
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 September 2018

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):

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.

Date: September 20, 2018

GOLDEN STAR RESOURCES LTD.

By: /s/ André van Niekerk
André van Niekerk
Executive Vice President and
Chief Financial Officer

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description of Exhibit</u>
<u>99.1</u>	<u>Press Release dated September 20, 2018 - Golden Star Provides an Update on Operations at the Prestea Complex and Full Year 2018 Guidance</u>

Golden Star Provides an Update on Operations at the Prestea Complex and Full Year 2018 Guidance

TORONTO, Sept. 20, 2018 /CNW/ - Golden Star Resources Ltd. (NYSE American: GSS; TSX: GSC; GSE: GSR) ("Golden Star" or the "Company") provides an update on operations at its Prestea Complex ("Prestea") in Ghana and the Company's full year ("FY") 2018 guidance.

HIGHLIGHTS

Operations at Prestea Complex

- Wassa Underground Gold Mine ("Wassa Underground") continues to deliver a strong performance and Prestea improvement plan formulated with the aim of ensuring Prestea begins 2019 from a similarly robust position as an underground-only operation
- Annual cash operating costs ¹ at Prestea expected to be reduced by 31% ² through closure of the open pit operation during the fourth quarter of 2018, including downsizing of the processing plant, rightsizing of the workforce and optimization of on-site management structure
- Focus remains on increasing the production rate at the Prestea Underground Gold Mine ("Prestea Underground") to a targeted rate of 650 tonnes per day ("tpd") on a consistent basis in FY 2019
 - Alimak mining training program brought in-house during the third quarter of 2018 to increase accountability and accelerate the mining sequence
- Since the handover to in-house training there have been significant improvements in the key lead indicators of raise development and longhole drilling, however FY 2018 production from Prestea is still expected to be impacted

Updated FY 2018 Guidance

- FY 2018 consolidated gold production is expected to be 225,000-235,000 ounces as a result of the slower than expected ramp up at Prestea Underground – a 5% decrease from the midpoint of the previous guidance range
- FY 2018 consolidated cash operating cost per ounce ¹ is expected to be \$790 to \$830 – a 17% increase from the midpoint of the previous guidance range
 - Stronger than expected performance at Wassa Underground during the year-to-date only partially offset the weaker than expected performance at Prestea Underground
- FY 2018 consolidated All-In Sustaining Cost ("AISC") per ounce ¹ guidance is expected to be \$1,050 to \$1,100 – a 19% increase from the midpoint of the previous guidance range

Notes:

1. See "Non-GAAP Financial Measures"
2. This percentage is the difference between Prestea's 2018 estimated cash operating costs and 2019's estimated cash operating costs

Sam Coetzer, President and Chief Executive Officer of Golden Star, commented:

"We are taking decisive action at Prestea to ensure that the operation begins 2019 on a robust footing. We are focused on increasing Prestea's production rate through continuing to optimize the mining sequence and once we receive the proceeds from the La Mancha investment, we will begin the process of rightsizing the Prestea workforce and streamlining the on-site management to allow us to move forward with a leaner cost structure. Golden Star is committed to delivering high margin production from both of our operations and we will continue to optimize both our operational delivery as well as our operating costs."

Update on Operations at the Prestea Complex

Golden Star has conducted a review of its operations and consequently has formulated an improvement plan for Prestea. The plan has the objective of ensuring that production and operating cost targets are met by the end of FY 2018 so that Prestea can begin FY 2019 from a strong position.

The Prestea Open Pits have generated robust cash flow for Golden Star during the past three years, but the operations

are now reaching the end of their mine life, with reduced grades and tonnages being sent to the processing plant, which has resulted in increased unit costs and hence a higher cash operating cost per ounce ¹.

The Company had delayed undertaking the closure of the open pit operation, which includes downsizing the processing plant from a capacity of 4,000 tpd to 700 tpd, right-sizing the open pit workforce at Prestea and optimizing the management and supervisory structure, due to the associated costs. However, with the proceeds of the investment from La Mancha Holding S.a r.l. ("La Mancha"), Golden Star will have sufficient funds to implement these actions and ensure the operation has a leaner cost structure going forward. This work is expected to be done during the fourth quarter of 2018, and consequently, the Company expects annual cash operating costs for Prestea to be reduced by 31%.

Golden Star commenced commercial production at Prestea Underground on February 1, 2018 and since then, the ramp up to the targeted production rate has been slower than anticipated. In the third quarter of 2018 Golden Star made the decision to bring its Alimak mining training program at Prestea Underground in-house. The decision was made with the objective of better integrating the Alimak mining team with the rest of the Prestea Underground operations and to improve the efficiency of the management of personnel, equipment and materials. This plan received the full support and assistance of Manroc Developments Inc, who held the training contract from the start of mining. The handover took place in July and August 2018 and resulted in reduced production as personnel were reorganized.

Since the handover there have been significant improvements in the key lead indicators of raise development and longhole drilling, with the operation making progress towards the planned rates of 7 metres per day of raising and 180 metres per day of drilling outlined in the Feasibility Study ². Raise development has increased from an average of 3.2 metres per day to between 5 and 6 metres per day and drilling has increased from 90 metres per day to 150 metres per day. Although the production rate for the third quarter of 2018 is expected to remain between 350 to 400 tpd, the Company is targeting 650 tpd on a consistent basis during FY 2019.

Golden Star is implementing further changes to its Alimak mining program, which are as follows:

- Optimization of the training program to ensure that trainers, experienced personnel and trainees are efficiently allocated to work areas
- Change of the primary longhole blasting agent from ammonium nitrate/fuel oil (which is known as Anfo) to emulsion, which is expected to result in reduced reblasts due to waterlogged holes and more efficient explosives movement
- Reduction and optimization of hanging wall cable bolting requirements, with the objective of reducing the overall raise cycle time by 15%
- Optimization of Alimak setup time and reduction of top-sub development time
- Installation of a sixth Alimak in the fourth quarter of 2018, with the seventh Alimak ordered and expected on site in the first quarter of 2019, with the objective of increasing the flexibility of the mining sequence
- Implementation of a short interval control system with the objective of further improving operational efficiency and reducing cycle times

Notes:

1. See "Non-GAAP Financial Measures"
2. See technical report entitled, 'NI 43-101 Technical Report on Resources and Reserves, Golden Star Resources, Bogoso/Prestea Gold Mine, Ghana' with an effective date of December 31, 2017

Updated FY 2018 Guidance

As a result of the reorganization at Prestea, Golden Star has provided an update on its expectations for FY 2018 gold production, cash operating cost per ounce ¹ and AISC per ounce ¹.

The updated FY 2018 guidance is as follows:

Operation	Gold Production (ounces)	Cash Operating Cost ¹ (\$/ounce)	AISC ¹ (\$/ounce)
Wassa Complex	150,000 - 155,000	Unchanged (600 - 650/oz)	-
Prestea Complex	75,000 - 80,000	1,150 - 1,225	-
Consolidated	225,000 - 235,000	790 - 830	1,050 - 1,100

Golden Star has increased its FY 2018 gold production guidance for the Wassa Complex ("Wassa") by 9% ² as a result of the stronger than expected production from the operation in the year-to-date. Wassa Underground delivered higher tonnages and grade than anticipated in the first half of 2018, as reported in the results for the second quarter of 2018 ³, and the average production rate for the year is now expected to be approximately 3,000 tpd. However, due to mine sequencing the grade processed in the second half of the year is expected to be lower than in the first half of 2018 at approximately 3.8 grams per tonne of gold.

The Company has maintained its FY 2018 cash operating cost per ounce ¹ guidance for Wassa as in the first half of 2018 Wassa delivered a cash operating cost per ounce ¹ of \$645, which is within the current FY 2018 guidance range.

Golden Star has decreased its FY 2018 gold production guidance for Prestea by 25% ². The ramp up of Prestea Underground has been slower than expected due to issues with longhole drilling and blasting productivities and the handover to in-house Alimak training, as detailed above, and this resulted in a lower than anticipated production rate during the year-to-date. As a result of the reduced FY 2018 gold production guidance, the Company has increased Prestea's FY 2018 cash operating cost per ounce guidance ¹.

The stronger than expected performance at Wassa during the year-to-date only partially offset the weaker than anticipated performance at Prestea and as a result, Golden Star has marginally reduced its FY 2018 consolidated guidance for gold production and increased its guidance for cash operating cost per ounce ¹ and AISC per ounce ¹.

An update on expected capital expenditures following the receipt of the \$125.7 million cash investment from La Mancha is anticipated to be released in the fourth quarter of 2018.

Notes:

1. See "Non-GAAP Financial Measures"
2. This number is calculated from the midpoint of the previous range to the midpoint of the updated range
3. See press release entitled 'Golden Star Reports Second Quarter 2018 Results', dated August 1, 2018

All monetary amounts refer to United States dollars unless otherwise indicated.

Company Profile:

Golden Star is an established gold mining company that owns and operates the Wassa and Prestea mines in Ghana, West Africa. Listed on the NYSE American, the Toronto Stock Exchange and the Ghanaian Stock Exchange, Golden Star is focused on delivering strong margins and free cash flow from its two high grade, low cost underground mines. Gold production guidance for 2018 is 225,000-235,000 ounces at a cash operating cost per ounce of \$790-830. As the winner of the PDAC 2018 Environmental and Social Responsibility Award, Golden Star is committed to leaving a positive and sustainable legacy in its areas of operation.

Non-GAAP Financial Measures

In this press release, we use the terms "cash operating costs", "cash operating cost per ounce" and "all-in sustaining costs per ounce". These should be considered as non-GAAP financial measures as defined in applicable Canadian and United States securities laws and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with GAAP.

"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, materials and supplies write off 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.

"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, severance charges 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.

"All-in sustaining costs" commences with cash operating costs and then adds the cash component of metals net realizable value adjustment, royalties, sustaining capital expenditures, corporate general and administrative costs (excluding 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. 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. 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.

For additional information regarding the Non-GAAP financial measures used by the Company, please refer to the information under the heading "Non-GAAP Financial Measures" in the Company's Management's Discussion and Analysis of Financial Condition and Results of Operations for the full year ended December 31, 2017, which is available at www.sedar.com.

Statements Regarding Forward-Looking Information

Some statements contained in this news release are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 and "forward looking information" within the meaning of Canadian securities laws. Forward looking statements and information include but are not limited to, statements and information regarding: the timing of the commencement of the Prestea improvement plan; the ability to reduce the annual operating costs at Prestea by 31%; the ability to increase the production rate at Prestea Underground; the expected FY 2018 consolidated gold production rate of 225,000-235,000 ounces; the expected FY 2018 consolidated cash operating cost per ounce of \$790 to \$830; the expected AISC per ounce of \$1,030 to \$1,080; the reduction and optimization of the raise cycle time; the installation of a sixth and seventh Alimak; the grades processed at Wassa; and production guidance and cash operating cost guidance for 2018. 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. Investors are cautioned that forward-looking statements and information are inherently uncertain and involve risks, assumptions and uncertainties that could cause actual facts to differ

materially. There can be no assurance that future developments affecting the Company will be those anticipated by management. Please refer to the discussion of these and other factors in Management's Discussion and Analysis of financial conditions and results of operations for the year ended December 31, 2017. Additional and/or updated factors is included in our annual information form for the year ended December 31, 2017 which is filed on SEDAR at www.sedar.com. The forecasts contained in this press release constitute management's current estimates, as of the date of this press release, with respect to the matters covered thereby. We expect that these estimates will change as new information is received. While we may elect to update these estimates at any time, we do not undertake any estimate at any particular time or in response to any particular event.

View original content:<http://www.prnewswire.com/news-releases/golden-star-provides-an-update-on-operations-at-the-prestea-complex-and-full-year-2018-guidance-300715770.html>

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