

MONTREAL, QUEBEC--(Marketwired - Mar 31, 2015) - [Semafo Inc.](#) (TSX:SMF)(OMX:SMF) is pleased to announce that Snowden Mining Industry Consultants Pty Ltd. has completed a NI 43-101 compliant mineral resource estimate for the Corporation's advanced Natougou gold deposit in the Tapoa Permit Group, in Burkina Faso. As at March 30, 2015, indicated mineral resources totaled 5.79 million tonnes at a grade of 5.87 g/t Au for 1.1 million ounces of contained gold. Inferred resources on the Natougou deposit stand at 3.93 million tonnes at a grade of 3.49 g/t Au for 0.44 million ounces of contained gold.

Tapoa's Natougou Mineral Resource, reported above a 0.77 g/t Au cut-off grade

Classification Tonnes Grade Contained Ounces

	Mt	g/t	000 oz
Indicated ¹	5.79	5.87	1,092
Inferred ²	3.93	3.49	442

(1) All indicated resources are contained in fresh rock.

(2) Eighty-three percent of the inferred resources are contained in fresh rock.

The mineral resource has been limited to within a pit shell, based on a gold price of US\$1,300 per ounce. Metallurgical test work was completed in 2013 by Lycopodium Minerals QLD Pty Ltd.

Key assumptions and parameters used in the mineral resource estimate are

- Data base includes a total of 714 reverse-circulation (RC) and diamond-drill holes
- Dominant drill hole spacing is 40 meters along strike (315°) by 40 meters across strike (45°)
- Drill spacing in the central area is up to 160 meters along strike and 80 meters across strike

Pit Optimisation Parameters

Parameter	Value	
Physical inputs		
Mining dilution	20	%
Mining recovery	95	%
Mining slopes (overall)	60°	
Processing recovery	94	%
Financial inputs*		
Gold price	\$1,300 /oz	
Mining price (waste)	\$2.95/t	
Mining cost (ore)	\$3.08 /t	
Rehabilitation	\$0.10 /t	
Processing cost	\$23.87 /t	
General and administration costs	\$5.25 /t	
Selling cost	\$2.18 /oz	
Royalties (4%)	\$52 /oz	

*All amounts are in US dollars.

Mineralisation

Mineralisation at the Natougou deposit is hosted within a flat-lying shear zone that has a subtle anticlinal geometry. The apparent axis of the anticline strikes approximately 315 degrees, and each limb dips approximately 15 degrees.

The mineralisation is characterised by sheared amphibolite, quartz boudinage veining, biotite-plagioclase alteration and an increase in sulphide content. Sulphide assemblage comprises pyrite, pyrrhotite and minor chalcopyrite and arsenopyrite. Visible gold has been observed in core samples. The host lithology consists of mafic to intermediate volcanic / intrusive stratigraphy.

Next Steps

An initial US\$2.5 million RC pre-collar and core tail drill program has already commenced on the Natougou property. The goal of the 22,000 meter in-fill drilling campaign is to convert Natougou's inferred resources to indicated resources. In the second quarter, additional drill rigs will be mobilized for a 10,000 meter drilling program on Natougou's related structures in addition to condemnation drilling on Natougou. Later in the year, we will initiate an in-fill drilling program on Natougou that is designed to convert a portion of the indicated resources to the measured category.

Qualified Person's Statement

The mineral resource estimate for the Natougou gold deposit, Tapoa Permit Group, was completed by John Graindorge of Snowden Mining Industry Consultants Pty Ltd, with the metallurgical portion of the technical report compiled by Harald Muller of Snowden Mining Industry Consultants Pty Ltd. The mineral resource was estimated as at March 30, 2015 in compliance with NI 43-101 for Standard of Disclosure for Mineral Projects as adopted by the Canadian Securities Regulators. Mineral resources that are not mineral reserves have not demonstrated economic viability. Mr. John Graindorge is an independent Qualified Person as defined under NI 43-101 and is responsible for the mineral resource estimate. Michel Crevier P.Geo MscA, Vice-President Exploration and Mine Geology and SEMAFO's Qualified Person, supervised the mineral resource estimate and consents to the inclusion in this press release of technical information relating to the Natougou gold deposit in the Tapoa Permit Group, in the form and context in which it appears. The full quality assurance/quality control (QA/QC) procedures are disclosed in the NI 43-101 Natougou Technical Report filed on SEDAR.

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 is committed to evolve in a conscientious manner to become a major player in its geographical area of interest. 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 "next steps", "goal", "will", "designed to", "estimated", "committed", "evolve", "become", "pursuing", "growth", "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 maintain our US\$2.5 million drilling program, the ability to convert Natougou's inferred resources to indicated resources, the ability to convert a portion of the indicated resources at Natougou to the measured category, 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 2014 Annual MD&A, 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 above information has been made public in accordance with the *Swedish Securities Market Act* and/or the *Financial Instruments Trading Act*.

Contact

SEMAFO
Robert LaValliere
Vice-President, Corporate Affairs & Investor Relations
Cell: +1 (514) 240 2780
Robert.Lavalliere@semafo.com
Ruth Hanna
Analyst, Investor Relations
Ruth.Hanna@semafo.com
Tel. local & overseas: +1 (514) 744 4408
North America Toll-Free: 1 (888) 744 4408
www.semafo.com