Cambior's 50% interests in the Yaou and Dorlin exploration properties in French Guiana.

(2) A 90% owned subsidiary

The consolidated property expenditures and abandonment costs for our exploration projects for the fiscal year ended December 31, 2001 were as follows:

	Acquisition, Deferred Exploration and Development Costs as of 12/31/00	Capitalized Exploration Expenditures in 2001	Joint Venture Recoveries in 2001	Property Abandonments and Adjustments in 2001	Acquisition, Deferred Exploration and Development Costs as of 12/31/01
<b>SURINAME</b>					
Gross Rosebel <sup>(1)</sup>	\$15,818	\$ 691	\$ (340)	\$ (8,103)	\$ 8,066
Sub-total	15,818	691	(340)	(8,103)	8,066
<b>FRENCH GUIANA (Guyanor Ressources S.A.)</b> <sup>(2)</sup>					
Paul Isnard / Eau Blanche	5,827	1,037	-	(6,864)	-
Sub-total	5,827	1,037	-	(6,864)	-
<b>AFRICA (Bogoso Gold Limited)</b> <sup>(3)</sup>					
Riyadh	239	35	-	-	274
Pampe/Flagbase	-	330	-	-	330
Bogoso Sulfide Project	2,608	964	-	-	3,572
Other Bogoso Area Projects	-	38	-	-	38
Sub-total	2,847	1,367	-	-	4,214
<b>OTHER</b>	-	43	-	(43)	-
<b>TOTAL</b>	<b>\$24,492</b>	<b>\$3,138</b>	<b>\$ (340)</b>	<b>\$ (15,010)</b>	<b>\$12,280</b>

(1) Sold to Cambior in 2002. (2) Approximately 73% owned. (3) A 90% owned subsidiary.

Deferred exploration and acquisition costs of the Paul Isnard property were deemed impaired and written off in 2001 following disappointing results from exploration work during the year and lower gold prices. An \$8.1 million impairment related write-off was deemed necessary at the Gross Rosebel project following an agreement in September 2001 to sell this property to our joint venture partner.

The recoverability of amounts shown for deferred acquisition and exploration is dependent upon sale or the discovery of economically recoverable reserves, our ability to obtain necessary financing to complete the development, and upon future profitable production or proceeds from the disposition thereof. The amounts deferred represent costs to be charged to operations in the future and do not necessarily reflect the present or future values of the properties.

## **16. Investment in Omai Gold Mines Limited**

In May 2002 we sold our 30% common share equity investment and preferred shares in OGML to Cambior. As payment for our 30% equity interest and preferred shares in OGML, we received a release and waiver from OGML, Cambior and the Guyana Government in respect of all liabilities, of any nature, related to the Omai gold mine and we received Cambior's 50% interests in the Yaou and Dorlin exploration properties in French Guiana.

OGML was a Guyana company established to build and operate the Omai mine in Guyana. The common share investment in OGML was accounted for using the equity method but, as of December 31, 2001 and 2000 our share of cumulative losses of OGML exceeded the value of our initial common equity investment, and accordingly, we discontinued applying the equity method in these years. Our unrecorded share of OGML's losses was \$33.6 million and \$32.4 million at December 31, 2001 and 2000, respectively.

We also acquired a redeemable preferred share equity interest (Class I preferred redeemable shares) in OGML in recognition of cumulative exploration costs of \$5.0 million which we incurred on the Omai project. The aggregate redemption value of these shares approximated \$11.0 million of which all \$11.0 million was received, as of December 31, 2002.

## **17. Warrants**

At December 31, 2002 there were six series of warrants outstanding to purchase a total of 16.1 million common shares. Of the 16.1 million total, 14.0 million were issued during 2002, 1.3 million were issued during 2001 and 0.8 million were issued in 1999:

Issued with	Date issued	Amount outstanding	Exercise price	Life	Expiration date
Convertible debentures	August 24, 1999	831,000	\$1.75	4 years	August 24, 2004
Prestea purchase	June 21, 2001	1,333,333	0.70	3 years	June 21, 2004
Private Placement	January 11, 2002	3,913,000	0.70	2 years	January 11, 2004
Purchase of Obuom	July 19, 2002	333,334	0.70	3 years	July 19, 2005
Equity offering	July 24, 2002	8,820,000	1.46 <sup>1</sup>	2 years	July 24, 2004
Private placement	December 12, 2002	860,000	1.50	2 years	December 12, 2004
Total		16,090,667			

1. Strike price is quoted in Cdn\$ at Cdn\$2.28.

The warrants issued in conjunction with the July 24, 2002 equity offering are traded on the Toronto Stock Exchange under the symbol GSC.WT. There is no public market for our other warrants at December 31, 2002.

## **18. Stock Option Plan**

We have one stock option plan, the 1997 Stock Option Plan, as amended (the "GSR Plan") and options are granted under this plan from time to time at the discretion of the Board of Directors. Options granted are non-assignable and are exercisable for a period of ten years or such other period as stipulated in a stock option agreement between Golden Star and the optionee. Under the GSR Plan, we may grant options to employees, consultants and directors of the Company or its subsidiaries for up to 9,000,000 shares of common stock. Options may take the form of non-

qualified stock options, and the exercise price of each option shall not be less than the market price of our stock on the date of grant. Options vest over periods ranging from immediately, to four years from the date of grant. Vesting periods are determined at the discretion of the Board of Directors. The number of common shares vested and exercisable under the plan at December 31, 2002 was 4,006,477. The number of common shares vested and exercisable under the plan as of December 31, 2001 was 3,606,617.

The following table summarizes information about options under the GSR Plan:

	2002		2001		2000	
	Shares (000)	Weighted-Average Exercise Price (Cdn\$)	Shares (000)	Weighted-Average Exercise Price (Cdn\$)	Shares (000)	Weighted-Average Exercise Price (Cdn\$)
<b>GSR Plan</b>						
Outstanding at beginning of year	4,595	1.42	4,821	1.56	3,730	1.56
Granted	640	1.17	938	1.02	1,695	1.39
Exercised	(548)	1.49	-	-	(62)	1.55
Forfeited	(198)	1.76	(1,164)	1.69	(542)	1.73
Outstanding at end of year	4,489	1.36	4,595	1.42	4,821	1.56
Options exercisable at year-end	4,006	1.40	3,607		3,520	
Weighted-average fair value of options granted during the year		0.86		1.02		1.23

<b>GSR Plan</b> Range of Exercise Prices (Cdn\$)	Options Outstanding			Options Exercisable	
	Number Outstanding at Dec. 31, 2002 (000)	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Price (Cdn\$)	Number Exercisable at Dec. 31, 2002 (000)	Weighted-Average Exercise Price (Cdn\$)
0.60 to 1.15	897	8.5	1.02	627	1.02
1.16 to 1.64	2672	7.5	1.33	2,460	1.34
1.65 to 1.80	<u>920</u>	<u>4.0</u>	<u>1.79</u>	<u>919</u>	<u>1.79</u>
	4,489	7.0	1.36	4,006	1.40

## 19. Income Taxes

We recognize future tax assets and liabilities based on the difference between the financial reporting and tax basis of assets and liabilities using the enacted tax rates expected to be in effect when the taxes are paid or recovered. We provide a valuation allowance against future tax assets for which we do not consider realization of such assets to meet the required “more likely than not” standard.

We have not provided current nor future income tax for any of the periods presented because our loss carryovers and other future tax assets exceed our future tax liabilities. A full valuation allowance has been provided against our net future tax assets.

Our future tax assets and liabilities at December 31, 2002 and 2001 include the following components:

	2002	2001
<b>Future tax assets:</b>		
Mine reclamation costs	\$ 1,607	\$ 1,892
Investment in OGML	-	601
Mine Property Costs	-	4,474
Offering costs	1,604	855
Loss carryovers	47,153	41,517
Valuation allowance	(47,759)	(49,339)
Future tax assets	\$ 2,605	\$ -
<b>Future tax liabilities:</b>		
Mine property costs	\$ 2,605	\$ -
Future tax liabilities	\$ 2,605	\$ -

A reconciliation of expected federal income tax on net income/(loss) before minority interest at statutory rates with the actual expenses (benefit) for income taxes is as follows:

	2002	2001	2000
Net income (loss) before minority interest	\$ 5,694	\$ (22,252)	\$ (18,869)
Statutory tax rate	42.0%	45.6%	45.6%
Tax expense (benefit) at statutory rate	2,391	(10,151)	(8,608)
Foreign tax rates	210	(391)	(141)
Change in tax rates	2,234	-	-
Expired loss carryovers	2,328	1,214	526
Ghana investment allowance	(298)	(79)	-
Foreign exchange (gain) loss	(4,203)	1,130	965
Change in valuation allowance	(2,662)	8,277	7,258
Income tax expense (benefit)	\$ -	\$ -	\$ -

During 2002 and 2001, we recognized \$2,576,626 and \$1,873,975, respectively, of share offering costs. Shareholders' equity had been credited in the amounts of \$1,082,000 and \$787,000 for the tax benefits of these deductions; however a valuation allowance had been provided against the full amount of these tax benefits.

At December 31, 2002 we had loss carryovers expiring as follows:

	Canada	Ghana	France
2003	\$ 4,479	\$ -	\$ 4,398
2004	3,705	-	9,558
2005	6,253	-	17,756
2006	6,247	21,836	33,777
2007	50	2,982	5,115
2008	1,127	-	-
2009	10,634	-	-
Indefinite	-	6,589	-
Total	\$ 32,496	\$ 31,407	\$ 70,604

## **20. Operations by Geographic Area**

The following geographic data includes revenues based on product shipment origin and long-lived assets based on physical location. The corporate entity has locations in Canada and in the United States.

	Revenues	Net Income(Loss)	Identifiable Assets
<b>2002</b>			
South America	\$ 466	\$ (1,106)	\$ 189
Africa	38,199	8,089	50,707
Corporate	137	(2,127)	23,239
Total	\$ 38,802	\$ 4,856	\$ 74,135
<b>2001</b>			
South America	\$ 548	\$ (15,373)	\$ 8,429
Africa	24,105	(3,019)	27,572
Corporate	5	(2,192)	551
Total	\$ 24,658	\$ (20,584)	\$ 36,552

<b>2000</b>			
South America	\$ 29	\$ (14,009)	\$ 21,960
Africa	30,916	18	24,625
Corporate	226	(890)	2,884
<b>Total</b>	<b>\$ 31,171</b>	<b>\$ (14,881)</b>	<b>\$ 49,469</b>

## **21. Stock Based Compensation**

(a) **Stock Bonus Plan** - In December 1992, we established an Employees' Stock Bonus Plan (the "Bonus Plan") for any full-time or part-time employee (whether or not a director) of the Company or any of our subsidiaries who has rendered meritorious services, which contributed to the success of the Company or any of its subsidiaries. The Bonus Plan provides that a specifically designated committee of the Board of Directors may grant bonus common shares on terms that it may determine, within the limitations of the Bonus Plan and subject to the rules of applicable regulatory authorities. The Bonus plan, as amended, provided for the issuance of 900,000 shares of bonus stock of which 388,620 have been issued as of December 31, 2002.

During 2002, 2001 and 2000 a total of 107,000, nil and 40,000 common shares respectively were issued to certain employees pursuant to the Bonus Plan. We recognized compensation expense related to bonuses under the Bonus Plan during 2002, 2001 and 2000 of \$78,000, nil and \$35,000 respectively.

(b) **Options** - On January 29, 2002, we granted to eligible employees and directors, options to acquire a total of 608,000 common shares at Cdn\$1.16. The average fair value of the common share options granted was determined to be Cdn\$0.83. On July 29, 2002, a second grant of options to acquire common shares was made in the amount of 32,000 shares, with an exercise price of Cdn\$1.40. The fair value of this grant has been estimated to be Cdn\$1.27 per option. We do not recognize compensation costs related to stock options granted. Had compensation costs been recognized for options vesting in 2002, our net income and earnings per share would have been reduced to the pro forma amounts shown below:

		2002	2001	2000
Net income/(loss)	As reported	\$ 4,856	\$ (20,584)	\$(14,881)
	Pro forma	4,339	(21,073)	(15,565)
Net income/(loss) per share	As reported	0.07	(0.49)	(0.40)
	Pro forma	0.06	(0.50)	(0.42)

The fair value of each option granted during 2002, 2001 and 2000 is estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted average assumptions:

	2002	2001	2002
Expected volatility	88.9% - 102.2%	81.0% - 84.0%	87.8%
Risk-free interest rate	3.68% - 4.47%	4.94% - 5.08	6.10% - 6.79%
Expected lives	5 years	5 years	5 years
Dividend yield	0%	0%	0%



## **22. Earnings per Common Share**

The following table provides a reconciliation between basic and diluted earnings per common share:

	For the Years Ended December 31,		
	2002	2001	2000
<u>Net Earnings/(Loss)</u>	<u>\$ 4,856</u>	<u>\$ (20,584)</u>	<u>\$ (14,881)</u>
<u>Shares (in millions)</u>			
Weighted average number of common shares	72.4	42.2	37.5
Dilutive Securities:			
Convertible debentures	-	- <sup>1</sup>	- <sup>1</sup>
Options	1.6	- <sup>1</sup>	- <sup>1</sup>
Warrants	2.7	- <sup>1</sup>	- <sup>1</sup>
Weighted average number of dilutive common shares	76.7	42.2	37.5
Basic Earning/(Loss) Per Share	\$ 0.07	\$ (0.49)	\$ (0.40)
Diluted Earnings/(Loss) Per Share	\$ 0.06	\$ (0.49)	\$ (0.40)

1. Since there was a loss in 2001 and 2000, inclusion of dilutive securities would have been anti-dilutive.

## **23. Related Parties**

Our President and CEO, Peter J. Bradford, participated in our private placement in January 2002, paying \$98,000 for 200,000 units, each unit consisting of one share of our common stock and one half warrant to purchase our common shares at \$0.70 until January 11, 2004.

During 2002 we obtained legal services from a legal firm in which one of our directors is of counsel. Our director did not personally perform any legal services for us.

During 1999, we, in conjunction with Anvil, acquired BGL. Our President and CEO was then and still is a director of Anvil. Based on the heads of agreement with Anvil to effect the 1999 BGL acquisition, we provided Anvil with a promissory note for their share of the purchase price and also a note for their share of the acquisition costs. In June 2001, we acquired Anvil's 20% equity interest in BGL in return for the issuance of 3,000,000 common shares of our common stock, and forgave the remaining note receivable.

## **24. Commitments and Contingencies**

### ***Environmental Regulations***

We are not aware of any event of material non-compliance with environmental laws and regulations in our operations with, which could have a material adverse effect on our operations or financial condition. The exact nature of environmental control problems, if any, which we may encounter in the future cannot be predicted, primarily because of the changing character of environmental requirements that may be enacted within the various jurisdictions. The environmental rehabilitation liability for reclamation and closure costs at Bogoso was \$4.9 million at December 31, 2002 and \$5.4 million at December 31, 2001. Estimates of the final reclamation and closure costs for Prestea were prepared in 2002 and an accrual for its reclamation liability will be recorded during 2003. A \$2.3 million reclamation liability was recorded in conjunction with the Wassa acquisition in September 2002. This amount is estimated to be the cost to reclaim environmental disturbances caused by the prior owner, as of the date of our purchase. There have been no additional environmental disturbances at Wassa since our September 2002 acquisition.

### ***Restricted Cash Long-Term (for the Environmental Rehabilitation Liability)***

Upon the closing of the acquisition of BGL in 1999, we were required, according to the acquisition agreement, to restrict \$6.0 million in cash, which was put on deposit in a bank. These funds are to be used for the ongoing and final reclamation and closure costs relating to Bogoso. The withdrawal of these funds must be agreed to by the sellers of BGL, who are ultimately responsible for the reclamation in the event of our non-performance. There were no drawdowns of restricted cash during 2002. At December 31, 2002, the remaining balance in the BGL reclamation cash fund was \$3.3 million.

### ***Royalties***

(a) **Wassa** - As part of the consideration for the purchase of the Wassa assets, a gold production royalty ("First Royalty") will be paid to the sellers on future production from Wassa. The First Royalty is set at \$7.00 per ounce of gold produced and increased by \$1.00 per ounce for each \$10.00 increase in the price of gold above \$280 per ounce up to a maximum royalty of \$15.00 per ounce at gold prices of \$350 per ounce and above. This royalty is capped at \$38 million (see Note 12 above.)

We and the lenders agreed, subject to Bank of Ghana approval, that the \$5.0 million deferred purchase price will be converted to a gold production royalty of \$8.00 per ounce capped at \$5.5 million. This royalty would be in addition to the First Royalty described above.

(b) **Bogoso/Prestea** - A gold production royalty was included as a component of total consideration paid for Prestea in October 2001. The royalty is due on the first 1.0 million ounces of gold produced from Bogoso/Prestea following our purchase of Prestea in October 2001. The amount of the royalty will vary, according to a gold price formula, from a minimum of \$6.00 per ounce at gold prices less than \$260 per ounce to a maximum of \$16.80 per ounce at gold prices at or above \$340 per ounce.

(c) **Government of Ghana** - Under the laws of Ghana, a holder of a mining lease is required to pay a royalty of not less than 3% and not more than 12% of the total revenues earned from the lease area. The royalty is payable on a quarterly basis. We currently pay a 3% royalty on gold production from Bogoso/Prestea and would expect to pay a royalty at a similar rate at Wassa, once it is in production.

(d) **Royalties receivable** - We also have royalties receivable from the sale of our interests in the Gross Rosebel property and the St. Elie property (see Note 14), contingent on future production from these properties.

## **25. Subsequent Events**

### ***Payments to the Sellers of Bogoso***

Provisions of the 1999 Bogoso purchase agreement specified that if a sulfide mining operation was ever initiated at Bogoso, utilizing sulfide ores from Bogoso, an additional payment would be due to the original Bogoso sellers. The agreement called for a payment of \$5.0 million which escalated each year by an inflation factor. In early 2003, negotiations with the Bogoso sellers resulted in this potential future payment being capped at \$2.0 million and it was further agreed that, in return for the reduction in the amount, the payment would be accelerated. This payment was made in February 2003. On the same date, the remaining \$2.0 million liability due the Bogoso sellers, triggered by acquiring more than 50,000 ounces of non-sulfide ores acquired from outside Bogoso, was made, thereby liquidating and satisfying any and all liabilities to the Bogoso sellers associated with the original Bogoso purchase.

### ***Equity Offering***

On January 30, 2003 we entered into an agreement with an underwriting group for the purchase by the underwriters of 17,000,000 units at Cdn\$3.00 per unit for gross proceeds of Cdn\$51,000,000. Each unit consisted of one common share and one-half of one warrant to purchase a common share. Each whole warrant is exercisable for a period of 48 months from its date of issue and shall entitle the holder to purchase one common share for Cdn\$4.60 per share. The closing took place on February 14, 2003.

## **26. Generally Accepted Accounting Principles in Canada and the United States**

Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in Canada which differ from US GAAP. The effect of applying US GAAP to our financial statements is shown below.

### **(a) Balance Sheets in US GAAP**

	As of December 31,	
	2002	2001
Cash	\$ 20,016	\$ 509
Trade accounts receivable, net	1,977	1,231
Inventories	8,421	7,666
Due from sale of property	1,000	-
Marketable securities (note d1)	1,454	-
Other current assets	<u>523</u>	<u>230</u>
Total current assets	33,391	9,636
Restricted cash	3,365	3,365
Acquisition, deferred exploration and development costs (note d2)	-	-
Due from sale of property	2,000	-
Investment in OGML (note d3)	-	-
Mining property (note d4)	14,216	8,303
Property, plant and equipment, net	9,101	2,268
Other assets	<u>571</u>	<u>660</u>
Total Assets	<u>\$62,644</u>	<u>\$24,232</u>
Current liabilities	\$10,880	\$14,785
Convertible debentures (note d5)	-	2,411
Long term debt	1,727	-
Environmental rehabilitation liability	7,246	5,407
Other	<u>-</u>	<u>-</u>
Total Liabilities	19,853	22,603
Minority interest	1,722	96
Share capital (notes d5 and d6)	198,070	165,833
Equity component of the convertible debentures (note d5)	-	-
Cumulative translation adjustments (note d7)	1,595	1,595
Accumulated comprehensive income (notes d1)	269	(279)
Deficit	<u>(158,865)</u>	<u>(165,616)</u>
Total Liabilities and Shareholders' Equity	<u>\$ 62,644</u>	<u>\$ 24,232</u>

**(b) Statements of Operations in US GAAP**

	For the Years Ended December 31,		
	2002	2001	2000
Net income/(loss) under Cdn GAAP	\$ 4,856	\$ (20,584)	\$ (14,881)
Acquisition and deferred exploration expenditures expensed under US GAAP) (note d2)	(529)	13,815	12,166
Gain on sale of exploration property (note d8)	8,066	-	-
Capitalized mine property acquisition costs expensed for US GAAP (note d4)	(7,246)	-	(11,302)
Effect of mining property depletion (note d4)	-	500	683
Other (notes d3 and d5)	<u>(7)</u>	<u>633</u>	<u>563</u>
Net income/(loss) under US GAAP before minority interest	5,140	(5,636)	(12,771)
Minority interest, as adjusted (notes d2 and d4)	<u>1,612</u>	<u>334</u>	<u>560</u>
Net income/(loss) under US GAAP	6,752	(5,302)	(12,211)
Other comprehensive income - gain on marketable securities (note d1)	548	-	-
Comprehensive income/(loss)	<u>\$ 7,300</u>	<u>\$ (5,302)</u>	<u>\$(12,211)</u>
Basic net income/(loss) per share under US GAAP	<u>\$ 0.09</u>	<u>\$ (0.13)</u>	<u>\$ (0.33)</u>
Diluted net income/(loss) per share under US GAAP	<u>\$ 0.09</u>	<u>\$ (0.13)</u>	<u>\$ (0.33)</u>

Weighted average common shares outstanding are the same under US GAAP as under Cdn GAAP for the periods presented.

**(c) Statements of Cash Flows in US GAAP**

	For the Years Ended December 31,		
	2002	2001	2000
Cash provided by (used in):			
Operating Activities	\$ 1,040	\$ 799	\$ 206
Investing activities	(6,517)	(3,556)	(966)
Financing activities	<u>24,984</u>	<u>2,275</u>	<u>(1,154)</u>
Increase (decrease) in cash and cash equivalents for the year	19,507	(482)	(1,914)
Cash and cash equivalent beginning of year	<u>509</u>	<u>991</u>	<u>2,905</u>
Cash and cash equivalents end of year	<u>\$ 20,016</u>	<u>\$ 509</u>	<u>\$ 991</u>

**(d) Footnotes**

(1) Under US GAAP, marketable securities available for sale are marked to market and gains or losses are recognized in Other Comprehensive Income until the securities are sold. Under Cdn GAAP, marketable securities are accounted for at the lower of cost or market.

(2) Under US GAAP, exploration, acquisition and general and administrative costs related to exploration projects are charged to expense as incurred. Under Cdn GAAP, exploration, acquisition and general and administrative costs related to exploration projects are capitalized. In each subsequent period, the exploration, engineering, financial and market information for each exploration project is reviewed by management to determine if any of the capitalized costs are impaired.

(3) Under US GAAP, the preferred share investment in OGML would have a carrying value of nil since the preferred shares were received in recognition of past exploration costs incurred by us, all of which were expensed for US GAAP purposes. Therefore, the entire OMGL preferred share redemption premium would have been

included in income. Under Cdn GAAP, a portion of the premium on the OGML preferred share redemption premium is included in income with the remainder reducing the carrying value of our preferred stock investment.

(4) Under US GAAP, the initial purchase cost of mining properties is capitalized. Pre-acquisition costs and subsequent development costs incurred, until such time as a feasibility study had been completed, are expensed in the period incurred. Under Cdn GAAP, all costs of new mine properties as well as costs incurred after acquisition are capitalized, and subsequently reviewed each period for impairment.

(5) Cdn GAAP requires that convertible debentures should be classified into their component parts, as either a liability or equity, in accordance with the substance of the contractual agreement. Under US GAAP, the convertible debenture would be classified entirely as a liability.

(6) We eliminated our accumulated deficit through the amalgamation (defined as a reorganization under US GAAP) effective May 15, 1992. Under US GAAP the cumulative deficit was greater than the deficit under Cdn GAAP due to the write-off of certain deferred exploration costs described in (2) above.

(7) For periods prior to May 15, 1992, our reporting currency was the Canadian dollar. Subsequent to our amalgamation and moving our headquarters to the United States, the reporting currency was changed to the United States dollar. As such, for the financial statements for the period prior to May 15, 1992, our financial statements were translated into United States dollars using a translation of convenience. US GAAP required translation in accordance with the current rate method.

(8) The US GAAP basis in the Gross Rosebel deferred exploration had been expensed in prior periods. Thus under US GAAP the full amount of the sales price was a gain. In Cdn GAAP, this property's basis approximated the sales price and thus there was no material impact on the statement of operations from the sale.

#### **(e) Impact of Recently Issued Accounting Standards**

In August 2001, the FASB issued SFAS No. 143, "Accounting for Asset Retirement Obligations," that established a uniform methodology for accounting for estimated reclamation and abandonment costs. The statement was effective January 1, 2003. At that time we will record the estimated present value of reclamation liabilities and increase the carrying amount of property, plant and mine development. Subsequently, reclamation costs will be allocated to expense over the life of the related assets and will be adjusted for changes resulting from the passage of time and revisions to either the timing or amount of the original present value estimate. We are currently in the process of quantifying the effect of adoption on January 1, 2003 for both US GAAP and Cdn GAAP purposes.

The FASB issued SFAS No. 144 "Accounting for the Impairment or Disposal of Long-Lived Assets." This statement addresses financial accounting and reporting for the impairment or disposal of long-lived assets. It supersedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of," and the accounting and reporting provisions of APB Opinion No. 30, "Reporting the Results of Operations - Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions," for the disposal of a segment of a business. It also amends APB No. 51, "Consolidated Financial Statements," to eliminate the exception to consolidation for a subsidiary for which control is likely to be temporary. The provisions of this statement are effective for financial statements issued for fiscal years beginning after December 15, 2001, and interim periods within those fiscal years, with early application encouraged. The provisions of this statement generally are to be applied prospectively. The adoption of this statement did not have a material effect on our financial statements.

In April 2002, the FASB issued SFAS No. 145, "Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections" (11 SFAS No. 145). SFAS No. 145 updates, clarifies and simplifies existing accounting pronouncements, by rescinding SFAS No. 4, which required all gains and losses from extinguishment of debt to be aggregated and, if material, classified as an extraordinary item, net of related income tax effect. As a result, the criteria in Accounting Principles Board Opinion No. 30 will now be used to classify those gains and losses. Additionally, SFAS No. 145 amends SFAS No. 13 to require that certain lease modifications that have economic effects similar to sale-leaseback transactions be accounted for in the same manner as sale-leaseback transactions. Finally, SFAS No. 145 also makes technical corrections to existing pronouncements. While those

corrections are not substantive in nature, in some instances, they may change accounting practice. The provisions of SFAS No. 145 that amend SFAS No. 13 are effective for transactions occurring after May 15, 2002, with all other provisions of SFAS No. 145 being required to be adopted by us in our consolidated financial statements for the first quarter of fiscal year 2003. We believe that the adoption of SFAS No. 145 will not have a material impact on our consolidated financial statements.

On July 30, 2002, the FASB issued SFAS No. 146 "Accounting for Costs Associated with Exit or Disposal Activities." SFAS No. 146 requires companies to recognize costs associated with exit or disposal activities when they are incurred rather than at the date of a commitment to an exit or disposal plan. Examples of costs covered by the standard include lease termination costs and certain employee severance costs that are associated with a restructuring, discontinued operation, plant closing or other exit or disposal activity. SFAS No. 146 replaces the prior guidance that was provided by EITF Issue No. 94-3 "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)." SFAS No. 146 is to be applied prospectively to exit or disposal activities initiated after December 31, 2002. We believe that the adoption of SFAS No. 146 will not have a material impact on our consolidated financial statements.

In December 2002, the FASB issued SFAS No. 148 "Accounting for Stock-Based Compensation, Transition and Disclosure, an amendment of FASB Statement No. 123." SFAS No. 148 provides alternative methods of transition for an entity that voluntarily changes to the fair value based method of accounting for stock-based employee compensation. It also amends the disclosure provisions of SFAS No. 123 to require prominent disclosure about the effects of reported net income of an entity's accounting policy decisions with respect to stock-based employee compensation. Finally, this statement amends APB Opinion No. 28, "Interim Financial Reporting," to require disclosure about those effects in interim financial information. The amendments to SFAS No. 123, which provides alternative methods of transition for an entity that voluntarily changes to the fair value based method of accounting for stock-based employee compensation is effective for financial statements for fiscal years ending after December 15, 2002. The amendment to SFAS No. 123 relating to disclosures and the amendment to Opinion 28 is effective for financial reports containing condensed financial statements for interim periods beginning after December 15, 2002. We do not intend to adopt the fair value accounting provisions of SFAS No. 123 and currently believe that the adoption of SFAS No. 148 will not have a material impact on our financial statements.

In November 2002, the FASB issued FASB Interpretation No. 45, "Guarantor's Accounting for Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others, an interpretation of FASB Statements No. 5, 57 and 107 and rescission of FASB Interpretation No. 34, Disclosure of Indirect Guarantees of Indebtedness of Others" (FIN 45). FIN 45 clarifies the requirements for a guarantor's accounting for and disclosure of certain guarantees issued and outstanding. It also requires a guarantor to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. This interpretation also incorporates without reconsideration the guidance in FASB Interpretation No. 34, which is being superseded. The adoption of FIN 45 will not have a material effect on our consolidated financial statements and will be applied prospectively.

In January 2003, the FASB issued FAS Interpretation No. 46, "Consolidation of Variable Interest Entities, an interpretation of Accounting Research Bulletin (ARB) No. 51, Consolidated Financial Statements" (FIN 46). FIN 46 clarifies the application of ARB No. 51 to certain entities in which equity investors do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. The adoption of FIN 46 will not have a material effect on our consolidated financial statements.

## **27. Quarterly Financial Data - Unaudited**

(In thousands except per share amounts)	2002			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net Sales	\$ 9,332	\$ 9,699	\$ 8,350	\$ 11,421
Gross Profit	2,447	2,954	1,762	1,948
Net Income	1,454	1,557	834	1,011
Earning Per Common Share	\$0.02	\$0.02	\$0.01	\$0.02

(In thousands except per share amounts)	2001			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net Sales	\$ 4,835	\$ 6,906	\$ 5,856	\$ 7,061
Gross Loss	(1,026)	(1,174)	(561)	(1,029)
Net Income	(1,851)	(1,422)	(9,000)	(8,311)
Loss Per Common Share	\$ (0.05)	\$ (0.04)	\$ (0.21)	\$ (0.19)

**ITEM 9**                    **CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

There have been no disagreements with PricewaterhouseCoopers LLP, our chartered accountants, regarding any matter of accounting principles or practices or financial statement disclosure.

**PART III**

**ITEMS 10, 11, 12 AND 13**

In accordance with General Instruction G(3), the information required by Part III is hereby incorporated by reference from our proxy statement to be filed pursuant to Regulation 14A not later than 120 days after the fiscal year covered by this report.

**ITEM 14**    **Controls and Procedures**

We carried out an evaluation, under the supervision and with the participation of our principal executive officer and principal financial officer, of the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) within 90 days prior to the filing date of this report. Based on this evaluation, the principal executive officer and principal financial officer have concluded that our disclosure controls and procedures are effective.

We periodically conduct an evaluation, under the supervision and with the participation of our principal executive officer and principal financial officer as well as our Audit Committee, of our internal controls and procedures. There have been no significant changes in our internal controls or in other factors that could significantly affect our internal controls subsequent to the date of the most recent evaluation.

## PART IV

### **ITEM 15      EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K**

(a) The following documents are filed as part of this Report:

#### **1. Financial Statements**

- Management's Report
- Auditors' Report
- Consolidated Balance Sheets as of December 31, 2002 and 2001
- Consolidated Statements of Operations for the Years Ended December 31, 2002, 2001 and 2000
- Consolidated Statements of Changes in Shareholders' Equity for the Years Ended December 31, 2002, 2001 and 2000
- Consolidated Statements of Cash Flows for the Years Ended December 31, 2002, 2001 and 2000
- Notes to Consolidated Financial Statements

#### **2. Financial Statement Schedules**

Financial Statement schedules have been omitted since they are either not required, are not applicable, or the required information is shown in the financial statements or related notes.

#### **(b) Reports on Form 8-K.**

1. A report on Form 8-KA was filed with the Securities and Exchange Commission on November 29, 2002 defining the nature of the Wassa acquisition as a purchase of assets.
2. A report on form 8-K was filed with the Securities and Exchange Commission on December 13, 2002 announcing completion of a private placement of 3,440,000 units at \$1.25 each. Each unit consists of one share of our common stock and one fourth of one warrant to acquire our common shares at a price of \$1.50.

#### **(c) Exhibits**

- 3(i) Incorporating Documents of the Company, including: Articles of Arrangement dated May 14, 1992, with Plan of Arrangement attached, with Certificate of Amendment with respect thereto dated May 15, 1992; Certificate of Amendment dated May 15, 1992, with Articles of Amendment; Certificate of Amendment dated March 26, 1993, with Articles of Amendment; Articles of Arrangement dated March 7, 1995, with Plan of Arrangement attached, with Certificate of Amendment with respect thereto dated March 14, 1995; Certificate of Amendment dated July 29, 1996, with Articles of Amendment; and Certificate of Amendment dated July 10, 2002, with Articles of Amendment (all incorporated by reference to Exhibit 4.1 to the Company's Form 8-K filed on January 23, 2003)
- 3(ii) Bylaws of the Company, including: Bylaw Number One, amended and restated as of April 3, 2002 (incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-3 (Reg. No. 333-102225) filed on December 27, 2002); Bylaw Number Two, effective May 15, 1992 (incorporated by reference to Exhibit 4.2 to the Company's Form 8-K filed on January 23, 2003); and Bylaw Number Three, effective May 15, 1992 (incorporated by reference to Exhibit 4.2 to the Company's Form 8-K filed on January 23, 2003)
- 4.1 Form of Specimen Certificate for Common Shares (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-3/A (Reg. No. 333-91666) filed on July 15, 2002)



- 4.2 Rights Agreement dated as of April 24, 1996, between the Company and the R-M Trust Company as Rights Agent (incorporated by reference to Exhibit 4.3 to the Company's Form 8-K filed on January 23, 2003); Amendment to Rights Agreement between the Company and CIBC Mellon Trust Company (formerly, the R-M Trust Company) dated as of June 30, 1999 (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q for the period ended June 30, 1999)
- 4.3 Form of Four-Year Warrant (incorporated by reference to Exhibit 4.4 to the Company's Form 8-K filed August 31, 1999)
- 4.4 Warrants dated as of September 11, 2001, between the Company and Barnato Exploration Limited.
- 4.5 Warrant, dated July 19, 2002, between the Company and Ware Limited.
- 4.6 Form of Warrant, dated as of January 2, 2002 (incorporated by reference to the Company's Form S-3 (Reg. No. 333-82106) filed on February 4, 2002)
- 4.7 Warrant Indenture, dated July 17, 2002, among the Company and CIBC Mellon Trust, as Trustee, including the Form of Warrant (incorporated by reference to Exhibit 4.1 to the Company's Form 8-K filed on August 5, 2002)
- 4.8 Form of Underwriters' Warrants (incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-3/A (Reg. 333-91666) filed on July 15, 2002)
- 4.9 Form of Warrant, dated December 12, 2002 (incorporated by reference to Exhibit 4.1 to the Company's Form 8-K filed on December 13, 2002)
- 4.10 Warrant Indenture, dated as of February 14, 2003, between Golden Star Resources Ltd. and CIBC Mellon Trust Company, including the Form of Warrant (incorporated by reference to Exhibit 4.1 of the Company's Form 8-K filed on February 14, 2003)
- 4.11 Form of Underwriters' Warrant, dated February 14, 2003 (incorporated by reference to Exhibit 4.2 of the Company's Form 8-K filed on February 14, 2003)
- 10.1 Summary of Executive Management Performance Bonus Plan (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed on January 23, 2003)
- 10.2 Amended and Restated 1997 Stock Option Plan, effective as of April 3, 2002 (incorporated by reference to Exhibit 10.2 of the Company's Form 8-K filed on January 23, 2003)
- 10.3 Form of Indemnification Agreement between the Company and its officers and directors (incorporated by reference to Exhibit 10.3 of the Company's Form 8-K filed on January 23, 2003)
- 10.4 Summary of Severance Arrangements between the Company and certain executive officers (incorporated by reference to Exhibit 10.4 of the Company's Form 8-K filed on January 23, 2003)
- 10.5 Employees' Stock Bonus Plan amended and restated to April 6, 2000 (incorporated by reference to Exhibit 10(j) to the Company's Form 10-K for the year ended December 31, 2000)
- 10.6 Guyanor Ressources S.A. Stock Option Plan amended and restated as of June 15, 1999 (English translation) (incorporated by reference to Exhibit 10.35(a) to the Company's Form 10-K for the year ended December 31, 1999)

- 10.7 Standardized Adoption Agreement for a 401-K Savings Plan adopted January 1, 1996 (incorporated by reference to Exhibit 10.28 to the Company's Form 10-K for the year ended December 31, 1995)
- 10.8 Employment contract with Mr. Peter Bradford dated November 1, 1999 (incorporated by reference to Exhibit 10.38 (c) to the Company's form 10-K for the year ended December 31, 1999)
- 10.9 Agreements between the Company and its outside directors granting them options to purchase Guyanor Class "B" common shares, (1) dated December 8, 1995, and December 10, 1996 (incorporated by reference as Exhibit 10.39 to the Company's Form 10-K for the year ended December 31, 1996), (2) dated December 9, 1997 (incorporated by reference to Exhibit 10.39(a) to the Company's Form 10-K for the year ended December 31, 1997), (3) dated December 8, 1998 (incorporated by reference to Exhibit 10.39(b) to the Company's Form 10-K for the year ended December 31, 1998), (4) dated June 15, 1999 (incorporated by reference to Exhibit 10.39(c) to the Company's Form 10-K for the year ended December 31, 1999), and (5) dated August 16, 2001
- 10.11 Agreement for the Sale and Purchase of Certain of the Assets of Satellite Goldfields Limited between The Law Debenture Trust Corporation P.L.C. and Wexford Goldfields Limited dated March 1, 2002 (incorporated by reference to Exhibit 2.1 of the Company's Form 8-K filed on September 30, 2002)
- 10.12 Agreement for the Sale and Purchase of Certain of the Assets of Satellite Goldfields Limited between Satellite Goldfields Limited, The Law Debenture Trust Corporation P.L.C. and Wexford Goldfields Limited dated March 15, 2002 (incorporated by reference to Exhibit 2.2 of the Company's Form 8-K filed on September 30, 2002)
- 10.13 Common Terms Agreement for Wassa Gold Project between Wexford Goldfields Limited, any other Obligor Party thereto from time to time, Standard Bank London Limited and The Law Debenture Trust Corporation P.L.C. dated June 26, 2002 (incorporated by reference to Exhibit 2.3 of the Company's Form 8-K filed on September 30, 2002)
- 10.14 Wassa Project Facility Agreement between Wexford Goldfields Limited, the lenders listed in Schedule 1 thereto and Standard Bank London Limited dated June 25, 2002 (incorporated by reference to Exhibit 2.4 of the Company's Form 8-K filed on September 30, 2002)
- 10.15 Royalty Agreement between Wexford Goldfields Limited and The Law Debenture Trust Corporation P.L.C. dated June 26, 2002 (incorporated by reference to Exhibit 2.5 of the Company's Form 8-K filed on September 30, 2002)
- 10.16 Agreement for the Sale and Purchase of 90% of the Issued Capital of Wexford Goldfields Limited between The Law Debenture Trust Corporation P.L.C. and Wasford Holdings dated June 26, 2002, and amendment thereto dated September 13, 2002 (incorporated by reference to Exhibit 2.6 of the Company's Form 8-K filed on September 30, 2002)
- 10.17 Support Agreement for Wassa Gold Project between Golden Star Resources Ltd. and Standard Bank London Limited dated September 13, 2002 (incorporated by reference to Exhibit 2.7 of the Company's Form 8-K filed on September 30, 2002)
- 10.18 Wassa Project Conversion Agreement between Wexford Goldfields Limited, Bayerische Hypo-Und Vereinsbank AG, Dresdner Bank AG London Branch, Fortis Bank (Nederland) N.V. and Standard Bank London Limited dated September 13, 2002 (incorporated by reference to Exhibit 2.8 of the Company's Form 8-K filed on September 30, 2002)

- 10.19 Wassa Gold Project Second Royalty Agreement between Wexford Goldfields Limited, the persons from time to time party thereto and Standard Bank London Limited dated September 13, 200 (incorporated by reference to Exhibit 2.9 of the Company's Form 8-K filed on September 30, 2002)
- 10.20 Sale of Shares Agreement with Barnato Exploration Ltd., dated June 21, 2001, for the purchase of Prestea mining lease rights and Barnex Isle of Man (incorporated by reference to Exhibit 10(z) of the Company's Form 10-K for the year ended December 31, 2001)
- 10.21 Agreement, dated November 16, 2001, between Bogoso Gold Limited and Prestea Gold Resources Limited for the purchase of Prestea mining lease rights and option payments (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed on March 6, 2002)
- 10.22 Share and Asset Acquisition Agreement, dated August 6, 2001, among Anvil Mining NL, Anvil International Finance Limited and the Company, regarding purchase of 20% interest in Bogoso Gold Limited (incorporated by reference to Exhibit 10(bb) to the Company's Form 10-K for the year ended December 31, 2001)
- 10.23 Guiana Shield Transaction Agreement with Cambior Inc. dated October 25, 2001 for the sale and swap of Golden Star's interest in Gross Rosebel and other properties (incorporated by reference to Exhibit 10.3 to the Company's Form 8-K filed March 6, 2002)
- 10.24 Mining lease, dated June 29, 2001, between the Government of the Republic of Ghana and Bogoso Gold Limited, relating to the Prestea property (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on March 6, 2002)
- 10.25 Joint Operating Agreement, dated January 31, 2002, between Bogoso Gold Limited and Prestea Gold Resources Limited.
- 10.26 Memorandum of Agreement, dated March 14, 2002, among Prestea Gold Resources, Bogoso Gold Limited and others
- 21.1 Subsidiaries of the Company
- 23.1 Consent of PricewaterhouseCoopers LLP
- 99.1 Certificate of Principal Executive Officer pursuant to 18 U.S.C. 1350 (Section 906 of the Sarbanes-Oxley Act of 2002)
- 99.2 Certificate of Principal Financial Officer pursuant to 18 U.S.C. 1350 (Section 906 of the Sarbanes-Oxley Act of 2002)

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

### GOLDEN STAR RESOURCES LTD.

Registrant

By: /s/ Peter J. Bradford  
Peter J. Bradford  
President and CEO

Date: March 25, 2003

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

By: /s/ Peter J. Bradford  
Name: Peter J. Bradford  
Title: President and CEO  
Date: March 25, 2003

By: /s/ Allan J. Marter  
Name: Allan J. Marter  
Title: Senior Vice-President and CFO  
Date: March 25, 2003

By: /s/ James E. Askew  
Name: James E. Askew  
Title: Director  
Date: March 25, 2003

By: /s/ David K. Fagin  
Name: David K. Fagin  
Title: Director  
Date: March 25, 2003

By: /s/ Ian MacGregor  
Name: Ian MacGregor  
Title: Director  
Date: March 25, 2003

By: /s/ Robert R. Stone  
Name: Robert R. Stone  
Title: Director  
Date: March 25, 2003

## CERTIFICATIONS

I, Peter J. Bradford, certify that:

1. I have reviewed this report on Form 10-K of Golden Star Resources Ltd. ("Registrant");
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this annual report;
4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the Registrant and we have:
  - a) designed such disclosure controls and procedures to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) evaluated the effectiveness of the Registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the Registrant's auditors and the audit committee of Registrant's board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the Registrant's ability to record, process, summarize and report financial data and have identified for the Registrant's auditors any material weaknesses in internal controls; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal controls; and
6. The Registrant's other certifying officer and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 25, 2003

/s/ Peter J. Bradford  
Peter J. Bradford  
President and CEO

I, Allan J. Marter, certify that:

1. I have reviewed this annual report on Form 10-K of Golden Star Resources Ltd. ("Registrant");
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this annual report;
4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the Registrant and we have:
  - a) designed such disclosure controls and procedures to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) evaluated the effectiveness of the Registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the Registrant's auditors and the audit committee of Registrant's board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the Registrant's ability to record, process, summarize and report financial data and have identified for the Registrant's auditors any material weaknesses in internal controls; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal controls; and
6. The Registrant's other certifying officer and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 25, 2003

/s/ Allan J. Marter  
Allan J. Marter  
Senior Vice President and Chief Financial Officer

# CORPORATE INFORMATION

## DIRECTORS

**James E. Askew** <sup>3\*</sup>  
Denver, Colorado  
*Corporate Director*

**Peter J. Bradford**  
Littleton, Colorado  
*President and Chief Executive Officer of the Corporation*

**David K. Fagin** <sup>1\*, 2</sup>  
Denver, Colorado  
*Corporate Director*

**Ian MacGregor** <sup>1, 2\*</sup>  
Toronto, Ontario, Canada  
*Counsel with Fasken Martineau DuMoulin LLP*

**Robert R. Stone** <sup>1, 2, 3</sup>  
Vancouver, British Columbia, Canada  
*Non-Executive Chairman of the Board,  
Corporate Director and Business Consultant*

\* Board Committee Chairman

1 Audit Committee Member

2 Legal and Corporate Governance Committee Member

3 Compensation Committee Member

## MANAGEMENT

**Peter J. Bradford**  
*President and Chief Executive Officer*

**Richard Q. Gray**  
*Senior Vice President and Chief Operating Officer*

**Allan J. Marter**  
*Senior Vice President, Chief Financial Officer and  
Corporate Secretary*

**Dr. Douglas A. Jones**  
*Vice President, Exploration*

**Peter Claringbull**  
*Vice President and General Manager of  
Bogoso Gold Limited*

## CORPORATE HEADQUARTERS

Golden Star Resources Ltd.  
10579 Bradford Road, Suite 103  
Littleton, Colorado 80127  
U.S.A.

Telephone: (303) 830-9000  
Toll Free: (800) 553-8436  
Facsimile: (303) 830-9094

## REPRESENTATIVE OFFICE

Bogoso Gold Limited  
32 Akosombo Road  
Airport Residential Area  
P.O. Box 16075  
Airport Post Office  
Accra, Ghana  
Telephone: 233-21-779-040  
Facsimile: 233-21-777-700

## FORM 10-K

The Company's 2002 Annual Report on Form 10-K is contained herein. Exhibits to the Form 10-K will be available upon payment of reproduction costs. Requests should be addressed to:

Golden Star Resources Ltd.  
Investor Relations  
10579 Bradford Road, Suite 103  
Littleton, Colorado 80127  
U.S.A.

## REGISTERED OFFICE

Golden Star Resources Ltd.  
19th Floor, 885 West Georgia Street  
Vancouver, British Columbia  
Canada V6C 3H4

## STOCK EXCHANGE LISTINGS/TRADING

Toronto Stock Exchange Symbol: **GSC**

Warrants Expiring July 2004: **GSC.WT**

Warrants Expiring February 2007: **GSC.WT.A**

American Stock Exchange Symbol: **GSS**

Berlin Stock Exchange Symbol: **GS5**

## REGISTRAR AND TRANSFER AGENT

Questions regarding the change of stock ownership, consolidation of accounts, lost certificates, change of address and other such matters should be directed to:

CIBC Mellon Trust Company  
Attention: Shareholder Services  
P.O. Box 1900  
Vancouver, British Columbia  
Canada V6C 3K9  
Toll Free: (800) 387-0825

## AUDITORS

PricewaterhouseCoopers LLP  
Calgary, Alberta, Canada

## ANNUAL MEETING

The Annual General Meeting of Shareholders of Golden Star Resources Ltd. will be held on Thursday, May 29, 2003 at 2:30 p.m. at the Fairmont Royal York Hotel, Manitoba Room, 100 Front Street West, Toronto, Ontario, Canada

## GUYANOR RESSOURCES S.A.

Guyanor Ressources S.A. (TSX: GRL.B, Nouveau Marché: GUYN) is a 73% owned subsidiary of Golden Star.

GOLDEN STAR



RESOURCES LTD.

800.553.8436  
[www.gsr.com](http://www.gsr.com)  
Toronto Stock Exchange: GSC  
American Stock Exchange: GSS