

NEWS RELEASE

Golden Star Announces Appointment of Executive Vice President & Head of Sustainability

Toronto, ON – November 25, 2019 - Golden Star Resources Ltd. (NYSE American: GSS; TSX: GSC; GSE: GSR) ("Golden Star" or the "Company") announced today that Philipa Varris has been appointed Executive Vice President, Head of Sustainability of Golden Star. Philipa currently holds the role of Vice President, Corporate Responsibility with the Company and will join the executive team to be located in London, effective January 1, 2020.

Following health, safety, environment and communities (HSEC) leadership roles in Australia and Papua New Guinea, Philipa has spent nine years in Golden Star's business units in Ghana and brings a wealth of institutional knowledge and specialist technical expertise to the executive team.

Andrew Wray, Chief Executive Officer, commented:

"Corporate responsibility and its component environment, social and governance (ESG) elements are critical to maintaining our social license and integral to the success of our business. Golden Star has been recognized as an industry leader in environmental and social responsibility and the appointment of Philipa to the executive team recognizes the ongoing leadership and differentiation that Golden Star intends to make in this arena for enhanced value, risk management and sustainability. I look forward to Philipa's, and the wider corporate responsibility team's, support as we further develop our business."

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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 underground mines in Ghana, West Africa. Listed on the NYSE American, the Toronto Stock Exchange and the Ghana Stock Exchange, Golden Star is focused on delivering strong margins and free cash flow from its two high-grade underground mines. Gold production guidance for 2019 is 190,000 – 205,000 ounces at a cash operating cost per ounce of \$800-\$850¹. 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.

Source: Golden Star Resources Ltd.

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: Philipa Varris joining the Company's executive team in London effective January 1, 2020 and forecasted gold production and cash operating cost per ounce for 2019. 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. 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. 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; risks related to joint venture operations; actual results of current exploration activities; environmental risks; future prices of gold; possible variations in Mineral Reserves, grade or recovery rates; mine development and operating risks; 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 and risks related to indebtedness and the service of such indebtedness. Although Golden Star has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information and statements, there may be other factors that cause results not to be as anticipated, estimated or intended. 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, 2018 and in our annual information form for the year ended December 31, 2018 as 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.

Non-GAAP Financial Measures¹

In this News Release, we use the term "cash operating cost per ounce". "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 or 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.

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 heading "Non-GAAP Financial Measures" in the Company's Management Discussion and Analysis of Financial Condition and Results of Operations for the three months ended June 30, 2019, which are available at www.sedar.com.