

GOLDEN STAR RESOURCES LTD
Form 10-K
March 05, 2013

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, 2012
Commission file number 1-12284

GOLDEN STAR RESOURCES LTD.

(Exact Name of Registrant as Specified in Its Charter)

Canada 98-0101955
(State or other Jurisdiction of (I.R.S. Employer
Incorporation or Organization) Identification No.)

150 King Street West Suite 1200 M5H1J9
Toronto, Ontario, M5H1J9, Canada (Zip Code)
(Address of Principal Executive Office)

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

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

Title of Each Class Name of each exchange on which registered

Common Shares NYSE MKT

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

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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 (the "Act") during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. (See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act). (Check one):

Large accelerated filer: Accelerated filer:

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Non-accelerated filer: Smaller reporting company:
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act) Yes No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant was approximately \$190.6 million as of June 30, 2012, based on the closing price of the shares on the NYSE MKT as of that date of \$1.16 per share.

Number of Common Shares outstanding March 1, 2013: 259,105,970

DOCUMENTS INCORPORATED BY REFERENCE

Portions of our Definitive Proxy Statement to be filed with the Securities and Exchange Commission pursuant to Regulation 14A in connection with the 2012 Annual Meeting of Shareholders are incorporated by reference to Part III of this Annual Report on Form 10-K.

REPORTING CURRENCY, FINANCIAL AND OTHER INFORMATION

All amounts in this report are expressed in United States (“U.S.”) dollars, unless otherwise indicated. Canadian currency is denoted as “Cdn\$.” Financial information is presented in accordance with accounting principles generally accepted in the United States (“U.S. GAAP”).

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

NON-GAAP FINANCIAL MEASURES

In this Form 10-K, we use the terms “cash operating cost per ounce” and “adjusted net income/(loss)” which are considered Non-GAAP financial measures as defined in SEC Regulation S-K Item 10 and applicable Canadian securities law and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with U.S. GAAP. See Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations for a definition of these measures as used in this Form 10-K.

STATEMENTS REGARDING FORWARD-LOOKING INFORMATION

This Form 10-K contains “forward-looking statements”, within the meaning of Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities Exchange Act of 1934, as amended, and within the meaning of applicable Canadian securities law, with respect to our financial condition, results of operations, business prospects, plans, objectives, goals, strategies, future events, capital expenditures, and exploration and development efforts.

Words such as “anticipates,” “expects,” “intends,” “forecasts,” “plans,” “believes,” “seeks,” “estimates,” “may,” “will,” and similar expressions (including negative and grammatical variations) tend to identify forward-looking statements.

Although we believe that our plans, intentions and expectations reflected in these forward-looking statements are reasonable, we cannot be certain that these plans, intentions or expectations will be achieved. Actual results, performance or achievements could differ materially from those contemplated, expressed or implied by the forward-looking statements contained in this Annual Report on Form 10-K.

These statements include comments regarding: anticipated attainment of gold production rates; cash operating costs generally; gold sales; gold recovery rates; ore processing; permitting; geological factoring, the receipt and timing of environmental, community and engineering studies; environmental permitting approvals; anticipated changes in regulations governing mining and exploration activities in Ghana; completion of a final West Reef feasibility study; receipt of environmental management plan approvals from the Ghana Environmental Protection Agency (“EPA”); changes in the tax regime and mining laws in Ghana; exploration and development efforts, activities and costs; exploration plans including Wassa pit expansion drilling, resource conversion and geotechnical drilling at the West Reef, Mampon resource conversion and infill drilling, and Prestea South non-refractory ore confirmation drilling; development plans at Dumasi, Mampon, the West Reef section of the Prestea Underground, and Prestea South; development plans for the Bogoso tailings recovery project and the Wassa tailings project; evaluation of a plant upgrade at Bogoso's refractory plant; ore grades; our anticipated investing, exploration and development spending through the end of 2013 and beyond; identification of acquisition and growth opportunities; retention of earnings from our operations; gold production and cash operating cost estimates for 2013; expected operational cash flow; our objectives for 2013; expected debt payments during 2013 and beyond; and sources of and adequacy of liquidity to meet capital and other needs in 2013 and beyond.

The following, in addition to the factors described under “Risk Factors” in Item 1A of this Annual Report on Form 10-K, for the year ended December 31, 2012 are among the factors that could cause actual results to differ materially from the forward-looking statements:

- significant increases or decreases in gold prices;
- losses or gains in Mineral Reserves from changes in operating costs and/or gold prices;
- failure of exploration efforts to expand Mineral Reserves around our existing mines;
- unexpected changes in business and economic conditions;
- inaccuracies in Mineral Reserves and non-reserve estimates;
- changes in interest and currency exchange rates;
- timing and amount of gold production;
- unanticipated variations in ore grade, tonnes mined and crushed ore processed;

- unanticipated gold recovery or production problems;
- effects of illegal mining on our properties;

2

• changes in mining and processing costs, including changes to costs of raw materials, power, supplies, services and personnel;

• changes in metallurgy and processing;

• availability of skilled personnel, contractors, materials, equipment, supplies, power and water;

• changes in project parameters or mine plans;

• costs and timing of development of new Mineral Reserves;

• weather, including drought or excessive rainfall in West Africa;

• changes in regulatory frameworks based upon perceived climate trends;

• results of current and future exploration activities;

• results of pending and future feasibility studies;

• acquisitions and joint venture relationships;

• political or economic instability, either globally or in the countries in which we operate;

• changes in regulations or in the interpretation of regulations by the regulatory authorities affecting our operations, particularly in Ghana, where our principal producing properties are located;

• local and community impacts and issues;

• timing of receipt and maintenance of government approvals and permits;

• unanticipated transportation costs and shipping incidents and losses;

• accidents, labor disputes and other operational hazards;

• environmental costs and risks;

• changes in tax laws, such as those proposed in Ghana;

• unanticipated title issues;

• competitive factors, including competition for property acquisitions;

• possible litigation;

• availability of capital on reasonable terms or at all;

• potential losses from future hedging activities; and

• additional risk due to increased use of mining contractors.

These factors are not intended to represent a complete list of the general or specific factors that could affect us. Many of these factors are beyond our ability to control or predict. Although we believe the expectations reflected in our forward-looking statements are based on reasonable assumptions, such expectations may prove to be materially incorrect due to known and unknown risks and uncertainties. You should not unduly rely on any of our forward-looking statements. These statements speak only as of the date of this Annual Report on Form 10-K. Except as required by law, we undertake no obligation to update any of these forward-looking statements to reflect future events or developments.

CONVERSION FACTORS AND ABBREVIATIONS

All units in this report are stated in metric measurements unless otherwise noted.

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

| | | | |
|---------------------------|-------------------------------|--------------------|----------------------------------|
| 1 acre | = 0.4047 hectare | 1 mile | = 1.6093 kilometers |
| 1 foot | = 0.3048 meter | 1 troy ounce | = 31.1035 grams |
| 1 gram per metric tonne | = 0.0292 troy ounce/short ton | 1 square mile | = 2.59 square kilometers |
| 1 short ton (2000 pounds) | = 0.9072 tonne | 1 square kilometer | = 100 hectares |
| 1 tonne | = 1,000 kg or 2,204.6 lbs | 1 kilogram | = 2.204 pounds or 32.151 troy oz |
| 1 hectare | = 10,000 square meters | 1 hectare | = 2.471 acres |

The following abbreviations may be used herein:

| | | | |
|-----|-------------------|-----------------|---------------------|
| m | = meter | T or t | = tonne |
| g | = gram | oz | = troy ounce |
| g/t | = grams per tonne | km ² | = square kilometers |
| ha | = hectare | kg | = kilogram |
| km | = kilometer | | |

GLOSSARY OF TERMS

We report our Mineral Reserves to two separate standards to meet the requirements for reporting in both Canada and the United States. Canadian reporting requirements for disclosure of mineral properties are governed by National Instrument 43-101 ("NI 43-101"). The definitions in NI 43-101 are adopted from those given by the Canadian Institute of Mining, Metallurgy and Petroleum. U.S. reporting requirements for disclosure of mineral properties are governed by the United States Securities and Exchange Commission ("SEC") Industry Guide 7. These reporting standards have similar goals in terms of conveying an appropriate level of confidence in the disclosures being reported, but embody differing approaches and definitions.

We estimate and report our Mineral Resources and Mineral Reserves according to the definitions set forth in NI 43-101 and modify them as appropriate to conform to SEC Industry Guide 7 for reporting in the U.S. The definitions for each reporting standard are presented below with supplementary explanation and descriptions of the similarities and differences.

NI 43-101 DEFINITIONS

| | |
|----------------------------|---|
| Mineral Reserve | <p>The term “Mineral Reserve” refers to the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a preliminary feasibility study. The study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.</p> |
| Proven Mineral Reserve | <p>The term “Proven Mineral Reserve” refers to the economically mineable part of a Measured Mineral Resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.</p> |
| Probable Mineral Reserve | <p>The term “Probable Mineral Reserve” refers to the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.</p> |
| Mineral Resource | <p>The term “Mineral Resource” refers to a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.</p> |
| Measured Mineral Resource | <p>The term “Measured Mineral Resource” refers to that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.</p> |
| Indicated Mineral Resource | <p>The term “Indicated Mineral Resource” refers to that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.</p> |
| Inferred Mineral Resource | <p>The term “Inferred Mineral Resource” refers to that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade</p> |

continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Qualified Person ⁽¹⁾

The term “Qualified Person” refers to an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these, has experience relevant to the subject matter of the mineral project and the technical report and is a member in good standing of a professional association.

SEC INDUSTRY GUIDE 7 DEFINITIONS

| | |
|-------------------------------------|---|
| Reserve | The term “Reserve” refers to that part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination. Reserves must be supported by a feasibility study ⁽²⁾ done to bankable standards that demonstrates the economic extraction. (“bankable standards” implies that the confidence attached to the costs and achievements developed in the study is sufficient for the project to be eligible for external debt financing.) A reserve includes adjustments to the in-situ tonnes and grade to include diluting materials and allowances for losses that might occur when the material is mined. |
| Proven Reserve | The term “Proven Reserve” refers to 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 Reserve | The term “Probable Reserve” refers to 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. |
| Mineralized Material ⁽³⁾ | The term “Mineralized Material” refers to material that is not included in the reserve as it does not meet all of the criteria for adequate demonstration for economic or legal extraction. |
| Non-Reserves | The term “Non-Reserves” refers to mineralized material that is not included in the reserve as it does not meet all of the criteria for adequate demonstration for economic or legal extraction. |
| Exploration Stage | An “Exploration Stage” prospect is one which is not in either the development or production stage. |
| Development Stage | A “Development Stage” project is one which is undergoing preparation of an established commercially mineable deposit for its extraction but which is not yet in production. This stage occurs after completion of a feasibility study. |
| Production Stage | A “Production Stage” project is actively engaged in the process of extraction and beneficiation of Mineral Reserves to produce a marketable metal or mineral product. |

(1) Industry Guide 7 does not require designation of a qualified person.

For Industry Guide 7 purposes the feasibility study must include adequate information on mining, processing, (2) metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

(3) This category is substantially equivalent to the combined categories of Measured Mineral Resource and Indicated Mineral Resource specified in NI 43-101.

ADDITIONAL DEFINITIONS

assay- a measure of the valuable mineral content

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

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

CIL or carbon-in-leach- an ore processing method involving the use of cyanide where activated carbon, which has been added to the leach tanks, is used to absorb gold as it is leached by cyanide

craton- a stable relatively immobile area of the earth's crust

cut-off grade- when determining economically viable Mineral Reserves, the lowest grade of mineralized material that qualifies as ore, i.e. that can be mined and processed at a profit

cyanidation- the process of introducing cyanide to ore to recover gold

diamond drilling- rotary drilling using diamond-set or diamond-impregnated bits, to produce a solid continuous core of rock sample

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

doré- unrefined gold bullion bars containing various impurities such as silver, copper and mercury, which will be further refined to near pure gold

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

feasibility study- a comprehensive study of a mineral deposit in which all geological, engineering, legal, operating, economic, social, environmental and other relevant factors are considered in sufficient detail that it could reasonably serve as the basis for a final decision by a financial institution to finance the development of the deposit for mineral production

formation- a distinct layer of sedimentary rock of similar composition

geochemical- the distribution and amounts of the chemical elements in minerals, ores, rocks, solids, water, and the atmosphere

geophysical- the mechanical, electrical, gravitational and magnetic properties of the earth's crust

geophysical surveys- a survey method used primarily in the mining industry as an exploration tool, applying the methods of physics and engineering to the earth's surface

grade- quantity of metal per unit weight of host rock

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 are sprayed to dissolve metals i.e. gold, copper etc.; the solutions containing the metals are then collected and treated to recover the metals

host rock- the rock in which a mineral or an ore body may be contained

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

in-situ- in its natural position

life-of-mine- a term commonly used to refer to the likely term of a mining operation and normally determined by dividing the tonnes of Mineral Reserve by the annual rate of mining and processing

mineral- a naturally occurring inorganic crystalline material having a definite chemical composition

mineralization- a natural accumulation or concentration in rocks or soil of one or more potentially economic minerals, also the process by which minerals are introduced or concentrated in a rock

National Instrument 43-101 or NI 43-101- standards of disclosure for mineral projects prescribed by the Canadian Securities Administrations

non-refractory- ore containing gold that can be satisfactorily recovered by basic gravity concentration or simple cyanidation. Typically involves gold ores that have been naturally oxidized in situ, but certain unoxidized gold ores can also be processed in non-refractory processing plants.

open pit- surface mining in which the ore is extracted from a pit or quarry, the geometry of the pit may vary with the characteristics of the ore body

ore- mineral bearing rock that can be mined and treated profitably under current or immediately foreseeable economic conditions

ore body- a mostly solid and fairly continuous mass of mineralization estimated to be economically mineable

ore grade- the average weight of the valuable metal or mineral contained in a specific weight of ore i.e. grams per tonne of ore

oxide- gold bearing ore which results from the oxidation of near surface refractory ore

Precambrian- period of geologic time, prior to 700 million years ago

preliminary economic assessment ("PEA") - a study that includes an economic analysis of the potential viability of Mineral Resources taken at an early stage of the project prior to the completion of a preliminary feasibility study
preliminary feasibility study and pre-feasibility study- each mean a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration in the case of an open pit, has been established and an effective method of mineral processing has been determined, and includes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating, economic, social, and environmental factors and the evaluation of other relevant factors which are sufficient for a qualified person, acting reasonably, to determine if all or part of the Mineral Resource may be classified as a Mineral Reserve

Proterozoic- the more recent time division of the Precambrian; rocks aged between 2,500 million and 550 million years old

QA/QC- Quality Assurance/Quality Control is the process of controlling and assuring data quality for assays and other exploration and mining data

RC (reverse circulation) drilling- a drilling method using a tri-cone bit, during which rock cuttings are pushed from the bottom of the drill hole to the surface through an outer tube, by liquid and/or air pressure moving through an inner tube

refractory- ore containing gold that cannot be satisfactorily recovered by basic gravity concentration or simple cyanidation. Refractory ores are processed in plants that utilize an oxidation technology to oxidize the ore before it is further treated to remove the gold.

resettlement- the relocation or resettlement of a community or part of a community

rock- indurated naturally occurring mineral matter of various compositions

sampling and analytical variance/precision- an estimate of the total error induced by sampling, sample preparation and analysis

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

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; metallic sulfur-bearing mineral often associated with gold mineralization

tailings- fine ground wet waste material produced from ore after economically recoverable metals or minerals have been extracted

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

technical report - means a report prepared and filed in accordance with NI 43-101 and Form 43-101F1 Technical Report that includes, in summary form, all material scientific and technical information in respect of the subject property as of the effective date of the technical report;

tectonic- relating to the forces that produce movement and deformation of the Earth's crust

transition ore- is ore from a zone lying between the naturally oxidized ore typically found near the surface and the un-oxidized refractory ores typically found at deeper depths; ore material that is partially weathered and oxidized

vein- a thin, sheet-like crosscutting body of hydrothermal mineralization, principally quartz

ITEM 1. BUSINESS

OVERVIEW OF GOLDEN STAR

We are a Canadian federally-incorporated, international gold mining and exploration company producing gold in Ghana, West Africa. We also conduct gold exploration in other countries in West Africa and in South America. Golden Star Resources Ltd.

was established under the Canada Business Corporations Act on May 15, 1992. Our principal office is located at 150 King Street West, Suite 1200, Toronto, Ontario, M5H1J9 Canada and our registered and records offices are located at 333 Bay Street, Bay Adelaide Centre, Box 20, Toronto, Ontario M5H 2T6.

We own controlling interests in several gold properties in southwest Ghana:

Through a 90% owned subsidiary, Golden Star (Bogoso/Prestea) Limited (“GSBPL”), we own and operate the Bogoso/Prestea gold mining and processing operations (“Bogoso/Prestea”) located near the town of Bogoso, Ghana. GSBPL operates a gold ore processing facility at Bogoso/Prestea with a nominal capacity of up to 3.5 million tonnes of ore per annum, which uses bio-oxidation technology to treat refractory ores (“Bogoso refractory plant”). In addition, GSBPL has a carbon-in-leach (“CIL”) processing facility located adjacent to the refractory plant, which is suitable for treating oxide and other non-refractory gold ores (“Bogoso non-refractory plant”) at a nominal rate up to 1.5 million tonnes per annum. Bogoso/Prestea produced and sold 172,379 ounces of gold in 2012, and 140,504 and 170,973 ounces of gold in 2011 and 2010, respectively.

Through another 90% owned subsidiary, Golden Star (Wassa) Limited (“GSWL”), we own and operate the Wassa open-pit gold mine and carbon-in-leach processing plant (“Wassa”), located approximately 35 km east of Bogoso/Prestea. The design capacity of the carbon-in-leach processing plant at Wassa (“Wassa processing plant”) is nominally 3.0 million tonnes per annum but varies depending on the ratio of hard to soft ore. GSWL also owns the Hwini-Butre and Benso concessions (“HBB”) in southwest Ghana. Currently our primary HBB ore source is the Father Brown pit which is located on the Hwini Butre concession. Ore from the HBB mines is sent to Wassa for processing. The Hwini-Butre and Benso concessions are located approximately 80 km and 50 km, respectively, south of Wassa along the Company's dedicated haul road. Mining activities were completed at Benso during 2012. Wassa/HBB produced and sold 158,899 ounces of gold in 2012 and 160,616 and 183,931 ounces of gold in 2011 and 2010, respectively.

Through GSBPL, we own the Prestea Underground, which is located on the Prestea property and consists of a currently inactive gold mine and associated support facilities. GSBPL owns 90% of the mine, and we are currently preparing a feasibility study to reopen the mine.

We also hold interests in several gold exploration projects in Ghana and elsewhere in West Africa, including Niger and Côte d'Ivoire, and in South America we hold and manage exploration properties in Brazil.

All our operations, with the exception of certain exploration projects, transact business in U.S. dollars and keep financial records in U.S. dollars. Our accounting records are kept in accordance with U.S. GAAP. Our fiscal year ends December 31. We are a reporting issuer or the equivalent in all provinces of Canada, in Ghana and in the United States and file disclosure documents with securities regulatory authorities in Canada and Ghana and with the United States Securities and Exchange Commission.

GOLD SALES AND PRODUCTION

We produced 331,278 ounces of gold in 2012 and 301,120 ounces in 2011. Currently, all of our gold production is shipped to a South African gold refinery which arranges for the sale of our gold. Our gold is sold in the form of doré bars that average approximately 90% gold by weight with the remaining portion being silver and other metals. The sales price is based on the London P.M. fix on the day of shipment to the refinery.

GOLD PRICE HISTORY

The price of gold is volatile and is affected by numerous factors all of which are beyond our control such as the sale or purchase of gold by various central banks and financial institutions, inflation, fluctuation in the relative values of the U.S. dollar and foreign currencies, changes in global and regional gold demand, and the political and economic conditions of major gold-producing countries throughout the world.

The following table presents the high, low and average London P.M. fixed prices for gold per ounce on the London Bullion Market over the past ten years.

| Year | High | Low | Average | Average Price Received by Golden Star |
|------------------|-------|-------|---------|---------------------------------------|
| 2003 | 416 | 320 | 363 | 364 |
| 2004 | 454 | 375 | 410 | 410 |
| 2005 | 537 | 411 | 445 | 446 |
| 2006 | 725 | 525 | 603 | 607 |
| 2007 | 841 | 608 | 695 | 713 |
| 2008 | 1,011 | 713 | 872 | 870 |
| 2009 | 1,213 | 810 | 972 | 978 |
| 2010 | 1,421 | 1,058 | 1,225 | 1,219 |
| 2011 | 1,895 | 1,319 | 1,572 | 1,565 |
| 2012 | 1,792 | 1,540 | 1,670 | 1,662 |
| To March 1, 2013 | 1,694 | 1,577 | 1,650 | NA |

The following diagram depicts the organizational structure of Golden Star and its significant subsidiaries:

BUSINESS STRATEGY AND DEVELOPMENT

Our business and development strategy is focused primarily on the exploration, development and operation of gold properties in Ghana. We also pursue gold exploration activities in South America and other countries in West Africa. We acquired the Bogoso property and began operating its mines and CIL processing facility in 1999. In 2001, we acquired the Prestea property located adjacent to the Bogoso property. In early 2002 GSBPL acquired a 45% interest in the Prestea Underground property, and since then its interest increased to 90% as a result of subsequent exploration and maintenance expenditures incurred on the property.

In late 2002, we acquired Wassa and constructed the Wassa processing plant, which began commercial operation in April 2005. In July 2007, we completed construction and development of the Bogoso refractory plant. In late 2005, we acquired the HBB properties consisting of the Benso and Hwini-Butre properties. Benso began sending ore to the Wassa processing plant in 2008, and in 2009, following its development phase, Hwini-Butre began sending ore to the Wassa processing plant.

Our current focus is to improve operating efficiencies at both operations, to complete a feasibility study for the Prestea Underground and to continue broader and deeper drilling at the Wassa pits to evaluate the expansion potential for the Wassa operation.

Our longer term objective is to continue the growth of our mining business to become a mid-tier gold producer. We continue to evaluate potential acquisition and merger opportunities that could further increase our annual gold production. However, we presently have no agreement or understanding with respect to any specific potential transaction.

In addition to our gold mining and development activities, we actively explore for gold in West Africa and South America, investing approximately \$24.4 million on such activities during 2011 and approximately \$21.0 million in 2012. We are conducting regional reconnaissance projects in Ghana, Cote d'Ivoire and Brazil, and have drilled more advanced targets in Ghana and Niger. See Item 2 - "Description of Properties" in this Annual Report on Form 10-K for the year ended December 31, 2012, for additional details on our assets.

GOLD SALES AND UNIT COSTS

The following table shows historical and projected gold sales and cash operating costs.

| Production and Cost Per Ounce | 2010 | 2011 | 2012 | 2013 Projected |
|--|-------|-------|-------|----------------|
| BOGOSO/PRESTEA | | | | |
| Gold Sales (thousands of ounces) | 171.0 | 140.5 | 172.4 | 170 - 190 |
| Cash Operating Cost (\$/oz) | 863 | 1,284 | 1,160 | 1,150 - 1,250 |
| WASSA/HBB | | | | |
| Gold Sales (thousands of ounces) | 183.9 | 160.6 | 158.9 | 150 - 160 |
| Cash Operating Cost (\$/oz) | 677 | 868 | 896 | 900 - 1,000 |
| CONSOLIDATED | | | | |
| Consolidated Total Sales (thousands of ounces) | 354.8 | 301.1 | 331.3 | 320 - 350 |
| Consolidated Cash Operating Cost (\$/oz) | 766 | 1,062 | 1,033 | 1,050 - 1,150 |

(1) See "Management's Discussion and Analysis of Financial Condition and Results of Operations" for the definition of cash operating cost per ounce.

MINERAL RESERVES

Our Proven and Probable Mineral Reserves are estimated in conformance with definitions set out in NI 43-101. We have filed Technical Reports regarding the initial disclosure of Mineral Reserves and Mineral Resources for Bogoso/Prestea and Wassa/HBB as required by NI 43-101. The Proven and Probable Mineral Reserves are those ore tonnages contained within economically optimized pits, configured using current and predicted mining and processing methods and related operating costs and performance parameters. We believe that our Mineral Reserves are estimated on a basis consistent with the definition of proven and probable reserves prescribed for use in the U.S. by the U.S. Securities and Exchange Commission and set forth in SEC Industry Guide 7. See our "Glossary of Terms."

In estimating Mineral Reserves, we first design an economically optimized pit based on all operating costs, including the costs to mine. Since all material lying within the optimized pit will be mined, the cut-off grade used in determining our Mineral Reserves is estimated based on the material that, having been mined, is economic to transport and process without regard to primary mining costs (i.e. mining costs that were appropriately applied at the economic optimization stage).

The QA/QC controls program used in connection with the estimation of our Mineral Reserves consists of regular insertion and analysis of blanks and standards to monitor laboratory performance. Blanks are used to check for contamination. Standards are used to check for grade-dependence biases.

The following table summarizes our estimated Proven and Probable Mineral Reserves as of December 31, 2012, and December 31, 2011:

PROVEN AND PROBABLE MINERAL RESERVES

| Property Mineral Reserve Category | As at December 31, 2012 | | | As at December 31, 2011 | | |
|--|-------------------------|------------------|-------------------|-------------------------|------------------|-------------------|
| | Tonnes (millions) | Gold Grade (g/t) | Ounces (millions) | Tonnes (millions) | Gold Grade (g/t) | Ounces (millions) |
| Bogoso/Prestea ⁽¹⁾ | | | | | | |
| Proven Mineral Reserves | | | | | | |
| Non-refractory | 1.3 | 1.82 | 0.08 | 1.3 | 1.64 | 0.07 |
| Refractory | 7.9 | 2.52 | 0.64 | 8.3 | 2.72 | 0.73 |
| Total Proven | 9.2 | 2.42 | 0.72 | 9.6 | 2.57 | 0.80 |
| Probable Mineral Reserves | | | | | | |
| Non-refractory | 4.8 | 2.35 | 0.36 | 6.9 | 2.31 | 0.51 |
| Refractory | 21.2 | 2.58 | 1.76 | 24.2 | 2.60 | 2.02 |
| Total Probable | 26.0 | 2.54 | 2.12 | 31.1 | 2.54 | 2.54 |
| Total Proven and Probable | | | | | | |
| Non-refractory | 6.2 | 2.23 | 0.44 | 8.2 | 2.21 | 0.58 |
| Refractory | 29.0 | 2.57 | 2.39 | 32.6 | 2.63 | 2.75 |
| Total Bogoso/Prestea Proven and Probable ⁽³⁾⁽⁴⁾ | 35.2 | 2.51 | 2.84 | 40.8 | 2.55 | 3.34 |
| Wassa ⁽²⁾ | | | | | | |
| Proven Mineral Reserves | | | | | | |
| Non-refractory | 0.8 | 0.89 | 0.02 | 0.6 | 1.27 | 0.03 |
| Probable Mineral Reserves | | | | | | |
| Non-refractory | 31.0 | 1.45 | 1.45 | 17.4 | 1.38 | 0.77 |
| Total Wassa Proven & Probable ⁽³⁾⁽⁴⁾ | 31.8 | 1.44 | 1.47 | 18.1 | 1.38 | 0.80 |
| Totals | | | | | | |
| Proven Mineral Reserves | | | | | | |
| Non-refractory | 2.1 | 1.47 | 0.10 | 1.9 | 1.52 | 0.10 |
| Refractory | 7.8 | 2.52 | 0.64 | 8.3 | 2.72 | 0.73 |
| Total Proven | 10.0 | 2.30 | 0.74 | 10.3 | 2.49 | 0.82 |
| Probable Mineral Reserves | | | | | | |
| Non-refractory | 35.9 | 1.57 | 1.82 | 24.3 | 1.65 | 1.29 |
| Refractory | 21.2 | 2.58 | 1.76 | 24.2 | 2.60 | 2.02 |
| Total Probable | 57.1 | 1.95 | 3.57 | 48.5 | 2.12 | 3.31 |
| Total Proven and Probable | | | | | | |
| Non-refractory | 38.0 | 1.57 | 1.92 | 26.3 | 1.64 | 1.38 |
| Refractory | 29.0 | 2.57 | 2.39 | 32.6 | 2.63 | 2.75 |
| Total Proven and Probable ⁽³⁾⁽⁴⁾ | 67.1 | 2.00 | 4.31 | 58.8 | 2.19 | 4.14 |

Notes to the Mineral Reserve Statement:

(1) The stated Mineral Reserve for Bogoso/Prestea includes Prestea South, Pampe and Mampon.

(2) The stated Mineral Reserve for Wassa includes Hwini-Butre.

The stated Mineral Reserves have been prepared in accordance with NI 43-101 Standards of Disclosure for Mineral Projects and are classified in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum's "CIM Definition Standards - For Mineral Resources and Mineral Reserves". Mineral Reserves are equivalent to "proven" and "probable reserves" as defined by the SEC Industry Guide 7. Mineral Reserve estimates reflect the Company's reasonable expectation that all necessary permits and approvals will be obtained and maintained. Mining dilution and mining recovery vary by deposit and have been applied in estimating the Mineral Reserves.

(4) The 2012 and 2011 Mineral Reserves were prepared under the supervision of Dr. Martin Raffield, Senior Vice President of Technical Services for the Company. Dr. Raffield is a "Qualified Person" as defined by NI 43-101.

The Mineral Reserves at December 31, 2012, were estimated using a gold price of \$1,450 per ounce, which is (5) approximately equal to the three-year average gold price. At December 31, 2011, Mineral Reserves were estimated using a gold price of \$1,250 per ounce.

The terms “non-refractory” and “refractory” refer to the metallurgical characteristics of the ore. We plan to process the (6) refractory ore in our sulfide bio-oxidation plant at Bogoso and to process the non-refractory ore in the Bogoso and Wassa non-refractory processing plants.

The slope angles of all pit designs are based on geotechnical criteria as established by external consultants. The size and shape of the pit designs are guided by consideration of the results from a pit optimization program. The parameters for the pit optimization program are based on a gold price of \$1,450 per ounce and historical and (7) projected operating costs at Bogoso/Prestea, Wassa, Hwini-Butre and Benso. Metallurgical recoveries are based on historical performance or estimated from test work and typically range from 60% to 95% for non-refractory ores and from 70% to 85% for refractory ores. A government royalty of 5% of gold revenues is allowed as are other applicable royalties.

(8) Numbers may not add due to rounding.

STOCKPILED ORES

Stockpiled ores are included in the Mineral Reserves for both Bogoso/Prestea and Wassa. Details of the Proven and Probable stockpiles included in the Mineral Reserves at year-end 2012 and 2011 are summarized in the table below.

PROVEN AND PROBABLE STOCKPILES INCLUDED IN MINERAL RESERVES

| Property Mineral Reserve Category | As at December 31, 2012 | | | As at December 31, 2011 | | |
|--|-------------------------|---------------------|----------------------|-------------------------|---------------------|----------------------|
| | Tonnes (millions) | Gold Grade (g/t) | Ounces (millions) | Tonnes (millions) | Gold Grade (g/t) | Ounces (millions) |
| Bogoso/Prestea | | | | | | |
| Proven Stockpiles | | | | | | |
| Non-refractory | 0.2 | 2.18 | 0.02 | 0.2 | 2.24 | 0.01 |
| Refractory | 0.5 | 1.81 | 0.03 | 0.5 | 2.19 | 0.03 |
| Total Proven Stockpiles | 0.7 | 1.93 | 0.04 | 0.6 | 2.21 | 0.04 |
| Probable Stockpiles | | | | | | |
| Non-refractory | — | — | — | — | — | — |
| Refractory | — | — | — | — | — | — |
| Total Probable Stockpiles | — | — | — | — | — | — |
| Total Proven and Probable | | | | | | |
| Non-refractory | 0.2 | 2.18 | 0.02 | 0.2 | 2.24 | 0.01 |
| Refractory | 0.5 | 1.81 | 0.03 | 0.5 | 2.19 | 0.03 |
| Total Bogoso/Prestea Proven and Probable | 0.7 | 1.93 | 0.04 | 0.6 | 2.21 | 0.04 |
| Wassa | | | | | | |
| Proven Stockpiles | | | | | | |
| Non-refractory | 0.8 | 0.79 | 0.02 | 0.5 | 1.30 | 0.02 |
| Probable Stockpiles | | | | | | |
| Non-refractory | 1.5 | 0.56 | 0.03 | 1.5 | 0.56 | 0.03 |
| Total Wassa Proven & Probable Stockpiles | 2.3 | 0.64 | 0.05 | 2.0 | 0.75 | 0.05 |
| Totals | | | | | | |
| Proven Stockpiles | | | | | | |
| Non-refractory | 1.0 | 1.09 | 0.04 | 0.7 | 1.53 | 0.03 |
| Refractory | 0.5 | 1.81 | 0.03 | 0.5 | 2.19 | 0.03 |
| Total Proven Stockpiles | 1.5 | 1.32 | 0.06 | 1.2 | 1.79 | 0.07 |
| Probable Stockpiles | | | | | | |
| Non-refractory | 1.5 | 0.56 | 0.03 | 1.5 | 0.56 | 0.03 |
| Refractory | — | — | — | — | — | — |
| Total Probable Stockpiles | 1.5 | 0.56 | 0.03 | 1.5 | 0.56 | 0.03 |
| Total Proven and Probable Stockpiles | | | | | | |
| Non-refractory | 2.5 | 0.78 | 0.06 | 2.2 | 0.86 | 0.06 |
| Refractory | 0.5 | 1.81 | 0.03 | 0.5 | 2.19 | 0.03 |
| Total Proven and Probable Stockpiles | 3.0 | 0.94 | 0.09 | 2.7 | 1.09 | 0.09 |

RECONCILIATION OF MINERAL RESERVES AS SHOWN UNDER NI 43-101 AND UNDER SEC INDUSTRY GUIDE 7

Since we report our Mineral Reserves to both NI 43-101 and SEC Industry Guide 7 standards, it is possible for our Mineral Reserve figures to vary between the two. Where such a variance occurs it will arise from the differing requirements for reporting Mineral Reserves. For example, NI 43-101 has a minimum requirement that Mineral Reserves be supported by a pre-feasibility study, whereas SEC Industry Guide 7 requires support from a detailed feasibility study that demonstrates that economic extraction is justified.

For the Mineral Reserves at December 31, 2012, and 2011, there is no difference between the Mineral Reserves as disclosed under NI 43-101 and those disclosed under SEC Industry Guide 7, and therefore no reconciliation is provided.

RECONCILIATION OF PROVEN AND PROBABLE MINERAL RESERVES-DECEMBER 31, 2011 TO DECEMBER 31, 2012

| | Tonnes (millions) | Contained Ounces (millions) | Tonnes (% of Opening) | Ounces (% of Opening) |
|--|----------------------|-----------------------------------|--------------------------|--------------------------|
| Mineral Reserves at December 31, 2011 ⁽⁵⁾ | 58.8 | 4.14 | 100 | 100 |
| Gold price increase ^(1 and 6) | 3.5 | 0.75 | 6 | 18 |
| Exploration changes ^(2 and 7) | 23.6 | 1.03 | 40 | 25 |
| Mining depletion ⁽³⁾ | (6.6) | (0.49) | (11) | (12) |
| Engineering ⁽⁴⁾ | (12.3) | (1.11) | (21) | (27) |
| Mineral Reserves at December 31, 2012 ⁽⁵⁾ | 67.1 | 4.31 | 114 | 104 |

Notes to the reconciliation of Mineral Reserves:

- (1) Gold price increase represents changes resulting from an increase in gold price used in the Mineral Reserve estimates from \$1,250 per ounce in 2011 to \$1,450 per ounce in 2012.
- (2) Exploration changes include changes due to geological modeling, data interpretation and resource block modeling methodology as well as exploration discovery of new mineralization.
- (3) Mining depletion represents the 2011 Mineral Reserve within the volume mined in 2012 with adjustments to account for stockpile addition and depletions during 2012 and therefore does not correspond with 2012 actual gold production.
- (4) Engineering includes changes as a result of changes in operating costs, mining dilution and recovery assumptions, metallurgical recoveries, pit slope angles and other mine design and permitting considerations.
- (5) Numbers may not add due to rounding.
- (6) Pit design changes that are primarily due to a higher gold price are included here.
- (7) Pit design changes that are primarily due to exploration discoveries are included here.

NON-RESERVES-MEASURED AND INDICATED MINERAL RESOURCES

Cautionary Note to U.S. Investors Concerning Estimates of Measured and Indicated Mineral Resources

This section uses the terms “Measured Mineral Resources” and “Indicated Mineral Resources.” We advise U.S. investors that while those terms are recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize them. US investors are cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into Mineral Reserves.

Our Measured and Indicated Mineral Resources, which are reported in this Form 10-K, do not include that part of our Mineral Resources that have been converted to Proven and Probable Mineral Reserves as shown above, and have been estimated in compliance with definitions set out in NI 43-101. Golden Star Resources has filed Technical Reports regarding the initial disclosure of Mineral Reserves and Mineral Resources for Bogoso/Prestea, Wassa and the HBB properties as required by NI 43-101 regulations. See our “Glossary of Terms.”

Except as otherwise provided, the total Measured and Indicated Mineral Resources for all properties have been estimated at an economic cut-off grade based on a gold price of \$1,750 per ounce for December 31, 2012, and \$1,500 per ounce for December 31, 2011, and on economic parameters deemed realistic. The economic cut-off grades for Mineral Resources are lower than those for Mineral Reserves and are indicative of the fact that the Mineral Resource estimates include material that may become economic under more favorable conditions including increases in gold price.

The following table summarizes our estimated non-reserves-Measured and Indicated Mineral Resources as of December 31, 2012, as compared to the totals for December 31, 2011:

| Property | Measured | | Indicated | | Measured & Indicated | |
|---|-------------------|------------------|-------------------|------------------|----------------------|------------------|
| | Tonnes (millions) | Gold Grade (g/t) | Tonnes (millions) | Gold Grade (g/t) | Tonnes (millions) | Gold Grade (g/t) |
| Bogoso/Prestea ⁽¹⁾ | 2.9 | 1.90 | 16.1 | 2.20 | 19.0 | 2.13 |
| Prestea Underground | — | — | 1.6 | 13.20 | 1.6 | 13.20 |
| Wassa/HBB | — | — | 20.0 | 1.30 | 20.0 | 1.30 |
| Father Brown Underground ⁽⁷⁾ | — | — | 1.2 | 5.80 | 1.2 | 5.80 |
| Total 2012 ⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾⁽⁶⁾ | 2.9 | 1.90 | 38.9 | 2.30 | 41.9 | 2.26 |
| Total 2011 ⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾ | 5.1 | 1.81 | 36.2 | 2.27 | 41.2 | 2.21 |

Notes to non-reserves-Measured and Indicated Mineral Resources Table:

(1) The Mineral Resources for Bogoso/Prestea include Pampe and Mampon.

(2) The Mineral Resources were estimated in accordance with the definitions and requirements of NI 43-101. The Mineral Resources are equivalent to Mineralized Material as defined by the SEC Industry Guide 7.

(3) The Mineral Resources for 2012 were estimated using optimized pit shells at a gold price of \$1,750 per ounce from which the Mineral Reserves have been subtracted. Other than gold price, the same optimized pit shell parameters and modifying factors used to determine the Mineral Reserves were used to determine the Mineral Resources. In 2011, we used a gold price of \$1,500 per ounce for the optimized pit shells. The Prestea Underground resource was estimated using a \$1,750 per ounce gold price and operating cost estimates using a economic gold cut-off of 3.0 g/t.

(4) The Mineral Resources are not included in and are in addition to the Mineral Reserves described above.

(5) The Qualified Person reviewing and validating the estimation of the Mineral Resources is S. Mitchel Wasel, Golden Star Resources Vice President of Exploration.

(6) Numbers may not add due to rounding.

(7) The Father Brown Underground Mineral Resource has been estimated below the \$1,750 per ounce of gold pit shell using an economic gold grade cut-off of 2.9 g/t, which the Company believes would be the lower cut-off grade for underground ore.

NON-RESERVES-INFERRERD MINERAL RESOURCES

Cautionary Note to U.S. Investors Concerning Estimates of Inferred Mineral Resources

This section uses the term “Inferred Mineral Resources.” We advise U.S. investors that while this term is recognized and required by NI 43-101, the U.S. Securities and Exchange Commission does not recognize it. “Inferred Mineral Resources” have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of Inferred Mineral Resources will ever be upgraded to a higher category. In accordance with Canadian rules, estimates of Inferred Mineral Resources cannot form the basis of feasibility or other economic studies. U.S. investors are cautioned not to assume that part or all of the Inferred Mineral Resource exists, or is economically or legally mineable.

Our Inferred Mineral Resources have been estimated in compliance with definitions defined by NI 43-101. Golden Star Resources has filed Technical Reports regarding the initial disclosure of Mineral Reserves and Mineral Resources for Bogoso/Prestea, Wassa and the HBB properties as required by NI 43-101. See our “Glossary of Terms.”

The total Inferred Mineral Resources for all of our open pit deposits are those ore tonnages contained within economically optimized pits, configured using current and predicted mining and processing methods and related operating costs and performance parameters. Except as otherwise indicated, the Inferred Mineral Resources for all properties have been estimated at economic cut-off grades based on gold prices of \$1,750 per ounce and \$1,500 per ounce as of December 31, 2012, and December 31, 2011, respectively, and economic parameters deemed realistic.

The following table summarizes estimated non-reserves - Inferred Mineral Resources as of December 31, 2012, as compared to the total for December 31, 2011:

| Property | Tonnes (millions) | Gold Grade (g/t) |
|---|----------------------|------------------------|
| Bogoso/Prestea ⁽¹⁾ | 3.8 | 3.10 |
| Prestea Underground | 5.2 | 7.40 |
| Wassa/HBB | 13.2 | 1.70 |
| Father Brown Underground ⁽⁷⁾ | 1.4 | 5.20 |
| Total 2012 ^{(2) (3) (4) (5) (6)} | 23.6 | 3.40 |
| Total 2011 | 13.3 | 4.49 |

Notes to Non-Reserves-Inferred Mineral Resources Table

(1) The Inferred Mineral Resources for Bogoso/Prestea incorporates Pampe and Mampon.

(2) The Inferred Mineral Resources were estimated in accordance with the definitions and requirements of NI 43-101.

(3) Inferred Mineral Resources are not recognized by the United States Securities and Exchange Commission.

The Inferred Mineral Resources were estimated using an optimized pit shell at a gold price of \$1,750 per ounce from which the Mineral Reserves have been subtracted. Other than gold price, the same optimized pit shell parameters and modifying factors used to determine the Mineral Reserves were used to determine the Mineral Resources. In 2011 we used a gold price of \$1,500 per ounce for the optimized shells. The Prestea Underground resource was estimated using a \$1,750 per ounce gold price and operating cost estimates using an economic gold cut-off of 3.0 g/t.

(4) The Inferred Mineral Resources are not included in and are in addition to the Mineral Reserves described above.

(5) The Qualified Person reviewing and validating the estimation of the Inferred Mineral Resources is S. Mitchel Wasel, Golden Star Resources Vice President of Exploration.

(6) Numbers may not add due to rounding.

The Father Brown Underground resource has been estimated below the \$1,750 per ounce gold pit shell using an economic gold grade cut-off of 2.9 g/t, which the Company believes would be the lower cut-off grade for underground ore.

EMPLOYEES

As of December 31, 2012, Golden Star, including our majority-owned subsidiaries, had approximately 2,000 full time employees and approximately 360 contract employees, for a total of 2,360, an 7% decrease from the approximately 2,360 full time and 190 contract employees at the end of 2011. The 2012 total includes 17 employees at our former principal office in Littleton, Colorado and 8 exploration personnel in South America.

CUSTOMERS

Currently all of our gold production is shipped to a South African gold refinery. The refinery arranges for sale of the gold on the day it is shipped from the mine site and we receive payment for gold sold two working days after the gold leaves the mine site. The global gold market is competitive with numerous banks and refineries willing to buy gold on short notice. Therefore, we believe that the loss of our current customer would not materially delay or disrupt revenues.

COMPETITION

Our competitive position depends upon our ability to successfully and economically explore, acquire, develop and operate new and existing gold properties. Factors that allow gold producers to remain competitive in the market over the long term include the quality and size of ore bodies, cost of operation, and the acquisition and retention of qualified employees. We compete with other mining companies in the acquisition, exploration, financing and development of new mineral properties. There is significant competition for a limited number of gold acquisition and exploration opportunities. We also compete with other mining companies for skilled mining engineers, mine and processing plant operators and mechanics, mining equipment, geologists, geophysicists and other experienced technical personnel.

SEASONALITY

All of our operations are in tropical climates that experience annual rainy seasons. Ore output from our surface mining operations can be reduced during wet periods. Our mine plans anticipate periods of high rain fall each year.

Exploration

17

activities are generally timed to avoid the rainy periods to ease transportation logistics associated with wet roads and swollen rivers.

AVAILABLE INFORMATION

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

ITEM 1A. RISK FACTORS

You should consider the following discussion of risks in addition to the other information contained in or included by reference in this Form 10-K. In addition to historical information, the information in this Form 10-K contains “forward-looking statements” about our future business and performance. Our actual operating results and financial performance may be very different from what we expect as of the date of this Form 10-K. The risks below address material factors that may affect our future operating results and financial performance.

General Risks

A substantial or prolonged decline in gold prices would have a material adverse effect on us.

The price of our common shares, our financial results and our exploration, development and mining activities have previously been, and would in the future be significantly adversely affected by a substantial or prolonged decline in the price of gold. The price of gold is volatile and is affected by numerous factors beyond our control such as the sale or purchase of gold by various central banks and financial institutions, inflation or deflation, fluctuation in the value of the United States dollar and foreign currencies, global and regional demand, and the political and economic conditions of major gold-producing countries throughout the world. Any drop in the price of gold adversely impacts our revenues, profits and cash flows. In particular, a sustained low gold price could:

- cause suspension of our mining operations at Bogoso/Prestea and Wassa/HBB if these operations become uneconomic at the then-prevailing gold price, thus further reducing revenues;
- cause us to be unable to fulfill our obligations under agreements with our partners or under our permits and licenses which could cause us to lose our interests in, or be forced to sell, some of our properties;
- cause us to be unable to fulfill our debt payment obligations;
- halt or delay the development of new projects; and
- reduce funds available for exploration, with the result that depleted mineral reserves may not be replaced by new exploration activities.

Furthermore, the need to reassess the feasibility of any of our development projects because of declining gold prices could cause substantial delays or could interrupt development until a reassessment could be completed. Mineral reserve estimations and life-of-mine plans incorporating significantly lower gold prices could result in reduced estimates of mineral reserves and non-reserve Mineral Resources and in material write-downs of our investment in mining properties and increased amortization, reclamation and closure charges.

We have incurred and may in the future incur substantial losses that could make financing our operations and business strategy more difficult and that may affect our ability to service our debts as they become due.

We had net losses of \$10.2 million in 2012, \$2.5 million in 2011 and \$14.6 million in 2010. In recent years increasing operating costs, lower ore grades from our mines and lower gold recovery rates have been the primary factors contributing to such losses. In the future, these factors, as well as declining gold prices, could cause us to continue to be unprofitable. Future operating losses could adversely affect our ability to raise additional capital if needed, and could materially and adversely affect our operating results and financial condition. In addition, continuing operating losses could affect our ability to meet our debt payment obligations.

Our obligations could strain our financial position and impede our business strategy.

We had total consolidated debt and liabilities as of December 31, 2012, of \$294.4 million, including \$18.2 million in equipment financing loans; \$99.3 million (\$77.5 million face value) pursuant to the 5% Convertible Debentures (as defined herein); \$101.8 million of current trade payables and accrued liabilities; \$41.0 million of current and future

taxes; and a \$34.1 million

18

accrual for environmental rehabilitation liabilities. Our indebtedness and other liabilities may increase as a result of general corporate activities. These liabilities could 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, 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, exploration and development projects and other general corporate requirements;
- limiting our flexibility in planning for, or reacting to, changes in our business and the industry; and
- placing us at a disadvantage when compared to our competitors that have less debt relative to their market capitalization.

Estimates of our Mineral Reserves and non-reserve Mineral Resources could be inaccurate, which could cause actual production and costs to differ from estimates.

There are numerous uncertainties inherent in estimating Proven and Probable Mineral Reserves and non-reserve Measured, Indicated and Inferred Mineral Resources, including many factors beyond our control. The accuracy of estimates of Mineral Reserves and non-reserves is a function of the quantity and quality of available data and of the assumptions made and judgments used in engineering and geological interpretation, which could prove to be unreliable. These estimates of Mineral Reserves and non-reserves may not be accurate, and Mineral Reserves and non-reserves may not be able to be mined or processed profitably.

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

We currently have only two sources of operational cash flows, which could be insufficient by themselves to fund our continuing exploration and development activities.

Our only current significant internal sources of funds are operational cash flows from Bogoso/Prestea and Wassah/HBB. The anticipated continuing exploration and development of our properties are expected to require significant expenditures over the next several years. During 2013 if cash on hand, free cash flows generated by Bogoso/Prestea and Wassah/HBB and our equipment financing facility is insufficient to cover all of our capital investment needs, we may require additional financing or we may consider rescheduling capital spending. Our ability to raise significant new capital will be a function of macroeconomic conditions, future gold prices, our operational performance and our then current cash flow and debt position, among other factors. Continued uncertainty in the global economy may affect lending practices and our ability to access capital. As a result, we may not be able to obtain adequate financing on acceptable terms or at all, which could cause us to delay or indefinitely postpone further exploration and development of our properties. Consequently, we could lose our interest in, or could be forced to sell, some of our properties.

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

Our revenues are in United States dollars, and we maintain most of our working capital in United States dollars or United States dollar-denominated securities. We convert our United States funds to foreign currencies as certain payment obligations become due. Accordingly, we are subject to fluctuations in the rates of currency exchange between the United States dollar and these foreign currencies, and these fluctuations could materially affect our financial position and results of operations. A significant portion of the operating costs at Bogoso/Prestea and Wassah/HBB is based on the Ghanaian currency, the Cedi. We are required by the Government of Ghana to convert into Cedis 20% of the foreign exchange proceeds that we receive from selling gold, but the Government could require us to convert a higher percentage of gold sales proceeds into Cedis in the future. We obtain construction and other services and materials and supplies from providers in South Africa and other countries. The costs of goods and

services could increase or decrease due to changes in the value of the United States dollar or the Cedi, the Euro, the South African Rand or other currencies. Consequently, operation and development of our properties could be more costly than anticipated.

Any hedging activities might be unsuccessful and incur losses.

While we held no hedging instruments during 2012, we may enter into additional hedging arrangements in the future. Future hedging activities might not protect adequately against declines in the price of gold. In addition, although a hedging program

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

Risks inherent in acquisitions that we might undertake could adversely affect our current business and financial condition and our growth.

We plan to continue to pursue the acquisition of producing, development and advanced stage exploration properties and companies. The search for attractive acquisition opportunities and the completion of suitable transactions are time consuming and expensive, divert management attention from our existing business and may be unsuccessful. Success in our acquisition activities depends on our ability to complete acquisitions on acceptable terms and integrate the acquired operations successfully with our operations. Any acquisition would be accompanied by risks. For example, there may be a significant change in commodity prices after we have committed to complete a transaction and established the purchase price or exchange ratio, a material ore body may prove to be below expectations or the acquired business or assets may have unknown liabilities which may be significant. We may lose the services of our key employees or the key employees of any business we acquire or have difficulty integrating operations and personnel. The integration of an acquired business or assets may disrupt our ongoing business and our relationships with employees, suppliers and contractors. Any one or more of these factors or other risks could cause us not to realize the anticipated benefits of an acquisition of properties or companies, and could have a material adverse effect on our current business and financial condition and on our ability to grow.

We are subject to litigation risks.

All industries, including the mining industry, are subject to legal claims, with and without merit. As such, we are involved in various routine legal proceedings incidental to our business. Defense and settlement costs can be substantial, even with respect to claims that have no merit. Due to the inherent uncertainty of the litigation process, the resolution of any particular legal proceeding could have a material effect on our future financial position and results of operations.

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

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

- power shortages;
- mechanical and electrical equipment failures;
- parts availability;
- unexpected changes in ore grades;
- unexpected changes in ore chemistry and gold recoverability;
- environmental hazards;
- discharge of pollutants or hazardous chemicals;
- industrial accidents;
- labor disputes and shortages;
- supply and shipping problems and delays;
- shortage of equipment and contractor availability;
- unusual or unexpected geological or operating conditions;
- cave-ins of underground workings;
- failure of pit walls or dams;
- fire;
- marine and transit damage and/or loss;
- changes in the regulatory environment, including in the area of climate change;
- delayed or restricted access to ore due to community interventions; and
- natural phenomena such as inclement weather conditions, floods, droughts and earthquakes.

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

Our mining operations are subject to numerous environmental laws, regulations and permitting requirements and bonding requirements that can delay production and adversely affect operating and development costs. 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 may have a material adverse effect on our exploration activities, results of operations and competitive position. New or expanded regulations, if adopted, could affect the exploration, development, or operation of our projects or otherwise have a material adverse effect on our operations.

Portions of our Wassa property, as well as some of our exploration properties in Ghana, including Dunkwa, are located within forest reserve areas. Although Dunkwa and Wassa have been identified by the Government of Ghana as eligible for mining permits, subject to normal procedures and a site inspection, permits for projects in forest reserve areas may not be issued in a timely fashion, or at all, and such permits may contain special requirements with which it is burdensome or uneconomic to comply.

Mining and processing gold from our future development projects in Ghana will require mining, environmental, and other permits and approvals from the Government of Ghana. The trend to longer lead times in obtaining environmental permits has reached a point where we are no longer able to accurately estimate permitting times for our planning purposes. The increases in permitting requirements could affect our environmental management activities including, but not limited to, tailings disposal facilities and water management projects at our mines.

Due to an increased level of non-governmental organization activity targeting the mining industry in Ghana, the potential for the Government of Ghana to delay the issuance of permits or impose new requirements or conditions upon mining operations in Ghana may increase. Any changes in the Government of Ghana's policies, or their application, may be costly to comply with and may delay mining operations. The exact nature of other environmental control problems, if any, which we may encounter in the future, cannot be predicted primarily because of the changing character of environmental requirements that may be enacted within the various jurisdictions where we operate.

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

The development and operation of our mining projects involve numerous uncertainties that could affect the feasibility or profitability of such projects.

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

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

- estimation of Mineral Reserves and Mineral Resources;
- mining rate, dilution and recovery;
- anticipated metallurgical characteristics of the ore and gold recovery rates;
- environmental and community considerations including resettlement, permitting and approvals;
- future gold prices;
- and
- anticipated capital and operating costs.

Estimates of proven and probable Mineral Reserves and operating costs developed in feasibility studies are based on reasonable assumptions including geologic and engineering analyses and may not prove to be accurate.

The management of mine development projects and the start up of new operations are complex. Completion of development and the commencement of production may be subject to delays. Any of the following events, among others, could affect the profitability or economic feasibility of a project:

- unanticipated changes in grade and tonnage of ore to be mined and processed;
- unanticipated adverse geotechnical conditions;

- incorrect data on which engineering assumptions are made;
- costs of constructing and operating a mine in a specific environment;
- cost of processing and refining;
- availability of economic sources of power and fuel;
- availability of qualified staff;

21

- inadequacy of water supply;
- inadequate access to the site including competing land uses (such as agriculture and illegal mining);
- unanticipated transportation costs and shipping incidents and losses;
- significant increases in the cost of diesel fuel, cyanide or other major components of operating costs;
- government regulations and changes to existing regulations (including regulations relating to prices, royalties, duties, taxes, permitting, restrictions on production, quotas on exportation of minerals, protection of the environment and agricultural lands, including bonding requirements);
- fluctuations in gold prices; and
- accidents, labor actions and force majeure events.

Adverse effects on the operations or further development of a project could also adversely affect our business (including our ability to achieve our production estimates), financial condition, results of operations and cash flow. We need to continually discover, develop or acquire additional Mineral Reserves for gold production and a failure to do so would adversely affect our business and financial position in the future.

Because mines have limited lives based on Proven and Probable Mineral Reserves, we must continually replace and expand Mineral Reserves as our mines produce gold. We are required to estimate mine life in connection with our estimation of reserves, but our estimates may not be correct. In addition, mine life would be shortened if we expand production or if we lose reserves due to changes in gold price or operating costs. Our ability to maintain or increase our annual production of gold will be dependent in significant part on our ability to bring new mines into production and to expand or extend the life of existing mines.

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

Gold exploration involves a high degree of risk. Exploration projects are frequently unsuccessful. Few prospects that are explored are ultimately developed into producing mines. We cannot assure you that our gold exploration efforts will be successful. The success of gold exploration is dependent in part on the following factors:

- the identification of potential gold mineralization based on surface analysis;
- availability of prospective land;
- availability of government-granted exploration and exploitation permits;
- the quality of our management and our geological and technical expertise; and
- the funding available for exploration and development.

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

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

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

Title to our mineral properties could be challenged.

We seek to confirm the validity of our rights to title to, or contract rights with respect to, each mineral property in which we have a material interest. We have mining leases with respect to our Bogoso/Prestea, Wassa, Prestea Underground and HBB properties. Title insurance generally is not available, and our ability to ensure that we have obtained a secure claim to individual mineral properties or mining concessions is limited. We generally do not conduct surveys of our properties until they have reached the development stage, and therefore, the precise area and location of such properties could be in doubt. Accordingly, our mineral properties could be subject to prior unregistered agreements, transfers or claims, and title could be affected by, among other things, undetected defects. In addition, we might be unable to operate our properties as permitted or to enforce our rights with respect to our properties.

We depend on the services of key executives.

We are dependent on the services of key executives including our President and Chief Executive Officer and Chief Financial Officer, and a number of other highly skilled and experienced executive personnel. Due to the relatively small size of our

management team, the loss of one or more of these persons or our inability to attract and retain additional highly skilled employees could have an adverse effect on our business and future operations.

Our increased use of contractors may expose us to a number of risks and increase our mining costs.

We have increased our use of mining contractors at Bogoso/Prestea and Wassa/HBB. The increased use of contractors subjects us to certain risks, some of which are outside our control, including:

• our ability to negotiate agreements with contractors on acceptable terms;

• reduced control over those aspects of operations which are the responsibility of the contractor;

• failure of a contractor to perform under its agreement;

• interruption of operations or increased costs in the event that a contractor ceases to do business due to insolvency or other unforeseen events;

• failure of a contractor to comply with applicable legal and regulatory requirements;

• labor relation issues from a contractors' workforce; and

• the potential to incur liability to third parties as a result of the actions of our contractors.

The occurrence of one or more of these risks could adversely affect our financial position and results of operations.

Our insurance coverage could be insufficient.

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

• adverse environmental conditions;

• industrial accidents;

• labor disputes;

• unusual or unexpected geological conditions;

• ground or slope failures;

• cave-ins;

• fire damage;

• changes in the regulatory environment;

• marine transit and shipping damage and/or losses;

• natural phenomena such as inclement weather conditions, floods and earthquakes; and

• political risks including expropriation and civil war.

Such occurrences could result in:

• damage to mineral properties or production facilities and equipment;

• personal injury or death;

• loss of legitimate title to properties;

• environmental damage to our properties or the properties of others;

• delays in mining, processing and development;

• monetary losses; and

• possible legal liability.

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

We are dependent on information technology systems, which are subject to certain risks, including cybersecurity risks and data leakage risks.

We are dependent upon information technology systems in the conduct of our operations. Any significant breakdown, invasion, virus, cyber attack, security breach, destruction or interruption of these systems by employees, others with

authorized access to our systems, or unauthorized persons could negatively impact our operations. To the extent any invasion, cyber attack or

security breach results in disruption to our operations, loss or disclosure of, or damage to, our data or confidential information, our reputation, business, results of operations and financial condition could be materially adversely affected. Our systems and insurance coverage for protecting against cyber security risks may not be sufficient. Although to date we have not experienced any material losses relating to cyber attacks, we may suffer such losses in the future. We may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities.

Governmental and Regulatory Risks

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

We are a holding company that conducts operations through foreign (principally Ghanaian) subsidiaries and joint ventures, and substantially all of our assets consist of equity in these entities. Accordingly, any limitation on the transfer of cash or other assets between the parent corporation and these entities, or among these entities, could restrict our ability to fund our operations efficiently, or to repay the 5% Convertible Debentures or other debt. Any such limitations, or the perception that such limitations might exist now or in the future, could have an adverse impact on available credit and our valuation and stock price.

In 2012 the Government of Ghana made a number of changes to the mining fiscal regime, and proposed significant additional changes that will have a significant impact on our overall costs.

In 2012, the Government of Ghana made several changes to the mining fiscal regime and proposed significant additional changes, which if implemented, would result in an increase in the overall corporate tax payable by mining companies in Ghana. The Government increased the income tax rate from 25% to 35% and disallowed expenditures from one mining area as a deduction from revenues in a separate mining area belonging to the same company in determining the company's taxable income for tax purposes. Further it instituted certain tax depreciation limits.

Additionally, the Government announced its intent to introduce a 10% windfall profit tax on mining companies in 2013.

In late 2011, the Government announced that it intends to establish a tax stability renegotiation team which plans to review the existing tax stability agreements of mining companies operating in Ghana. While our mines do not have tax stability agreements, it is not clear at this time if the tax stability renegotiation team will review our Deeds of Warranty which specify certain tax agreements for our properties. Although the specific details of these proposed changes have not been made available, if these changes are implemented, they would have a significant impact on our profitability and financial resources.

We are subject to changes in the regulatory environment where we operate which may increase our costs of compliance.

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

- licensing;
- production;
- taxes;
- disposal of process water or waste rock;
- toxic substances;
- development and permitting;
- exports and imports;
- labor standards;
- mine and occupational health and safety;
- environmental protection and corporate responsibility, and
- mine rehabilitation and closure plans.

Compliance with these regulations increases the costs of the following:

planning;

designing;

drilling;

operating;

24

developing;
constructing; and
closure, reclamation and rehabilitation and post closure.

We believe that we are in substantial compliance with current laws and regulations in Ghana and elsewhere. However, these laws and regulations are subject to frequent change and reinterpretation. 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. These factors could cause a reduction in levels of production and delay or prevent the development or expansion of our properties in Ghana. The implementation of changes in regulations that limit the amount of proceeds from gold sales that could be withdrawn from Ghana could also have a material adverse impact on us, as Bogoso/Prestea and Wassah/HBB are currently our only sources of internally generated operating cash flows.

Environmental bonding requirements are under review in Ghana and bonding requirements may be increased. As part of its periodic assessment of mine reclamation and closure costs, the Ghana EPA reviews the adequacy of reclamation bonds and guarantees. In certain cases, it has requested higher levels of bonding based on its findings. If the EPA were to require additional bonding at our properties, it may be difficult, if not impossible, to provide sufficient bonding. If we are unable to meet any such increased requirements or negotiate an acceptable solution with the Government of Ghana, our operations and exploration and development activities in Ghana may be materially adversely affected.

The Government of Ghana has the right to increase its interest in certain subsidiaries.

In accordance with the Minerals and Mining Act, 2006 (Act 703), the Government of Ghana has a 10% carried interest in the mineral operations of Ghanaian mining companies. The carried interest comes into existence at the time the government issues a mining license. As such, the Government of Ghana currently has a 10% carried interest in our subsidiaries that own the Bogoso/Prestea properties and the Wassah/HBB properties.

Under Act 703, the Government of Ghana has the right to acquire a special share or “golden share” in such subsidiaries at any time for no consideration or such consideration as the Government of Ghana and such subsidiaries might agree, and a pre-emptive right to purchase all gold and other minerals produced by such subsidiaries. A “golden share” carries no voting rights and does not participate in dividends, profits or assets. While the Government of Ghana has not sought to exercise any of these rights at our properties, any such attempts to do so in the future could adversely affect our financial results.

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

Our assets and operations are affected by various political and economic uncertainties in the countries where we operate, including:

- war, civil unrest, terrorism, coups or other violent or unexpected changes in government;
- political instability and violence;
- expropriation and nationalization;
- renegotiation or nullification of existing concessions, licenses, permits, and contracts;
- illegal mining;
- changes in taxation policies;

unilaterally imposed increases in royalty rates, such as the increase in royalty rates imposed by the Government of Ghana, effective March 2011, which changed the method of calculating the royalties from not less than 3% and not more than 6% of a mine's total mineral revenues to a flat rate of 5% of mineral revenues;

- restrictions on foreign exchange and repatriation; and
- changing political conditions, currency controls, and governmental regulations that favor or require the awarding of contracts to local contractors or require foreign contractors to employ citizens of, or purchase supplies from, a particular jurisdiction.

Illegal mining has occurred on our properties which is difficult to control, can disrupt our business and can expose us to liability.

We continue to experience illegal mining activity on our mining and exploration properties. Most of this activity is on our Prestea South properties. While we are proactively working with local, regional and national governmental

authorities to obtain

25

protection of our property rights, any action on the part of such authorities may not occur, may not fully address our problems or may be delayed.

In addition to the impact on our Mineral Reserves and non-reserves, the presence of illegal miners can lead to project delays and disputes and delays regarding the development or operation of commercial gold deposits. Illegal miners could cause environmental damage or other damage to our properties, or personal injury or death, for which we could potentially be held responsible. Illegal miners may work on other of our properties from time to time, and they may in the future increase their presence and have increased negative impacts such as those described above on such other properties.

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

Our business, mining operations and exploration and development activities are subject to extensive Canadian, United States, Ghanaian and other foreign, federal, state, provincial, territorial and local laws and regulations governing exploration, development, production, exports, taxes, labor standards, waste disposal, protection of the environment, reclamation, historic and cultural resource preservation, mine safety and occupational health, toxic substances, reporting and other matters, as well as accounting standards. Compliance with these laws, regulations and standards or the imposition of new such requirements could adversely affect operating and development costs, the timing of operations and the ability to operate and financial results.

Failure to maintain effective internal controls could have a material adverse effect on our business and share price.

Annually, we are required to test our internal controls over financial reporting to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act of 2002, which requires annual management assessments of the effectiveness of our internal controls over financial reporting. Failure to maintain effective internal controls could have a material adverse effect on our business and share price.

Market Risks

The market price of our common shares has experienced volatility and could continue to do so in the future.

Our common shares are listed on the NYSE MKT, the Toronto Stock Exchange and the Ghana Stock Exchange.

Companies with market capitalizations similar to ours have experienced substantial volatility in the past, often based on factors unrelated to the financial performance or prospects of the companies involved. These factors include macroeconomic developments in North America and globally and market perceptions of the attractiveness of particular industries. Our share price is also likely to be significantly affected by short-term changes in gold prices or in our financial condition or results of operations as reflected in our quarterly earnings reports. Other factors unrelated to our performance that could have an effect on the price of our common shares include the following:

- the extent of analytical coverage available to investors concerning our business could be limited if investment banks with research capabilities do not continue to follow our securities;

- the trading volume and general market interest in our securities could affect an investor's ability to trade significant numbers of common shares;

- the size of the public float in our common shares may limit the ability of some institutions to invest in our securities;

and

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