

#### CORPORATE PROFILE

Golden Star is a gold producer with a 90% equity interest in the Bogoso/Prestea gold mine in Ghana. In addition, Golden Star has a 73% controlling shareholding in Guyanor Ressources S.A., a French gold exploration company listed on the Nouveau Marché of the Paris Bourse and the Toronto Stock Exchange, which has several gold exploration properties in French Guiana. Golden Star is listed on the Toronto Stock Exchange and trades on the Nasdaq Over-The-Counter Bulletin Board.

During 2001, Golden Star focused on consolidating its activities at the Bogoso gold mine and has (i) increased its equity interest in Bogoso Gold Limited from 70% to 90%, (ii) completed several transactions to gain access to the Prestea gold property, which lies adjacent to and south of the Bogoso gold mine, (iii) progressed a definitive feasibility study for the Bogoso sulfide resources, and (iv) entered into a transaction to sell its major exploration stage properties and other holdings in the Guiana Shield, to provide finance for its Ghana activities. The sum of these initiatives is that Golden Star has now secured a long-term source of cash flow to underpin the Company's activities and growth.

Going forward, the Company will re-orient itself to capitalize on its strategic presence on the Ashanti gold belt in West Africa, one of the most prolific gold producing belts in the world, by acquiring additional exploration and producing gold assets that have synergy with our activities at Bogoso.

We will continue to maintain and capitalize on our presence in the Guiana Shield, where the Company has been at the forefront of exploration and development and has a knowledge base in the area second to none.

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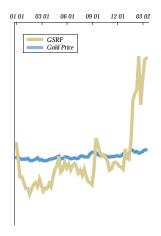
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#### About the Cover

The runner is ready – eyes focused on the race ahead. He is prepared for the race and poised for success. Golden Star too, is ready, focused, prepared for the race and poised for success.

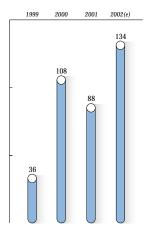
# HIGHLIGHTS

GSRSF c/w Gold Price



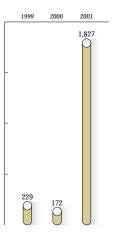
**Gold Production** 

(000s ounces)



**Gold Reserves** 

(000s ounces) at December 31,





#### LETTER TO OUR SHAREHOLDERS

Dear Shareholder:

Back in 1999, your Company commenced a process of evolution, to become a gold producer by acquiring a 70% interest in the Bogoso gold mine in Ghana.

At the time of the acquisition, the Bogoso gold mine had a limited mine life of about two years and therefore, for this acquisition to be a success, the Company had to capitalize on the Bogoso acquisition by either assessing and developing the deeper refractory gold reserves at Bogoso or by acquiring additional gold reserves in the vicinity that could be immediately processed at the Bogoso processing plant.

It is with a combination of pleasure and pride that we are able to report that both of these objectives have been achieved.

In 2001, the Company was awarded a mining lease over the Prestea concession that delivered approximately one million ounces of proven and probable ore reserves. During 2000 and 2001, the Company completed feasibility study work to fully assess the sulfide reserves at Bogoso which delivers additional proven and probable reserves of about 0.8 million ounces. The net outcome from these parallel strategies is a robust source of gold production and cashflow that should underpin the Company's activities for at least the next decade.

In addition to our successful endeavors to increase the mine life of the Bogoso gold mine, we have sought to increase the Company's interest in Bogoso Gold Limited, hereafter referred to as BGL (which owns the Bogoso gold mine), by acquiring the 20% minority interest previously held by Anvil Mining NL. Golden Star now has a 90% equity interest in BGL and, more importantly, in the medium term, Golden Star owns 100% of approximately \$28 million of debt previously owed to the project lenders. In short, this means that for

some time to come, Golden Star will receive the benefit of 100% of BGL's production and cashflow.

The culmination of these efforts was enhanced in early 2002 by a \$5.6 million private placement, which provided the funding that was essential to finalizing the acquisition of and commencement of mining at Prestea. If nothing else, this placement seems to have focused attention on the Company and its achievements: like a spring that has been wound down too far for too long, the Company's stock price has subsequently uncoiled and performed very well during the early part of 2002, in a period of relatively stronger market conditions for gold.

Despite our achievements, the past year has been difficult, particularly the ten months through to October 2001. During this period we persevered with operations at Bogoso by processing semi refractory transition ore from the Bogoso concession while finalizing negotiations to gain access to the Prestea concession, to perfect the necessary approvals to commence mining and to develop the mining operations at Prestea. While the results during this period were far from satisfactory, the process of sustaining operations at Bogoso was important as it kept our core management and workforce intact and kept the facilities in good working order. Conversely, shutting down and averting the poor operating results would have potentially cost more in closure and care and maintenance costs, and could have had a political cost, which could have impacted on the Company's negotiations to access the Prestea property.

The fact that we have weathered these difficulties is a credit to our management, professional staff and employees in Ghana, who have committed themselves 100% to making our operations successful and assisting the Company to gain access to the Prestea property.



Notwithstanding how important these matters are to Golden Star, they are just as, or more important, to the communities within which we operate in Ghana. The continuing operation of Bogoso/Prestea in 2001 and over the next decade will provide a continuing source of employment that will significantly benefit the economy of the area. Recognizing this, the stakeholders, principally, the Government of Ghana, the Ghana Mineworkers Union and the Ghana Chamber of Mines, have been very supportive in ensuring the Company's success in gaining access to the Prestea property.

In 2001, the Company reached agreement with Cambior Inc. to rationalize the various joint ventures that Cambior and Golden Star (or Guyanor Ressources S.A., our 73% owned subsidiary) were involved in. In short, we acquired Cambior's interest in the Yaou, Dorlin and Bois Canon gold properties in French Guiana and simultaneously sold to Cambior our interests in the Omai gold mine in Guyana, and the Gross Rosebel, Headley's Reef, and Thunder Mountain gold properties in Suriname. As a result of these transactions, Cambior will pay to Golden Star \$5 million at closing, as well as \$1 million on each of the second, third, and fourth anniversary of closing. In addition, Cambior will pay to Golden Star \$1 million on the commencement of mining from Headley's Reef and Thunder Mountain and a

royalty equal to 10% of the incremental revenue above a gold price of \$300 per ounce from the Gross Rosebel project. The proceeds from the transaction at closing will be used to pay certain deferred purchase payments to the sellers of Bogoso.

Following the transaction with Cambior, Golden Star and Guyanor will, collectively, own 100% of the Yaou, Dorlin and Bois Canon gold properties in French Guiana.

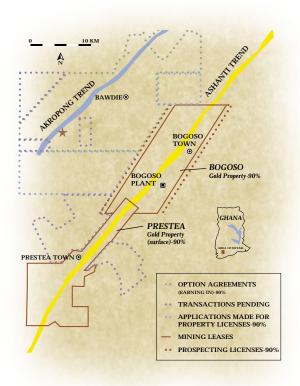
Going forward, our goal is to build our business in Ghana and, regionally in West Africa, to capitalize on our operating presence at Bogoso/Prestea. The Company's vision is to quickly grow into a mid tier gold producer via a combination of organic growth and acquisitions. This vision is predicated on our belief that the junior gold industry in West Africa is ripe for consolidation and Golden Star has demonstrated its ability to deliver sound multiples for its reserves and production, which should deliver value to both sides of any acquisition. More importantly, we believe that the gold market is strengthening, and this should further add to the leverage that Golden Star can deliver.

The Company remains un-hedged in 2002 and we will endeavor to increase the Company's access to capital by leveraging our operating cashflows. This will be done by keeping the Company's gold price upside uncapped.

We thank you for your continued support through these past difficult times.

Yours sincerely,
Peter Bradford
President and CEO

#### **BOGOSO/PRESTEA MINE**



Bogoso is situated approximately 10km south of the town of Bogoso, in the Western Region of Ghana. Bogoso town lies 35km by road from the town of Tarkwa, at the junction of the main north-south Takoradi-Kumasi road. Tarkwa is an important mining center for the region, and Takoradi, a further 85km south of Tarkwa, is a major port. The capital of Ghana, Accra, is approximately 350km by road from Bogoso.

Golden Star acquired an initial 70% interest in BGL in 1999, and in 2001 increased its interest to 90% by acquiring the 20% interest held by Anvil Mining NL for consideration of 3,000,000 common shares of Golden Star. The Government of Ghana holds the remaining 10% interest.

At the time of its acquisition, Bogoso had a poor track record and only had about two years of reserves remaining. Beyond the limited mine life at Bogoso, however, Golden Star saw an opportunity to build a larger land position to acquire more reserve life and more exploration upside. This strategy has been successful, with (i) additional reserves being acquired in 2001 through the acquisition of the Prestea property, which lies immediately to the south of Bogoso, and (ii) a strong land position being secured on the Akropong trend to the west of Bogoso, where the Company has an active regional exploration program.

In addition to the opportunity to consolidate a larger land position, Golden Star saw an opportunity to take a fresh look at the existing open pittable sulfide resource at Bogoso. In pursuit of this, we have invested \$3.5 million into a drilling program and feasibility study. The aim was to prove the known resource and to demonstrate that the Bogoso sulfides can be exploited using the BIOX stirred tank bio-oxidation technology, as used by Ashanti Goldfields Company





Limited at the Obuasi mine, 70km north of Bogoso on the same Ashanti trend.

The culmination of these parallel strategies is the creation of a long-lived production base at Bogoso/Prestea.

Mining at Prestea began in September 2001, following a series of transactions to acquire the property that are fully described in the Form 10-K and summarized as follows:

(i) Prestea Gold Resources Limited ("PGR"), the operator of the underground mine surrendered its rights over the whole of the Prestea mining lease, which were originally granted to PGR by Government in November 2000.

- (ii) On June 29, 2001, Government granted a new mining lease to PGR over the underground mine on the Prestea mining lease, below a depth of 200 metres.
- (iii) Simultaneously, on June 29, 2001, Government granted a new mining lease over the Prestea surface resources to BGL.
- (iv) In consideration for PGR's surrender of its old rights to the whole of Prestea, BGL initially entered into an option agreement with PGR to acquire a 35% interest in PGR in exchange for (i) the payment to PGR of \$2,100,000, which has been paid, and (ii) the payment of \$1,900,000 on the later of: (a) 180 days; and (b) the commencement of mining by BGL at the Plant-North deposit in the central part of the Prestea Property. Subsequently, BGL and PGR entered into a new agreement on March 14, 2002 whereby, the parties would enter into a joint venture instead of BGL acquiring an interest in PGR. Under the new agreement, the underground mine will cease production and will be put on care and maintenance to allow BGL to carry out an assessment. Furthermore, the \$1,900,000 payment described above would be increased to \$2,400,000 and BGL would acquire a 45% interest in the joint venture and management rights.

Measured and Indicated Mineral Resources for Bogoso/Prestea as at December 31, 2001 were as follows:

Material	Tonnes	Grade	Contained Ounces
Oxide	5,447,440	2.41	424,628
Transition	974,656	3.04	95,274
Primary	7,853,011	2.87	724,963
Refractory Transition	2,146,082	3.32	229,260
Refractory	12,021,509	3.62	1,399,357
Total	28,472,698	3.14	2,873,482

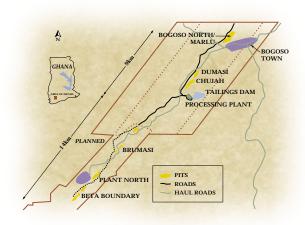
Probable Mineral Reserves for Bogoso/Prestea as at December 31, 2001, which are contained within the Mineral Resources shown to the left, were as follows.

Material	Tonnes	Grade	Contained Ounces
Oxide	5,351,395	2.07	356,340
Transition	834,295	2.78	74,457
Primary	3,600,781	3.29	380,305
Refractory Transition	1,987,397	3.01	192,582
Refractory Sulfide	7,322,678	3.50	823,642
Total	19,096,546	2.97	1,827,326

Further details of the Mineral Resources and Mineral Reserves are contained in Golden Star's Form 10-K included in this annual report.

(v) In a separate agreement with Barnato Exploration Limited ("Barnex"), Golden Star acquired the Barnex subsidiary that held an option to acquire the Prestea Property from Government, in exchange for: (a) 3,333,333 common shares of Golden Star; (b) 1,333,333 warrants to acquire common shares of Golden Star for a three year period at an exercise price of \$0.70; and (c) a gold production royalty on the first 1,000,000 ounces to be mined from Bogoso/Prestea after closing at a royalty rate of \$6.00 to \$16.80 per ounce on a sliding scale of gold prices between \$260 per ounce and \$340 per ounce. The Barnex transaction required the approval of the Ghana Government, the Bank of Ghana, the Reserve Bank of South Africa, and the Barnex shareholders. With these approvals the transaction closed effective September 19, 2001.

Ore mined from Prestea is trucked to the central Bogoso processing plant. This is a distance varying from 6 road-kilometres from the most northern known Prestea pits to 17 road-kilometres from the most southern known Prestea pits. The known pits at Prestea will be mined through to 2006. If no further ore discoveries are made on the Prestea concession by that time, the Bogoso processing plant would be upgraded by the addition of a BIOX circuit to process the known sulfide reserves from



Bogoso and the northern end of the Prestea concession. The BIOX facility would require an investment of approximately \$30 million.

Having said this, based on our exploration success to date and the prospectivity of the northern part of the Prestea property, in particular, we expect that additional ore discoveries on the Prestea concession and the Akropong trend will push the BIOX upgrade back into 2007 or later.

Bogoso/Prestea is forecast to deliver an average of 130,000 ounces at a cash cost of \$185 per ounce over the next ten years but this will vary from year to year based on grade, stripping ratios, material type and distance from the Bogoso processing plant.



At Bogoso, the Company has integrated its environmental monitoring and reclamation with its day-to-day mining operations. In new mining areas, environmental reclamation commences as soon as the first material is removed from the new pit. This approach ensures that environmental reclamation costs are minimized and the Company builds a strong reputation for its stewardship of the land.

The Company's program goes far beyond stewardship, with programs to develop and apply agroforestry techniques that are championed by the Company for adoption by the local farming community. The intent of this proactive program is to encourage the use of agro-forestry as a sustainable alternative to the historical "slash and burn" agricultural techniques widely used in the area.

The Company is also carrying out field trials towards the development of a palm oil plantation on reclamation areas, with the intent of fostering a palm oil industry in the area, and with the ultimate sponsorship of a palm oil pressing plant and an out-grower program that can provide employment in the area.

In addition, the Company has an active program to support development programs in the vicinity of the mines' operations to improve access to potable water and sanitation. The Company is also involved in programs to support education and roads in the area.

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In 2002, gold production of 134,000 ounces is forecast with a cash cost of about \$175 per ounce from ores to be mined from the Prestea property. This is a significant turnaround from 2001, when we persevered with marginal transition ores mined from the Bogoso concession while we finalized the acquisition of the Prestea property.

Capital Expenditure for the combined Bogoso/Prestea project in 2002 totals \$11.4 million as detailed below:

Category	\$ million
Mine & Maintenance Equipment	\$ 1.5
Milling Equipment	1.5
Prestea Surface Equipment	3.8
Finance & Admin. Equipment	0.3
Development/Exploration	1.1
PGR Investment	3.2
Total	\$11.4

After 2002, the annual capital expenditure, excluding 2006, reduces significantly and is forecast to average \$1.4 million for the period 2003 to 2012. In 2006, unless additional cyanide leach recoverable reserves are delineated, capital expenditure of \$30 million will be required to develop the sulfide project.

On the Akropong trend to the west of Bogoso, several very strong soil anomalies have been delineated in areas

where previous operators have demonstrated the presence of narrow, high-grade vein type mineralization. Drilling of these anomalies will be commenced in the current year.

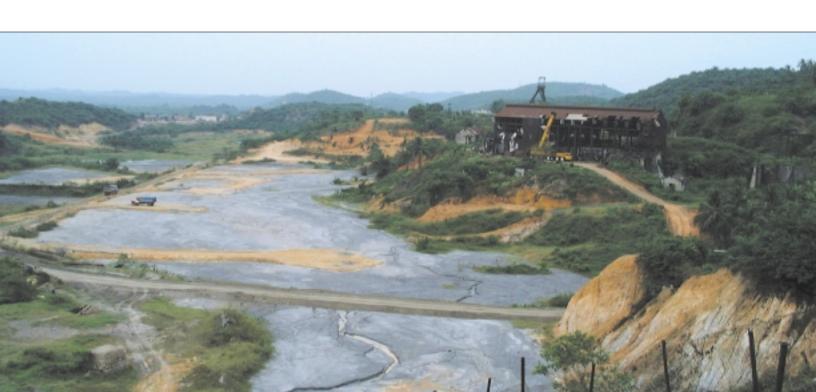
On the Prestea property, significant tracts of the Ashanti trend have only had limited exploration in the past, and, based on the Company's experience at Bogoso, these areas are highly prospective.

In total, we have budgeted to spend \$1.5 million on exploration in 2002 at Prestea and on the Akropong trend.

Longer term, we believe the greatest potential is for sulfide ores at depth. This sulfide potential applies to both the Bogoso and Prestea concessions. The exploration for sulfides on Bogoso has not been extended over the whole property and the resources defined to date are generally open along strike and at depth. And, while the Prestea underground mine has past production of some nine million ounces, it has not been subject to any modern assessment or exploration.

# PRESTEA HISTORY TO 2000

Mining has been conducted at Prestea for over 100 years, primarily as an underground operation with limited open pit mining. The Ghana Chamber of Mines has recorded that some nine million ounces of gold have been produced from the Prestea concession since 1873.



This makes Prestea the second most productive gold mining area in the history of Ghana, after Obuasi.

During the period from 1873 until 1965, the Prestea area was divided into several licenses operated by as many different mining companies. In 1965 the Government of Ghana amalgamated these mining operations into Prestea Goldfields Limited under the aegis of the State Gold Mining Corporation, a company with the Government of Ghana as its sole shareholder.

Following this consolidation in 1965, production declined and the mines operated at a loss. In 1985, in an attempt to redress the situation, the Government of Ghana secured a loan in an amount of \$925,000 from the World Bank to rehabilitate a portion of the mine. After three years of continuing losses, the Government decided to privatize the operation. Between 1988 and 1994, several companies looked at the operation including Gold Fields of South Africa and JCI Limited. Gold Fields chose not to pursue the project.

In 1994, JCI Limited and its subsidiary, Barnex, were selected by the Government of Ghana to develop the Prestea Project. Under the agreement, the parties had the right to acquire 90% of the Prestea property and assets and to conduct mining operations on the property. To complete the Prestea acquisition, Barnex was

required to complete a five-phase work program, including due diligence, preliminary exploration and mining management, advanced exploration, feasibility study and mine establishment and to make payments to the Government of Ghana at defined milestones.

In a separate development, Prestea Sankofa Gold Limited was granted a mining lease for 10 years on May 11, 1992 to mine dumps, tailings and other mining waste materials within the lease area. Since then, Prestea Sankofa has operated a small CIL facility.

During the period 1996 to 1998, Barnex conducted preliminary and advanced work programs on the Prestea property and completed a feasibility study to develop the properties which was carried out by Steffen Robertson & Kirsten and completed in early 1999. As a result of declining gold prices and continuing losses on the operation of the underground mine at Prestea, Barnex decided to close the underground mine in September 1998.

Following the closure, the local branch of the Ghana Mineworkers Union and the Prestea senior staff employees formed PGR and obtained the approval of the Government of Ghana (and Barnex) to explore, develop, mine and produce gold at the existing underground mining operations and also the right to use the existing mill facility.

Although the Company has not yet applied for any formal safety certification for Bogoso, sound industry standard safety systems and workplaces are in place and enviable safety statistics are being achieved.

For instance, Bogoso had a lost time injury frequency rate for 2001 of 0.99 per million manhours. This compares to 9.25 per million manhours for the North American mining industry during the same period.



# 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, 2001

Commission file number 1-12284

# GOLDEN STAR RESOURCES LTD.

(Exact Name of Registrant as Specified in Its Charter)

Canada98-0101955(State or other Jurisdiction of<br/>Incorporation or Organization)(I.R.S. Employer<br/>Identification No.)

10579 Bradford Road, Suite 103 Littleton, Colorado (Address of Principal Executive Office)

**80127-4247** (Zip Code)

(303) 830-9000

(Registrant's telephone number, including area code)

Securities registered or to be registered pursuant to Section 12 (b) of the Act: NONE

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

# Title of Each Class Common Shares

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 X 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. \_\_\_X\_\_

The aggregate market value of the voting stock held by non-affiliates of the Registrant was approximately Cdn \$165 million as of March 22, 2002, based on the closing price of the shares on the Toronto Stock Exchange of Cdn \$2.70 per share.

Number of Common Shares outstanding as at March 22, 2002: 62,109,432

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The Registrant will furnish a copy of any exhibit filed as part of this report to any shareholder of record upon receipt of a written request from such person and payment of the Registrant's reasonable expenses for furnishing such exhibit. Requests should be made to the Secretary of the Registrant at the address set forth on the cover page of this report.

# REPORTING CURRENCY AND FINANCIAL INFORMATION

All amounts in this Report are expressed in United States dollars, unless otherwise indicated. References to (i) "Cdn" are to Canadian dollars, (ii) "FF" are to French francs, and (iii) "Cedi" or "Cedis" are to Ghanaian cedis.

Financial information is presented in accordance with accounting principles generally accepted in Canada. Differences between accounting principles generally accepted in the United States and those applied in Canada, as applicable to the Registrant, are explained in Note 16 to the Consolidated Financial Statements.

#### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Form 10-K contains "forward-looking statements" within the meaning of the United States securities laws. Forward-looking statements include statements concerning plans, objectives, goals, strategies, future events, capital expenditure, exploration efforts, financial needs, and other information that is not historical information. The forward-looking statements contained herein are based on Golden Star's current expectations and various assumptions as of the date such statements are made. Golden Star cannot give assurance that such statements will prove to be correct. These forward-looking statements include statements regarding:

- our operating plans and expectations for the Bogoso/Prestea mine and the surrounding properties
- the potential increase in property interests and the acquisition of additional properties, including the Wassa mine
- our expected concentration on mining operations in Africa and the de-emphasis at this time of exploration unrelated to active mining
- expectations relating to future gold production
- anticipated cash and other operating costs and expenses
- schedules for completion of feasibility studies, mine development programs and other key elements of our business plan
- potential increases or decreases in reserves and production
- the timing and scope of future drilling and other exploration activities
- expectations regarding receipt of permits and other legal and governmental approvals required to implement our business plan, and
- anticipated recovery rates.

Factors that could cause our actual results to differ materially from these statements include, but are not limited to, changes in gold prices, the timing and amount of estimated future production, unanticipated grade changes, unanticipated recovery problems, mining and milling costs, determination of reserves, costs and timing of the development of new deposits, metallurgy, processing, access, transportation of supplies, water availability, results of current and future exploration activities, results of pending and future feasibility studies, changes in project parameters as plans continue to be refined, political, economic and operational risks of foreign operations, joint venture relationships, availability of materials and equipment, the timing of receipt of governmental approvals, capitalization and commercial viability, the failure of plant, equipment or processes to operate in accordance with specifications or expectations, accidents, labor disputes, delays in start-up dates, environmental costs and risks, local and community impacts and issues, and general domestic and international economic and political conditions. See the factors set forth under the caption "Risk Factors" in Item 1 of this Form 10-K.

#### **PART I**

# ITEM 1. DESCRIPTION OF BUSINESS

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 Part I.

#### Overview

We are an international mining company and gold producer. Since 1999, we have sought to move from a primarily exploration focus, with operations in several areas in Africa and South America, to a primarily production focus, concentrating on operations in Ghana. We own a 90% equity interest in Bogoso Gold Limited ("BGL"), which owns the Bogoso gold mine (the "Bogoso Mine") in Ghana, and have recently acquired mineral rights in the adjacent Prestea property. These two properties are now referred to as "Bogoso/Prestea". We have also agreed in principle to purchase the Wassa mine and associated mining rights, located some 35 kilometers from the Bogoso property. We are in the process of selling our interest in the Gross Rosebel project in Suriname to our partner in the project and expect to use the proceeds of this sale and the proceeds of our recent equity financing to provide a portion of the equity base to expand our Ghana operations. Through our 73%-owned subsidiary, Guyanor Ressources S.A. ("Guyanor"), we have interests in several gold exploration properties in French Guiana

# **Business Strategy and Recent Developments**

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 the Bogoso Mine in Ghana. The BGL acquisition provided a source of internally generated cash flow from the mining and processing of near-surface oxide gold ores.

Immediately after purchasing the Bogoso Mine, our focus shifted to the acquisition of additional oxide gold reserves in the immediate vicinity of the Bogoso Mine, which could be processed through the Bogoso mill once the Bogoso Mine reserves were exhausted in late 2001. We were successful in this endeavor acquiring, in mid-2001, the surface mining lease on the Prestea property, which is located adjacent to the Bogoso property.

According to historical records, more than nine million ounces of gold has been produced from the Prestea property since the late 1800s, under several different owners. 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 Bogoso mill. Currently identified gold reserves at Prestea are sufficient to provide non-refractory feed for the Bogoso mill for approximately five years. In addition, refractory sulfide mineralization is also known to exist on the Prestea property and this material will eventually be incorporated into the Bogoso sulfide feasibility study.

Mineral rights to the Prestea surface reserves were acquired from two separate entities, Prestea Gold Resources Limited ("PGR") and Barnato Exploration Limited ("Barnex") both of which have produced gold from the Prestea underground operations in recent years. As a result of our entering into an agreement with PGR in May 2001, PGR surrendered its lease over the Prestea property in June 2001. In June 2001, we entered into a binding agreement with Barnex, whereby we acquired certain subsidiaries of Barnex and Barnex also abandoned its rights to the Prestea property. On June 29, 2001, the Government of Ghana granted BGL a new 30-year mining lease over the surface of the Prestea property, under which BGL has the right to mine the surface resources at Prestea down to a depth of 200 vertical meters. In September 2001, following the completion and acceptance of an environmental impact statement for the Buesichem deposit at the north of the Prestea property, BGL received a mining permit and immediately commenced mining operations. The first Prestea ores were processed through the Bogoso mill in October 2001.

Several 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 several of these potential resources continue. In addition, we are

nearing the publication of a feasibility study to assess the potential of a sulfide gold ore operation to treat the refractory gold ores located on and around the Bogoso and Prestea properties.

In March 2002, BGL reached a new agreement with PGR, the Ghana Mineworkers Union and the Government of Ghana and related parties to form a joint venture, to be managed by BGL, for the assessment and future operations of the Prestea underground mine, which replaces elements of the original agreement negotiated in May 2001. BGL will contribute \$2.4 million to become a 45% joint venture partner, with PGR also holding 45% and the Government of Ghana holding a 10% carried interest. Under the new agreement, the funds provided to PGR will be used to pay arrears of salary and termination benefits to the Prestea underground miners. It is the intent of the joint venture to place the underground operation on care and maintenance pending completion of an assessment, which will include a comprehensive review of the safety and economic viability of the mine, as well as a review of past environmental practices. As long as BGL's interest in the joint venture does not drop below 30%, BGL will manage the joint venture. Additional cash requirements not externally funded will be made through voluntary contributions from the two non-governmental participants in the joint venture and their relative percentage interests will be adjusted to reflect any inequality in such contributions.

In November 2001 we agreed broad terms with Satellite Goldfields Limited ("SGL") and its senior secured creditors, for the acquisition of the Wassa gold mine ("Wassa") in Ghana located 35 kilometers east of Bogoso/Prestea. Broad terms of the agreement, which are subject to governmental and court approvals, include an initial consideration of \$4.0 million and an additional \$5.0 million when and if Golden Star proceeds with development of Wassa using a CIL processing plant. The initial \$4.0 million and the subsequent \$5.0 million would be funded by a debt facility to be provided by Wassa's existing senior secured creditors. The debt would be repaid over a period of four years commencing one year after the completion of the transaction during which time Wassa would be redeveloped as a CIL operation.

Golden Star has also agreed to pay a minimum \$7.00 per ounce royalty from future gold production from Wassa. The royalty rate will increase by \$1.00 for each \$10 increase in the average market price for gold for each quarter above \$280 per ounce up to a maximum royalty of \$15.00 per ounce.

In addition to the governmental and court approvals referred to above, the acquisition is subject to (i) the execution of binding definitive documentation, and (ii) Golden Star completing its funding activities for the Bogoso/Prestea gold mine. Unless otherwise agreed by the parties, closing of the transaction is expected to occur in April 2002.

As at December 31, 2000, the proven and probable reserves at Wassa, as stated by its former owner, Glencar Mining plc, were 14.4 million tonnes grading 1.67 g/t, or 776,000 ounces. We have not completed our detailed investigations and therefore are not in a position to provide our own evaluation of Wassa reserves.

We plan to temporarily place the Wassa operation on a care and maintenance basis while conducting a feasibility study on the redevelopment of Wassa as a 3 million tonne per annum CIL operation. Based on our own preliminary engineering studies for the CIL redevelopment, we expect that an average of about 100,000 ounces of gold per annum at an average cost of \$185 per ounce can be produced at Wassa for a period of six years. The total cost for the CIL feasibility study, construction and commissioning are currently estimated at approximately \$16 million.

We have agreed to sell our interest in the Gross Rosebel project in Suriname ("Gross Rosebel") to our partner in the project, Cambior Inc. in accordance with the following terms: Golden Star will sell its 50% interest in Gross Rosebel to Cambior for a total purchase consideration of \$8.0 million in cash plus a price participation royalty on the first seven million ounces of future gold production from Gross Rosebel. In exchange for Gross Rosebel, Golden Star will receive \$5.0 million cash from Cambior on closing (of which \$3.0 million was received in January 2002) and three deferred payments of \$1.0 million each no later than the second, third, and fourth anniversaries of the closing. Once commercial production begins, Cambior will also pay a price participation royalty, equal to the excess of the average market price for gold for each quarter above a hurdle gold price multiplied by 10% of the gold production for the quarter, less the 2% royalty payable in Suriname. For soft ores, the hurdle gold price will be \$300 per ounce. For hard ores, the hurdle gold price will be \$350 per ounce. As a part of this transaction, we will also transfer to Cambior our interest in the Headley's Reef and Thunder Mountain properties, contiguous to Gross Rosebel, and our 30% interest in the Omai Gold Mine in Guyana. Cambior will concurrently transfer to Golden Star

its 50% interests in the Yaou and Dorlin properties and its 100% interest in the Bois Canon property (all in French Guiana).

Also in 2001, we conducted a first phase exploration program on the Paul Isnard project in French Guiana, which, through Guyanor, we were developing in a joint venture with Rio Tinto Mining and Exploration Limited ("Rio Tinto"). The program results did not indicate the potential to meet Rio Tinto's resource target requirements and Rio Tinto elected to withdraw from the agreement under which it could have earned into a share of the project. Although Guyanor is in discussions with several senior mining companies with respect to a possible exploration joint venture for the project (but has not reached an agreement with respect to any such joint venture), we wrote off the balance of \$6.9 million of deferred exploration costs in the fourth quarter of 2001.

Both the Wassa acquisition and the Gross Rosebel sale are subject to conditions and have not yet closed. Although we currently expect to close both transactions in the second quarter of this year, various factors could cause the closing of either or both transactions to be delayed, could require a renegotiation of certain deal terms or could cause either or both transactions to be abandoned. In particular, with regard to the Wassa transaction, we have not completed our due diligence and there remain other conditions to our obligation to close that have not yet been satisfied. Accordingly, we cannot assure you that these transactions will close as anticipated or at all.

In January 2002, we completed a private placement of 11.5 million units at a price of \$0.49 per unit for gross proceeds of \$5.6 million (\$5.3 million, net). Each unit consists of one common share and one-half of a warrant. Each whole warrant will entitle the holder to the right, for a period of two years, to acquire one further common share at an exercise price of \$0.70. Cash commissions and fees equaled 6% of the gross proceeds and warrants (identical to the unit warrants) equal to 6% of the total common shares issued in the private placement were issued to agents and consultants.

The proceeds from the private placement will be used to contribute to our acquisition and development costs in Ghana. Half of the proceeds from the private placement have been paid directly to Golden Star with the balance having been deposited in escrow. The escrowed funds will become available to us upon (i) the registration of the common shares underlying the units, (ii) the completion of the Cambior transaction, and (iii) the completion of our acquisition of the Wassa property. We expect that these conditions will be met early in the second quarter of 2002, although various factors could delay satisfaction of one or more of these conditions.

Gold exploration remains an element of our overall strategy but we expect our exploration activities in the immediate future to be in support of our gold production operations. Accordingly, we expect to engage in exploration activities principally in areas that are within truckable distance from our Bogoso and Wassa processing facilities where existing data supports a high probability of success. Consistent with this strategy, most of our early and intermediate stage exploration projects have been placed on care and maintenance awaiting a more favorable environment for gold exploration and development

In the future, we intend to act more often as operator of our own discoveries although, to improve shareholder benefits, we may still decide, given the nature and size of a project and its mineralized material, to joint venture projects to larger mining companies that have the technical skills and financial resources to develop and operate large modern mining operations. We will continue to pursue new opportunities and may, if warranted, make selective additional acquisitions of promising properties.

In view of the current gold market environment, we intend to continue to focus on transactions that offer the immediate potential to provide cash flow to fund operations, exploration and development. We will also consider transactions to increase our inventory of exploration properties in West Africa. Various transactions that may be considered include acquisitions of production or development stage mining projects, particularly those opportunities which may exist in our geographical areas of expertise. Transactions involving mergers with other mining and exploration companies may also be considered.

#### Reserves

The following tables present estimated reserves for Bogoso/Prestea as of December 31, 2001. Reserves estimates for both properties have been prepared by qualified members of our staff. While reserve estimates reported below

are the responsibility of the Company, Associated Mining Consultants Ltd, ("AMC") of Calgary, Canada, performed an independent review of Bogoso/Prestea reserves in November 2001 and in their capacity as qualified, independent mineral reserve consultants issued a Qualifying Report which attests to the Proven and Probable reserves estimates as of November 19, 2001. Company personnel subsequently updated AMC's Qualifying Report reserves taking into consideration, materials removed from the mine subsequent to the AMC report and adding additional reserves as new drilling data became available subsequent to AMC's work.

TOTAL BOGOSO/PRESTEA RESERVES at December 31, 2001						
	Tonnes Gold Grade g/t Contained Ounces (Golden Star 's 90 % sh					
Proven Reserves	10,768,645	3.21	1,110,100	999,100		
Probable Reserves	8,327,901	2.68	717,200	645,500		
Total	19,096,546	2.97	1,827,300	1,644,600		

Our Proven and Probable Reserves at December 31, 2001 are compared to Proven and Probable Reserves at December 31, 2000 of 2.46 million tonnes at an average grade of 2.2 g/t, representing approximately 0.172 million ounces of gold.

BOGOSO MINE RESERVES <sup>1</sup> at December 31, 2001				
Tonnes Gold Grade g/t Contained Ounces (Golden Star's 90% share				
Proven Reserves	7,129,795	3.19	731,200	658,100
Probable Reserves 1,425,664 2.88 134,100		120,700		
Total	8,555,459	3.14	865,300	778,800

(1) We have reported our Proven and Probable Reserves for the Bogoso property for year-end 2001 using a \$275 gold price. The reserves are those ore tonnages contained within economically optimized pit envelopes, designed for the oxide, transition and refractory sulfide resources, and using current and predicted mine operating costs and performance parameters. Included in the Proven Reserves category are 1.2 million tonnes of ores in stockpiles on the Bogoso property.

PRESTEA MINE RESERVES <sup>2</sup> at December 31, 2001				
Tonnes Gold Grade g/t Contained Ounces (Golden Star 's 90% share				
Proven Reserves	3,638,850	3.23	378,900	341,000
Probable Reserves	able Reserves 6,902,237 2.64 583,100		524,800	
Total	10,541,087	2.84	962,000	865,800

(2) We have reported our Proven and Probable Reserves for the Prestea property for year-end 2001 using a \$275 gold price. The reserves are those ore tonnages contained within economically optimized pit envelopes, designed for the oxide, transition and primary sulfide resources, and using current and predicted mine operating costs and performance parameters.

The definitions of Proven and Probable Reserves (see glossary of terms) are those prescribed for use in the United States by the Securities and Exchange Commission and set forth in SEC Industry Guide 7. These definitions are

substantially the same as those applied in Canada as set forth in National Instrument 43-101. The conversion from resources into reserves has included due regard to the effects of mining losses and dilution

#### **Mineralized Material**

Mineralized material has been estimated by the Company or by Cambior, our partner in various properties, as indicated below. See "Item 2. Description of Properties" for a description and report of mineralized material for each property and see "Risk Factors" below for a discussion of factors that could affect the estimates of mineralized material.

Mineralized material does not represent reserves, however the Proven and Probable Reserves shown above have been included in the estimates for Bogoso/Prestea shown below. Even though drilling and trenching indicate sufficient tonnage and grade to warrant further exploration or development expenditures, the mineralized material does not qualify under the United States Securities and Exchange Commission standards as being commercially minable until further drilling, metallurgical work and other economic and technical feasibility factors based upon such work are resolved. We report mineralized material only if the potential exists for reclassification to reserves following additional drilling and/or final technical, economic, and legal factors have been determined for the project.

#### MINERALIZED MATERIAL (Including Proven and Probable Reserves) at December 31, 2001

	Tonnes	Tonnes	Gold Grade
Project	(100%)	(Golden Star 's share)	g/t
Bogoso/Prestea (oxide) 1	5,477,000	4,929,300	2.4
Bogoso/Prestea (Transition) <sup>1</sup>	974,000	876,600	3.0
Bogoso/Prestea (Primary) <sup>1</sup>	7,853,000	7,067,700	2.9
Bogoso/Prestea (Refractory Transition) <sup>1</sup>	2,146,000	1,931,400	3.3
Bogoso/Prestea (sulfide) <sup>1</sup>	12,022,000	10,819,800	3.6
Gross Rosebel <sup>2</sup>	25,166,000	12,583,000	1.7
Yaou and Dorlin <sup>3</sup>	13,800,000	6,900,000	2.1
Paul Isnard <sup>4</sup>	6,178,000	4,485,000	2.8

- (1) Estimates of mineralized material <u>include</u> the proven and probable reserves detailed above. Mineralized material not converted to proven and probable reserves has had an economic grade cut off applied using a \$300 per ounce gold price and economic constraints that are believed to be realistic. See "Item 2. Description of Properties" for more detail information on each project
- (2) At December 31, 2001, Cambior announced that additional reserve definition work during 2001 had allowed a reclassification of Gross Rosebel mineralized material to Probable Reserves based on a \$300 gold price. Due to the pending sale of Golden Star's 50% share of Gross Rosebel to Cambior, Inc. (See "Guiana Shield Transaction" discussion in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.) Golden Star has opted to leave the Gross Rosebel material with a mineralized material designation. Following completion of the pending Guiana Shield Transaction, Cambior will own 100% of Gross Rosebel.
- (3) As reported by Cambior as of December 31, 2000 and based upon \$300 gold price. Following completion of the pending Guiana Shield Transaction Golden Star and Guyanor will together own 100% of the Yaou and Dorlin properties.
- (4) Results estimated by the Company in February 1999 and based on a \$325 gold price.

### **Employee Relations**

As of March 15, 2002, we had 594 full-time employees and contractors, a 4% increase from the 573 people employed at the end of 2000. Six employees are based at the headquarters in Littleton, Colorado. Approximately 529 full-time employees and 47 full-time contractors are working for BGL. At March 15, 2002, Guyanor employed 11 full-time employees in French Guiana and we had one employee in Suriname.

#### **Customers**

As is common in the gold mining business, all of our gold production is sold at the prevailing spot price on the date of the shipment, to a single customer on an annually negotiated contract. Per 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. 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, are 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. Concurrent with the amalgamation, the common shares of Golden Star were consolidated on a one-for-two basis. All references to "common shares" in this document mean the common shares of Golden Star after the amalgamation and the share consolidation. The fiscal year of the Company ends on December 31 of each year.

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.

### RISK FACTORS

READERS SHOULD CAREFULLY CONSIDER THE RISK FACTORS SET FORTH BELOW.

## **Financial Risks**

# We currently have limited liquidity and capital resources.

We have limited financial resources. At December 31, 2001, we held cash and short-term investments of approximately \$0.5 million as compared to cash and short-term investments of \$1.0 million as at December 31, 2000. Our only internal source of finance is operational cash flows from Bogoso/Prestea. In addition to funds required to acquire additional reserves, the execution of our business strategy going forward will require significant expenditures, including debt service on the \$2.4 million aggregate principal amount of our 7.5% subordinated convertible debentures. We expect that these expenditures will exceed revenues and free cash flows generated by BGL and our other operations and therefore will require additional outside capital. Historically low gold prices during the past five years have adversely affected our ability to obtain financing. 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. As a result, we may lose our interest in some of our properties and may be forced to sell some of our properties.

The loss of any of our interests in exploration and mining properties could give rise to write-offs of any capitalized costs and this would negatively impact the results of operations. The impact would also be shown in reduction of assets in our balance sheet, which in turn would impair our ability to raise additional funds.

# Our business is substantially dependent on gold prices, which have been low during the last several years

The price of our common shares and our business plan have been, and may in the future be, significantly adversely affected by declines in the price of gold. Gold prices often vary widely and are affected by numerous factors beyond our control, such as the sale or purchase of gold by various central banks and financial institutions, inflation or deflationary conditions, 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.

# We continue to experience substantial losses.

We reported net losses of \$20.6 million in 2001, \$14.9 million in 2000, \$24.4 million in 1999, \$22.2 million in 1998, and \$26.6 million in 1997, and may continue to incur losses in the future. Future operating losses may make financing our operations and our business strategy, or raising additional capital, difficult or impossible, materially and adversely affecting our operations. The losses of the last three years are largely related to the write-off of exploration and acquisition costs incurred in periods prior to 1999.

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

We have total debts and liabilities as of December 31, 2001 of \$22.6 million, including the amount outstanding under our convertible debentures, amounts payable to financial institutions, amounts due the Sellers of BGL, environmental rehabilitation liability and other payables. In addition, our liabilities are expected to 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 capitalization.

# We may have to restate estimates of mineralized material.

There are numerous uncertainties inherent in estimating proven and probable reserves and mineralized material, including many factors beyond our control. The estimation of reserves and mineralized material is a subjective process and the accuracy of any such estimate is a function of the quantity and quality of available data and of the assumptions made and judgments used in engineering and geological interpretation. 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 estimates.

Golden Star's reserve policy calls for an internal or external review of all estimates of mineralized material and reserves by a qualified person recognized professionally as competent for this type of review. These controls are aimed at insuring that our estimates of mineralized material and reserves are made in accordance with the best practices in the industry. We cannot, however, guarantee that revisions to our estimates will not be required in the future.

## Low gold prices may require a hedging program against gold production at the Bogoso/Prestea Mine.

BGL is constantly reviewing whether or not, in light of the potential for gold prices to fall, it would be appropriate to establish a hedging program against the production of gold to protect against further gold price decreases but to date, we have not decided to implement such a program. The implementation of any hedging program may not, however, serve to protect adequately against declines in the price of gold. In addition, if unsuccessful, the costs of any hedging program may further deplete BGL's financial resources.

Although a hedging program may protect us from a decline in the price of gold, it may also prevent us from benefiting fully from price increases. For example, as part of a hedging program, we may be obligated to sell gold at a price lower than the then-current market price.

# We are subject to fluctuations in currency exchange rates.

We currently maintain most of our working capital in United States dollars or United States dollar denominated securities and convert funds to foreign currencies as payment obligations become due. In addition, we currently have future obligations that are payable in Euros, and receivables collectible in Euros. Finally, a significant portion of the operating costs at Bogoso/Prestea 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.

We currently do not hedge against currency exchange risks. 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.

# **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 sulfide mining feasibility study for the Bogoso property in 2001 and its subsequent review by a qualified, independent mineral reserves consultant, the sulfide material on the Bogoso property and on various portions of the Prestea properties has been included in our Proven and Probable reserves at December 31, 2001. 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 in the required amounts and funding may be unavailable, whether from internal or external sources, in the necessary amounts and on acceptable terms. In addition, 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. We do not currently anticipate start-up of sulfide processing operations prior to 2007, after currently known oxide and non-refractory ores are exhausted.

Other things being equal, declining gold prices reduce our preexisting estimates of mineralized material and reserves and can result in delays in development until we can make new estimates using lower gold prices and determine new potential economic development options under the lower gold price assumptions.

In addition to impacting our reserve estimates and 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.

# **Operational hazards and responsibilities**

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
- inability to attract competent professionals and managers
- 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, monetary losses and possible legal liability. We may incur liability as a result of pollution and other casualties. The occurrence of such events can result in delayed production, increase in production costs or liability. Paying compensation for obligations resulting from such liability may be very costly and could have an adverse effect on our financial position.

# **Compliance with environmental regulations**

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, earnings, expenditures 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, just as estimated production dates may be delayed materially, in each case. Any such events can materially and adversely affect our business, financial condition, results of operations and cash flows.

# The development and operation of our mining projects involves numerous uncertainties

We expect that many of our planned mining projects will 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 such development projects is based on many factors such as:

- estimation of reserves
- metallurgical recoveries
- future gold prices, and
- 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. As a result, the risks and uncertainties attached to mine development activities are very high.

Any of the following events, among others, could cause the profitability of a project to be impaired or could cause the project to no longer be economically feasible:

- 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
- processing and refining facilities
- availability of economic sources of energy
- 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 factors.

The occurrence of any of these events could materially and adversely affect the operations or further development of a project and as a result our business, financial condition, results of operations and cash flow.

#### Our insurance coverage may be insufficient.

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 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 Risks**

# A limitation on the ability of our operating subsidiaries to make distributions to us could adversely affect the funding our operations or limit our ability to make distributions to our shareholders.

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 or to make distributions to our shareholders. Any such limitations, or the perception that such limitations may exist now or in the future could also 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

taxes

water disposal

toxic substances

mine safety

development

exports

• imports

labor standardsoccupational 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. 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 would 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, Wassa and the **Prestea Underground Joint Venture.**

The Ghanaian government currently has a 10% carried interest in BGL and will have a similar interest in the entities that will own the Wassa mine and the Prestea underground joint venture. The Ghanaian government also has or will have the right to acquire up to an additional 20% equity interest in BGL and the Wassa entity for a price to be determined by agreement or arbitration. We cannot assure you that the government will not seek to acquire an additional equity interest in the mine, 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 BGL and amounts available for reinvestment or distribution

# We are subject to special 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. The range and diversity of the laws and regulations are such that we cannot adequately summarize them in this report. For countries where we have exploration or development stage projects we would 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.

# <u>Illegal mining occurs on our properties, is difficult to control, can disrupt our business and can expose us to liability.</u>

In French Guiana, Suriname and Ghana, artisanal miners have been illegally working on our properties 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 damages for which we could potentially be held responsible.

#### **Market Risks**

### The market price of our stock and unit warrants may experience volatility and could decline significantly.

Our common shares are listed on the Toronto Stock Exchange and also trade in the United States on the Nasdaq OTC Bulletin Board. Securities of micro and small-cap companies have in the past experienced substantial volatility, 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;
- a substantial decline in our stock price that persisted for a significant period of time could cause our securities to be delisted from the Toronto Stock Exchange, further reducing market efficiency.

As a result of any of these factors, the market price of our stock 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.

# ITEM 2. DESCRIPTION OF PROPERTIES

Information in Item 2 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 Part I.

#### Introduction

Our most significant projects are located in Ghana (Africa), where we own the Bogoso and Prestea gold properties. The Bogoso property includes the Bogoso mill, administrative facilities and several pits which we mined from 1999 to late 2001. The Bogoso property contains 6.7 million tonnes of sulfide ore reserves grading 3.58 g/t gold and contains 774,000 ounces of gold, which we anticipate will be mined after 2006, once the oxide and other non-refractory ores have been mined at the adjoining Prestea property and from the Bogoso Mine.

The Prestea property, which adjoins the Bogoso property, was acquired in 2001 and contains 10.5 million tonnes of ore grading 2.84 g/t gold and contains 962,000 ounces. Ore from the Prestea property is hauled by truck to the Bogoso mill for processing.

In addition to the operating properties listed above we have a 30% ownership in an operating gold mine in Guyana known as the Omai mine (which is in the process of being sold to Cambior Inc., the majority owner) and also own several exploration properties in Ghana, and Suriname, French Guiana and Guyana in South America, as indicated in Figures 1 and 2 below. These projects are situated in geologic domains known as greenstone belts, which are ancient volcanic-sedimentary rock assemblages. Greenstone belts are known to be favorable geologic environments for gold mineralization and account for a significant proportion of the world's gold production, (e.g., the greenstone belts of the Canadian Shield in Eastern Canada, the Pilbara and Yilgarn Blocks of Western Australia, the greenstone belts of East and West Africa and the Guiana and Brazilian Shields of South America).

All of our operating and exploration properties are located in developing countries, with the exception of French Guiana, which is legally a part of France. There are certain business and political risks inherent in doing business in developing countries. In particular, the regulatory framework for conducting mining and exploration activities in these countries, including the tax and general fiscal regimes and the manner in which rights and title to mineral properties are established and maintained, are often uncertain, incomplete, in a state of flux or subject to change without notice. Further, in many of the countries in which our operating and exploration projects are located, it may not be economically feasible to develop a commercial mine unless special tax or other fiscal and regulatory concessions are obtained from the applicable governmental and regulatory authorities. Such concessions are typically sought in a mineral agreement (also known as foreign investment agreements and establishment agreements). A mineral agreement thus serves to establish the legal and financial framework pursuant to which mining will take place in countries where such framework might be otherwise unclear, uncertain or not commercially viable. There can be no assurance, however, that the Company will be able to execute or enforce satisfactory mineral agreements or obtain satisfactory political risk insurance on commercially reasonable terms for any or all of its properties. Consequently, the Company may have to abandon or relinquish otherwise valuable mineral rights if it determines that it will not be able to profitably exploit any discovery under existing laws and regulations.

Figure 1.

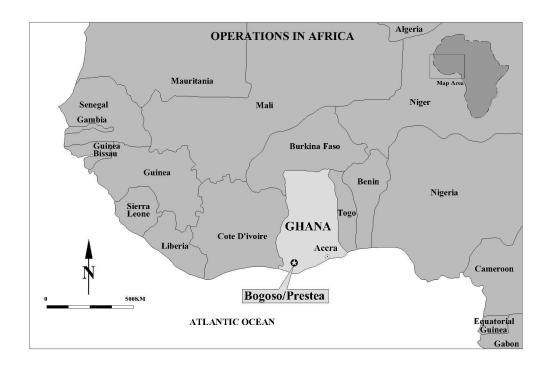
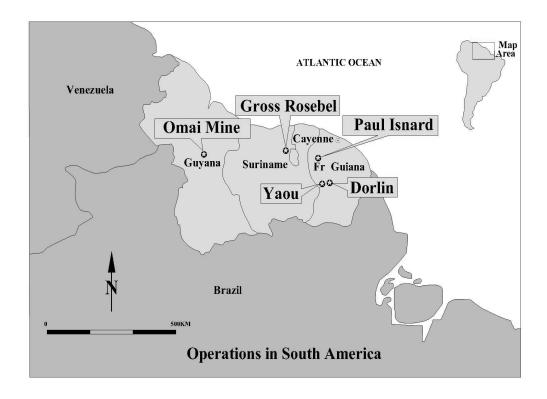


Figure 2.



# **Property Status Table as of December 31, 2001:**

<b>Property</b>	Type of Interest	Expiration Date	<u>Renewal</u>	Financial Obligation	<u>Status</u>	Comments
Bogoso	90% equity interest in BGL	8/21/17 8/16/18	N/A	N/A	Operating mill facility	
Akropong Trend	Option agreements	Various	Agreement of the parties	Various		Exploration stage
Prestea	90% equity interest in BGL	7/6/31	N/A	N/A	Operating Mine	Ore from Prestea processed at Bogoso
Omai	30% equity interest in OGML	N/A	N/A	N/A	Operating Mine	(5)
Eagle Mountain	30% indirect interest through OGML (1)	N/A	N/A	N/A	Care and maintenance.	Exploration stage (5)
Gross Rosebel	Right of Exploration (2)	Application for extension pending	The right of exploration remains legally in force until a decision on the right of exploitation has been made	N/A	Care and maintenance	Advanced exploration (5)
Dorlin	Type A Exploration Permit (3)	3/1/06	Renewable for up to 10 years	FF7,000	Care and maintenance	Exploration stage
Yaou	Type A Exploration Permit (3)	3/1/06	Renewable for up to 10 years	FF5,000	Care and maintenance	Exploration stage
Paul- Isnard	8 Concessions (4)	12/31/18	Renewable for an additional 25 years	US\$4,765/ FF30,275	Care and maintenance	Exploration stage
	Type A Permit (4)	12/1/02	Renewable for up to 10 years	US\$2.9M/ FF17.3M	Care and maintenance	Exploration stage

- (1) The Eagle Mountain interest is owned by OGML.
- (2) 50% owned by Golden Star and 50% owned by Cambior Inc., pending the sale of our interest to Cambior
   (3) 50% owned by Guyanor and 50% owned by Cambior Inc., pending the sale by Cambior of its interest to Golden Star
- (4) 100% owned by Guyanor, a 73% owned subsidiary of Golden Star
   (5) Pending sale to Cambior Inc. See "Guiana Shield Transaction" discussion in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations below.

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

	Acquisition, Deferred Exploration and Development Costs as at 12/31/00	Capitalized Exploration Expenditures in 2001	Capitalized Acquisition Expenditures in 2001	Joint Venture Recoveries in 2001	Property Abandon- ments and Adjustments in 2001	Acquisition, Deferred Exploration and Development Costs as of 12/31/01 (4)
SURINAME	*****					
Gross Rosebel (1)	\$15,818	\$ 691	\$ -	\$(340)	\$ (8,103)	\$ 8,066
Sub-total	15,818	691	-	(340)	(8,103)	8,066
FRENCH GUIANA (Guyanor Ressources S.A.) (2) Paul Isnard / Eau Blanche	5,827	1,037	-		(6,864)	<u>-</u>
Sub-total	5,827	1,037	-	-	(6,864)	-
AFRICA (Bogoso Gold Limited) (3) Riyadh	239	35				274
Pampe Flagbase	239	330	-	-	-	330
Bogoso Sulfide	2,608	964				3,572
Other Bogoso Area Projects	2,000	38	_	_	_	38
Sub-total	2,847	1,367				4,214
OTHER	2,047	43		_	(43)	7,217
TOTAL	\$24,492	\$3,138	\$ -	\$(340)	\$(15,010)	\$12,280
TOTAL	ΨΔ¬,¬/Δ	Ψ5,150	Ψ	Ψ(5+0)	Ψ(12,010)	Ψ12,200

- (1) Subject to sale to Cambior. See "Guiana Shield Transaction" discussion in Item 7.
- (2) Approximately 73% owned by Golden Star.
- (3) A 90% owned subsidiary of Golden Star.
- (4) Our holdings include ownership interests, royalty interests, leases, options and joint venture interests in varying percentages.

# THE BOGOSO/PRESTEA GOLD MINES

BGL is the owner of the Bogoso and Prestea Mines (hereafter called "Bogoso/Prestea"), located on the Ashanti Trend in the Republic of Ghana. Golden Star currently owns 90% of the common shares of BGL, having increased its ownership from 70% to 90% during 2001 by purchasing a 20% interest from Anvil Mining NL ("Anvil"), a public exploration and development company. The Government of Ghana controls 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 acquired this interest for no consideration and is not required to contribute any funds to pay any BGL expenses.

Ghana is situated on the West Coast of Africa, approximately 750 kilometers north of the equator on the Gulf of Guinea, and Accra, the capital city of Ghana, and 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 km<sup>2</sup> and the topography is relatively flat. Ghana has a tropical climate with two rainy seasons and two dry seasons.

The Government of Ghana issued a gold prospecting license to BGL on November 7, 1986, granting BGL the right to prospect for gold in a prospecting area of approximately 148 square kilometers for a three-year term commencing on May 12, 1986. On August 21, 1987, the Government of Ghana granted BGL a 30-year mining lease giving BGL the exclusive right to work, develop and produce gold in a mining area of 50 square kilometers within this prospecting area. On August 16, 1988, the Government of Ghana granted BGL a second 30-year gold mining lease covering an additional 45 square kilometers area adjacent to the first mining area. In June 2001, BGL was granted the 30-year surface mining lease on the Prestea gold property by the Government of Ghana. The Prestea property is located immediately south of, and adjacent to the existing Bogoso property, and covers an aggregate area of 129 square kilometers. Mining of non-refractory gold ore began at the Prestea Mine in the fourth quarter of 2001 to

replace ores from the Bogoso Mine. We expect that all of the non-refractory ore from the Prestea Mine will be processed through our Bogoso mill.

Under the above three mining leases (the "Mining Leases"), BGL holds gold mining rights in a mining area totaling 224 square kilometers, subject to the payment of nominal annual rents.

Bogoso/Prestea consists of an operating gold mine and a mill facility owned by BGL. Until the fourth quarter of 2001, BGL mined ore from several open pits and processed the ore at a processing plant that it built on the Bogoso property in 1991. The plant uses conventional CIL technology to extract gold from the ore and has been producing approximately 100,000 ounces of gold per year since it was built.

Bogoso/Prestea is located in western Ghana approximately 35 kilometers northwest of the town of Tarkwa from where it can be reached by accessible roads. A paved road runs down most of the 18.5 kilometers 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 km to the north. The mining areas are connected by paved and gravel haul-roads to the treatment plant.

#### The Bogoso Acquisition

On September 30, 1999, we and Anvil acquired 70% and 20%, respectively, of the common shares of BGL. The Government of Ghana retained a 10% equity interest in BGL. The total acquisition cost including initial payments, future payments, financing costs and administrative costs was \$14.7 million. The sellers received \$6.5 million cash at September 30, 1999 and agreed to receive both contingent and non-contingent additional payments in the future. As of the date of this report, all non-contingent payments have been made.

A \$2.0 million reserve acquisition linked payment due the sellers is triggered if minable reserves equivalent to 50,000 ounces of gold or greater are acquired elsewhere in Ghana for processing at the Bogoso mill before September 30, 2001. The acquisition of the surface mining lease at the Prestea property, with its contained reserves in excess of 50,000 ounces may have triggered the reserve acquisition payment. Pending the outcome of discussions with the sellers, we have accrued a \$2.0 million current liability for this item.

We are required to pay the sellers an additional \$5.0 million (escalated at LIBOR) on the first anniversary of the commencement of treatment of sulfide ore at the Bogoso Mine, which we presently expect by no earlier than 2006. Due to the contingent nature of this obligation, the Company has not yet recorded a liability. We expect that the \$5.0 million liability would be recorded if and when a decision to proceed with development of the sulfide project is made.

We are also required to make production related payments to the provider of the credit facility arranged for, but not used to effect, the acquisition of BGL in 1999. During the first 72 months following the September 30, 1999 acquisition, the Company is required to pay \$0.25 million for every continuous 12- month period wherein more than 75,000 ounces of gold is produced from the Bogoso Mine. Based on the Bogoso Mine's proven and probable reserves in 1999, the Company accrued \$0.5 million for the two years expected production life of the Bogoso Mine. The first payment due under this agreement was scheduled for payment on September 30, 2001 and was paid in January 2002. A second and final payment is now scheduled for September 30, 2002. Also in connection with this credit facility, we issued to the credit provider three-year warrants to acquire 1.5 million common shares of the Company. All of these warrants were exercised in May 2001.

In June 2001 we purchased Anvil's 20% share of BGL thereby raising our ownership to 90% from 70%. In consideration of it's holding, Anvil received 3,000,000 shares of Golden Star common stock and we agreed to cancel our note receivable from Anvil, which stood at \$1.9 million immediately prior to the transaction. The stock and note together brought the total purchase price of Anvil's 20% interest to \$2.9 million and resulted in an increase in mining property assets of \$1.4 million.

#### The Prestea Acquisition

A surface mining lease for the Prestea property was granted to us by the Government of Ghana on June 29, 2001, following extended negotiations with PGR, 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, Golden Star issued to Barnex 3,333,333 common shares and 1,333,333 warrants to subscribe for Golden Star common shares at a price of \$0.70 per share for three years. In addition, Golden Star will 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, 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

Golden Star also paid \$2.1 million in cash to PGR, of which \$1.3 million was paid to PGR during 2001 and another \$0.8 million payment was made in January 2002.

The total cost of acquiring the Prestea mine during 2001 was \$6.8 million. This includes \$2.2 million for the Golden Star stock and warrants issued to Barnex, \$1.3 million of cash paid to PGR, \$2.0 million for the contingent liability to the Sellers of BGL which may have been triggered by obtaining the Prestea surface lease, \$0.7 million of preproduction development costs and approximately \$0.6 million in transactions costs. In addition to the \$6.8 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 from Anvil during 2001, will be included in the new Prestea amortization base, bringing the total amortizable cost basis to \$8.6 million.

On June 29, 2001, the Government of Ghana granted PGR a mining lease over the underground portion of the Prestea property, below a depth of 200 vertical meters (below surface). Under the agreement between PGR and BGL, BGL had an option to acquire up to a 45% interest in PGR, by making an option payment to PGR of up to \$2.4 million.

In March 2002, PGR and BGL agreed to terminate the above option agreement in favor of a new agreement between PGR, BGL, the Ghana Mineworkers Union and the Government of Ghana and related parties to form a joint venture, to be managed by BGL, for the assessment and future operations of the Prestea underground mine. BGL will contribute \$2.4 million to be a 45% joint venture partner, with PGR also holding 45% and the Government of Ghana holding a 10% carried interest. Under the agreement, the funds provided to PGR will be used to pay arrears of salary and termination benefits to the Prestea underground miners. It is the intent of the joint venture to place the underground operation on care and maintenance pending completion of an assessment, which will include a comprehensive review of the safety and economic viability of the mine, as well as a review of past environmental practices. As long as BGL's interest in the joint venture does not drop below 30%, BGL will manage the joint venture. Additional cash requirements not externally funded will be made through voluntary contributions from the

two non-governmental participants in the joint venture and their relative percentage interests will be adjusted to reflect any inequality in such contributions.

# Government of Ghana Special Rights

The Government of Ghana is entitled to acquire up to an additional 20% interest in BGL. If the Government of Ghana wishes to exercise this right, it must give reasonable notice to BGL. It must also pay such purchase price for the additional 20% interest as the Government of Ghana and BGL may agree on 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 Centre for the Settlement of Investment Disputes. The Government of Ghana may also acquire further interests in BGL on terms mutually acceptable to the Government and BGL.

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 may agree. The special share will constitute a separate class of shares with such rights as the Government of Ghana and BGL 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 has 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. The purchase price will be such price as the Government of Ghana and BGL 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 sells gold in accordance with certain procedures for selling gold approved by the Bank of Ghana.

#### Rovalties

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. The Government of Ghana levies a royalty on BGL based on the profitability of its mining operations. The royalty is determined by the application of an operating ratio expressed in terms of the percentage that the operating margin bears to the value of gold from mining operations in every year. The total royalty paid in 2001 was \$0.7 million or 3% of revenues and the royalty paid in 2000 was \$0.9 million or, 3% of total revenues.

For the fourth quarter of 2001, \$0.3 million of royalties were paid to Barnex per the Barnex royalty as described above.

#### Geology of the Bogoso/Prestea Mine

The Bogoso/Prestea concessions lie within the Eburnean Tectonic Province (1,800-2,166 Ma) in the West African Precambrian Shield. The palaeoproterozoic 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 15km from 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.

Gold deposits in the Tarkwaian sequence include Teberebie, Abosso, Tarkwa, Iduapriem and Wassa.

In the Bogoso area, the faulted contact zone is known as the "Main Crush Zone" and passes through the central part of the Bogoso Mine for its entire 18.5-kilometer concession 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 the Bogoso Mine 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.

The Prestea concession covers a 22 km stretch of the Ashanti Trend located immediately south of the Bogoso concession. Within the concession, the fault belt comprises an anastomosing network of faults with a dominant set of three or more northeasterly (40-60°) 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

Gold was first commercially mined at the Bogoso Mine in the early 20th century. In 1935, Marlu Gold Mining Areas Ltd. started mining high-grade oxide ore from a series of open pits extending south from Bogoso North to Buesichem, just south of the Bogoso Mine. Marlu also mined a small amount of ore from underground operations at Bogoso North, Marlu and Bogoso South. According to BGL's records, 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 BV, then a unit of the Royal Dutch Shell group, took control of the Bogoso Mine in the late 1980's. The 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.

Billiton encountered serious operational difficulties with the fluid bed roaster, which did not function as anticipated because the sulfur level in the concentrate was less than expected and because the clay content of the feed was

higher than expected. Mechanical problems also occurred. As a result, Billiton closed the flotation circuit and roaster in early 1994. Following closure of the roaster, Billiton focused the Bogoso operations on oxide ore. The CIL plant has a capacity of approximately 2.0 million tonnes of oxide ore per year. However, only a few months of oxide ore were available at that time. Basic exploration has been successful in adding to the available quantity of oxide ore and the mine has operated as an oxide-only operation since 1994. Operating cash flows funded all the exploration costs.

In the last two years as sources of oxide feed to the mill started to run out, the mill was upgraded to allow processing of transition ores. The upgrades include a spirals gravity recovery section, coupled with an intensive cyanide leach circuit, to recover free gold from the transition ores.

## Historical Mining Operations at Prestea

Mining has been conducted at Prestea for more than 125 years, primarily as an underground operation. There has also been limited open cast mining (small-scale artisan miners) on the property. From 1873 to 1965, the current Prestea concession comprised a number of different licenses operated by independent mining companies, which, in 1965, were amalgamated by the post-independence government into Prestea Goldfields Limited, under the aegis of the State Gold Mining Corporation ("SGMC"). Production declined due to lack of sustained investment, and the mine operated at a loss. In 1985, the Government of Ghana secured a World Bank loan to rehabilitate the SGMC mines, but after three years of continued losses, the decision was taken to divest the operation as part of the Economic Recovery Program.

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

However, owing to the declining gold price and continued financial losses, BPL terminated its management role of the underground mining operation in September 1998, and in accordance with provisions in the PDA, elected to shut down the underground workings. This action was opposed by the Prestea workforce and managers, who pooled their statutory redundancy payments to form their own company, PGR, to operate the mine. They were granted a 6 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 JCI lease over the Prestea concession, and formally awarded it to PGR. This was followed by extensive 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 concession, one being for surface rights down to a depth of 200m below general ground elevation (an elevation of approximately 150m below sea level), and one for all mineralisation below the 200m 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.

In March 2002, as described in The Prestea Acquisition above, BGL reached an agreement with PGR, the Ghana Mineworkers Union and the Government of Ghana to form a joint venture, to be managed by BGL, for the assessment and future operations of the Prestea underground mine. BGL will contribute a total of \$4.5 million (consisting of \$2.4 million payable to the joint venture and \$2.1 million that has already been paid to PGR) to become a 45% joint venture partner, with PGR also holding 45% and the Government of Ghana holding a 10% carried interest.

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. It is worth recording that total gold production from the Prestea area since recorded mining commenced in the 1880s 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, which is owned and operated by Ashanti Goldfields Company Limited.

#### Production

Gold production from the existing Bogoso mill from start up in 1991 through 2001 has totaled 1,102,984 ounces. Gold production from January to December 2001 was 87,936 ounces, compared to 108,643 ounces in 2000. This 19% decrease in gold production for 2001 compared to 2000 was directly attributable to the lower gold recoveries achieved when operating on sustained transition ore processing runs.

Comparisons with previous years are shown below:

	Gold Produced	Cash Cost (exc.	Ore Tonnes Milled	Ore Grade	Recovery	Throughput
	Troduced	Royalties)	Willed			
	Ounces	\$/oz	Tonnes	g/t	%	tpd
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
1999	130,645	190	2,156,858	2.31	81.4	5,958
1998	122,585	215	2,026,804	2.19	85.8	5,553
1997	108,186	235	1,908,506	2.05	85.9	5,229

Quarterly production statistics for the Bogoso Mine for 2000 and 2001 are as follows:

	2001					
	First	Second	Third	Fourth	Total / Average	
	Quarter	Quarter	Quarter	Quarter	2001	
Ore milled (t)	509,276	536,118	485,645	567,126	2,098,165	
Rate (t/day)	5,659	5,891	5,279	6,164	5,748	
Grade (g/t)	2.82	2.40	3.69	1.98	2.69	
Recovery (%)	44.0	56.4	36.4	70.5	49.6	
Gold Production (oz)	17,811	24,695	20,825	24,605	87,936	
Cash cost of production (\$/oz)	267	280	268	238	263	

	2000					
	First	Second	Third	Fourth	Total / Average	
	Quarter	Quarter	Quarter	Quarter	2000	
Ore milled (t)	510,537	529,701	580,413	518,628	2,139,279	
Rate (t/day)	5,610	5,821	6,309	5,637	5,845	
Grade (g/t)	2.70	2.84	2.28	2.48	2.56	
Recovery (%)	69.4	63.1	64.1	60.0	64.4	
Gold Production (oz)	29,942	31,606	27,899	19,195	108,643	
Cash cost of production (\$/oz)	188	187	211	236	201	

Prior to the fourth quarter of 2001, all ore feed to the process plant originated from pits within the Bogoso concession. During the fourth quarter of 2001, ore feed started to come from the Buesichem pit on the Prestea concession, and by December 2001, no more feed was originating from the Bogoso concession. Overall for the quarter, only 10% of total plant feed came from the Bogoso concession.

The combined Bogoso/Prestea mining operation is expected to produce approximately 134,000 ounces of gold during 2002, at a total cash cost, before royalties, of approximately \$175 per ounce. Mill throughput is budgeted at approximately 5,810 tonnes per day of ore. Head grades are anticipated to average 2.46 g/t with a budgeted gold recovery of 79.6%. During 2002, the stripping of waste is expected to result in a waste to ore ratio of approximately 3.38:1.

#### Reserves

We have reported Proven and Probable Reserves for year-end 2001 using a \$275 gold price. The reserves are those ore tonnages contained within economically optimized pit envelopes, designed for the oxide, transition and refractory sulfide mineralized material, for the Bogoso Reserves, and for oxide, transition, primary sulfide and refractory sulfide mineralized material for the Prestea Reserves. Current and predicted mine operating costs and performance parameters have been used in the reserve estimation exercise. Our Proven and Probable Reserves at Bogoso/Prestea on December 31, 2001 stood at 19.1 million tonnes at an average grade of 2.97 g/t, representing approximately 1.83 million ounces of gold. This is compared to Proven and Probable Reserves at December 31, 2000 of 2.5 million tonnes at an average grade of 2.2 g/t, representing approximately 0.17 million ounces of gold. The qualified person responsible for supervising the estimation of reserves for BGL is Mr. Dave Alexander, Chief Mining Engineer. 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 substantial increase in our reserve base is the result of two significant events that occurred during 2001: Firstly, in June 2001, our subsidiary BGL was granted a surface mining lease over the adjoining Prestea concession, to a vertical depth of 200m. This concession has been extensively drilled in the past, and test work carried out on samples of mineralized material has indicated that the material can be successfully treated through BGL's current process plant. These resources have therefore been categorized as reserves, and incorporated into BGL's current mining plan.

Secondly, the final results from the metallurgical test work carried out on samples of refractory sulfide material from below the existing Bogoso pits, demonstrated and confirmed that the material was suitable to bio-oxidation process methods to recover the contained gold. A feasibility study, carried out under the auspices of consultants Steffen Robertson and Kirsten (SRK), has been taken to an advanced stage, including pit designs, capital and operating costing, and economic analyses. The resultant mineralized material within the pits has consequently been moved from a resource classification into a reserve category.

The conversion from the mineralized material into the reserves has been done with due regard of the effects of mining losses and dilution.

The following tables present estimated reserves for the Bogoso/Prestea mines as of December 31, 2001. Reserves estimates for both properties have been prepared by qualified members of our staff. While reserve estimates reported below are the responsibility of Golden Star, Associated Mining Consultants Ltd, ("AMC") of Calgary, Canada, performed an independent review of the Bogoso/Prestea reserves in November 2001 and in their capacity as qualified, independent mineral reserve consultants issued a Qualifying Report which attests to the Proven and Probable Reserves estimates at Bogoso/Prestea as of November 2001. Company personnel subsequently updated AMC's Qualifying Report reserves taking into consideration, materials removed from the mine subsequent to the AMC report and adding additional reserves as new drilling data became available subsequent to AMC's work. See "Item 2. Description of Properties" for a description of the Bogoso/Prestea Mine and "Risk Factors" for a discussion of factors that could affect the following reserve estimates.

**Total Reserves** (Including Stockpiles)

	December 31, 2001				December 31, 2000			
1								
	Proven &				Proven &			
	Probable	Grade	Contained		Probable	Grade	Contained	
	Reserves	(g/t)	Gold (oz)		Reserves	(g/t)	Gold (oz)	
	(tonnes)				(tonnes)			
Oxide	5,351,395	2.07	356,340		1,549,000	1.17	58,289	
Transition	834,295	2.78	74,457		-	-	-	
Primary	3,600,781	3.29	380,305		-	-	-	
Refractory	1,987,397	3.01	192,582		916,000	3.82	114,074	
Transition								
Sulfide	7,322,678	3.50	823,642		-	-	-	
Total	19,096,546	2.97	1,827,326		2,465,000	2.19	172,363	

Oxide, Transition and Primary Ores are suitable for processing in the existing Bogoso mill. Refractory Transition and Sulfide ores will be processed through the planned sulfide mill facility.

The Company has estimated its 90% share of BGL's Proven and Probable Reserves, as 17.2 million tonnes grading 2.97 g/t, of which 9.7 million tonnes at 3.20 g/t are classified as Proven Reserves and 7.5 million tonnes at 2.68 g/t are classified as Probable Reserves.

**Bogoso Reserves** 

	De	cember 31, 20	001	December 31, 2000		
	Proven &			Proven &		
	Probable	Grade	Contained	Probable	Grade	Contained
	Reserves	(g/t)	Gold (oz)	Reserves	(g/t)	Gold (oz)
	(tonnes)			(tonnes)		
Oxide	601,878	2.04	39,450	203,000	2.51	16,309
Refractory						
Transition	1,001,263	3.15	101,308	542,000	3.93	68,289
Sulfide	5,723,161	3.66	673,187	-	-	-
Total	7,326,302	3.45	813,945	745,000	3.56	84,598

Prestea Reserves

	December 31, 2001			December 31, 2000		
	Proven & Probable Reserves (tonnes)	Grade (g/t)	Contained Gold (oz)	Proven & Probable Reserves (tonnes)	Grade (g/t)	Contained Gold (oz)
Oxide	3,745,589	2.37	284,976	-	-	-
Transition	834,295	2.78	74,457	-	-	-
Primary	3,600,781	3.29	380,305	ī	-	-
Refractory				=	-	-
Transition	760,905	2.94	71,815			
Sulfide	1,599,517	2.93	150,455	-	-	-
Total	10,541,087	2.84	962,008	I	-	-

**Stockpiles** 

	December 31, 2001			December 31, 2000		
	Proven & Probable	Grade	Contained	Proven & Probable	Grade	Contained
	Reserves (tonnes)	(g/t)	Gold (oz)	Reserves (tonnes)	(g/t)	Gold (oz)
Oxide	1,003,928	0.99	31,914	1,346,000	0.97	41,980
Refractory						
Transition	225,229	2.69	19,459	374,000	3.67	45,785
Total	1,229,157	1.30	51,373	1,720,000	1.60	87,765

## Mineralized Material

At year-end 2001, BGL had estimated total mineralized material at Bogoso/Prestea of 28.5 million tonnes grading 3.14 g/t, which is <u>inclusive</u> of the Proven and Probable Reserves, stated above. The Bogoso/Prestea Mine oxide and transition mineralized material has been estimated using historic mining costs, processing costs and recoveries with a \$300 per ounce gold price. Sulfide mineralized material utilized estimates of bio-oxidation processing recoveries and costs, and also assumed a \$300 per ounce gold price. Implementing a 1.0 g/t cut off grade for non-refractory oxide, transition and primary mineralized material yields an estimated total of 14.3 million tonnes grading 2.70 g/t. Refractory sulfide and transition mineralized material at a 2.1 g/t cut off grade totals 14.1 million tonnes grading 3.58 g/t. Golden Star's 90% share of BGL's mineralized material totals 25.6 million tonnes. The mineralized

material estimates correspond with measured and indicated resources as defined by the CIM (Canadian Institute of Mining, Metallurgy and Petroleum) and recognized in the Canadian National Instrument 43-101.

The Bogoso mineralized material estimates for 2000 totaled 13.2 million tonnes grading 3.25 g/t. During 2001, mineralized material estimates for the Bogoso concession were reevaluated and reclassified. The revised mineralized material estimates for the Bogoso concession totaled 9.9 million tonnes grading 3.7 g/t. The reduction in the mineralized material for the Bogoso concession is the result of material being processed during 2001 and adjustments to the existing geologic models to reflect a selective mining scenario.

The acquisition of the adjacent Prestea concession accounts for the majority of additional mineralized material during 2001. Mineralized material acquired from the Prestea acquisition totals 18.5 million tonnes grading 2.83 g/t.

The December 2001 year-end mineralized material estimates at Bogoso/Prestea are summarized in the following tables:

## Bogoso Mineralized Material estimates as of December 31, 2001

		Measured		Indicated	
	Cut off Grade g/t	Tonnes	Gold Grade g/t	Tonnes	Gold Grade g/t
Oxides	>1.0 g/t Au	295,717	2.38	636,040	2.17
Transition	>1.0 g/t Au	0	0.00	0	0.00
Primary	>1.0 g/t Au	0	0.00	0	0.00
Refractory Transition	>2.1 g/t Au	543,517	3.43	804,768	3.34
Sulfide	>2.1 g/t Au	5,726,781	4.15	1,921,781	3.31
Totals		6,566,015	4.01	3,362,590	3.10

## Prestea Mineralized Material estimates as of December 31, 2001

		Measured		Indicated	
	Cut off Grade g/t	Tonnes	Gold Grade g/t	Tonnes	Gold Grade g/t
Oxides	>1.0 g/t Au	1,536,554	3.25	3,009,128	2.03
Transition	>1.0 g/t Au	259,183	3.29	715,473	2.95
Primary	>1.0 g/t Au	2,792,706	3.20	5,060,305	2.69
Refractory Transition	>2.1 g/t Au	505,984	3.43	291,813	2.90
Sulfide	>2.1 g/t Au	803,023	3.30	3,569,924	3.01
Totals		5,897,450	3.25	12,646,643	2.64

## Total Prestea and Bogoso Mineralized Material estimates as of December 31, 2001

		Measured		Indicated	
	Cut off Grade g/t	Tonnes	Gold Grade g/t	Tonnes	Gold Grade g/t
Oxides	>1.0 g/t Au	1,832,271	3.11	3,645,169	2.06
Transition	>1.0 g/t Au	259,183	3.29	715,473	2.95
Primary	>1.0 g/t Au	2,792,706	3.20	5,060,305	2.69
Refractory Transition	>2.1 g/t Au	1,049,501	3.43	1,096,581	3.22
Sulfide	>2.1 g/t Au	6,529,804	4.05	5,491,705	3.11
Totals		12,463,465	3.65	16,009,233	2.74

The mineralized material tabulated above has been estimated using a \$300 per ounce gold price, average mining-processing costs of \$8.19, \$9.63, and \$15.91/tonne of non-refractory oxide - transition - Primary, refractory transition and refractory sulfide material respectively. Average processing recoveries of 80%, 55% and 86% were

used for non-refractory oxide - transition - Primary, refractory transition and refractory sulfide material respectively. An overall mining recovery of 95% was also applied for all materials. Processing costs and recoveries for transition and oxide are based on historic numbers achieved with the current mining fleet and 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. The resources have been calculated in accordance with the definitions and guidelines adopted by the Canadian Institute of Mining, Metallurgy and Petroleum and NI 43-101.

The portion of mineralized material which has not been converted to the proven and probable reserves categories do not qualify under the United States Securities and Exchange Commission standards as being commercially mineable until further drilling, metallurgical work and other economic and technical feasibility factors based upon such work are resolved.

Initial classification of mineralized materials was based on the density of drill data used for the interpolation of each individual mineralized ore block. Blocks where grades were interpolated during the first restricted search ellipse were allocated a class of "indicated". A portion of the indicated blocks was reclassified as "measured" if more than 15 composite grades were used for interpolation. Block grades interpolated during the second long distance search ellipse were all classified as "inferred". The classification above acted as a base for further evaluation based on the criteria defined below:

- Confidence in current data set including, drill hole surveys, assays, topography, specific gravity determinations and depth of weathering.
- Continuity of mineralization, thickness and extent both along strike and down dip.
- Density and type of data, reverse circulation, rotary air blast, diamond drill, trench, grade control and cross cut data

The classification of the mineralized material conforms to definitions by the Canadian Institute of Mining, Metallurgy and Petroleum.

In 1999, SRK conducted a major review of BGL's mineralized material and reserve estimation procedures. SRK continues to assist BGL with geostatistical evaluation and modelling using Gemcom® software.

During October 2001, as required by the Ontario Securities Commission, an independent technical report was produced by Associated Mining Consultants Ltd ("AMC") on behalf of Golden Star. As part of its due diligence, an AMC sister company, IMC (Australia) Pty. Ltd, conducted an audit of the Gemcom® files used to produce the volumetric and grade estimations which form the basis of the mineralized material statements.

Sulfide mineralized material estimates for the sulfide feasibility study on the Bogoso portion of the concession were based on 1,139 reverse circulation drill holes totalling 35,251 m, 517 diamond drill holes totalling 52,654 m and 5,941 rotary air blast holes totalling 137,677 m. Included in the drilling above, 221 new drill holes totalling 24,450 m were drilled during 2000 and 2001 as part of our sulfide feasibility study, of which 8,187 m were HQ or PQ core. This includes 1,110 m of oriented core for geotechnical and hydrogeological modelling. Mineralized material estimates on the Prestea portion of the concession are based on drilling by JCI and Barnex (Prestea) Limited, who completed 1,003 drill holes totalling 88,331 m of diamond, reverse circulation and rotary air blast drilling between July 1995 and April 1999. This was comprised of 48,604 m of reverse circulation drilling, 36,915 m of diamond drilling and 2,813 m of rotary air blast drilling and resulted in 95,182 analytical samples.

The information in this report that relates to mineralized material is based on information compiled and or validated by Mr. S. Mitchel Wasel an employee of Golden Star, who following the acquisition of the mine in late 1999 has assumed the position of Exploration Manager for BGL. Mr. Wasel qualifies as the competent person responsible for overseeing mineralized material estimates. Mr. Wasel is a qualified geologist who has 14 years of experience in gold and base metal exploration and is a Member of the Australasian Institute of Mining and Metallurgy.

## Work Program

Exploration activities during 2001 concentrated on validating and re-estimating resources on the Prestea concession. Rotary air blast drilling was used in 2001 as part of the Prestea due diligence and for delineation of additional oxide resources on the Bogoso concession.

Budgeted exploration for 2002 will include further evaluation of the Prestea concession. Additional potential exists to define mineralized material north and south of the existing Prestea underground mine. Exploration activities on the Prestea concession will involve follow up soil geochemistry, extensive RAB drilling and further reverse circulation drilling to delineate additional mineralized material.

The Company has continued to acquire additional concessions near the Bogoso mill. Currently the Company has finalized five joint ventures with concession holders on the Akropong trend west of the Bogoso mill. In addition to the five joint ventures, Golden Star has applied for two additional land packages along the Akropong trend to the south and east of the current land holdings.

In addition to acquiring mineral concessions along the Akropong trend, the Company will be pursuing Joint venture partners in other prospective localities in Ghana. For further clarification, refer to the exploration project portion of this document.

### Environment

BGL is 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 and 2001 to advance this plan and to reduce the outstanding reclamation liability. Expenditures for ongoing rehabilitation work, including the capping of sulfide material and the contouring and revegetation of waste dumps, were approximately \$0.7 million during 2000. An additional \$0.2 million was spent on reclamation activities during 2001. As at December 31, 2001, BGL had \$3.3 million of restricted funds set aside for environmental reclamation of the Bogoso Mine.

## **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 100% interest in mineral properties located on the Akropong trend and within approximately 20 to 25 kilometers from the BGL plant. In addition to the option agreements, BGL has applied for two prospecting licenses to the south and east of the Akropong trend. The total surface area of the mineral properties covered in the option agreements and applications is approximately 409 square kilometers. An aggregate of \$0.3 million has been paid to the owners of these projects in consideration for the grant of the options. The objective of this work is to acquire potential mining opportunities in the immediate vicinity of the Bogoso/Prestea Mine that may, in the future, provide additional sources of millfeed 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 seven properties are referred to hereinafter as the "Akropong Projects".

In 2001, exploration activities on the Akropong projects concentrated on Flagbase, Pampe and Amenfi. Exploration activities for 2001 included regional mapping, soil geochemistry and sampling of old mine workings. Exploration work conducted in 2001 has enabled the prioritization of the Akropong Projects. Excluding property payments and geologists time, exploration expenditures totaled approximately \$0.4 million.

Budgeted expenditures for the Akropong Projects total approximately \$0.2 million for 2002. Exploration work for 2002 will involve soil geochemistry surveys, mechanized trenching and initial RAB drilling. Testing 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. Manual trenching and additional mapping has been budgeted for the Flagbase concession to determine the attitude and controls of gold mineralization. The additional information collected at Flagbase will be used to plan initial RAB drilling at Flagbase in 2003. Follow up soil geochemistry will be conducted at Amenfi to delineate the source of the alluvial

gold defined by the 2001 stream sampling program. Further regional stream sampling has been planned to cover the entire Akropong concession holdings. Expenditures given are estimates and may vary dependent on actual results.

Golden Star is currently negotiating on several other properties in Ghana and expects to close option agreements on these properties in 2002.

## **SOUTH AMERICAN PROJECTS**

## Guiana Shield Transaction

We have reached agreement with Cambior on a series of transactions involving several of our exploration and development properties in South America, including the sale of our interest in Gross Rosebel. The transaction, referred to as the "Guiana Shield Transaction", is expected to be completed in April 2002. The elements of the total Guiana Shield Transaction package include the following:

Golden Star will sell its 50% interest in Gross Rosebel in Suriname to Cambior for a total purchase consideration of \$8.0 million in cash plus a price participation royalty on the first seven million ounces of future gold production from Gross Rosebel. Golden Star will receive the initial \$5.0 million payment from Cambior on closing and three deferred payments of \$1.0 million each no later than the second, third, and fourth anniversaries of the closing. Once commercial production begins, Cambior will also pay a price participation royalty, equal to the excess of the average market price for gold for each quarter above a hurdle gold price multiplied by 10% of the gold production for the quarter, less the 2% royalty payable in Suriname. For soft ores, the hurdle gold price will be \$300 per ounce. For hard ores, the hurdle gold price will be \$350 per ounce.

Golden Star will transfer its 100% interest in the Headley's Reef and Thunder Mountain properties, which are located south and east of Gross Rosebel, to Cambior for \$1.00 plus a conditional future payment of \$1.0 million triggered by Cambior commencing commercial mining operations from these properties.

Golden Star has also agreed to sell its 30% equity interest and preferred shares in Omai Gold Mines Limited ("OGML"), which operates the Omai gold mine in Guyana, in consideration for the assumption by Cambior of the unpaid portion of the non-interest bearing loan made to Golden Star by OGML in December 1998.

Cambior has agreed to transfer its 50% interest in the Yaou and Dorlin properties in French Guiana and its 100% interest in the Bois Canon property, also in French Guiana, to Golden Star. This portion of the transaction increased our beneficial interest in the Yaou and Dorlin properties so that Golden Star and Guyanor now own 100% of these concessions.

Because we have agreed to sell our interest in the above-described properties to Cambior, and expect the transaction to close in April 2002, we have omitted detailed descriptions of the properties being sold to Cambior. Such descriptions are contained in prior reports filed by us with the SEC.

# French Guiana Properties

Upon closing, the bulk of our properties in South America will be the French Guiana properties held through Guyanor. French Guiana is part of the French national territory and has been an overseas "Département" of France since 1946. The Département, with an area of 84,000 km² and a population of approximately 130,000, 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. "). 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. MontJoyeux, 97337 Cayenne-Cedex, French Guiana.

At December 31, 2001, Guyanor owned mineral rights (either directly or through its subsidiaries) for the Yaou, Dorlin, Paul Isnard, Eau-Blanche and St-Elie gold projects. All of the properties are in the exploration stage.

During 2001, Guyanor spent \$1.0 million on exploration and in care and maintenance expenditures, of which \$0.8 million was furnished by a joint venture partner (see discussion in Item 7. – "Significant Events During 2001 and Recent Developments). In 2000, Guyanor spent \$1.6 million, \$0.8 million of which was reimbursed by joint venture partners. During 2001, it was determined, given the historically low gold prices, lack of funds to continue active exploration and the change in the Company's focus, that Paul Isnard, Guyanor's remaining active exploration project, was impaired. Accordingly the remaining \$6.9 million of deferred exploration costs associated with the Paul Isnard property were written off. Title to the mineral rights, however, will be retained.

## YAOU AND DORLIN

## The Properties

The Yaou exploration permit covers an area of 52 km<sup>2</sup> located some 210 km southwest of Cayenne, French Guiana. Access to the property is by helicopter or four-wheel drive vehicle on 17 km 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 km<sup>2</sup> located some 180 km southwest of Cayenne and 60 km east of Maripasoula. The property is accessible by helicopter and a 500 m airstrip located on the property is suitable for fixed wing aircraft. Access is also available by boat during the rainy season.

## Geology

The geology of the Yaou project area consists of a folded and sheared sequence of Lower Proterozoic mafic and ultramafic volcanics and volcaniclastics, 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 Permo-Triassic age cuts through the property. Exploration has defined three principal zones of gold mineralisation, mainly associated with narrow, deformed felsic intrusive bodies and finely laminated felsic tuffs. These zones, Yaou Central, Chaina and IJK, have been evaluated by intensive 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 2001, at the Yaou and Dorlin remained on care and maintenance. We believe that the price of gold must improve substantially in order to have an economically feasible project.

In 2001, Guyanor's expenditures on Yaou and Dorlin totaled less than \$0.1 million. During 2000, Guyanor spent a total of \$0.3 million on the Yaou and Dorlin projects, of which Cambior reimbursed \$0.2 million. Guyanor has budgeted less than \$0.1 million in 2002 for its shares of expenditures at Yaou and Dorlin. During 2000, the Yaou and Dorlin projects were determined to be impaired and written off.

## Mineralized Material

At year-end 2000, Cambior reported its 50% share of mineralized material for Yaou and Dorlin, using a long-term gold price assumption of \$300/oz (as compared with \$325/oz in 1999), as 6.9 million tonnes grading 2.1g/t. The Company's share of the mineralized material for Yaou and Dorlin is 6.9 million tonnes grading 2.1 g/t compared to 8.2 million tonnes grading at 1.9g/t in 1999. The qualified person responsible for the estimation of mineralized material for the Yaou and Dorlin project is Mr. Francis Clouston, Project Assessment Engineer for Cambior. The Company has not independently verified the estimates reported by Cambior for Yaou and Dorlin.

The Company is reporting these results as mineralized material. Mineralized material does not represent reserves and has not been included in the Company's proven and probable reserve estimates because even though enough drilling and trenching indicate a sufficient amount and grade to warrant further exploration or development expenditures, these mineral deposits do not qualify under the U.S. Securities and Exchange Commission standards as being commercially minable until further drilling, metallurgical work and other economic and technical feasibility factors based upon such work are resolved.

## The Guiana Shield Transaction

Cambior has agreed to transfer its 50% interest in the Yaou and Dorlin properties in French Guiana (and its 100% interest in the Bois Canon property, also in French Guiana), to Golden Star. This portion of the transaction will increase our beneficial interest in the Yaou and Dorlin properties so that Golden Star and Guyanor now own 100% of these concessions.

## PAUL ISNARD

On October 29, 1994, Guyanor acquired an interest in the Paul Isnard and Eau Blanche 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 held, directly or indirectly, eight mineral concessions (the "Paul Isnard Concessions") and four type "B" exploration permits. Since then, all type "B" permits have expired or were relinquished. The concessions will expire on December 31, 2018 but can be renewed for an additional 25 years. A type "A" permit covering an area of approximately 326 km² was granted to Guyanor on November 30, 1999 for an initial period of three years. The type "A" permit includes most of the area covered by the four type "B" permits as well as a new area adjacent to the Paul Isnard property. In this report, unless the context indicates otherwise, the term the "Paul Isnard" refers to the Paul Isnard and Eau Blanche properties.

## Agreement with Rio Tinto

In January 2001, Guyanor and Rio Tinto Mining and Exploration Limited ("Rio Tinto") entered into a Heads of Agreement with respect to the Paul Isnard project. The area covered by the agreement included the eight concessions held by SOTRAPMAG and the western part of the type "A" permit held by Guyanor, covering a total area of 216 km². The remaining 214 km² in the eastern part of the exploration permit was not included in the joint venture, although Rio Tinto had a preemptive right over the area.

Under the terms of the agreement, Rio Tinto could earn a 40% participating interest in the joint venture by incurring expenditures of at least \$2,250,000 on the project on or before the third anniversary of the agreement. Rio Tinto could also acquire an additional 30% participating interest in the joint venture by incurring expenditures, without contribution by Guyanor of at least \$6,750,000 on or before the fifth anniversary of the agreement. The Rio Tinto-funded work on the Paul Isnard project was completed in August 2001. Based upon its review of the project results, Rio Tinto announced in September 2001 that it was opting to withdraw from the Heads of Agreement and would not fund additional exploration efforts.

## The Properties

The Paul Isnard project is located in the western part of French Guiana, some 200 km west of Cayenne. The property is accessible from St-Laurent-du-Maroni, either by air, at a distance of 75 km to the south, or by means of a 115 km-long laterite road. The first 62-km section of this road is maintained by the government and the remaining 53-km 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. These have been intruded by intermediate granitic rocks of similar age.

The Decou-Decou mountain located to the south of the property is formed of volcanic rocks that, at the summit, are covered by degraded lateritic layers. The Lucifer mountain to the north-east is 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 the host stratigraphy for mineralization is a +400m thick section of bi-modal felsic and mafic volcanics with lesser volcaniclastics, 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 three 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 (200m) 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

Total expenditures in 2001 were \$1.0 million for Paul Isnard. Total expenditures in 2000 were \$0.5 million. Golden Star loaned \$830,000 from the private placement proceeds received from Rio Tinto in January to fund the first semester 2001 work program on Paul Isnard. During 2000, \$2.0 million of past capitalized exploration work on the Paul Isnard alluvial areas was impaired and written off. During 2001, following Rio Tinto's withdrawal from the above mentioned agreement, the remaining \$6.9 million of deferred exploration costs were also written off bringing the capitalized basis to zero.

### Mineralized Material

The mineralized material reported by the Company was estimated in February 1999. The Company estimated its 73% share of Paul Isnard, using a \$325 gold price, as 4.4 million tonnes grading 2.8 g/t. This report only reflects mineralized material estimated to be present within the open pits modeled by the Company. The qualified person responsible for the estimation of mineralized material for the Paul Isnard project was Declan Costelloe, former Manager Mining Geology, for the Company.

Mineralized material does not represent reserves and has not been included in the Company's proven and probable reserve estimates because even though enough drilling and trenching indicate a sufficient amount and grade to warrant further exploration or development expenditures, these mineral deposits do not qualify under the United States Securities and Exchange Commission standards as being commercially minable until further drilling, metallurgical work and other economic and technical feasibility factors based upon such work are resolved.

Exploitation Authorization Given for Alluvial Mining Titles by Third Parties

Guyanor has granted the right to twenty-two small scale mining companies or individuals to apply for Exploitation Authorization on specific areas located within the Paul Isnard concessions and the Type A permit. The French government created this new type of mining title in connection with the recent revisions to the Mining Code. This new title, referred to as "AEX", grants to small-scale alluvial miners the right to mine within a specific area of 1 km². The titleholder of an AEX is responsible for all potential environmental damages. Under separate agreements with each applicant, Guyanor is entitled to receive as compensation a certain percentage of the value of the gold extracted.

## ITEM 3. LEGAL PROCEEDINGS

There are currently no material pending legal proceedings to which the Company or any of its subsidiaries is a party or to which any of its properties or those of any of its subsidiaries is subject. The Company and its subsidiaries are, however, engaged in routine litigation incidental to their business. No material legal proceedings involving the

Company are pending, or, to the knowledge of the Company, contemplated, by any governmental authority. The Company is not aware of any material events of non-compliance with environmental laws and regulations. The exact nature of environmental control problems, if any, which the Company may encounter in the future cannot be predicted, primarily because of the changing character of environmental requirements that may be enacted within foreign jurisdictions. For a description of the type of legal and regulatory environment in which the Company does business, see "Item 1. Description of Business - Risk Factors" and "Item 2. Description of Properties - General".

# 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 2001.

# CONVERSION FACTORS AND ABBREVIATIONS

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

1 acre= 0.4047 hectare1 mile= 1.6093 kilometers1 foot= 0.3048 meter1 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 = 0.9072 tonne 1 square kilometer = 100 hectares

pounds)

1 metric tonne = 1,000 kg or 2,204.6 pounds 1 kilogram = 2.2 pounds or 32.151 troy ounce

The following abbreviations of measurements are used herein:

Au = gold m = meter  $m^2$ Ct = carat = square meter Ct/m<sup>2</sup>  $m^3$ = carats per square meter = cubic meter G = gram = milligram mg

g/t = grams of gold per tonne mg/m<sup>3</sup> = milligrams per cubic meter

 $egin{array}{lll} Ha &=& \mbox{hectare} & t &=& \mbox{metric tonne} \\ Km &=& \mbox{kilometer} & \mbox{oz} &=& \mbox{troy ounce} \\ Km^2 &=& \mbox{square kilometers} & \mbox{ppb} &=& \mbox{parts per billion} \\ \end{array}$ 

Kg = kilogram

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

## **GLOSSARY OF TERMS**

Note: The definitions of Proven (Measured) and Probable (Indicated) reserves set forth below are those used in the United States by the Securities and Exchange Commission and are set forth in SEC Industry Guide 7.

These definitions are substantially the same as those applied in Canada as set forth in National Instrument 43-101.

Reserve That part of a mineral deposit which could be economically and legally extracted

or produced at the time of the reserve determination.

**Proven Reserves** Reserves for which (a) quantity is computed from dimensions revealed in

outcrops, trenches, workings or drill holes; grade and/or quality are computed from the results of detailed sampling and (b) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined

that size, shape, depth, and mineral content of reserves are well-established.

**Probable Reserves** Reserves for which quantity and grade and/or quality are computed from

information similar to that used for proven (measured) reserves, but the sites for inspection, sampling and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven

reserves, is high enough to assume continuity between points of observation.

The following definitions of the stages of the exploration and development process are used by Golden Star. 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.

early stage an early stage exploration prospect typically involves one or more targets within an area

> which have been determined to merit further follow-up work based on a combination of geological, geochemical and geophysical analysis. The objective of an early stage prospect typically is to better define targets that have the potential to be advanced to the

next state of exploration and level of financial commitment.

advanced stage an advanced exploration stage prospect typically involves testing targets at depth 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. This typically is accomplished by trenching and drilling.

feasibility stage 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.

**alluvium, alluvials** a general term for clay, silt, sand, gravel or other material deposited by a body of water usually during recent geological time

**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%

**biooxidation** a processing method which uses bacteria to oxidize refractory sulfide ore to make it amenable to normal oxide ore processing techniques such as carbon in leach

**BLEG** (Bulk Leach Extractable Gold) an analytical method for determining very low levels of gold in material **Birimian** a thick and extensive sequence of proterozoic age metamorphosed sediments and volcanics first identified in the Birim region of southern Ghana

carbon in leach or CIL 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

caustic digestion a technique involving the application of strong acid to a potentially diamond bearing rock sample so as to dissolve minerals completely which are more susceptible to solution on exposure to acid. The remaining undissolved minerals which are artificially concentrated may be studied to determine the presence of diamonds or diamond indicator minerals

**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

dilation deformation by an increase in volume

**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

**elluvial** an incoherent ore deposit resulting from decomposition or disintegration of rock in place

**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

**hydrogeological** the study of subsurface water (groundwater)

**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

**Island-Arc Sequence** rocks which originally formed adjacent to a continental margin; Island-Arc sequences frequently contain rocks of both volcanic and sedimentary origin

**kimberlite** an intrusive ultra-mafic rock which has ascended rapidly from the mantle/lower crust margin to the surface of the earth; kimberlites frequently contain diamonds

lamproite lamproites are ultra-mafic intrusive rocks with intrusion mechanisms similar to kimberlites but with distinctly different chemical compositions; lamproites have greater mineralogical and textural variations than kimberlites

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 s, characterized by a great concentration of ore in one place, as opposed to a disseminated or veinlike 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

**Mobile Metal Ion** (MMI) a special geochemical method which detects low levels of metals in soil and other surface samples

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

polymetallic a deposit containing more than one metal

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

**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 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

rotary air blast drilling (RAB), 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

**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.

**sill** a near horizontal fracture in the earth's crust which has been filled by an intrusive rock

**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

**tourmalinization** the in situ alteration of a rock which involves the development of tourmaline type minerals. The alteration is generally medium to high temperature and is frequently accompanied by silicification

**tuff** volcanic rocks which consist of generally fine grained material ejected from a volcano; particle sizes vary from very fine grained ash to coarser, bean to nut size pebbles which are known as "Lapilli"

**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

## PART II

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

At the beginning of 2001 our common shares were listed on the Toronto Stock Exchange ("TSE") under the trading symbol "GSC" and on the American Stock Exchange ("Amex") under the trading symbol "GSR". Our shares were de-listed from Amex on January 26, 2001, and immediately began trading on the Nasdaq OTC Bulletin Board ("OTCBB"). As of March 22, 2002, 62,109,432 common shares were outstanding and we had 906 shareholders of record. On March 22, 2002, the closing price per share for our common shares, as reported by the TSE was Cdn\$2.70 and as reported by the OTCBB was \$1.71.

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 TSE and the OTC Bulletin Board.

		Toronto	Toronto Stock Exchange		C Bulletin Board
		Cdn\$	Cdn\$	\$	\$
		<u>High</u>	Low	<u>High</u>	Low
2001:					
	First Quarter	0.76	0.43	0.50	0.28
	Second Quarter	1.15	0.45	0.72	.029
	Third Quarter	1.45	.062	0.90	.042
	Fourth Quarter	1.53	.088	0.97	.055
2000:		Toront	o Stock Exchange	Americ	can Stock Exchange
	First Quarter	2.35	1.17	1.63	0.81
	Second Quarter	1.80	1.22	1.19	0.81
	Third Quarter	1.35	0.85	0.94	0.56
	Fourth Quarter	1.15	0.62	0.75	0.38

We have not declared or paid cash dividends on our common shares since our inception. Future dividend decisions will consider then current business results, cash requirements and the financial condition of the Company.

# 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 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 Treaty, the rate of withholding tax is 5% of the gross amount of the dividend where the Holder is a company that owns at least 10% of the voting stock of the Company 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 the Company at any time in the five years 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 will 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.

Tax return preparation is currently in arrears, with 1999 and 2000 returns currently incomplete. It is our plan to bring all tax filing current by the end of 2002.

## CERTAIN UNITED STATES INCOME TAX CONSIDERATIONS

A passive foreign investment company ("PFIC") is a foreign corporation that meets either an income test (75% or more of the gross income of such corporation for the taxable year is passive income) or an asset test (the average percentage of assets held by such corporation during the taxable year which produce passive income or which are held for the production of passive income is at least 50%).

In prior years, we have included a section in our public filings that discussed the PFIC rules and their potential application to Golden Star. However, it is now our belief that no material risk exists that Golden Star can be considered a PFIC for U.S. tax purposes, since we believe that we do not meet the "income" or "asset" tests described above for purposes of being considered a PFIC.

# 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, 2001, 2000, 1999, 1998, and 1997, and should be read in conjunction with those financial statements and the footnotes thereto. The consolidated financial statements have been prepared in accordance with Canadian generally accepted accounting principles ("Cdn GAAP"). Selected financial data derived in accordance with United States GAAP ("US GAAP") has also been provided and should be read in conjunction with Footnote 16 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, 2001	As of December 31, 2000	As of December 31, 1999	As of December 31, 1998	As of December 31, 1997
Working capital	\$(5,149)	\$ 4,452	\$ 6,020	\$ 6,516	\$16,427
Current assets	9,636	12,960	13,957	8,216	20,152
Total assets	36,552	49,469	74,352	68,597	89,122
Current liabilities	14,785	8,508	7,937	1,700	3,725
Shareholders' equity	12,342	26,040	40,501	58,471	79,557

	For the Year				
CDN GAAP	Ended	Ended	Ended	Ended	Ended
	December 31,				
	2001	2000	1999	1998	1997
Revenue	\$24,658	\$31,171	\$11,254	\$ 635	\$ 1,698
Net loss	(20,584)	(14,881)	(24,366)	(22,248)	(26,584)
Net loss per share	(0.49)	(0.40)	(0.76)	(0.74)	(0.92)

US GAAP	As of December 31, 2001	As of December 31, 2000	As of December 31, 1999	As of December 31, 1998	As of December 31, 1997
Working capital	\$(5,149)	\$ 4,452	\$ 6,020	\$ 3,901	\$13,485
Current assets	9,636	12,960	13,957	5,601	17,210
Total assets	24,232	24,020	45,635	27,240	42,076
Current liabilities	14,785	8,508	7,937	1,700	3,725
Shareholders' equity	(1,533)	(478)	11,145	16,899	31,160

US GAAP	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	For the Year Ended December 31, 1997
Revenue	\$24,658	\$31,171	\$11,254	\$ 635	\$ 1,698
Net loss	(5,352)	(12,465)	(11,335)	(15,395)	(26,838)
Net loss per share	(0.13)	(0.33)	(0.35)	(0.51)	(0.94)

# 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 Cdn GAAP. For the US GAAP reconciliation, see Note 16 to the attached consolidated financial statements, as well as "Results of Operations" below.

## Overview of 2001

The year 2001 saw a continued implementation of our plan to transform Golden Star from a gold exploration company to a gold mining company with operating properties and operating cash flow. Toward this end we were able to complete the acquisition of the Prestea reserves located adjacent to the Bogoso Mine, receiving the Prestea mining lease from the government of Ghana in June 2001. Mining was initiated on the Prestea property in September 2001. The Bogoso mill operated throughout the year, processing oxide and transition ores from the Bogoso Mine until October and afterward oxide ores from Prestea. The protracted nature of the Prestea acquisition process necessitated mining of sub-optimal material at the Bogoso Mine during certain periods of 2001 and, as a result, gold production in the first three quarters of 2001 was lower than in the same period of 2000. Once the

Prestea ore became available in the fourth quarter there was a marked improvement in gold production over the earlier quarters of 2001.

Exploration efforts were once again scaled back in accordance with the new direction of the Company. By the end of 2001, all offices devoted strictly to exploration had been closed except for the Guyanor office in French Guiana and a single representative of the company in Suriname. Guyanor's exploration activities during the year were reduced to a single project and, following the end of the summer field-work, Guyanor proceeded with additional staff reductions. Geologists located at Bogoso/Prestea in Ghana pursued several promising projects in the Bogoso/Prestea vicinity but total spending was less than \$0.5 million.

In response to unfavorable drilling results on the Paul Isnard project during the year, and Rio Tinto's early withdrawal from the joint venture during 2001, the carrying value of the Paul Isnard property was deemed impaired and the remaining \$6.9 million of capitalized acquisition and exploration costs were written off. In addition, an offer by Cambior to purchase Gross Rosebel resulted in an \$8.1 million adjustment to the carrying value of Gross Rosebel, as it was marked down to the selling price.

With these two write-offs, we have, over the last three years, written off \$55.6 million of capitalized acquisition and exploration costs incurred in earlier periods of Golden Star's history when exploration was the main focus of the Company. Of the \$59.8 million total cumulative losses incurred since 1999, \$55.6 million was related to impairments and associated write-offs of deferred acquisition and explorations costs.

At the end of 2001, the only capitalized acquisition and exploration costs remaining were associated with (i) the Gross Rosebel project, (ii) feasibility cost studies on the sulfide potential at the Bogoso Mine, and (iii) minor exploration expenditures on various exploration properties in areas surrounding Bogoso/Prestea. It is anticipated that the \$8.1 million remaining deferred acquisition and exploration costs at Gross Rosebel will be matched against revenues from the pending sale of Gross Rosebel to Cambior in 2002.

## Significant Events During 2001 and Recent Developments

## Rio Tinto

In January 2001, we entered into an agreement with Rio Tinto whereby Rio Tinto could earn up to a 70% participating interest in the Paul Isnard property by funding exploration on the Paul Isnard property in 2001 and subsequent years. Per the agreement Rio Tinto purchased by way of a private placement 500,000 common shares of Golden Star at a price of \$2.00 per common share for total proceeds of \$1.0 million. Golden Star committed to lend the full \$1.0 million to Guyanor during 2001. Of the \$1.0 million total, \$0.75 million was used to fund a work program on the Paul Isnard gold project and the remaining \$0.25 million was used to partially fund the cost of a reorganization of Guyanor aimed at reducing ongoing costs.

In September 2001, Rio Tinto withdrew from the agreement following the completion of the first phase exploration program conducted from February to August 2001 at a cost of \$1.0 million, which failed to indicate the potential to meet Rio Tinto's resource target requirements.

## Anvil Buyout

As described elsewhere in this report, in September 2001, we acquired Anvil's interest in BGL and issued 3,000,000 common shares to Anvil. In addition to the common shares issued in the transaction, we agreed to cancel our note receivable from Anvil, which stood at \$1.9 million immediately prior to the transaction. The stock and note together brought the total purchase price of Anvil's 20% interest in BGL to \$2.9 million and resulted in an increase in mining properties assets of \$1.4 million

## Prestea Acquisition

As described elsewhere in this report, in mid-2001, we agreed to pay \$2.1 million in cash to PGR for PGR surrendering its lease to the Prestea property and to acquire an option to purchase a 35% interest in PGR at a future date. In March 2002, BGL reached an agreement with PGR, the Ghana Mineworkers Union and the Government of

Ghana and related parties to form a joint venture, to be managed by BGL, for the assessment and future operations of the Prestea underground mine. BGL will contribute \$2.4 million to become a 45% joint venture partner, with PGR also holding 45% and the Government of Ghana holding a 10% carried interest. Under the agreement, the funds provided to PGR will be used to pay arrears of salary and termination benefits to the Prestea underground miners. It is the intent of the joint venture to place the underground operation on care and maintenance pending completion of an assessment, which will include a comprehensive review of the safety and economic viability of the mine, as well as a review of past environmental practices. As long as BGL's interest in the joint venture does not drop below 30%, BGL will manage the joint venture. Additional cash requirements not externally funded will be made through voluntary contributions from the two non-governmental participants in the joint venture and their relative percentage interests will be adjusted to reflect any inequality in such contributions.

In October 2001, we issued to Barnex 3,333,333 common shares and 1,333,333 warrants to subscribe for Golden Star 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. See Description of Properties in Item 2 above for additional information on the Prestea acquisition.

The total cost of acquiring the Prestea property during 2001 was \$6.8 million. This includes \$2.2 million for the Golden Star stock and warrants issued to Barnex, \$1.3 million of cash paid to PGR, \$2.0 million accrued for the additional liability to the Sellers of BGL which may have been triggered by BGL obtaining the Prestea surface lease, \$0.7 million of pre-production development costs and approximately \$0.6 million in transactions costs.

In addition to the \$6.8 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 from Anvil during 2001, will be included in the new Prestea amortization base, bringing the total Prestea amortization basis to \$8.6 million. The Prestea acquisition was accounted for using the purchase method.

Wassa

The proposed Wassa acquisition, described elsewhere in this report, did not materially impact our financial results in 2001 but is expected to increase the scope of our operations and cash requirements in future periods.

# CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our financial statements reflect the application of Canadian 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.

## RESULTS OF OPERATIONS

## **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 and a net loss of \$24.4 million in 1999. The major factors contributing to the losses in all three years, have been non-cash write-offs of deferred exploration costs incurred in earlier years of our existence when the focus was on exploration. Given the sharp decreases in gold prices in the last five years, 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 costs have suffered impairments and have been written off in the three years beginning in 1999. Cumulative deferred acquisition and exploration write-offs over the last three years have totaled \$55.6 million, including \$15.0 million in 2001, \$16.7 million in 2000 and \$23.9 million in 1999. Of the \$59.8 million total cumulative losses incurred since 1999, \$55.6 million have been related to impairments and associated write-offs of deferred acquisition and explorations costs.

Write-offs in 2001 included \$6.9 million at the Paul Isnard property, triggered by Rio Tinto'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 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 the full year, gold output dropped to 87,936 ounces from 108,643 ounces in 2000. As the Bogoso Mine 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 the Bogoso Mine 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 \$270.56 per ounce in 2001, down from \$279.59 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 cost per ounce averaged \$271 per ounce in 2001, up from \$201 per ounce in 2000.

Cost of sales 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.

Depreciation and depletion in future years is expected to be lower than in the past 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 the Bogoso Mine during the 2 year period between the September 1999 purchase and the September 2001 closure of the oxide mining from the Bogoso concession. Ounces from the Prestea property will incur amortization and depreciation only to the extent of the Prestea purchase cost and for equipment purchased after September 1999.

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

The proportion of gains and losses allocated to minority shareholders are expected to be substantially less in the future following the July 2001 purchase of the 20% interest in BGL owned by Anvil. In addition, cumulative losses at Guyanor reduced the value of the Guyanor minority interest to zero during 2000 and thus our financial statements will not allocate to Guyanor minority interest holders a portion of future losses. The sole remaining minority interest position reflected in the December 31, 2001 balance sheet is the 10% of BGL held by the Government of Ghana.

## Deferred Exploration Spending

### Ghana

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.

## South America

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 is related to the Paul Isnard project and the balance is related to the holding cost of Gross Rosebel.

# **2000** Compared to 1999

We reported a net loss of \$14.9 million for 2000 compared to a net loss of \$24.4 million in 1999. The major factor contributing to the 2000 loss was the impairment costs of numerous deferred exploration properties following cutbacks in exploration and the placing of most projects on a care and maintenance basis during the year in response to continued low gold prices and in response to our new direction. As a result, a total of \$16.7 million of deferred exploration costs were written off during 2000, including those for the Tanda project in the Ivory Coast; the Yaou, Dorlin, Paul Isnard Alluvials and Dachine projects in French Guiana, and the Eagle Mountain project in Guyana. While many of the exploration properties written-off may still have development potential, and while we will retain the mineral rights to most of these properties, continued exploration and development has been indefinitely delayed.

The Bogoso Mine operated throughout 2000 contributing \$30.4 million of revenues versus \$10.6 million during 1999. The 1999 revenues were generated during the last quarter of 1999 following the September 30, 1999 acquisition of the Bogoso Mine. During 2000, the Bogoso Mine produced and sold 108,643 ounces of gold, which was sold at an average market price of \$279.59 per ounce. We do not hedge our gold sales.

Cash cost of operations was \$21.7 million during the year, compared to \$6.0 million in 1999, the 1999 figure again reflecting our ownership only during the last three months of 1999. Total cash cost per ounce averaged \$201 per ounce during 2000 versus \$165 per ounce in the fourth quarter of 1999. The higher cost per ounce in 2000 versus 1999 was due to the fact that during various periods in 2000 the Bogoso mill processed transition (mixed sulfide/oxide) ore, which is more expensive to process and yields lower recoveries than did the oxide ores which were processed exclusively during the fourth quarter of 1999.

Depreciation and depletion expenses increased to \$7.3 million from \$3.0 million during the last quarter of 1999, again the increase being due to 12 months of operation in 2000 versus three months in 1999. Purchase cost amortization averaged \$58 per ounce in 2000. Exploration expenses of \$0.9 million during 2000 were up from \$0.5 million in 1999. While overall exploration activity decreased from 1999, the amount of the expenses capitalized to specific projects was limited in 2000 following the large number of project closures at the end of 1999.

General and administrative costs were further reduced during 2000 from \$3.7 million in 1999 to \$2.9 million in 2000. Continued reductions in corporate staff and corporate activities were responsible for the lower costs. Interest expense rose in response to a full year's interest on the convertible debentures compared to only four and one-half months interest in 1999, the debentures having been issued in August 1999.

## LIQUIDITY AND CAPITAL RESOURCES

## **During 2001**

Cash provided by operations totaled \$2.4 million in 2001, essentially unchanged from the \$2.5 million generated in 2000. Reductions in work-in-process inventory and an increase in accounts payable and accrued liabilities were major factors contributing to 2001's total. At the end of 2000, work-in-process inventory rose above typical levels as gold ore concentrates were stockpiled in advance of the start-up of a new mill facility designed to treat the concentrates, but which did not begin operations until early 2001. Low gold recoveries in late 2001 from the Bogoso transition ores adversely impacted sales revenues and cash flow. As a result, vendor payables were extended causing a \$2.7 million increase in current payables compared with the end of 2000.

Cash used in investing activities rose to \$5.2 million in 2001, up from \$3.3 million in 2000. While equipment purchases and capitalization of deferred exploration costs were down from 2000, the costs of acquiring the Prestea property more than offset these reductions. The total direct cost of acquisition of the Prestea property in 2001 was \$6.8 million, with non-cash items accounting for all but \$2.6 million of the total. The following schedule details the Prestea acquisition cost components in 2001:

COST ITEM:	(millions)
Value of Stock and Warrants paid to Barnex	\$2.2
Cash paid to PGR	1.3
Development cost incurred during start-up of Prestea mining	0.7
Legal, engineering and financing costs of the acquisition	0.6
Accrual for possible liability due the sellers of BGL	2.0
Total Direct Costs	\$6.8

In addition, \$0.4 million of remaining unamortized costs from the original September 1999 BGL purchase costs will be included in the amortization base of Prestea, as will \$1.4 million of costs incurred to purchase the 20% BGL minority position owned by Anvil. These indirect costs brought the total Prestea amortization basis to \$8.6 million.

New share capital raised \$2.3 million during 2001, including \$1.0 million from a private placement and \$1.3 million from warrant exercises. Additional short-term debt related to the purchase of Prestea provided \$0.8 million, while repayment of the loan from OGML used \$1.1 million.

Working capital at December 31, 2001 decreased to a negative \$5.1 million from \$4.5 million a year earlier, mainly due to lower inventories and increases in accounts payable and current debt. Inventories were unusually high at December 31, 2000 due to stockpiling of gold concentrates in anticipation of the first quarter 2001 start-up of an upgrade of the Bogoso mill to enable it to process such concentrates. Payables increased late in 2001 due to reduced operating cash flow, especially in the third quarter of 2001. As the Bogoso Mine neared the end of its oxide and transition ore reserves in the third quarter of 2001, gold recovery dropped and revenues fell accordingly. Current debt rose as the new reserves at Prestea may have triggered the reserve acquisition clause in the original Bogoso purchase agreement and the Company has accrued \$2.0 million for this potential liability, and BGL borrowed \$0.8 million for the PGR purchase. At December 31, 2001, the Company had \$3.4 million of cash, which is restricted, in accordance with the BGL acquisition agreement, to be used for environmental rehabilitation at the Bogoso Mine. The Company drew down \$0.8 million from the restricted cash account during 2001 to cover rehabilitation expenditures.

## Cash Flow 2002

In January 2002 we completed a private placement of 11.5 million units at a price of \$0.49 per unit for gross proceeds of \$5.6 million (\$5.3 million, net). Each unit consists of one common share and one-half of a warrant. Each whole warrant will entitle the holder to the right, for a period of two years, to acquire one further common share at an exercise price of \$0.70. Cash commissions and fees equaled 6% of the gross proceeds and warrants (identical to the unit warrants) equal to 6% of the total common shares issued in the private placement were issued to agents and consultants.

The proceeds from the private placement will be used to contribute to our acquisition and development costs in Ghana. Half of the proceeds from the private placement have been paid directly to Golden Star with the balance having been deposited in escrow. The escrowed funds will become available to us upon (i) the registration of the common shares underlying the units, (ii) the completion of the Cambior transaction, and (iii) the completion of our acquisition of the Wassa property. We expect that these conditions will be met early in the second quarter of 2002, although various factors could delay satisfaction of one or more of these conditions.

Looking to 2002, we anticipate approximately \$30 million of capital investment in the year including \$1 million for deferred exploration projects, \$9 million in Wassa property purchase costs, \$0.8 million in connection with the agreement with PGR to access the Prestea surface reserves, \$2.4 million in connection with acquiring a controlling interest in the Prestea underground mine presently owned and operated by PGR, approximately \$10 million for the Wassa project redevelopment and \$8 million for Bogoso/Prestea equipment, facilities and development. We also anticipate needing approximately \$8 million for repayment of various current liabilities and debts. We expect cash flow from operations, proceeds from the \$5.6 million private placement in January 2002, vendor financing of the Wassa property purchase and proceeds from the sale of Gross Rosebel (of which \$3.0 million was received in January 2002 with the balance of \$2.0 million expected to be received on closing in April 2002) to furnish approximately 50 percent of the required cash for these investment projects and debt repayments, leaving a need for approximately \$20 million of additional funds from outside sources. Possible sources may include, bank loans, convertible debentures, sale of assets or a further sale of equity. For a discussion of potential risks to our liquidity and capital resources, see the discussion of Financial Risks in the Risk Factors section of Item 1 of this report.

As noted elsewhere in this report, the Wassa and Gross Rosebel transactions have not yet closed and there is some chance that either or both might be delayed, renegotiated or abandoned. The failure or either transaction to close would entitle the purchasers of units in our January placement to require the offering proceeds placed in escrow as described above to be returned to them (in which event, the units purchased with such proceeds would be cancelled). However, such purchasers could elect to waive this right and permit the distribution of the proceeds to us. The failure of the Gross Rosebel sale to close would increase our need for additional outside financing. If the Wassa transaction did not close, the scope of our operations would be temporarily lessened, although we would continue to look for attractive acquisition prospects. Because a substantial portion of the Wassa related expense is vendor financed, the failure of the transaction to close would not significantly impact our short term capital requirements.

## **OUTLOOK**

The three main objectives for 2002 are: (i) orderly and efficient development of the new Prestea reserves allowing an adequate flow of oxide and other non-refractory ores to the Bogoso mill; (ii) successful acquisition of the Wassa property; and (iii) successful redevelopment of the Wassa property to become a producing mine in 2003. In addition, we plan to continue to evaluate acquisition and growth opportunities in Ghana and elsewhere in West Africa. We will also strive to maximize the value of our South American assets via joint venture financed exploration activities where possible. Adequate access to capital is critical to many of our objectives in 2002. While a \$5.6 million private placement was completed in January 2002 and a \$3.0 million down payment on the Guiana Shield Transaction was received in early 2002 significant additional capital will be required during the year. Given the recent improvements in gold prices and increased interest in gold investing in recent months, we are encouraged that capital may be more readily available in 2002 than in the past few years. However, we cannot assure you that we will be successful in raising the amounts needed to execute all of our planed activities during 2002. We will continue to explore various possibilities for raising capital, which might include, among other things, the further establishment of joint ventures, the sale of property interests, debt financing and the issuance of additional equity

We have budgeted consolidated total revenue of approximately \$37 million in 2002 and total operating and general and administrative expenditures of approximately \$32 million. Consolidated net exploration and development expenditures, after recoveries from joint venture partners are budgeted at approximately \$1.4 million, most of which will be spent in Ghana. We have budgeted production from the Bogoso/Prestea Mine at 134,000 ounces during 2002. 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 2002, although we are actively seeking joint venture partners which could fund additional work at Paul Isnard or at our other properties. 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. In any such event, the estimates described above would likely change materially.

## 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**

We may invest our cash in debt instruments of the United States Government and its agencies, and in high-quality corporate issuers. Investments in both fixed rate and floating rate interest-earning instruments carry a degree of interest rate risk. Fixed rate securities may have their fair market value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall. Due in part to these factors our future investment income may fall short of expectations due to changes in interest rates or we may suffer losses in principal if forced to sell securities which have declined in market value due to changes in interest rates. Given the relatively low amounts of cash on hand in recent years, the impact on revenues from changes in interest rates would be immaterial. 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 \$3.3 million effect on the results of operations and cash flows. We currently do not have a program for hedging, or to otherwise manage exposure to commodity price risk. We may in the future manage our exposure through hedging programs.

# ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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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 22, 2002, 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 and Corporate Governance Committee of the Board of Directors is comprised of four 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

March 22, 2002

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

## **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, 2001 and 2000 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, 2001. 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 referred to above present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2001 and 2000, and the consolidated results of its operations and cash flows for each of the three years in the period ended December 31, 2001, in accordance with accounting principles generally accepted in Canada.

/s/ PricewaterhouseCoopers LLP Chartered Accountants Calgary, Canada

March 22, 2002

# CONSOLIDATED BALANCE SHEETS

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

ASSETS	As of D 2001	December 31, 2000
CURRENT ASSETS Cash and short-term investments Accounts receivable Inventories Other assets Total Current Assets	\$ 509 1,231 7,666 230 9,636	\$ 991 976 10,805 <u>188</u> 12,960
RESTRICTED CASH (Note 18) NOTES RECEIVABLE ACQUISITION, DEFERRED EXPLORATION	3,365	4,147 1,918
AND DEVELOPMENT COSTS (Note 11) INVESTMENT IN OMAI GOLD MINES LIMITED (Note 12) MINING PROPERTIES (Net of accumulated depreciation of \$10,852 and \$9,111, respectively) (Notes 9 & 10)	12,280 141 8,353	24,492 625 1,922
FIXED ASSETS (Net of accumulated depreciation of \$5,134 and \$3,508, respectively) OTHER ASSETS  Total Assets	2,268 509 \$ 36,552	2,937 468 \$ 49,469
LIABILITIES		
CURRENT LIABILITIES  Accounts payable Accrued liabilities Accrued wages and payroll taxes Current Debt (Note 7)  Total Current Liabilities	\$ 4,365 2,783 124 <u>7,513</u> 14,785	\$ 2,565 1,727 238 3,978 8,508
NOTE PAYABLE – OMGL LONG TERM (Note 12c) AMOUNT PAYABLE TO FINANCIAL INSTITUTIONS CONVERTIBLE DEBENTURES (Note 8) ENVIRONMENTAL REHABILITATION LIABILITY (Note 18) OTHER LIABILITIES Total Liabilities	2,358 5,407 - 22,550	1,378 250 3,179 5,651 19 18,985
MINORITY INTEREST	1,660	4,444
COMMITMENTS AND CONTINGENCIES (Note 18)		
SHAREHOLDERS' EQUITY		
SHARE CAPITAL (Note 13)  First Preferred Shares, without par value, unlimited shares authorized. No shares issued.  Common shares, without par value, unlimited shares authorized. Shares issued and outstanding in 2001 of 49,259,548 and in 2000 of 37,588,988.  Equity component of convertible debentures (Note 8)	168,308 545	160,922 1,045
DEFICIT  Total Shareholders' Equity  Total Liabilities and Shareholders' Equity	( <u>156,511</u> ) <u>12,342</u> <u>\$ 36,552</u>	( <u>135,927</u> ) <u>26,040</u> <u>\$ 49,469</u>

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

Approved by the Board:

By: <u>/s/ Robert R. Stone - Director</u>
By: <u>/s/ David K. Fagin - Director</u>

# GOLDEN STAR RESOURCES LTD. CONSOLIDATED STATEMENTS OF OPERATIONS

(Stated in thousands of United States Dollars except per share amounts)

		the Years Ended De	
REVENUE	<u>2001</u>	<u>2000</u>	<u>1999</u>
Gold sales	\$ 23,801	\$ 30,405	\$ 10,581
Interest and other	857	766	673
GOGTG AND EMPENATE	24,658	31,171	11,254
COSTS AND EXPENSES Mining engrations	24,824	21,693	5,966
Mining operations Depreciation and depletion	3,420	7,289	2,971
Exploration expense	3,420 204	7,289 946	2,971 468
General and administrative	2,669	2,905	3,734
Write-downs and abandonment of mineral properties	15,010	16,706	23,933
Gain on disposal of assets	13,010	(50)	(139)
Interest expense	833	805	203
Foreign exchange loss (gain)	(50)	(254)	(508)
1 oreign enemange 1000 (gam)	46,910	50,040	36,628
LOSS BEFORE THE UNDERNOTED	(22,252)	(18,869)	(25,374)
Omai preferred share redemption premium	583	479	379
Loss before minority interest	(21,669)	(18,390)	(24,995)
Minority interest	1,085	3,509	629
NET LOSS	(20,584)	(14,881)	(24,366)
DEFICIT, BEGINNING OF PERIOD	(135,927)	(121,046)	(96,680)
DEFICIT, END OF PERIOD	\$(156,511)	<u>\$(135,927)</u>	<u>\$(121,046)</u>
BASIC AND DILUTED NET LOSS PER SHARE	<u>\$ (0.49)</u>	<u>\$ (0.40)</u>	<u>\$ (0.76)</u>
WEIGHTED AVERAGE SHARES OUTSTANDING (in millions of shares)	42.2	<u>37.5</u>	32.4

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

# CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY (Stated in thousands of United States Dollars except share amounts)

	Common Stock Number of <u>Shares</u>	Share <u>Capital</u>	<u>Warrants</u>	Stock Option <u>Loans</u>	Equity Component of Convertible <u>Debentures</u>	<u>Deficit</u>
Balance at December 31, 1998	30,292,249	\$159,163	\$ -	\$ (4,012)	\$ -	\$ (96,680)
Shares Issued	6,947,994	3,484	-	_	-	_
Shares Canceled	(679,012)	(3,312)	-	-	-	-
Shares Issued Under Options	17,500	12	-	-	-	-
Shares Issued Under Warrants	365,000	255	-	-	-	-
Issue Costs	-	(441)	-	-	-	-
Warrants Issued	-	` -	1,341	_	_	_
Stock Option Loan			•			
Repayment/Cancellation	-	-	-	4,012	-	-
Equity Component of				-		
Convertible Debentures	-	-	-	-	1,045	-
Net Loss	<u>-</u> _					(24,366)
Balance at December 31, 1999	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	<del>_</del>	<del>_</del>				<u>(14,881</u> )
Balance at December 31, 2000	37,588,988	159,642	1,341	-	984	(135,927)
Shares Issued Under Warrants	2,738,660	1,282	-	-	-	-
Shares Issued	6,833,333	4,147	-	-	-	-
Debenture Conversions	2,098,567	1,469	-	-	(439)	-
Warrants Issued	-	-	427	-	-	-
Net Loss						(20,584)
Balance at December 31, 2001	49,259,548	<u>\$166,540</u>	\$ 1,768	<u>\$ -</u>	<u>\$ 545</u>	<u>\$(156,511)</u>

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

# CONSOLIDATED STATEMENTS OF CASH FLOWS

(Stated in thousands of United States Dollars)

	For the Years Ended December 31,		
Operating Activities:	<u>2001</u>	<u>2000</u>	1999
Net Loss	\$(20,584)	\$(14,881)	\$(24,366)
Reconciliation of net loss to net cash used in operating			
activities:	2 422	<b></b>	2051
Depreciation, depletion and amortization	3,423	7,289	2,971
Convertible debentures accretion	209	209	74
Premium on Omai preferred share redemption	(583)	(479)	(379)
Non-cash employee compensation	-	35	- (120)
(Gain)/Loss on disposal of assets	6	(50)	(139)
Impairment and abandonment of mineral properties	15,010	16,706	23,933
Accrued interest on notes receivable	(89)	(215)	-
Restricted cash	782	-	-
Reclamation expenditures	(244)	(1,070)	-
Minority interest	(1,085)	(3,509)	(629)
Changes in assets and liabilities:			
Accounts receivable	(255)	1,000	(12)
Inventories	3,139	(1,900)	(340)
Accounts payable	2,742	(199)	(1,335)
Other assets	(42)	(407)	125
Total changes in non-cash operating working capital	5,584	<u>(1,506)</u>	<u>(1,562</u> )
Net Cash Provided by/(Used in) Operating Activities	2,429	2,529	(97)
Investing Activities:			
Expenditures on mineral properties, net of joint venture			
recoveries	(2,798)	(3,224)	(3,597)
Expenditures on mining properties	(2,376)	(102)	(303)
Equipment purchases	(1,018)	(2,804)	(920)
Omai preferred share redemption	1,068	876	694
Proceeds from sale of equipment	-	55	245
Environmental rehabilitation bonding	-	1,853	(6,000)
Payments for acquisition, net of cash acquired	-	, <u>-</u>	(1,525)
Other	(62)	57	75
Net Cash Used in Investing Activities	(5,186)	(3,289)	$\overline{(11,331)}$
<b>G</b>		<del></del>	
Financing Activities:			
Repayment of stock option loan	-	-	637
Change in other liabilities	235	14	(310)
Issuance of convertible debentures	-	-	4,155
Repayment of long-term debt	(1,068)	(2,286)	(694)
Issuance of short term debt	826	947	-
Issuance of share capital, net of issue costs	2,282	171	3,195
Net Cash Provided by/(Used in) Financing Activities	2,275	(1,154)	6,983
Decrease in cash and short-term investments	(482)	(1,914)	(4,445)
Cash and short-term investments, beginning of year	991	2,905	7,350
Cash and short-term investments, end of year	\$ 509	\$ 991	\$ 2,905

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

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amounts in thousands of United States Dollars unless noted otherwise)

## 1. Formation of the Company

In May of 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 mining company and gold producer. Since 1999, we have sought to move from a primarily exploration focus, with operations in several areas in Africa and South America, to a primarily production focus, concentrating on operations in Ghana. We own a 90% equity interest in Bogoso Gold Limited ("BGL"), which owns the Bogoso gold mine in Ghana ("Bogoso Mine"), and have recently acquired mineral rights in the adjacent Prestea property. These two properties are now referred to as "Bogoso/Prestea". We are in the process of selling our interest in the Gross Rosebel project in Suriname ("Gross Rosebel") to our partner in the project and expect to use the proceeds of this sale and the proceeds of our recent equity financing to provide a portion of the equity base to expand our Ghana operations. 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. All material intercompany balances and transactions have been eliminated. The consolidated group includes the following as of December 31, 2001 (all entities are 100%-owned, unless otherwise noted):

## 2001:

Golden Star Holdings Ltd.
Venezuela Investments Ltd.
Pan African Resources Corporation
Southern Star Resources Ltd.
Guyanor Ressources S.A. (72.6%)
Société de Travaux Publics
et de Mines Aurifères en
Guyane ("SOTRAPMAG")

## 2000:

Golden Star Holdings Ltd.
Venezuela Investments Ltd.
Golden Star Management Ltd.
Pan African Resources Corporation
Southern Star Resources Ltd.
Guyanor Ressources S.A. (72.6%)
Société de Travaux Publics
et de Mines Aurifères en

Société des Mines de St-Elie ("SMSE") 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%)

Guyane ("SOTRAPMAG")

Société des Mines de St-Elie ("SMSE")

Caystar Holdings
Bogoso Holdings
Bogoso Gold Limited (70%)

# 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. Actual results could differ from those estimates.

## Cash and Short-term Investments

Cash and short-term investments consist primarily of high credit quality United States and Canadian money market investments and fixed and variable income commercial paper, which are capable of reasonably prompt liquidation, have a maturity date of less than 90 days when acquired and are stated at amortized cost, which approximates market value.

## 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.

## 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 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.

## Acquisition, Deferred Exploration and Development Costs

Acquisition, exploration and development costs of mineral properties are capitalized.

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 reevaluated to determine if future exploration is warranted and if their carrying values are appropriate.

If a mineral 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.

# Mining Properties Impairments

The Company evaluates its mining properties for impairment when 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 fair value of the asset which generally will be computed using undiscounted future cash flows. The Company's 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 mineral properties.

## Investment in Omai Gold Mines Limited

The common share investment in Omai Gold Mines Limited ("OGML") is accounted for using the equity method. As of December 31, 2001 our share of cumulative losses of OGML had exceeded the cost of the original investment in common shares.

In addition, we hold Class I redeemable preferred shares of OGML which were recorded at the cost of the mineral interest exchanged. The preferred shares are required to be redeemed quarterly based upon a percentage of cash flows from the Omai Mine (Note 12), which proceeds are applied to the Investment OGML balance based upon the relationship that the Company's original investment in deferred exploration costs (\$5 million) bore to the original value of the redeemable preferred shares (\$11 million). The remainder of the preferred share proceeds is recognized as "Omai preferred share redemption premium" in the consolidated statement of operations.

### Fixed Assets

Fixed 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. The net book value of fixed 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

Costs are estimated based primarily upon environmental and regulatory requirements to fund the ongoing and final reclamation and closing costs relating to the Bogoso and Prestea mine sites.

# Foreign Currencies and Foreign Currency Translation

Certain South American and African currencies are not readily negotiable outside their respective countries. United States of America funds transferred to these countries are used to purchase local currency to be used for labor, local supplies, and other items associated with the exploration and development of mineral properties.

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 "Eu" afterward, and Ghanaian currency is denoted as "Cedi" or "Cedis".

## Net Loss per Share

We adopted the treasury stock method of accounting for fully diluted earnings per common share in the current period. Formerly, generally accepted accounting principles required that the imputed earnings method be used for determining the dilutive effect of options.

The treasury stock method computes the number of incremental shares by assuming the outstanding stock options exercisable at exercise prices below the average market price for the applicable fiscal year are exercised and then that number of incremental shares is reduced by the number of shares that could have been repurchased from the issuance proceeds, using the average market price of the company's shares for the applicable fiscal year.

The effects of common share equivalents are anti-dilutive.

## Concentration of Credit Risk

Financial instruments that potentially subject us to concentration of credit risk consist primarily of cash investments and trade accounts receivable. We restrict investment of temporary cash balances to financial institutions with high credit standing. We strive to minimize our credit risk through diversification of our holdings with financial institutions.

## 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 is shipped from the mine site.

## Income Taxes

We follow the liability method of accounting for income taxes. Under this method, income tax liabilities and assets are recognized for the estimated tax consequences attributable to differences between the amounts reported in the financial statements and their respective tax bases, using enacted income tax rates. The effect of the change in income tax rates on future income tax liabilities and assets is recognized in the results of the period that the change occurs.

## 4. Supplemental Cash Flow Information

The following is a summary of non-cash transactions:

<u>2001</u>	<u>2000</u>	<u>1999</u>
\$ 3	\$ 52	\$ 193
-	-	(3,784)
-	-	(8,258)
150	-	-
(150)	-	_
85	-	-
-	-	(3,312)
(1,549)	-	-
1,081	-	_
(1,388)	-	_
1,857	-	-
(2,000)	-	_
(2,493)	-	-
	\$ 3 	\$ 3 \$ 52 

## Financing:

Increase in amount payable to financial institutions (Note 9)	-	-	6,917
Cancellation of stock option loan related shares	-	-	3,312
Issuance of warrants for credit facility (Note 9)	-	-	1,341
Shares issued upon conversion of convertible debentures	1,030	214	-
(Note 8)			
Conversion of convertible debentures (Note 8)	(1,030)	(214)	=
Adjustment of final amount due Sellers of BGL	(85)	-	-
Accrual of possible liability due the Sellers (Note 10)	2,000	-	-
Common stock issued to Barnex for Prestea purchase (Note			
10)	2,493	-	-

## 5. Fair Value of Financial Instruments

The Company's financial instruments are comprised of short-term investments, accounts receivable, restricted cash, the investment in OGML, 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.

## 6. Inventories

	December 31, 2001	December 31, 2000
Stockpiled ore	\$ 1,278	\$ 2,736
In-process	951	2,361
Materials and supplies	5,437	5,708
• •	<u>\$ 7,666</u>	\$10,805

## 7. Current Debt

	December 31, 2001	December 31, 2000
Note due Omai Gold Mines Limited (Note 7a)	\$ 310	\$ -
Amounts due to the Sellers of BGL (Note 7b and 9)	2,874	2,781
Due financial institution (Note 7c)	500	250
Overdraft facility at BGL (Note 7d)	1,003	947
Bank loan at BGL (Note 7e)	826	-
Accrual of possible liability to Sellers of BGL (Notes 7f and 9)	<u>2,000</u>	<u>-</u> _
Total	<u>\$7,513</u>	\$3,978

## (a) Note due Omai Gold Mines Limited

On December 23, 1998, 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 is non-interest bearing until September 30, 2010. Subsequent redemption of preferred shares has reduced the liability to the amount shown. See Note 12 for additional information on the OMGL notes.

# (b) Amounts Due to the Sellers of Bogoso Gold Limited

The September 30, 1999, BGL purchase agreement provides for three payments to the Sellers of BGL, the first at the signing of the purchase agreement on September 30, 1999, the second on the first anniversary of the purchase agreement ("first interim payment") and the third on the second anniversary of the purchase agreement ("second

interim payment"). The amounts of the two interim payments were dependent upon the average price of gold over the two years following the date of the purchase agreement.

Golden Star and Anvil, (as of the acquisition date Anvil was the minority interest holder in BGL), together were scheduled to make the interim payment to the Sellers of BGL on September 30, 2000 in the amount of \$2.8 million. On November 9, 2000 we paid the Sellers \$1.4 million of the \$2.8 million due, and reached agreement with the Sellers that the balance, plus interest at 10% per annum, was to be paid by December 22, 2000. A second and final interim payment was due to the Sellers on September 30, 2001 in the amount of approximately \$1.3 million. The total payment due on September 30, 2001, including the \$1.4 million due from 2000, plus accrued interest, and the final 2001 interim payment, was approximately \$2.8 million. An agreement was reached with the Sellers in October 2001, which deferred the \$2.8 million payment until November 30, 2001. In January 2002, \$2.9 million was paid to the Sellers extinguishing this liability.

## (c) Due to a Financial Institution

This amount represents gold production related payments due to a financial institution retained in 1999 to provide bridge financing for the BGL acquisition. The first payment of \$0.25 million, due September 30, 2001, was made in January 2002, and the second and final payment of \$0.25 million is due September 30, 2002.

## (d) Overdraft facility at BGL

Over-draft facility at BGL from Barclays Bank in Ghana in the amount of \$1.0 million.

## (e) Bank Loan BGL

Term loan from CAL Merchant Bank, Ghana to BGL. This loan is denominated in Ghanaian cedis, has a six month repayment holiday and a two year maturity. Proceeds were used to make a second payment to PGR with respect to the Prestea property.

## (f) Accrual of Possible Liability to Sellers

The original BGL purchase agreement of September 1999 included a reserve acquisition payment due the Sellers. The reserve acquisition payment would be triggered if minable reserves equivalent to 50,000 ounces of gold or greater were to be acquired by BGL prior to September 30, 2001 from elsewhere in Ghana for processing at the Bogoso mill. The acquisition of the surface mining lease at the Prestea property may have triggered the reserve acquisition payment and the associated \$2.0 million liability. While the Company's liability for this payment and the exact due date of this liability is yet to be established, the \$2.0 million contingent liability was accrued in the fourth quarter of 2001.

## **8.** Convertible Debentures

On August 24, 1999, we issued \$4,155,000 of subordinated convertible debentures to raise financing for the acquisition of BGL. The debentures mature on August 24, 2004 and bear 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 are convertible at the option of the holder into common shares of Golden Star at a conversion price of \$0.70 per share, subject to adjustment upon the occurrence of certain events, such as but not limited to the payment of dividends on the Company's share capital. Any portion of the debenture that is a multiple of \$1,000 may be converted into common shares at any time prior to the maturity date of August 24, 2004, unless previously redeemed. The holder's right of conversion will terminate on the date of redemption, if we have chosen to redeem the debentures. Each \$1,000 principal amount of debentures also entitles the holder to warrants exercisable for 200 common shares of Golden Star 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.

The debentures are redeemable by the Company (1) in the event of certain developments involving Canadian withholding taxes at a redemption price of 100% of the principal amount of the debentures to be redeemed, plus accrued interest to the redemption date and (2) at the option of the Company on or after August, 2002 if the reported closing trading price, on the American Stock Exchange or any other national securities exchange or any automated quotation system our shares are listed on, of the common shares as reported on the close of business for any 20 of the 25 consecutive trading days immediately prior to the date notice of redemption is given is at least 125% of the conversion price.

The debentures are unsecured obligations of Golden Star and are subordinated in right of payment to all existing and future indebtedness and other liabilities of Golden Star and its subsidiaries. There are no financial restrictions or covenants contained in the debentures.

During 2001, \$1.5 million of debentures were converted to 2,098,567 shares of common stock. During 2000 \$0.2 million of the debentures were converted to 392,857 shares of common stock. Changes in the liability and equity components since the debentures were issued are shown in the following table:

	Liability	Equity
	Component	Component
Upon issuance, August 1999	\$3,110	\$1,045
Accretion since issuance	492	-
Conversions since issuance	(1,244)	(500)
December 31, 2001	\$2,358	\$ 545

The accretion component is designed to accrue additional liability pro-ratably over the life of the debentures equal to the portion originally designated as the equity component of the debentures.

The following schedule shows our obligations for the next three years in relation to interest and principal payments on the convertible debentures assuming there are no additional conversions after December 2001:

<u>Year</u>	<u>Obligatioi</u>
2002	\$ 180
2003	180
2004	2,529
Total	<u>\$2,889</u>

#### 9. Acquisition of BGL

On September 30, 1999, Golden Star and Anvil Mining NL, an Australian company ("Anvil"), acquired 70% and 20%, respectively, of the common shares of BGL, a Ghanaian company. The Government of Ghana retained a 10% equity interest in BGL. BGL is the owner of the Bogoso Mine, an operating gold mine in the Republic of Ghana. In mid-2001 we acquired the 20% interest owned by Anvil thereby increasing our ownership of BGL to 90%. The Government of Ghana retains the right to acquire an additional 20% of BGL.

The original September 1999 acquisition was completed pursuant to a purchase agreement among Golden Star and Anvil (the "Buyers") and a consortium of banks headed by the International Finance Corporation and Deutsche Investition und Entwicklungsgesellschaft mbH (the "Sellers"). The total acquisition cost including initial payments, future payments, financing costs and administrative costs was \$14.7 million. The acquisition was accounted for under the purchase method of accounting for business combinations. Included in the purchase were \$10.9 million of current assets, \$6.0 million of cash restricted for future reclamation work, \$10.9 million of mining property, \$4.4 million of liabilities, \$7.0 million of accrued reclamation liabilities and \$1.7 million of minority interest. The Sellers received \$6.5 million cash at September 30, 1999 and agreed to receive additional payments in the future as described below. The initial payment of \$6.5 million, was funded using working capital and proceeds from our August 24, 1999 offering of subordinated convertible debentures, common shares and warrants.

The BGL purchase agreement provided for three payments to the Sellers, the first at the signing of the purchase agreement on September 30, 1999, the second on the first anniversary of the purchase agreement ("first interim"

payment"), and the third on the second anniversary of the purchase agreement ("second interim payment"). The amounts of the two interim payments were dependent upon the average price of gold over the two years following the date of the purchase agreement.

The Buyers were scheduled to make the first interim payment to the Sellers of BGL on September 30, 2000 in the amount of \$2.8 million. On November 9, 2000 we paid the Sellers \$1.4 million of the \$2.8 million due, and reached agreement with the Sellers that the balance, plus interest at 10% per annum, was to be paid by December 22, 2000. A second and final interim payment was due to the Sellers on September 30, 2001 in the amount of approximately \$1.3 million. The total payment due on September 30, 2001, including the \$1.4 million due from 2000, plus accrued interest, and the final 2001 interim payment, was approximately \$2.8 million. An agreement was reached with the Sellers in October 2001, which deferred the \$2.8 million payment until November 30, 2001 and imposed a \$45,000 penalty if payment was made after November 30, 2001. In January 2002, the first interim payment, second interim payment, accrued interest and the penalty were paid to the Sellers, thereby liquidating all payments due the Sellers.

The original BGL purchase agreement of September 1999 also included a reserve acquisition payment, which would also be due the Sellers. The reserve acquisition payment would be triggered if minable reserves equivalent to 50,000 ounces of gold or greater were to be acquired by BGL prior to September 30, 2001 from elsewhere in Ghana for processing at the Bogoso mill. The acquisition of the surface mining lease at the Prestea property, with its contained reserves in excess of 50,000 ounces, may have triggered the reserve acquisition payment and the associated \$2.0 million liability. While our liability for this payment and the exact due date of this liability is yet to be established, the \$2.0 million contingent liability was accrued in the fourth quarter of 2001. We will also be required to pay the Sellers an additional \$5.0 million on the first anniversary of the commencement of treatment of sulfide ore at the Bogoso Mine. Such payment is contingent upon financing, implementation and start-up of a sulfide operation. Due to the contingent nature of this consideration, we have not recorded any liability as of December 31, 2001.

We are also required to make production related payments to the provider of a credit facility arranged for, but not used, to effect the acquisition of BGL. We are required to pay \$0.25 million for every continuous 12- month period wherein more than 75,000 ounces of gold is produced from the Bogoso Mine. Based on proven and probable reserves, we accrued \$0.5 million in 1999 for the two-year production life on the Bogoso Mine. The first of these payments was made in January 2002 and the second and final payment is scheduled for September 2002.

## 10. Acquisition of Prestea

Soon after completion of the BGL acquisition we began negotiations to acquire a second property in Ghana known as the Prestea property. The Prestea property lies immediately south of and adjacent to the Bogoso Mine and contains gold reserves which were known to be suitable for processing in the Bogoso mill once the Bogoso reserves were exhausted in late 2001. We were successful in acquiring a mining lease for the Prestea property in June 2001. Currently identified gold reserves at Prestea are expected to provide non-refractory feed for the Bogoso mill for approximately five years. Additional sulfide mineralization is also known to exist on the Prestea property.

To acquire the Prestea property two transactions were required, one with Barnato Exploration Limited ("Barnex"), which closed in late 2001, and one with Prestea Gold Resources Limited ("PGR"), which was completed in early 2002. 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 on June 29, 2001. Pursuant to the agreement with Barnex, Golden Star issued Barnex 3,333,333 common shares and 1,333,333 warrants to subscribe for Golden Star 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 costs of acquiring the Prestea mine was \$6.8 million. This includes \$2.2 million for the Golden Star stock and warrants issued to Barnex, \$1.3 million

of cash paid to PGR, \$2.0 million accrued for the potential reserve acquisition liability to the Sellers of BGL which may have been triggered by obtaining the Prestea reserves, \$0.7 million of pre-production development costs and approximately \$0.6 million in transactions costs.

In addition to the \$6.8 million of direct purchase costs listed above, \$0.4 million of unamortized Bogoso mine property costs acquired in the September 1999 Bogoso purchase and \$1.4 million of costs associated with the purchase of the 20% minority interest position in BGL from Anvil during 2001, will be included in the new Prestea amortization base, bringing the total amortization basis to \$8.6 million, of which \$0.2 million has been amortized to date.

# 11. Acquisition, Deferred Exploration and Development Costs

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	Capitalized Exploration	Capitalized Acquisition	Joint Venture Recov-	Property Abandon- ments and	Acquisition, Deferred Exploration and Development
	Costs as at	Expenditures	Expenditures	eries in	Adjustments	Costs as of
	12/31/00	in 2001	in 2001	2001	in 2001	12/31/01 (4)
		Ir	n Thousands of u	nited States D	ollars	
SURINAME						
Gross Rosebel (1)	\$15,818	\$ 691	\$ -	\$ (340)	\$ (8,103)	\$ 8,066
Sub-total	15,818	691	-	(340)	(8,103)	8,066
FRENCH GUIANA (Guyanor Ressources S.A.) (2) Paul Isnard / Eau Blanche Sub-total	5,827 5,827	1,037 1,037	<u>-</u>	<u>-</u>	(6,864) (6,864)	<u>-</u>
Sub total	3,027	1,057			(0,001)	
AFRICA (Bogoso Gold Limited) (3)						
Riyadh	239	35	-	-	-	274
Pampe/Flagbase	2 (00	330				330
Bogoso Sulfide Project Other Bogoso Area Projects	2,608	964 38	-	-	-	3,572 38
Sub-total	2,847	1,367	-	-	-	4,214
OTHER		43	-	-	(43)	-
TOTAL	\$24,492	\$3,138	\$ -	\$ (340)	\$(15,010)	\$12,280

- (1) Subject to sale to Cambior. See note 19.
- (2) Approximately 73% owned by Golden Star.
- (3) A 90% owned subsidiary of Golden Star
- (4) Our holdings include ownership interests, royalty interests, leases, options and joint venture interests in varying percentages.

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 the associated decision of a joint venture partner to with draw from the Paul Isnard exploration joint venture late in the year.

An \$8.1 million impairment related write-off was deemed necessary at the Gross Rosebel project following an agreement in September to sell this property to our joint venture partner. See note 19.

The consolidated property expenditures and abandonment costs for the Company's exploration projects for the fiscal year ended December 31, 2000 were as follows:

	Acquisition, Deferred Exploration and Development Costs as at 12/31/99	Capitalized Exploration Expenditures in 2000	Capitalized Acquisition Expenditures in 2000	Joint Venture Recov- eries in 2000	Property Abandon- ments and Adjustments in 2000	Acquisition, Deferred Exploration and Development Costs as of 12/31/00 (4)
=		Ir	Thousands of U	nited States D	ollars	
GUYANA						
Eagle Mountain	\$ 1,364	\$ -	\$ -	\$ -	\$ (1,364)	\$ -
Other	123	-	-	-	(123)	-
Sub-total	1,487	-	-	-	(1,487)	-
SURINAME						
Gross Rosebel	15,860	216	-	(258)		15,818
Sub-total	15,860	216	=	(258)		15,818
FRENCH GUIANA (Guyanor Ressources S.A.) (1) Dorlin	2,608	150	-	(75)	(2,683)	-
Yaou	6,968	241	-	(91)	(7,118)	-
Paul Isnard / Eau Blanche	5,376	451	-	-	- (1.005)	5,827
Paul Isnard Alluvials	1,987	-	-	-	(1,987)	-
Dachine	1,720	708	-	(678)	(1,750)	-
Sub-total	18,659	1,550	=	(844)	(13,538)	5,827
AFRICA (Pan African Resources Corporation) (2) Ivory Coast / Tanda	1,681				(1,987)	
(Bogoso Gold Limited) (3)	1,081	-	-	-	(1,987)	-
Riyadh	75	164		_	_	239
Bogoso Sulfide	160	2,448	_	_	-	2,608
Sub-total	1,916	2,612	-		(1,681)	2,847
TOTAL	\$37,922	\$4,378	\$ -	\$(1,102)	\$(16,706)	\$24,492

<sup>(1)</sup> Approximately 73% owned by the Company.

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.

## 12. Investment in Omai Gold Mines Limited

#### (a) Common Share Investment

We have a 30% common share equity interest in OGML, a Guyana company established to build and operate the Omai Mine in Guyana. The common share investment in OGML is accounted for using the equity method but, as of December 31, 2001, 2000 and 1999 our share of cumulative losses of OGML exceeded the value of our initial common equity investment, and accordingly, we have discontinued applying the equity method in these years. Our unrecorded share of OGML's losses was \$33.6 million, \$32.4 million and \$22.9 million at December 31, 2001, 2000 and 1999, respectively.

<sup>(2)</sup> A 100% owned subsidiary of the Company.

<sup>(3)</sup> A 70% owned subsidiary of the Company in 2000.

<sup>(4)</sup> Our holdings include ownership interests, royalty interests, leases, options and joint venture interests in varying percentages.

As part of the Guiana Shield Transaction announced in October 2001 and expected to close in April 2002, we are selling our 30% common share equity investment and preferred shares in OGML, to Cambior Inc. in consideration for the assumption by Cambior of the unpaid portion of the non-interest bearing loan made to Golden Star by OGML in December 1998.

# (b) Preferred Share Investment

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 \$10.7 million has been received, as of December 31, 2001.

# (c) Note Payable

On December 23, 1998 OGML advanced \$3.2 million to us as an unsecured loan to be repaid as and when our Class I preferred shares of OGML are redeemed by OGML. The loan is non-interest bearing until September 30, 2010. All of the \$1.1 million and \$0.9 million of Class I preferred shares redeemed in 2001 and 2000, respectively, was used to reduce the outstanding loan balance from \$1.4 million at December 31, 2000 to \$0.3 million at December 31, 2001. The remaining \$0.3 million has been classified as current debt at December 31, 2001.

## 13. Share Capital

## (a) Stock Option Plan

# Stock Options

Golden Star has one stock option plan, the 1997 Stock Option Plan (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 5,600,000 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, 2001 was 3,606,617. The number of common shares vested and exercisable under the plan as of December 31, 2000 was 3,520,350.

Guyanor has one stock option plan (the "Guyanor Plan"). Under the Guyanor Plan, Guyanor may grant options to its employees for up to 4,367,889 shares of Class B common shares. The options may take the form of non-qualified stock options, the exercise price of each option shall not be less than (i) the equivalent of the Canadian Dollar amount equal to the closing price of the shares on the Toronto Stock Exchange on the trading day immediately prior to the day the option is granted and (ii) 80% of the average closing price on the Noveau Marché of the Bourse de Paris during the 20 consecutive trading days immediately preceding the date the option is granted. An option's term is ten years. Options under the Guyanor Plan are granted from time to time at the discretion of Guyanor's Board of Directors and vest over periods ranging from immediately to two years.

During 1999, certain employee stock options under the GSR Plan were repriced. On January 15, 1999 the Board of Directors of the Company approved, subject to any necessary regulatory and shareholder approvals, the amendment of certain stock options. The number of shares that can be purchased under these outstanding options was reduced by 20%. The exercise price of outstanding stock options previously granted to directors and officers ("Insiders"), employees and consultants ("Non-Insiders") of the Company was amended to Cdn\$1.80, if the original exercise price was greater than Cdn\$1.80. The exercise price of the repriced stock options ranged from Cdn\$2.76 to Cdn\$22.40. The total number of shares of the stock options repriced was 2,525,780. Of that amount 2,026,780 were held by Insiders and 499,000 were held by Non-Insiders. All the necessary approvals were obtained and the Insiders' options were reduced to 1,621,424 (a reduction of 405,356) and the Non-Insiders' options were reduced to 399,200 (a reduction of 99,800).

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

		2001	2000		1999	
				Weighted-		
		Weighted-Average		Average Exercise		Weighted-Average
GSR Plan	Shares	Exercise Price	Shares	Price	Shares	Exercise Price
	(000)	(Cdn\$)	(000)	(Cdn\$)	(000)	(Cdn\$)
Outstanding at beginning of year	4,821	1.56	3,730	1.56	3,497	10.40
Granted	938	1.02	1,695	1.39	2,013	1.42
Exercised	-	-	(62)	1.55	(18)	1.08
Forfeited	1,164	1.69	(542)	1.73	(1,762)	7.55
Outstanding at end of year	4,595	1.42	4,821	1.56	3,730	1.86
Options exercisable at year-end	3,607		3,520		3,127	
Weighted-average fair value of						
options granted during the year		1.02		1.23		1.86

Options Outstanding			Options	Exercisable	
	Number			Number	_
GSR Plan	Outstanding at	Weighted-Average	Weighted-Average	Exercisable at	Weighted-Average
Range of Exercise	Dec. 31, 2001	Remaining	Exercise Price	Dec. 31, 2001	Exercise Price
Prices (Cdn\$)	(000)	Contractual Life	(Cdn\$)	(000)	(Cdn\$)
0.60 to 1.15	974	9.41	1.02	434	1.02
1.16 to 1.64	2,293	8.08	1.38	1,845	1.38
1.65 to 1.80	<u>1,328</u>	4.64	<u>1.79</u>	<u>1,328</u>	<u>1.80</u>
	4,595	7.37	1.42	3,607	1.49

The following tables summarize information about stock options for the Guyanor Plan:

	2001		2000		1999	
Guyanor Plan	Shares (000)	Weighted- Average Exercise Price (Cdn\$)	Shares (000)	Weighted-Average Exercise Price (Cdn\$)	Shares (000)	Weighted-Average Exercise Price (Cdn\$)
Outstanding at beginning of year	1,550	2.75	3,216	3.40	3,035	3.56
Granted	26	0.25	70	0.78	181	0.72
Exercised	-	-	-	-	-	-
Forfeited	384	3.38	(1,736)	3.87	-	-
Outstanding at end of year	1,192	2.49	1,550	2.75	3,216	3.40
Options exercisable at year-end Weighted-average fair value of	1,187		1,539		3,095	
options granted during the year		0.25		0.70		0.72

Options Outstanding			Options	Exercisable	
	Number			Number	
Guyanor Plan	Outstanding at	Weighted-Average	Weighted-Average	Exercisable at	Weighted-Average
Range of Exercise	Dec. 31, 2001	Remaining	Exercise Price	Dec. 31, 2001	Exercise Price
Prices (Cdn\$)	(000)	Contractual Life	(Cdn\$)	(000)	(Cdn\$)
0.25 to 1.64	245	7.23	1.05	240	1.06
2.10 to 3.30	878	3.53	2.36	878	2.36
9.20	69	<u>4.95</u>	9.20	<u>69</u>	<u>9.20</u>
	1,192	4.24	2.49	1,187	2.50

# (b) Stock Option Loans

As of December 31, 1998 employees had exercised their rights under employee stock option loan agreements and purchased 1,029,012 common shares against which there were outstanding loans of Cdn\$5.3 million which related to loans to two employees, one a former officer and currently a director, and the other a former officer of the Company. These loans were non-interest bearing, collateralized by our common shares issued under the agreement,

and repayable within five years from the date of exercise unless the loan term is extended by vote of the Board of Directors.

During 1999, 679,012 shares were canceled that were previously issued for options granted under the Golden Star Stock Option Plan and the remaining balance related to stock option loans, principally to one former officer, amounting to \$3.3 million and collateralized by the shares, was also canceled. During 1999, we negotiated repayment of the stock option loans in the amount of approximately \$0.7 million with the former officer and current director, and it was paid in full in May 1999. There were no stock option loans outstanding as of December 31, 1999 and no new stock option loans were granted during 2000 and 2001.

## (c) 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 maximum number of common shares issuable under the Bonus Plan is 320,000.

During 2001, 2000 and 1999, a total of nil, 40,000 and 24,994 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 2001, 2000 and 1999 of nil, \$35,000 and \$20,000, respectively.

#### (d) Warrants

On August 24, 1999 we completed a financing with total proceeds from the sale of equity units of \$3.4 million, comprised of 6,923,000 common shares and warrants to purchase 3,461,500 common shares. The exercise price of these warrants was \$0.70 and the expiration date was February 24, 2001. In December 2000, we obtained regulatory approval to reduce the exercise price for 2,299,500 of these warrants to \$0.52 per share and to extend the life of these same warrants to the earlier of August 24, 2001 or the 30<sup>th</sup> calendar day following the determination that the 10-day weighted average trading price is greater than \$0.62 per share. The new price was in excess of the fair market value at the date of the re-pricing. In May 2001, the ten-day weighted average trading price exceeded \$0.62 per share, triggering the thirty-day mandatory exercise period. Subsequently, 934,000 of these options were exercised and all remaining unexercised warrants in this tranche expired prior to the end of June 2001.

In conjunction with the convertible debenture financing (also completed on August 24, 1999), which totaled \$4,155,000, we also issued warrants ("four year warrants") to the holders of the debentures to purchase up to 831,000 common shares. The exercise prices for the four-year warrants, was \$1.50 if exercised prior to August 24, 2001 and \$1.75 if exercised after August 24, 2001 but before August 24, 2003. The four-year warrants expire August 24, 2003. None of these warrants have been exercised to December 31, 2001.

Also, on August 24, 1999, we issued warrants at an exercise price of \$0.70 to purchase a total of 380,825 of our common shares, in connection with the equity financing completed on the same date. These warrants had an expiration date of August 24, 2000. In August 2000, we extended the life of these warrants to February 24, 2001. In December 2000, we obtained regulatory approval to reduce the exercise price for these warrants to \$0.52 per share and to extend the life of these warrants to the earlier of August 24, 2001 or the 30<sup>th</sup> calendar day following the determination that the 10-day weighted average trading price is greater than \$0.62 per share. The new price was in excess of the fair market value at the date of the re-pricing. In May 2001 the ten-day weighted average trading price exceeded \$0.62 per share, triggering the thirty-day mandatory exercise period. Subsequently 152,330 of these options were exercised and all remaining unexercised warrants in this tranche expired prior to the end of June 2001.

On June 9, 1999, we issued two warrants to a financial institution to purchase 1,500,000 of our common shares, in connection with the credit facility that was arranged, but not used to effect, the purchase of BGL. These warrants were exercisable at a price of \$0.7063 each and expire June 9, 2002. In October 1999, we reduced the exercise price of these warrants from \$0.7063 to \$0.425. The fair value of the warrants of approximately \$1.3 million was

included in share capital, and was reflected as a purchase price adjustment in the fourth quarter of 1999. All of these warrants were exercised during 2001.

On October 26 1999, we issued two warrants at an exercise price of \$0.70 to brokerage firms to purchase a total of 380,825 common shares of the Company in connection with the completion of the August 24 equity financing and the closing of the BGL acquisition. These warrants had an expiration date of August 24, 2000. In August 2000, we extended the life of these warrants to February 24, 2001. In December 2000, we obtained regulatory approval to reduce the exercise price for these warrants to \$0.52 per share and to extend the life of these warrants to the earlier of August 24, 2001 or the 30<sup>th</sup> calendar day following the determination that the 10-day weighted average trading price is greater than \$0.62 per share. The new price was in excess of the fair market value at the date of the repricing. In May 2001, the ten-day weighted average trading price exceeded \$0.62 per share, triggering the thirty-day mandatory exercise period. Subsequently, 152,330 of these options were exercised and all remaining unexercised warrants in this tranche expired prior to the end of June 2001.

In conjunction with the purchase of Prestea property, we issued to Barnex, 1,333,333 warrants to subscribe for our common shares at a price of \$0.70 for three years. All of these warrants were outstanding at December 31, 2001.

#### (e) Debenture Conversion

During 2001 holders of convertible debentures opted to convert \$1.5 million of debentures to equity. These conversions added \$1.0 million to share capital. The balance, of \$0.5 million, reduced the equity component of the convertible debentures.

#### 14. Income Taxes

Income tax accounting for US GAAP utilizes a similar asset and liability approach. Use of the asset and liability method has no effect on the US GAAP nor the Cdn GAAP financial statements as we has concluded that a full valuation allowance must be applied to the future tax asset resulting from our net operating loss carryforwards. For the years ended December 31, 2001 and 2000, we have recorded no current tax expense under Canadian nor US GAAP due to the cumulative net losses incurred to date. Tax return preparation is currently in arrears with 1999 and 2000 returns currently incomplete. It is our plan to bring all tax filing current by the end of 2002.

Summarized below are the components of future taxes:

	As of December 31,		
	<u>2001</u>	2000	
Temporary differences relating to net assets:			
Other current assets	\$ -0-	\$ 62	
Property, plant & equipment	34,634	28,692	
Investment in OGML	930	930	
Offering costs	1,324	1,324	
Tax loss and credit carryforwards	19,303	18,016	
Gross future tax asset	56,191	49,024	
Valuation allowance	<u>(56,191)</u>	<u>(49,024)</u>	
Net future tax assets	\$ -	\$ -	

## 15. 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.

2001		Revenues	Net Income(Loss)	Identifiable <u>Assets</u>
2001	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
2000				
	South America	\$ 29	\$(14,009)	\$ 21,960
	Africa	30,916	18	24,625
	Corporate	226	(890)	2,884
Total		\$ 31,171	\$(14,881)	\$ 49,469
1999				
	South America	\$ 345	\$(19,176)	\$36,800
	Africa	10,611	(1,508)	26,364
	Corporate	298	(3,682)	11,188
Total	•	\$ 11,254	\$(24,366)	\$74,352

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

The following Golden Star Resources Ltd. consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (US GAAP). (Stated in thousands of United States Dollars except for per share amounts)

# (a) Balance Sheets in US GAAP

(w) Summer success in the Grand	As of December 31,		
	2001	2000	
Cash	\$ 509	\$ 991	
Trade accounts receivable, net	1,231	976	
Inventories	7,666	10,805	
Other Assets	230	188	
Total current assets	9,636	12,960	
Restricted cash	3,365	4,147	
Notes receivable	-	1,918	
Acquisition, deferred exploration and development costs			
(note 1)	-	-	
Investment in OGML (note 2)	-	-	
Mining property (note 1)	8,303	1,371	
Fixed Assets, net	2,268	2,937	
Other assets	660	<u>687</u>	
Total Assets	<u>\$24,232</u>	<u>\$24,020</u>	
Current liabilities	\$14,785	\$ 8,508	
Note payable OGML long term	-	1,378	
Amounts payable to financial institutions	-	250	
Convertible debentures (note 3)	2,411	3,875	
Environmental rehabilitation liability	5,407	5,651	
Other	<u>-</u>	19	
Total Liabilities	22,603	19,681	
Minority interest	96	4,817	
Share capital (notes 3 and 4)	165,833	158,519	
Equity component of the convertible debentures (note 3)	-	-	
Cumulative translation adjustments	1,595	1,595	
Accumulated comprehensive income (Note 5)	(279)	(329)	
Deficit	(165,616)	(160,263)	
Total Liabilities and Shareholders' Equity	<u>\$24,232</u>	\$24,020	

# (b) Statements of Operations in US GAAP

	For the Years Ended December 31,				
	2001	2000	1999		
Net loss under Canadian GAAP	\$(20,584)	\$(14,881)	\$(24,366)		
Net effect of the deferred exploration expenditures on loss					
for the period (1)	13,815	12,166	13,403		
Effect of capitalized acquisition costs (1)	-	(11,302)	(1,233)		
Effect of mining property depletion (6)	500	683	-		
Other (2) (3) (5)	583	309	315		
Loss under US GAAP before minority interest	(5,686)	(13,025)	(11,881)		
Minority interest, as adjusted (1) (2) (3) (5)	334	560	546		
Net loss under US GAAP	(5,352)	(12,465)	(11,335)		
Other comprehensive income foreign exchange gain (5)	50	<u>254</u>	10		
Comprehensive loss	<u>\$ (5,302)</u>	<u>\$(12,211)</u>	<u>\$(11,325</u> )		
Basic and diluted net loss per share under US GAAP	<u>\$ (0.13)</u>	<u>\$ (0.33)</u>	<u>\$ (0.35)</u>		

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

Under US GAAP the Omai preferred share redemption premium would be included with costs and expenses before the caption "Loss Before the Undernoted" on the consolidated statements of operations

# (c) Statements of Cash Flows in US GAAP

	Year ended December 31, 2001	Year ended December 31, 2000	Year ended December 31, 1999
Cash provided by (used in):			
Operating Activities	\$ 799	\$ 206	\$(3,144)
Investing activities	(3,545)	(966)	(8,284)
Financing activities	2,264	(1,154)	6,983
Increase (decrease) in cash and cash equivalents for			
the year	(482)	(1,914)	(4,445)
Cash and cash equivalent beginning of year	<u>991</u>	<u>2,905</u>	<u>7,350</u>
Cash and cash equivalents end of year	\$ 509	<u>\$ 991</u>	\$ 2,905

# (d) Footnotes

- (1) Under US GAAP, exploration and general and administrative costs related to projects are charged to expense as incurred. As such, the majority of costs charged to Exploration Expense and Abandonment of Mineral Properties under Cdn GAAP would have been charged to earnings in prior periods under US GAAP. Prior to January 1, 2000, acquisition costs for exploration properties were capitalized under US GAAP but in January 2000 we expensed previously capitalized acquisition costs related to exploration projects, totaling \$11.3 million based upon the uncertainty of the ultimate recoverability of these costs under FAS 121. Under US GAAP, we now expense all exploration costs, including property acquisition costs, for exploration projects.
- (2) 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 the Company, all of which were expensed for US GAAP purposes. Therefore, the entire Omai preferred share redemption premium would have been included in income. Under Cdn GAAP, a portion of the premium on the Omai preferred share redemption premium is included in income with the remainder reducing the carrying value of the Company's preferred stock investment.
- (3) 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.
- (4) 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 (a) above.
- (5) Under US GAAP, items such as foreign exchange gains and losses are required to be shown separately in derivation of Comprehensive Income.
- (6) Under US GAAP, the fair value of warrants issued in connection with the credit facility that was arranged for, but not used to effect the purchase of BGL, is required to be expensed. Such costs were capitalized as part of the purchase cost of BGL for Canadian GAAP.

# (e) Share Based Compensation

We apply Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" (APB 25), and related interpretations in accounting for our two stock-based compensation plans. We also apply United States Financial Accounting Standards Board ("FASB") Interpretation No. 44, "Accounting for Certain Transactions Involving Stock Compensation - an Interpretation of APB No. 25" ("FIN 44"), providing clarification of the accounting rules for stock-based compensation under APB 25.

We have adopted the disclosure-only provisions of Statement of Financial Accounting Standards No. 123, "Accounting for Stock Based Compensation" (SFAS 123). Had compensation cost for our stock option plans been determined based on the fair value at the grant date for awards under the plans, consistent with the methodology prescribed under the SFAS 123, our net loss would have changed to the pro forma amounts indicated as follows:

		<u>2001</u>	<u>2000</u>	<u> 1999</u>
Net loss under US GAAP	As reported	\$ (5,352)	\$(12,465)	\$(11,335)
	Pro forma	(5,841)	(13,152)	(12,584)
Net loss per share under US GAAP	As reported	(0.13)	(0.33)	(0.35)
	Pro forma	(0.14)	(0.35)	(0.39)

The fair value of each option granted during 2001, 2000 and 1999 is estimated on the date of grant for both plans using the Black-Scholes option-pricing model with the following weighted average assumptions:

	20	01	
	GSR Plan	Guyanor Plan	
Expected volatility	81.0% - 84.0%	91.0	
Risk-free interest rate	4.94% - 5.08	4.94	
Expected lives	5 years	5 years	
Dividend yield	0%	0%	
	2000		
	GSR Plan	Guyanor Plan	
Expected volatility	87.8%	94.7%	
Risk-free interest rate	6.10% - 6.79%	6.33% - 6.37%	
Expected lives	5 years	5 years	
Dividend yield	0%		
	1999		
	GSR Plan	Guyanor Plan	
Expected volatility	82.2%	90.3%	
Risk-free interest rate	4.65% - 6.08%	5.15%	
Expected lives	5 years	5 years	
Dividend yield	0%	0%	

## (f) Impact of Recently Issued Accounting Standards

During the year, the Canadian Institute of Chartered Accountants ("CICA") issued CICA 1581 - "Business Combinations" ("CICA 1581") and FASB issued SFAS No. 141, "Business Combinations", ("SFAS 141"). These standards are effective for all business combinations initiated after June 30, 2001, and require that the purchase method of accounting be used for all business combinations initiated after that date. We complied with CICA 1581 and SFAS 141 in the purchase of the Prestea property in 2001 and will continue to apply CICA 1581 and FAS 141 to any future acquisitions.

During the year, the CICA issued CICA 3062 - "Goodwill and Other Intangible Assets" ("CICA 3062") and FASB issued SFAS No. 142, "Goodwill and Other Intangible Assets" ("SFAS 142"). These standards are effective for fiscal years beginning after December 15, 2001, which is the fiscal year beginning January 1, 2002 for the Company, but applied immediately to any business combinations consummated after June 30, 2001, CICA 3062 and

SFAS 142 require that goodwill and intangible assets deemed to have indefinite lives will no longer be amortized, including goodwill recorded in past business combinations, but will be subject to annual impairment tests in accordance with the new guidelines. Other tangible assets will continue to be amortized over their useful lives. We believe that the adoption of these pronouncements will have no impact on our consolidated financial results.

In August 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets", ("SFAS 144"). This Statement addresses financial accounting and reporting for the impairment or disposal of long-lived assets. The provisions of this Statement are effective for financial statements issued for fiscal years beginning after December 15, 2001, which is the fiscal year beginning January 1, 2002 for the Company. We have not yet assessed the impact that the adoption of this standard will have on our results of operations or financial position.

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 31, 2002, which is the fiscal year beginning January 1, 2003 for the Company. Since we have no hedge instruments in place, we do not believe that the adoption of this guideline will have a material impact on our results of operations or financial position.

In January 2002, the CICA amended CICA 1650 - "Foreign Currency Translation" ("CICA 1650"). The amended standard eliminates the requirement to defer and amortize exchange gains and losses related to a foreign currency denominated monetary items with a fixed or ascertainable life extending beyond the end of the following fiscal year, and require new disclosure surrounding foreign exchange gains and losses. The standard is effective for all fiscal years beginning on or after January 1, 2002, which is the fiscal year beginning January 1, 2002 for the Company. We have not assessed the impact that the adoption of this standard will have on our results of operations or financial position.

In January 2002, the CICA issued CICA 3870 - "Stock-Based Compensation and Other Stock-Based Payments" ("CICA 3870"). This section establishes standards for the recognition, measurement and disclosure of stock-based compensation and other stock-based payments made in exchange for goods and services. This section sets out a fair value-based method of accounting and is required for certain, but not all, stock-based transactions. The recommendations of this section should be adopted for fiscal years beginning on or after January 1, 2002, which is the fiscal year beginning January 1, 2002 for the Company, and applied to awards granted on or after the date of adoption. We have not yet assessed the impact that the adoption of this standard will have on our results of operations or financial position.

## 17. Related Parties

During 1999, Golden Star, in conjunction with Anvil, acquired BGL (see Note 9). The current President and CEO of the Company, Peter J. Bradford, was then and still is a Director of Anvil and his relationship constituted a related party. 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 Golden Star, and forgave the remaining note receivable, thereby ending the related party relationship.

# 18. Commitments and Contingencies

#### **Environmental Regulations**

We are not aware of any events of material non-compliance in our operations with environmental laws and regulations, 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 foreign jurisdictions. The environmental rehabilitation liability for reclamation and closure costs at the Bogoso mine was \$5.4 million at December 31, 2001 and \$5.7 million at December 31, 2000. Estimates of the final reclamation and closure costs for the new Prestea property are currently being prepared and once available a provision will be established.

#### Restricted Cash (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. These funds are to be used for the ongoing, final reclamation and closure costs relating to the Bogoso mine site. 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 non-performance by Golden Star. During 2001 and 2000, we were allowed to draw down \$0.8 million and \$1.9 million respectively of the restricted cash to cover ongoing reclamation costs incurred since the September 1999 project acquisition. At December 31, 2001, the remaining balance in the BGL reclamation cash fund was \$3.3 million.

#### 19. Subsequent Events

# **New PGR Agreement**

In March 2002, BGL reached an agreement with PGR, the Ghana Mineworkers Union and the Government of Ghana and related parties to form a joint venture, to be managed by BGL, for the assessment and future operations of the Prestea underground mine. BGL will contribute \$2.4 million to become a 45% joint venture partner, with PGR also holding 45% and the Government of Ghana holding a 10% carried interest. Under the agreement, the funds provided to PGR will be used to pay arrears of salary and termination benefits to the Prestea underground miners. It is the intent of the joint venture to place the underground operation on care and maintenance pending completion of an assessment, which will include a comprehensive review of the safety and economic viability of the mine, as well as a review of past environmental practices.

#### **Guiana Shield Transaction**

We have agreed to sell our interest in the Gross Rosebel project in Suriname to our partner in the project, Cambior Inc., in accordance with the following terms: Golden Star will sell its 50% interest in Gross Rosebel in Suriname to Cambior for a total purchase consideration of \$8.0 million in cash plus a price participation royalty on the first seven million ounces of future gold production from the project. In exchange for the Gross Rosebel property, Golden Star will receive \$5.0 million cash from Cambior on closing (of which \$3.0 million was received in January 2002) and three deferred payments of \$1.0 million each no later than the second, third, and fourth anniversaries of the closing. Once commercial production begins, Cambior will also pay a price participation royalty, equal to the excess of the average market price for gold for each quarter above a hurdle gold price multiplied by 10% of the gold production for the quarter, less the 2% royalty payable in Suriname. For soft ores, the hurdle gold price will be \$300 per ounce. For hard ores, the hurdle gold price will be \$350 per ounce. As a part of this transaction, we will also transfer to Cambior our interest in the Headley's Reef and Thunder Mountain properties, contiguous to the Gross Rosebel property, and our 30% interest in the Omai Gold Mine in Guyana. Cambior will concurrently transfer to Golden Star its 50% interests in the Yaou and Dorlin properties and its 100% interest in the Bois Canon property (all in French Guiana).

#### **Private Placement**

In January 2002, the Company completed a private placement of 11.5 million units at a price of \$0.49 (equivalent to Cdn\$0.77) per unit for gross proceeds of \$5.6 million (\$5.3 million, net). Each unit consists of one common share and one-half of a warrant. Each whole warrant will entitle the holder to the right, for a period of two years, to acquire one further common share at an exercise price of \$0.70 (currently equivalent to Cdn\$1.10). Cash commissions and fees equaled 6% of the gross proceeds and warrants (identical to the unit warrants) equal to 6% of the total common shares issued in the private placement were issued to agents and consultants.

# 20. Quarterly Financial Data - Unaudited

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

(In thousands except per share	2000			
amounts)	First	Second	Third	Fourth
	Quarter	<u>Quarter</u>	<u>Quarter</u>	<u>Quarter</u>
Net Sales	\$ 8,991	\$ 9,110	\$ 7,742	\$ 5,328
Gross Profit/(Loss)	949	319	(1,190)	2,111
Net Income	(70)	(156)	(1,689)	(12,966)
Earning/(Loss) Per Common Share	0.00	0.00	(0.04)	(0.36)

#### Year 2001

Third quarter results include an \$8.1 million impairment write-off of a portion of the Gross Rosebel project deferred acquisition and exploration costs. Fourth quarter results included \$6.9 million of write-offs of deferred exploration properties, mostly in French Guiana.

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

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

# **PART III**

# ITEM 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.

#### **PART IV**

# ITEM 14. 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, 2001 and 2000

Consolidated Statements of Operations Years Ended December 31, 2001, 2000 and 1999

Consolidated Statements of Changes in Shareholders' Equity Years Ended December 31, 2001, 2000 and 1999

Consolidated Statements of Cash Flows Years Ended December 31, 2001, 2000 and 1999 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.

A report 8-K was filed with the Securities and Exchange Commission on December 21, 2001 regarding an announcement by the Company that it intended to sell up to \$6.125 million of units, each unit consisting of one common share and one half of one commons share purchase warrant, in a private offering.

#### CORPORATE INFORMATION

#### **DIRECTORS**

JAMES A. ASKEW Managing Director and Chief Executive Officer of Black Range Minerals Sydney, Australia

PETER BRADFORD
President and
Chief Executive Officer
Littleton, Colorado

DAVID K. FAGIN <sup>1,2,</sup> Corporate Director Denver, Colorado

ERNEST C. MERCIER <sup>1,2</sup> Corporate Director and Businessman Toronto, Ontario

IAN MACGREGOR <sup>1,2</sup> Counsel with Fasken Martineau DuMoulin LLP Toronto, Ontario

ROBERT R. STONE 1.2
Chairman of the Board
Corporate Director and
Business Consultant
Vancouver, British Columbia

- 1 Audit Committee Member
- 2 Compensation and Corporate Governance Committee Member

# CORPORATE HEADQUARTERS

Golden Star Resources Ltd. 10579 Bradford Road, Suite 103 Littleton, Colorado 80127 U.S.A.

Telephone: (303) 830-9000 Facsimile: (303) 830-9094 Toll Free: (800) 553-8436

# **REGISTERED OFFICE**

Golden Star Resources Ltd. 19th Floor 885 West Georgia Street Vancouver, British Columbia Canada V6C 3H4

#### **MANAGEMENT**

PETER BRADFORD
President and
Chief Executive Officer
Littleton, Colorado

RICHARD GRAY Vice President, Chief Operating Officer and Managing Director of Bogoso Gold Limited Bogoso, Ghana

ALLAN J. MARTER Vice President, Chief Financial Officer and Corporate Secretary Littleton, Colorado

PETER G. DONALD Vice President and General Manager Paramaribo, Suriname

PETER CLARINGBULL General Manager of Bogoso Gold Limited Bogoso, Ghana

## FORM 10-K

The Company's 2001 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.

# STOCK EXCHANGE LISTINGS / TRADING

GOLDEN STAR RESOURCES LTD. Toronto Stock Exchange Symbol: GSC

Nasdaq OTC BB Symbol: GSRSF

GUYANOR RESSOURCES S.A. Toronto Stock Exchange Symbol: GRL/B

Nouveau Marché of the Bourse

de Paris

Symbol: GUYN

# 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 and Special General Meeting of Shareholders of Golden Star Resources Ltd. will be held on Tuesday, May 28, 2002 at 10:00 a.m. at the Courtyard Marriott, 475 Yonge Street, Toronto, Ontario, Canada.

Golden Star (TSE: GSC, Nasdaq OTC BB: GSRSF) is a Canadian company, with its headquarters in Littleton, Colorado. Guyanor Ressources S.A. (TSE: GRL/B, Noveau Marché: GUYN) is Golden Star's French subsidiary that conducts the Company's activities in French Guiana.



800 553-8436 www.gsr.com Toronto Stock Exchange: GSC Nasdaq OTC BB: GSRSF