
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 February 2016

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): _____

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: February 4, 2016

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>
99.1	Press Release dated February 4, 2016 - Golden Star Announces Results of F Shoot Drilling at Wassa Underground

Golden Star Announces Results of F Shoot Drilling at Wassa Underground

TORONTO, Feb. 4, 2016 /CNW/ - Golden Star today provided an update on exploration activities at its Wassa gold mine in Ghana. Full drill results, plans, and sections are available on the Company's website at www.gsr.com/Operations/Wassa.asp.

Highlights of Drill Program

- FSDD010 – 22.0 meters ("m") grading 3.5 grams per tonne ("g/t") gold
- FSSDD011 – 8.4 m grading 5.6 g/t

The Wassa Underground has advanced significantly since development began in July 2015, from a single orebody (the B Shoot) to adding the F Shoot which Golden Star believes to be a parallel zone to the main mining stopes along the B Shoot structure. The underground economic potential of the F Shoot was first recognized in 2014 when stope optimizations were conducted for the Company's Preliminary Economic Assessment of the Wassa Underground. The initial resource was small and only consisted of a few stopes which were defined by a handful of holes; it was therefore decided to further test this target in early 2015 utilizing surface drill rigs. The results of this drilling were used to update the Wassa Underground resource models used for the Feasibility Study on the Wassa Underground completed in 2015. The Company plans to publish its 2015 year-end mineral reserves and resources statements later in the quarter which will include additions for the F Shoot target that were delineated during 2015 drilling. The recent drilling programs have successfully extended the F Shoot target north of the current reserve and the Company plans to assess the full potential of the F Shoot, which remains open down plunge to the south.

The Main and Ventilation declines have reached a position where access to the F Shoot mineralization is being developed. The twin declines will continue down plunge to access the B Shoot stope areas. The declines have advanced approximately 1060 meters in total since development start-up in July 2015.

Sam Coetzer, President and CEO of Golden Star, commented:

" These drill results, testing the extension of the F Shoot mineralization north of the planned mining stopes, are very encouraging. We expect future F Shoot drilling programs to continue to add ounces to the Wassa Underground resources and reserves. These drilling results indicate grades and thicknesses that could be mined underground and the location of these zones allows quick access to this area, potentially adding ounces to our near term production . "

Wassa Drilling

The Wassa Underground development has advanced significantly and is on schedule to gain access to the first F Shoot stopes in the second quarter of 2016. During the development of the twin declines, the northern projection of the F Shoot structure was intersected along 24 meters of development in both drives. The presence of this zone in the underground development and intersections of higher grade mineralization in existing drill holes supported further drilling to test the continuity and geometry of the northern extension of the F Shoot structure. Four holes were collared from the bottom of the Starter Pit, targeting the projection of the F Shoot, with all four holes intersecting the zone.

Significant intersections included FSDD010, which intersected an estimated true width of mineralization of 22 meters grading 3.5 g/t and was inclusive of a higher grade zone of 3.3 meters which yielded a grade of 9.2 g/t. This particular hole was drilled to confirm the grades intersected in STDD018, 20.6 meters grading 2.7 g/t which is located approximately 10 meters to the south of FSDD010.

The F Shoot is characterized by up to three parallel zones, FSDD010 intersected what has been interpreted to be the middle zone where FSDD011 has intersected the upper and lower zones. The upper zone in FSDD011, 8.4 meters grading 5.6 g/t, including 3.2 meters at 12.7 g/t, was intersected 15 meters up dip from hole STDD012, which generated an intercept of 4.6 meters at a grade of 3.0 g/t. The lower zone in FSDD011, 6.5 meters grading 3.8 g/t, extended the gold mineralization approximately 30 meters down dip of STDD019 which intersected 6.1 meters at a grade of 5.8 g/t.

The results from this phase of drilling have shown that grades and thicknesses amenable to underground mining exist north of the current F Shoot designed mining stopes, and therefore additional drilling is being planned from both surface and underground to better delineate the higher grade portions of the structure. The drilling program is expected to begin in the first quarter of 2016.

Wassa F Shoot North Extension significant drill hole results:

Hole ID	Easting (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	From (m)	To (m)	Drilled Width (m)	~ True Width (m)	Gold Grade g/t
FSDD009A	40056	20363	894	97	-60	105.5	111.6	6.1	5.4	2.9
FSDD010	40056	20364	892	67	-51	90.0	107.7	23.3	22.0	3.5
Including				67	-51	93.7	97.2	3.5	3.3	9.2
FSDD011	40056	20364	892	103	-63	78.6	88.4	9.8	8.4	5.6
Including				103	-63	82.6	86.4	3.8	3.2	12.7
FSDD011	40056	20364	892	94	-66	186.4	194.2	7.8	6.5	3.8
FSDD012	40056	20364	892	67	-41	90.1	101.0	10.9	10.8	1.9

Company Profile:

Golden Star is an established gold mining company that holds a 90% interest in the Wassa and Prestea gold mines in Ghana. As of December 31, 2014 Golden Star had Mineral Reserves of 1.9 million ounces and 6.6 million ounces in Measured and Indicated Mineral Resources. The Company is developing two brownfield projects at Wassa and Prestea mines which are expected to transform Golden Star into a lower cost producer. As such, the Company offers investors leveraged exposure to the gold price in a stable African mining jurisdiction with significant development upside potential.

For further information regarding Golden Star's Mineral Reserves and Mineral Resources, see Golden Star's Annual Information Form for the year ended December 31, 2014, available on SEDAR at www.sedar.com.

Cautionary note 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: expectations derived from the interpretation of drilling results and the belief that the F Shoot is a parallel zone to the B Shoot; the timing for releasing mineral reserves and resources statements and the inclusion of F Shoot drilling results therein; the impact of future F Shoot drilling programs on Wassa Underground mineral resources and reserves; the ability to mine and access F Shoot zone grades and thicknesses by way of underground mining; the F Shoot zone adding ounces to near term production; and plans for additional drilling of F Shoot and the timing thereof. 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, 2014 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

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 Laboratories in Tarkwa 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.

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 a Feasibility Study of the Wassa Open Pit Mine and Underground Project in Ghana" with an effective date of March 26, 2015.

SOURCE Golden Star Resources Ltd.

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For further information: Please visit www.gsr.com or contact: Lisa Doddridge, Vice President Investor Relations, +1 416 583 3800, investor@gsr.com

CO: Golden Star Resources Ltd.

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