UNEARTHING THE FUTURE

Annual Information Form

DATED AS OF MARCH 7, 2017

FOR THE YEAR ENDED DECEMBER 31, 2016

SEMAFO

INTERNATIONAL EXPERTISE®
HUMAN ADVOCACY

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ITEM 1 – GENERAL MATTERS

Where we say "**we**", "**us**", "**our**", the "**Corporation**" or "**SEMAFO**", we mean SEMAFO Inc. or SEMAFO Inc. and/or one or more or all of its subsidiaries, as it may apply.

This Annual Information Form ("**AIF**") 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. We disclaim any obligation to update or revise these forward-looking statements, except as required by applicable law. For further information regarding forward looking statements contained in this AIF, please refer to ITEM 23 – FORWARD-LOOKING STATEMENTS.

All dollar amounts contained in this AIF are expressed in US dollars unless otherwise specified.

ITEM 2 - THE CORPORATION

Name, Address and Incorporation

Created under the *Companies Act* (Québec) as a result of the amalgamation, effective January 31, 1994 of SEG Exploration Inc. and Orimar Resources Inc., SEMAFO is now governed by the *Business Corporations Act* (Québec) since it came into force on February 14, 2011. Having maintained the corporate name "Exploration SEG Inc." subsequent to the amalgamation, the Corporation changed its name to "West Africa Mining Exploration Corporation Inc." in June 1995. The Corporation further changed its name to its current name "SEMAFO Inc." pursuant to a certificate and articles of amendment dated May 13, 1997. "SEMAFO" is the acronym of "Société d'exploration minière d'Afrique de l'Ouest", the French version of the Corporation's former name.

Our Corporate office is located at 100, boul. Alexis-Nihon, 7th Floor, Saint-Laurent, Québec, Canada, H4M 2P3. The addresses of our principal subsidiaries may be found under ITEM 21 – ADMINISTRATIVE OFFICES.

We are a reporting issuer in Québec, Ontario, Alberta and British Columbia and our common shares have been listed for trading on the Toronto Stock Exchange ("**TSX**") since December 12, 1996 and on the NASDAQ OMX Stockholm Exchange ("**NASDAQ OMX**") since October 20, 2011.

Capital Structure

COMMON SHARES

Our capital structure is composed of an unlimited number of common shares and of an unlimited number of Class "A" and Class "B" preferred shares, all without nominal or par value. Holders of our common shares are entitled to one vote for each common share held at all our meetings of shareholders, to participate rateably in any dividend declared by the board of directors (the "**Board**") on the common shares, and, subject to any rights attaching to the Class "A" and Class "B" preferred shares, to receive our remaining property in the event of the voluntary or involuntary liquidation, dissolution, winding-up or other distribution of our assets. As at March 7, 2017, 324,861,200 common shares and no Class "A" or Class "B" preferred share are issued and outstanding.

RIGHTS

On March 15, 2011, the Board adopted a Shareholder Rights Plan (the "**Rights Plan**") that is designed to provide shareholders and the Board with adequate time to consider and evaluate any unsolicited bid made for SEMAFO and to provide the Board with adequate time to identify, develop and negotiate value-enhancing alternatives, if considered appropriate, to any such unsolicited bid.

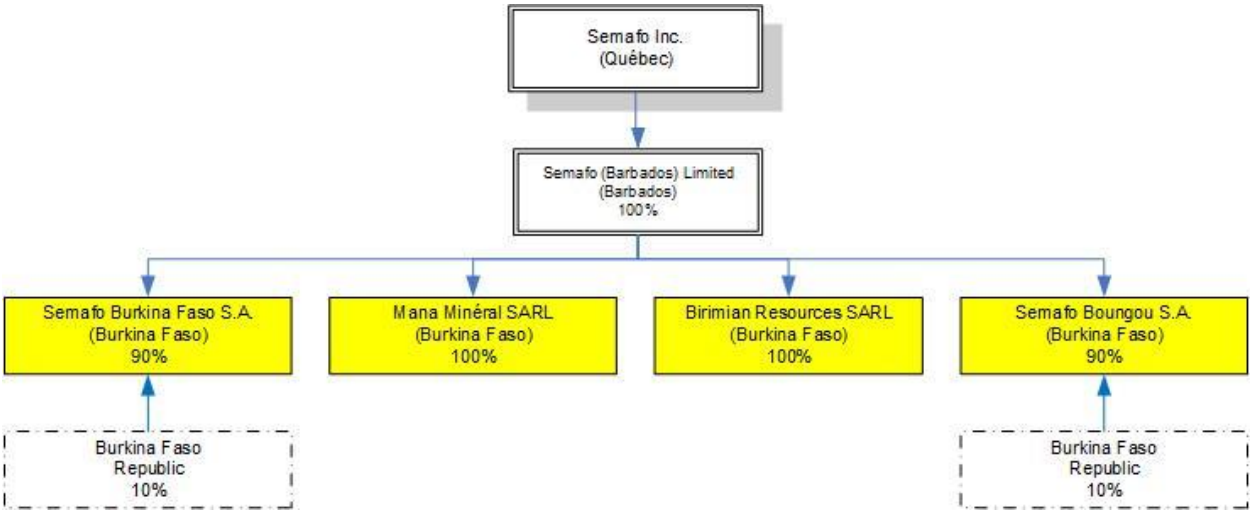
The Rights Plan encourages a potential acquirer who makes a take-over bid to proceed either by way of a "Permitted Bid" (as defined in the Rights Plan), which generally requires a take-over bid to satisfy certain minimum standards designed to promote fairness, or with the concurrence of the Board. If a take-over bid fails to meet these minimum standards and the Rights Plan is not waived by the Board, the Rights Plan provides that holders of our common shares, other than the Acquiring Person (as defined in the Rights Plan), will be able to purchase additional common shares at a significant discount to market, thus exposing the Acquiring Person to substantial dilution of its holdings.

The Rights Plan is initially not dilutive. However, if a "Flip-in Event" (as defined in the Rights Plan) occurs, holders of Rights not exercising their Rights after a Flip-in Event may suffer substantial dilution.

The Rights Plan was ratified at our annual general and special meeting of shareholders held on May 10, 2011 and was extended at our annual general and special meeting of shareholders held on May 15, 2014. If not extended at our 2017 annual shareholders' meeting to be held on May 4, 2017, the Rights Plan will terminate at the end of such meeting.

Intercorporate Relationships

The following diagram presents, as at December 31, 2016, the names of our material subsidiaries, where they were incorporated or continued as well as the percentage of votes attaching to all voting securities of each such subsidiary beneficially owned, controlled or directed by the Corporation.



ITEM 3 - GENERAL DEVELOPMENT OF THE BUSINESS

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

Three Year History

2014

On February 20, 2014, we announced that the milling of ore from the high-grade Siou deposit had commenced.

On April 10, 2014, we reported that bulk test results from the high-grade Siou deposit in March were in line with expectations, providing very good reconciliation against the block model. Test results indicated an average grade of 4.7 g/t Au at a recovery rate of over 96%. We also announced that pre-stripping activities had begun at our Fofina deposit.

On May, 6, 2014, we announced that in light of our new expanded land package, we allocated an additional two million dollars to the exploration budget in order to carry out geological mapping and auger drilling aimed at identifying priority drill targets on the new permits. This amount was in addition to our 2014 initial exploration budget of $18 million, which focused mainly on the Siou intrusive.

On July 29, 2014, we announced results from an initial Siou infill core drilling program at depth, which had the objective of replacing and increasing the reserves base at Siou by year-end. Initial results yielded very strong results that confirmed the continuity of the zone widths and grades.

On October 14, 2014, we announced that driven by the performance of the recently ramped-up Siou and Fofina high-grade deposits and the third quarter operating results, SEMAFO raised 2014 production guidance from between 200,000 and 225,000 ounces to between 230,000 and 235,000 ounces of gold, representing a 9% increase at midpoint. Considering the revised production level for the Mana Mine, we have lowered our full full-year guidance for total cash costs from between $695 and $745 to between $660 and $675 per ounce. Additionally, due to the increase in the 2014 production guidance, capital expenditures have been revised upward to $58.5 million from $48.5 million, reflecting mainly higher capitalized stripping costs.

On December 3, 2014, we reported that operating activities resumed at our Mana Mine in Burkina Faso after a previously reported three-day illegal work stoppage.

Orbis Gold Transaction (2014-2015)

On October 12, 2014, we announced that we had submitted a non-binding proposal to the board of directors of Orbis Gold Limited (ASX: OBS) ("**Orbis Gold**") to acquire 100% of the issued share capital in Orbis Gold by way of a recommended transaction at a price range between A$0.62 to A$0.65 per share, payable in cash ("**Proposal"**). The Proposal remained subject to certain pre-conditions, being limited scope due diligence, entry into appropriate binding transaction documentation on terms and conditions considered customary for a transaction of this kind and the proposed placement by Orbis Gold to not proceeding.

On October 15, 2014, we announced that we would be making a takeover bid for 100% of Orbis Gold at A$0.65 per share, payable in cash, subject to the conditions below ("**Cash Bid**"). Other than standard conditions for a transaction of this nature, the Cash Bid required that the proposed placement by Orbis Gold to Greenstone be rejected by Orbis Gold shareholders as well as the tender of at least 50.1 % of the outstanding Orbis Gold shares.

On November 30, 2014, we announced that we lodged our bidder's statement in respect of our A$0.65 per share cash offer for 100% of the shares in Orbis Gold with the Australian Securities and Investments Commission, Orbis Gold and

the Australian Securities Exchange ("**ASX**"). In addition to our cash on hand of $121 million as at November 30, 2014, we secured a credit facility of up to $60 million to fund the acquisition from a syndicate led by Sprott Resource Lending Partnership.

On February 11, 2015, Orbis Gold and SEMAFO jointly announced a revised takeover offer for Orbis Gold ("**Revised Offer**"), under which Orbis Gold shareholders were to be offered A$0.713 cash per Orbis Gold share. All of the Orbis Gold directors, together representing 2.8% of Orbis Gold's shares, committed to accept the Revised Offer. In addition, shareholders representing in aggregate 62.2% of Orbis Gold (including major shareholder DGR Global Limited) indicated to Orbis Gold an intention to accept the Revised Offer. The closing date for the Revised Offer was February 20, 2015 and was subsequently extended to February 27, 2015.

We also announced that we entered into an agreement with Clarus Securities Inc. as lead underwriter on behalf of a syndicate of underwriters to purchase, on a bought deal private placement basis, 5,500,000 common shares of the Corporation, at a price of C$3.70 per common share, for aggregate gross proceeds of C$20,350,000. We also granted to the underwriters an over-allotment option to purchase up to an additional 825,000 common shares at the same price, exercisable by the underwriters up to two days prior to closing, for additional gross proceeds of up to C$3,052,500.

We further announced that we amended the terms of its previously announced bought deal private placement offering to increase the size of the offering to C$50,320,000 (the "**Upsized Offering**"). Under the terms of the Upsized Offering, a syndicate of underwriters led by Clarus Securities Inc. agreed to purchase, on a "bought deal" private placement basis, 13,600,000 common shares of SEMAFO at a price of C$3.70 per share for aggregate gross proceeds of C$50,320,000. We also granted to the Underwriters an over-allotment option to purchase up to an additional 2,040,000 common shares at the same price, exercisable by the Underwriters up to two days prior to closing, for additional gross proceeds of up to C$57,868,000.

On March 4, 2015, we announced that we closed the bought deal private placement previously announced as well as arranged a credit facility from Macquarie Bank Limited. We issued a total of 15,640,000 common shares at a price of C$3.70 per common share, including the exercise of the Underwriters' over-allotment option in full for aggregate gross proceeds of C$57,868,000 (the "**2015 Offering**"). The net proceeds of the 2015 Offering was used to partly fund the purchase of Orbis Gold, as well as for working capital and general corporate purposes. In addition, we obtained a $90 million senior secured credit facility from Macquarie Bank Limited (the "**Facility**") which was used to fund our acquisition of Orbis Gold. The Facility has a three-year term and is repayable in three annual amounts of $30 million on the first, second and third anniversaries of closing. The Facility bears interest at LIBOR plus 6.5% and replaces the short-term Sprott facility (announced November 30, 2014), which has been cancelled.

The acquisition of Orbis Gold was concluded March 16, 2015 for a total consideration of $149.7 million.

2015

On February 20, 2015, we disclosed historical resources on the Orbis Gold Natougou and Nabanga gold projects located in Burkina Faso. The historical mineral resource estimate for the Natougou gold project was prepared by Snowden Mining Industry Consultants Pty. Ltd. ("**Snowden**") in 2014 and was reported in accordance with the 2012 edition of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves (the "**JORC Code"**). The Natougou gold project contained historical indicated resources of 7.1 million tonnes @ 5.1 g/t Au for 1.2 million ounces and historical inferred resources of 11 million tonnes @ 2.3g/t Au for 0.8 million ounces of contained gold. The historical mineral resource estimate for the Nabanga gold project was prepared by Snowden in 2012 and was reported in accordance with the 2004 edition of the JORC Code. The Nabanga gold project contained historical inferred resources of 3.2 million tonnes @ 6.5 g/t Au for 660,000 ounces of contained gold. We also announced that we planned conducting a major drilling program and metallurgical tests on the Natougou gold project. As indicated below, on March 31, 2015, Snowden completed a mineral resource estimate for the Natougou gold deposit in the Tapoa permit group, in Burkina Faso in accordance with *National Instrument 43-101 – Standards of Disclosure for Mineral Projects* ("**NI-43-101**"). Snowden as well completed a NI 43-101 technical report dated June 2015 with respect to the Nabanga gold project.

On February 24, 2015, we reported that replacement of the shell of the semi-autogenous grinding mill ("**SAG**") was successfully completed on time at our Mana Mine in Burkina Faso. During the shutdown between January 19 and

February 23, 2015, we produced approximately 22,220 ounces of gold. The secondary ball mill performed above expectations, processing a daily throughput of close to 4,000 tonnes at an average grade of approximately 5.2 g/t Au from the Fofina pit. The recovery rate was above 94%.

On March 12, 2015, we announced that we had established the following milestones with regard to the Natougou and Nabanga projects:

- The conversion of the JORC Code historical resources on the Natougou and Nabanga gold projects to NI-43-101 compliant resources in the second quarter of 2015.
- The establishment of a total budget of $2.5 million for an infill and exploration program on Natougou. The launching of the in-fill drilling campaign consisting of approximately 22,000 meters of reverse-circulation ("**RC**") drilling in order to convert Natougou's historical inferred resources to indicated resources using a 40-meter by 40-meter grid spacing. Concurrently, the commencement of a 10,000 meter RC drill program on Natougou's related structures, with the aim of increasing resources in close proximity.
- The initiation, in the second half of the year, as part of the definitive feasibility study ("**DFS**"), of an in-fill drilling program on Natougou that is designed to convert a portion of the indicated resources to the measured category.
- The carrying out of a regional exploration program on the Natougou advanced gold project with the objective of increasing the resources base.

On March 31, 2015, we announced that Snowden had completed a NI 43-101 compliant mineral resource estimate for the Natougou gold deposit in the Tapoa Permit Group, in Burkina Faso. As at such date, 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.

On May 13, 2015, we announced the complete review of all preliminary results on the ongoing DFS. The following mandates were awarded for completion of the DFS:

- Lypocodium Minerals Canada Ltd. – Definitive Feasibility Study including processing design, leach and elution circuits, power supply options, metallurgical work programs, project scheduling and reporting
- Golder Associates – ground water exploration program and geotechnical assessment of open pit wall stability
- Knight Piésold Consulting – geotechnical infrastructure, geochemical soil testing, water balance, trade-off study and tailings site facility optimization
- WSP Canada Inc. – Environmental and Social Impact Assessment ("**ESIA**") and Resettlement Action Plan ("**RAP**")
- Snowden – resource model
- AMC Mining Consultants (Canada) Ltd. – NI 43-101 reserve model, pit optimization and life of mine ("**LOM**") sequencing

We also announced that the DFS was scheduled for completion early in the second quarter of 2016 and envisaged a base case scenario of a 4,000-tonne-per-day processing plant. A budget estimate of $12.5 million was established in order to complete the DFS that included:

- 6,000 meters of condemnation drilling
- 22,000 meters of in-fill drilling to convert in-pit inferred resources to indicated category
- 17,000-meter in-fill drill program, designed to convert a portion of the indicated resources to the measured category
- 10,000 meters of drilling on proximal related structures

On July 14, 2015, we announced that we had received results for 60% of the recently completed delineation drilling program, at 40 meter by 40 meter spacing, on the Natougou deposit (Boungou Shear Zone) and that results were in line with expectations, showing local variations in grade without any significant change in the geometry of the deposit. We also announced that we remained on track to complete the DFS on Natougou early in the second quarter of 2016 and that the additional 17,000-meter in-fill drill program was already underway in the southwest part of the deposit with the aim of converting a portion of the indicated resources to the measured category.

On July 28, 2015, we announced results from an ongoing 10,000 meter proximal drilling program at Natougou designed to explore the lateral extensions of the flat-lying Boungou Shear Zone proximal to the current in-pit resources. A new mineralized area, dubbed the Southwest Extension, has returned values of up to 10.29 g/t Au over 10 meters at depths varying from 8 to 131 meters. The target area measured approximately 200 meters wide and remained open towards the west and northwest. The 14-hole program was designed to provide a better understanding of the geometry of the shear zone while establishing the potential for proximal mineralization that could eventually be included in the resources base.

On August 5, 2015, we announced that, in light of favourable fuel prices and exchange rates, we had reduced our cost guidance for 2015. The 2015 total cash cost guidance was lowered from between $575 and $605 per ounce to between $515 and $540 per ounce, representing an 11% decrease at midpoint. Our all-in sustaining cost guidance for the year was consequently decreased from between $715 and $750 per ounce to between $655 and $685 per ounce. In addition, the corporate general and administrative expense estimate for 2015 was lowered from $15 million to $14 million. Our 2015 production guidance remained unchanged at between 245,000 and 275,000 ounces. We also announced that we had made strong progress in advancing the DFS, which passed the 40% completion stage. We continued to target completion of the DFS by early second quarter of 2016 and as at June 30, 2015, a total of $5.7 million of the estimated budget of $12.5 million had been disbursed towards completion of the DFS.

On November 12, 2015, we announced that driven by our strong third-quarter operational performance, we were lowering for a second time both our total cash cost and all-in sustaining cost guidance for the year from $515 - $540 per ounce to $485 - $505 per ounce respecting total cash cost per ounce sold and from $655 - $685 to $630 - $650 respecting all-in sustaining cost per ounce sold, the downward revisions reflecting cost containment efforts, lower industry costs and favourable exchange rates. We also announced that the DFS for Natougou continued to gain traction in the third quarter and was 70% completed.

2016

Natougou Feasibility Study Highlights and Financing[1]

On February 25, 2016, we announced the results of a positive DFS for our Natougou gold project located 320 kilometers east of Ouagadougou in Burkina Faso. We also announced that we entered into a commitment letter with Macquarie Bank Limited to amend the Facility.

NATOUGOU FEASIBILITY STUDY HIGHLIGHTS

- During the first three years

  Average annual production of more than 226,000 ounces
  Average total cash cost[2] of $283/oz and all-in sustaining cost[3] of $374/oz
  Average head grade of 5.72 g/t at a gold recovery rate of 93.8%

- Production of some 1.2 million ounces at total cash cost of $408/oz and a gold recovery rate of 92.9% over a projected LOM in excess of 7 years
- LOM all-in sustaining cost of $518/oz including capitalized stripping and sustaining capital expenditures
- Maiden open pit mineral reserves of 9.6 million tonnes at a grade of 4.15 g/t Au for 1,276,000 ounces of contained gold
- Initial capital expenditures: $219 million, which includes $42 million in pre-stripping expenditures and an $18-million contingency

[1] The statements in this section are forward-looking. For more information on forward-looking statements, see ITEM 23-FORWARD-LOOKING STATEMENTS.

[2] Total cash cost is a non-IFRS financial performance measure with no standard definition under IFRS and represents the mining operation expenses and government royalties per ounce sold.

[3] All-in sustaining cost is a non-IFRS financial performance measure with no standard definition under IFRS and represents the total cash cost, plus sustainable capital expenditures and stripping costs per ounce.

- Project economics (base case at $1,100/oz):

  After-tax 5% NPV: $262 million
  After-tax IRR: 48%
  Payback period: 1.5 years

- Targeted construction start-up: year-end 2016
- Expected first gold pour: second half of 2018 with first year of full production in 2019

FINANCING

We entered into a commitment letter with Macquarie Bank Limited to amend our Facility. The development of the Natougou gold project is fully funded through an available credit facility of $120 million, our cash position as well as anticipated cash flow from operations.

Amendments to the Facility included

- Facility increased from $90 million to $120 million
- Incremental $60 million to be drawn down by June 30, 2017 ($30 million repayment due March 3, 2016)
- LIBOR + 4.75% per annum
- Quarterly repayments of $15 million, from first quarter of 2019 to fourth quarter of 2020

Closing of the amended Facility took place on March 29, 2016.

On April 22, 2016 we closed the bought deal financing announced on April 4, 2016 as increased on April 5, 2016. We issued a total of 26,450,000 common shares at a price of C$4.35 per common share, which included the exercise of the underwriters' over-allotment option in full, for aggregate gross proceeds of C$115,057,500 (the "**2016 Offering**"). The 2016 Offering was completed by a syndicate of underwriters led by BMO Capital Markets as sole bookrunner and co-led by Clarus Securities Inc. The net proceeds of the 2016 Offering was used for exploration expenditures at Mana and Natougou, to further enhance our financial flexibility with respect to the Natougou gold project as well as for working capital and general corporate purposes.

On June 20, 2016, we announced delineation drilling results from Yama, the recently discovered mineralized zone located 22 kilometers southwest of the Mana mill. Over 2,500 meters of in-fill drilling were completed in May at 25-meter by 50-meter grid spacing. Results of up to 2.23 g/t across 28 meters were obtained. The May campaign comprised of 16 RC holes and 4 multipurpose (RC-core combination) holes that furthered our understanding of the mineralized zones and grades defined in the first quarter of 2016. The mineralization is hosted by quartz veining and silicified sediments flanked by mafic volcanic flows. The sedimentary unit is highly altered and sheared, dipping approximately 70 degrees to the west and trending generally north-south.

On September 14, 2016, we announced that we have resumed development of the Wona North pit at the Mana Mine. A total of 2.3 million tonnes of waste material will be extracted this year from the Wona North pit. We expect to increase our annual mining capacity to 40 million tonnes for the next three years in order to produce over 200,000 ounces of gold per year at Mana. In 2017, the Mana Mine should process ore from the Fofina, Siou and Wona North pits with the Fofina deposit expected to be depleted in the first half of 2017.

On December 5, 2016, we announced results from an ongoing proximal drilling program at Natougou designed to explore the lateral extensions of the flat-lying Boungou Shear Zone proximal to the current in-pit reserves. Based on the results to date, we now plan:

- 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

On December 22, 2016, we announced that the Council of Ministers of the Government of Burkina Faso has approved our mining permit application for our Natougou gold project. Receipt of the mining permit enables development of the Natougou gold project to proceed on schedule.

Construction in now underway with the following progress having been made:

- Development on time and on budget, with $17 million spent as at December 31, 2016
- Detailed design and engineering 80% complete at end of February 2017
- Earthworks have commenced including

  Clearing, grubbing and removal of top soil
  Building the water storage facility

- Procurement

  100% of long-lead items have been ordered
  Suppliers selected for 70% of total contract value

- Hiring of key personnel for the construction team is well underway
- Compensation has been initiated in line with the resettlement action plan

2017 Outlook and Strategy[4]

In 2017, we intend to mark a decade of operational excellence by delivering our production guidance at Mana again. The positive cash flow generated in 2016 provides a strong foundation on which to complete our 2017 capital spending program, including at Natougou. Successful progress in the construction of Natougou this year will position us for a period of higher production, lower costs and value creation for our shareholders. The strengthening of our exploration budget maximises the potential for increased mine lives at both Natougou and Mana.

2017 OUTLOOK

	2017 Guidance
Gold production ('000 oz)	215 - 235
Total cash cost ($/oz)	585 - 615
All-in sustaining cost ($/oz)	795 - 835
Sustaining capital expenditures	**$ millions**
Sustaining - Mana	12
Stripping - Mana	34
Total	**46**
Initial exploration budget	**23**

The general and administrative expense for 2017 has been forecast at $14 million.

[4] The statements in this section are forward-looking. For more information on forward-looking statements, see ITEM 23-FORWARD-LOOKING STATEMENTS.

ASSUMPTIONS

A number of assumptions were made in preparing the 2017 guidance, including

- Price of gold: $1,150 US dollars per ounce
- Price of fuel: $0.98 US dollars per litre
- Exchange rate: $0.74 US dollars to the Canadian dollar
- Exchange rate: $1.06 US dollars to the Euro

OPERATIONS

In 2017, the Mana mill should process approximately 2.4 million tonnes at an average grade of 3.21 g/t Au, with an average gold recovery rate of 91%. A total of 1.9 million tonnes of ore will be extracted from the Siou, Fofina and Wona North pits at an average grade of 3.82 g/t Au, with the remaining balance sourced from low-grade material. The Fofina deposit is expected to be depleted in the first half of 2017.

EXPLORATION

Initial exploration expenditure for 2017 has been set at $23 million, $15 million of which will be assigned to Natougou, $5 million to the Mana project and the remaining balance to other properties.

This year, the exploration program at Mana includes 80,000 meters of auger, 15,000 meters of RC and 4,500 meters of core drilling with a particular focus on the Siou Sector. A provision of $1 million of the initial budget will be used to test the underground potential at Siou. Exploration activities at Mana include a discovery drilling program that has the aim of identifying near-site satellite deposits.

At Natougou, the 2017 budget includes a provision of $8.5 million for an infill drill program designed to convert current inferred resources on the West Flank Sector into the indicated category and $1.3 million, which has been earmarked for completing studies in order to evaluate a potential underground operation. The remainder of the Natougou program involves exploration drilling on both proximal and contiguous permits to the Natougou deposit. See ITEM 5 – MINERAL PROJECTS – Tapoa Property.

ITEM 4 – MINERAL RESERVES AND RESOURCES ESTIMATES

We have properties which are at different levels of advancement. The following estimates of mineral reserves and resources were estimated as at December 31, 2016, the whole in accordance with the provisions adopted by the Canadian Institute of Mining Metallurgy and Petroleum and incorporated into NI 43-101. Except for the mineral reserve estimates on the Natougou deposit, the updates on these reserve and resource estimates were reviewed and approved by Mr. Michel A. Crevier, P. Geo, MScA, Vice-President Exploration and Mine Geology, our “qualified person” (as defined in NI 43-101). The mineral reserve estimates for the Natougou deposit were prepared under the supervision of Neil Lincoln, Vice-President, Business Development and Studies at Lycopodium Minerals Canada Ltd., and the participation of other qualified persons. See ITEM 5 – MINERAL PROJECTS – Tapoa Property.

Consolidated Reserves and Resources

PROPERTY	Mana[1,2,4,5,6]	Tapoa[1,2,4,5,6] (Natougou Project)	Yactibo[1,3,4,5,7] (Nabanga Project)	Total
MINERAL RESERVES				
Proven				
Tonnes	10,242,000	1,583,000		**11,825,000**
Grade (g/t Au)	3.09	6.46		**3.54**
Ounces	1,017,000	329,000		**1,346,000**
Probable				
Tonnes	8,400,000	7,984,000		**16,384,000**
Grade (g/t Au)	2.63	3.69		**3.15**
Ounces	710,600	947,000		**1,657,600**
TOTAL MINERAL RESERVES				
Tonnes	18,642,000	9,567, 000		**28,209,000**
Grade (g/t Au)	2.88	4.15		**3.31**
Ounces	1,727,600	1,276,000		**3,003,600**
MINERAL RESOURCES (exclusive of reserves)				
Measured				
Tonnes	9,050,000	70,000		**9,120,000**
Grade (g/t Au)	1.47	1.90		**1.48**
Ounces	428,600	4,000		**432,600**
Indicated				
Tonnes	35,981,000	2,602,000		**38,583,000**
Grade (g/t Au)	2.04	2.48		**2.07**
Ounces	2,360,600	207,000		**2,567,600**
TOTAL M&I				
Tonnes	45,031,000	2,672,000		**47,703,000**
Grade (g/t Au)	1.93	2.46		**1.96**
Ounces	2,789,200	211,000		**3,000,200**
Inferred				
Tonnes	13,022,000	6,298,000	1,840,000	**21,160,000**
Grade (g/t Au)	2.95	3.72	10.00	**3.79**
Ounces	1,233,600	754,000	590,000	**2,577,600**

1 The Corporation indirectly owns a 100% interest in all of its permits, except for the permits held by SEMAFO Burkina Faso S.A. and SEMAFO Boungou S.A., respectively, in which the Government of Burkina Faso holds a 10% interest.

2 Mineral reserves and resources at Mana and at Tapoa (Natougou project) were estimated using a gold price of $1,100 and $1,400 per ounce, respectively.

3 Mineral resources at Yactibo Permit Group (Nabanga project) were reported above a 5.0 g/t Au cut-off grade.

4 Rounding of numbers of tonnes and ounces may present slight differences in the figures.

5 All mineral resources reported are exclusive of mineral reserves.

6 As of December 31, 2016.

7 As of June 30, 2015.

Mana, Burkina Faso[1,2,3]

DEPOSITS	DECEMBER 31, 2016								
	PROVEN RESERVES			PROBABLE RESERVES			TOTAL RESERVES		
	Tonnage	Grade (g/t Au)	Ounces[4]	Tonnage	Grade (g/t Au)	Ounces[4]	Tonnage	Grade (g/t Au)	Ounces[4]
WONA-KONA	6,060,000	2.35	457,900	6,308,000	2.24	454,700	**12,368,000**	**2.30**	**912,600**
NYAFÉ	263,000	5.85	49,400	4,000	5.02	700	**267,000**	**5.84**	**50,100**
FOFINA	199,000	3.38	21,600	12,000	2.69	1,000	**211,000**	**3.33**	**22, 600**
SIOU	3,535,000	4.14	470,500	1,461,000	4.65	218,400	**4,996,000**	**4.29**	**688,900**
YAMA	-	-	-	615,000	1.81	35,800	**615,000**	**1.81**	**35,800**
ROMPAD	185,000	2.96	17,600	-	-	-	**185,000**	**2.96**	**17,600**
TOTAL MANA	**10,242,000**	**3.09**	**1,017,000**	**8,400,000**	**2.63**	**710,600**	**18,642,000**	**2.88**	**1,727,600**

DEPOSITS	DECEMBER 31, 2016								
	MEASURED			INDICATED			TOTAL RESOURCES		
	Tonnage	Grade (g/t Au)	Ounces[4]	Tonnage	Grade (g/t Au)	Ounces[4]	Tonnage	Grade (g/t Au)	Ounces[4]
WONA-KONA	1,419,000	1.98	90,200	21,696,000	2.55	1,778,400	**23,115,000**	**2.51**	**1,868,600**
NYAFÉ	300,000	5.60	54,100	230,000	5.84	43,100	**530,000**	**5.70**	**97,200**
FOFINA	412,000	3.67	48,600	309,000	4.04	40,200	**721,000**	**3.83**	**88,800**
YAHO	5,738,000	0.91	168,500	11,636,000	0.88	330,800	**17,374,000**	**0.89**	**499,300**
FILON 67	26,000	2.72	2,300	9,000	3.59	1,000	**35,000**	**2.93**	**3,300**
FOBIRI	469,000	1.80	27,100	114,000	1.52	5,600	**583,000**	**1.74**	**32,700**
SIOU	686,000	1.71	37,800	1,879,000	2.65	160,100	**2,565,000**	**2.40**	**197,900**
YAMA	-	-	-	108, 000	0,41	1,400	**108,000**	**0.40**	**1,400**
TOTAL MANA	**9,050,000**	**1.47**	**428,600**	**35,981,000**	**2.04**	**2,360,600**	**45,031,000**	**1.93**	**2,789,200**

DEPOSITS	DECEMBER 31, 2016		
	INFERRED		
	Tonnage	Grade (g/t Au)	Ounces[4]
WONA-KONA	3,463,000	2.96	329,600
NYAFÉ	151,000	5.86	28,400
FOFINA	88,000	3.73	10,500
YAHO	223,000	0.78	5,600
FILON 67	6,000	6.32	1,100
FOBIRI	578,000	1.39	25,800
MAOULA	2,628,000	1.62	137,100
SIOU	5,834,000	3.70	693,200
YAMA	51,000	1.42	2 300
TOTAL MANA	**13,022 ,000**	**2.95**	**1,233,600**

1 The Corporation indirectly owns 90% of SEMAFO Burkina Faso S.A., which directly holds the interest in the Mana Mine reserves and resources.

2 Mineral reserves and resources were estimated using a gold price of $1,100 and $1,400 per ounce, respectively.

3 All mineral resources reported are exclusive of mineral reserves.

4 Rounding of numbers of tonnes and ounces may present slight differences in the figures.

We are presenting 100% of the reserves and resources of the deposits in the above tables and hence excluding minority interests. Regarding open pit reserves, cut-off grades are established with the ultimate pit software in consideration of the rock type and haulage distance.

We are focusing on quality ounces. As of December 31, 2016, SEMAFO's total proven and probable mineral reserves were 3,003,600 ounces of gold. Measured and indicated resources totaled 3,000,200 ounces of contained gold. From December 31, 2015 to December 31, 2016, Mana reserves have varied from 1,989,000 ounces to 1,727,600 ounces with respective tonnage of 20,980,000 and 18,642,000 and respective grade of 2.95 and 2.88 g/t Au, including mining depletion.

As a result of an extensive in-fill drilling program and up-to-date modelling on the Natougou deposit, the open-pit proven and probable mineral reserves estimate was established at 9,567,000 tonnes averaging 4.15 g/t Au for 1,276,000

ounces of contained gold. Additionally, measured and indicated resources amounts to 211,000 ounces of contained gold.

The following table summarizes our existing mining and exploration permits in Burkina Faso and Ivory Coast.

Summary of properties per permit group owned or under option (as at March 7, 2017)					
Property name	**Permit type**	**Area (km^2)**	**% of Ownership**	**Expiration dates**	**Comments**
MANA					
Wona-Nyafé	Mining	148.84	90%	March 20, 2027	
Mana Ouest	Exploration	124.15	100%	October 10, 2017	
Mana Est	Exploration	130.20	100%	October 19, 2017	
Fobiri 2	Exploration	212.34	100%	January 5, 2018	
Kona Blé	Exploration	100.79	100%	January 18, 2017	
Bombouela Nord	Exploration	87.02	100%	December 30, 2016	Awaiting renewal decree
Bombouela 2	Exploration	250.00	100%	May 6, 2016	
Bara	Exploration	229.00	100%	October 10, 2017	
Oula	Exploration	194.11	100%	October 27, 2012	Awaiting decree for new permit
Bladi	Exploration	99.50	100%	November 12, 2018	
Pompoï Nord	Exploration	60.82	100%	February 17, 2017	Awaiting renewal decree
Saoura	Exploration	247.48	100%	April 15, 2019	
Pompoi	Exploration	174.20	100%	December 27, 2016	Awaiting transfer and renewal decrees
TAPOA					
Boungou	Mining	29.06	90%	January 23, 2024	
Boungou	Exploration	250.00	100%	May 5, 2018	
Pambourou	Exploration	233.74	100%	September 28, 2017	
Bossoari	Exploration	39.00	Under option	November 21, 2017	
Dangou	Exploration	250.00	100%	December 16, 2015	Awaiting renewal decree
YACTIBO					
Ouargaye	Exploration	200.00	100%	January 16, 2016	Awaiting renewal decree
Nabanga	Exploration	178.50	100%	April 1, 2017	
Kamsongo	Exploration	184.24	Under option	September 24, 2017	
Yacti	Exploration	165.00	100%	October 17, 2017	
Napade	Exploration	73.40	100%	September 12, 2017	
KONGOLOKORO					
Dynikongolo	Exploration	250.00	100%	December 17, 2017	
Milpo	Exploration	224.00	100%	May 19, 2018	
Segue	Exploration	250.00	100%	May 19, 2018	
Founa	Exploration	249.00	100%	June 29, 2018	
KORHOGO CI					
Korhogo-Ouest	Exploration	379.8	100%	March 26, 2017	

ITEM 5 - MINERAL PROJECTS

Mana Property

INTRODUCTION

Information in this section is based on the technical report entitled "Advanced Technical Report, Mana Property, Burkina Faso, Reserve and Resource Update as at June 30, 2013", dated October 4, 2013 (the "**Mana Report**"), prepared under the supervision of Michel Crevier, Geo, MScA, Vice-President Exploration and Mine Geology, with the participation of François Thibert, MSc, P. Geo, Richard Roy, P. Geo, Patrick Moryoussef, P. Eng and Sylvain Duchesne, P. Eng., SEMAFO's qualified persons for purposes of the Mana Report. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein. Readers should consult the Mana Report which is available under SEMAFO's profile on SEDAR at www.sedar.com to obtain further particulars regarding the Mana Mine.

Unless otherwise indicated, technical information which has been disclosed since the release of the Mana Report has been prepared under the supervision of, or reviewed by, Mr. Crevier.

Property Description, Location and Access

The Mana gold deposits and mine are located in the Mana property, southwest of Burkina Faso, in the provinces of Balé and Mouhoun at about 200 km by road from the capital of Ouagadougou. The South part (Mana Est and Ouest and Fobiri II permits) is in the departments of Bana and Yaho (province of Balé) while the North part (Kona Blé permit) is in the department of Kona (province de Mouhoun). Burkina Faso is a land locked country of Western Africa bordered by Mali to the North and West, Ivory Coast, Ghana, Togo and Bénin to the South and Niger to the East.

The Mana gold deposits are located within the limits of 12 exploration permits and one mining permit that was granted in 2007 and extended in 2013. The total areal extent of the exploration permits is 1909.61 km^2 (and 2,058.45 km^2 including the mining permit). Most of the exploration permits are granted for 3-year renewable periods (up to a maximum of 9 years) to our wholly-owned subsidiaries incorporated in Burkina Faso while the mining permit is granted for a 20-year period (currently ending March 20, 2027 and renewable for 5-year periods as needed) to Semafo Burkina Faso S.A. ("**SEMAFO BF**"), a corporation held 90% by SEMAFO and 10% by the Republic of Burkina Faso. One permit (Pompoi) is currently held by arm's length companies with whom we have signed an acquisition agreement. The exploration expenditures we incurred largely surpasses what is needed for renewal.

The mining permit covers the current open pit operations of Wona-Kona to the north, Fofina to the south and Siou to the east. The permitting processed to extend the former Wona-Nyafé mining permit to the east (towards Siou) and to the south (towards Fofina) was completed on April 3rd 2014. The mining permit now covers 149 km^2.

The Mana deposits and mine are accessible by road from the capital city of Ouagadougou which is serviced by regular air flights from Europe and other African countries. The first 175 km of the 270 km trip is on the main paved road from Ouagadougou to Bobo Dioulasso. The remainder of the trip is via a well maintained gravel road.

The climate is divided into a rainy season, from June to September comprising most of the average annual 830 mm rainfall, and a dry season from October to May. Water for processing is collected from a network of wells, collected from the tailings and accumulated behind an earthen dam constructed to collect seasonal runoff. A 58 km buried pipeline between the Mana water dam and the Mouhoun River was completed in September 2012 at a cost of $24 million and is operational since December 2012. It is designed to pump up to 450 m^3/hour, or a maximum of 3.5 million m^3 of water per year. This, in addition to the water captured from the rainy season, should be sufficient to feed a 14,000 tons per day ("**tpd**") operation. Dust storms from the north are frequent in February and March. Minimum and maximum temperatures are about 15°C and 40°C. The mine site operates year round.

Most of the local workforce for the Mana operation lives in the nearby villages of Bana, Wona, Somona, Yona, Fofina and Bissa in the Province of Bale to the south and those of Kona and Dangouna in the Province of Mouhoun to the north. A portion of the workforce is composed of expatriates, who work on 35 days in/28 days out rotation.

The Mana Mine began operation in March of 2008 with a 4,000 tpd (after ramp-up from 2,000 tpd) mill which was progressively upgraded up to a current capacity of 8,000 tpd in blended ores. Installations also include carbon in leach mill with crusher, a SAG mill, two ball mills, reactive cells, gold room and ancillary services. About half a kilometer away to the East, we established a living camp for expatriates with a mess club and other facilities. Power is currently from diesel generators. SEE ITEM 5 – MINERAL PROJECTS “Mana Property” “Mining Operations” “National Power Grid”.

Most of the area lays at elevations of about 350 meters with highs of 450 meters on several “lateritic” hills that dot the landscape. Those hills are mostly found to the southeast of the Fobiri II permit, the South of the Mana mining permit (with the Nyafé and F67 deposits) and most of the Mana Ouest permit. The North part of the mining permit with the Wona-Kona deposit and mill compound is on relatively flat topography.

History

Exploration work on the Mana property started in October 1997 which led to the initial discovery of the Nyafé, Filon 67 and Wona-Kona deposits during this period. A formal feasibility study and environmental impact study were initiated in 2004. Results of the feasibility study were made public in August 2005 while the environmental impact study was completed in 2006. Mine construction and a public hearing on environmental impact began in 2006. The Ministry of Environment of Burkina Faso and the mining permit was granted in February 2007. Mill start-up took place on February 15, 2008 with a 2,000 tpd ball mill and a first doré bar was poured on March 31, 2008. Few months after, the 4,000 tpd ball mill started operation on 2008. In 2010, a SAG was added to increase the mill throughput to 6,000 tpd. Two other CIL were added in 2010 to optimize gold recovery. In February 2011, a fourth phase of plant expansion to attain up to 7,200 tpd in bedrock and up to 8,000 tpd in blended ore was launched. The primary changes to the processing plant include: installation of a new pebble crusher into the grinding circuit, addition of two new GenSets at the power plant, addition of 1 extra CIL reservoir, upgrade of the elution circuit and upgrading all services (process water, raw water air) in the mill. The commissioning of the latest expansion (Phase IV) was completed in July 2012 and current plant capacity exceeds expectations.

The cumulative production at Mana from 2008 to December 31, 2016 is 1,656,800 ounces from 20.1 million tonnes at 2.86 g/t with an average mill recovery of 90%. The ore extracted in 2016 was from the Wona-Kona open pit (9%), the Siou open pit (65%) and the Fofina open pit (26%). Production for 2016 was 2,753,300 tonnes at 2.88 g/t with an average mill recovery of 94% for 240,200 ounces produced.

Geological Setting and Mineralization

The Mana property is mostly covered by sedimentary, volcano-sedimentary and volcanic rocks of Birrimian age (paleo-proterozoic) from the NNE-SSW Houndé belt (or syncline) within the West African craton. Several of these greenstone belts dissect the craton within Burkina Faso, and they host several gold deposits. Sedimentary, volcano-sedimentary and volcanic rocks in the belts are metamorphosed to greenschist facies and they have been subject to a least two deformation phases. Limits of belts with contiguous plutonic rocks correspond to shears of generally NE-SW direction associated to those phases.

The Wona-Kona deposit is hosted in a series of highly deformed sedimentary, volcano-sedimentary and meta-volcanic rocks. The gold mineralization has developed along a major NE-SW sub-vertical fault zone of regional extension. The shear zone is about 200 meters wide in the Wona-Kona pit sector. The original stratigraphic sequence is a succession of pelitic sediments with graphitic horizons and volcanoclastics. They have been affected by a pervasive S1 schistosity associated with vertical movements along the fault (the east block rising with respect to the west one) as well as sinistral lateral movements. Those foliated rocks are cut by mafic to intermediate dykes. The mineralization appears to be associated to a later movement along the fault associated with hydrothermal fluid circulation and intense silicification. A small deposit dubbed the Yama Deposit, located 6km south of the Fofina Deposit was delineated in 2016. Although with limited extension (2x 200m long strike length over a distance of 1km), its geology and mineralization style shows close similarities with the Wona Deposit.

The Nyafé deposit is hosted in a purely volcanic sequence with basalt and mafic-tuffs. Several sub-vertical decameter scale dikes cross-cut the volcanic sequence, in particular, an N-S dike of felsic porphyry (with quartz phenocrysts) and two mafic dikes on both sides of the pit and parallel to the mineralization. The Filon 67 deposit, next to Nyafé is composed of quartz veins associated to shear zones with dextral motion within a package of greenschist rocks. Those composite veins show textures indicative of several successive fillings.

The Fofina deposit is divided into two sectors. The west zones are located in a sheared sedimentary unit dipping moderately west and trending NNE. It is related to a rheological contact with a massive basalt unit to the east. The eastern zones are within the basaltic lavas and have a similar habitus to the Nyafé deposit.

The Yaho deposit is hosted in a wide north-striking and steeply west dipping sandstone unit flanked by shales and siltstones to the west and basaltic flows to the east. The mineralization is associated with silicified and sericitized corridors within the sandstone which also contain increased amounts of sulfides.

Finally, the Siou deposit is a typical shear-hosted quartz vein deposit. The two principal zones are the Siou and No 9 zones. The Siou Zone is hosted in a single quartz vein located within the granitic intrusive but near the contact with sandstones and shales to the west. The No 9 Zone is located at the contact between the sediments and the granitic intrusive and generally consists of quartz veining and veinlets affecting the granitic intrusive. Both are north-striking and moderately east dipping.

Outcropping mineral deposits under a tropical climate in general, and in western Africa in particular, are subjected to intense meteoritic alteration with the development of a saprolitic zone near the surface. Saprolite is a multicolored soft material, which results from the kaolinization of original feldspars in volcanic rocks. In the saprolite, iron sulphides are also generally transformed into iron oxides or hydroxides hence the generally yellow-brown color of the mineralized saprolite. All the deposits on the Mana property are affected by this alteration zone, which in general increases its values by reducing the hardness and increasing the recovery (within this current plant design).

Deposit Types

Four important deposit types have so far been recognized on the Mana property. The Wona-Kona deposit is hosted in relatively wide corridors of silicification with disseminated mineralization hosted in a sheared package of alternating fine grained metasediments and metavolcanics. At Yaho, the mineralization is associated with a strongly sericitized arenite, locally conglomeratic located within a wider deformation zone affecting metavolcanics and other fine grained sediments. The three southern deposits (Nyafé, Fobiri and Fofina) are hosted in dominantly sheared and silicified volcanic rocks hosted within quartz rich veins. These veins tend to be richer but narrower. Finally, the Siou Zone is composed of a series of shear zones hosting free-gold bearing quartz veins located along a contact between a sedimentary sequence and a felsic intrusive.

The Wona-Kona deposit has been traced over a distance of 5 km along the N45 direction. The mineralized zones are sub-vertical with a slight dip to east at the south extremity and then a slight dip to west in the north part. The principal mineralized zones run along most of the full strike length of the deposit and is generally 15-40 meters wide. Further to the south, as this main zone gets thinner, additional parallel zones appears to the east of the main zone, although some also occur to the west. Those satellite zones can be very significant and sometimes wider than the main Wona-Kona zone. On some sections, up to 4 satellite zones occur in addition to the main zone.

The Yaho deposit is located 18 km southwest of the Wona-Kona deposit and was traced over a strike length of 2 km to date. It strikes N-S, parallel to the local stratigraphy, and dips to the west. The host conglomeratic arenite is approximately 300 meters wide and is consistently strongly sericitized and locally silicified. This unit occurs between mafic metavolcanic flows to the west and finer grained sediments with local volcanoclastics to the east. Alteration rarely affects the flanking rock units.

The Nyafé deposit has a general strike of about N45 with a few diversions along its length. In the Nyafé South, Nyafé Center and the south of Nyafé North, the geometry of mineralized zones is rather simple with a single structure strongly dipping to west and locally some satellite structures with about the same orientation or much flatter. In some cases multiple zones may merge at depth. Between those two limiting structures, oblique zones of significant grade occur. Together, these structures with different orientations generate an anastomosing lozenge pattern locally.

The Filon 67 deposit is located about 300 meters to the east. It strikes approximately NS over a length of about 500 meters. It is composed of two main zones with similar dips (60° to 70°) to the west. In the center, those two structures are very close and they may merge at depth. Toward both extremities, there are further apart, leaving room for flatter satellites structures.

The Fofina deposit is characterized by two main mineralization styles. The Fofina corridor located to the west appears to follow a lithological contact between a brecciated volcanic unit and sedimentary rocks, while the N-S striking zones to the east are virtually all confined to a sequence of massive basaltic lavas and consist of a series of anastomosing shears.

The Siou Zone is located 15 km east of the Mana mill along the 30 km long NNE striking Kokoi Corridor which marks the eastern boundary between the volcanosedimetary belt with granitic intrusives. It consists of a series of sub-parallel (locally anastomosing) shear zones dipping approximately 40 to 50° to the east which occur within a 50 meters wide corridor flanking the contact. The bulk of the mineralization is found within two main shear zones namely Siou and Zone 9, over a distance of roughly two kilometers. Gold is found within quartz veins developed within the shear zones.

EXPLORATION

Exploration at Mana generally follows a systematic approach depending on the available information of each specific target. For grassroots targeting, airborne geophysics (Mag-Helitem) and surface mapping is used to identify areas for sampling via auger. Auger drilling is a cost-effective geochemical sampling method that consists of drilling vertical holes down to the in-situ saprolite horizon along a predetermined grid. A sample is taken from both the laterite/saprolite interface and within the saprolite. The sample is then sent for gold assaying using the bottle-roll method, which can detect very small gold contents from larger size samples. Considering that the geochemical anomaly associated with the Wona-Kona deposit was below 75 ppb gold, low level gold detection limits are paramount to ensure a reliable dataset. Some areas not amenable to auger drilling (e.g. high relief or outcropping areas) are generally covered by soil sampling following a similar grid as auger drilling. Air Core ("**AC**") and/or RC drilling is then used as a first pass to test the Auger drilling anomalies. Following positive results, RC drilling and core drilling is used to extend the information at depth. Oriented core drilling is used in places to gain a better understanding of the geometry of the deposits within bedrock.

Several Auger drilling programs have been completed on geochemical or geophysical anomalies in the Mana permits. Several significant anomalies were identified with this method since 2010. The Siou discovery in 2012 was achieved from a follow-up RC drilling on an Auger anomaly located along an interpreted regional structure.

A multiphase airborne geophysical survey which commenced in 2009 was completed in 2011. The resulting survey covers virtually the entire property (approximately 15,000 line-km) and consists of Magnetic, Radiometric and Electro Magnetic ("**EM**") surveys. Preliminary observations reveal that the combination of Magnetic and EM data is an excellent mapping tool, particularly for sedimentary rocks containing graphitic shales, which stand out as conductive and non-magnetic; whereas massive mafic volcanic flows are typically magnetic and highly resistive. Linear structural features (faults and deformation zones) can also be observed as discontinuities in both EM and Magnetic data. Over the course of 2011 and 2012, a property-wide surface mapping program was completed in order to confirm and further refine the geology interpreted based on geophysical data. Following the Siou discovery, much field work efforts have been dedicated to the east half of the property, especially proximal to the Siou Intrusive. This work has considerably added to our understanding of the eastern limit of the Houndé Belt.

In order to optimize its exploration programs, Mana Mineral SARL continues to refine the geological models for each deposit. Funding of academic studies as well as geological mapping coupled with the use of oriented core has helped us in understanding the distribution and controls on the ore gold bearing structures. The geological potential of the Mana property is considered high and continued exploration is expected to result in further discoveries.

Drilling

The drilling method of choice at Mana is RC which is a destructive drilling method. According to information in the drill holes database as of December 31, 2016, there have been 7,389 holes (849,324 meters) of drilling on the Mana property by SEMAFO. During 2016 alone, there were 40,397 meters of RC drilling (319 holes) on the Mana property. They are normally drilled at 50-60° dip angles to intersect the sub-vertical mineralized structures. Recovery is generally very good, and appropriate steps are taken to ensure that no sample bias is introduced during collection and reduction of the drill cuttings (riffle splitter on site for sample reduction). RC drilling in 2016 was devoted to different auger geochemical anomalies principally located within 30 km from the Mana mill.

AC is also a destructive drilling method which is limited to the soft horizons: drilling generally stops at the base of the saprolite layer. This method is rapid and inexpensive and is typically used to test anomalies identified by the auger drilling where the saprolite is expected to be thick. The Mana database contains 5,512 holes of AC totaling 205,776 meters. No AC drilling was done on the Mana property during 2016.

Oriented core drilling provides geological information, such as dip direction and degree of alteration; this information is not available from RC chips. It also provides material for metallurgical testing and density measurements. According to information in the drill hole database at the end of 2016, there has been a total of 301,039 meters in 982 holes of core drilling completed on the Mana property to date. In 2016, 6 diamond drill holes totaling 1,448 meters were completed. 5 holes were pre-collared using RC drilling and completed by diamond tails with NQ (75.7 mm) hole diameter. One hole was entirely drilled with core of NQ hole diameter. The latter was drilled for geological information and orientation.

In 2016, the internal laboratory[5] at the Mana Mine processed 54,141 drill and trench samples from the exploration department. Additionally, ALS processed 7,328 geochemical soil and auger samples. Core and RC samples are prepared and analyzed from a subsample of 50 g by fire assay; geochemical soil and auger samples are analyzed by the BLEG method. Assay results for all holes drilled in 2016 are included in the database and have been used for the current resource estimation.

Sampling, Analysis and Data Verification

As a general rule, RC and AC holes are sampled at systematic 1 meter intervals while core holes are sampled according to intervals corresponding to intersected lithologies or structures. The RC and AC database contains 1,045,651 samples covering 1,051,125meters of drilling (99% of total drilled), while the core hole database contains 207,859 samples covering 207,943 meters of drilling (100% of total drilled).

A few historical Wona holes were commenced RC and completed in core drilling to save costs. The RC portions were not sampled. The length of the assay intervals in the entire database varies from 0.05 meter to 2 meter for core holes (average 0.97 meter), and 1 meter to 6 meter for RC and AC holes (average 1.01 meter). Only a few historical RC samples were taken at 6 meter length leading into the expected Wona Zone.

Each 1 meter RC or AC sample of approximate 16 kg weight is reduced in a multistage riffle splitter to get a split of about 2 kg which is packed and sent to a laboratory. Another split of the same size is kept on site for reference and the rest of the RC sampled material is discarded. Trench samples are processed in the same way. Core samples are sawed in half with the first half packed and sent to the laboratory; the other half is kept in the core storage shelters.

At Mana Mine SEMAFO BF Laboratory, all samples (AC, RC, trench and core) are dried, crushed to -10 mesh (1.5 mm) and quartered to get a first 500 g split of crushed material. That material is pulverized to 200 mesh and quartered to get a second 50 g split which is fire-assayed with an atomic absorption finish.

The SEMAFO BF Laboratory also processes the grade control pit channel samples. Chips from 1 meter intervals along channels weigh about 1-2 kg. Each sample is dried and crushed to -10 mesh. The crushed sample is processed through a riffle splitter to get a 500 g split which is pulverized to 200 mesh (in a ring mill). The sample preparation, crushing,

[5] During the first half of 2012, a new sample preparation facility was built at the Mana Mine's laboratory in order to commence processing and assaying of exploration samples. The ''**SEMAFO BF Laboratory**'' is owned and operated by SEMAFO BF, the operator of the Mana Mine.

and pulverization of exploration samples at the SEMAFO BF Laboratory is completed in a completely separate set of equipment and building from the mine's grade control samples. All samples are transported from the drilling site to the core shack and preparation area (at the Bana exploration camp, near Nyafé) in plastic bags (RC, trench and channel) or metallic core boxes. Core samples are sawed and bagged at the Bana Camp.

A robust quality assurance and quality control ("**QA/QC**") program has been implemented within the Mana Mineral exploration group. For each batch of 78 samples two certified standards and two blanks samples are inserted. For each batch of 20 samples, one certified standard and one blank or one duplicate alternatively are inserted. The SEMAFO BF Laboratory is responsible for preparing the single coarse duplicate located by the exploration group. All batches of results are screened upon reception and prescribed pass-fail criteria are applied to decide whether the data is allowed to enter the database, or whether the batch is sent for reanalysis. A written protocol describing the pass-fail system as well as fail criteria assigned to the blank standards is kept updated throughout the year.

All batches which has at least one standard above or equal to three times the standard deviation of the expected grade will be required to go through a set protocol before entering the database. The following steps describe the protocol used to determine if a failed batch requires re-assaying:

- Review the sample tags and standard stickers to determine if a clerical error was done while entering the number of the standard sent. This step is particularly suspected if the assay result of the standard is close to the grade expected for other standard in use. If a clerical error is found, it is corrected and reported in the QA/QC verification spreadsheet. The data can then enter the database
- If no clerical error is found, and assay results do not contain a series of at least 3 samples above 0.5 g/t Au, or at least one sample above 1.5 g/t Au, the batch was accepted and results entered the database.
- If no clerical error is found, and assay results contain a series of at least 3 samples above 0.5 g/t Au, or at least one sample above 1.5 g/t Au, a re-assay is requested and new standards are included

In 2016, eighteen different certified reference materials ("**CRMs**") were inserted in the sampling sequence by SEMAFO. The CRMs (pulps) were purchased from Rocklabs Limited. The CRMs range from 0.452 g/t Au up to 8.595 g/t Au. The CRMs results were analyzed by examining control charts and are considered appropriate for assessing laboratory analytical accuracy with respect to Mana mineralization.

In 2016, a total of 3,205 CRMs samples were submitted with primary samples to the SEMAFO Mana Mine laboratory. Initially, 114 (or 4%) failed the initial three standard deviation control limits and reruns were requested by SEMAFO. After re-assaying, only 73 failures remained, which equates to a failure rate of approximately 2.3%. Most of those were maintained in the database because none of the samples contained in the certificate had significant values. Analysis of the reference materials shows the majority of results fall within the accepted control limits, suggesting that reasonable analytical accuracy has been achieved.

In 2016, 2,398 coarse blank samples were submitted with the primary samples to SEMAFO Mana Mine laboratory. Only one blank sample failed the acceptance threshold of 0.08 g/t Au. Overall, the results from the blanks for the 2016 drilling data show no evidence for systematic contamination of samples in the different laboratories during sample preparation or assaying.

In 2016, 1,143 RC coarse duplicate (lab reject) were selected for re-assay at SEMAFO Mana Mine laboratory. Average grade of the duplicates assayed is 8% lower than the original results which might suggest some issues with the sample preparation. Additionally, 19 quarter core duplicate samples were submitted with the primary core samples to the SEMAFO Mana Mine. Overall the populations compare reasonably well, with some outliers at higher grades, typical of gold deposits containing visible gold particles. There is no evidence to suggest that the primary sample varies significantly from the duplicate sample and it is considered that SEMAFO has achieved reasonable precision during the sampling and assaying process for the diamond core samples.

A set of 504 pulp duplicate samples from SEMAFO BF Laboratory were submitted to the SGS laboratory in Ouagadougou as an umpire check of results from the primary laboratory. Results show that the average duplicate samples grade lower than the original. Though there seems to be a slight negative bias towards SGS, SEMAFO considers that overall the populations compare within an acceptable range.

Mana Exploration Budget

The initial exploration budget for Mana has been set at $5.0 million and will include 80,000 meters of auger, 15,000 meters of RC and 4,500 meters of core drilling designed to confirm or expand mineralization within trucking distance of the Mana Mine. Accordingly, three auger drills are currently mobilised on the Mana Ouest and Fobiri 2 permits, and one multi-purpose drill is active on Siou deep. Approximately $1 million of the 2017 budget has been assigned to testing the underground potential at Siou.

MINING OPERATIONS

All mining operations are presently realized by open pit method. Like in many oxidized ore deposits, the Mana open pits have been exploited with a percentage of drill and blast.

The ore selectivity is done by assaying the mineralized zones along berm trench samples. The geologists are drawing sampling lines on berms that are sampled for every 1m of length. The vertical influence of these samples is for 2.5 meters. According to the assay results, the ore/waste contacts are drawn on berms and selective mining is done to separate what is defined as high grade ore, medium grade, low grade ore or marginal and waste material. Technicians are assigned to the follow-up of all of the mining operations.

The open pit walls, except for some local faults or shear zones, are very stable. The average designed pit slopes of Siou, Fofina, Wona and Kona vary from 20° to 42° in saprolite or oxide ore and from 50° to 52° in saprock, fresh rock or sulphide ore depending on the depth and design configuration.

The Mana mining fleet includes:

- 40 mining trucks:
    - 23 Komatsu mining trucks - 63 metric tonnes
    - 4 Caterpillar mining trucks - 63 metric tonnes
    - 13 Komatsu mining trucks - 100 metric tonnes
- 15 hydraulic excavators varying from 2.50 m^3 – 10.00 m^3
    - 1 Komatsu PC600/mine services
    - 1 Komatsu PC800 - 4.75 m^3/mine services
    - 11 Komatsu PC1250 - 6.50 m^3/production
    - 2 Caterpillar 6018 - 10.00 m^3/production
- 5 wheel loaders with buckets varying from 3.5 to 6.1 m^3
- 8 production drills Atlas Copco / ROCF9 and 2 Flexiroc T45
- regular water truck, dozers and graders

Our fleet has the capacity to move 110,000 tonnes of material per day. In addition, we employ two burkinabè subcontractors each capable of transporting over 5,000 tonnes of ore per day to mill stemming from the satellite deposits of Siou and Fofina.

Investments have been allocated in sustaining capital cost to reflect renewal of some of the mining fleet and refurbishing of major components of the mining fleet.

National Power Grid

In October 2011, we announced an agreement with National Electricity Company Sonabel for the construction of a 58-kilometer high-voltage transmission line to deliver power to our Mana Mine.

Construction of the power line connecting the Mana Mine to the national power grid was completed in December 2014. This involved the following milestones: (i) Completion of a 58 km – 90 KV transmission line, (ii) Completion of a 2.6 km – 33 KV transmission line, (iii) Completion of the 90/33 KV Wona substation, (iv) Completion of the 33/6.6 KV Mana

substation. Although commissioning of on-site equipment and substations was completed in the first quarter of 2015, we have yet to receive electricity from the power line and Sonabel cannot predict when the power will be forthcoming.

Metallurgical Processing and Recovery Operations

Gold from the Mana deposit is recovered by a metallurgical plant which has a nominal capacity of 4,000 tpd. In June 2010, installation of a SAG mill, construction of a new crushing circuit and addition of four new gensets were added to increase the mill throughput at 6,000 tpd. In December 2010 another plant expansion has been completed to add two other CIL tanks to optimize gold recovery. In February 2011 a fourth phase of plant expansion to attain up to 7,200 tpd in bedrock and up to 8,000 tpd in blended ore was launched and was completed in July 2012. The primary changes to the processing plant include the addition of a pebble crusher, utilization of the third ball mill, previously used as back-up, addition of one CIL tank, upgrade of the elution circuit to improve capacity, two additional gensets, critical spares and some equipment capacity upgrades such as compressors and pumps.

Run of Mine ("**ROM**") ore is loaded by a WA600 front end loader onto a static grizzly screen to handle slabby material. A rock breaker reduces the oversize material. Finer material drops into a 150 tonne capacity ROM bin. The ore is then extracted from the bin by a primary apron feeder (1,524 mm x 7,000 mm) and fed to a vibrating scalper (1,500 mm x 4,000 mm) to separate further the fines. Coarse material from the scalper feeds directly into a 36" x 48" (950 mm x 1,250 mm) single toggle jaw crusher.

The grinding circuit consists of a SAG mill in close circuit with a vibrating screen. The 7.92 m diameter x 2.74 m Allis Chalmers SAG is equipped with 2,387 KW variable speed motor and operates between 9-15% ball charge depending of ore hardness. Oversize from the SAG is sent to a HP200 pebble crusher for further crushing. Crushed material is returned to the SAG mill. Secondary and tertiary mills provide the grinding power to maintain target grind at P80-75 microns.

The CIL circuit consists of eight CIL tanks each with live capacity of 1,588 m^3. An extra tank with a capacity of 3,182 m^3 has been added to maintained and provide 29 hours residence time.

The following operations are carried out in the elution and gold room areas. The stripping and gold room areas operate seven days a week:

- Acid Washing of Carbon
- Stripping of gold from loaded carbon using the pressurized zadra method. Extra equipment was installed to maintain the stripping capacity of the circuit even with higher tonnage
- Electrowinning of gold from pregnant solution
- Smelting of electro-winning sludge.

Tailing produced by the process is pumped with variable speed pumps to the tailings storage facility (''**TSF''**). The TSF has a surface area of about 1.5 km^2 or the equivalent capacity of 10 million tonnes ("**Mt**") of tailings when final elevation will be reached. Extra lifts of the TSF are done on a regular basis to increase the tailings storage capacity.

The metallurgical processing method will be the same for the next coming years. In 2016, the mill processed 2,753,300 tonnes of ore at a head grade of 2.88 g/t Au and produced 240,600 ounces of gold for an average mill recovery of 94% which is in line with the above forecast recoveries.

Production 2016

The following table presents 100% of the gold production statistics for the Mana Mine for the financial year ended December 31, 2016. The Mana Mine is owned and operated by SEMAFO BF in which we own a 90% equity interest.

Production Update[1]	Year ended December 31				
	2016	**2015**	**2014**	**2013**	**2012**
Gold production (ounces)	240,200	255,900	234,300	158,600	172,700
Plant ore processed (tonnes)	2,753,300	2,399,100	2,754,400	2,834,500	2,738,000
Weighted Head-grade (g/t Au)	2,88	3.63	2.90	1.99	2.25
Weighted Recovery (%)	94	91	91	86	87
Total Cash Cost ($/ounce)[2]	548	493	649	777	750
All-in sustaining cost[3]	720	645	801	1,242	1,221

1 Mill start-up of the Mana Mine began in February 2008.

2 Total cash cost is a non IFRS financial performance measure with no standard definition under IFRS and represents the mining operation expenses and government royalties per ounce sold.

3 All-in sustaining cost is a non-IFRS financial performance measure with no standard definition under IFRS and represents the total cash cost, plus sustainable capital expenditures and stripping costs per ounce.

Markets and Contracts

We do not have hedging program or forward sales contracts for the Mana Mine. The gold production (doré bars) is shipped by truck and plane from the mine site and entirely sold at spot price.

Infrastructure, Permitting and Compliance Activities

An environmental impact study of the project has been made prior to construction. It included a preliminary rehabilitation and closure plan. A detailed rehabilitation and closure plan, including cost estimate, must be filed every four years. A new study was conducted and finalized in 2013 with respect to Siou and Fofina pit. A new one will be prepared in 2017.

Specialized employees perform regular environmental controls. All year long, and particularly during the rainy season, careful monitoring of different flows and water levels is made in order to have a permanent and clear understanding of the water balance.

Community development is and will remain a priority of management. For initial construction and for each new project potentially affecting the population, an environmental impact study is produced and includes an assessment of the necessary compensation for the local population along with the impact on lodging and revenues of people affected by the project.

Taxes and Royalties

Our tax rate is 17.5% at Mana. All shipments with gold spot prices lower or equal to $1,000 per ounce are subject to a royalty rate of 3%, a 4% rate is applied to all shipments with gold spot prices between $1,000 and $1,300 per ounce, and a 5% royalty rate is applied on all shipments with a gold spot price greater than $1,300 per ounce.

LOM

Based upon the current mineral estimates, the LOM for Mana is expected to continue for an additional eight (8) years at a gold price of $1,100.

Tapoa Property

INTRODUCTION

Information in this section is based on the technical report entitled "Natougou Gold Deposit Project, Burkina Faso", dated March 23, 2016 (the "**Tapoa Report**"), prepared under the supervision of Neil Lincoln, Vice-President, Business Development and Studies at Lycopodium Minerals Canada Ltd. ("**Lycopodium**"), with the participation of Marius Phillips, MAusIMM (CP), Principal Process Engineer at Lycopodium, Glen Williamson, Principal Mining Engineer at AMC Consultants (Canada) Ltd, John Graindorge, Principal Consultant – Applied Geosciences at Snowden, Jean-Sébastien Houle, Eng. from WSP Canada Inc. and Timothy Rowles, MAusIMM (CP) from Knight Piésold Consulting, all "qualified persons" for the purpose of the Tapoa Report. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein. Readers should consult the Tapoa Report which is available under SEMAFO's profile on SEDAR at www.sedar.com to obtain further particulars regarding the Natougou gold deposit.

Property Description, Location and Access

The Tapoa Permit Group is located in Burkina Faso, West Africa. The project lies approximately 320 km east of Ouagadougou, the capital of Burkina Faso. We indirectly hold, through Birimian Resources Sarl, four contiguous exploration permits – Dangou, Pambourou, Boungou and Bossoari, collectively known as the Tapoa Permit Group, covering approximately 711 km2 within the Diapaga greenstone belt in the southeast of Burkina Faso. On December 22, 2016, the Council of Minister of the Government of Burkina Faso approved and granted our mining permit covering an area of 29.06 km^2. The permit is valid for a period of seven (7) years renewable for consecutive 5-year periods until depletion of the deposits. The mining permit is held by Semafo Boungou S.A., a corporation held 90% by SEMAFO and 10% by the Republic of Burkina Faso. Access to the property is by means of Route Nationale RN04, an all-weather bitumen road from Ouagadougou, the capital of Burkina Faso, through Fada n'Gourma to the Ougarou junction. From there, travel is via a laterite road to the property 60 km to the southeast. Fada n'Gourma is the nearest town with basic hospital, hotel and limited supply facilities. Any significant supplies must be sourced from Ouagadougou. The property area is relatively flat and sits at an elevation of approximately 260 m above sea level. To the east and north of the property are mesas which rise approximately 10 m above the surrounding topography. A small hill is located in the very southern corner of the deposit. The land rises gently to the north, culminating in the height of land separating two watersheds. The main laterite access road into site is located along this ridge top. The road is reasonably well-drained and is accessible year-round to four-wheel drive vehicles. Numerous tracks allow for access to most places throughout the property area. During the rainy season (August to October), heavy rains may temporarily restrict vehicle movement in the immediate area of the deposit.

History

No exploration is known to have occurred on the Tapoa permits prior to 2010 when Orbis Gold commenced soil and rock chip sampling. The soil and rock chip sampling was followed up in 2012 with a regional RC drilling program which resulted in the discovery of the Natougou gold deposit. Resource drilling commenced at Natougou in 2012 and culminated with an initial mineral resource estimate being completed by Snowden in August 2013, which was classified and reported in accordance with the 2004 edition of the JORC Code. Orbis Gold completed further infill drilling at Natougou in 2014 and the mineral resource estimate was updated by Snowden in August 2014 and was classified and reported in accordance with the 2012 edition of the JORC Code. SEMAFO submitted a non-binding proposal to the board of directors of Orbis Gold, followed by a takeover of Orbis Gold in November 2014, which was delisted from the ASX on March 16, 2015. A conversion of the resource from JORC Code to NI 43-101 was completed by Snowden in March 2015 for SEMAFO and reported in accordance with NI 43-101 regulations. Between March 2015 and August 2015, SEMAFO completed an infill drilling program at Natougou aimed at upgrading the confidence in the resource estimate along with exploring targets proximal to the resource area. See ITEM 3 - GENERAL DEVELOPMENT OF THE BUSINESS – Three Year History – 2014.

No modern production of gold has occurred within the Tapoa Permit Group. The central part of the Boungou permit has artisanal activity along the north to south trending drainage system. Extraction of gold by the local community from artisanal workings has occurred for an unknown period of time, with free gold recovered by gravity methods in gold

pans or through simple sluicing methods. The vertical extent of the workings is unknown, however it is believed to reach a maximum depth of approximately 20 m to 40 m, although the vast majority of the workings are less than 5 m deep. Snowden notes that the deeper workings are extremely localised and limited in extent. The total tonnage and grade of material extracted from artisanal workings at the Natougou deposit is unknown, however it is not considered to be material to the current mineral resource estimate.

Geological Setting and Mineralization

The Boungou permit, which contains the Natougou deposit, lies within the Diapaga greenstone belt, a northeast-southwest orientated belt that extends over 250 km in length and over 50 km in width. We hold four contiguous permits, collectively known as the Tapoa Permit Group, covering approximately 70 km in strike length along the Diapaga belt.

The stratigraphy at Natougou is relatively simple and quite consistent from hole to hole. The stratigraphy consists of two volcanic flows separated by a volcaniclastic unit. The footwall flow generally progresses upwards from a massive basalt flow to pillowed flows followed by flow breccia and volcaniclastics. The hangingwall is characterized by a medium grained volcanic flow (or sill). All these units are intruded by diorite and/or granodiorite sills, possibly originating from the felsic intrusion located immediately west of the deposit. Late dolerite dykes are also present and appear to be sub-vertical and strike northwest. The Boungou Shear Zone, which hosts the main gold mineralization at Natougou, is located at the contact between the footwall and hangingwall volcanic units, where the volcanic flow top breccias have formed and the volcaniclastics deposited. The contact zone is thought to have served as an area of weakness, focussing the deformation. While the volcaniclastic units are not always present (although the intensity of the alteration can make it difficult to identify), the flow top breccias are interpreted to be ubiquitous across the deposit area.

Deposit Types

The Natougou deposit can be described as a West African shear zone hosted greenstone gold deposit. The main mineralized lode is interpreted as a flat-lying anticlinal shear that outcrops in the southeast and plunges gently to the northwest. The mineralization has a strike length of approximately 2 km, striking towards a bearing of 315° and an across-strike length of approximately 1 km (towards 045°). The mineralization is gently folded with the fold axis oriented along strike and the limbs dipping gently at approximately 15°.

Gold mineralization is associated with biotite and silica-sericite alteration, along with disseminated sulphides, such as pyrrhotite, pyrite and minor arsenopyrite and chalcopyrite, with occasional free gold. The mineralization is structurally controlled and is hosted primarily within a large shear zone and its associated alteration. Arsenopyrite is almost invariably associated with the presence of gold in assayed samples. The percent arsenopyrite logged can be used as an initial identification of the mineralized lode. Although not common, visible gold has been observed in core in some drill holes.

EXPLORATION

Drilling

Drilling at Natougou was performed by a combination of RC and diamond drilling. The diamond drill holes were pre-collared using RC drilling down to approximately 10 m above the interpreted top of mineralization. Diamond tails (HQ diameter) were used to complete the holes. These are recorded as multi-purpose (MP) holes in the database. A limited number of diamond holes were cored from the surface, predominately on two 10 m by 10 m close spaced drilling panels.

At the end of 2016, the total dataset comprises 1,667 drill holes, of which 1,260 were used for the Natougou resource estimate. We drilled 291 holes in 2016 for a total of 36,480 metres. Our 2016 drilling program included proximal exploration drilling at Natougou. One of the objectives of the 2016 exploration program was to expand resources at depth within the footwall zone of the Boungou Shear Zone (BSZ) in addition to the sector west of the deposit. The BSZ is a gently folded, northwest-plunging shear zone proximal to the current in-pit reserves. Potential extensions of the BSZ had been identified through the 2016 RC drill program. A portion of the RC drill program in the second quarter focused on defining the limits of the footwall zone below the BSZ within the pit area in addition to extending the West Flank Sector of the BSZ. In the fourth quarter, 6,716 meters of RC drilling were completed at 80-meter hole spacing on the West Flank Sector. All drill holes intersected the BSZ at depths ranging from 30 to 180 meters vertically. Some

similar drilling was realized on a smaller potential area on the East Flank. Based on the results, we brought the West and East Flank Sectors into the inferred resources category by year-end 2016. The mineralization within the West Flank Sector remains open along the plunge towards the northwest where hole TPA0811 returned values of 5.31 g/t Au over 4 meters. In addition, the down plunge of the main mineralized trends north of the in-pit reserves remains open and underexplored.

Regarding regional exploration in 2016, we deepened our understanding of the Tapoa permit by completing an airborne magnetic campaign comprising magnetic and radiometric surveys over the entire property. In parallel, a previous auger drill program had identified significant anomalies along a NE-trending regional structure dubbed Trend 045 that crossed the entire property to the south of the Natougou deposit. A series of lineaments are observed across the entire property within a two- to four-kilometer wide corridor. After combining with results from mapping, soil geochemistry, auger drilling and trenching, a number of high-potential targets were identified. A total of 4,000 meters of reverse-circulation ("RC") drilling was carried out on the trend.

Drill hole collars were surveyed in 2016 using a LEICA GS14 Total Station system. Data from the instrument is downloaded directly to a laptop and processed using Leica Survey Office software. The Total Station System has a reported accuracy of 10 mm horizontally and vertically. The coordinate system basis used is WGS84 Zone 31N.

Post-2015 drill holes were all surveyed downhole using a Reflex GYRO electronic surveying tool. Both the azimuth and dip were recorded at 5 m intervals (approximately) downhole. Pre-2015 drill holes were surveyed downhole using a Reflex EZ-shot electronic surveying tool. Both the azimuth and dip were recorded at 6 m intervals (approximately) downhole, within the PVC casing, and then at 30 m intervals until the bottom of hole was reached.

A topographical survey using an aircraft mounted LiDAR system was completed on 18 November 2014 by Southern Mapping to produce a digital terrain model (DTM) of a portion of the Boungou Permit over an area that extends past the current resource estimate area. The survey was flown at a height of approximately 1,200 m. SEMAFO noted some minor discrepancies in elevation between the drill hole collar survey and the LIDAR survey. Consequently, SEMAFO elected to use the LIDAR coordinate as the collar elevation (i.e. Z coordinate) in the database for the current mineral resource estimate.

Sampling, Analysis and Data Verification

Material from the 2016 RC drilling by SEMAFO was collected every 1 m into a plastic bag directly from the cyclone on the drill rig. The bags are pre-labelled with the hole ID, "metre from" and "metre to".

For the 2016 RC drilling, approximately 30 kg to 40 kg of material was collected by the cyclone for each 1 m RC interval, which was reduced using a tiered riffle splitter to obtain a split of about 2 kg which was packed in a plastic bag. Sample tickets were placed into each plastic bag and the hole ID and sample depth recorded on the remaining ticket stub. The riffle splitter was cleaned after each sample with a brush. Sample bags were then transported to the on-site preparation laboratory for crushing and pulverizing and the sample pulps transported to the SGS laboratory in Ouagadougou for assaying. Quality control samples, including reference materials and blanks were also submitted with these samples.

A second split of the same size is kept on site for reference and the rest of the RC sampled material is discarded. A small sample of chips from each 1 m interval is removed with a sieve, washed and placed in labelled chip trays for logging and future reference. SEMAFO indicated that RC samples were collected dry 99% of the time.

Diamond core samples were either sampled on a maximum of 1.2 m intervals or to the lithological/alteration/mineralization boundaries, with a minimum sample length of 0.2 m. The core is cut in half lengthwise using a diamond saw and the sampled half core is placed in a plastic bag and labelled with the hole ID and depth. A sample ticket labelled with the hole ID and depth is also placed in the bag. Quality control samples were also submitted with these samples.

In 2016 drill core and RC samples were submitted to the SGS laboratory in Ouagadougou. SGS laboratories were recognized in July 2015 by the South African National Accreditation System (SANAS) for meeting the requirements of the ISO/IEC 17025 standard.

In 2016, samples were prepared at the on-site sample preparation facility, which is managed and run by SGS. The sample preparation involves oven drying and crushing approx. 2 kg of samples to 80% passing 2 mm. One in 20 samples is screened to ensure 80% passing 2 mm. The 2 kg sample is split in half using a rotary or riffle splitter, one preparation duplicate is selected every 50 samples for control. The 1 kg split of the 2 mm material is then pulverized to 85% passing 75 µm. One in 20 samples is screened to ensure 85% passing 75 µm and one prep blank in 50 samples is taken and assayed for contamination. A 250 g sub-sample is collected by scooping and conditioned for shipping to the Ouagadougou laboratory. Sample pulps are stored on site in a secure locked room until shipment to Ouagadougou. Transportation occurs on a regular basis with security guards. Personnel releasing the samples for shipment to the laboratory assume responsibility for the sample security and paperwork with recorded sample numbers accounted for prior to shipment to the laboratory. The remaining material (pulp reject) is stored on-site.

Gold content was determined at the SGS laboratory in Ouagadougou by fusing a 50 g sample with a litharge based flux followed by cupellation, dissolving the prill in aqua regia and determining the gold content by atomic absorption spectroscopy ("**AAS**"). SGS undertake an internal QA/QC process involving standards, blanks and duplicates. Each analysis batch consists of 84 samples, of which 10 are quality control samples, comprising four reference materials, two duplicates (taken before crushing), two pulp duplicates, one blank (pulp) and one coarse blank. SGS also participate in regular round robin programs to monitor for bias. A minimum of 5% additional pulp check assays are performed on all batches (depending on the number of anomalies present within a given batch). SGS provide SEMAFO with a monthly report of results from the internal QA/QC program.

All assay reports from SGS assay laboratory are submitted to SEMAFO as digital data files and as PDF certificates. In 2016, a total of 490 batches of samples were sent to SGS for a grand total of 38,348 new samples added to the database since the previous resource estimate. An additional 262 RC coarse duplicates and 158 quarter core duplicates were assayed at SGS. 140 pulp duplicates from SGS were also assayed at ALS laboratory in Ouagadougou, which acted as a check laboratory.

SEMAFO QA/QC protocol includes the addition of reference materials, field duplicates and blank samples to the sample batches. For each batch of samples, which typically comprised 74 samples, for the 2016 drilling, two reference material samples, two blanks and two pulp duplicates are inserted.

In 2016, eight different CRMs were inserted in the sampling sequence by SEMAFO. The CRMs (pulps) were purchased from Rocklabs Limited and were inserted at a rate of one in every 20 samples. The CRMs range from 0.599 g/t Au up to 7.09 g/t Au. The CRMs results were analyzed by examining control charts and by assessing the location of the CRMs within the sample batch. Although the standards are not matrix matched, they are considered appropriate for assessing laboratory analytical accuracy with respect to Natougou mineralization.

In 2016, a total of 1,075 CRMs samples were submitted with primary samples to the SGS laboratory in Ouagadougou. Initially, eight (8) (or 1%) failed the initial three standard deviation control limits and reruns were requested by SEMAFO. After re-assaying, only seven (7) failures remained, equating to a failure rate of less than 1%. Analysis of the reference materials shows the majority of results fall within the accepted control limits, suggesting that reasonable analytical accuracy has been achieved.

In 2016, 1,068 coarse blank samples were submitted with the primary diamond core and RC samples to SGS. Two blank samples were submitted per batch of 74 (SGS) samples. The blank material is sourced from the Bobu quarry and comprises of non-mineralized sedimentary rock. There was no failure in 2016. The results from the blanks for the 2016 drilling data show no evidence for systematic contamination of samples at SGS during sample preparation or assaying.

In 2016, there were a total of 262 RC coarse duplicates and 158 quarter core duplicates for diamond core samples submitted to SGS. Overall the RC populations compare reasonably well, with some outliers at higher grades, typical of gold deposits containing visible gold particles. On the other hand, there is a slight negative bias in the core duplicate population potentially caused by the difficulties in replicating results when comparing ½ core samples and ¼ core samples. Although a bias was identified, the difference is considered insignificant and it is believed that SEMAFO has achieved reasonable precision during the sampling and assaying process for the diamond core samples.

A set of 140 pulp duplicate samples from SGS were submitted to ALS laboratory in Ouagadougou as an umpire check of results from the primary laboratories. Overall the populations compare well and no bias is evident between the

duplicate pairs. The results indicate acceptable precision is being achieved at SGS laboratory (SGS and ALS, Ouagadougou).

Mineral Processing and Metallurgical Testing

A detailed metallurgical testwork program was undertaken and was focussed on primary ore from the Natougou deposit. Quantities of oxide ore presented to the process plant are expected to be around 1% of reserves and as such, this ore type was not included in the master composite work. However, it was tested in the variability work.

The detailed testwork was carried out from March 2013 to August 2015 under the direction of Lycopodium, with input from former property owner, Orbis Gold and later SEMAFO, using HQ and PQ (123 mm) drill core recovered from both resource and metallurgical drilling campaigns.

In general the Natougou primary ore is an abrasive, competent ore with above average comminution energy requirements. The ore has a high gravity recoverable gold content; leach kinetics are very slow when gravity is not included in the flowsheet. High dissolved oxygen levels and lead nitrate are required to achieve fast leach kinetics and adequate gold recovery. Anticipated lime consumption for primary ore is low to moderate, provided good quality water can be provided on site. Cyanide consumption is likely to be moderate. High lime consumption will be experienced if oxide ore forms part of the feed blend.

The variability testwork showed that overall gold recoveries for the Natougou primary ore ranged from 84 % to 99%. There was a distinct relationship between recovery in the gravity stage and overall recovery. LOM head grades for the process plant are expected to average 4.15 g/t with a gold recovery of 92.9%.

The results suggest that the residue grade is moderately correlated with the amount of coarse gold in the sample (measured by % gold in +75 micron fraction of the screen fire assay), arsenic head assay, and gold head assay. A constant tail relationship is not appropriate.

With consideration of the parameters currently in the geological model, a relationship between the residue grade and the gold head assay was developed to produce the following predictive equation:

Gold Residue (g/t Au) = 0.1378 + 0.0384*Gold Head Assay (g/t Au)

For example, for a gold head assay of 4.36 g/t Au, the gold residue grade would be 0.31 g/t Au.

As silver residue grades are frequently at the assay detection limit, and no trend with head grade is apparent, it is recommended that a simple arithmetic average of all the silver recovery figures be used i.e. 67%.

Tapoa Exploration Budget

A total of $15 million has been assigned to explore the Natougou gold project in 2017, $8.5 million of which has been allocated to an infill drilling program (40-meter by 40-meter hole spacing) with the aim of bringing the inferred resources on the West Flank Sector into the indicated resources category by the end of the first half of 2017. In addition, 60,000-meter auger and 70,000-meter RC drill programs have been initiated on the project, with the bulk of the RC program scheduled for the Natougou permit.

During the second half of 2017, we intend 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. An amount of $1.3 million has been earmarked for this purpose.

MINING OPERATIONS

Mining will use a conventional open-pit mining method, with hydraulic excavators in backhoe configuration to mine the mineralized zone, and in face-shovel configuration to mine the majority of the waste. The majority of the rock requires blasting and only the softer material located within the top 5 m to 10 m of the deposit will be free digging and loaded directly by hydraulic excavators. The mining operations are anticipated to be contracted out with SEMAFO overseeing management and the provision of the mining technical services.

The LOM is expected to last approximately 8 years excluding pre-stripping activities in 2017 and 2018; in 2026, the mill should be fed solely from remaining stockpile. Over the LOM, approximately 139 Mt of rock and topsoil will be mined, comprising 9.6 Mt of ore and 130 Mt of waste, including top soil at an average strip ratio of 13.6:1. A summary of the mining schedule is presented in the table below.

Mining Schedule Summary

		2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Mined Tonnes and Grades											
Total ore mined	Mt	0.1	1.7	1.7	2.1	1.1	1.3	1.2	0.5		**9.6**
Total Au grade mined	g/t	2.5	5.0	4.5	4.7	3.1	3.9	2.9	3.5		**4.1**
Total tonnes mined	Mt	18.2	21.8	21.5	20.9	20.5	17.4	16.6	2.4		**139.4**
Ex-pit strip ratio	t:t	240.2	11.4	11.5	8.8	18.5	12.8	13.1	4.3		**13.6**[1]
Mill feed											
Total tonnes to mill	Mt		1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.2	**9.6**
Total Au grade to mill	g/t		5.9	5.6	5.6	3.6	3.9	2.7	2.2	1.5	**4.1**

[1] Value includes additional topsoil, without topsoil included the ex-pit strip ratio is 13.4

Processing and Recovery Operations

The metallurgical treatment route selected has been based on the results of the current testwork program and includes processing ore at 4,000 tpd via the following unit process operations:

- Single stage primary crushing with a jaw crusher to produce a crushed product size of 80% passing (P_{80}) of 133 mm.
- Mill feed surge/overflow bin that overflows to a 8,000 tonne stockpile to provide 48 hours of capacity. During extended periods of up to two days for primary crusher equipment maintenance, ore from the stockpile will be reclaimed by an excavator or dozer to feed the grinding circuit.
- The grinding circuit is a SATMC type, which consists of a closed circuit SAG mill, pebble crusher for SAG mill discharge oversize and a closed circuit tower mill to produce a P_{80} grind size of 63 µm.
- A gravity gold recovery circuit.
- Hydrocyclones are operated to achieve a cyclone overflow slurry density of 27% solids to promote better particle size separation efficiency. Subsequently, a pre-leach thickener is included to increase slurry density to the leach circuit, minimise leach tank volume requirements and reduce overall reagent consumption.
- Leach circuit with five tanks to achieve the required 36 hours of residence time at nominal plant throughput. Carbon-in-pulp carousel circuit consisting of seven stages is a carbon adsorption circuit for recovery of gold dissolved in the leaching circuit.
- AARL elution circuit with gold recovery to doré. The circuit includes an acid wash column to remove inorganic foulants from the carbon with hydrochloric acid.
- Carbon regeneration kiln to remove organic foulants from the carbon with heat.
- Tailings thickener to increase slurry density for water recovery prior to tailings discharge to the tailings storage facility.

The processing facility also includes water, air and oxygen services (storage and distribution), and reagent and grinding media storage and usage.

Infrastructure, Permitting and Compliance Activities

Infrastructure

The major infrastructure at the site to support a 4,000 tpd (1.34 Mtpa) mining and processing facility includes a 15.4 Megawatt onsite power generation via a hybrid heavy fuel oil and light fuel oil generators, electrical distribution, bulk fuel storage, TSF, water storage dams for water harvesting, sediment ponds, raw water storage facility, main access road, reagents and consumables storage, plant operations and maintenance buildings, administration building, medical facilities, warehousing main kitchen and dining room, engineering and exploration offices, accommodation camps with services for operations and maintenance personnel, and security.

The TSF will have a capacity to store 10 Mt of tailings generated by the process plant is required for the LOM with tailings being produced at a rate of 1.34 Mtpa. The preferred site selected for the project is located 800 m to the north-east of the process plant. The tailings storage facility will require a single embankment along its south and western extents with a total embankment length of 1665 m and with a maximum embankment height of 23.6 m at the south west corner. The eastern and northern margins of the storage facility are confined by a natural laterite ridge line and therefore no supporting embankment is required along these margins. The tailings beach surface at full capacity will cover an area of approximately 76.5 hectares. Tailings will be pumped to the TSF as a slurry at 62% to 65% solids and will be deposited sub-aerially to facilitate drying and consolidation of the tailings mass.

Geochemical testing of the two composite tailings samples were conducted and found to be non-acid forming but were highly enriched in arsenic which was soluble under the pH conditions anticipated in the TSF. As a result of the high arsenic in the tailings solids and supernatant a robust seepage control system comprising an above liner underdrainage system, a geomembrane liner overlying a compacted in-situ low permeability sub-base and a sub liner seepage recovery drains have been included in the design.

The total water demand for the site was estimated at between 1.1 and 1.4 million m^3 per year. The water demand for the process plant amounts to 0.75 million m^3, which includes the process raw water requirement of 0.08 million m^3 but excludes water in ore. Other water demands include a provision of between 0.2 million m^3 and 0.6 million m^3 for dust suppression and wash down water and 0.04 million m^3 for potable water requirements. The demand will be met from TSF decant, pit dewatering (including precipitation on the pit area), runoff from the ROM pad and plant site and sediment impacted runoff collected in the sediment control ponds. The balance of the water demands will be made up of raw water harvested from the groundwater and the surface water sources.

Raw water demands at Natougou will be met from two creeks which are located to the east and west of the process plant and water which will be harvested from the sediment ponds located around the site. An East Water Supply Dam will be constructed approximately 1.5 km to the north east of the processing plant. The mean annual runoff at the dam site is estimated to be 0.95 million m^3 from a catchment area of 1902 Ha. A West Water Supply Sump will be constructed approximately 2.0 km to the west south west of the processing plant. The mean annual runoff at the dam site is estimated to be 1.15 million m^3 from a catchment area of 2262 Ha. The flat topography at the dam sites would result in significant evaporation and seepage losses should this location be used to store water for extended periods of time and therefore a supplementary water storage facility, the Raw Water Pond, has been provided to store water more efficiently.

Three major sediment ponds have been designed to capture runoff from the waste dumps with an upstream clean water diversion designed to carry non impacted water around the site.

Environmental, Permitting and Social or Community Impact

Burkina Faso has a regulatory framework for environmental and social management. The relevant policies, laws and regulations of Burkina Faso were taken into account during the implementation of the ESIA.

The application for an operating permit requires a feasibility study ("**FS**") that must first be accepted by the *Ministère de l'environnement et du développement durable*[6]. The FS must include an ESIA which in turn must include a RAP that

[6] Ministry of Environment and Sustainable Development

has been accepted by all stakeholders. Once in production, a mining permit holder is required[7] to open under his name a fiduciary account named *Fonds de préservation et de réhabilitation de l'environnement minier*[8] at the *Banque Centrale des États de l'Afrique de l'ouest*[9]. This account must be funded annually on January 1st by an amount equal to the total rehabilitation budget presented in the ESIA, divided by the number of years of production to cover the costs of mine reclamation, closure and rehabilitation.

Both the ESIA and the RAP were filed with the government of Burkina Faso in the second quarter of 2016. Our mining permit application for our Natougou gold project was approved on December 22, 2016 by the Council of Ministers of the Government of Burkina Faso.

Many baseline studies have been conducted from 2013 and 2015 in order to fully document the sensitive environmental and social components of the Natougou gold project.

The stakeholder information and consultation process is an integral part of the ESIA. To date, we have put in place mechanisms and communication tools so that all those involved in, or affected by, the project can freely express themselves. The information collected during these consultations has helped identify issues, risks, benefits, and opportunities in order for the project to avoid, minimize, or offset negative impacts and enhance the positive ones.

Our project will have many impacts on the physical, biological, social and economic components of the project's area. The impacts on physical environment are moderate given the mining operations have a zero water discharge and that the project is engineered to protect ground water from potential cyanide contamination. The most significant impact is the social component with the resettlement of the population currently living on its site. The economic impact of the project at the local, regional, and national levels is positive as it will provide jobs during construction, operation and closure phases which will increase household incomes and improve living conditions. The revenues generated by the mining operation will also increase Burkina Faso's internal revenue through taxes and royalties charged by the local authorities.

The Natougou gold project will require the relocation of 165 concessions involving approximately 900 inhabitants and compensation will be paid for 813 Ha of farmland. The current RAP budget is estimated at approximately $8 million including contingencies.

Geochemical studies have been conducted to assess the potential for acid drainage (Acid Rock Drainage) and metal leaching of the waste rock and construction materials as well as CIP tailings and heap leach solids. It was found that the direct seepage form the waste dump will meet Burkina Faso's Effluent Discharge Criteria for release to surface water.

A Conceptual Closure and Rehabilitation Plan was developed including work to be conducted from the closure of the mine, at the end of operational activities, as well as progressive rehabilitation work. The estimated cost for the direct closing, decommissioning and restoration cost, engineering and post closure monitoring is estimated at $17.6 million. When including contingencies and salvage value recovery, the cost for mine closure and remediation should be $17.2 million.

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[7] Decree No. 2007-845/PRES/PM/MCE/MEF.

[8] Fund for the Preservation and the Rehabilitation of the Mining Environment

[9] Central Bank of West African States

Capital and Operating Costs

Average LOM Operating Costs

The average LOM operating costs are summarized in the table below and is based on the LOM operating strip ratio of 7.1:1 which excluded capitalized stripping costs. The operating costs do not include financing and leasing costs associated with the onsite power plant and bulk fuel storage. The operating costs are based on contract mining and include personnel costs, power costs based on fuel usage, reagent and consumable usage, maintenance costs, fuel usage, laboratory costs, and various administration costs covered in general and administration.

Area	$/t ore processed
Mining	$20.28
Processing	$19.51
General and administration	$4.94
Total	$44.73

Initial Capital Costs

The initial estimated capital cost to develop the Natougou gold project is $219.4 million and includes pre-stripping costs, contingency, taxes and duties and is summarized in the table below.

	$ ('000,000)
Indirect Construction	$13.6
Processing Plant	$42.3
Reagents and Plant Services	$13.7
Infrastructure	$41.8
Owner costs	$15.8
EPCM costs	$15.9
Resettlement Action Plan	$8.0
Initial Supplies Inventory	$7.2
Plant & Infrastructure Subtotal	**$158.3**
Pre-stripping	$42.4
Contingency	$18.7
Total	**$219.4**

Deferred capital (which include bulk fuel facility and power plant) is estimated at $15.2 million, sustaining and closure costs are estimated at $42.3 million, including the estimated salvage value of the site in 2026 amounting to $3.84 million.

Yactibo Property

INTRODUCTION

Information in this section is based on the technical report entitled "Yactibo Permit Group, Nabanga Gold Deposit", dated June 2015 (the "**Yactibo Report**"), prepared by John Graindorge, Principal Consultant – Applied Geosciences at Snowden and Harald Muller, B.Eng.(Chem), MBL, FAusIMM, FIChemE, FSAIChE, Divisional Manager – Metallurgy at Snowden, "qualified persons" for the purposes of the Yactibo Report. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein. Readers should consult the Yactibo Report which is available under SEMAFO's profile on SEDAR at www.sedar.com to obtain further particulars regarding the Nabanga gold deposit.

Management does not consider the Nabanga gold deposit as being a material project to the Corporation**.**

Property Description, Location and Access

The Nabanga gold deposit is part of the Yactibo Permit Group located in Burkina Faso, West Africa. The project lies approximately 250 km southeast of Ouagadougou, the capital of Burkina Faso. We indirectly hold, through Birimian Resources Sarl and Birimian Discovery Sarl (an immaterial subsidiary of SEMAFO), five contiguous exploration permits – Ouargaye, Nabanga, Kamsongo, Yacti and Napade, collectively known as the Yactibo Permit Group, covering approximately 801 km^2 of southeast Burkina Faso. The Nabanga exploration permit, which hosts the Nabanga deposit, covers an area of 179 km^2 and was granted on April 1, 2008 by Burkina Faso decree No. 08-059 to Birimian Resources SARL, a 100% owned subsidiary of SEMAFO. The original vendor of the permit retains a 1% net profit royalty, payable upon any future gold sales.

Access to Nabanga is by means of Route Nationale RN04, an all-weather bitumen road from Ouagadougou, the capital of Burkina Faso, through Fada n'Gourma. From there, travel is via Route Nationale RN18, an all-weather bitumen road to within approximately 15 km of the Nabanga project. An unsealed dirt road, which crosses the Kompienga River, is then used to access the Nabanga property approximately 15 km to the west of RN18.

History

Four of the Yactibo permits (Ouargaye, Nabanga, Kamsongo and Yacti) were acquired by Orbis Gold in 2007 and 2008, through certain Orbis Gold subsidiaries in Burkina Faso. The Napade permit was later added to the Yactibo Permit Group in 2011 to fill the gap between the Nabanga and Kamsongo permits. The Yactibo Permit Group was acquired through the acquisition of Orbis Gold.

No exploration is known to have occurred on the Yactibo permits prior to Orbis Gold' acquisition of the permits in 2007 and 2008. Other than the Nabanga deposit within the Nabanga permit, all other areas within the Yactibo Permit Group are considered to be at an early exploration stage.

Initial exploration by Orbis Gold on the property comprised mapping and field reconnaissance, which identified a number of artisanal mining trends. Rock chip samples within the Yactibo Permit Group, collected primarily from artisanal mining sites (artisanal samples are typically either grab samples from the spoil heaps or from "ore" mined from underground), show results of up to 101.3 g/t Au (sample of quartz vein collected from spoil heap at Pilogre artisanal site).

In 2010, a limited regional drilling program was undertaken which resulted in the discovery of the Nabanga gold deposit. A high resolution airborne geophysical survey (magnetics and radiometrics) was flown by NRG in 2011.

A second phase of drilling was completed at Nabanga in mid-2011 and based on the results, further resource definition drilling was completed in the 2011 to 2012 field season, culminating with an initial mineral resource estimate being completed by Snowden in September 2012, which was classified and reported in accordance with the 2004 edition of the JORC Code.

Follow-up diamond drilling below the initial resource was completed in 2013 with mixed results. According to Orbis Gold (2013), the deep diamond drilling indicates a significant weakening of the Nabanga structure below 200 m vertical depth. An additional five RC drill holes were completed by Orbis Gold in 2013 along strike to the northeast, with no significant mineralization intersected, effectively closing off the resource to the northeast. The 2017 exploration program is designed to test proximal parallel coincident geochemical and geophysical anomalies for Nabanga-type mineralized quartz veins.

Geological Setting and Mineralization

The Yactibo Permit Group straddles a major northeast trending shear separating the Youga Belt in the northwest from the Diapaga Belt in the southeast. The Nabanga deposit is located to the southeast of the shear, within the Diapaga Belt. The Diapaga Belt is dominantly comprised of metamorphosed intermediate volcanics, sediments, and foliated or migmatitic granites and gneisses.

The overall strike orientation of the mineralized structures within the Yactibo Permit Group is northeast-southwest, with a moderate to steep dip towards the northwest. Gold mineralization at Nabanga is predominantly hosted within a magnetic-rich granodiorite intrusive. The gold mineralization is associated with quartz veining and a distinctive alteration zone developed around the central quartz filled structure. The mineralized structure dips approximately 65° towards the northwest and has an average horizontal thickness of 4 m.

Deposit Types

The Nabanga mineralization is considered to belong to the 'intrusion related' class of gold deposits.

The granodiorite host has been variously altered with the alteration associated with the mineralized structure primarily comprising sericite-biotite-hematite-chlorite. Sulphide minerals, mostly pyrite with some trace chalcopyrite, are relatively uncommon. Scanning electron microscope ("**SEM**") analyses of specimens collected from RC drill hole NARC040 show that the gold occurs as fine (<10 µm) gold ±silver telluride inclusions within pyrite grains. A backscattered SEM image showing calaverite (gold telluride; calaverite = $AuTe_2$) inclusions within a pyrite grain as well.

EXPLORATION

Drilling

Drilling at Yactibo was performed by a combination of RC and diamond drilling. The diamond drill holes were generally pre-collared using RC drilling down to maximum depth of 200 m below surface. Diamond tails (NQ diameter) were used to complete the holes. A limited number of diamond holes were cored from the surface. A number of trial Rotary Air Blast ("**RAB**") holes were drilled within the Kamsongo permit, however the drilling technique was deemed unsuitable and often could not reach the planned target. No further RAB drilling has been completed.

Orbis drilling dataset contains 441 drill holes, of which 390 were used for the resource estimate. The 51 drill holes which were not included in the Nabanga resource estimate either do not intersect mineralization or are too sparse to allow resources to be modelled. All of the drill holes within the dataset provided by SEMAFO are within the Nabanga permit. All drill holes were drilled by Orbis Gold between 2010 and 2013.

The vast majority of the drilling within the Nabanga permit is focused on the Nabanga deposit, which is split into the North Zone, Central Zone and Southern Extension Zone. Drilling to the northwest targets a sub-parallel structure known as the Nabanga North Lode. The best result at Nabanga North Lode is 2 m at 8.32 g/t Au from 25 m downhole (NARC019; downhole length), although the majority of results suggest that the mineralization is narrow, discontinuous and generally of low grade (less than 0.3 g/t Au).

A total of 16,063m of RC drilling from 131 holes was completed by SEMAFO on the Yactibo property in 2016. Of these, 1,959m were drilled along strike at the Nabanga deposit and the remainder was used to explore the Kamsongo soil anomaly trend located north of the deposit. Although wide anomalous gold values were obtained, explaining the soil anomalies, no significant values of economic potential were encountered.

All drill hole collars were surveyed using a Trimble Geoexplorer 6000 differential global position system. The coordinate system basis used is WGS84 Zone 31N.

All drill holes used for the Nabanga mineral resource estimate have been surveyed using digital single and multi-shot cameras. The cameras used for the downhole surveys are the Campteq multi-shot camera and the Reflex EZ-trac multi-shot camera; both have a reported accuracy of ±0.5° for azimuth measurements and ±0.2° for dip measurements. It was noted that the downhole surveying methodology used can be influenced by magnetic interference from the surrounding host rocks, however, given the low magnetic susceptibility of the Nabanga deposit (average of approximately 24,600 nT), this interference is unlikely to be material to the mineral resource estimate.

The drill hole collars was used to create a topographic surface for constraining the resource block model. It is considered reasonable given the early project status.

The drilling recoveries for both diamond core and RC drilling were reviewed to ensure appropriate material weight or core length was recovered during drilling. The global recovery of RC chips is acceptable, with an average recovery of 80% to 90%. The estimated recovery of the RC drilling is based on a 5¼ inch (133.35 mm) diameter drill hole with a global average bulk density of 2.8 t/m^3. It is considered that the recoveries are acceptable for representative sampling and subsequent mineral resource estimation.

Sampling, Analysis and Data Verification

Material from the RC drilling is collected (every 1 m) into a plastic bag directly from the cyclone on the drill rig. The bags are pre-labelled with the hole ID, “metre from” and “metre to”. A small sample of chips from each 1 m drilling run is removed with a sieve, washed and placed in appropriately labelled chip trays for future reference.

The geologist identifies possible mineralized intersections which are sampled on a 1 m interval. The metre bags are split using a three-tiered riffle splitter, followed by a single tier riffle splitter to produce a nominal 2 kg sample. Outside the mineralized interval, RC samples are composited to 4 m samples. A three-tiered riffle splitter and/or single tier riffle splitter is used to split the metre bags to an approximate weight of 500 g resulting in an approximate 2 kg sample representing a 4 m interval of drilling. Sample tickets are placed into a plastic bag and the hole ID and sample depth recorded on the remaining ticket stub. The riffle splitter is cleaned after each sample with a brush. Quality control samples are also submitted with these samples.

For wet samples, holes are poked in the plastic metre bags and the water allowed to drain. The samples are then placed on black plastic sheets, under the supervision of the geologist on site, to dry. Once dried, the samples are homogenised by hand and then split using the same process as the dry samples.

The split 2 kg samples are placed in a plastic bag and transported to camp to await shipment to SGS laboratory in Ouagadougou. The original 1 m drill bags from each hole are transported directly after splitting and arranged in order by depth drilled at the bag farm. With the exception of initial RC drill holes, Orbis Gold routinely collect a 2 kg to 3 kg split of the 1 m samples for storage in an enclosed shed on site.

The assay results from the 4 m composites are used to select 1 m intervals for resampling. A grade of 0.25 g/t Au is used to flag 4 m composite samples for the second phase of assaying. The 4 m composite samples either side of the identified mineralized section are also split to bracket potential mineralization. A riffle splitter is used to split the 1 m sample to an approximate 2 kg to 3 kg sample. This is placed in a pre-labelled polythene bag. A corresponding sample ticket is placed in each bag and the hole ID and depth recorded on the stub remaining in the ticket book. The riffle splitter is cleaned after each sample. Records of sampling show that RC samples were collected dry 77% of the time, moist 9% of the time and wet 13% of the time.

Diamond core samples are collected based on 1 m intervals or to the lithological/ alteration/mineralization boundaries. The core is cut in half lengthwise using a diamond saw and the sampled half core (right-hand side) is placed in a plastic bag and labelled with the hole ID and depth. A sample ticket labelled with the hole ID and depth is also placed in the bag.

Samples are stored securely on site at Nabanga, with the transportation of samples during the drilling campaigns overseen by security guards. Personnel releasing the samples for shipment to the laboratory assume responsibility for

the sample security and paperwork, with recorded sample numbers accounted for prior to shipment to the laboratory. Laboratories in Ouagadougou check the received samples against the paperwork and signs-off on the receipt.

Drill core and RC samples were submitted to three different laboratories – the BIGS laboratory, the ALS laboratory and the SGS laboratory, all located in Ouagadougou, Burkina Faso. ALS was used for samples from drill holes NARC001 to NARC091, with all subsequent RC samples submitted to the SGS laboratory in Ouagadougou. Diamond drill core samples were submitted to the BIGS laboratory.

Samples received in a pulp form (i.e. standards and/or blanks) are prepared by the SGS laboratory in Ouagadougou as follows: one in 30 samples screened to ensure 85% passing 75 µm; if the screen test fails the required particle size then all samples are screened; any samples failing the screen test are milled to attain the required particle size.

If the samples are received as rocks, drill core or RC drill cuttings, SGS prepare the samples as follows: the samples are dried at 105°C for a minimum of six hours; samples are weighed and crushed to 80% passing 2 mm; 1.5 kg is split by rotary splitter or riffle splitter; the entire 1.5 kg split of the 2 mm material is then pulverised to 85% passing 75 µm in a bowl and puck pulveriser. A 200 g sub-sample is then collected (by scooping) from the 1.5 kg split. The remaining material is returned to the original bag (or a plastic bag if the original is not suitable). All preparation equipment is flushed with barren material prior to the commencement of the job. Cleaning of equipment (e.g. crushers and pulverisers) is by compressed air which is done between each sample.

All samples were analysed for gold using industry standard fire assaying with the gold grade determined by AAS. This technique has a detection limit of 0.01 ppm Au for both the ALS and SGS laboratories. The detection limit at the BIGS laboratory (diamond core only) is reportedly 0.001 ppm Au. Samples analysed at SGS are assayed by fusing a 50 g sample with a litharge (lead oxide) based flux followed by cupellation, dissolving the gold-bearing prill in aqua regia and determining the gold content by AAS. SGS undertake an internal QA/QC process involving standards, blanks and duplicates. Each analysis batch consists of 84 samples, of which 10 are QC samples, comprising four reference materials, two duplicates (taken before crushing), two pulp duplicates, one blank (pulp) and one coarse blank. A minimum of 5% additional check assays are performed on all batches (depending on the number of anomalies present within a given batch). SGS provided Orbis Gold with a monthly report of results from the internal QA/QC program. All assay reports from the primary assay laboratory (SGS) are submitted to Orbis Gold as digital data files and as PDF certificates. The internal QA/QC procedures used at the ALS and BIGS laboratories in Ouagadougou are not known.

Standard samples were submitted by Orbis Gold with primary samples to the laboratory. A standard was inserted into the drill hole sample batch at the end of the visually mineralized intersection along with at the end of the hole. From the supplied QA/QC dataset, Orbis Gold utilised 22 standards since 2010. The certified standards have been sourced from Ore Research and Exploration Pty Ltd ("**ORE**"). The standards represent 2% of all samples submitted to the laboratory (502 out of a total of 17,968 samples). The ORE standards are considered as representative of the style of mineralization exhibited at Nabanga. The ORE standards are derived from the Magdala Lode at the Stawell Gold Mine in Victoria and a high grade lode from the Cracow Gold Mine in Queensland. The selection of standards based on grade is appropriate and reflects the likely grades at Nabanga. Of the 502 standard sample results, 25 lay outside the control limits, as defined by three standard deviations from the expected grade, as specified by ORE.

Orbis Gold submitted a blank sample at the start of each drill hole sample sequence, along with one blank within the mineralized intersection. Results from the blanks for gold are considered reasonable with the average grade of the blank samples being 0.014 g/t Au, however it was noted that the grades range from below the detection limit up to 1.82 g/t Au. The average of the blank material is well below the mineralization cut-off (0.20 g/t Au) used for geological modelling. The results are considered acceptable for mineral resource estimation and some of the higher than expected gold grades are attributed to elevated background levels inherent in the material.

Orbis Gold riffle split 418 field duplicate samples and submitted them within the sample batches for analysis. The duplicate sample pairs have a Pearson correlation coefficient of 0.98, which is considered an excellent correlation for a gold deposit. The mean gold grade of the original and duplicate samples is 3.84 g/t Au and 3.90 g/t Au respectively. The coefficient of variation for the original and duplicate datasets is 2.70 and 2.62 respectively, indicating that the variability is similar in both datasets, as would be expected. Overall the populations compare well, with some outliers at higher grades typical of gold deposits containing visible gold particles. It is considered that there is no evidence to

suggest that the primary sample varies significantly from the duplicate sample and that reasonable precision during the sampling and assaying process has been achieved.

Bulk density measurements were collected on site by Orbis Gold from samples of diamond drill core. A total of 139 bulk density measurements were completed, including five duplicated measurements. The measurements were completed primarily on fresh, non-porous core and include the following lithologies: granodiorite (84 measurements); amphibolite (30 measurements); quartz vein (20 measurements). Two methods were employed by Orbis Gold to determine the bulk density. The initial 46 bulk density measurements were taken using a displacement calculation as Orbis Gold were not in possession of an appropriate set of scales. This method was discontinued due to the inaccuracy surrounding the method. A further 83 measurements were obtained by using the Archimedes immersion technique (weight in air divided by the difference between the weight in air and the weight in water). The procedure for measuring bulk density using the Archimedes water immersion technique is reasonable for an Inferred Resource, however there is scope for improvement. Ideally, wax coating of samples may be necessary to obtain reliable measurements in the oxidized zone (plastic wrapping is not recommended due to excess air being trapped which results in underestimating the bulk density).

Twinning of four RC drill holes was undertaken by Orbis Gold in 2012 with HQ diameter diamond core (HQ has a similar hole diameter to RC). The twinned holes are within 5 m of each other within the mineralized zone. The results show a moderate level of variability in both the mineralized intersection width (i.e. downhole length) and grade. Comparisons between the twinned drill holes are as follows: The comparison between NARC154 and NADD012 shows a narrower intersection at higher grade in the diamond drilling, which is likely a result of sampling the diamond drill hole to the geological boundaries, whereas the RC drill hole is sampled on a 1 m downhole interval. However, there may be some contamination downhole in NARC154 contributing to the wider intersection; NARC134 and NADD013 compare reasonably well, with the grade difference attributed to local geological variability; NARC184 shows a significantly narrower intersection than the corresponding twinned diamond core drill hole, NADD002, likely caused by a local steepening of the structure; the modelled mineralized intersection for NARC033 is significantly narrower than the diamond twin. However, including lower grade mineralization in the footwall of the modelled RC Intersection shows a good comparison to the diamond core twin, with similar width and grade. It is noted that at this stage there is not enough twin drill hole data to enable a meaningful statistical comparison to be completed.

Assay data validation has been completed by Orbis Gold through the insertion of certified standards and field duplicate samples in the sample batches and it is believed the assay data within the database is robust.

The sampling practices and assaying practices used for the trench, rock chip and soil sampling programs are adequate for the purposes of early exploration. While some minor errors are likely to be present in the geochemical assay data, it is believed these are minimal and not material to the assay data for the purposes of early exploration. The RC and diamond core drilling completed at Nabanga by Orbis Gold between 2010 and 2012 included independent QC samples with the sample batches, the results of which show reasonable precision and accuracy have been achieved. Additionally, the diamond core drilling, is achieving excellent core recovery. Assaying for gold has primarily been completed at the SGS laboratory in Ouagadougou, which, based on the results of the QC samples and multiple inspections, has achieved reasonable precision and analytical accuracy. The drill hole assay data for the Nabanga deposit is reasonable for use in resource estimation.

SEMAFO's drilling on Yactibo went through identical QA/QC procedures than other projects but no report was realized due to lack of significant results.

Yactibo Exploration Budget

A portion of our budget will focus on investigating parallel structures in the Nabanga intrusive. The program, which includes 5,000 meters of auger and 7,000 meters of RC drilling, is primarily directed towards the Nabanga area.

Mineral Processing and Metallurgical Testing

The following section is taken from an Independent Technical Report and Valuation of the mineral assets of Orbis Gold, which was prepared by Snowden at the request of Orbis Gold in December 2014.

The metallurgical testwork reports for the Nabanga project, includes:

- ALS Metallurgy - Metallurgical testwork conducted upon samples from Nabanga Gold Project for Orbis Gold - November 2013
- Lycopodium - Nabanga Project Metallurgical Testwork Review - October 2012
- Pathfinder Exploration Pty Ltd - Petrographic and Mineragraphic Descriptions - 2011
- Knight Piesold Consulting - Memorandum to Mt Isa Metals Ltd. (Orbis Gold former name); re: Preliminary Waste Rock Geochemical Characterisation - 22 October 2012
- Pathfinder Exploration Pty Ltd - SEM Analyses of Samples NARC040 66 m to 67 m and 69 m to 70 for Mt Isa Metals Ltd. - 6 June 2012
- JK Tech - SMC Test Report; Mt Isa Metals Ltd. (Orbis Gold former name) - July 2012.

The testwork conducted at ALS in 2013 was relatively broad and included:

- Chemical analyses
- Gravity separation
- Flotation
- Leaching.

The head grade of the composite sample tested was 10.9 g/t Au and 3 g/t Ag. Recoveries were not optimised, however gold recovery to a flotation concentrate was 80% at a grind size of P_{80} of 75 µm. A laboratory scale Knelson concentrator recovered approximately 12.5% of the gold to a gravity concentrate. Subsequent high intensity leaching recovered about 25% of the gold with the balance reporting to the gravity tails.

Cyanidation tests were conducted on samples from the various mineralized zones, which included low, average and high grade oxidised material, as well as low, average and high grade sulphide material, all at a grind size P_{80} of 106 µm. Further leach tests were also conducted at finer grind sizes of 53 µm, 25 µm and 10 µm.

The initial leach tests were conducted to establish the free-milling nature of the mineralization at Nabanga. The results showed that oxide material recoveries of 70% of Au and 83% of Ag could be achieved after 48 hours of leaching. The fresh samples only achieved 47% Au recovery and 51% silver recovery, giving an early indication that the Nabanga mineralization may be refractory.

As the initial leach tests at a grind size P_{80} of 106 µm returned unsatisfactory results, further tests were conducted at finer grinds and then also at higher cyanide concentration.

Although the initial leach tests performed relatively poorly, further fine grinding and higher cyanide additions did result in satisfactory gold recoveries. This indicates a more complex flowsheet requiring fine grinding of the feed prior to intensive leaching will be required.

Further testwork will be required to determine if the recovery of gold in a gravity circuit will enhance overall recoveries and also if the inclusion of a flotation circuit to produce a high grade concentrate will improve overall processing efficiencies and recoveries.

The following comminution tests were undertaken:

- Bond Work Index
- Bond Abrasion Index
- SMC tests.

Testwork results confirmed that the material was hard, with a Bond Work index of 22.9 kWh/t for the quartz rock type and 23.5 kWh/t for the granodiorite rock type. SMC testwork confirmed A x b values of 34.7 and 37.1, which supports the data that the material would be classed as hard for comminution design purposes.

Knight Piesold investigated the potential for acid and metalliferous drainage from waste rock for the Nabanga project. Based on results from acid-base accounting, the net acid generation tests show the waste rock appears to present low risks of generating acid drainage. Similarly the waste rock samples were found to have a low level of enrichment and therefore the risk of leaching metal from the waste dumps was considered to be low. However further confirmatory tests were recommended during subsequent project design phases.

Current metallurgical testwork for the Nabanga project is considered to be preliminary in nature and further testing is required to evaluate and optimise processing options, and to assess the variability of the mineralization in terms of its metallurgical characteristics.

ITEM 6 - COMPETITIVE CONDITIONS

Significant and increasing competition exists for the limited number of acquisition opportunities available. Competitors for acquisitions include large established mining companies with greater financial and technical resources than us. As a result, we may be unable to acquire additional attractive mining properties on terms we consider satisfactory.

Furthermore, gold is traded on world markets with benchmark prices for gold based on the London Bullion Market, which may be subject to considerable fluctuations. Gold can be easily sold on many markets throughout the world and it is difficult to ascertain its future market price at any particular time.

Increasing competition in the mining sector has also had an important impact of the level of demand on various services, equipment, supplies and parts necessary to carry out our operations. The shortage of any needed good or service may cause cost increases or delays in delivery time hereby materially adversely affecting production schedules as well as our financial condition and results of operations.

Moreover, SEMAFO and other companies in the mining industry compete for qualified and key personnel with strong knowledge and expertise in the mining environment. We must find and retain such qualified employees in order to continue to operate successfully.

ITEM 7- SALES AND REFINING

We sell gold doré to a refiner at the market price. Since there are several other available gold refiners, we are not dependent upon our current refiner.

ITEM 8 - FOREIGN OPERATIONS

Our operations are concentrated in West Africa, where we operate our Mana Mine in Burkina Faso, which continue to foster a relatively investor friendly environment. Other than the customary corporate restrictions on doing business within their corporate objective, i.e. the exploration for and operation of a gold mine, our subsidiaries are not subject to any additional restrictions by the governments of the states in which they operate.

Our everyday operations in Africa are exposed to various levels of legal, political, economic and operational risks and uncertainties associated with operating in a foreign jurisdiction. They require permits from various local authorities. Such activities are subject to local laws and regulations governing exploration activities, mining activities, exports, taxation, labour standards, occupational health and safety, toxic substances, waste disposal, land use and environmental protection. Companies such as SEMAFO that engage in the development and operation of mines and related facilities have to deal with increased costs and delays ensuing from the need to comply with applicable laws, regulations and permits.

Burkina Faso is a member of the Economic Community of West African States and has adopted a single system of business laws and implementing institutions, the OHADA rules, which harmonizes to a great extent applicable business and commercial laws and is generally based on civil law principles, very similar in nature and substance to those applicable in the province of Québec. The similarities in the applicable legal context and institutions provide us with greater ease in its operation and evaluation of risks as we operate in a somewhat familiar legal environment.

The government of Burkina Faso holds 10% in our operating corporate operating entities, Semafo Burkina Faso S.A. and soon, Semafo Boungou S.A. The government is represented on the corporate board of directors of these subsidiaries along with representatives of SEMAFO who hold the majority voting right. Local management as well as executive management of SEMAFO work closely with representatives of the government on a continuing basis in order to advance business. Executive management, including the President and Chief Executive Officer, travel to Burkina Faso to participate in board of directors meetings of our operating subsidiaries.

Despite the inherent cultural differences resulting from operating in a foreign jurisdiction, the common language, the presence of a number of nationals in the management team and on the Board as well as a continuous closely knitted relationship between management and local operations have had a positive impact on our operations and relationships with local stakeholders. For instance, local management in Burkina Faso boasts the presence of a former Mining Minister as well as former President of the Chamber of Mines of Burkina Faso and, since 2012, Mr. Tertius Zongo, a former Prime Minister, Minister and Ambassador of Burkina Faso, has joined the Board. In addition, Mrs. Flore Konan lives in Ivory Coast and works for an entity controlled by the national government. This provides management and the Board with the capability of breaching certain cultural barriers and allows for the appropriate understanding of legal, business and operational concerns. See ITEM 11-RISK FACTORS.

ITEM 9 - ENVIRONMENTAL PROTECTION

Each step of our operations is subject to environmental regulations. We recognize that appropriate environmental management is essential to the proper carrying out of mining operations and activities. As such, our goal is to minimize the environmental impacts of our processes and activities. We make every effort to protect the environment against the risks that may arise from its activities and encourage any action that contributes towards the responsible management of natural resources. We implement our corporate Environmental Policy and comply in all material respect with applicable environmental laws. Our thoroughness and performance have allowed us to minimize our financial risks, including environmental offences and damage to our reputation. See ITEM 10 – SOCIAL AND ENVIRONMENTAL POLICIES and ITEM 11-RISK FACTORS.

ITEM 10 - SOCIAL AND ENVIRONMENTAL POLICIES

To our knowledge, all our operations are in compliance with all environmental laws and regulations in all material respect.

We are aware of our social and environmental responsibilities and consequently adopted a series of corporate policies. Such corporate policies are available on our website and include an environmental policy and a social responsibility policy in which we reiterate our commitment to conduct our business in a manner that promotes sustainable development and an improvement in the social welfare of the regions in which we operate. The policies sets out our commitment to limit as much as possible the impact of our activities on the environment and the surrounding communities.

Accordingly, our environmental specialists have established and abide by strict process management systems so as to protect natural resources and minimize our environmental footprint. Our environmental specialists are responsible for all facets of water and waste management, environmental risks and incidents, as well as the implementation of employee training and awareness programs.

Our environmental control systems and initiatives are closely monitored with detailed reports completed monthly. Specialized independent firms conduct regularly scheduled environmental audits. All recommendations are incorporated into our continuous improvement process.

Furthermore, our Social Responsibility Policy demonstrates our commitment to social responsibility and outlines our guiding principles in this regard. We are committed to promoting social responsibility by continually improving our knowledge, our understanding of challenges and our actions. In our host countries, we seek to establish environments that are conducive to improving living conditions through investments in community projects, job creation, training, and improving the quality of life of the people and communities.

Along with our expatriate employees, we conduct ourselves as guests in the host countries and assume our responsibilities toward the local communities and environment. We recognize the fundamental importance of our employees, both in terms of their health and safety, and in terms of their well-being and working conditions. We also rely on our employees and contractors in our commitment to respecting the environment and the neighboring communities. The Social Responsibility Policy helps to uphold our values and benefits all of our employees, suppliers, shareholders and the communities in which we operate.

In addition, we contribute up to 2% of our net income to *Fondation SEMAFO* which mission is to support communities and improve human conditions through its actions and investments in community development projects. More information is available at www.fondationsemafo.org and our Management Discussion and Analysis for the financial year ended December 31, 2016.

We are committed to fostering an open dialogue with communities surrounding our deposits as part of our commitment to sustainable mining. The SEMAFO Foundation has already enhanced access to fresh drinking water and improved sanitary conditions for the Natougou communities. The Foundation's priority for the area involves reinforcement of its educational capacity through construction and support of schools and the launch and equipping of agricultural projects with which to generate community revenue.

For a second consecutive year, we were honoured to be recipient of the grand prize for Corporate Social Responsibility of Mining Companies in Burkina Faso, which acknowledges not only the results of eight years of continuous community commitment, but also the dedication of our teams. This year, we garnered a prize for the environment in addition to prizes for female entrepreneurship, communities and local development.

ITEM 11 - RISK FACTORS

As a mining company, we face the financial and operational risks inherent to the nature of our activities. These risks may affect our financial condition and results of operation. As a result, an investment in our common shares should be considered speculative. Prospective purchasers or holders of our common shares should give careful consideration to all of our risks factors. For a complete description of the various risk and uncertainties please see the "Risks and Uncertainties" section of our MD&A for the financial year ended December 31st, 2016 filed on SEDAR at www.sedar.com and available on our website at www.semafo.com.

ITEM 12 - DIVIDENDS

We currently do not anticipate declaring dividends in the near future. However, the amount of any future dividend payments will be subject to evaluation and approval by the Board, based on our financial condition, capital requirements, growth plans and gold price as well as our financial requirements to finance future growth and other factors which the Board may consider appropriate in the circumstances.

ITEM 13 – MARKET FOR SECURITIES

Our common shares are listed on the TSX and the NASDAQ OMX under the symbol "SMF".

The following table shows, for our common shares traded on the TSX, the monthly price ranges and volume traded during the 2016 financial year.

MONTH	High (C$)	Low (C$)	Volume Traded
January	4,40	3,19	59 501 728
February	4,96	3,46	59 554 375
March	5,20	4,30	68 640 395
April	5,68	4,30	76 413 055
May	6,01	4,83	53 441 304
June	6,69	4,90	65 309 703
July	7,39	5,89	65 627 769
August	7,46	5,50	52 461 757
September	6,54	5,34	82 627 743[10]
October	5,85	4,69	57 332 857
November	5,75	3,90	73 516 561
December	4,72	3,60	76 084 371

Source: TSX

[10] The large volume in September 2016 was generated by SMF's deletion from the S&P TSX SmallCap Index (together with another 42 companies), and from the quarterly rebalancing of two Van Eck Market Vectors ETFs: the Junior Gold Miners (GDXJ) ETF and Gold Miners ETF (GDX).

ITEM 14 - DIRECTORS AND EXECUTIVE OFFICERS

The Board is currently comprised of eight (8) directors who are elected annually at each annual meeting of shareholders to hold office for one year or until his or her successor is elected or appointed, unless he or she resigns or his office becomes vacant.

The following table sets forth for each director and executive officer of SEMAFO, his name, place of residence, his principal occupation during the past five years as well as the date of his election or nomination as director or executive officer. The directors and executive officers have provided their respective information.

Name, province and country of residence	Position with the Corporation	Principal Occupation during the past 5 years
Terence F. Bowles Nun's Island (Québec) Canada	Director since May 10, 2011 independent	Mr. Bowles is a member of the Audit Committee and of the Environment, Health & Safety and Sustainable Development Committee. Terence Bowles is President and Chief Executive Officer of the St. Lawrence Seaway Management Corporation since 2010. Prior to this appointment, he served as President and Chief Executive Officer of the Iron Ore Company of Canada, from 2001 to 2010. Following his graduation from Université Laval in Québec City, Mr. Bowles joined Quebec Iron and Titanium (QIT) where he also served as President as well as on the board of directors of an African subsidiary. Mr. Bowles is on the board of the St. Lawrence Seaway Management Corporation, the Chamber of Marine Commerce and Green Marine. He is a member of the Ordre des Ingénieurs du Québec and obtained an Institute of Corporate Directors designation.
Michel A. Crevier Laval, (Québec) Canada	Vice-President, Exploration and Mine Geology and Qualified Person	Mr. Crevier has held the position of Vice-President, Exploration and Mine Geology since 2006. He has over 35 years of exploration and mine geology experience. After several years exploring for base metals and uranium, he moved over to gold exploration, mine geology, and resources and reserves estimations in the Canadian provinces of Quebec, Maritimes and Ontario. During this time, Mr. Crevier was in the employ of companies such as Lac Minerals, Placer Dome and Mines McWatters. At the turn of the millennium, his career took an international turn when he moved to Russia with Bema Gold Corporation/OMGC at Julietta Mine and subsequently joined SEMAFO in Africa. Mr. Crevier has a master's degree in geology from Université du Québec à Chicoutimi and is the recognized "Qualified Person" as defined in the NI 43-101. A member of the Ordre des Géologues du Québec, Mr. Crevier is a member of the Canadian Council of Professional Geoscientists.

Name, province and country of residence	Position with the Corporation	Principal Occupation during the past 5 years
Benoit Desormeaux Candiac (Québec) Canada	Director, President and Chief Executive Officer	Benoit Desormeaux became President and Chief Executive Officer on August 8, 2012. Mr. Desormeaux had been our Executive Vice-President and Chief Operating Officer since 2004, and previously held the positions, successively, of Corporate Controller as well as Chief Financial Officer. Prior to joining SEMAFO in 1997, he was with Deloitte LLP, involved principally in corporate audits in the manufacturing sector. Mr. Desormeaux is a Chartered Professional Accountant and a member of Ordre des Comptables Professionnels Agréés du Québec. He sits on the board of directors of Groupe Technosub inc. and is Chair of the board of directors of SEMAFO Foundation.
Sylvain Duchesne Orford (Québec) Canada	Vice-President, Construction & Engineering	Mr. Duchesne is Vice-President, Construction and Engineering. He has held this position since November 2014 and prior to his appointment, was General Manager, Construction and Engineering and Director of Metallurgy. Mr. Duchesne has over 25 years of experience in managing gold and polymetallic operations. Prior to joining SEMAFO in 2005, he served as mill superintendent at Campbell Resources, Aur Resources and Noranda, respectively. Mr. Duchesne graduated as a mining engineer from Polytechnique Montréal in 1987 and is a member of Ordre des Ingénieurs du Québec.
Flore Konan Abidjan, Ivory Coast	Director since May 14, 2015 independent	Mrs. Konan is a member of the Audit Committee. Since October 2011, Mrs. Konan is Director of Internal Controls, Eranove, a holding company involved in the production, transportation and distribution of water and electricity in Africa that has over 8,000 employees. Between 1994 and 2011, Mrs. Konan held positions of increasing responsibility at CIE, a subsidiary of Eranove, before becoming general manager in 2008. Prior to this, Mrs. Konan was in the employ of SODECI, another subsidiary of Eranove. Mrs. Konan is also the Chair of the Board of ECOBANK Côte-d'Ivoire, a subsidiary of ECOBANK Transnational Incorporated, present in 32 African countries.
Jean Lamarre[1] Outremont (Québec) Canada	Director since May 12, 1997 Chair of the Board since June 18, 2008 not independent	Jean Lamarre is currently Chair of the Board and served as Executive Chair of the Board from June 2008 to December 31, 2014. Mr. Lamarre sits on the board of directors of several public and privately held companies such as Technologies D-BOX Inc., TSO3 Inc., Arianne Phosphate Inc., Télé-Québec, Le Devoir, Klox Technologies Inc., Mispro Biotech Services Inc. and SEMAFO Foundation. He is also a member of the independent review committee of Investors Group Investment Management Ltd. From 1977 through 1992, Mr. Lamarre held various positions of significant responsibility with Groupe Lavalin Inc., including Vice President, Finance. From 1992 to 1995, he was Vice President, Special and International Projects for Groupe Canam Manac. In 1995, he became President of Lamarre Consultants, a company representing national and international companies in their efforts to establish or expand their business in Québec. Mr. Lamarre has been present on the African continent for close to 45 years.

[1] Mr. Lamarre was a director of Medical Intelligence Technologies Inc. which filed for and obtained protection under the *Companies' Creditors Arrangement Act* (Canada) ("**CCAA**") and subsequently made an assignment of its property on February 9, 2010. He was also a director of 6941249 Canada Inc. (known as Mechtronix), which filed a notice of intent to make a proposal to its creditors under the *Bankruptcy and Insolvency Act* (Canada)

Name, province and country of residence	Position with the Corporation	Principal Occupation during the past 5 years
Robert LaVallière Saint Bruno (Québec) Canada	Vice-President, Corporate Affairs & Investor Relations	Mr. LaVallière joined the company in October 2012. Mr. LaVallière has over 30 years of investor relations experience in the mining industry and extensive knowledge of exploration, project assessment, mergers and acquisitions and communications at both national and international levels. Previously, Mr. LaValliere served as Vice-President, Corporate Affairs for Anvil Mining Ltd. and Director, Investor Relations at Cambior Inc. He holds a B.Sc. degree in geology from Université du Québec à Montréal (UQAM) and an MBA from Université de Montréal-HEC Montréal. Mr. LaVallière is a member of Ordre des géologues du Québec and the Canadian Institute of Mining, Metallurgy and Petroleum.
John LeBoutillier, C.M.[2] Montréal (Québec) Canada	Director since January 25, 2006 Lead Director since June 18, 2008 independent	Mr. LeBoutillier is Chair of the Human Resources and Corporate Governance Committee. Lead Director of SEMAFO's Board of Directors, John LeBoutillier will not stand for reelection as a director of Industrial Alliance, Insurance and Financial Services Inc. at its 2017 shareholders' meeting. He is a director of Stornoway Diamond Corporation and of two affiliated companies, Mazarin Inc. and Asbestos Corporation Limited. Between 1996 and 2000, Mr. LeBoutillier was President and Chief Executive Officer of Iron Ore Company of Canada, as well as President and Chief Executive Officer of Sidbec-Dosco Inc. (now ArcelorMittal Long Products Canada G.P.) from 1983 to 1996. Mr. LeBoutillier is a recipient of the Order of Canada.
Gilles Masson[3] Laval (Québec) Canada	Director since January 25, 2006 independent	Mr. Masson is Chair of the Audit Committee and a member of the Environmental, Health & Safety and Sustainable Development Committee. Gilles Masson was appointed Chair of SEMAFO's Audit Committee in 2007. He is a member of the board of directors of RNC Minerals. He spent 36 years with the firm PricewaterhouseCoopers LLP, Chartered Professional Accountants, including 25 years as partner. His clientele included large national and international companies, some of which operated in the mining sector. A chartered professional accountant, Mr. Masson is a member of the Institute of Corporate Directors.

on May 15, 2012 and then filed an assignment for the benefit of its creditors on August 3, 2012. Mr. Lamarre was also a director of Mango Industrie de Cuivre Inc., which filed for protection under the CCAA in 2012 and remains subject thereto.

[2] Mr. John LeBoutillier was, but is no longer, a director of Shermag Inc., which filed for and obtained creditor protection under the CCAA in April 2008. In August 2009, Shermag presented a plan of arrangement to its creditors and obtained the homologation from the Superior Court (district of Montreal) on September 15, 2009. Shermag closed a transaction with Groupe Bermex Inc. and implemented a plan of arrangement in October 2009 allowing it to emerge from the CCAA proceedings. The transaction enabled Groupe Bermex Inc. to take control over Shermag and to pursue its restructuring and relaunching.

[3] Mr. Gilles Masson was, but is no longer, a director of Malaga Inc. ("**Malaga**"). In June 2013, Malaga filed a notice of intention to make a proposal pursuant to the provisions of Part III of the *Bankruptcy and Insolvency Act* (Canada). Pursuant to the notice of intention, Raymond Chabot Inc. was appointed trustee in Malaga's proposal proceedings and in that capacity monitored and assisted Malaga in its restructuring efforts. These proceedings had the effect of imposing an automatic stay of proceedings that protected Malaga and its assets from the claims of creditors and others while Malaga pursued its restructuring efforts. Malaga submitted a proposal dated October 4, 2013 to its creditors; the proposal was accepted by the creditors pursuant to a vote held on December 13, 2013 and approved by judgment of the Superior Court rendered on January 7, 2014.

Name, province and country of residence	Position with the Corporation	Principal Occupation during the past 5 years
Lawrence McBrearty[4] Brampton (Ontario) Canada	Director since May 12, 2009 independent	Mr. McBrearty is Chair of the Environmental, Health & Safety and Sustainable Development Committee and a member of the Human Resources and Corporate Governance Committee. Lawrence McBrearty has been a labour relations consultant since his retirement in 2004. Mr. McBrearty's business experience includes a more than 40-year career with the United Steelworkers of America, the largest industrial labour union in North America. He began his tenure in 1974 as staff representative, subsequently holding positions of increasing responsibility that culminated in his election as National Director for Canada in 1994.
Alain Mélanson Boucherville (Québec) Canada	Vice-President, Human Resources	Mr. Mélanson joined SEMAFO as Vice-President, Human Resources in September 2009. Prior to this appointment, he spent two and a half years at Bell Aliant Regional Communications as Vice-President, Human Resources, Communications and Public Affairs. Previously, Mr. Mélanson served as Vice-President, Human Resources, Communications and Public Affairs, Bell Nordiq from 2001 through December 2006. He has also served in senior management and executive positions at Groupe Laperrière & Verreault, Coca-Cola and Labatt Breweries. Mr. Mélanson is a graduate of the University of Laval in industrial relations and is a member of the Quebec Order of Certified Human Resources Professionals and Industrial Relations Counsellors.
Martin Milette Mont Saint-Hilaire (Québec) Canada	Chief Financial Officer	Mr. Milette was appointed Chief Financial Officer of SEMAFO in May 2006. Mr. Milette has been with the company since 2005 when he joined as Director, Development and Special Projects. Previously, he worked for eight years as Senior Manager, Assurance and Advisory Services at PricewaterhouseCoopers LLP where he was principally active in the high-tech and mining sectors. Mr. Milette is a Chartered Professional Accountant, a member of Ordre des Comptables Professionnels Agréés du Québec, and a Certified Public Accountant in the USA. Mr. Milette oversees all aspects of the Finance and IT functions of the company.
Patrick Moryoussef Dollard-des-Ormeaux (Québec) Canada	Vice-President, Mining Operations	Mr. Moryoussef has served as Vice-President, Mining Operations since joining Semafo in September 2004. Prior to his appointment, he was General Manager and administrator at South-Malarctic Exploration and previously senior project engineer at Les Mines McWatters. Following graduation, he served as junior mining engineer at the Campbell Mine of Placer Dome Canada and held the position of Open Pit Mine Captain, Engineering at Placer Dome Canada's Sigma Mine. Mr Moryoussef also work as project engineer for Falconbridge Kidd Creek Mine and Noranda's Brunswick operation. Mr. Moryoussef is a mining engineering graduate from McGill University in 1994 and a member of Ordre des Ingénieurs du Québec. He also acts as an administrator for Canadian Metals.

[4] Mr. McBrearty was a director of Mango Industrie de Cuivre Inc., which filed for protection under the CCAA in 2012 and remains subject thereto.

Name, province and country of residence	Position with the Corporation	Principal Occupation during the past 5 years
Eric Paul-Hus Saint-Lambert (Québec) Canada	Vice-President, Law, Chief Compliance Officer and Corporate Secretary	Mr. Paul-Hus is Vice-President, Law, Chief Compliance Officer and Corporate Secretary of SEMAFO and has been with the company since September 2009. Prior to his appointment, he spent five years in private practice, including one year in secondment with the Autorité des Marchés Financiers (former Québec Securities Commission) in the Corporate Finance and Continuous Disclosure Group. Subsequently, he held several positions of increasing responsibility, including Vice-President, during his 12-year tenure with a major Canadian telecommunications company where he continued to practice business law, specializing in securities, M&A and corporate law. Mr. Paul-Hus is a lawyer and member of the Québec Bar since 1993.
Tertius Zongo Ouagadougou, Burkina Faso	Director since May 14, 2012 independent	Mr. Zongo is a member of the Environmental, Health & Safety and Sustainable Development Committee and of the Human Resources and Corporate Governance Committee. Tertius Zongo served as Prime Minister and Head of Government of Burkina Faso from 2007 until 2011 and was Ambassador Extraordinary and Plenipotentiary of Burkina Faso to the United States of America from 2002 until 2007. Previously, Mr. Zongo held positions of increasing importance within the government of Burkina Faso including as Minister of State for Planning and Budget and Minister of Economy and Finance. Prior to his career with the government of Burkina Faso, Mr. Zongo was an academic at the University of Ouagadougou and the National School of Financial Controls where he taught accounting, business economics and financial management. He sits on the board of Banque centrale des états de l'Afrique de l'Ouest (BCEAO) and of Banque ouest-africaine de développement (BOAD).

The number of our common shares beneficially owned or controlled or directed, directly or indirectly, by all directors and executive officers of the Corporation as a group, is 535,822 representing approximately 0.16% of our issued and outstanding common shares as at March 7, 2017.

ITEM 15 - EMPLOYEES

At the end of our last financial year, we had 1,697 people working for us of which 995 are employees.

ITEM 16 - INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

No director or executive officer of SEMAFO, no person that beneficially owns or controls or directs, directly or indirectly, more than ten percent (10%) of any class or series of outstanding voting securities of SEMAFO, and no associate or affiliate of any such persons, has a material interest in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or will materially affect us or one of our subsidiaries.

ITEM 17 - MATERIAL CONTRACTS

The following contracts are the material contracts of the Corporation entered into within the most recently completed financial year, or before the most recently completed financial year that are still in effect, other than contracts entered into the ordinary course of business:

i. the Rights Agreement entered into between the Corporation and Computershare Investor Services Inc. on March 15, 2011 as extended at our annual general and special meeting of shareholders held on May 15, 2014

ii. the Mining Agreement dated October 2, 2007 between Burkina Faso and Semafo Burkina with respect to the exploitation of gold deposits.

See ITEM 2- THE CORPORATION “CAPITAL STRUCTURE-RIGHTS”, and ITEM 5- MINERAL PROJECTS.

ITEM 18 - INTERESTS OF EXPERTS

SEMAFO’s independent auditors PricewaterhouseCoopers LLP, have audited our consolidated financial statements for the year ended December 31, 2016. PricewaterhouseCoopers LLP confirmed that they are independent with respect to SEMAFO within the meaning of the Code of Ethics of the Ordre des comptables professionnels agréés du Québec.

Certain disclosure with respect to mineral resources and mineral reserves of the Mana Mine contained in this AIF is derived from the Mana Report and updates prepared under the supervision of Michel Crevier, Geo, MScA, Vice-President Exploration and Mine Geology, with the participation of François Thibert, MSc, P. Geo, Richard Roy, P. Geo, Patrick Moryoussef, P. Eng and Sylvain Duchesne, P. Eng., SEMAFO’s “qualified persons” for purposes of the Mana Report.

Certain disclosure with respect to the Tapoa Permit Group – Natougou gold deposit contained in this AIF is derived from the Tapoa Report prepared under the supervision of Neil Lincoln, Vice-President, Business Development and Studies at Lycopodium, with the participation of Marius Phillips, MAusIMM (CP), Principal Process Engineer at Lycopodium, Glen Williamson, Principal Mining Engineer at AMC Consultants (Canada) Ltd, John Graindorge, Principal Consultant – Applied Geosciences at Snowden, Jean-Sébastien Houle, Eng. from WSP Canada Inc. and Timothy Rowles, MAusIMM (CP) from Knight Piésold Consulting, “qualified persons” for the purposes of the Tapoa Report.

Certain disclosure with respect to the Yactibo Permit Group – Nabanga gold deposit contained in this AIF is derived from the Yactibo Report prepared by John Graindorge, Principal Consultant – Applied Geosciences at Snowden and Harald Muller, B.Eng.(Chem), MBL, FAusIMM, FIChemE, FSAIChE, Divisional Manager – Metallurgy at Snowden, “qualified persons” for the purposes of the Yactibo Report.

ITEM 19 - AUDIT COMMITTEE INFORMATION

The following information is provided in accordance with Form 52-110F1 – *Audit Committee Information Required in an Annual Information Form* ("**Form 52-110F1**") of Multilateral Instrument 52-110 - *Audit Committees* ("**MI 52-110**") adopted by the *Canadian Securities Administrators*.

Audit Committee Charter

The mandate of the Audit Committee appears in Schedule B of this AIF.

Composition of the Audit Committee

The current members of the Audit Committee are Mr. Gilles Masson (Chair), Mr. Terence F. Bowles and Mrs. Flore Konan.

Each member of the Audit Committee is financially literate, which means the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by our financial statements. As demonstrated hereinafter, all the members of the Committee have an education and experience which are relevant to their responsibilities.

Mr. Gilles Masson was appointed to the Board and to the Audit Committee of SEMAFO in January 2006. In May 2007, he was appointed Chair of the Audit Committee. Mr. Masson is a member of the Ordre des comptables agréés du Québec and he is a member of the Institute of Corporate Directors. He worked for 36 years for the firm PricewaterhouseCoopers LLP, Chartered Accountants, including 25 years as a partner. His clientele included, among others, large national and international companies doing business in the mining sector. He retired on December 31, 2005. Since then, Mr. Masson has been acting as member of the board of directors of several public companies and he is currently a member of the board of directors of RNC Minerals.

During his career, Mr. Masson gained a great deal of experience in auditing public companies operating in the mining, manufacturing and distribution sectors. He understands Canadian and US generally accepted accounting principles (GAAP), International Financial Reporting Standards (IFRS), generally accepted auditing standards (GAAS), as well as regulations for presenting financial information for public companies listed in Canada and the United States. He further developed a relevant experience in dealing with audit committee requirements, including recent changes brought by new regulations. Mr. Masson understands the accounting principles used by the Corporation to prepare its financial statements and the general application of such accounting principles in connection with the accounting for estimates, accruals and reserves.

Mr. Terence F. Bowles was appointed to SEMAFO's Board and Audit Committee on May 10, 2011. He is also a member of the Environment, Health & Safety and Sustainable Development Committee. Mr. Bowles is President and Chief Executive Officer of the St. Lawrence Seaway Management Corporation since November 1, 2010. Prior to this appointment, he served as President and Chief Executive Officer of the Iron Ore Company of Canada, the largest manufacturer of iron ore pellets in Canada, from 2001 to 2010. Following his 1971 graduation as a Chemical Engineer from Laval University in Québec City, Mr. Bowles joined Québec Iron and Titanium (QIT). During his 27-year career at QIT, he assumed a series of progressively more senior assignments which culminated with his appointment as President in 1996, a position he held until 2001. He served as well on the board of directors of an African subsidiary. Along with his Engineering Degree, he obtained a Master's in Business Administration from Montreal's McGill University, completed an Advanced Executive Program at the Kellogg Graduate School of Management in Chicago, a Strategic Leadership Program at the London Business School, and McGill's Institute of Corporate Directors Program, where he received the ICD.D designation. Mr. Bowles is a Member of the Québec Order of Engineers. He is currently on the board of directors of the St. Lawrence Seaway Management Corporation, the Chamber of Marine Commerce, Green Marine.

Since October 2011, Mrs. Konan is Director of Internal Controls, Eranove, a holding company involved in the production, transportation and distribution of water and electricity in Africa that has over 8,000 employees. Between 1994 and 2011, Mrs. Konan held positions of increasing responsibility at CIE, a subsidiary of Eranove, before becoming general manager in 2008. Prior to this, Mrs. Konan was in the employ of SODECI, another subsidiary of Eranove. Mrs. Konan is also the Chair of the Board of ECOBANK Côte-d'Ivoire, a subsidiary of ECOBANK Transnational Incorporated, present in 32 African countries.

The members of the Audit Committee have provided the information disclosed hereinabove.

Reliance on Certain Exemptions

We confirm that we have are not relied on any exemptions identified in section 4 or 5 of Form 52-110F1 during our most recently completed financial year. We further confirm we have not relied on section 3.8 of Regulation 52-110 during our most recently completed financial year.

External Auditor Service Fees

	Year Ended December 31			
	2016 (CAN$)		**2015** (CAN$)	
Audit Fees	404,410	(73.0%)	358,762	(62.6%)
Audit-Related Fees	42,500	(7.7%)	39,375	(6.9%)
Tax Compliance and Preparation Fees	4,354	(0.8%)	19,764	(3.5%)
All Other Fees	102,322	(18.5%)	154,929	(27.0%)
TOTAL FEES	553,586	(100%)	572,830	(100%)

"audit services" – these services relate to the audit of our audited annual financial statements and other regulatory audit services

"audit-related services" – these services relate to professional services regarding interim financial statements

"tax compliance and preparation fees" – these services mainly relate to tax compliance and international tax consulting work

"other services" – these services relate to accounting and financial reporting services pertaining to public offering by prospectus, assurance and advisory services for International Financial Reporting Standards (known as IFRS) obligations and conversions.

ITEM 20 – TRANSFER AGENT AND REGISTRAR

Our transfer agent and registrar is Computershare Trust Corporation of Canada, 1500 Robert-Bourassa Boulevard, Suite 700, Montreal, Quebec, H3B 3S8. Our registers of transfers are located at the foregoing address.

ITEM 21 - ADMINISTRATIVE OFFICES

Listed below are the addresses of the head offices of SEMAFO and its material subsidiaries.

CANADA (Corporate office)

SEMAFO Inc.
100, Alexis-Nihon Boulevard
Suite 700
Saint-Laurent (Quebec) H4M 2P3
Telephone: (514) 744-4408
Fax: (514) 744-2291
Email: info@semafo.com
Web Site: www.semafo.com

BARBADOS

Semafo (Barbados) Limited

African GeoMin Mining Development Corporation Ltd.
The Gables
Haggatt Hall
St-Michael, Barbados, West Indies

BURKINA FASO

Semafo Burkina Faso S.A.

Mana Mineral SARL

Sector 13, Babanguida Avenue
Benda Street, Door # 211
01 PO Box 390
Ouagadougou 01, Burkina Faso
Tel. (011) 226.50.36.95.92
Fax: (011) 226.50.36.95.87
Email: info@semafo.com

Semafo Boungou S.A.

Birimian Resources SARL

Arrondissement 12, Secteur 54, Parcelle 14
Lot 19, Section 281
11 BP 1196 CMS
Ouagadougou 11, Burkina Faso
Tel. (011) 226.25.37.41.61
Email: info@semafo.com

ITEM 22 - ADDITIONAL INFORMATION

Additional information relating to SEMAFO can be found on SEDAR at www.sedar.com and on our website at www.semafo.com.

Additional information, including directors' and officers' compensation, principal holders of our securities and securities authorized for issuance under equity compensation plans is contained in our most recent management information circular.

Additional financial information is provided in our audited consolidated financial statements for the year ended December 31, 2016 and the corresponding Management Discussion and Analysis.

ITEM 23 – FORWARD LOOKING STATEMENTS

As mentioned in ITEM 1 – GENERAL MATTERS, this AIF contains forward-looking statements that 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. These forward looking statements include statements regarding our expectations as to the market price of gold, production targets, timetables, mining operation expenses, capital expenditures and mineral reserves and resources estimates. Forward-looking statements include words or expressions such as “maximise”, “pursuing”, “strategic”, “growth”, “opportunities”, “2017”, “outlook”, “strategy”, “intend”, “guidance”, "provide", “will”, "potential", “increased”, "forecast", "should", “expected”, “designed to”, “remainder”, “ongoing”, “in order to”, “plan to”, “evaluate”, “estimated” 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 execute on our strategic focus, the ability to deliver our production guidance at Mana, the ability to complete our 2017 capital spending program, the ability to attain higher production, lower costs and create value for our shareholders, the ability of our exploration budget to increase mine lives at both Natougou and Mana, the accuracy of our assumptions, the ability of our exploration activities at Mana to identify near-site satellite deposits, the ability of our 2017 infill program at Natougou to convert current inferred resources on the West Flank Sector into the indicated category, the ability to complete studies in order to evaluate potential underground operations at Mana and at Natougou, the ability to develop Natougou on time and on budget, including and with respect to (i) first gold pour, (ii) average annual production of 226,000 ounces during the first three years at a total cash cost of $283 per ounce and all-in sustaining cost of $374 per ounce at an average head grade of 5.72g/t at a gold gold recovery rate of 93.8%, (iii) project economics including an after tax NPV of $262 million, an after tax IRR of 48% and a payback period of 1.5 years, fluctuation in the price of currencies, gold prices and operating costs, mining industry risks, uncertainty as to calculation of mineral reserves and resources, delays, requirements of additional financing, increase in tax or royalty rates or adoption of new interpretations related thereto, political and social stability in Africa (including our ability to maintain or renew licenses and permits) and other risks described in this AIF and in our other documents filed with Canadian securities regulatory authorities.

Forward-looking statements involve known and unknown risks and uncertainties which may cause our actual results, performance or achievements to differ materially from any of our future results, performance or achievements expressed or implied by forward-looking statements. All forward-looking statements in this AIF, whether a reference to the present section is made or not, are qualified by this cautionary statement. Investors are cautioned that the foregoing list of factors is not exhaustive of the factors that may affect the actual outcome of events that are the subject of forward-looking statements. These and other factors should be considered carefully. See ITEM 11 - RISK FACTORS. We disclaim any obligation to update or revise these forward-looking statements, except as required by applicable law.

SCHEDULE A - GLOSSARY OF TERMS

The following glossary gives the meaning of certain technical terms.

"**Archaean**"	The oldest division of the Precambrian era, spanning the period 4,600 to 2,500 million years before the present.
"**arsenopyrite**"	Sulphidic mineral usually formed in veins at high temperature, but also through contact metamorphism. Silver white colour on crystal faces and steel gray on fresh breaks. Same as mispickel.
"**Birrimian**"	In West Africa, the name given to rocks assigned to the lower part of the Proterozoic division of the Precambrian period of geological time, which succeeds the Archaean division of the Precambrian, with a geological time era of about 2.1 billion years.
"**BLEG**"	Bulk Leach Extractable Gold technique. Very sensitive analytical method for gold whereby all the gold contained within a 1-2 kilogram geochemical survey sample is extracted by cyanide leaching. A very low detection limit may be achieved: the quoted limit of the method is 0.5 parts per billion of gold. The gold content of stream sediments diminishes downstream of the source, so the greater the sensitivity of the assay method used, the more widely the samples may be spaced. BLEG sampling therefore cuts down on the number of samples required to test a given area and effectively increases the survey efficiency.
"**carbon-in-leach**" or "**CIL**"	Metallurgical process of gold extraction. Involves the osmotic use of activated carbon particles during the leaching phase to absorb gold.
"**cuirasse**"	Hard layer of detrital superficial sediments, strongly cemented by iron oxides, which may occur at or just beneath the surface. Also known as "iron pan".
"**diamond drilling**" or "**DDH**"	Drilling method by which a solid core is extracted from depth, for examination on the surface. A diamond drill bit composed of industrial diamonds set into a soft metallic matrix is mounted onto a drill stem, which is connected to a rotary drill. Water is injected into the drill pipe, so as to wash out the rock cuttings produced by the bit. The motor-driven drill, by rotary action (and washing) causes a core to be extracted inside the barrel and taken to the surface.
"**extensive lateritic plateau**"	Elevated, flat-lying zone of lateritic (iron-rich) soil, often capped by cuirasse, which covers a considerable area.
"**felsic**"	Descriptive term for light-coloured rocks containing a predominance of feldspar and silica, or the light-coloured silicate minerals themselves.
"**geochemical surveys**"	Mineral deposits may be located by identifying wide zones of unusual concentrations of metals, which are dispersed around concealed ore bodies in the surrounding environment. "Soil geochemical surveys" take samples of soils on regular grids or on traverses in geologically favourable terrains to test for unusual concentrations of the metal sought or for other metals, which may be associated with that metal. "stream sediment surveys" collect samples of active sediment from streams and use highly sensitive chemical analysis to detect anomalous concentrations of the metals, which will increase in level upstream towards the source. "Lithogeochemical surveys" test

rock samples for unusual concentrations of metals or alteration products, which indicate proximity to an ore body.

"**geophysical surveys**" Mineral deposits may be located by the effect their presence has on the physical properties of their host rocks. One of the most common techniques used is the electromagnetic method, which measures the response of the earth to electromagnetic radiation; if an ore body is present it may produce a detectable zone of high conductivity. Other electrical methods may measure the resistance of the earth; a low resistively may indicate a conductive ore body. The induced polarisation method puts pulses of electrical current into the ground and measures the decay of the current as the transmitter is turned off. This gives a direct measure of the amount of polarisable material in the ground, which will increase if disseminated metallic mineralization is present. The magnetic method measures anomalous increases in the Earth's magnetic field, which may be attributable to concentrations of magnetic minerals.

"**granitoid**" Coarse-grained, crystalline, silica-rich acid rock with granitic texture, of indeterminate origin.

"**graphitic**" Contains graphite or carbon.

"**induced polarisation**" Geophysical survey technique whereby pulses of electrical current are induced in the ground via electrodes, and the decay of the current is measured between pulses. This may indicate the presence of disseminated sulphide mineralization.

"**lateritic**" Descriptive term for residual, oxidized deposits formed in tropical and subtropical terrains by the weathering action of the alternation wet and dry seasons.

"**lithogeochemical**" Descriptive of detailed chemical analysis of rocks to determine their metallic content or degree of alteration usually used for mineral exploration.

"**lithology**" Term referring to the visual characteristics of a rock type, rather than to its microscopic or chemical features, generally applied to outcrop or hand-specimen samples.

"**mineral reserves**" Mineral reserves are subdivided in order of increasing confidence into probable mineral reserves and proven mineral reserves. Probable mineral reserves have a lower level of confidence than proven mineral reserves.

Mineral reserves are the economically mineable part of measured or indicated mineral resources demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. Mineral reserves include diluting materials and allowances for losses that may occur when the material is mined.

Mineral reserves are this part of mineral resources which, after the application of all mining factors, results in an estimated tonnage and grade which, in the opinion of a qualified person making the estimates, is the basis of an economically viable project after taking account of all relevant processing, metallurgical, economic, marketing, legal, environment, socio-economic and government factors. Mineral reserves are inclusive of diluting material that will be mined in conjunction with the mineral reserves and delivered to the treatment plant or equivalent facility. The term "mineral reserves" does not necessarily mean that extraction facilities are in place or operative or that all governmental approvals have been received. It does mean that there are reasonable expectations of such approvals.

“**proven mineral reserves**” “Proven mineral reserves” are the economically mineable part of measured mineral resources demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

Application of the proven mineral reserves category implies that a qualified person has the highest degree of confidence in the estimate with the consequent expectation in the minds of the readers of the report. The term should be restricted to that part of the deposit where production planning is taking place and for which any variation in the estimate would not significantly affect potential economic viability.

“**probable mineral reserves**” “Probable mineral reserves” are the economically mineable part of indicated, and in some circumstances, measured mineral resources demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

“**mineral resources**” Mineral resources are subdivided, in order of increasing geological confidence, into inferred, indicated and measured categories. Inferred mineral resources have a lower level of confidence than that applied to indicated mineral resources. Indicated mineral resources have a higher level of confidence than inferred mineral resources, but have a lower level of confidence than measured mineral resources.

Mineral resources are a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth’s crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of mineral resources are known, estimated or interpreted from specific geological evidence and knowledge.

The term “mineral resources” covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which mineral reserves may subsequently be defined by the consideration and application of technical, economic, legal, environmental, socio-economic and governmental factors. The expression “reasonable prospects for economic extraction” implies a judgement by a qualified person with respect to the technical and economic factors likely to influence the prospect of economic extraction. Mineral resources are an inventory of mineralization that, under realistically assumed and justifiable technical and economic conditions, might become economically extractable. These assumptions must be presented explicitly in both public and technical reports.

“**measured mineral resources**” “Measured mineral resources” are that part of mineral resources for which quantity, grade or quality, densities, shape and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

Mineralization or other natural material of economic interest may be classified as measured mineral resources by a qualified person when the nature, quality, quantity and distribution of data are such that the tonnage and grade of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

"**indicated mineral resources**" "Indicated mineral resources" are that part of mineral resources for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Mineralization may be classified as indicated mineral resources by a qualified person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. A qualified person must recognize the importance of the indicated mineral resources category to the advancement of the feasibility of the project. An indicated mineral resources estimate is of sufficient quality to support a preliminary feasibility study which can serve as the basis for major development decisions.

"**inferred mineral resources**" "Inferred mineral resources" are that part of mineral resources for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Due to the uncertainty of inferred mineral resources, it cannot be assumed that all or any part of inferred mineral resources will be upgraded to indicated or measured mineral resources as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred mineral resources must be excluded from estimates forming the basis of feasibility or other economic studies.

"**plutonic**" Intrusive origin body of magmatic rocks formed at depth into the earth crust, in large massive lensoid or ovoid shape.

"**property**" Descriptive term for interests in a permit to exploit or prospect for mineral resources on a given area.

"**qualified person**" An individual who is an engineer or geoscientist, with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these, has experience relevant to the subject matter of the mineral project and technical report, and is a member in good standing of a professional association, as defined in National Instrument 43-101.

"**reserve**" or "**ore**" Natural aggregate of one or more minerals which, at a specified time and place, may be mined and sold at a profit, or from which some part may be profitably separated.

"**reverse circulation**" **or** "**RC**"	Drilling method whereby the rock is broken into chips using a rotary method of penetration. A double-walled drill pipe is used and compressed air is forced down the space between the two pipes to the drill bit. The drilled chips are flushed back up to the surface through the centre tube of the drill pipe.
"**saprolitic**"	Rocks which have been deeply weathered in a tropical to sub-tropical environment, but which retain recognizable internal structure.
"**shear**"	Dislocation by lateral slip of one part of a body relative to another, often occurring on a regional scale. A fracture in rock similar to a fault.
"**silica**"	Silicon dioxide.
"**silicification**"	Total or partial replacement of rocks or fossils by silica (such as quartz or chalcedony).
"**strike**"	Course or bearing of a bed or layer of rock.
"**sulphide**"	Mineral compound of sulphur and a metal.
"**tectonic**"	Pertaining to rock structures in topographic features resulting from deformation of the Earth's crust.
"**tuff**"	Consolidated fine-grained igneous debris, originally ejected during volcanic activity.
"**ultramafic**"	Basic igneous rocks with a very high proportion of ferromagnesian minerals.
"**vein**"	Occurrence of ore with a regular development in length, width and depth.

Metric Equivalents

Conversion rates from imperial to metric measures and from metric to imperial measures are provided below.

Imperial Measure	Metric Unit	Metric Measure	Imperial Unit
1 acre	0.4047 hectare	1 hectare	2.4711 acres
1 foot	0.3048 meter (m)	1 meter (m)	3.2808 feet
1 mile	1.6093 kilometres (km)	1 kilometre (km)	0.6214 mile
1 ounce (troy)	31.1035 grams (g)	1 gram (g)	0.0322 ounce (troy)
1 pound	0.4536 kilogram (kg)	1 kilogram (kg)	2.2046 pounds
1 short ton	0.9072 metric tonne (t)	1 metric tonne (t)	1.1023 short ton
1 ounce (troy) / short ton	34.2857 grams / metric tonne	1 gram / metric tonne	0.0292 ounce (troy) / short ton

Gold Prices

The following table sets forth the annual high, low and average price of gold for the periods indicated, as well as the price of gold at the end of each such period, as determined on the London Bullion Market (US dollars per ounce).

Gold Prices $/oz	2016	2015	2014	2013	2012	2011
High	1,366	1,296	1,385	1,693	1,792	1,895
Low	1,077	1,049	1,142	1,192	1,540	1,319
Average	1,251	1,160	1,266	1,411	1,669	1,571
End of period	1,151	1,060	1,206	1,201	1,658	1,574

Currency Exchange Rates

Except as otherwise indicated, all dollar amounts set forth herein are expressed in United States dollars. $ means United States dollars.

The following table sets forth the exchange rates of Canadian dollars to US dollars for the periods indicated. The average exchange rates are presented for these periods, as well as the exchange rate at the end of each such period. These exchange rates are expressed in Canadian dollars and represent the noon buying rate for US dollars at the Bank of Canada.

	2016	2015	2014	2013	2012	2011
Average	1.3262	1.2777	1.1038	1.0299	1.0001	0.9890
End of period	1.3427	1.3884	1.1601	1.0636	0.9949	0.9449

SCHEDULE B – MANDATE OF THE AUDIT COMMITTEE

1. Duties

The role of the Audit Committee (the "Committee") of SEMAFO Inc. (the "Corporation") is to assist the Board of Directors (the "Board") in its oversight of:

- The identification of the principal business risks and, with the exception of environmental and health & safety risks, the establishment of appropriate policies and risk management systems aimed at managing these risks
- The integrity of the Corporation's internal control, information and financial management systems
- The establishment of policies and systems aimed at increasing accountability, ensuring compliance with applicable laws and with auditing and accounting principles.

The Committee does not have the mandate of planning or conducting a financial audit, nor is it responsible for determining whether the financial statements are complete and fully reflect the Corporation's situation or whether accounting principles applicable to the Corporation have actually been applied. In these respects, after having carried out the verifications dictated by the circumstances, and having ensured the existence of adequate internal controls, the Committee relies on the accounting and financial expertise of the President and Chief Executive Officer and the Chief Financial Officer of the Corporation who are responsible for the integrity of the information submitted to the Committee and to the Board.

The independent auditor is responsible for auditing the Corporation's accounts. He or she reports on the results of the audit directly to the Committee.

The Committee fosters frank and open dialogue with the independent auditor, management, and the Corporation's accounting personnel.

In fulfilling its duties, the Committee:

Financial Reporting

- Reviews the results of the independent audit firm's reviews of interim financial statements if any, and annual audit and any significant disagreements with management
- Reviews and recommends to the Board for approval the annual audited financial statements and related "Management's Discussion and Analysis of financial and operating results"
- Reviews and recommends to the Board for approval the Annual Information Form
- Reviews and recommends to the Board for approval the quarterly financial statements and related Management's Discussion and Analysis of financial and operating results
- Reviews and recommends to the Board for approval the Corporation's earnings press releases
- Reviews management process to maintaining and evaluating financial disclosure controls and procedures and internal control over financial reporting.

Independent Auditors

- Periodically assesses the independent auditor
- Recommend to the Board for consideration by the shareholders an independent audit firm to conduct an annual audit of the Corporation's financial statements
- Evaluate the independence of the independent audit firm
- Review an annual report from the independent audit firm elected by the shareholders regarding the independent audit firm's internal quality-controls procedures, material issues raised by the most recent internal quality-control review, or peer-review, of such firm, or by any inquiry or investigation by governmental or professional authorities respecting one or more independent auditors carried out by the firm
- Review the plan and scope of the annual audit engagement of the independent audit firm elected by the shareholders
- Recommend to the Board for approval the annual audit engagement fees of the independent audit firm elected by the shareholders

- Approve all non-audit engagements of the independent audit firm elected by the shareholders.

2. Policies

The Committee must establish a procedure for the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal accounting controls or auditing matters.

The Committee must also establish a procedure for the confidential and anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters.

The Committee must establish hiring policies regarding partners, employees and former partners and employees of the present and former independent audit firms elected by the shareholders.

3. Composition

The Committee is composed of at least three directors appointed by the Board for a mandate of one year or for any other period set by the Board.

All Committee members shall be independent directors and financially literate as prescribed by the Canadian Securities Administrators and determined by the Board.

4. Chair

The Chair of the Committee is appointed by the Board. In the event of the Chair's inability to attend a meeting, Committee members shall appoint a chair for such meeting.

The Chair of the Committee:

- Chairs all Committee meetings
- Ensures the fulfillment of the Committee's mandate
- Reports on Committee activities to the Board
- Ensures that this mandate is reviewed annually by the Committee members to recommend to the Board any appropriate changes.

5. Meetings

The Committee meets at least four times a year at locations, dates and times it determines.

The Chair of the Committee may convene a meeting at any time.

6. Organization

The Corporation's secretary acts as Committee secretary.

Before each Committee meeting, the secretary distributes the agenda and the information required for discussion and decision-making purposes. The secretary records the minutes of each Committee meeting in a register kept for this purpose.

7. Quorum and Decisions

The Committee quorum is the majority of Committee members.

Subject to the quorum being reached, the Committee makes its decisions by a majority of the votes cast by attending members.

8. Outside Advisors

In fulfilling its duties, the Committee may retain legal, accounting or other advisors.

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