Maya Gold & Silver Reports Positive NI 43-101 Preliminary Economic Assessment Results at the Zgounder Silver Mine in Morocco

05.02.2018 | Marketwired

Project Indicates After-tax IRR of 118% with an NPV6.5% of US $200.2 Million

MONTREAL, QUEBEC--(Marketwired - Feb 5, 2018) - Maya Gold & Silver Inc. ("Maya" or the "Corporation") (TSX VENTURE:MYA) is pleased to announce the results of an independent NI 43-101 Preliminary Economic Assessment S ("PEA") on its Zgounder Silver Mine in Morocco. The mine is owned by Zgounder Millenium Silver Mining S.A. (ZMSM) 85% owned joint venture with l'Office National des Hydrocarbures et des Mines of the Kingdom of Morocco (15%). The was prepared by GoldMinds Geoservices Inc. from Québec City (GMG) and is effective as of January 30th 2018 and re mineral resource estimates reported on January 8th 2018. The details of the study NI 43-101 technical report will be ava SEDAR and Maya's website within 45 days.

Maya started the first diamond-drilling program at Zgounder in April 2015 and both the diamond drilling programs of 201 allowed Maya to increase the mineral resource estimates of Zgounder. The milling operations began in July 2014 and M announced the first silver pour in August 2014 with the production of the 20 silver ingots. Maya has produced a total of ounces of silver at its Zgounder mine as of December 2017.

Highlights of the Zgounder Silver Mine PEA Study:

- A project life of 10 years with the current resources up to 2027;
- ZMSM Internal Rate of Return of 134% and 118% after taxes;
- ZMSM pre-tax Net Present Value of US$215.1M (discounted at 6.5%) at variable silver price from US$17.50 to U ounce with yearly average of US$20.50 per ounce;
- ZMSM after-tax Net Present Value of US$200.2M (discounted at 6.5%) at variable silver price from USD$17.50 to USD per ounce with average of US$20.5 per ounce;
- The extraction of 3.974Mt at 292 g/t Ag for silver production of 33.682M ounces;
- Milling to increase to 500 tpd in 2018 then up to 2020 followed by a 2000 tpd in 2021;
- Production increase to 1.354M ounces per year up to 4.762M ounces of silver per year;
- Total operating cost of US $63.64 per tonne (averaged over the expected mine's life);
- Capex and sustaining capital requirements of US $46.9M
- MAYA Internal Rate of Return of 121% with an NPV of US$209.86M;
- The Zgounder PEA was prepared as combination of underground extraction, open pit extraction of mineralized m well as reprocessing of old tailings based on the mineral resources reported on January 8, 2018.

Click here for the view of the proposed open pit.

Click here to view the proposed 2000 tpd mill configuration.

Click here for the longitudinal view of mineralized zones with main mine development.

Cautionary Statements

The PEA is preliminary in nature and includes the use of inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral Thus, there is no certainty that the results stated in the PEA will be realized. Actual results may vary, perhaps materially resources that are not mineral reserves do not have demonstrated economic viability. Additional exploration work is req increase the quality of the mineral resources.

Message From the President

Noureddine Mokaddem, President of Maya, stated: *"These positive results of the PEA is an important milestone reached at the Zgounder silver mine. We are very excited to see such high NPV, a break-even point before taxes of US$10.40/ounce Ag, well positioning Zgounder to face severe commodity fluctuations. The financial results outlined in the PEA are highly encouraging, indicating the economic viability of the known resources and supports our belief that Zgounder is a robust project, and has the upward potential in inferred resources to grow into an important silver producer. These results will help Maya continue to scale and achieve its aspirations."*

Mineral Resource Used in the PEA

The NI 43-101 PEA Study was based on the undiluted mineral resource estimate prepared by GMG previously reported by Maya on January 8th, 2018. The table below summarizes the mineral resource estimated by GMG combining forty-eight (48) envelopes and the old tailings.

A cut-off grade of 61.89 g/t was applied for the in-pit mineral resources and a cut-off grade of 125 g/t was applied for the underground mineral resources (just under the pit surface).

Total resource estimate at Zgounder silver mine (rounded numbers).

Measured			Indicated			Inferred			Measured + Indicated		
Tonnes	Ag g/t	Ounces	Tonnes	Ag g/t	Ounces	Tonnes	Ag g/t	Ounces	Tonnes	Ag g/t	Ounces
242,000	338	2,633,000	748,000	308	7,395,000	3,437,000	256	28,338,000	990,000	315	10,028,000

In-pit resource estimate at Zgounder silver mine (rounded numbers).

Measured			Indicated			Inferred			Measured + Indicated		
Tonnes	Ag g/t	Ounces	Tonnes	Ag g/t	Ounces	Tonnes	Ag g/t	Ounces	Tonnes	Ag g/t	Ounces
208,000	315	2,108,000	616,000	293	5,794,000	1,886,000	248	15,012,000	824,000	298	7,902,000

High grade underground resource estimate at Zgounder silver mine (rounded numbers).

Measured			Indicated			Inferred			Measured + Indicated		
Tonnes	Ag g/t	Ounces	Tonnes	Ag g/t	Ounces	Tonnes	Ag g/t	Ounces	Tonnes	Ag g/t	Ounces
34,000	482	527,000	132,000	377	1,601,000	1,051,000	332	11,209,000	166,000	398	2,128,000

The old tailings Inferred mineral resources

Inferred		
Tonnes	Ag g/t	Ounces
500,000	132	2,122,000

Project Economics

A summary of the base case parameters and assumptions are shown below:

Project Base Case Economic Parameters and Assumptions

Items	Units	Values
Silver price (yearly average)	US/oz	$20.50
Processed tonnage over LoM	metric tonne	4,926,500
Silver metal production	ounces	33,682,600
Royalty on sales (ONHYM)	%	3.0
Maya Management Fees including NPI*(1)*	%	2.75
Taxes for the first 5 years on gross revenues for a new company*(2)*	%	0.5
Taxes after the first 5 years on profits	%	17.5

1 Net Profit Interest on gross profits (sales less milling and mining costs)

2 After completion of OHNYM 8Million Oz commitment (15%), Project will be 100% owned by a new company owned by Maya in 2021.

The project cash flow summary of the base case is shown in the following table:

Project Cash Flow Summary ZMSM

Items	Value US
Total revenue of silver sales	$708,967,000
Total operating costs	$313,515,000
After-tax undiscounted cash flow	$325,182,000
After-tax discounted (6.5%) NPV	$200,217,000

Project Sensitivities are shown in the following table:

Sensitivity Analysis for Zgounder Millenium Silver Mining (ZMSM)

Parameter	Unit	-30%	-20%	-10%	0%	+10%	+20%	+30%
Pre-Tax								
Capex	M US$	32,83	37,52	42,21	46,90	51,59	56,28	60,97
NPV @ 6,5%	M US$	224,68	221,49	218,30	215,11	211,92	208,73	205,53
IRR	%	152	146	140	134	128	123	117
Opex	M US$	219,46	250,81	282,16	313,51	344,87	376,22	407,57
NPV @ 6,5%	M US$	275,55	255,40	235,26	215,11	194,96	174,81	154,66
IRR	%	182	165	149	134	119	106	93
Metal Price (avg)	$/oz	14,35	16,40	18,45	20,50	22,55	24,60	26,65
NPV @ 6,5%	M US$	86,97	129,68	172,39	215,11	257,82	300,54	343,25
IRR	%	59	83	108	134	161	189	217
Recovery (avg)	%	61	70	78	87	96	−	−
NPV @ 6,5%	M US$	88,33	130,59	172,85	215,11	257,37	−	−
IRR	%	60	84	108	134	161	−	−
Head Grade	g/t	204	234	263	292	321	351	380
NPV @ 6,5%	M US$	94,07	134,42	174,76	215,11	255,45	295,80	336,14
IRR	%	63	85	109	134	160	187	214
Parameter	Unit	-30%	-20%	-10%	0%	+10%	+20%	+30%
After-Tax								
Capex	M US$	32,83	37,52	42,21	46,90	51,59	56,28	60,97
NPV @ 6,5%	M US$	209,79	206,60	203,41	200,22	197,03	193,83	190,64
IRR	%	135	129	124	118	113	108	103
Opex	M US$	219,46	250,81	282,16	313,51	344,87	376,22	407,57
NPV @ 6,5%	M US$	256,59	237,80	219,01	200,22	181,43	162,63	143,84
IRR	%	155	143	130	118	107	95	85
Metal Price (avg)	$/oz	14,35	16,40	18,45	20,50	22,55	24,60	26,65
NPV @ 6,5%	M US$	80,15	120,17	160,19	200,22	240,24	280,26	320,29
IRR	%	55	76	97	118	140	162	185
Recovery (avg)	%	61	70	78	87	96	−	−
NPV @ 6,5%	M US$	81,43	121,02	160,62	200,22	239,81	−	−
IRR	%	56	77	97	118	139	−	−
Head Grade	g/t	204	234	263	292	321	351	380
NPV @ 6,5%	M US$	86,87	124,65	162,43	200,22	238,00	275,78	313,57
IRR	%	58	78	98	118	139	160	182

The sensitivity analysis suggests that the most sensitive parameters are the head grade, the recovery and the silver price. The project outlook calculation presents a robust positive project even at US$14.35/Oz silver and also shows important NPV with the increase in Metal price.

Operating Costs

The operating costs, also called operating expenditures (Opex), are expressed in USD per tonne processed, and are summarized below. This next Table outlines the costs of the total project.

Operating Costs

Items	Cost US	Cost US/t milled
Waste development cost	$102,074,242	$20.72
Mineralized Material production cost	$51,842,142	$10.52
Mineralized Material process cost	$95,507,510	$19.39
General and Administration	$23,325,499	$4.73
Royalty & Management fees (incl. NPI)	$40,765,601	$8.27
Total	$313,514,993	$63.63

Note: The internal shaft, main ramp with all major underground developments of the mine down to 1620m level are in the Capex sustaining capital. Provision for additional underground development is taken into account with a 20% waste development of mineralized material mined at year 2021 as it is currently at 10%.

Capital Costs

The breakdown of the surface, mill and underground remaining capital cost expenditures (Capex) and sustaining capital to materialize the study is summarized in the following table. It is important to realize that the Zgounder project capital costs for the 500 tpd mill has already been paid with the mine revenues.

The sensitivity analysis suggests that the remaining capital cost has low impact on the economical results.

It is important to mention that operating costs are based on existing real cost adapted to up scaling scenarios. Moreover, the mill capital costs are based on real effective quotes received from Xinhai based in China. The 500 tpd mill is already on site and is being installed.

Capex Summary

Description	Cost - US
Mill 500 tpd	$5 000 000
Mill 2000 tpd	$20 000 000
Shaft+Rock B.	$3 000 000
Ramp & Gallery	$6 400 000
New tailing	$1 500 000
Energy line	$3 500 000
Explosive magazine	$800 000
UG Maintenance room	$750 000
Site prep. mill 2000 tpd	$1 000 000
Air vent/Exit	$250 000
Exploration+Studies	$2 500 000
Water treatment plan	$450 000
Ventilation	$500 000
Upgraded Live Camp	$1 250 000
Total	$46 900 000
1US$=10Dirhams	

In addition to the capital cost needed of US $5,000,000 initially, there is an estimated amount of US $41,900,000 required for the sustaining capital included in the cash flow. No contingency on the Capex has been added, as it is a preliminary economic assessment with a +/- 30% precision.

The Zgounder Cash Flow after tax is positive every year from its own revenues except for year three, which will require financing, and with a payback of one year. The 500 tpd mill is uphill near the existing base camp,

while the proposed new 2000 tpd mill should be installed south of the 2000m level entrance and the existing 200 tpd mill.

Mining

The Zgounder deposit assumes the processing of an average of 340 tpd for the first year (half at 187.5 tpd and half at 500 tpd), with an envisioned expansion to 500 tpd forecasted for two years and 2000 tpd for the remaining seven years of production.

The Zgounder deposit is located in competent rock and has a steep overall dip, making it easily mined using free falling methods. It is recommended to use the open long-hole mining method with sub-levels for the proposed new mining sites.

It is proposed to excavate a main ramp to connect all existing levels to the East above the 2,000m up to 2,100m level. Continued ramp access to the 1,800m level below the 2000m level and reach out the develop levels down to 1,925m and the future levels down to 1,800m; this will facilitate the development and also the transportation of backfill when required. Above 2,100 m elevation, the levels are accessible by adits. As the mine has previously been in production, few new developments are required above 2000m. The total of additional development required is estimated at 20% of mineralized material tonnage with an average of 3.0m linear meters per working day. There is a provision in the Capex (sustaining capital) for an average of 6.0m linear per working day, including the ramp (3.4m x 4m section), for a total of 4,691 meters for the major access and a 315m internal shaft for the life of mine (LOM).

The current processing plant was built to process 200 metric tons per day, assuming 350 working days per year, amounting to 70,000 tonnes per year. With the implementation of the new 500 tpd, mill assuming 350 working days per year, amounting to 175,500 tonnes a year, the feed would come from the underground mine above the 2000m level. Subsequently with the implementation of the 2000 tpd mill, mining and mill feed should come from the surface, underground and the ancient tailings in a proportion of 45%, 42% and 13% respectively. The scheduled tonnage for the 2000 tpd from surface is 900 tonnes, 840 tonnes from underground and 260 tonnes from the old tailings. This has been applied to the ratio of available resources and optimization has not been done.

The surface extraction should use drill, blast, load, haul to crusher and/or ore pass of the existing Alimak. A fleet was initially selected and the management of ZMSM prefers to use national mining contractors to reduce the Capex burden. As well, underground mining equipment was initially selected as a fleet, as the mine is actually mining contractors, the company wishes to pursue that path and equipment list elaborated by Goldminds should be used as reference for the equivalence. With the present total mineralized material being in the order of 4Mt, the mine life would be 10 years with the upgrade to 500 tpd and the 2000tpd. The mineralized material available is 1.681Mt at 331 g/t from UG, 1.79Mt at 300 g/t from potential quarry and 500,000 tonnes at 132 g/t Ag from the old tailings. Material at the surface is pit constrained.

According to the historical and the current mine production, the mining dilution is 10% and the mining recovery is 97%. The 10% mining dilution is applied up to year 2020 and afterward 30% as it represents the 10% from underground and an expected 50% dilution in the pit. These values are applied in the PEA Study. A dilution grade of 50 g/t Ag to the mill feed grade is applied.

The Zgounder mine is accessible from adits on each main level, offering the advantage of straightforward dewatering and good natural air circulation from surface to the 2000m Level. Existing levels down to 1925m should be used in the redevelopment below the 2000m main level.

Metallurgy and Processing

Actual mill operation is about 185 tpd, the feed grade approximately 330 g/t Ag, and the silver recovery is in the 87% range. The intent of Maya is to gradually increase the Zgounder mill feed rate from +/- 200 tonnes per day to 2,000 tonnes per day.

- First step is to increase the mill feed rate to 500 tpd (2018 -2020)
- Second step is to increase the mill feed rate to 2,000 tpd (2021 -2027)

The object of this chapter of the PEA is to describe in broad detail the mill operation at 500 and 2,000 tonnes per day. If this PEA proves successful, the 500 tpd operation will be addressed later in a future prefeasibility study.

The 500 tpd process plant is designed to recover the silver by a gravity-flotation process followed by the cyanide leaching of the gravity and the flotation concentrates in two different mills. The "upper" mill, designed by Yantai Xinhai Mining Research & Design Co., Ltd. (Xinhai), which will be located some 1.5 km from the actual mill will incorporate the following sections: run of mine mineralized material storage, a three stage crushing plant, two 500 tonne fine mineralized material bins, a two stage grinding bay integrating gravity, a flotation section followed by gravity and flotation concentrates thickening and regrinding spaces.

The "lower" mill (actual Zgounder mill), will essentially remain the same as it is now except for the removal of the two small ball mills and changing of the present clarifier by four filter-presses. The "lower" mill will be fed by gravity from the gravity-flotation concentrates (cyclones O/F) coming from the "upper" mill. The expected mill recovery is based on provided met test is set to 80%.

For the 2,000 tonnes per day operation (2021 - 2027), ZMSM will need a complete new mill. Mill feed averaging 233 g/t (at least for years 2021 to 2024) will come from 3 different locations. Around 45% will come from the open pit, 12% from the old tailings and the other 43% from deep underground-mineralized sectors. To have a smooth and steady operation and to avoid large variations in feed grade and quality, the design criteria for the processing plant is based on a continuous and homogenous feed rate from all sources. The 2,000 tpd processing plant will be designed to recover the silver mainly by cyanide leaching followed by a CIP (carbon in pulp) process. The mill tentatively proposed by Goldminds Geoservices Inc. (GMG) should be located some 250m from the actual 200 tpd mill and will incorporate the following sections: run of mine mineralized material storage, a one stage crushing plant, two fine mineralized material bins, a two stage grinding bay integrating gravity, cyanide leaching followed by carbon adsorption, carbon elution and finally refining. The expected mill recovery based on provided met test with a complete new mill is set to 90%. Additional metallurgical testing is required to validate all parameters of the proposed process.

Mill rejects should undergo cyanide destruction before disposal into the tailings pond or will be naturally destroyed in the pond. GMG is of the opinion that the new conceptual tailings pond has the capacity to store the whole mine life production of this PEA, that is to say during the next ten years of operation. Additional work will need to be done to validate the conceptual design.

Supernatant from the tailings ponds will flow by gravity to a small polishing pond, where it will be treated if necessary, and approximately 80% will be pumped back to the mill. The other 20%, free of any cyanide, will be discharged in the valley connected to the small Zgounder River.

Infrastructure

The energy is coming from a new power line rating 22 KV, having a power of 2500 KVA, is expected to be powerful enough for the milling operation of the 500 tpd. Subsequently, for the 2000 tpd mill, a new line will have to be installed from Taliouine and preliminary discussions with the Office National of Energy (ONE) set the total Capex to US3.5 million.

A new water line will have to be installed for the 2000 tpd mill upgrade and there is a provision in the Capex for this. As well, the existing tailings will be reinforced and modified to accommodate the whole mine life of the PEA. A polishing pond with water containment of 450,000 cubic meter is planned to assist in the management of recycle water. Provision for a water treatment plant near the polishing pond has been done.

A provision in the Capex exists for the expansion of the existing accommodation camp will be required to lodge the additional workforce (the staff and mining contractors).

Qualified Persons

The technical content of this news release has been prepared and reviewed by Claude Duplessis Eng.,

Gilbert Rousseau Eng. and Dr. Merouane Rachidi P. Geo. from GoldMinds Geoservices Inc.: both independent Qualified Persons under NI 43-101 standards.

Forward-looking statements

This news release contains statements about our future business and planned activities. These are "forward-looking" because we have used what we know and expect today to make a statement about the future. Forward-looking statements including but are not limited to comments regarding the timing and content of upcoming work and analyses. Forward-looking statements usually include words such as may, intend, plan, expect, anticipate, and believe or other similar words. We believe the expectations reflected in these forward-looking statements are reasonable. However, actual events and results could be substantially different because of the risks and uncertainties associated with our business or events that happen after the date of this news release. You should not place undue reliance on forward-looking statements. As a general policy, we do not update forward-looking statements except as required by securities laws and regulations.

Contact

Maya Gold & Silver Inc.
Noureddine Mokaddem
President and CEO
+1 514-978-6111/+212 661-196-111
nmokaddem@mayagoldsilver.com
Maya Gold & Silver Inc.
Sophy Cesar
Investor Relations
514-866-2008
scesar@mayagoldsilver.com
www.mayagoldsilver.com