

**GOLDEN STAR REPORTS DRILLING RESULTS FROM
WASSA UNDERGROUND GOLD MINE****Significant intercepts include 10.4 m grading 11.9 g/t Au and
16.2 m grading 6.7 g/t Au**

Toronto, ON – December 17, 2018 – Golden Star Resources Ltd. (NYSE American: GSS; TSX: GSC; GSE: GSR) (“Golden Star” or the “Company”) is pleased to report further step out and infill drilling results from its Wassa Underground Gold Mine (“Wassa Underground”) in Ghana, demonstrating the extension and robustness of the deposit.

HIGHLIGHTS¹

- Positive assay results received from five new infill and step-out diamond drill (“DD”) holes at Wassa Underground
- Step out drilling confirms gold mineralization remains open at least 200 metres (“m”) to the South of existing Inferred Mineral Resources
- Infill drilling confirms continuity of width and grade of mineralized areas
- New foot wall zone of gold mineralization has been identified
- Significant intercepts include:
 - 10.4 m grading 11.9 g/t (“grams per tonne”) of gold (“Au”) from 774.5 m, including 6.4 m grading 16.2 g/t Au in hole BS18DD393M
 - 16.2 m grading 6.7 g/t Au from 944.0 m in hole BS18DD392D1 (drilled depth from wedge)
 - 15.6 m grading 4.0 g/t Au from 256.7 m including 5.2 m grading 6.7 g/t Au in hole BS18DD391D2 (drilled depths from wedge)
- These results are expected to further increase Wassa's Inferred Mineral Resources and upgrade a portion of them to Indicated Mineral Resources
- Conceptual mining studies are advancing in conjunction with the new drilling in preparation for a Preliminary Economic Assessment in 2019

Notes

1. All widths quoted in this press release are estimated true widths

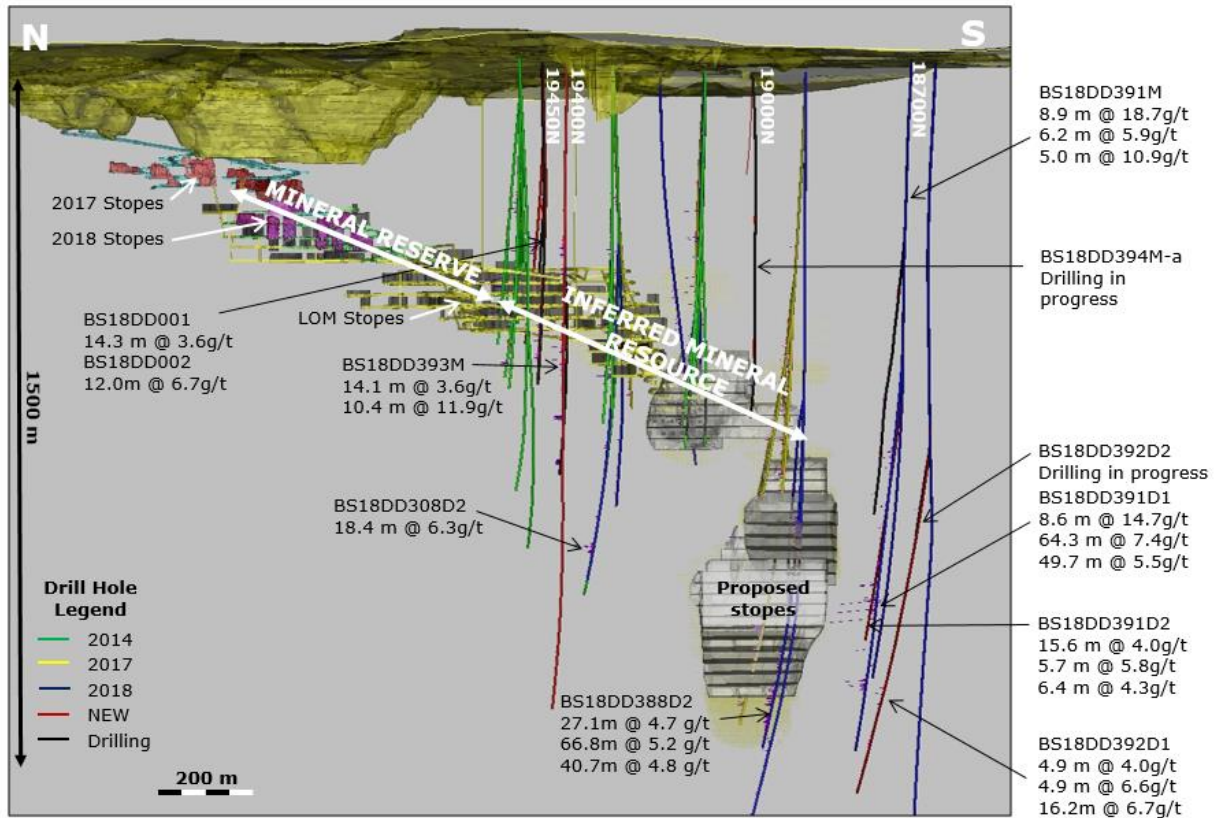
Sam Coetzer, President and Chief Executive Officer of Golden Star, commented:

“I am encouraged by the latest positive results from the Wassa Underground drilling program. Our objective is to ‘fill the mill’ through defining additional Mineral Resources and utilizing the Wassa processing plant’s excess capacity and these latest results suggest that we are on track to achieve this goal. The step out drilling results continue to confirm the extension of the Wassa Underground deposit to the south and the deposit remains open down plunge, which suggests further exploration upside potential. The infill drilling results also confirm the previously recorded grades and widths of the deposit and we expect to upgrade a portion of Wassa’s Inferred Mineral Resources into the Indicated category. With our larger exploration budget as a result of the funds received from the investment by our new strategic investor, we are focused on demonstrating the potential of this exceptional deposit and delivering compelling value for our shareholders.”

WASSA UNDERGROUND DRILLING RESULTS

Golden Star has received assay results for five new DD holes at Wassa Underground, comprising approximately 4,800 m of drilling from surface. The two step out holes further tested the extents of the F Shoot mineralized corridor at depth, both to the North and South. The three infill holes targeted the B Shoot's Inferred Mineral Resources with the objective of converting them into the Indicated Mineral Resource category.

Wassa Underground: Isometric view looking East



Notes

All widths quoted in this diagram are estimated true widths

Further sections showing the location of the drill holes are available at: <http://www.gsr.com/operations/wassa/wassa-main>

Wassa Underground step out drilling results¹

The results of five holes on the 18700 N step out fence have now been received, including the two new holes reported today. Two additional holes are underway and one final hole is planned.

The two new holes, BS18DD391D2 and BS18DD392D1, are both 'daughter' holes drilled on the 18700 N drill fence, approximately 200 m from the extent of Wassa Underground's current Inferred Mineral Resources. The mother holes, BS18DD391M and BS18DD392M, were drilled from surface and a wedge was established at 721 m (approximately 600 m

from surface) and 838 m (approximately 750 m from surface) respectively. The daughter holes were then drilled at various angles from the mother hole and their objective was to test above and below the high grade mineralization intersected in hole BSDD391D1 (64.3 m grading 7.4 g/t Au from 577.0 m and 49.7 m grading 5.5 g/t from 792.0 m)². The results received to date confirm the extension of the deposit down plunge to the south.

Notes

1. All widths quoted in this press release are estimated true widths.
2. See press release entitled, 'Golden Star Extends Wassa Underground Deposit A Further 200 Metres To The South', dated September 20, 2018

Wassa Underground infill drilling results

The results of three new infill holes are also reported today, which had the objective of converting Inferred Mineral Resources in the B Shoot zone to the Indicated Mineral Resource category.

Two of the six planned holes on drill fence 19450 N, which is located 50 m south of the current Mineral Reserves, have been completed. These holes have the objective of converting Inferred Mineral Resources to the Indicated category by reducing the drill spacing to 50 m x 50 m.

All of the infill drilling conducted in the 2018 drilling program to date has confirmed the widths and grades of the main B Shoot gold mineralization, in addition to extending this zone up and down dip. This drilling has also defined hanging wall and foot wall zones of gold mineralization, which are of sufficient thickness and grade to be amenable to underground mining. Golden Star intends to include these holes in the 2019 Mineral Resource model update for Wassa Underground and it is expected to deliver an increase in all categories of Mineral Resources in this area.

Significant intercepts

The full set of drilling results released today is listed in Appendix A, including the significant intercepts set out below.

HOLE ID	Azimuth (°)	Dip (°)	From (m)	To (m)	Drilled Width (m)	Estimated True Width (m)	Grade Au (g/t)	Drilling Objective	Target
BS18DD393M	92.7	-75.1	374.1	422.2	48.1	38.9	2.9	Infill	B Shoot
Including	91.6	-74.8	397.5	403.5	6.0	4.9	5.2	Infill	B Shoot
Including	91.0	-74.9	414.0	422.2	8.2	6.6	4.6	Infill	B Shoot
BS18DD393M	94.7	-75.3	620.0	637.5	17.5	14.1	3.6	Infill	B Shoot
BS18DD393M	93.7	-75.7	648.9	663.9	15.0	12.0	3.8	Infill	B Shoot
BS18DD393M	90.4	-75.8	774.5	787.5	13.0	10.4	11.9	Infill	B Shoot
Including	90.3	-75.7	776.5	784.5	8.0	6.4	16.2	Infill	B Shoot
BS18DD392D1	81.6	-49.6	764.0	771.0	7.0	4.9	4.0	Step Out	F Shoot
BS18DD392D1	81.6	-49.6	784.0	791.0	7.0	4.9	6.6	Step Out	F Shoot
BS18DD392D1	84.7	-49.2	944.0	967.0	23.0	16.2	6.7	Step Out	F Shoot
BS18DD391D2	86.4	-55.4	256.7	281.7	25.0	15.6	4.0	Step Out	F Shoot
Including	86.4	-55.4	267.4	275.7	8.3	5.2	6.7	Step Out	F Shoot

BS18DD391D2	86.7	-55.1	286.7	295.7	9.0	5.7	5.8	Step Out	F Shoot
BS18DD391D2	86.7	-54.1	315.0	325.0	10.0	6.4	4.3	Step Out	F Shoot
BS18DD391D2	88.1	-52.1	430.0	438.0	8.0	5.3	4.6	Step Out	F Shoot
BS18DD002	78.2	-67.4	447.0	455.0	8.0	5.6	4.4	Infill	B Shoot
BS18DD002	75.4	-66.3	587.0	603.8	16.8	12.0	6.7	Infill	B Shoot
Including	75.4	-66.3	592.4	599.8	7.4	5.3	11.3	Infill	B Shoot
BS18DD001	90.1	-71.9	314.0	322.0	8.0	5.2	3.6	Infill	B Shoot
BS18DD001	84.0	-72.6	427.1	431.3	4.2	2.7	4.3	Infill	B Shoot
BS18DD001	83.2	-72.2	579.2	584.0	4.8	3.1	12.6	Infill	B Shoot
BS18DD001	84.4	-73.2	589.0	605.0	16.0	10.0	3.3	Infill	B Shoot
BS18DD001	81.4	-73.2	621.4	634.4	13.0	8.1	4.8	Infill	B Shoot
BS18DD001	80.4	-73.2	646.2	669.0	22.8	14.3	3.6	Infill	B Shoot
BS18DD001	80.4	-73.2	674.0	679.0	5.0	3.1	5.1	Infill	B Shoot
BS18DD001	80.4	-73.2	690.0	693.0	3.0	1.9	4.1	Infill	B Shoot

Wassa Underground's current drilling program and next steps

There are currently five drill rigs in operation at Wassa Underground, two rigs conducting step out drilling (testing the extents of the F Shoot mineralized zones on Section 18700 N) and three rigs conducting infill drilling (for the purpose of converting B Shoot Inferred Mineral Resources to Indicated Mineral Resources). Golden Star intends to release further drilling results from Wassa Underground in the first quarter of 2019.

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

For further information, please visit www.gsr.com or contact:

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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.

APPENDIX A

Wassa Underground step out and infill drilling results

HOLE ID	Azimuth (°)	Dip (°)	From (m)	To (m)	Drilled Width (m)	~True Width (m)	Grade Au (g/t)	Drilling Objective	Target
BS18DD001	90.1	-71.9	314.0	322.0	8.0	5.2	3.6	Infill	B Shoot
BS18DD001	84.0	-72.6	427.1	431.3	4.2	2.7	4.3	Infill	B Shoot
BS18DD001	83.2	-72.2	579.2	584.0	4.8	3.1	12.6	Infill	B Shoot
BS18DD001	84.4	-73.2	589.0	605.0	16.0	10.0	3.3	Infill	B Shoot
Including	84.4	-73.2	593.0	597.2	4.2	2.6	7.8	Infill	B Shoot
BS18DD001	81.4	-73.2	621.4	634.4	13.0	8.1	4.8	Infill	B Shoot
BS18DD001	80.4	-73.2	646.2	669.0	22.8	14.3	3.6	Infill	B Shoot
BS18DD001	80.4	-73.2	674.0	679.0	5.0	3.1	5.1	Infill	B Shoot
BS18DD001	80.4	-73.2	690.0	693.0	3.0	1.9	4.1	Infill	B Shoot
BS18DD002	78.1	-66.1	413.2	425.2	12.0	8.6	2.9	Infill	B Shoot
Including	78.1	-66.1	421.2	425.2	4.0	2.9	5.1	Infill	B Shoot
BS18DD002	78.7	-66.3	429.2	434.2	5.0	3.6	5.2	Infill	B Shoot
BS18DD002	78.2	-67.4	447.0	455.0	8.0	5.6	4.4	Infill	B Shoot
BS18DD002	75.4	-66.3	587.0	603.8	16.8	12.0	6.7	Infill	B Shoot
Including	75.4	-66.3	592.4	599.8	7.4	5.3	11.3	Infill	B Shoot
BS18DD391D2	86.2	-55.5	231.0	240.0	9.0	5.6	2.6	Step Out	F Shoot
BS18DD391D2	86.4	-55.4	256.7	281.7	25.0	15.6	4.0	Step Out	F Shoot
Including	86.4	-55.4	267.4	275.7	8.3	5.2	6.7	Step Out	F Shoot
BS18DD391D2	86.7	-55.1	286.7	295.7	9.0	5.7	5.8	Step Out	F Shoot
BS18DD391D2	86.9	-54.7	302.0	308.0	6.0	3.8	2.5	Step Out	F Shoot
BS18DD391D2	86.7	-54.1	315.0	325.0	10.0	6.4	4.3	Step Out	F Shoot
BS18DD391D2	88.1	-52.1	430.0	438.0	8.0	5.3	4.6	Step Out	F Shoot
BS18DD391D2	88.2	-51.2	492.0	516.5	24.5	16.6	1.7	Step Out	F Shoot
BS18DD391D2	87.1	-50	535.0	553.0	18.0	12.5	1.8	Step Out	F Shoot
Including	87.1	-50	546.0	550.0	4.0	2.8	3.3	Step Out	F Shoot
Including	87.1	-50	681.0	685.0	4.0	2.8	3.1	Step Out	F Shoot
BS18DD391D2	86.8	-50.2	681.0	694.7	13.7	9.5	1.6	Step Out	F Shoot
BS18DD392D1	82.8	-49.6	755.0	760.0	5.0	3.5	1.2	Step Out	F Shoot
BS18DD392D1	81.6	-49.6	764.0	771.0	7.0	4.9	4.0	Step Out	F Shoot
BS18DD392D1	81.6	-49.6	784.0	791.0	7.0	4.9	6.6	Step Out	F Shoot
BS18DD392D1	81.5	-49.3	819.0	823.0	4.0	2.8	4.6	Step Out	F Shoot
BS18DD392D1	84.7	-49.2	944	967	23	16.2	6.7	Step Out	F Shoot
BS18DD392D1	81.2	-49.3	1041	1049	8	5.6	3.0	Step Out	F Shoot
BS18DD392D1	80.7	-49.5	1072	1080	8	5.6	2.3	Step Out	F Shoot
BS18DD393M	92.7	-75.1	374.1	422.2	48.1	38.9	2.9	Infill	B Shoot
Including	91.6	-74.8	397.5	403.5	6.0	4.9	5.2	Infill	B Shoot
Including	91.0	-74.9	414.0	422.2	8.2	6.6	4.6	Infill	B Shoot

BS18DD393M	89.6	-75.1	443.7	459.7	16.0	12.9	2.6	Infill	B Shoot
BS18DD393M	91.9	-75.7	594.0	607.1	13.1	10.5	2.3	Infill	B Shoot
BS18DD393M	94.7	-75.3	620.0	637.5	17.5	14.1	3.6	Infill	B Shoot
BS18DD393M	93.7	-75.7	648.9	663.9	15.0	12.0	3.8	Infill	B Shoot
BS18DD393M	91.9	-76.2	667.9	677.9	10.0	8.0	2.2	Infill	B Shoot
BS18DD393M	93.2	-76.1	685.3	691.3	6.0	4.8	2.3	Infill	B Shoot
BS18DD393M	92.0	-76.1	716.0	721.0	5.0	4.0	3.3	Infill	B Shoot
BS18DD393M	90.4	-75.8	774.5	787.5	13.0	10.4	11.9	Infill	B Shoot
Including	90.3	-75.7	776.5	784.5	8.0	6.4	16.2	Infill	B Shoot

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 expected increase of Wassa's Inferred Mineral Resources; the expected upgrade of a portion of Wassa's Inferred Mineral Resources into Indicated Mineral Resources; the planning of a final step-out drilling hole; the intention to include certain drilling holes from the in the main B Shoot gold mineralization in the 2019 Mineral Resource model update for Wassa Underground and the expectation to deliver an increase in all categories of Mineral Resources in such area; the upside potential on the size of the Wassa deposit; the intention to release further drilling results from Wassa Underground in the first quarter of 2019; 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 will be 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.

Technical Information

The technical contents of this press release have been reviewed and approved by S. Mitchel Wasel, BSc Geology, a Qualified Person pursuant to National Instrument 43-101. Mr. Wasel is Vice President of Exploration for Golden Star and an active member and Registered Chartered Professional of the Australasian Institute of Mining and Metallurgy.

The results for Wassa Underground stated herein are based on the analysis of saw-split HQ/NQ diamond half core or a three kilogram single stage riffle split of a nominal 25 to 30 kg Reverse Circulation chip sample which has been sampled over nominal one meter intervals (adjusted where necessary for mineralized structures). Sample preparation and analyses have been carried out at SGS or Intertek Laboratories in Tarkwa, which are independent from Golden Star, using a 1,000 gram slurry of sample and tap water which is prepared and subjected to an accelerated cyanide leach (LEACHWELL). The sample is then rolled for twelve hours before being allowed to settle. An aliquot of solution is then taken, gold extracted into Di-iso Butyl Keytone (DiBK), and determined by flame Atomic Absorption Spectrophotometry (AAS). Detection Limit is 0.01 ppm.

All analytical work is subject to a systematic and rigorous Quality Assurance-Quality Control (QA-QC). At least 5% of samples are certified standards and the accuracy of the analysis is confirmed to be acceptable from comparison of the recommended and actual "standards" results. The remaining half core is stored on site for future inspection and detailed logging, to provide valuable information on mineralogy, structure, alteration patterns and the controls on gold mineralization.

Source: Golden Star Resources Ltd.