

Golden Star Resources Ltd.: Continued Exploration Drilling at Wassa Yields Positive Results

Toronto, ON – April 3, 2014 – Golden Star Resources Ltd. (“Golden Star” or the “Company”) today provides an update on exploration activities at its Wassa gold mine in Ghana. Drilling widths in this press release are estimated true widths in meters (“m”) and grades are grams of gold per tonne (“g/t Au”).

Highlights of this announcement are as follows:

- Step out drilling confirms that high grade gold mineralization at Wassa continues down plunge, with high grade mineralization 450 m south of current Wassa ore body
- Significant grades and widths intercepted 200 m south of last step out drill fence
 - BSDD305D2 - 48.0 m grading 3.7 g/t Au
 - BSDD305M - 12.4 m grading 6.5 g/t Au
- Infill drilling shows wide zones of significant grades between existing high grade drill intercepts
 - BSDD308M - 23.1 m grading 9.6 g/t Au
 - BSDD301 - 19.2 m grading 11.4 g/t Au
 - BSDD304 - 49.2 m grading 3.9 g/t Au
- Drilling is progressing on schedule with the current program expected to be completed by mid-2014
- Contract for preliminary economic assessment of underground mining at Wassa awarded to SRK Consulting and work started

Sam Coetzer, President and CEO of Golden Star commented:

“The Wassa drilling program continues to return positive results confirming both higher grades beneath the current Main pit and the extension of this high grade mineralization down plunge to the south. Since our last update we have drilled a further fence of step-out holes 200 m south of the last fence. Results confirm that mineralization plunges in that direction and remains open. Additionally, infill drilling continues to confirm continuity, grade and thickness of this mineralization. The Company will continue testing the extent of this growing target to determine its potential. A PEA of an underground operation at Wassa, to be developed alongside the ongoing open pit operation, has commenced and is expected to be completed during the second quarter of 2014.”

The Wassa gold mine is in the western region of Ghana. It has a carbon-in-leach processing plant with a rated capacity of 2.7 million tonnes per annum. There are currently two operational pits at feeding the Wassa processing plant – the Wassa Main pit and the Father Brown pit. In 2014, mining is planned to be completed in the Father Brown pit by the second quarter; where after mining will be from the Wassa Main pit only.

The current drilling program at Wassa is focused on two goals – approximately 20,000 m of infill drilling of the current resource to further define grades and continuity and step out drilling on 200 meter drill fences to the south to determine the extension of the high grade mineralization below the current Wassa Main pit design.

Drilling continued in the first quarter of 2014 with two drill rigs working on step out directional drilling and two drill rigs concentrating on infill drilling beneath the Wassa Main pit. Drilling results received for the first quarter were from 15 holes totaling 8,828 m with an additional six holes for 3,290 m, either still being drilled or pending assays. Full plans, and sections from the drilling program are available at <http://media3.marketwire.com/docs/gsr43b.pdf>.

Step out Drilling

Step out drilling has demonstrated success in extending the high grade mineralized zone 450 m down plunge with significant widths and grades being intercepted on cross section 19100 N. Cross section 19100 N is located 200 m south of the previously reported step out drilling on 19300N (please see the Company's press release dated January 31, 2014).

Significant results from the 19100 N step out drilling include hole BSDD305M, which intersected 12.4 m grading 6.5 g/t Au from 766.8 m drilled depth and hole BSDD305D2, which intersected 48.0 m grading 3.7 g/t Au from 475.8 m depth.

Further drilling was also conducted on the previous step out fence, section 19300 N, to follow up on the intersection in hole BSDD295M (20.3 m at 3.5 g/t Au from 649.4 m drilled depth). Hole BSDD308M is approximately 100 m up plunge from BSDD295M and intersected 23.1 m grading 9.6 g/t Au. Hole BSDD308D1, located between these two holes, intersected an upper zone of 13.6 m grading 6.0 g/t Au and a lower zone of 13.2 m grading 4.5 g/t Au. Additional drilling on both step out fences is ongoing.

Infill Drilling

Infill drilling beneath the Wassa Main pit continued to confirm wide widths of significant gold grades including BSDD301, which intersected 19.2 m grading 11.4 g/t Au. BSDD301 was drilled approximately 70 m up dip of hole BSDD256 (52.9 m grading 4.3 g/t Au) located on section 19600 N. Drill hole BSDD304 on section 19550N intersected 49.2 m grading 3.9 g/t Au. The intersection was wider and of higher grade than that of hole BSDD291 (18.7m grading 2.7g/t Au) located approximately 30 m up dip on the same section.

Significant Drill Intersections

Significant results from both infill and step out drilling from the first quarter of this year are summarized in the table below.

Hole ID	E (m)	N (m)	Elev (m)	Azim (°)	Dip (°)	From (m)	To (m)	Drilled Width (m)	~True Width (m)	Gold Grade g/t Au
BSDD301	39864	19600	1026	90	-66	417.1	438.1	21.0	19.2	11.4
BSDD301		Including		90	-66	431.1	437.1	6.0	5.5	28.3
BSDD301	39864	19600	1026	90	-66	446.4	458.8	12.4	11.3	4.8
BSDD304	39840	19549	1032	90	-72	501.1	552.8	51.7	49.2	3.9
BSDD304		Including		90	-72	531.8	543.8	12.0	11.4	9.4
BSDD305D1	39993	19100	687	90	-80	318.4	335.8	17.4	17.1	2.4
BSDD305D2	39972	19100	786	90	-79	475.6	524.6	49.0	48.0	3.7
BSDD305M	39919	19100	1029	90	-77	766.8	779.2	12.4	12.1	6.5
BSDD306	39697	19977	1038	90	-54	331.6	345.8	14.2	11.5	2.4
BSDD306	39697	19977	1038	90	-54	435.4	472.4	37.0	29.9	17.4
BSDD306		Including		90	-54	454.4	460.4	6.0	4.9	39.3
BSDD307	39715	19900	1038	90	-66	376.7	393.7	17.0	15.5	2.1
BSDD307	39715	19900	1038	90	-66	452.4	464.4	12.0	11.0	4.0
BSDD308D1	39933	19300	805	90	-72	320.3	334.6	14.3	13.6	6.0
BSDD308D1	39933	19300	805	90	-72	397.3	411.2	13.9	13.2	4.5
BSDD308M	39842	19300	1039	90	-68	594.4	619.3	24.9	23.1	9.6
BSDD310	39769	19922	1030	90	-56	386.0	409.0	23.0	19.1	5.6

Holes of the same number but denoted M or D have been drilled from the same collar.

Wassa Underground PEA

In early 2014, SRK Consulting (UK) Ltd (“SRK Consulting”) was awarded the contract to prepare a preliminary economic assessment (“PEA”) to determine the economic viability of an underground operation beneath the Wassa Main pit and in conjunction with ongoing mining from the open pit. Site visits have been completed and SRK Consulting is making progress on the stope optimization, mine design and mine scheduling tasks. It is expected that the PEA will be completed and published on SEDAR during the second quarter of 2014.

Company Profile:

Golden Star is an established gold mining company that holds a 90% interest in both the Bogoso and Wassa open-pit gold mines in Ghana. Golden Star also has a 90% interest in the Prestea Underground mine in Ghana, which is currently undergoing permitting subsequent to a successful feasibility study being completed in June 2013. In 2013, Golden Star sold 331,000 ounces of gold and the Company expects to produce 295,000 to 320,000 ounces of gold in 2014.

For further information on the Company, please visit www.gsr.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 other applicable securities laws. Such statements include: the timing for the completion of the current drilling program, timing for completion of the PEA, timing for the completion of the mining at Father Brown, ; expectations regarding the interpretation of drilling results; the consideration of underground mining at Wassa and the Company’s expected production in 2014. Investors are cautioned that forward-looking statements are inherently uncertain and involve risks and uncertainties. Factors that could cause actual results to differ materially include timing of and unexpected events during exploration; variations in ore grade; variations in relative amounts of refractory, non-refractory and transition ores; technical or permitting issues; fluctuations in gold price and costs; availability of capital and/or external financing on acceptable terms; changes in U.S. and Canadian securities markets; and general economic conditions. There can be no assurance that future developments affecting the Company will be those anticipated by management. Please refer to the discussion of these risks and other factors in the Company’s Annual Information Form for the year ended December 31, 2013 and other filings of the Company with the United States Securities and Exchange Commission and the applicable Canadian securities regulatory authorities. 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 to update any estimate at any particular time or in response to any particular event.

Technical Information and Quality Control:

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 quoted 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 Laboratories in Tarkwa using 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 Ketone (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.

Additional information on earlier drilling results and Mineral Reserve and Mineral Resource estimates at Wassa are available in the Company's National Instrument 43-101 compliant Technical Report titled "NI 43-101 Technical Report on Mineral Resources and Mineral Reserves Golden Star Resources Ltd, Wassa Gold Mine, Ghana, Effective Date 31st December 2012".

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