

Values of up to 6.94 g/t Au over 6 Meters Obtained in the West Flank Zone

MONTREAL, QUEBEC--(Marketwired - Dec 5, 2016) - SEMAFO (TSX:SMF)(OMX:SMF) today announced results from an ongoing proximal drilling program at Natougou designed to explore the lateral extensions of the flat-lying Boungou Shear Zone (BSZ) proximal to the current in-pit reserves. Based on the results to date, the Corporation now plans:

- To bring the West Flank Zone into the inferred resources category by year-end 2016;
- To convert the inferred resources into the indicated category by end of first half of 2017; and
- To evaluate the potential for an underground operation

Since July 1, 2016, a total of 6,716 (39 holes) meters of drilling have been completed along the West Flank Zone located immediately to the southwest of the current in-pit reserves of the Natougou deposit (Figure 1). The program was designed to provide 80-meter by 80-meter hole spacing, reaching inferred category, within the known area of mineralization. All drill holes intersected the BSZ at depths ranging from 30 to 180 meters vertically. The BSZ is a gently folded, northwest-plunging shear zone (Figures 2 and 3). The following table provides the highlights of the recently completed program:

TABLE 1

Hole No.	From (m)	To (m)	Length ¹ (m)	Au ² (g/t)
TPA0698	135	139	4	6.10
TPA0700	137	143	6	6.94
TPA0701	131	135	4	6.37
TPA0710	152	156	4	4.57
TPA0811	143	147	4	5.31
TPA0814	174	178	4	4.84
TPA0819	158	162	4	4.70
TPA0833	142	147	5	5.29

1. All lengths are along the hole axis, and the true thickness is over 80% of the given length.
2. All assay results are below the cutting grade of 45 g/t Au.
3. All assay results have been received except TPA0840.

As shown in Figure 1, the mineralization within the West Flank Zone remains open along the plunge towards the northwest where hole TPA0811 returned values of 5.31 g/t Au over 4 meters. In addition, an area of gold mineralization located on the East Flank will be further explored. Finally, the down plunge of the main mineralized trends north of the in-pit reserves remains open and underexplored. Drilling along the East Flank is currently in progress while the proximal first phase of exploration drilling to the north of the in-pit reserves and within the West Flank North Extension Target will be completed before the end of 2016.

Figure 1 - A map is available at the following address: http://media3.marketwire.com/docs/SW_Extension_Figure_EN_1.pdf

Figure 2 - A map is available at the following address: http://media3.marketwire.com/docs/SW_Extension_Figure_EN_2.pdf

Figure 3 - A map is available at the following address: http://media3.marketwire.com/docs/SW_Extension_Figure_EN_3.pdf

Next Steps

The program is designed to identify the most favourable areas for further infill drilling (40-meter by 40-meter hole spacing) with the aim of bringing the inferred resources into the indicated resources category by the end of the first half of 2017. During the second half of 2017, the Corporation intends to complete studies in order to evaluate a potential underground operation accessible by a decline collared at the bottom of the open pit, particularly on the West Flank.

Quality Assurance

For core drilling, all individual samples represent approximately one meter in length of core, which was sawn in half. Half of the core is kept on site for reference, and its counterpart is sent for preparation and gold assaying to the SGS Minerals Services laboratories in Ouagadougou, Burkina Faso. For RC drilling, all individual samples represent approximately one meter in length of rock chips homogenized and riffle-split to an approximately 2-kilogram subsample that is sent for preparation and gold assaying to the SGS Minerals Services laboratories in Ouagadougou, Burkina Faso. Each sample is fire-assayed for gold content on a 50-gram subsample. In addition to SGS's own QA/QC (Quality Assurance/Quality Control) program, an internal quality control and quality assurance program is in place throughout the sampling program, using blind duplicates, blanks and

recognized industry standards.

Michel Crevier, P.Geo MScA, Vice-President Exploration and Mine Geology, is SEMAFO's Qualified Person and has reviewed this press release for accuracy and compliance with National Instrument 43-101.

About SEMAFO

SEMAFO is a Canadian-based mining company with gold production and exploration activities in West Africa. The Corporation operates the Mana Mine in Burkina Faso, which includes the high-grade satellite deposits of Siou and Fofina, and is developing the advanced gold deposit of Natougou. SEMAFO's strategic focus is to maximize shareholder value by effectively managing its existing assets as well as pursuing organic and strategic growth opportunities.

CAUTION CONCERNING FORWARD-LOOKING STATEMENTS

This press release contains forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties and assumptions and accordingly, actual results and future events could differ materially from those expressed or implied in such statements. You are hence cautioned not to place undue reliance on forward-looking statements. Forward-looking statements include words or expressions such as "potential", "designed", "planning", "will", "favourable", "aim", "intends", "pursuing", "opportunities" and other similar words or expressions. Factors that could cause future results or events to differ materially from current expectations expressed or implied by the forward-looking statements include the ability to identify the most favourable areas of the lateral extensions of the Boungou Shear Zone proximal to the current in-pit reserves for further infill drilling in early 2017, the ability to complete studies with the aim of a potential underground operation accessible by a decline collared at the bottom of the open pit, the ability to complete the proximal exploration drilling to the north of the in-pit reserves before the end of 2016, the ability to bring the West Flank Zone into the inferred category by year-end 2016, the ability to convert the inferred resources into the indicated category by the end of the first half of 2017, the accuracy of our assumption, the ability to execute on our strategic focus, fluctuation in the price of currencies, gold or operating costs, mining industry risks, uncertainty as to calculation of mineral reserves and resources, delays, political and social stability in Africa (including our ability to maintain or renew licenses and permits) and other risks described in SEMAFO's documents filed with Canadian securities regulatory authorities. You can find further information with respect to these and other risks in SEMAFO's 2015 Annual MD&A, as updated in the First, Second and Third Quarter MD&As, and other filings made with Canadian securities regulatory authorities and available at www.sedar.com. These documents are also available on our website at www.semafo.com. SEMAFO disclaims any obligation to update or revise these forward-looking statements, except as required by applicable law.

The information in this release is subject to the disclosure requirements of SEMAFO under the *Swedish Securities Market Act* and/or the *Swedish Financial Instruments Trading Act*. This information was publicly communicated on December 5, 2016 at 7:00 a.m., Eastern Standard Time.

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