

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

**FORM 6-K**

**REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE  
ACT OF 1934**

For the month of November 2017

Commission File Number 001-12284

**GOLDEN STAR RESOURCES LTD.**

(Translation of registrant's name into English)

**150 King Street West  
Suite 1200  
Toronto, Ontario  
M5H 1J9, Canada**

(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F  Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): \_\_\_\_\_

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): \_\_\_\_\_

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes  No

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): \_\_\_\_\_

**INCORPORATION BY REFERENCE**

Exhibits 99.1 and 99.2 included in this report on Form 6-K are each hereby incorporated by reference in the Registration Statements on Form S-8 of the Registrant as each may be amended from time to time (File Nos. 333-105820, 333-105821, 333-118958, 333-169047, 333-175542, 333-211926 and 333-218064) and Form F-10 of the Registrant, as may be amended from time to time (File No. 333-220478) to the extent not superseded by documents or reports subsequently filed by us under the Securities Act of 1933 or the Securities Exchange Act of 1934, in each case as amended.

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## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

### **GOLDEN STAR RESOURCES LTD.**

Date: November 1, 2017

*(signed) André van Niekerk*

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André van Niekerk  
Executive Vice President and Chief Financial Officer

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## EXHIBIT INDEX

<b>Exhibit</b>	<b>Description of Furnished Exhibit</b>
99.1	Management's Discussion and Analysis for the three and nine months ended September 30, 2017
99.2	Condensed Interim Consolidated Financial Statements for the three and nine months ended September 30, 2017 and September 30, 2016
99.3	Form 52-109F2 - Certification of Interim Filing - CEO
99.4	Form 52-109F2 - Certification of Interim Filing - CFO

# **GOLDEN STAR**

The logo for Golden Star features a stylized, multi-pointed star in a golden-brown color, positioned between the letters 'S' and 'T' of the word 'STAR'.

**Management's Discussion and Analysis**

**For the Three and Nine Months Ended September 30, 2017**

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## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following management's discussion and analysis provides information that management believes is relevant to an assessment and understanding of the consolidated financial condition and results of operations of Golden Star Resources Ltd. and its subsidiaries ("Golden Star" or "the Company" or "we" or "our"). This Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") should be read in conjunction with the Company's condensed interim consolidated financial statements and related notes for the three and nine months ended September 30, 2017, which are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). This MD&A includes information available to, and is dated, October 31, 2017. Unless noted otherwise, all currency amounts are stated in U.S. dollars and all financial information presented in this MD&A is prepared in accordance with IFRS.

### CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This MD&A contains "forward-looking information" within the meaning of applicable Canadian securities laws and "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995, concerning the business, operations and financial performance and condition of Golden Star. Generally, forward-looking information and statements can be identified by the use of forward-looking terminology such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", "believes" or variations of such words and phrases (including negative or grammatical variations) or statements that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" or the negative connotation thereof. Forward-looking information and statements in this MD&A include, but are not limited to, information or statements with respect to: production, cash operating costs and all-in sustaining costs estimates for 2017; capital expenditures, including sustaining capital and development capital, for 2017; Prestea Underground achieving commercial production in the fourth quarter of 2017; production from the Wassa Underground mine replacing part of the prior year's Wassa Main Pit feed in the plant with higher grade underground ore; Wassa Main Pit production reducing its contribution as the Wassa Underground continues to ramp up production; the quantity of and plan for drilling to test the southern extension of the B Shoot at Wassa Underground and the timing thereof; the excavation of a new drill chamber to the north of the current West Reef 24 Level access of Prestea Underground, and the quantity and timing of drilling; the mining of further surface reserves at Wassa; the mining of surface deposits at Prestea Open Pits until early 2018; the average grade of the first three stopes at Prestea Underground; capital expenditures, net of pre-commercial production revenue, at Prestea Underground in total, as well as during the fourth quarter of 2017; the Company's debt repayment obligations for the remainder of 2017 and for 2018; the Company not expecting to make any excess cash flow payments under the Royal Gold loan; rehabilitation obligations of the Company and provisions therefor, as well as the expected undiscounted cash flows for rehabilitation provisions; the timing for the results of drilling at the B Shoot zone of Wassa Underground; the timing for extension drilling of the West Reef of Prestea Underground; the sufficiency of cash available to support the Company's operations and mandatory expenditures for the next twelve months; production at Prestea Underground during the development phase of the project; exploration spending during 2017; the sufficiency of the Company's existing cash balance; and working capital, debt repayments and requirements for additional capital.

Forward-looking information and statements are made based upon certain assumptions and other important factors that, if untrue, could cause the actual results, performance or achievements of Golden Star to be materially different from future results, performance or achievements expressed or implied by such statements. Such statements and information are based on numerous assumptions regarding present and future business strategies and the environment in which Golden Star will operate in the future, including the price of gold, anticipated costs and ability to achieve goals. Certain important factors that could cause actual results, performances or achievements to differ materially from those set forth in the forward-looking information and statements include, among others, gold price volatility, discrepancies between actual and estimated production, mineral reserves and resources and metallurgical recoveries, mining operational and development risks, litigation risks, liquidity risks, suppliers suspending or denying delivery of products or services, regulatory restrictions (including environmental regulatory restrictions and liability), actions by governmental authorities (including changes in taxation), currency fluctuations, the speculative nature of gold exploration, the global economic climate, dilution, share price volatility, the availability of capital on reasonable terms or at all, local and community impacts and issues, results of pending or future feasibility studies, competition, loss of key employees, additional funding requirements and defective title to mineral claims or property. Although Golden Star has attempted to identify important factors that could cause actual results, performance or achievements to differ materially from those described in forward-looking information and statements, there may be other factors that cause actual results, performance or achievements not to be as anticipated, estimated or intended.

Forward-looking information and statements are subject to known and unknown risks, uncertainties and other important factors that may cause the actual results, performance or achievements of Golden Star to be materially different from those expressed or implied by such forward-looking information and statements, including but not limited to: risks related to international operations, including economic and political instability in foreign jurisdictions in which Golden Star operates; risks related to current global financial conditions; actual results of current exploration activities; environmental risks; future prices of gold; possible variations in mineral reserves and mineral resources, grade or recovery rates; mine development and operating risks; an inability to obtain power for

operations on favourable terms or at all; mining plant or equipment breakdowns or failures; an inability to obtain products or services for operations or mine development from vendors and suppliers on reasonable terms, including pricing, or at all; accidents, labor disputes and other risks of the mining industry; delays in obtaining governmental approvals or financing or in the completion of development or construction activities; risks related to indebtedness and the service of such indebtedness, as well as those factors discussed in the section entitled "Risk Factors" in Golden Star's Annual Information Form for the year ended December 31, 2016. Although Golden Star has attempted to identify important factors that could cause actual results, performances and achievements to differ materially from those contained in forward-looking information and statements, there may be other factors that cause results, performance and achievements not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results, performance, and achievements and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information and statements. Forward-looking information and statements are made as of the date hereof and accordingly are subject to change after such date. Except as otherwise indicated by Golden Star, these statements do not reflect the potential impact of any non-recurring or other special items or of any dispositions, monetizations, mergers, acquisitions, other business combinations or other transactions that may be announced or that may occur after the date hereof. Forward-looking information and statements are provided for the purpose of providing information about management's current expectations and plans and allowing investors and others to get a better understanding of the Company's operating environment. Golden Star does not undertake to update any forward-looking information and statements that are included in this MD&A, except as required by applicable securities laws.

## **CAUTIONARY NOTE REGARDING RESERVES AND RESOURCES**

Scientific and technical information contained in this MD&A was reviewed and approved by Dr. Martin Raffield, Senior Vice- President, Technical Services for Golden Star who is a "qualified person" as defined by National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101") and by S. Mitchel Wasel, BSc Geology who is a Qualified Person pursuant to NI 43-101. Mr. Wasel is Vice President Exploration for Golden Star and an active member of the Australasian Institute of Mining and Metallurgy. All mineral reserves and mineral resources have been calculated in accordance with the standards of the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") and in compliance with the requirements of NI 43-101. All mineral resources are reported inclusive of mineral reserves. Mineral resources which are not mineral reserves do not have demonstrated economic viability. Information on data verification performed on, and other scientific and technical information relating to, the mineral properties mentioned in this MD&A that are considered to be material mineral properties of the Company are contained in Golden Star's Annual Information Form for the year ended December 31, 2016 and the following current technical reports for those properties available at [www.sedar.com](http://www.sedar.com): (i) Wassa - "NI 43-101 Technical Report on feasibility study of the Wassa open pit mine and underground project in Ghana" effective date December 31, 2014; (ii) Bogoso - "NI 43-101 Technical Report on Resources and Reserves Golden Star Resources Ltd., Bogoso Prestea Gold Mine, Ghana" effective date December 31, 2013; and (iii) Prestea Underground - "NI 43-101 Technical Report on a Feasibility Study of the Prestea Underground Gold Project in Ghana" effective date November 3, 2015.

### **Cautionary Note to U.S. Investors**

This MD&A has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ materially from the requirements of United States securities laws applicable to U.S. companies. Information concerning our mineral properties has been prepared in accordance with the requirements of Canadian securities laws, which differ in material respects from the requirements of the United States Securities and Exchange Commission (the "SEC") set forth in Industry Guide 7. Under the SEC's Industry Guide 7, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time of the reserve determination, and the SEC does not recognize the reporting of mineral deposits which do not meet the SEC Industry Guide 7 definition of "Reserve". In accordance with NI 43-101, the terms "mineral reserve", "proven mineral reserve", "probable mineral reserve", "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" are defined in accordance with CIM standards. While the terms "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" are recognized and required by NI 43-101, the SEC does not recognize them. You are cautioned that, except for that portion of mineral resources classified as mineral reserves, mineral resources do not have demonstrated economic viability. Inferred mineral resources have a high degree of uncertainty as to their existence and as to whether they can be economically or legally mined. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Therefore, you are cautioned not to assume that all or any part of an inferred mineral resource exists, that it can be economically or legally mined, or that it will ever be upgraded to a higher category. Likewise, you are cautioned not to assume that all or any part of measured mineral resources or indicated mineral resources will ever be upgraded into mineral reserves.

## OVERVIEW OF GOLDEN STAR

Golden Star is an established gold producer that holds a 90% interest in the Wassa and Prestea gold mines in Ghana. The Company has two open pit operations (Wassa Main Pit and the Prestea Open Pits), one producing underground mine ("Wassa Underground") and one underground development project ("Prestea Underground"). Wassa Underground achieved commercial production on January 1, 2017 and Prestea Underground is expected to achieve commercial production in the fourth quarter of 2017. The Company is a reporting issuer or the equivalent in all provinces of Canada, in Ghana and in the United States, and files disclosure documents with securities regulatory authorities in Canada, Ghana and with the SEC in the United States.

## SUMMARY OF OPERATING AND FINANCIAL RESULTS

		Three Months Ended September 30,		Nine Months Ended September 30,	
		2017	2016	2017	2016
<b>OPERATING SUMMARY</b>					
Wassa Main Pit gold sold	oz	16,122	20,229	54,869	72,207
Wassa Underground gold sold	oz	15,877	2,202	40,646	3,195
Prestea Open Pits gold sold	oz	39,176	22,930	97,083	65,624
Prestea Underground gold sold	oz	3,204	—	3,529	—
Total gold sold	oz	74,379	45,361	196,127	141,026
Wassa Main Pit gold produced	oz	15,847	20,088	54,587	71,910
Wassa Underground gold produced	oz	15,877	2,202	40,646	3,195
Prestea Open Pits gold produced	oz	38,899	22,684	97,034	65,546
Prestea Underground gold produced	oz	3,204	—	3,529	—
Total gold produced	oz	73,827	44,974	195,796	140,651
Average realized gold price <sup>1</sup>	\$/oz	1,233	1,286	1,213	1,219
Cash operating cost per ounce - Consolidated <sup>2</sup>	\$/oz	671	964	747	870
Cash operating cost per ounce - Wassa <sup>2</sup>	\$/oz	856	1,110	926	898
Cash operating cost per ounce - Prestea <sup>2</sup>	\$/oz	520	835	570	839
Cost of sales per ounce - Consolidated <sup>2</sup>	\$/oz	855	1,152	959	1,042
Cost of sales per ounce - Wassa <sup>2</sup>	\$/oz	1,083	1,355	1,178	1,115
Cost of sales per ounce - Prestea <sup>2</sup>	\$/oz	669	973	744	962
All-in sustaining cost per ounce - Consolidated <sup>2</sup>	\$/oz	848	1,153	924	1,059

<sup>1</sup> Average realized gold price per ounce excludes pre-commercial production ounces sold at Prestea Underground in 2017 and at Wassa Underground in 2016.

<sup>2</sup> See "Non-GAAP Financial Measures" section for a reconciliation of cost of sales per ounce, cash operating cost per ounce and all-in sustaining cost per ounce to cost of sales before depreciation and amortization.



FINANCIAL SUMMARY		Three Months Ended September 30,		Nine Months Ended September 30,	
		2017	2016	2017	2016
Gold revenues	\$'000	87,772	55,511	233,652	168,035
Cost of sales excluding depreciation and amortization	\$'000	53,502	44,608	160,081	128,622
Depreciation and amortization	\$'000	7,365	5,111	24,697	15,043
Mine operating margin	\$'000	26,905	5,792	48,874	24,370
General and administrative expense	\$'000	7,264	9,370	17,209	25,237
Loss/(gain) on fair value of financial instruments, net	\$'000	3,446	5,784	(3,959)	26,516
Net income/(loss) attributable to Golden Star shareholders	\$'000	12,117	(23,110)	26,170	(43,093)
Adjusted net income attributable to Golden Star shareholders <sup>1</sup>	\$'000	19,827	1,148	30,941	11,119
Income/(loss) per share attributable to Golden Star shareholders - basic	\$/share	0.03	(0.07)	0.07	(0.16)
Income/(loss) per share attributable to Golden Star shareholders - diluted	\$/share	0.03	(0.07)	0.06	(0.16)
Adjusted income per share attributable to Golden Star shareholders - basic <sup>1</sup>	\$/share	0.05	0.00	0.08	0.04
Cash provided by operations	\$'000	23,717	20,964	44,237	28,015
Cash provided by operations before working capital changes <sup>2</sup>	\$'000	23,941	21,500	55,864	51,561
Cash provided by operations per share - basic	\$/share	0.06	0.06	0.12	0.10
Cash provided by operations before working capital changes per share - basic <sup>2</sup>	\$/share	0.06	0.07	0.15	0.19
Capital expenditures	\$'000	17,877	21,656	52,887	60,577

<sup>1</sup> See "Non-GAAP Financial Measures" section for a reconciliation of adjusted net income attributable to Golden Star shareholders and adjusted income per share attributable to Golden Star shareholders to net income/(loss) attributable to Golden Star shareholders and income/(loss) per share attributable to Golden Star shareholders.

<sup>2</sup> See "Non-GAAP Financial Measures" section for an explanation of the calculation of cash provided by operations before working capital changes and cash provided by operations before working capitals per share - basic.

- **Gold revenues totaled \$87.8 million in the third quarter of 2017 , compared to \$55.5 million in the same period in 2016 .** The 58% increase in gold revenues was due to higher gold production at both Prestea and Wassa operations. Gold revenues from Prestea increased by 63% during the third quarter of 2017 as its gold sales attributable to the Prestea open pits increased by 71% compared to the same period in 2016 . Gold revenues from Wassa increased by 52% during the third quarter of 2017 as a result of an increase in gold sales attributable to Wassa Underground. The consolidated average realized gold price was \$1,233 per ounce in the third quarter of 2017, compared to \$1,286 per ounce for the same period in 2016. For the nine months ended September 30, 2017, gold revenue totaled \$233.7 million , a 39% increase compared to \$168.0 million in the same period in 2016 due to higher production at both Prestea and Wassa operations.
- **Gold sales of 74,379 ounces in the third quarter of 2017 were 64% higher than the 45,361 ounces sold in the same period in 2016 .** Prestea gold sales of 42,380 ounces in the third quarter of 2017 were 85% higher than the same period in 2016 due to higher throughput, higher ore grade processed and higher recovery. The higher ore grade processed at Prestea in the third quarter of 2017 was a result of mining the higher grade Mampon deposit that commenced in March 2017. Gold sales from Wassa of 31,999 ounces in the third quarter of 2017 was 43% higher than the same period in 2016. For the third quarter of 2017, 15,877 ounces (or approximately 50%) of gold sold were attributed to the higher grade Wassa Underground and 16,122 ounces (or approximately 50%) of gold sold were attributed to the Wassa Main Pit. The production from the Wassa Underground Mine is intended to replace part of the prior year's Wassa Main Pit feed in the plant with higher grade underground ore. Wassa Main Pit is expected to continue to reduce its contribution going forward as the Wassa Underground Mine continues to ramp up. For the nine months ended September 30, 2017, gold sales of 196,127 ounces were 39% higher than the 141,026 ounces sold in the same period in 2016 due to higher production at both operations.
- **Cost of sales excluding depreciation and amortization in the third quarter of 2017 totaled \$53.5 million compared to \$44.6 million in the same period in 2016 .** The 20% increase in cost of sales excluding depreciation and amortization for the third quarter of 2017 was due mainly to higher mining costs at Wassa as it continues to transition into a new business model from solely operating an open pit operation, to a combination of open pit and underground mining operations. Wassa Underground was placed into commercial production on January 1, 2017, and as a result mining costs were higher in 2017 when compared to the same period of 2016. Wassa Underground mining costs were capitalized in 2016. At Prestea, the increase

in cost of sales excluding depreciation and amortization was due mainly to higher haulage costs for the material mined at the Mampon deposit. For the nine months ended September 30, 2017, cost of sales excluding depreciation and amortization totaled \$160.1 million, 24% higher compared to \$128.6 million in the same period in 2016 due mainly to an increase in inventory charge as a result of drawdown of stockpiles at Wassa and an increase in mining costs at Wassa as a result of the additional Wassa Underground mining costs in 2017 that were capitalized in 2016.

- **Consolidated cost of sales per ounce was \$855 in the third quarter of 2017, 26% lower than \$1,152 in the same period in 2016. Consolidated cash operating cost per ounce was \$671 in the third quarter of 2017, 30% lower than \$964 in the same period in 2016.** Prestea achieved a 38% improvement in cash operating cost per ounce in the third quarter of 2017 compared to the same period in 2016 as a result of higher gold production from mining the higher grade Mampon deposit. Wassa's cash operating cost per ounce in the third quarter of 2017 was 23% lower than the same period in 2016, due mainly to higher gold production with the addition of gold ounces attributable to the Wassa Underground Mine. Wassa's gold production in the third quarter of 2016 was mostly from the Wassa Main Pit. For the nine months ended September 30, 2017, consolidated cost of sales per ounce was \$959, 8% lower than \$1,042 in the same period in 2016 due to higher production at both operations.
- **Depreciation and amortization expense totaled \$7.4 million in the third quarter of 2017 compared to \$5.1 million in the same period in 2016.** For the nine months ended September 30, 2017, depreciation and amortization expense totaled \$24.7 million compared to \$15.0 million in the same period in 2016. The increase in depreciation and amortization expense for the three and nine months ended September 30, 2017 was due primarily to the commencement of depreciation on Wassa Underground assets in 2017 as a result of achieving commercial production, higher production at both operations and lower mineral reserve and resource estimates for Prestea Open Pits compared to 2016.
- **General and administrative costs totaled \$7.3 million in the third quarter of 2017, compared to \$9.4 million in the same period in 2016.** For the nine months ended September 30, 2017, general and administrative costs totaled \$17.2 million compared to \$25.2 million in the same period in 2016. The decrease in general and administrative costs for both the three and nine months ended September 30, 2017 were due mainly to a decline in non-cash share-based compensation compared to the same periods in prior year.
- **The Company recorded a loss of \$3.4 million on fair value of financial instruments in the third quarter of 2017 compared to a \$5.8 million loss in the same period in 2016.** The loss in the third quarter of 2017 was comprised of a \$3.2 million non-cash revaluation loss on the embedded derivative liability of the 7% Convertible Debentures and a \$0.2 loss recognized for the warrants. The \$5.8 million fair value loss recognized in the third quarter of 2016 was comprised of a \$3.3 million non-cash revaluation loss of the embedded derivative liability of the 7% Convertible Debentures, a \$1.9 million non-cash revaluation loss on the 5% Convertible Debentures, a \$0.8 million non-cash revaluation loss on warrants and a \$0.2 million gain on forward and collar contracts. The valuation techniques used for these financial instruments are disclosed in the "Financial Instruments" section of this MD&A. For the nine months ended September 30, 2017, the Company recorded \$4.0 million of fair value gain on financial instruments compared to \$26.5 million fair value loss for the same period in 2016.
- **Net income attributable to Golden Star shareholders for the third quarter of 2017 totaled \$12.1 million or \$0.03 income per share, compared to a net loss of \$23.1 million or \$0.07 loss per share in the same period in 2016.** The net income attributable to Golden Star shareholders in the three months ended September 30, 2017 compared to a net loss attributable to Golden Star shareholders for the same period in 2017 was due primarily to \$21.1 million higher consolidated mine operating margin and \$14.4 million lower losses recognized for financial instruments. For the nine months ended September 30, 2017, net income attributable to Golden Star shareholders totaled \$26.2 million or \$0.07 income per share (basic), compared to a net loss of \$43.1 million or \$0.16 loss per share for the same period in 2016. The net income attributable to Golden Star shareholders in the nine months ended September 30, 2017 compared to a net loss attributable to Golden Star shareholders for the same periods in 2016 was due primarily to a higher mine operating margin at Prestea in the nine months ended September 30, 2017 and a fair value gain on financial instruments in the nine months ended September 30, 2017 compared to a loss recognized on financial instruments in the same period in 2016. These were partially offset by a lower mine operating margin at Wassa in nine months ended September 30, 2017 compared to the same period in 2016.
- **Adjusted net income attributable to Golden Star shareholders (see "Non-GAAP Financial Measures" section) was \$19.8 million in the third quarter of 2017, compared to \$1.1 million for the same period in 2016.** For the nine months ended September 30, 2017, adjusted net income attributable to Golden Star shareholders totaled \$30.9 million compared to \$11.1 million in the same period in 2016. The higher adjusted net income attributable to Golden Star shareholders for the three and nine months ended September 30, 2017 was principally due to higher mine operating margin compared to same periods in 2016.
- **Cash provided by operations before working capital was \$23.9 million for the third quarter of 2017, compared to \$21.5 million in the same period in 2016.** The increase in cash provided by operations before working capital was due primarily to a \$21.1 million higher mine operating margins at Prestea and Wassa in the third quarter of 2017 compared to the same period in 2016. In 2016, \$20 million of cash flow from operations was represented by advance payment under the streaming

agreement from RGLD Gold AG ("RGLD") during the third quarter of 2016 compared to \$nil in the same period in 2017. For the nine months ended September 30, 2017, cash provided by operations before working capital changes was \$55.9 million compared to \$51.6 million in the same period in 2016 due mainly to higher mine operating margin at Prestea.

- **Capital expenditures for the third quarter of 2017 totaled \$17.9 million compared to \$21.7 million in the same period in 2016.** Capital expenditures at Prestea during the third quarter of 2017 included \$9.7 million on expenditures relating to the development of the Prestea Underground Mine, \$0.6 million relating to development of the Prestea Open Pit Mines, \$0.2 million relating to Mampon development expenditures and \$0.3 million related to exploration drilling. The major capital expenditures in the third quarter of 2017 at Wassa included \$2.1 million of exploration drilling, \$1.9 million of expenditures relating to the development of the Wassa Underground Mine, \$1.0 million of equipment purchases and \$0.3 million for the improvement of the tailings storage facility. For the nine months ended September 30, 2017, capital expenditures totaled \$52.9 million compared to \$60.6 million in the same period in 2016.

## OUTLOOK FOR 2017

### Production and cost guidance

The Company's consolidated production and cost guidance for 2017 remains unchanged. Consolidated production is expected to be between 255,000 - 280,000 ounces at a cash operating cost per ounce of \$780 - \$860. All-in sustaining cost per ounce is expected to be \$970 - \$1,070.

### Capital expenditures guidance

Capital expenditures guidance of \$69.3 million remains unchanged as previously updated in the second quarter of 2017.

## CORPORATE DEVELOPMENTS

### Gold prices

Spot gold prices were \$1,283 per ounce at the end of the third quarter of 2017, up slightly from \$1,242 per ounce at the end of the second quarter of 2017. The Company realized an average gold price of \$1,233 per ounce for gold sales during the third quarter of 2017, compared to an average realized gold price of \$1,286 per ounce for the same period in 2016. The spot gold price on October 31, 2017 was \$1,270 per ounce.

Revenue from spot sales during the third quarter of 2017 resulted in an average realized price of \$1,279 per ounce whereas revenue recognized from the gold purchase and sale agreement (the "Streaming Agreement") with RGLD resulted in an average realized price of \$836 per ounce.

	Three Months Ended September 30, 2017		
	\$'000	Ounces <sup>1</sup>	Realized price per ounce
Revenue - Stream arrangement			
Cash proceeds	\$ 1,881		
Deferred revenue recognized	4,266		
	\$ 6,147	7,354	\$ 836
Revenue - Spot sales	81,625	63,821	1,279
Total revenue	\$ 87,772	71,175	\$ 1,233

<sup>1</sup> Ounces sold used in the calculation of realized price per ounce excludes 3,204 pre-commercial ounces sold from Prestea Underground Mine during the period.

### Mining at Mampon

Mining at the Mampon deposit that was commenced in March 2017 continued during the third quarter of 2017. Mampon is a high grade, open pit, oxide deposit, with mineral reserves of 301,000 tonnes at 4.64 grams per tonne ("g/t") for 45,000 ounces of gold. Mampon is 65 km to the north of the carbon-in-leach processing plant at Bogoso/Prestea. Trucking of the higher grade ore from Mampon began in early April 2017 and it is being blended with ore from the Prestea Open Pits.

## **Warrants**

During the quarter ended September 30, 2017, the Company issued 3,223,684 common shares to Royal Gold, Inc. ("RGI") upon a cashless exercise by RGI of all 5,000,000 warrants held. The Company recorded a \$2.5 million increase in equity and \$2.7 million decrease in warrant liability, resulting in a \$0.2 million gain on exercise.

## **Exploration Update**

The 2017 exploration program continued during the third quarter of 2017, focusing on step out drilling at both Wassa and Prestea.

### *Wassa Underground*

Three surface drill rigs were employed at Wassa to test the extents of the higher grade mineralization, up plunge to the north of the current planned stoping areas in the B Shoot zone and down plunge to the south of the current Inferred Mineral Resources. It confirmed the ore body is larger than previously estimated and remains open in both directions.

The drilling to test the northern extension comprised 15 holes and totaled 4,164 metres and confirmed that the B Shoot extends approximately 50 metres ("m") to the north. This suggests the potential to add production to Wassa Underground's mine plan in the near term. Significant intercepts included 14.9 m grading 18.9 g/t of gold ("Au") from 294.0 m in hole BS17DD002, including 2.0m grading 91.8 g/t Au from 300.0m, and 23.8m grading 7.3 g/t Au from 289.9m in hole BS17DD003, including 4.0 m grading 21.8 g/t Au from 293.0 m

The drilling to test the southern extension of the B Shoot is expected to comprise 7,000 m and include two mother holes with up to four directional daughter holes being deflected from each of the mother holes. Results received from the first mother hole confirmed that the high grade zone extends approximately 200 m to the south of the current Inferred Mineral Resources. Previously reported significant intercepts included drilled widths of 23.8 m grading 6.1 g/t Au from 1,001.0 m and 21.7 m grading 5.3 g/t from 1,049.3 m. For additional information, please refer to the Company's news release dated September 19, 2017.

Following the completion of this first mother hole, three of the four daughter holes have been deflected and drilling of the second mother hole is expected to commence late in the fourth quarter of 2017. Results are pending for all of the daughter holes.

### *Prestea Underground*

During the third quarter of 2017 drilling at Prestea Underground focused on testing the extension of the West Reef to the north as well as further delineating the West Reef through additional in-fill drilling. For additional information, please refer to the Company's news release dated September 21, 2017.

Five holes have been completed to date in the extension drilling program, with the results of the first four holes received and reported. These results confirm the extension of gold mineralization to the north and represent the opportunity to add new stopes, which have the potential to be mined during the next 18 months and add ounces to the short term mine plan. The drilling was conducted from within Prestea Underground's workings and comprised a total of 1,007 m. Previously reported significant intercepts included 0.5 m grading 132.4 g/t Au from 174.7 m in hole WR17-24-274S25 and 0.5 m grading 67.20 g/t Au from 182.3 m in hole WR17-24-274S19.

The results of 23 holes have been received and reported in the in-fill stope definition drilling program to further delineate the West Reef ore body, with seven of these holes received and reported during the third quarter of 2017. The latest seven holes comprised 947 m of drilling and all the results received to date confirm the previously modelled high grade nature and strong continuity of gold mineralization and the thickness of the ore body. Significant intercepts included 0.5 m grading 87.6 g/t Au from 141.1 m in hole WR17-24-274S1 and 1.5 m grading 64.5 g/t Au from 144.2 m in hole WR17-24-274S17.

Golden Star intends to excavate a new drill chamber to the north of the current West Reef 24 Level access. This is to enable the exploration team to access the larger, longer term exploration target, which is the projected down plunge extension of the high grade West Reef ore body (Mineral Reserves of 1.09 million tonnes at 13.93 g/t Au for 490,000 ounces). The Company expects the drill chamber to be completed during the fourth quarter of 2017, allowing for a further increase in drill production from late 2017/early 2018 onwards. Drill production is expected to increase during the remainder of 2017 through the mobilization of a second underground diamond drill rig.

## **Surface operations**

### *Wassa*

The Company plans to suspend mining at the Wassa surface operation from early January 2018, after which Wassa production will come entirely from the Wassa underground operation. These surface reserves are expected to be mined at a future date, however the Company is still assessing the optimal time to mine those reserves. Further updates will be provided in the first quarter of 2018.

## Prestea

As disclosed previously, the Company expects the current surface operation at the Prestea mine to complete production in early 2018, after which Prestea production will come entirely from the Prestea underground operation. The Company expects to continue to process stockpiled ore until the end of the first quarter of 2018.

## DEVELOPMENT PROJECTS UPDATE

### Prestea

The Prestea mine consists of an underground mine that has been in existence for over 100 years along with adjacent surface deposits. The Prestea mine is located 16 km south of the Bogoso mine and processing plants in the town of Prestea and it will be mined via mechanized shrinkage stoping. A number of high grade surface deposits exist to the south of the underground mine, which the Company is currently processing through the non-refractory processing plant. The surface deposits are expected to continue production until early 2018.

#### *Prestea Underground Development*

By the end of the third quarter of 2017, the refurbishment of Prestea Underground was completed and commercial production is expected to be achieved in the fourth quarter of 2017.

The longhole drilling of the first stope was completed during the quarter and stope blasting commenced in late September 2017. As of October 31, 2017, longhole drilling for cable bolts has commenced in the second raise and development of the third raise has reached 124 m. The fourth raise is about to commence blasting and the fifth Alimak nest is almost complete.

Major improvements to the ventilation system occurred during the third quarter of 2017, with the breakthrough of the footwall drive between the two crosscuts. Through-flow ventilation is now in place at the raise developments, resulting in cooler temperatures, better environmental conditions for loader operation and the removal of the long ventilation ducts and fans in the crosscuts. The breakthrough of the footwall drive has also exposed stope access areas for the next 13 planned stopes.

As of October 31, 2017, a total of 29,500 tonnes of material had been delivered to the processing plant. Of the 29,500 tonnes, approximately 12,100 tonnes was ore from raise development. Since the raises have a width of 2.7 m and the stopes are expected to be mined at a width of 1.7 m, the expected average grade of the first three stopes is approximately 16 g/t Au, which is significantly higher than the reserve grade. As ore and waste use the same pass system on 24 Level, it was decided that to improve logistics and productivity during the pre-commercial production period, ore and waste would not be separated and that all mined material would be delivered to the run of mine pad at the processing plant.

The capital expenditures for Prestea Underground Mine incurred to the end of the third quarter of 2017 are shown in the table below:

<b>(in millions of U.S. dollars)</b>	<b>Third Quarter 2017</b>	<b>Year-to-date</b>	<b>Project-to- date</b>
Capital spending	\$ 8.2	\$ 28.9	\$ 68.3
Capitalized borrowing costs	1.5	3.7	7.4
Capital expenditures	<u>\$ 9.7</u>	<u>\$ 32.6</u>	<u>\$ 75.7</u>

## WASSA OPERATIONS

Through a 90% owned subsidiary, Golden Star (Wassa) Limited, the Company owns and operates the Wassa Main Pit (an open pit mine) and Wassa Underground (an underground mine). The Wassa operations are located in the southwestern region of Ghana, approximately 35 kilometers northeast of the town of Tarkwa. Wassa has a non-refractory processing plant (the "Wassa processing plant") consisting of a carbon-in-leach ("CIL") system with a capacity of 2.7 million tonnes per annum. Ore from both the Wassa Main Pit and Wassa Underground is processed at the Wassa processing plant.

		Three Months Ended September 30,		Nine Months Ended September 30,	
		2017	2016	2017	2016
<b>WASSA FINANCIAL RESULTS</b>					
Revenue	\$'000	\$ 39,556	\$ 25,958	\$ 115,748	\$ 87,556
Mine operating expenses	\$'000	27,980	22,473	84,613	69,799
Severance charges	\$'000	145	—	1,099	113
Royalties	\$'000	2,033	1,488	5,970	4,713
Operating costs (to)/from metals inventory	\$'000	(603)	(20)	3,827	(4,988)
Inventory net realizable value adjustment	\$'000	606	—	2,410	—
Cost of sales excluding depreciation and amortization	\$'000	30,161	23,941	97,919	69,637
Depreciation and amortization	\$'000	4,481	3,464	14,612	10,892
Mine operating margin/(loss)	\$'000	\$ 4,914	\$ (1,447)	\$ 3,217	\$ 7,027
Capital expenditures	\$'000	6,469	9,699	13,113	31,650
<b>WASSA OPERATING RESULTS</b>					
Ore mined - Main Pit	t	395,623	561,343	1,080,522	1,798,358
Ore mined - Underground	t	211,670	46,234	509,234	66,418
Ore mined - Total	t	607,293	607,577	1,589,756	1,864,776
Waste mined - Main Pit	t	1,436,889	2,674,220	4,993,512	7,628,381
Waste mined - Underground	t	56,553	68,040	139,496	187,920
Waste mined - Total	t	1,493,442	2,742,260	5,133,008	7,816,301
Ore processed - Main Pit	t	457,232	653,337	1,448,759	1,851,053
Ore processed - Underground	t	211,670	45,669	512,069	62,653
Ore processed - Total	t	668,902	699,006	1,960,828	1,913,706
Grade processed - Main Pit	g/t	1.20	1.08	1.24	1.27
Grade processed - Underground	g/t	2.61	1.93	2.68	1.71
Recovery	%	93.1	93.4	95.0	93.8
Gold produced - Main Pit	oz	15,847	20,088	54,587	71,910
Gold produced - Underground	oz	15,877	2,202	40,646	3,195
Gold produced - Total	oz	31,724	22,290	95,233	75,105
Gold sold - Main Pit	oz	16,122	20,229	54,869	72,207
Gold sold - Underground	oz	15,877	2,202	40,646	3,195
Gold sold - Total	oz	31,999	22,431	95,515	75,402
Cost of sales per ounce <sup>1</sup>	\$/oz	1,083	1,355	1,178	1,115
Cash operating cost per ounce <sup>1</sup>	\$/oz	856	1,110	926	898

<sup>1</sup> See "Non-GAAP Financial Measures" section for a reconciliation of cost of sales per ounce and cash operating cost per ounce to cost of sales excluding depreciation and amortization.

**For the three months ended September 30, 2017 compared to three months ended September 30, 2016**

*Production*

Wassa Underground

Wassa Underground contributed 211,670 ore tonnes at a grade of 2.61 g/t for 15,877 ounces (or approximately 50% of Wassa's total production) in the third quarter of 2017. In the third quarter of 2017, mining operations were primarily focused on the higher grade B Shoot zone. The higher grade ore from Wassa Underground is intended to partially replace Wassa Main Pit feed to the plant.

Wassa Main Pit

Production from Wassa Main Pit was 457,232 ore tonnes at a grade of 1.2 g/t for 15,847 ounces (or approximately 50% of Wassa's total production) in the third quarter of 2017, a decrease of 21% compared to the same period in 2016. This is as a result of mining operations nearing the bottom of the current pushback, Cut 2, which means that the pit area has become smaller and mining rates have become lower.

*Gold revenues*

Gold revenues for the third quarter of 2017 were \$39.6 million, up 52% from \$26.0 million in the same period in 2016 due mainly to an increase in gold ounces sold. Gold sold totaled 31,999 ounces in the third quarter of 2017, compared to 22,431 ounces in the same period in 2016. The achievement of commercial production of Wassa Underground on January 1, 2017 contributed to the increase in gold revenue.

For the third quarter of 2017, approximately 50% of gold revenues at Wassa were attributable to Wassa Underground. Wassa gold revenues in the third quarter of 2016 were attributable to Wassa Main Pit. The realized gold price averaged \$1,236 per ounce in the third quarter of 2017, compared to \$1,283 per ounce for the same period in 2016.

*Cost of sales excluding depreciation and amortization*

Cost of sales excluding depreciation and amortization was \$30.2 million for the third quarter of 2017, compared to \$23.9 million incurred during the same period in 2016. The higher cost of sales in the third quarter of 2017 was a result of an increase in mining costs due primarily to the addition of the underground mining costs that were capitalized in the same period in 2016. Additionally, royalty expense in the third quarter of 2017 increased by 37% compared to the same period in 2016 due to higher gold sales. Finally, a \$0.6 million net realizable value adjustment on inventories was recorded in the third quarter of 2017 compared to \$nil in the second quarter of 2016 contributed to the increase in cost of sales.

*Depreciation and amortization*

Depreciation and amortization increased to \$4.5 million for the third quarter of 2017, compared to \$3.5 million for the same period in 2016 due to commencement of depreciation and amortization on Wassa Underground assets as commercial production was achieved on January 1, 2017.

*Costs per ounce*

Cost of sales per ounce for the third quarter of 2017 totaled \$1,083, down 20% from \$1,355 in the same period in 2016. Cash operating cost per ounce for the third quarter of 2017 totaled \$856, down 23% from \$1,110 for the same period in 2016. The lower costs per ounce in the third quarter of 2017 as compared to the same period in 2016 were primarily a result of a 43% increase in gold ounces sold.

*Capital expenditures*

Capital expenditures for the third quarter of 2017 totaled \$6.5 million compared with \$9.7 million during the same period in 2016. Sustaining capital expenditures were \$2.5 million for the third quarter of 2017 compared to \$1.3 million for the same period in 2016. Development capital expenditures were \$4.0 million for the third quarter of 2017 compared to \$8.4 million in the same period in 2016. Development capital expenditures in the third quarter of 2017 included \$2.1 million of exploration drilling and \$1.9 million relating to the development of the Wassa Underground Mine.

**For the nine months ended September 30, 2017 compared to nine months ended September 30, 2016**

*Production*

Wassa Underground

In its first nine months of commercial production, Wassa Underground contributed 512,069 ore tonnes at a grade of 2.68 g/t for 40,646 ounces (or approximately 43% of Wassa's total production) in the first nine months of 2017. Beginning in late March and continued into the second and third quarters, mining operations transitioned into the B Shoot zone. The higher grade ore from Wassa Underground is intended to partially replace Wassa Main Pit feed to the plant.

### Wassa Main Pit

Production from Wassa Main Pit was 1,448,759 ore tonnes at a grade of 1.24 g/t for 54,587 ounces (or approximately 57% of Wassa's total production) for the nine months ended September 30, 2017, a decrease of 24% compared to the same period in 2016. This is as a result of mining operations nearing the bottom of the current pushback, Cut 2, which means that the pit area has become smaller and mining rates have become lower. The increase in production from Wassa Underground also reduced the amount of ore required from the Main Pit. Wassa Main Pit is expected to reduce its contribution going forward as the underground operation ramps up.

### *Gold revenues*

Gold revenues were \$115.7 million for the nine months ended September 30, 2017, up 32% from \$87.6 million in the same period in 2016 due mainly to increase in gold ounces sold. Gold sold totaled 95,515 ounces for the nine months ended September 30, 2017, compared to 75,402 ounces in the same period in 2016. The achievement of commercial production of Wassa Underground on January 1, 2017 contributed to the higher gold revenues, however gold revenues attributable to the Wassa Main Pit declined due to the scheduled reduction of ore tonnes supplied from the Wassa Main Pit as described above.

For the nine months ended September 30, 2017, approximately 43% of gold revenues at Wassa were attributable to Wassa Underground. Wassa gold revenues in the first nine months of 2016 were attributable to Wassa Main Pit. The realized gold price averaged \$1,212 per ounce for the nine months ended September 30, 2017, compared to \$1,213 per ounce for the same period in 2016.

### *Cost of sales excluding depreciation and amortization*

Cost of sales excluding depreciation and amortization was \$97.9 million for the nine months ended September 30, 2017, compared to \$69.6 million incurred during the same period in 2016. The higher cost of sales was a result of an increase in mining costs due primarily to the addition of the underground mining costs that were capitalized in 2016 as well as a higher strip ratio at the open pit operation. Additionally, there was a \$8.8 million increase in inventory charges in the first nine months of 2017 compared to the same period in 2016 due to a drawdown of stockpiles at Wassa during the nine months ended September 30, 2017. Furthermore, a \$2.4 million net realizable value adjustment on inventory and a \$1.1 million severance expense were recorded during the nine months ended September 30, 2017.

### *Depreciation and amortization*

Depreciation and amortization expense increased to \$14.6 million for the nine months ended September 30, 2017, compared to \$10.9 million for the same period in 2016 due to commencement of depreciation and amortization on Wassa Underground assets as commercial production was achieved on January 1, 2017.

### *Costs per ounce*

Cost of sales per ounce totaled \$1,178 for the nine months ended September 30, 2017, up 6% from \$1,115 in the same period in 2016 mainly due to higher depreciation and amortization expense. Cash operating cost per ounce totaled \$926, up 3% from the same period in 2016. The higher costs per ounce for the nine months ended September 30, 2017 as compared to the same period in 2016 were primarily a result of higher mining costs, offset by the increase in gold ounces sold. Wassa's higher mining costs were largely due to transitioning into a new business model from solely an open pit operation to a combination of open pit and underground operations.

### *Capital expenditures*

Capital expenditures for the nine months ended September 30, 2017 totaled \$13.1 million compared with \$31.7 million during the same period in 2016. Development capital expenditures were \$9.9 million for the nine months ended September 30, 2017 compared to \$27.4 million in the same period in 2016. Development capital expenditures in the first nine months of 2017 included \$5.5 million of expenditures relating to the development of Wassa Underground, \$2.8 million of exploration drilling and \$1.6 million for the improvement of the tailings storage facility.



## PRESTEA OPERATIONS

Through a 90% owned subsidiary, Golden Star (Bogoso/Prestea) Limited, the Company owns and operates the Bogoso gold mining and processing operations, and the Prestea mining operations located near the town of Prestea, Ghana. Prestea has a CIL processing facility, which is suitable for treating non-refractory gold ore (the “non-refractory plant”) with capacity of up to 1.5 million tonnes per annum.

The Prestea mining operations consist of an underground mine, neighbouring open-pits, oxide deposits and associated support facilities. Prestea currently processes ore from the Prestea Open Pits through the non-refractory plant. Ore feed from the open pit operations commenced in the third quarter of 2015. The Prestea Underground Mine is currently being refurbished and commercial production is expected to be achieved in the fourth quarter of 2017.

		Three Months Ended September 30,		Nine Months Ended September 30,	
		2017	2016	2017	2016
<b>PRESTEA FINANCIAL RESULTS</b>					
Revenue	\$'000	\$ 48,216	\$ 29,553	\$ 117,904	\$ 80,479
Mine operating expenses	\$'000	22,113	19,959	59,801	56,025
Severance charges	\$'000	83	—	83	(184)
Royalties	\$'000	2,901	1,515	6,705	4,131
Operating costs to metals inventory	\$'000	(1,756)	(807)	(4,427)	(987)
Cost of sales excluding depreciation and amortization	\$'000	23,341	20,667	62,162	58,985
Depreciation and amortization	\$'000	2,884	1,647	10,085	4,151
Mine operating margin	\$'000	\$ 21,991	\$ 7,239	\$ 45,657	\$ 17,343
Capital expenditures	\$'000	11,408	11,913	39,774	28,883
<b>PRESTEA OPERATING RESULTS</b>					
Ore mined	t	469,961	469,075	1,162,360	1,158,409
Waste mined	t	1,024,836	1,212,431	2,563,589	3,424,962
Ore processed	t	408,341	386,621	1,167,800	1,126,559
Grade processed	g/t	3.60	2.20	3.03	2.12
Recovery	%	86.7	82.7	87.9	84.2
Gold produced - Open pits	oz	38,899	22,684	97,034	65,546
Gold produced - Underground	oz	3,204	—	3,529	—
Gold produced - Total	oz	42,103	22,684	100,563	65,546
Gold sold - Open pits	oz	39,176	22,930	97,083	65,624
Gold sold - Underground	oz	3,204	—	3,529	—
Gold sold - Total	oz	42,380	22,930	100,612	65,624
Cost of sales per ounce <sup>1</sup>	\$/oz	669	973	744	962
Cash operating cost per ounce <sup>1</sup>	\$/oz	520	835	570	839

<sup>1</sup> See "Non-GAAP Financial Measures" section for a reconciliation of cost of sales per ounce and cash operating cost per ounce to cost of sales excluding depreciation and amortization.

### For the three months ended September 30, 2017 compared to three months ended September 30, 2016

#### Production

Prestea gold production was 42,103 ounces for the third quarter of 2017, a 86% increase from the 22,684 ounces produced during the same period in 2016 due to higher throughput, higher ore grade processed and higher recovery. The higher ore grade processed in the third quarter of 2017 was a result of mining the higher grade Mampon deposit, which began in March 2017. The Company also produced 3,204 ounces of gold from the Prestea Underground compared to nil in the same period in 2016.

### *Gold revenues*

Gold revenues for the third quarter of 2017 were \$48.2 million , up 63% from \$29.6 million in the third quarter of 2016 as a result of a 71% increase in gold sales attributable to the Prestea Open Pits. Gold revenue from incidental gold sales attributable to the Prestea Underground Mine is accounted for as a reduction to the capital expenditures for the development of the Prestea Underground Mine as the Prestea Underground Mine has not yet achieved commercial production. The realized gold price averaged \$1,231 per ounce in the third quarter of 2017 , compared with \$1,289 per ounce in the same period in 2016 . Gold sold totaled 42,380 ounces in the third quarter of 2017 , compared to 22,930 ounces in the same period of 2016 .

### *Cost of sales excluding depreciation and amortization*

Cost of sales excluding depreciation and amortization was \$23.3 million for the third quarter of 2017 , up 13% from \$20.7 million for the same period in 2016 , due to increase in mine operating expenses and increase in royalty costs, offset by a higher build up of inventories. Mine operating expenses totaled \$22.1 million in the third quarter of 2017, 11% higher than the \$20.0 million incurred during the same period in 2016 , mainly as a result of higher haulage costs for the material mined at the Mampon deposit.

### *Depreciation and amortization*

Depreciation and amortization expense increased to \$2.9 million for the third quarter of 2017 , compared to \$1.6 million for the same period in 2016, The higher depreciation and amortization for the third quarter of 2017 was due to higher production and lower reserve base for Prestea Open Pits compared to the same period in 2016.

### *Costs per ounce*

Cost of sales per ounce for the third quarter of 2017 totaled \$669 , down 31% from \$973 for the same period in 2016 . Cash operating cost per ounce was \$520 for the third quarter of 2017 , down 38% from \$835 for the same period in 2016 . The lower costs per ounce compared to the same period in 2016 were due to more gold ounces sold as a result of mining at the higher grade Mampon deposit.

### *Capital expenditures*

Capital expenditures for the third quarter of 2017 totaled \$11.4 million compared to \$11.9 million incurred during the same period in 2016 . Development capital expenditures in the third quarter of 2017 included \$9.7 million related to the development of the Prestea Underground Mine and \$0.3 million related to exploration drilling.

## **For the nine months ended September 30, 2017 compared to nine months ended September 30, 2016**

### *Production*

Prestea gold production was 100,563 ounces for the nine months ended September 30, 2017 , a 53% increase from the 65,546 ounces produced during the same period in 2016 due to higher throughput, higher ore grade processed and higher recovery. The higher throughput and higher ore grade processed in 2017 were a result of mining the higher grade Mampon deposit.

### *Gold revenues*

Gold revenues were \$117.9 million for the nine months ended September 30, 2017 , up 46% from \$80.5 million in the same period in 2016 as a result of a 48% increase in gold sales attributable to the Prestea Open Pits offset by a 1% decrease in average realized gold price. The realized gold price averaged \$1,214 per ounce for the nine months ended September 30, 2017 , compared to \$1,226 per ounce in the same period in 2016 . Gold sold totaled 100,612 ounces in the first nine months of 2017, compared to 65,624 ounces in the same period in 2016.

### *Cost of sales excluding depreciation and amortization*

Cost of sales excluding depreciation and amortization was \$62.2 million for the nine months ended September 30, 2017 , compared to \$59.0 million for the same period in 2016 . The higher cost of sales excluding depreciation and amortization for the nine months ended September 30, 2017 was due to higher mine operating expenses and higher royalty expense, offset by a higher build up of inventories. Mine operating expenses increased compared to the same period in 2016 primarily due to higher haulage costs for the material mined at the Mampon deposit.

### *Depreciation and amortization*

Depreciation and amortization expense increased to \$10.1 million for the nine months ended September 30, 2017 , compared to \$4.2 million for the same period in 2016 . The higher depreciation and amortization for the nine months ended September 30, 2017 was due to higher production and lower reserve base for Prestea Open Pits compared to the same period in 2016.

### *Costs per ounce*

Cost of sales per ounce totaled \$744 for the nine months ended September 30, 2017 , down 23% from \$962 for the same period in 2016. Cash operating cost per ounce was \$570 for the nine months ended September 30, 2017 , down 32% from \$839 for the

same period in 2016 . The lower costs per ounce were due to an increase in gold production in the first nine months of 2017 compared to the same period in 2016.

#### Capital expenditures

Capital expenditures for the nine months ended September 30, 2017 totaled \$39.8 million compared to \$28.9 million incurred during the same period in 2016 . The increase relates primarily to an increase in development capital expenditures, which totaled \$34.6 million for the nine months ended September 30, 2017 compared to \$26.0 million for the same period in 2016 . Development capital expenditures in the first nine months of 2017 included \$32.6 million related to the development of the Prestea Underground Mine and \$1.2 million related to exploration drilling.

## SUMMARIZED QUARTERLY FINANCIAL RESULTS

(Stated in thousands of U.S dollars except per share data)	Three Months Ended,							
	Q3 2017	Q2 2017	Q1 2017	Q4 2016	Q3 2016	Q2 2016	Q1 2016	Q4 2015
Revenues	\$ 87,772	\$ 77,335	\$ 68,545	\$ 53,255	\$ 55,511	\$ 51,457	\$ 61,067	\$ 56,420
Cost of sales excluding depreciation and amortization	53,502	55,173	51,406	43,994	44,608	42,956	41,058	39,354
Net income/(loss)	13,703	13,681	(250)	2,551	(23,792)	(22,836)	2,314	14,217
Net income/(loss) attributable to shareholders of Golden Star	12,117	13,883	170	3,446	(23,110)	(22,034)	2,051	13,781
Adjusted net income attributable to Golden Star shareholders <sup>1</sup>	19,827	7,703	3,411	64	1,148	1,433	8,538	7,003
Income/(loss) per share attributable to Golden Star shareholders - basic	0.03	0.04	0.00	0.01	(0.07)	(0.08)	0.01	0.05
Income/(loss) per share attributable to Golden Star shareholders - diluted	0.03	0.02	0.00	0.01	(0.07)	(0.08)	0.01	0.05
Adjusted income per share attributable to Golden Star shareholders - basic <sup>1</sup>	0.05	0.02	0.01	0.00	0.00	0.01	0.03	0.03

<sup>1</sup> See "Non-GAAP Financial Measures" section for a reconciliation of adjusted net income attributable to Golden Star shareholders and adjusted income per share attributable to Golden Star shareholders to net income/(loss) attributable to Golden Star shareholders and income/(loss) per share attributable to Golden Star shareholders.

## LIQUIDITY AND FINANCIAL CONDITION

The Company held \$30.0 million in cash and cash equivalents as of September 30, 2017 , up from \$21.8 million at December 31, 2016 . During the nine months ended September 30, 2017 , operations provided \$44.2 million , investing activities used \$55.2 million and financing activities provided \$19.2 million of cash.

Before working capital changes, operations provided \$55.9 million of operating cash flow during the nine months ended September 30, 2017 , compared to \$51.6 million in the same period in 2016. Cash provided by operations increased primarily due to a higher mine operating margin during the first nine months of 2017 compared to the same period in 2016, offset by \$30.0 million decrease in advance payments from RGLD as the full \$145.0 million in advance payments under the Streaming Agreement were received by January 2017.

Working capital used \$11.6 million during the first nine months of 2017, compared to \$23.5 million in the same period in 2016. The working capital changes in the first nine months of 2017 included a \$6.9 million decrease in accounts payable and accrued liabilities, a \$6.2 million increase in inventory, a \$1.7 million increase in prepaid and other, offset by a \$3.1 million decrease in accounts receivable.

The working capital deficit reduced to \$41.7 million at September 30, 2017 compared to \$60.5 million at December 31, 2016. The improvement in working capital deficit was due mainly to a higher cash balance as a result of improved mine operating margin and a reduction in accounts payable and accrued liabilities.

Investing activities used \$55.2 million during the first nine months of 2017, which included \$32.6 million on the development of the Prestea Underground Mine, \$3.2 million on the development of the Mampon property, \$5.5 million on the development of the Wassa Underground Mine, \$4.0 million on exploration drilling, \$1.6 million on the expansion of the tailings storage facility at Wassa and \$2.0 million on the Prestea Open Pit mines.

Financing activities provided \$19.2 million cash in the first nine months of 2017 compared to \$20.9 million in the same period in 2016. Financing activities for the nine months ended September 30, 2017 included net proceeds of \$24.5 million from the bought

deal public offering in February 2017, \$10.0 million proceeds from the Ecobank Loan III (as defined below), offset by the \$13.6 million repayment of the 5% Convertible Debentures and \$1.7 million principal repayments of debt.

## LIQUIDITY OUTLOOK

As of September 30, 2017, the Company had \$30.0 million in cash and a working capital deficit of \$41.7 million compared to \$21.8 million in cash and a working capital deficit of \$60.5 million at December 31, 2016. In order to generate cash flow from operations, the Company has to incur mine operating costs, a 5% royalty to the Government of Ghana, reclamation expenditures at the properties it operates and corporate general and administration expenditures.

The Company expects to incur \$16 million on capital expenditures during the fourth quarter of 2017. The Company's debt repayment and servicing obligations are expected to approximate \$2 million for the remainder of 2017 and \$23 million for 2018. The excess cash flow provision of the Royal Gold loan became effective at the end of the second quarter of 2017. The Company was not required to make any excess cash flow payment during the second and third quarter of 2017 and does not expect to make excess cash flow payments in the fourth quarter of 2017. The excess cash flow provision requires the Company to make mandatory repayments of 25% of excess cash flow in 2017 as defined in the Royal Gold loan agreement.

In March 2017, the Company through its subsidiary Golden Star (Wassa) Limited signed a commitment letter with Ecobank Ghana Limited regarding a \$25 million secured facility ("Ecobank Loan III"). The Company has twelve months from the date of the commitment letter to drawdown the facility. At October 31, 2017, the Company has drawn \$10 million from the facility. The Company has \$15 million available for future drawdowns under the facility.

Based on the Company's cash balance together with the operating cash flow that the Company anticipates generating and the remaining amount available from the Ecobank Loan III, the Company expects to have sufficient cash available to support its operations and mandatory expenditures for the next twelve months. However, operating cash flow may decline in certain circumstances, most of which are beyond the Company's control, such as decreases in gold prices or increases in the cost of raw materials and inputs used by the Company to produce gold.

## TABLE OF CONTRACTUAL OBLIGATIONS

(Stated in thousands of U.S dollars)	Payment due by period				
	Less than 1 Year	1 to 3 years	4 to 5 years	More than 5 Years	Total
Accounts payable and accrued liabilities	\$ 87,169	\$ —	\$ —	\$ —	\$ 87,169
Debt <sup>1,3</sup>	446	50,657	57,054	—	108,157
Interest on long term debt	1,123	13,185	7,940	—	22,248
Purchase obligations	19,650	—	—	—	19,650
Rehabilitation provisions <sup>2</sup>	3,253	20,797	24,259	32,939	81,248
<b>Total</b>	<b>\$ 111,641</b>	<b>\$ 84,639</b>	<b>\$ 89,253</b>	<b>\$ 32,939</b>	<b>\$ 318,472</b>

<sup>1</sup> Includes the outstanding repayment amounts from the 7% Convertible Debentures maturing on August 15, 2021, the loan from Royal Gold, the finance leases, the equipment financing loans and the vendor agreement.

<sup>2</sup> Rehabilitation provisions indicates the expected undiscounted cash flows for each period.

<sup>3</sup> The excess cash flow provision of the Royal Gold loan came into effect at the end of the second quarter of 2017. The excess cash flow provision as defined in the Royal Gold loan agreement requires the Company to make mandatory repayments of 25% of excess cash flow for the remainder of 2017 and mandatory repayments of 50% excess cash flow beginning 2018 until maturity. As excess cash flow is dependent upon factors beyond the Company's control such as gold price, no excess cash flow repayments have been required. The table of contractual obligations shows the total principal amount settled at maturity. Interest payments on the Royal Gold loan are based on the average daily London Bullion Market Association ("LBMA") gold price multiplied by 62.5% divided by 10,000 to a maximum interest rate of 11.5% per annum. The estimated interest payments are calculated based on \$1,275 per ounce LBMA gold price.

## RELATED PARTY TRANSACTIONS

There were no material related party transactions in the three and nine months ended September 30, 2017 and 2016 other than compensation of key management personnel which is presented in the table below. Key management personnel are defined as members of the Board of Directors and certain senior officers. Compensation of key management personnel are made on terms equivalent to those prevailing in an arm's length transaction.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Salaries, wages, and other benefits	\$ 649	\$ 627	\$ 2,211	\$ 1,982
Bonuses	327	284	983	815
Share-based compensation	3,070	4,618	3,893	11,857
	<u>\$ 4,046</u>	<u>\$ 5,529</u>	<u>\$ 7,087</u>	<u>\$ 14,654</u>

## OFF-BALANCE SHEET ARRANGEMENTS

The Company has no material off-balance sheet arrangements.

## NON-GAAP FINANCIAL MEASURES

In this MD&A, we use the terms "cash operating cost", "cash operating cost per ounce", "all-in sustaining costs", "all-in sustaining costs per ounce", "adjusted net income attributable to Golden Star shareholders", "adjusted income per share attributable to Golden Star shareholders", "cash provided by operations before working capital changes", and "cash provided by operations before working capital changes per share - basic".

"Cost of sales excluding depreciation and amortization" as found in the statements of operations includes all mine-site operating costs, including the costs of mining, ore processing, maintenance, work-in-process inventory changes, mine-site overhead as well as production taxes, royalties, and by-product credits, but excludes exploration costs, property holding costs, corporate office general and administrative expenses, foreign currency gains and losses, gains and losses on asset sales, interest expense, gains and losses on derivatives, gains and losses on investments and income tax expense/benefit.

"Cash operating cost" for a period is equal to "cost of sales excluding depreciation and amortization" for the period less royalties, the cash component of metals inventory net realizable value adjustments and severance charges, and "cash operating cost per ounce" is that amount divided by the number of ounces of gold sold (excluding pre-commercial production ounces sold) during the period. We use cash operating cost per ounce as a key operating metric. We monitor this measure monthly, comparing each month's values to prior periods' values to detect trends that may indicate increases or decreases in operating efficiencies. We provide this measure to investors to allow them to also monitor operational efficiencies of the Company's mines. We calculate this measure for both individual operating units and on a consolidated basis. Since cash operating costs do not incorporate revenues, changes in working capital and non-operating cash costs, they are not necessarily indicative of operating profit or cash flow from operations as determined under IFRS. Changes in numerous factors including, but not limited to, mining rates, milling rates, ore grade, gold recovery, costs of labor, consumables and mine site general and administrative activities can cause these measures to increase or decrease. We believe that these measures are similar to the measures of other gold mining companies, but may not be comparable to similarly titled measures in every instance.

"All-in sustaining costs" commences with cash operating costs and then adds metals net realizable value adjustment, royalties, sustaining capital expenditures, corporate general and administrative costs (excluding non-cash share-based compensation expenses), and accretion of rehabilitation provision. "All-in sustaining costs per ounce" is that amount divided by the number of ounces of gold sold (excluding pre-commercial production ounces sold) during the period. This measure seeks to represent the total costs of producing gold from current operations, and therefore it does not include capital expenditures attributable to projects or mine expansions, exploration and evaluation costs attributable to growth projects, income tax payments, interest costs or dividend payments. Consequently, this measure is not representative of all of the Company's cash expenditures. In addition, the calculation of all-in sustaining costs does not include depreciation expense as it does not reflect the impact of expenditures incurred in prior periods. Therefore, it is not indicative of the Company's overall profitability. Non-cash share-based compensation expenses are now also excluded from the calculation of all-in sustaining costs as the Company believes that such expenses may not be representative of the actual payout on equity and liability based awards. Non-cash share-based compensation expenses were previously included in the calculation of all-in sustaining costs. The Company has presented comparative figures to conform with the computation of all-in sustaining costs as currently calculated by the Company.

The Company believes that “all-in sustaining costs” will better meet the needs of analysts, investors and other stakeholders of the Company in understanding the costs associated with producing gold, understanding the economics of gold mining, assessing the operating performance and also the Company's ability to generate free cash flow from current operations and to generate free cash flow on an overall Company basis. Due to the capital intensive nature of the industry and the long useful lives over which these items are depreciated, there can be a disconnect between net earnings calculated in accordance with IFRS and the amount of free cash flow that is being generated by a mine. In the current market environment for gold mining equities, many investors and analysts are more focused on the ability of gold mining companies to generate free cash flow from current operations, and consequently the Company believes these measures are useful non-IFRS operating metrics ("non-GAAP measures") and supplement the IFRS disclosures made by the Company. These measures are not representative of all of Golden Star's cash expenditures as they do not include income tax payments or interest costs. Non-GAAP measures are intended to provide additional information only and do not have standardized definitions under IFRS and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. These measures are not necessarily indicative of operating profit or cash flow from operations as determined under IFRS. The table below reconciles these non-GAAP measures to the most directly comparable IFRS measures and, where applicable, previous periods have been recalculated to conform to the current definition.

The table below reconciles consolidated cost of sales excluding depreciation and amortization to cost of sales per ounce, cash operating cost per ounce and all-in sustaining costs per ounce:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
(Stated in thousands of U.S dollars except cost per ounce data)				
<b>Cost of sales excluding depreciation and amortization</b>	\$ 53,502	\$ 44,608	\$ 160,081	\$ 128,622
Depreciation and amortization	7,365	5,111	24,697	15,043
<b>Cost of sales</b>	<u>\$ 60,867</u>	<u>\$ 49,719</u>	<u>\$ 184,778</u>	<u>\$ 143,665</u>
<b>Cost of sales excluding depreciation and amortization</b>	\$ 53,502	\$ 44,608	\$ 160,081	\$ 128,622
Severance charges	(228)	—	(1,182)	71
Royalties	(4,934)	(3,003)	(12,675)	(8,844)
Metals inventory net realizable value adjustment	(606)	—	(2,410)	—
<b>Cash operating costs</b>	<u>\$ 47,734</u>	<u>\$ 41,605</u>	<u>\$ 143,814</u>	<u>\$ 119,849</u>
Royalties	4,934	3,003	12,675	8,844
Metals inventory net realizable value adjustment	606	—	2,410	—
Accretion of rehabilitation provision	311	342	933	1,026
General and administrative costs, excluding share-based compensation	3,205	2,944	9,708	9,071
Sustaining capital expenditures	3,599	1,850	8,418	7,114
<b>All-in sustaining costs</b>	<u>\$ 60,389</u>	<u>\$ 49,744</u>	<u>\$ 177,958</u>	<u>\$ 145,904</u>
Ounces sold <sup>1</sup>	71,175	43,159	192,598	137,831
Cost per ounce measures (\$/oz):				
Cost of sales per ounce	855	1,152	959	1,042
Cash operating cost per ounce	671	964	747	870
All-in sustaining cost per ounce	848	1,153	924	1,059

<sup>1</sup> Ounces sold used in the calculation of cost of sales per ounce, cash operating cost per ounce and all-in sustaining cost per ounce excludes pre-commercial production ounces sold during the period.

The tables below reconciles cost of sales excluding depreciation and amortization to cash operating costs per ounce for each of the operating mines:

	Three Months Ended September 30, 2017		
	Wassa	Prestea	Combined
(Stated in thousands of U.S dollars except cost per ounce data)			
<b>Cost of sales excluding depreciation and amortization</b>	\$ 30,161	\$ 23,341	\$ 53,502
Depreciation and amortization	4,481	2,884	7,365
<b>Cost of sales</b>	<b>\$ 34,642</b>	<b>\$ 26,225</b>	<b>\$ 60,867</b>
<b>Cost of sales excluding depreciation and amortization</b>	<b>\$ 30,161</b>	<b>\$ 23,341</b>	<b>\$ 53,502</b>
Severance charges	(145)	(83)	(228)
Royalties	(2,033)	(2,901)	(4,934)
Metals inventory net realizable value adjustment	(606)	—	(606)
<b>Cash operating costs</b>	<b>\$ 27,377</b>	<b>\$ 20,357</b>	<b>\$ 47,734</b>
Ounces sold <sup>1</sup>	31,999	39,176	71,175
Cost of sales per ounce	\$ 1,083	\$ 669	\$ 855
Cash operating cost per ounce	\$ 856	\$ 520	\$ 671

	Nine Months Ended September 30, 2017		
	Wassa	Prestea	Combined
(Stated in thousands of U.S dollars except cost per ounce data)			
<b>Cost of sales excluding depreciation and amortization</b>	\$ 97,919	\$ 62,162	\$ 160,081
Depreciation and amortization	14,612	10,085	24,697
<b>Cost of sales</b>	<b>\$ 112,531</b>	<b>\$ 72,247</b>	<b>\$ 184,778</b>
<b>Cost of sales excluding depreciation and amortization</b>	<b>\$ 97,919</b>	<b>\$ 62,162</b>	<b>\$ 160,081</b>
Severance charges	(1,099)	(83)	(1,182)
Royalties	(5,970)	(6,705)	(12,675)
Metals inventory net realizable value adjustment	(2,410)	—	(2,410)
<b>Cash operating costs</b>	<b>\$ 88,440</b>	<b>\$ 55,374</b>	<b>\$ 143,814</b>
Ounces sold <sup>1</sup>	95,515	97,083	192,598
Cost of sales per ounce	\$ 1,178	\$ 744	\$ 959
Cash operating cost per ounce	\$ 926	\$ 570	\$ 747

<sup>1</sup> Ounces sold used in the calculation of cost of sales per ounce, cash operating cost per ounce and all-in sustaining cost per ounce excludes pre-commercial production ounces sold during the period.

	Three Months Ended September 30, 2016		
	Wassa	Prestea	Combined
(Stated in thousands of U.S dollars except cost per ounce data)			
<b>Cost of sales excluding depreciation and amortization</b>	\$ 23,941	\$ 20,667	\$ 44,608
Depreciation and amortization	3,464	1,647	5,111
<b>Cost of sales</b>	<u>\$ 27,405</u>	<u>\$ 22,314</u>	<u>\$ 49,719</u>
<b>Cost of sales excluding depreciation and amortization</b>	\$ 23,941	\$ 20,667	\$ 44,608
Royalties	(1,488)	(1,515)	(3,003)
<b>Cash operating costs</b>	<u>\$ 22,453</u>	<u>\$ 19,152</u>	<u>\$ 41,605</u>
<b>Ounces sold <sup>1</sup></b>	20,229	22,930	43,159
Cost of sales per ounce	\$ 1,355	\$ 973	\$ 1,152
Cash operating cost per ounce	\$ 1,110	\$ 835	\$ 964

	Nine Months Ended September 30, 2016		
	Wassa	Prestea	Combined
(Stated in thousands of U.S dollars except cost per ounce data)			
<b>Cost of sales excluding depreciation and amortization</b>	\$ 69,637	\$ 58,985	\$ 128,622
Depreciation and amortization	10,892	4,151	15,043
<b>Cost of sales</b>	<u>\$ 80,529</u>	<u>\$ 63,136</u>	<u>\$ 143,665</u>
<b>Cost of sales excluding depreciation and amortization</b>	\$ 69,637	\$ 58,985	\$ 128,622
Severance charges	(113)	184	71
Royalties	(4,713)	(4,131)	(8,844)
<b>Cash operating costs</b>	<u>\$ 64,811</u>	<u>\$ 55,038</u>	<u>\$ 119,849</u>
<b>Ounces sold <sup>1</sup></b>	72,207	65,624	137,831
Cost of sales per ounce	\$ 1,115	\$ 962	\$ 1,042
Cash operating cost per ounce	\$ 898	\$ 839	\$ 870

<sup>1</sup> Ounces sold used in the calculation of cost of sales per ounce, cash operating cost per ounce and all-in sustaining cost per ounce excludes pre-commercial production ounces sold during the period.

"Cash provided by operations before working capital changes" is calculated by subtracting the "changes in working capital" from "net cash provided by operating activities" as found in the statements of cash flows. "Cash provided by operations before working capital changes per share - basic" is "Cash provided by operations before working capital changes" divided by the basic weighted average number of shares outstanding for the period.

We use cash operating cost per ounce and cash provided by operations before working capital changes as key operating metrics. We monitor these measures monthly, comparing each month's values to the values in prior periods to detect trends that may indicate increases or decreases in operating efficiencies. These measures are also compared against budget to alert management of trends that may cause actual results to deviate from planned operational results. We provide these measures to investors to allow them to also monitor operational efficiencies of the mines owned by the Company.

Cash operating cost per ounce and cash provided by operations before working capital changes should be considered as non-GAAP financial measures as defined in the Canadian securities laws and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. There are material limitations associated with the use of such non-GAAP measures. Since these measures do not incorporate revenues, changes in working capital and non-operating cash costs, they are not necessarily indicative of operating profit or cash flow from operations as determined under IFRS. Changes in numerous factors including, but not limited to, mining rates, milling rates, ore grade, gold recovery, costs of labor, consumables and mine site general and administrative activities can cause these measures to increase or decrease. We believe that these measures are similar to the measures of other gold mining companies, but may not be comparable to similarly titled measures in every instance.



### Adjusted net income attributable to Golden Star shareholders

The table below shows the reconciliation of net income/(loss) attributable to Golden Star shareholders to adjusted net income attributable to Golden Star shareholders and adjusted income per share attributable to Golden Star shareholders:

(Stated in thousands of U.S dollars except per share data)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Net income/(loss) attributable to Golden Star shareholders	\$ 12,117	\$ (23,110)	\$ 26,170	\$ (43,093)
Add back:				
Non-cash share-based compensation expenses	4,059	6,426	7,501	16,166
Loss/(gain) on fair value of financial instruments	3,446	5,784	(3,959)	26,516
Loss on conversion of 7% Convertible Debentures	—	—	165	—
Loss on repurchase of 5% Convertible Debentures	—	12,048	—	11,594
Severance charges	228	—	1,182	(71)
	19,850	1,148	31,059	11,112
Adjustments attributable to non-controlling interest	(23)	—	(118)	7
Adjusted net income attributable to Golden Star shareholders	\$ 19,827	\$ 1,148	\$ 30,941	\$ 11,119
Adjusted income per share attributable to Golden Star shareholders - basic	\$ 0.05	\$ 0.00	\$ 0.08	\$ 0.04
Weighted average shares outstanding - basic (millions)	378.0	325.3	371.2	269.7

In order to indicate to stakeholders the Company's income excluding the non-cash (gain)/loss on fair value of financial instruments, non-cash share-based compensation expenses, loss on conversion of 7% Convertible Debentures and severance charges, the Company calculates "adjusted net income attributable to Golden Star shareholders" and "adjusted income per share attributable to Golden Star shareholders" to supplement the condensed interim consolidated financial statements. The adjusted income per share attributable to Golden Star shareholders is calculated using the weighted average number of shares outstanding using the basic method of earnings per share.

Adjusted net income attributable to Golden Star shareholders and adjusted income per share attributable to Golden Star shareholders should be considered as non-GAAP financial measures as defined in the Canadian securities laws and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with GAAP. There are material limitations associated with the use of such non-GAAP measures. Since these measures do not incorporate all non-cash expense and income items, changes in working capital and non-operating cash costs, they are not necessarily indicative of operating profit or cash flow from operations as determined under IFRS. Changes in numerous factors including, but not limited to, our share price, risk free interest rates, gold prices, mining rates, milling rates, ore grade, gold recovery, costs of labor, consumables and mine site general and administrative activities can cause these measures to increase or decrease. The Company believes that these measures are similar to the measures of other gold mining companies, but may not be comparable to similarly titled measures in every instance.

### OUTSTANDING SHARE DATA

As of October 31, 2017, there were 380,581,075 common shares of the Company issued and outstanding, 16,656,712 stock options outstanding, 5,092,152 deferred share units outstanding, 1,694,491 share units of 2017 PSUs outstanding and 7% Convertible Debentures which are convertible into an aggregate of 57,220,000 common shares.

### CRITICAL ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUMPTIONS

The critical accounting judgments, estimates and assumptions are disclosed in Note 4 of the audited consolidated financial statements for the year ended December 31, 2016.

### CHANGES IN ACCOUNTING POLICIES

The changes in accounting policies and standards, interpretations and amendments not yet effective are disclosed in Note 3 of the condensed interim consolidated financial statements for the three and nine months ended September 30, 2017.

## FINANCIAL INSTRUMENTS

(Stated in thousands of U.S dollars)	Fair value at September 30, 2017	Basis of measurement	Associated risks
Cash and cash equivalents \$	29,954	Loans and receivables	Interest/Credit/Foreign exchange
Accounts receivable	4,207	Loans and receivables	Foreign exchange/Credit
Trade and other payables	76,665	Amortized cost	Foreign exchange/Interest
Equipment financing facility	218	Amortized cost	Interest
Finance leases	1,909	Amortized cost	Interest
Ecobank Loan III	9,534	Amortized cost	Interest
7% Convertible Debentures	42,028	Amortized cost	Interest
Royal Gold loan, net of fees	18,736	Amortized cost	Interest
Vendor agreement	22,887	Amortized cost	Interest/Foreign exchange
Long term derivative liability	9,061	Fair value through profit and loss	Market price

**Loans and receivables** - Cash and cash equivalents and accounts receivables mature in the short term and approximate their fair values.

**Amortized costs** - Trade and other payables, the 7% Convertible Debentures, the Ecobank Loan III, the Royal Gold loan, the vendor agreement, the equipment financing facility and the finance leases approximate their carrying values as the interest rates are comparable to current market rates. Carrying value of the vendor agreement has been discounted to reflect its fair value.

**Fair value through profit or loss** - The fair value of the long term derivative liability relating to the 7% Convertible Debentures is estimated using a convertible note valuation model. For the three months ended September 30, 2017, a revaluation loss of \$3.2 million was recorded. For the nine months ended September 30, 2017, total gain of \$4.0 million was recorded to the statement of operations.

## DISCLOSURES ABOUT RISKS

The Company's exposure to significant risks include, but are not limited to, the following risks: change in interest rates on our debt, change in foreign currency exchange rates, commodity price fluctuations, liquidity risk and credit risk. In recognition of the Company's outstanding accounts payable, the Company cannot guarantee that vendors or suppliers will not suspend or deny delivery of products or services to the Company. For a complete discussion of the risks regarding the Company, refer to the Company's Annual Information Form for the year ended December 31, 2016 available on the SEDAR website at [www.sedar.com](http://www.sedar.com).

## CONTROLS AND PROCEDURES

### Disclosure Controls and Procedures

The Company's management, with the participation of its President and Chief Executive Officer and Executive Vice President and Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures. Based upon the results of that evaluation, the Company's President and Chief Executive Officer and Executive Vice President and Chief Financial Officer have concluded that, as of September 30, 2017, the Company's disclosure controls and procedures were effective to provide reasonable assurance that the information required to be disclosed by the Company in reports it files is recorded, processed, summarized and reported, within the appropriate time periods and is accumulated and communicated to management, including the President and Chief Executive Officer and Executive Vice President and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

### Management's Report on Internal Control Over Financial Reporting

The Company's management, with the participation of its President and Chief Executive Officer and Executive Vice President and Chief Financial Officer, are responsible for establishing and maintaining adequate internal control over financial reporting. Under the supervision of the President and Chief Executive Officer and Executive Vice President and Chief Financial Officer, the Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. The Company's internal control over financial reporting includes policies and procedures that:

- pertain to the maintenance of records that accurately and fairly reflect, in reasonable detail, the transactions and dispositions of assets of the Company;

- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS and that the Company's receipts and expenditures are made only in accordance with authorizations of management and the Company's directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the Company's consolidated financial statements.

The Company's management, including the President and Chief Executive Officer and Executive Vice President and Chief Financial Officer, believes that any disclosure controls and procedures or internal control over financial reporting, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, they cannot provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been prevented or detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by unauthorized override of the control. The design of any control system also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Accordingly, because of the inherent limitations in a cost effective control system, misstatements due to error or fraud may occur and not be detected.

#### **Changes in Internal Control Over Financial Reporting**

There has been no change in the Company's design of internal controls and procedures over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting during the period covered by this MD&A.

#### **ADDITIONAL INFORMATION**

Additional information regarding the Company, including the Company's Annual Information Form for the year ended December 31, 2016, is available under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com).

# **GOLDEN STAR**

**Condensed Interim Consolidated Financial Statements**

**For the Three and Nine Months Ended September 30, 2017 and September 30, 2016**

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**GOLDEN STAR RESOURCES LTD.**  
**CONDENSED INTERIM CONSOLIDATED STATEMENTS OF OPERATIONS AND**  
**COMPREHENSIVE INCOME/(LOSS)**  
(Stated in thousands of U.S. dollars except shares and per share data)  
(unaudited)

	Notes	Three Months Ended September 30,		Nine Months Ended September 30,	
		2017	2016	2017	2016
<b>Revenue</b>	15	\$ 87,772	\$ 55,511	\$ 233,652	\$ 168,035
Cost of sales excluding depreciation and amortization	16	53,502	44,608	160,081	128,622
Depreciation and amortization		7,365	5,111	24,697	15,043
Mine operating margin		26,905	5,792	48,874	24,370
<b>Other expenses/(income)</b>					
Exploration expense		400	408	1,380	1,389
General and administrative		7,264	9,370	17,209	25,237
Finance expense, net	17	2,264	2,001	7,411	6,837
Other income		(172)	(27)	(466)	(2,889)
Loss/(gain) on fair value of financial instruments, net	4	3,446	5,784	(3,959)	26,516
Loss on repurchase of 5% Convertible Debentures, net	4	—	12,048	—	11,594
Loss on conversion of 7% Convertible Debentures, net	10	—	—	165	—
Net income/(loss) and comprehensive income/(loss)		\$ 13,703	\$ (23,792)	\$ 27,134	\$ (44,314)
Net income/(loss) attributable to non-controlling interest		1,586	(682)	964	(1,221)
Net income/(loss) attributable to Golden Star shareholders		\$ 12,117	\$ (23,110)	\$ 26,170	\$ (43,093)
<b>Net income/(loss) per share attributable to Golden Star shareholders</b>					
Basic	14	\$ 0.03	\$ (0.07)	\$ 0.07	\$ (0.16)
Diluted	14	\$ 0.03	\$ (0.07)	\$ 0.06	\$ (0.16)
Weighted average shares outstanding-basic (millions)		378.0	325.3	371.2	269.7
Weighted average shares outstanding-diluted (millions)		385.3	325.3	438.1	269.7

The accompanying notes are an integral part of the condensed interim consolidated financial statements.

**GOLDEN STAR RESOURCES LTD.**  
**CONDENSED INTERIM CONSOLIDATED BALANCE SHEETS**  
(Stated in thousands of U.S. dollars)  
(unaudited)

	Notes	As of September 30, 2017	As of December 31, 2016
<b>ASSETS</b>			
<b>CURRENT ASSETS</b>			
Cash and cash equivalents		\$ 29,954	\$ 21,764
Accounts receivable		4,207	7,299
Inventories	5	48,896	44,381
Prepays and other		6,843	3,926
<b>Total Current Assets</b>		<b>89,900</b>	<b>77,370</b>
RESTRICTED CASH		6,493	6,463
MINING INTERESTS	6	243,076	215,017
<b>Total Assets</b>		<b>\$ 339,469</b>	<b>\$ 298,850</b>
<b>LIABILITIES</b>			
<b>CURRENT LIABILITIES</b>			
Accounts payable and accrued liabilities	7	\$ 87,169	\$ 92,900
Derivative liabilities	4	—	2,729
Current portion of rehabilitation provisions	8	3,254	5,515
Current portion of deferred revenue	9	17,827	19,234
Current portion of long term debt	10	12,533	15,378
Current portion of other liability	13	10,801	2,073
<b>Total Current Liabilities</b>		<b>131,584</b>	<b>137,829</b>
REHABILITATION PROVISIONS	8	71,273	71,867
DEFERRED REVENUE	9	95,634	94,878
LONG TERM DEBT	10	82,779	89,445
LONG TERM DERIVATIVE LIABILITY	4	9,061	15,127
LONG TERM OTHER LIABILITY	13	5,178	10,465
<b>Total Liabilities</b>		<b>395,509</b>	<b>419,611</b>
<b>SHAREHOLDERS' EQUITY</b>			
<b>SHARE CAPITAL</b>			
First preferred shares, without par value, unlimited shares authorized. No shares issued and outstanding		—	—
Common shares, without par value, unlimited shares authorized	11	783,232	746,542
CONTRIBUTED SURPLUS		34,758	33,861
DEFICIT		(806,781)	(832,951)
<b>Equity/(deficit) attributable to Golden Star shareholders</b>		<b>11,209</b>	<b>(52,548)</b>
NON-CONTROLLING INTEREST		(67,249)	(68,213)
<b>Total Deficit</b>		<b>(56,040)</b>	<b>(120,761)</b>
<b>Total Liabilities and Shareholders' Equity</b>		<b>\$ 339,469</b>	<b>\$ 298,850</b>

The accompanying notes are an integral part of the condensed interim consolidated financial statements.

Signed on behalf of the Board,

*"Timothy C. Baker"*  
Timothy C. Baker, Director

*"Robert E. Doyle"*  
Robert E. Doyle, Director





**GOLDEN STAR RESOURCES LTD.**  
**CONDENSED INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(Stated in thousands of U.S. dollars)  
(unaudited)

	Notes	Three Months Ended September 30,		Nine Months Ended September 30,	
		2017	2016	2017	2016
<b>OPERATING ACTIVITIES:</b>					
Net income/(loss)		\$ 13,703	\$ (23,792)	\$ 27,134	\$ (44,314)
<b>Reconciliation of net income/(loss) to net cash provided by operating activities:</b>					
Depreciation and amortization		7,373	5,114	24,719	15,056
Share-based compensation	13	4,059	6,426	7,501	16,166
Loss/(gain) on fair value of 7% Convertible Debentures embedded derivative	4	3,170	3,341	(3,997)	3,341
Loss on fair value of 5% Convertible Debentures	4	—	1,920	317	17,086
Loss on repurchase of 5% Convertible Debentures, net	4	—	12,048	—	11,594
Recognition of deferred revenue	9	(4,266)	(2,889)	(10,651)	(8,495)
Proceeds from Royal Gold stream	9	—	20,000	10,000	40,000
Reclamation expenditures	8	(2,157)	(1,325)	(5,151)	(4,026)
Other	20	2,059	657	5,992	5,153
Changes in working capital	20	(224)	(536)	(11,627)	(23,546)
Net cash provided by operating activities		23,717	20,964	44,237	28,015
<b>INVESTING ACTIVITIES:</b>					
Additions to mining properties		(82)	(261)	(474)	(873)
Additions to plant and equipment		(374)	—	(519)	—
Additions to construction in progress		(16,655)	(21,395)	(51,128)	(59,704)
Change in accounts payable and deposits on mine equipment and material		(2,194)	146	(3,100)	(5,910)
Increase in restricted cash		—	—	(29)	—
Net cash used in investing activities		(19,305)	(21,510)	(55,250)	(66,487)
<b>FINANCING ACTIVITIES:</b>					
Principal payments on debt	10	(357)	(23,803)	(1,717)	(28,429)
Proceeds from debt agreements	10	—	—	10,000	3,000
Proceeds from 7% Convertible Debentures, net	10	—	20,729	—	20,729
5% Convertible Debentures repayment	10	—	(18,240)	(13,611)	(19,941)
Shares issued, net	11	—	31,771	24,521	45,477
Exercise of options		—	6	10	22
Net cash (used in)/provided by financing activities		(357)	10,463	19,203	20,858
Increase/(decrease) in cash and cash equivalents		4,055	9,917	8,190	(17,614)
Cash and cash equivalents, beginning of period		25,899	7,577	21,764	35,108
Cash and cash equivalents, end of period		\$ 29,954	\$ 17,494	\$ 29,954	\$ 17,494

See Note 20 for supplemental cash flow information.

The accompanying notes are an integral part of the condensed interim consolidated financial statements.

**GOLDEN STAR RESOURCES LTD.**  
**CONDENSED INTERIM CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY**  
**(Stated in thousands of U.S. dollars except share data)**  
**(unaudited)**

	Number of Common Shares	Share Capital	Contributed Surplus	Deficit	Non-Controlling Interest	Total Shareholders' Equity
<b>Balance at December 31, 2015</b>	<b>259,897,095</b>	<b>\$ 695,555</b>	<b>\$ 32,612</b>	<b>\$ (793,304)</b>	<b>\$ (66,097)</b>	<b>\$ (131,234)</b>
Shares issued	68,750,000	49,515	—	—	—	49,515
Shares issued under DSUs	39,744	9	(9)	—	—	—
Shares issued under options	58,919	39	(17)	—	—	22
Options granted net of forfeitures	—	—	618	—	—	618
Deferred share units granted	—	—	446	—	—	446
Share issue costs	—	(4,039)	—	—	—	(4,039)
Net loss	—	—	—	(43,093)	(1,221)	(44,314)
<b>Balance at September 30, 2016</b>	<b>328,745,758</b>	<b>\$ 741,079</b>	<b>\$ 33,650</b>	<b>\$ (836,397)</b>	<b>\$ (67,318)</b>	<b>\$ (128,986)</b>
<b>Balance at December 31, 2016</b>	<b>335,356,450</b>	<b>\$ 746,542</b>	<b>\$ 33,861</b>	<b>\$ (832,951)</b>	<b>\$ (68,213)</b>	<b>\$ (120,761)</b>
Shares issued (see Note 11)	40,809,502	35,682	—	—	—	35,682
Shares issued under DSUs	1,167,689	521	(521)	—	—	—
Shares issued under options	23,750	16	(6)	—	—	10
Shares issued under warrants (see Note 11)	3,223,684	2,450	—	—	—	2,450
Options granted net of forfeitures	—	—	1,027	—	—	1,027
Deferred share units granted	—	—	247	—	—	247
Performance and restricted share units granted	—	—	150	—	—	150
Share issue costs	—	(1,979)	—	—	—	(1,979)
Net income	—	—	—	26,170	964	27,134
<b>Balance at September 30, 2017</b>	<b>380,581,075</b>	<b>\$ 783,232</b>	<b>\$ 34,758</b>	<b>\$ (806,781)</b>	<b>\$ (67,249)</b>	<b>\$ (56,040)</b>

The accompanying notes are an integral part of the condensed interim consolidated financial statements.

## GOLDEN STAR RESOURCES LTD.

### NOTES TO THE CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2017 and 2016 (All currency amounts in tables are in thousands of U.S. dollars unless noted otherwise) (unaudited)

#### 1. NATURE OF OPERATIONS

Golden Star Resources Ltd. ("Golden Star" or "the Company" or "we" or "our") is a Canadian federally-incorporated, international gold mining and exploration company headquartered in Toronto, Canada. The Company's shares are listed on the Toronto Stock Exchange (the "TSX") under the symbol GSC, the NYSE American (formerly NYSE MKT) under the symbol GSS and the Ghana Stock Exchange under the symbol GSR. The Company's registered office is located at 150 King Street West, Sun Life Financial Tower, Suite 1200, Toronto, Ontario, M5H 1J9, Canada.

Through a 90% owned subsidiary, Golden Star (Wassa) Limited, we own and operate the Wassa open-pit gold mine, the Wassa underground mine and a carbon-in-leach ("CIL") processing plant (collectively, "Wassa"), located northeast of the town of Tarkwa, Ghana. Through our 90% owned subsidiary Golden Star (Bogoso/Prestea) Limited, the Company owns and operates the Bogoso gold mining and processing operations ("Bogoso"), the Prestea open-pit mining operations and the Prestea underground development project located near the town of Prestea, Ghana. We hold interests in several gold exploration projects in Ghana and in South America we hold and manage exploration properties in Brazil.

#### 2. BASIS OF PRESENTATION

##### Statement of compliance

These unaudited condensed interim consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") including International Accounting Standards ("IAS") 34 Interim financial reporting. These condensed interim consolidated financial statements should be read in conjunction with the Company's annual consolidated financial statements for the year ended December 31, 2016, which have been prepared in accordance with IFRS as issued by the IASB. The accounting policies and methods of application adopted are consistent with those disclosed in Note 3 of the Company's consolidated financial statements for the year ended December 31, 2016, except for the changes in accounting policies as described below.

These condensed interim consolidated financial statements were approved by the Audit Committee of the Company on October 31, 2017 .

##### Basis of presentation

These condensed interim consolidated financial statements include the accounts of the Company and its subsidiaries, whether owned directly or indirectly. The financial statements of the subsidiaries are prepared for the same period as the Company using consistent accounting policies for all periods presented. All inter-company balances and transactions have been eliminated. Subsidiaries are entities controlled by the Company. Non-controlling interests in the net assets of consolidated subsidiaries are a separate component of the Company's equity.

These condensed interim consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and discharge of all liabilities in the normal course of business.

The condensed interim consolidated financial statements have been prepared on a historical cost basis, except for derivative financial instruments which are measured at fair value through profit or loss.

#### 3. CHANGES IN ACCOUNTING POLICIES

The Company has adopted the following new and revised standards, effective January 1, 2017. These changes were made in accordance with the applicable transitional provisions.

*IAS 7 Statement of cash flows - Disclosures related to financing activities* was amended to require disclosures about changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes. As a result of the adoption of IAS 7, the Company has included additional disclosure on non-cash changes of debt amounts in Note 20 .

*IAS 12 Income taxes - Deferred tax* was amended to clarify (i) the requirements for recognizing deferred tax assets on unrealized losses; (ii) deferred tax where an asset is measured at a fair value below the asset's tax base, and (iii) certain other aspects of

accounting for deferred tax assets. The adoption of this amendment did not result in any impact to the Company's financial statements.

#### Standards, interpretations and amendments not yet effective

IFRS 9 *Financial Instruments* was issued in July 2014 and includes (i) a third measurement category for financial assets - fair value through other comprehensive income; (ii) a single, forward-looking "expected loss" impairment model; and (iii) a mandatory effective date of annual periods beginning on or after January 1, 2018. The Company does not expect material impact to the financial statements on adoption of this standard.

IFRS 15 *Revenue from Contracts with Customers* was amended to clarify how to (i) identify a performance obligation in a contract; (ii) determine whether a company is a principal or an agent; and (iii) determine whether the revenue from granting a license should be recognized at a point in time or over time. In addition to the clarifications, the amendments include two additional reliefs to reduce cost and complexity for a company when it first applies the new standard. The amendments have the same effective date as the standard, which is January 1, 2018. The Company has reviewed its contracts with customers with respect to the applications to IFRS 15. The Company does not expect that the timing or amounts of revenue currently recognized on our bullion spot sales will be affected by IFRS 15. It is anticipated that the Company's streaming arrangement with RGLD Gold AG ("RGLD"), will be impacted by the adoption of IFRS 15 as a result of a significant financing component in the contract as defined by IFRS 15. It is expected that the finance costs and revenue will increase on adoption of this standard. The Company is currently in the process of quantifying these impacts to the financial statements.

IFRS 2 *Share-based payments* was amended to address (i) certain issues related to the accounting for cash settled awards, and (ii) the accounting for equity settled awards that include a "net settlement" feature in respect of employee withholding taxes effective for years beginning on or after January 1, 2018. The Company does not expect material impact to the financial statements on adoption of this standard.

IFRS 16 *Leases* specifies how an IFRS reporter will recognize, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessees to recognize assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value. Lessors continue to classify leases as operating or finance, with IFRS 16's approach to lessor accounting substantially unchanged from its predecessor, IAS 17. IFRS 16 was issued in January 2016 and applies to annual reporting periods beginning on or after January 1, 2019. The Company is still assessing the impact of this standard.

IFRIC 23 *Uncertainty over income tax treatments* clarifies how the recognition and measurement requirements of IAS 12, *Income Taxes*, are applied where there is uncertainty over income tax treatments effective for years beginning on or after January 1, 2019. The Company is still assessing the impact of this standard.

#### 4. FINANCIAL INSTRUMENTS

The following tables illustrate the classification of the Company's recurring fair value measurements for financial instruments within the fair value hierarchy and their carrying values and fair values as at September 30, 2017 and December 31, 2016 :

	Level	September 30, 2017		December 31, 2016	
		Carrying value	Fair value	Carrying value	Fair value
<b>Financial Liabilities</b>					
Fair value through profit or loss					
5% Convertible Debentures	3	\$ —	\$ —	\$ 13,294	\$ 13,294
Warrants	2	—	—	2,729	2,729
7% Convertible Debentures embedded derivative	3	9,061	9,061	15,127	15,127

There were no non-recurring fair value measurements of financial instruments as at September 30, 2017 .

The three levels of the fair value hierarchy are:

Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities;

Level 2 - Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and

Level 3 - Inputs that are not based on observable market data.

The Company's policy is to recognize transfers into and transfers out of the fair value hierarchy levels as of the date of the event or change in circumstances that caused the transfer. During the nine months ended September 30, 2017 , there were no transfers between the levels of the fair value hierarchy.

Loss/(gain) on fair value of financial instruments in the Statement of Operations includes the following components:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Loss on fair value of 5% Convertible Debentures	\$ —	\$ 1,920	\$ 317	\$ 17,086
Loss/(gain) on fair value of warrants	469	820	(86)	2,804
Gain on warrant exercise	(193)	—	(193)	—
Loss/(gain) on fair value of 7% Convertible Debentures embedded derivative	3,170	3,341	(3,997)	3,341
Unrealized (gain)/loss on non-hedge derivative contracts	—	(297)	—	3,285
	<u>\$ 3,446</u>	<u>\$ 5,784</u>	<u>\$ (3,959)</u>	<u>\$ 26,516</u>

The valuation techniques that are used to measure fair value are as follows:

*5% Convertible Debentures*

On May 26, 2017, \$13.6 million principal and \$0.3 million interest was paid in full settlement of the 5% Convertible Debentures.

The debt component of the 5% Convertible Debentures was valued based on discounted cash flows and the conversion feature was valued based on a Black-Scholes model. The risk free interest rate used in the fair value computation was the interest rate on US treasury bills with maturity similar to the remaining life of the 5% Convertible Debentures. The discount rate used was determined by adding our risk premium to the risk free interest rate. A market-based volatility rate was applied to the fair value computation.

The following table presents the changes in the 5% Convertible Debentures for the nine months ended September 30, 2017 :

	Fair value
<b>Balance, December 31, 2016</b>	\$ 13,294
Repayment	(13,611)
Loss in the period included in earnings	317
<b>Balance, September 30, 2017</b>	<u>\$ —</u>

*Warrants*

As part of the term loan transaction with Royal Gold, Inc. ("RGI"), 5,000,000 warrants to purchase Golden Star shares were issued to RGI. The warrants had a \$0.27 exercise price and expire on July 28, 2019, being the fourth year anniversary of the date of issuance. These instruments were fair valued based on a Black-Scholes model.

On August 30, 2017, the Company issued 3,223,684 common shares upon a cashless exercise of all 5,000,000 warrants held by RGI. The Company recorded a \$2.5 million increase in equity, \$2.7 million decrease in warrant liability and a \$0.2 million gain on exercise.

The following table presents the changes in the warrants for the nine months ended September 30, 2017 :

	Fair value
<b>Balance, December 31, 2016</b>	\$ 2,729
Exercise	(2,643)
Gain on fair value of warrants	(86)
<b>Balance, September 30, 2017</b>	<u>\$ —</u>

### 7% Convertible Debentures embedded derivative

The debt component of the 7% Convertible Debentures is recorded at amortized cost using the effective interest rate method, and the conversion feature is classified as an embedded derivative measured at fair value through profit or loss.

The embedded derivative was valued at September 30, 2017 and December 31, 2016 using a convertible note valuation model. The significant inputs used in the convertible note valuation are as follows:

	September 30, 2017	December 31, 2016
<b>Embedded derivative</b>		
Risk-free interest rate	1.7%	1.7%
Risk premium	9.3%	12.9%
Borrowing costs	15.0%	10.0%
Expected volatility	45.0%	45.0%
Remaining life (years)	3.9	4.6

The following table presents the changes in the 7% Convertible Debentures embedded derivative for the nine months ended September 30, 2017 :

	Fair value
<b>Balance, December 31, 2016</b>	\$ 15,127
Gain on conversions	(2,069)
Gain on fair value of 7% Convertible Debentures embedded derivative	(3,997)
<b>Balance, September 30, 2017</b>	<u>\$ 9,061</u>

If the risk premium increases by 5% , the fair value of the 7% Convertible Debentures embedded derivative would decrease and the related gain in the Statement of Operations would increase by \$0.1 million at September 30, 2017 .

## 5. INVENTORIES

Inventories include the following components:

	As of September 30, 2017	As of December 31, 2016
Stockpiled ore	\$ 23,504	\$ 23,833
In-process ore	4,556	5,008
Materials and supplies	20,416	14,824
Finished goods	420	716
<b>Total</b>	<u>\$ 48,896</u>	<u>\$ 44,381</u>

The cost of inventories expensed for the nine months ended September 30, 2017 and 2016 was \$147.4 million and \$119.8 million , respectively.

During the three and nine months ended September 30, 2017 , \$0.6 million and \$3.5 million of net realizable value adjustments were recorded for stockpiled ore, respectively (three and nine months ended September 30, 2016 - \$nil ).

## 6. MINING INTERESTS

The following table shows the breakdown of the cost, accumulated depreciation and net book value of plant and equipment, mining properties and construction in progress:

	Plant and equipment	Mining properties	Construction in progress	Total
<b>Cost</b>				
<b>As of December 31, 2016</b>	\$ 461,438	\$ 746,657	\$ 131,409	\$ 1,339,504
Additions	519	474	48,191	49,184
Transfers	17,614	35,795	(53,409)	—
Capitalized interest	—	—	3,703	3,703
Change in rehabilitation provision estimate	—	1,363	—	1,363
Disposals and other	(7,142)	—	(390)	(7,532)
<b>As of September 30, 2017</b>	<u>\$ 472,429</u>	<u>\$ 784,289</u>	<u>\$ 129,504</u>	<u>\$ 1,386,222</u>
<b>Accumulated depreciation</b>				
<b>As of December 31, 2016</b>	\$ 431,698	\$ 692,789	\$ —	\$ 1,124,487
Depreciation and amortization	9,387	16,063	—	25,450
Disposals and other	(6,791)	—	—	(6,791)
<b>As of September 30, 2017</b>	<u>\$ 434,294</u>	<u>\$ 708,852</u>	<u>\$ —</u>	<u>\$ 1,143,146</u>
<b>Carrying amount</b>				
As of December 31, 2016	\$ 29,740	\$ 53,868	\$ 131,409	\$ 215,017
<b>As of September 30, 2017</b>	<u>\$ 38,135</u>	<u>\$ 75,437</u>	<u>\$ 129,504</u>	<u>\$ 243,076</u>

As at September 30, 2017, equipment under finance leases had net carrying amounts of \$0.6 million. The total minimum lease payments are disclosed in Note 10 - Debt.

No depreciation is charged to construction in progress assets. For the nine months ended September 30, 2017, the general capitalization rate for borrowing costs was 7%.

## 7. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

Accounts payable and accrued liabilities include the following components:

	As of September 30, 2017	As of December 31, 2016
Trade and other payables	\$ 42,872	\$ 48,591
Accrued liabilities	33,793	35,998
Payroll related liabilities	10,504	8,311
<b>Total</b>	<u>\$ 87,169</u>	<u>\$ 92,900</u>

## 8. REHABILITATION PROVISIONS

At September 30, 2017, the total undiscounted amount of future cash needs for rehabilitation was estimated to be \$81.2 million. A discount rate assumption of 2% and an inflation rate assumption of 2% were used to value the rehabilitation provisions. The changes in the carrying amount of the rehabilitation provisions are as follows:

	Nine Months Ended September 30, 2017	Year Ended December 31, 2016
<b>Beginning balance</b>	\$ 77,382	\$ 79,685
Accretion of rehabilitation provisions	933	1,368
Changes in estimates	1,363	1,856
Cost of reclamation work performed	(5,151)	(5,527)
<b>Balance at the end of the period</b>	<u>\$ 74,527</u>	<u>\$ 77,382</u>
Current portion	\$ 3,254	\$ 5,515
Long term portion	71,273	71,867
<b>Total</b>	<u>\$ 74,527</u>	<u>\$ 77,382</u>

## 9. DEFERRED REVENUE

During the nine months ended September 30, 2017, the Company sold 18,361 ounces of gold to RGLD Gold AG ("RGLD"). Revenue recognized on the ounces sold to RGLD during the nine months ended September 30, 2017 consisted of \$4.6 million of cash payment proceeds and \$10.7 million of deferred revenue recognized in the period (see Note 15). The Company has delivered a total of 48,726 ounces of gold to RGLD since the inception of the Streaming Agreement.

	Nine Months Ended September 30, 2017	Year Ended December 31, 2016
<b>Beginning balance</b>	\$ 114,112	\$ 65,379
Deposits received	10,000	60,000
Deferred revenue recognized	(10,651)	(11,267)
<b>Balance at the end of the period</b>	<u>\$ 113,461</u>	<u>\$ 114,112</u>
Current portion	\$ 17,827	\$ 19,234
Long term portion	95,634	94,878
<b>Total</b>	<u>\$ 113,461</u>	<u>\$ 114,112</u>



## 10. DEBT

The following table displays the components of our current and long term debt instruments:

	As of September 30, 2017	As of December 31, 2016
<b>Current debt:</b>		
Equipment financing credit facility	\$ 218	\$ 931
Finance leases	1,448	1,153
Ecobank Loan III	1,667	—
5% Convertible Debentures at fair value (see Note 4)	—	13,294
Vendor agreement	9,200	—
<b>Total current debt</b>	<b>\$ 12,533</b>	<b>\$ 15,378</b>
<b>Long term debt:</b>		
Equipment financing credit facility	\$ —	\$ 188
Finance leases	461	806
Ecobank Loan III	7,867	—
7% Convertible Debentures	42,028	47,617
Royal Gold loan	18,736	18,496
Vendor agreement	13,687	22,338
<b>Total long term debt</b>	<b>\$ 82,779</b>	<b>\$ 89,445</b>
<b>Current portion</b>	<b>\$ 12,533</b>	<b>\$ 15,378</b>
<b>Long term portion</b>	<b>82,779</b>	<b>89,445</b>
<b>Total</b>	<b>\$ 95,312</b>	<b>\$ 104,823</b>

### 5% Convertible Debentures

On May 26, 2017, \$13.6 million principal and \$0.3 million interest was paid in full settlement of the 5% Convertible Debentures.

### 7% Convertible Debentures

A total of 9,445,552 shares were issued on conversion of \$8.5 million principal amount of 7% Convertible Debentures during the first quarter of 2017. The Company recorded a net loss on conversions of \$0.2 million. The Company also made make-whole interest payments of \$1.4 million as a result of the conversions. There were no conversions during the second or third quarters of 2017. As at September 30, 2017, \$51.5 million principal amount of 7% Convertible Debentures remains outstanding.

The changes in the carrying amount of the 7% Convertible Debentures are as follows:

	Nine Months Ended September 30, 2017	Year Ended December 31, 2016
<b>Beginning balance</b>	<b>\$ 47,617</b>	<b>\$ —</b>
Principal value of debt issued	—	65,000
Embedded derivative fair value at debt issuance	—	(12,259)
Transaction costs	—	(2,271)
Conversions	(6,947)	(3,708)
Accretion of debt	1,358	855
<b>Balance at the end of the period</b>	<b>\$ 42,028</b>	<b>\$ 47,617</b>

### Ecobank Loan III

On February 22, 2017, the Company through its subsidiary Golden Star (Wassa) Limited closed a \$25 million secured Medium Term Loan Facility ("Ecobank Loan III") with Ecobank Ghana Limited. Ecobank Loan III has a term of 60 months from the date of initial drawdown and is secured by, among other things, Wassa's existing plant, and certain machinery and equipment. The interest rate on the loan is three month LIBOR plus 8%, per annum, payable monthly in arrears beginning a month following the

initial drawdown. Repayment of principal commences six months following the initial drawdown and is thereafter payable quarterly in arrears. The Company has twelve months to drawdown the loan.

During the nine months ended September 30, 2017, the Company drew down \$10.0 million on Ecobank Loan III.

#### Finance leases

During the three months ended September 30, 2017, the Company entered into a financing lease agreement for a period of 24 months.

Schedule of payments on outstanding debt as of September 30, 2017:

	Three months ending December 31, 2017	Year ending December 31, 2018	Year ending December 31, 2019	Year ending December 31, 2020	Year ending December 31, 2021	Year ending December 31, 2022	Maturity
<b>Equipment financing loans</b>							
Principal	\$ 30	\$ 188	\$ —	\$ —	\$ —	\$ —	2017 to 2018
Interest	7	4	—	—	—	—	
<b>Finance leases</b>							
Principal	416	1,224	269	—	—	—	2019
Interest	32	63	8	—	—	—	
<b>Ecobank Loan III</b>							
Principal	—	2,222	2,222	2,222	2,500	834	2022
Interest	226	831	629	429	245	56	
<b>7% Convertible Debentures</b>							
Principal	—	—	—	—	51,498	—	August 15, 2021
Interest	—	3,605	3,605	3,605	3,605	—	
<b>Royal Gold loan</b>							
Principal <sup>1</sup>	—	—	20,000	—	—	—	2019
Interest <sup>2</sup>	398	1,594	930	—	—	—	
<b>Vendor agreement</b>							
Principal	—	12,266	12,266	—	—	—	2019
Interest	460	1,418	498	—	—	—	
<b>Total principal</b>	<b>\$ 446</b>	<b>\$ 15,900</b>	<b>\$ 34,757</b>	<b>\$ 2,222</b>	<b>\$ 53,998</b>	<b>\$ 834</b>	
<b>Total interest</b>	<b>1,123</b>	<b>7,515</b>	<b>5,670</b>	<b>4,034</b>	<b>3,850</b>	<b>56</b>	
	<b>\$ 1,569</b>	<b>\$ 23,415</b>	<b>\$ 40,427</b>	<b>\$ 6,256</b>	<b>\$ 57,848</b>	<b>\$ 890</b>	

<sup>1</sup> Beginning with the three months ending June 30, 2017, the excess cash flow provision of the Royal Gold loan came into effect. The excess cash flow provision as defined in the Royal Gold loan agreement requires the Company to make mandatory repayments of 25% of excess cash flow for the remainder of 2017 and mandatory repayments of 50% excess cash flow beginning 2018 until maturity. The excess cash flow calculation is dependent upon factors beyond the Company's control such as gold price. No excess cash flow repayments have been required to date. The schedule of payments shows the total principal amount outstanding settled at maturity.

<sup>2</sup> Interest payments on the Royal Gold loan are based on the average daily London Bullion Market Association ("LBMA") gold price multiplied by 62.5% divided by 10,000 to a maximum interest rate of 11.5% per annum. The estimated interest payments are calculated based on \$1,275 per ounce LBMA gold price.

## 11. SHARE CAPITAL

		Number of Common Shares	Share Capital
<b>Balance at December 31, 2016</b>		<b>335,356,450</b>	<b>\$ 746,542</b>
Bought deal	a	31,363,950	26,203
Conversion of 7% Convertible Debentures	b	9,445,552	9,479
Shares issued under DSUs		1,167,689	521
Shares issued under options		23,750	16
Shares issued under warrants	c	3,223,684	2,450
Share issue costs		—	(1,979)
<b>Balance at September 30, 2017</b>		<b>380,581,075</b>	<b>\$ 783,232</b>

- a. On February 7, 2017, the Company closed a bought deal offering of 31,363,950 common shares, which includes shares issued upon full exercise of the over-allotment option, at a price of C \$1.10 per share, for net proceeds to the Company of \$24.5 million .
- b. During the nine months ended September 30, 2017 , a total of 9,445,552 common shares were issued on conversion of \$8.5 million principal amount of 7% Convertible Debentures. The Company recorded a \$9.5 million increase in equity offset by capitalized share issue costs of \$0.3 million , resulting in a net equity increase of \$9.2 million . The Company recorded a net loss on conversions of \$0.2 million .
- c. On August 30, 2017, the Company issued 3,223,684 common shares upon a cashless exercise of all 5,000,000 warrants held by RGI. The Company recorded a \$2.5 million increase in equity, \$2.7 million decrease in warrant liability and a \$0.2 million gain on exercise.

## 12. COMMITMENTS AND CONTINGENCIES

The Company has capital commitments of \$19.7 million , all of which are expected to be incurred within the next three months.

Due to the nature of the Company's operations, various legal matters from time to time arise in the ordinary course of business. The Company accrues for such items when a liability is both probable and the amount can be reasonably estimated. In the opinion of management, these matters will not have a material effect on the Condensed Interim Consolidated Financial Statements of the Company.

## 13. SHARE-BASED COMPENSATION

Non-cash employee compensation expenses, recognized in general and administrative expense in the Statements of Operations and Comprehensive Income, are as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Share options	\$ 205	\$ 143	\$ 1,027	\$ 618
Deferred share units	69	229	247	446
Share appreciation rights	240	347	259	696
Performance share units	3,545	5,707	5,968	14,406
	<u>\$ 4,059</u>	<u>\$ 6,426</u>	<u>\$ 7,501</u>	<u>\$ 16,166</u>

### Share options

The fair value of option grants is estimated at the grant dates using the Black-Scholes option-pricing model. Fair values of options granted during the nine months ended September 30, 2017 and 2016 were based on the weighted average assumptions noted in the following table:

	Nine Months Ended September 30,	
	2017	2016
Expected volatility	73.70%	72.40%
Risk-free interest rate	1.86%	1.28%
Expected lives	5.99 years	4.86 years

The weighted average fair value per option granted during the nine months ended September 30, 2017 was \$0.84 ( nine months ended September 30, 2016 - \$0.35 ). As at September 30, 2017 , there was \$0.7 million of share-based compensation expense ( September 30, 2016 - \$0.4 million ) relating to the Company's share options to be recorded in future periods. For the nine months ended September 30, 2017 , the Company recognized an expense of \$1.0 million ( nine months ended September 30, 2016 - \$0.6 million ).

A summary of option activity under the Company's Fourth Amended and Restated 1997 Stock Option Plan during the nine months ended September 30, 2017 are as follows:

	Options ( '000 )	Weighted- Average Exercise price ( \$CAD )	Weighted- Average Remaining Contractual Term ( Years )
<b>Outstanding as of December 31, 2016</b>	16,119	1.29	5.7
Granted	2,352	1.28	9.4
Exercised	(24)	0.55	7.6
Forfeited	(626)	2.20	2.1
Expired	(1,164)	2.19	—
<b>Outstanding as of September 30, 2017</b>	<u>16,657</u>	<u>1.19</u>	<u>6.1</u>
Exercisable as of December 31, 2016	11,738	1.55	4.8
Exercisable as of September 30, 2017	12,831	1.28	5.4

#### Deferred share units ("DSUs")

For the nine months ended September 30, 2017 , the DSUs that were granted vested immediately and a compensation expense of \$0.2 million was recognized for these grants ( nine months ended September 30, 2016 - \$0.4 million ). As of September 30, 2017 , there was no unrecognized compensation expense related to DSUs granted under the Company's DSU Plan.

A summary of DSU activity during the nine months ended September 30, 2017 and 2016 :

	Nine Months Ended September 30,	
	2017	2016
Number of DSUs, beginning of period ( '000 )	5,734	4,496
Grants	313	1,178
Exercises	(1,168)	(40)
Number of DSUs, end of period ( '000 )	<u>4,879</u>	<u>5,634</u>

#### Share appreciation rights ("SARs")

As of September 30, 2017 , there was approximately \$0.6 million of total unrecognized compensation cost related to unvested SARs ( September 30, 2016 - \$0.4 million ). For the nine months ended September 30, 2017 , the Company recognized an expense of \$0.3 million related to these cash settled awards ( nine months ended September 30, 2016 - \$0.7 million ).

A summary of the SARs activity during the nine months ended September 30, 2017 and 2016 :

	Nine Months Ended September 30,	
	2017	2016
Number of SARs, beginning of period ('000)	2,687	2,934
Grants	1,460	1,850
Exercises	(185)	(10)
Forfeited	(408)	(480)
Number of SARs, end of period ('000)	3,554	4,294

#### Performance share units ("PSUs")

For the nine months ended September 30, 2017 , the Company recognized an expense of \$5.8 million related to PSU's ( nine months ended September 30, 2016 - \$14.4 million ). As at September 30, 2017 , the long term PSU liability is \$5.2 million , recognized on the Balance Sheet as Other Long Term Liability and the current portion of \$10.8 million is recognized on the Balance Sheet as Other Liability.

A summary of the PSU activity during the nine months ended September 30, 2017 and 2016 :

	Nine Months Ended September 30,	
	2017	2016
Number of PSUs, beginning of period ('000)	15,480	9,618
Grants	—	6,058
Redeemed	(1,876)	—
Forfeited	—	(196)
Number of PSUs, end of period ('000)	13,604	15,480

#### 2017 Performance and restricted share units ("PRSU's")

On May 4, 2017, the Company adopted a 2017 performance and restricted share unit plan (the "2017 PRSU Plan"). Pursuant to the 2017 PRSU Plan, performance share units ("2017 PSUs") and restricted share units ("2017 RSUs" and, together with the 2017 PSUs, the "Share Units") may be issued to any employee or officer of the Company or its designated affiliates. Share Units may be redeemed for: (i) common shares issued from treasury; (ii) common shares purchased in the secondary market; (iii) a cash payment; or (iv) a combination of (i), (ii) and (iii). On March 21, 2017, the Company issued 1,694,491 Share Units.

Each PRSU represents one notional common share that is redeemed for common shares or common shares plus cash subject to the consent of the Company based on the value of a common share at the end of the three year performance period, to the extent performance and vesting criteria have been met. The PRSUs vest at the end of a three year performance period based on the Company's total shareholder return relative to a performance peer group of gold companies as listed in the 2017 PRSU Plan. The award is determined by multiplying the number of Share Units by the performance adjustment factor, which ranges from 0% to 200% . The performance adjustment factor is determined by comparing the Company's share price performance to the share price performance of a peer group of companies. As the Company is required to settle these awards in common shares or common shares plus cash subject to the consent of the Company, they are accounted for as equity awards with corresponding compensation expense recognized. For the nine months ended September 30, 2017 , the Company recognized an expense of \$0.1 million .

## 14. INCOME/(LOSS) PER COMMON SHARE

The following table provides reconciliation between basic and diluted income/(loss) per common share:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Net income/(loss) attributable to Golden Star shareholders	\$ 12,117	\$ (23,110)	\$ 26,170	\$ (43,093)
Adjustments:				
Interest expense on 7% Convertible Debentures	—	—	2,749	—
Amortization of 7% Convertible Debentures discount	—	—	1,358	—
Gain on fair value of 7% Convertible Debentures embedded derivative	—	—	(3,997)	—
Diluted income/(loss)	\$ 12,117	\$ (23,110)	\$ 26,280	\$ (43,093)
Weighted average number of basic shares (millions)	378.0	325.3	371.2	269.7
Dilutive securities:				
Options	2.0	—	2.6	—
Deferred stock units	5.3	—	5.7	—
Convertible Debentures	—	—	58.6	—
Weighted average number of diluted shares (millions)	385.3	325.3	438.1	269.7
Income/(loss) per share attributable to Golden Star shareholders:				
Basic	\$ 0.03	\$ (0.07)	\$ 0.07	\$ (0.16)
Diluted	\$ 0.03	\$ (0.07)	\$ 0.06	\$ (0.16)

## 15. REVENUE

Revenue includes the following components:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Revenue - Streaming Agreement				
Cash payment proceeds	\$ 1,881	\$ 1,212	\$ 4,596	\$ 3,333
Deferred revenue recognized	4,266	2,889	10,651	8,495
	6,147	4,101	15,247	11,828
Revenue - Spot sales	81,625	51,410	218,405	156,207
Total revenue	\$ 87,772	\$ 55,511	\$ 233,652	\$ 168,035

## 16. COST OF SALES EXCLUDING DEPRECIATION AND AMORTIZATION

Cost of sales excluding depreciation and amortization include the following components:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Mine operating expenses	\$ 50,093	\$ 42,432	\$ 144,414	\$ 125,824
Severance charges	228	—	1,182	(71)
Operating costs to metal inventory	(2,359)	(827)	(600)	(5,975)
Inventory net realizable value adjustment	606	—	2,410	—
Royalties	4,934	3,003	12,675	8,844
	\$ 53,502	\$ 44,608	\$ 160,081	\$ 128,622

## 17. FINANCE EXPENSE, NET

Finance income and expense includes the following components:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Interest income	\$ (2)	\$ (11)	\$ (59)	\$ (21)
Interest expense, net of capitalized interest (see Note 6)	1,645	2,043	5,312	6,398
Net foreign exchange loss/(gain)	310	(373)	(220)	(566)
Accretion of rehabilitation provision	311	342	933	1,026
Conversion make-whole payment	—	—	1,445	—
	<u>\$ 2,264</u>	<u>\$ 2,001</u>	<u>\$ 7,411</u>	<u>\$ 6,837</u>

## 18. RELATED PARTY TRANSACTIONS

There were no material related party transactions for the nine months ended September 30, 2017 and 2016 other than the items disclosed below.

### Key management personnel

Key management personnel is defined as members of the Board of Directors and certain senior officers. Compensation of key management personnel are as follows, with such compensation made on terms equivalent to those prevailing in an arm's length transaction:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Salaries, wages, and other benefits	\$ 649	\$ 627	\$ 2,211	\$ 1,982
Bonuses	327	284	983	815
Share-based compensation	3,070	4,618	3,893	11,857
	<u>\$ 4,046</u>	<u>\$ 5,529</u>	<u>\$ 7,087</u>	<u>\$ 14,654</u>

## 19. OPERATIONS BY SEGMENT AND GEOGRAPHIC AREA

The Company has reportable segments as identified by the individual mining operations. Segments are operations reviewed by the executive management. Each segment is identified based on quantitative and qualitative factors.

Three Months Ended September 30,	Wassa	Bogoso/Prestea	Other	Corporate	Total
<b>2017</b>					
Revenue	\$ 39,556	\$ 48,216	\$ —	\$ —	\$ 87,772
Mine operating expenses	27,980	22,113	—	—	50,093
Severance charges	145	83	—	—	228
Operating costs to metal inventory	(603)	(1,756)	—	—	(2,359)
Inventory net realizable value adjustment	606	—	—	—	606
Royalties	2,033	2,901	—	—	4,934
Cost of sales excluding depreciation and amortization	30,161	23,341	—	—	53,502
Depreciation and amortization	4,481	2,884	—	—	7,365
Mine operating margin	4,914	21,991	—	—	26,905
Net income attributable to non-controlling interest	444	1,142	—	—	1,586
Net income/(loss) attributable to Golden Star	\$ 3,117	\$ 20,565	\$ (1,373)	\$ (10,192)	\$ 12,117
Capital expenditures	\$ 6,469	\$ 11,408	\$ —	\$ —	\$ 17,877
<b>2016</b>					
Revenue	\$ 25,958	\$ 29,553	\$ —	\$ —	\$ 55,511
Mine operating expenses	22,473	19,959	—	—	42,432
Operating costs to metal inventory	(20)	(807)	—	—	(827)
Royalties	1,488	1,515	—	—	3,003
Cost of sales excluding depreciation and amortization	23,941	20,667	—	—	44,608
Depreciation and amortization	3,464	1,647	—	—	5,111
Mine operating (loss)/margin	(1,447)	7,239	—	—	5,792
Net loss attributable to non-controlling interest	(317)	(365)	—	—	(682)
Net (loss)/income attributable to Golden Star	\$ (1,411)	\$ 7,300	\$ (1,733)	\$ (27,266)	\$ (23,110)
Capital expenditures	\$ 9,699	\$ 11,913	\$ 44	\$ —	\$ 21,656



Nine Months Ended September 30,	Wassa	Prestea	Other	Corporate	Total
<b>2017</b>					
Revenue	\$ 115,748	\$ 117,904	\$ —	\$ —	\$ 233,652
Mine operating expenses	84,613	59,801	—	—	144,414
Severance charges	1,099	83	—	—	1,182
Operating costs from/(to) metal inventory	3,827	(4,427)	—	—	(600)
Inventory net realizable value adjustment	2,410	—	—	—	2,410
Royalties	5,970	6,705	—	—	12,675
Cost of sales excluding depreciation and amortization	97,919	62,162	—	—	160,081
Depreciation and amortization	14,612	10,085	—	—	24,697
Mine operating margin	3,217	45,657	—	—	48,874
Net (loss)/income attributable to non-controlling interest	(73)	1,037	—	—	964
Net income/(loss) attributable to Golden Star	\$ 1,229	\$ 43,434	\$ (2,743)	\$ (15,750)	\$ 26,170
Capital expenditures	\$ 13,113	\$ 39,774	\$ —	\$ —	\$ 52,887
<b>2016</b>					
Revenue	\$ 87,556	\$ 80,479	\$ —	\$ —	\$ 168,035
Mine operating expenses	69,799	56,025	—	—	125,824
Severance charges	113	(184)	—	—	(71)
Operating costs to metal inventory	(4,988)	(987)	—	—	(5,975)
Royalties	4,713	4,131	—	—	8,844
Cost of sales excluding depreciation and amortization	69,637	58,985	—	—	128,622
Depreciation and amortization	10,892	4,151	—	—	15,043
Mine operating margin	7,027	17,343	—	—	24,370
Net income/(loss) attributable to non-controlling interest	137	(1,358)	—	—	(1,221)
Net income/(loss) attributable to Golden Star	\$ 5,467	\$ 18,983	\$ (5,683)	\$ (61,860)	\$ (43,093)
Capital expenditures	\$ 31,650	\$ 28,883	\$ 44	\$ —	\$ 60,577

	Wassa	Prestea	Other	Corporate	Total
<b>September 30, 2017</b>					
Total assets	\$ 179,876	\$ 154,231	\$ 3,143	\$ 2,219	\$ 339,469
<b>December 31, 2016</b>					
Total assets	\$ 175,738	\$ 109,691	\$ 8,786	\$ 4,635	\$ 298,850

Currently, approximately 90% of our gold production is sold through a South African gold refinery. Except for the sales to RGLD as part of the Streaming Agreement, the refinery arranges for the sale of gold on the day it is shipped from the mine sites 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 revenue.

## 20. SUPPLEMENTAL CASH FLOW INFORMATION

During the nine months ended September 30, 2017 and 2016, there was no payment of income taxes. The Company paid \$7.3 million of interest during the nine months ended September 30, 2017 ( nine months ended September 30, 2016 - \$5.9 million ).

Changes in working capital for the nine months ended September 30, 2017 and 2016 are as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Decrease/(increase) in accounts receivable	\$ 2,222	\$ 1,354	\$ 3,092	\$ (349)
Increase in inventories	(3,889)	(906)	(6,192)	(7,110)
(Increase)/decrease in prepaids and other	(478)	(405)	(1,661)	471
Increase/(decrease) in accounts payable and accrued liabilities	1,921	(579)	(6,866)	(3,189)
Decrease in current portion of vendor agreement	—	—	—	(13,369)
<b>Total changes in working capital</b>	<b>\$ (224)</b>	<b>\$ (536)</b>	<b>\$ (11,627)</b>	<b>\$ (23,546)</b>

Other includes the following components:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Loss on disposal of assets	\$ 98	\$ —	\$ 611	\$ —
Net realizable value adjustment on inventory	606	—	2,410	—
Loss/(gain) on fair value of warrants (see Note 4)	469	820	(86)	2,804
Loss/(gain) on fair value of marketable securities	10	—	(27)	(84)
Unrealized (gain)/loss on non-hedge derivative contracts	—	(297)	—	3,285
Realized gain on non-hedge derivative contracts	—	(1,320)	—	(2,172)
Gain on deferral of payables	—	—	—	(2,682)
Accretion of vendor agreement	183	183	549	1,825
Accretion of rehabilitation provisions (see Note 8)	311	342	933	1,026
Amortization of financing fees	105	582	272	804
Amortization of 7% Convertible Debentures discount	470	347	1,358	347
Loss on conversion of 7% Convertible Debentures, net	—	—	165	—
Gain on warrant exercise	(193)	—	(193)	—
	<b>\$ 2,059</b>	<b>\$ 657</b>	<b>\$ 5,992</b>	<b>\$ 5,153</b>

### *Non-cash changes of liabilities arising from financing activities*

During the nine months ended September 30, 2017, the non-cash changes relating to the changes in liabilities arising from financing activities were \$6.9 million relating to the conversion of the 7% Convertible Debentures, \$1.6 million accretion of debt and \$0.3 million fair value loss on the 5% Convertible Debentures.

**FORM 52 - 109F2**  
**CERTIFICATION OF INTERIM FILINGS**  
**FULL CERTIFICATE**

I, Samuel T. Coetzer, President and Chief Executive Officer of Golden Star Resources Ltd., certify the following:

1. **Review:** I have reviewed the interim financial report and interim MD&A (together, the “interim filings”) of Golden Star Resources Ltd. (the “issuer”) for the interim period ended September 30, 2017 .
2. **No misrepresentations:** Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings.
3. **Fair presentation:** Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.
4. **Responsibility:** The issuer’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers’ Annual and Interim Filings* , for the issuer.
5. **Design:** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, the issuer’s other certifying officer and I have, as at the end of the period covered by the interim filings
  - A. designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that
    - I. material information relating to the issuer is made known to us by others, particularly during the period in which the interim filings are being prepared; and
    - II. information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and
  - B. designed ICFR, or caused it to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer’s GAAP.
- 5.1 **Control framework:** The control framework the issuer’s other certifying officer and I used to design the issuer’s ICFR is the Internal Control – Integrated Framework (COSO Framework) published by The Committee of Sponsoring Organizations of the Treadway Commission (2013).
- 5.2 **ICFR - material weakness relating to design:** N/A
- 5.3 **Limitation on scope of design:** N/A
6. **Reporting changes in ICFR:** The issuer has disclosed in its interim MD&A any change in the issuer’s ICFR that occurred during the period beginning on July 1, 2017 and ended on September 30, 2017 that has materially affected, or is reasonably likely to materially affect, the issuer’s ICFR.

Date: October 31, 2017

(signed) Samuel T. Coetzer

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Samuel T. Coetzer  
President and Chief Executive Officer

**FORM 52 - 109F2**  
**CERTIFICATION OF INTERIM FILINGS**  
**FULL CERTIFICATE**

I, André van Niekerk, Executive Vice President and Chief Financial Officer of Golden Star Resources Ltd., certify the following:

1. **Review:** I have reviewed the interim financial report and interim MD&A (together, the “interim filings”) of Golden Star Resources Ltd. (the “issuer”) for the interim period ended September 30, 2017 .
2. **No misrepresentations:** Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings.
3. **Fair presentation:** Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.
4. **Responsibility:** The issuer’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers’ Annual and Interim Filings* , for the issuer.
5. **Design:** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, the issuer’s other certifying officer and I have, as at the end of the period covered by the interim filings
  - A. designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that
    - I. material information relating to the issuer is made known to us by others, particularly during the period in which the interim filings are being prepared; and
    - II. information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and
  - B. designed ICFR, or caused it to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer’s GAAP.
- 5.1 **Control framework:** The control framework the issuer’s other certifying officer and I used to design the issuer’s ICFR is the Internal Control – Integrated Framework (COSO Framework) published by The Committee of Sponsoring Organizations of the Treadway Commission (2013).
- 5.2 **ICFR - material weakness relating to design:** N/A
- 5.3 **Limitation on scope of design:** N/A
6. **Reporting changes in ICFR:** The issuer has disclosed in its interim MD&A any change in the issuer’s ICFR that occurred during the period beginning on July 1, 2017 and ended on September 30, 2017 that has materially affected, or is reasonably likely to materially affect, the issuer’s ICFR.

Date: October 31, 2017

(signed) André van Niekerk

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André van Niekerk  
 Executive Vice President and Chief Financial Officer