SEMAFO (the "Corporation") is a Canadian-based mining company with gold production and exploration activities in West Africa. The Corporation and its subsidiaries currently operate three gold mines: the Mana Mine in Burkina Faso, the Samira Hill Mine in Niger and the Kiniero Mine in Guinea. SEMAFO is committed to evolve in a conscientious manner to become a major player in its geographical areas of interest. SEMAFO's strategic focus is to maximize shareholder value by effectively managing its existing assets as well as pursuing organic and strategic growth opportunities.

This Management's Discussion and Analysis ("MD&A") provides an analysis to enable readers to assess material changes in financial condition and results of operations for the year ended December 31, 2010 compared to those of the previous year. This MD&A, prepared as of March 15, 2011, is intended to complement and supplement our Audited Consolidated Financial Statements (the "financial statements"). It should be read in conjunction with our financial statements and notes for the year ended December 31, 2010. Our financial statements and this MD&A are intended to provide investors with a reasonable basis for assessing our results of operation and our financial performance.

Our financial statements are prepared in accordance with Canadian Generally Accepted Accounting Principles ("GAAP"). All dollar amounts contained in this MD&A are expressed in US dollars, unless otherwise specified.

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.

1. Financial and Operating Highlights

	2010	2009	2008
Gold ounces produced	**261,100**	242,400	195,400
Gold ounces sold	**260,800**	243,800	198,000
(In thousands of dollars, except amounts per ounce, per tonne and per share)			
Revenues – Gold sales	**323,275**	240,788	169,911
Operating income	**128,873**	60,905	33,108
Net income	**103,246**	43,505	39,529
Adjusted net income [1]	**103,246**	39,968	21,680
Basic net income per share	**0.39**	0.18	0.19
Diluted net income per share	**0.38**	0.18	0.19
Cash flow from operating activities [2]	**147,451**	92,147	56,339
Operating cash flow per share [3]	**0.56**	0.38	0.26
Average selling price (per ounce)	**1,240**	988	858
Cash operating cost (per ounce produced) [4]	**466**	463	461
Cash operating cost (per tonne processed) [4]	**33**	33	33
Total cash cost (per ounce sold) [5]	**517**	510	508
Total cash margin (per once sold) [6]	**723**	478	350

[1] Adjusted net income is a non-GAAP measure. For 2009, the adjusted net income represents the net income excluding a gain on settlement of advances payable totaling $3,537,000. The adjusted net income for 2008 excluded a gain on disposal of investment in subsidiaries in the amount of $17,849,000.

[2] Cash flow from operating activities excludes changes in non-cash working capital items and settlement of liabilities related to asset retirement obligations.

[3] Operating cash flow per share is a non-GAAP measure. See the "Non-GAAP Measures'' section of this MD&A.

[4] Cash operating cost is a non-GAAP measure and is calculated using ounces produced and tonnes processed. See the "Non-GAAP Measures'' section of this MD&A.

[5] Total cash cost is a non-GAAP measure and represents the mining operating costs and government royalties per ounce sold. See the "Non-GAAP Measures'' section of this MD&A.

[6] Total cash margin is a non-GAAP measure and is calculated using the average realized price and the total cash cost.

1. Financial and Operating Highlights (continued)

	Three-month period ended December 31	
	2010	2009
Gold ounces produced	**61,500**	57,900
Gold ounces sold	**62,100**	66,000
(In thousands of dollars, except amounts per ounce, per tonne and per share)		
Revenues – Gold sales	**86,392**	73,286
Operating income	**33,209**	17,494
Net income	**27,001**	10,483
Basic net income per share	**0.09**	0.04
Diluted net income per share	**0.09**	0.04
Cash flow from operating activities [1]	**38,743**	23,902
Operating cash flow per share [2]	**0.14**	0.10
Average selling price (per ounce)	**1,391**	1,110
Cash operating cost (per ounce produced) [3]	**533**	506
Cash operating cost (per tonne processed) [3]	**36**	36
Total cash cost (per ounce sold) [4]	**596**	552
Total cash margin (per once sold) [5]	**795**	558

[1] Cash flow from operating activities excludes changes in non-cash working capital items and settlement of liabilities related to asset retirement obligations.

[2] Operating cash flow per share is a non-GAAP measure and is calculated using cash flow from operating activities and the weighted average number of outstanding common shares.

[3] Cash operating cost is a non-GAAP measure and is calculated using ounces produced and tonnes processed.

[4] Total cash cost is a non-GAAP measure and represents the mining operating costs and government royalties per ounce sold.

[5] Total cash margin is a non-GAAP measure and is calculated using the average realized price and the total cash cost.

A Word from the CEO

From time to time, it is important to look back over one's shoulder to appreciate the evolution. SEMAFO has grown from a grassroots exploration company to a three-mine gold producer with a market capitalization in excess of $3 billion. Our operations have evolved, essentially owing to our unique savoir-faire, and today provide our Corporation with a solid platform for sustainable growth. In 2010, we achieved record production, revenues, net income, cash flow from operating activities and operating cash flow per share, while our cash operating cost remained comparable to the previous year.

Over the past 5 years our cash margin rose from $45 to $723 per ounce, outpacing the average gold price increase. Our cash flow from operating activities totaled $147 million in 2010 compared to negative cash flow of $4 million in 2006, and our basic net income per share increased from a $0.11 basic net loss per share to a $0.39 basic net income per share for the same period.

In 2010, we celebrated the production of our one-millionth ounce of gold, an accomplishment unmatched by the majority of companies in our industry.

Energized by a 180% increase in reserves and 195% in inferred resources at Mana, our team continues to focus on this property as a flagship asset in our value creation model. Recognizing that the structures identified thus far represents less than 10% of the property, in 2010 we invested $18 million in accelerated exploration programs. We are motivated by the excellent 2010 exploration results and hence have established an initial $30-million exploration budget for the Mana property in 2011.

We are pleased with the successful completion of our Mana plant expansion, which increased plant capacity from 4,000 tonnes per day to 6,000 tonnes per day in hard rock. The construction and commissioning of all three phases of the plant expansion were efficiently scheduled and executed on time and on budget with little or no impact on our ongoing operations. Owing to Mana's ever-growing potential, we recently announced a decision to undertake a fourth phase of plant expansion aimed at increasing plant capacity to up to 8,000 tonnes per day in blended ore. Completion of Phase IV will increase throughput by 1,200 tonnes per day, representing an additional 26,000 to 30,000 ounces of gold annually when compared to the current plant capacity.

The next few years promise to be an exciting time for SEMAFO, as our expanded Mana property continues to strengthen our production profile. As part of this initiative, we will continue to maximize Mana's on-surface and at-depth exploration programs to ultimately increase shareholder value.

In the past 5 years we have proven that our growth is sustainable and that our unique savoir-faire is present at all levels of our operations. We are now considered a significant player in our industry and remain committed to continue to grow responsibly to create value for our shareholders.

Benoit La Salle, FCA
President and Chief Executive Officer

2010 – HIGHLIGHTS

- Gold production of 261,100 ounces, an 8% increase over the same period last year
- Gold sales of $323.3 million, an increase of 34% year over year
- Cash operating cost of $466 per ounce produced compared to $463 in 2009
- Operating income of $128.9 million, an increase of 112% compared to 2009
- Net income of $103.2 million or $0.39 per share, an improvement of 137% over the same period last year
- Cash flow from operating activities of $147.5 million or $0.56 per share, an increase of 60% over last year
- Increase of 180% in proven and probable reserves at Mana
- Continued exploration success at Mana
- Successful completion of Phases I, II and III of the Mana plant expansion
- Encouraging exploration results at Samira Hill

Q4 2010 – HIGHLIGHTS

- Gold production of 61,500 ounces, a 6% increase over the same period last year
- Gold sales of $86.4 million, an increase of 18% compared to last year
- Cash operating cost of $533 per ounce produced compared to $506 for the same period in 2009
- Operating income of $33.2 million, an increase of 90% compared to 2009
- Net income of $27.0 million or $0.09 per share, an improvement of 158% over the same period last year
- Cash flow from operating activities of $38.7 million or $0.14 per share, an increase of 62% over last year
- Successful completion of Phase III of the Mana plant expansion

2010 Objectives	2010 Achievements
Maximize Value • Pursue aggressive at-depth and on-surface exploration programs at the Mana Mine • Complete Wona Deep feasibility study to commence development • Initiate an aggressive two-year $6 million exploration program at the Samira Hill Mine	• Increased inferred mineral resources by 108%, representing 3.5 million ounces of gold • Exploration budget doubled at Mana to $18.2 million • Discovered new zones at Mana: Wona Southwest, Kona, Fobiri, Fofina • Discovered new priority targets at Mana: Y1, BC1 • Enhanced Wona Deep feasibility study to include Wona Southwest and parallel zones – results expected in Q1 2011 • At Mana, the first of two new airborne geophysical surveys scheduled reveals five new prospective trends over the property • Discovered two new gold zones at Samira Hill
Disciplined Growth • Achieve production of between 235,000 and 260,000 ounces of gold in 2010 • Increase plant capacity at the Mana Mine to up to 6,000 tonnes per day in bedrock • Improve production efficiencies at the Samira Hill Mine • Maintain stable production at the Kiniero Mine • Attract and retain best mining talent	• Gold production of 261,100 ounces • Milestone production of SEMAFO's one-millionth ounce of gold • Completed Phases I, II and III of the Mana plant expansion on time and on budget • Recognized as one of Canada's top 50 companies, doing the best job of engaging employees, in an exclusive survey conducted by Aon Hewitt • Gold production of 51,300 ounces at Samira Hill and 30,100 ounces at Kiniero
Responsible Mining • Minimize our environmental footprint • Continue corporate philanthropy program, donating up to 2% of net income to support Fondation SEMAFO • Support government initiatives in host countries • Increase employee training and development programs	• Initiated Corporate Social Responsibility Report • Ongoing support including funding of approximately $1 million to *Fondation SEMAFO* • Launched "Together for a Better Society" in Burkina Faso: a series of 30-minute weekly radio broadcast aimed at raising awareness, facilitating discussion and promoting sustainable development in the communities and throughout the country • Feasibility study of solar power facility underway in Burkina Faso • Collaborated with Quebec-based school boards to establish tailor-made development programs for our African workforce

2011 – Objectives[1]

Maximize value

- Pursue aggressive at-depth and on-surface exploration programs at Mana – initial budget of $30 million
- Commence development of Wona Deep underground mining operation
- Maintain robust exploration at Samira Hill – budget of $4.8 million

Disciplined Growth

- Achieve production of between 238,000 and 263,000 ounces of gold in 2011
- Increase Mana plant capacity to attain throughput of up to 8,000 tonnes per day in blended ore
- Attract and retain best mining talent

Responsible Mining

- Manage effectively to minimize our environmental footprint
- Continue corporate philanthropy program, donating up to 2% of net income to *Fondation SEMAFO*
- Support government initiatives in host countries
- Increase employee training and development programs
- Maintain and improve our health and safety programs

[1] These statements are forward-looking. For more information on forward-looking statements, see note 19.

Key Economic Trends

Price of Gold

The price of gold is the most significant factor affecting our profitability and our operating cash flows. Accordingly our current and future financial performance is closely linked to the price of gold. The price of gold is subject to volatile price movements over short periods of time and is affected by various industry and macroeconomic factors that are beyond our control such as currency exchange rate fluctuation and the relative strength of the US dollar, inflation expectations and increased demand for gold as an investment class asset from retail and institutional investors. During 2010, the price of gold fluctuated between $1,045 to a high of $1,431 with an average price of $1,225 per ounce based on the London Gold Fix.

Source: Bloomberg

During 2010, our average realized gold price was $1,240 compared to the average London Gold Fix of $1,225.

	2010					2009
(In dollars)	Q1	Q2	Q3	Q4	YTD	YTD
Average London Gold Fix	1,109	1,197	1,227	1,367	**1,225**	972
Average realized gold price	1,111	1,210	1,241	1,391	**1,240**	988

Inflationary cost pressures

Operations in open pit mining are generally energy intensive activities. As a result, our earnings are impacted by higher operating costs related to energy. Although the cost of fuel as a percentage of total cash costs varies in the mining industry, all mining companies have observed, to some extent, higher energy costs related to the increase in global oil prices that occurred during the last semester of 2010.

Reserves and Resources

MINERAL RESERVES

Mines	Mana [1][2] Burkina Faso	Samira Hill [1][3] Niger	Kiniero [1][4] Guinea	Total
Proven Mineral Reserves				
Tonnes	8,315,700	7,227,200	198,700	15,741,600
Grade (g/t)	2.68	1.83	2.21	2.28
Ounces [5]	716,000	425,800	14,000	1,155,800
Probable Mineral Reserves				
Tonnes	17,152,300	2,245,500	1,008,400	20,406,200
Grade (g/t)	2.62	1.13	4.20	2.53
Ounces [5]	1,443,700	81,800	136,000	1,661,500
TOTAL MINERAL RESERVES				
Tonnes	25,468,000	9,472,700	1,207,100	**36,147,800**
Grade (g/t)	2.64	1.67	3.86	**2.43**
Ounces [5]	2,159,700	507,600	150,000	**2,817,300**

MINERAL RESOURCES

Measured Mineral Resources				
Tonnes	2,440,300	8,043,800	1,356,900	11,841,000
Grade (g/t)	1.77	1.54	2.30	1.67
Ounces [5]	138,800	398,400	100,300	637,500
Indicated Mineral Resources				
Tonnes	21,222,400	20,980,600	8,553,400	50,756,400
Grade (g/t)	1.45	1.49	1.96	1.55
Ounces [5]	987,200	1,006,800	539,900	2,533,900
TOTAL MINERAL RESOURCES				
Tonnes	23,662,700	29,024,400	9,910,300	**62,597,400**
Grade (g/t)	1.5	1.51	2.01	**1.59**
Ounces [5]	1,126,000	1,405,200	640,200	**3,171,400**

TOTAL MINERAL RESERVES AND RESOURCES				
Tonnes	49,130,700	38,497,100	11,117,400	**98,745,200**
Grade (g/t)	2.1	1.55	2.21	**1.89**
Ounces [5]	3,285,700	1,912,800	790,200	**5,988,700**
INFERRED MINERAL RESOURCES				
Tonnes	36,466,300	17,062,400	1,757,600	55,286,300
Grade (g/t)	2.28	1.13	2.81	1.94
Ounces [5]	2,678,000	622,600	158,800	3,459,400

We are presenting 100% of the reserves and resources of the mines in the above table. Regarding open pit reserves, cut-off grades are established with the Ultimate Pit software in consideration of the rock type and haulage distance, regarding underground mining, cut-off are established from calculated operations costs. Cut-off grades vary from 0.6 g/t to 2.0 g/t.

(1) Mineral reserves estimated using US$1,100 per ounce of gold.

(2) The Corporation indirectly owns 90% of SEMAFO Burkina Faso, which directly holds the interest in the Mana Mine reserves and resources.

(3) Mineral reserves and resources at the Samira Hill Mine represent the combined reserves and resources of SML and AGMDC. The Corporation indirectly owns 80% of SML.

(4) The Corporation indirectly owns 85% of SEMAFO Guinée, which directly holds the interest in the Kiniero Mine reserves and resources.

(5) Rounding of numbers to the nearest hundreds of tonnes may introduce slight differences in the figures representing the ounces contained.

The mineral reserves and resources were estimated as at December 31, 2010 in accordance with the definitions adopted by the Canadian Institute of Mining Metallurgy and Petroleum and incorporated into National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101").

Exploration Programs

Burkina Faso

In December, SEMAFO announced the results of preliminary follow-up core drilling on the new Fofina area located 12.5 kilometers south of SEMAFO's Mana Mill, and presented an update on the ongoing regional exploration program. Core drilling results showed good grades from the V zones (V1 to V4) with values of up to 21.62 g/t Au (43.11 g/t Au uncut) across 5 meters and 2.72 g/t Au across 27.2 meters (including 9.82 g/t Au over 6 meters). In addition, reverse circulation ("RC") and air core ("AC") drilling over the Fobiri and Fofina blocks continued to produce significant results including 11.43 g/t Au over 2 meters, 1.26 g/t Au over 15 meters and 3.99 g/t Au over 4 meters.

Subsequent to results communicated in SEMAFO's press release dated August 3, 2010, a core drilling program was initiated on the Fofina area including the V zones to observe the mineralization styles for further outline. In addition, a series of 200-meter-spaced RC drilling lines extending over the most promising gold-bearing zones are in progress in order to determine the orientation and grade continuity of the near-surface mineralization. Meanwhile, the ongoing AC drilling program continues to explore untested auger drilling anomalies.

At Fofina, 5 diamond drilling hole ("DDH") sections located between 100 and 150 meters apart (Figure 1) were completed over both the Fofina and the V zones (V1 to V3). The holes were oriented towards the south to cross the northeast trending main Fofina zone but also cut the V zones, which were believed to trend virtually east-west. Testing of the V structures shows that the zones are characterized by shallow dipping quartz-pyrite-arsenopyrite stringer zones, often associated with variably intense sericite alteration within massive volcanic rocks. Information gathered from this drilling now suggests that the V zones are virtually parallel to the Fofina, with the difference between the two related principally to the host rock as opposed to the geometry. The V zones show frequent significant pinch and swell, similar to what we have observed at Nyafé. Nonetheless, high grade values were obtained on a regular basis in most of the 11 holes drilled (results from hole WDC-258 remain pending) as demonstrated by hole WDC-242 (21.90 g/t Au over 1 meter), WDC-244 (21.63 g/t Au over 5 meters – 43.11 g/t Au uncut), and WDC-251 (9.99 g/t Au over 1 meter). Major swelling of the mineralization was observed in holes WDC-246 (1.38 g/t Au over 26 meters), WDC-247 (2.72 g/t Au over 27.2 meters) and WDC-251 (1.17 g/t Au over 21 meters) and sometimes includes higher grade intervals such as in WDC-247 (9.82 g/t Au over 6 meters).

Fofina Area Core Diamond Drilling Highlights

DDH No.	Zone	From	To	Au* / Length**
WDC236	V1	91.0	96.0	1.56 g/t / 5.0 m
WDC239	V2	226.0	227.0	4.82 g/t / 1.0 m
WDC242	V1	26.0	29.0	3.22 g/t / 3.0 m
WDC242	V1 FW	149.0	150.0	4.33 g/t / 1.0 m
WDC242	V2	188.0	189.0	21.90 g/t / 1.0 m
WDC242	V2	232.0	234.0	4.09 g/t / 2.0 m
WDC244	V2	19.0	20.0	4.80 g/t / 1.0 m
WDC244	V2	35.0	40.0	21.63 g/t / 5.0 m (43.11 g/t uncut)
WDC244	V3	196.0	202.0	3.26 g/t / 6.0 m
WDC246	V2	133.0	139.0	2.16 g/t / 6.0 m
WDC246	V3	208.0	234.0	1.47 g/t / 26.0 m
	Including	231.0	234.0	6.13 g/t / 3.0 m
WDC247	Shallow Vein	47.0	48.0	2.09 g/t / 1.0 m
WDC247	V3	189.0	216.2	2.72 g/t / 27.2 m
	Including	198.0	204.0	9.82 g/t / 6.0 m
WDC251	V1	55.0	56.0	9.99 g/t / 1.0 m
WDC251	V1 FW	151.0	172.0	1.17 g/t / 21.0 m
	Including	151.0	153.0	5.44 g/t / 2.0 m
WDC254	Shallow Vein	249.8	250.8	3.25 g/t / 1.0 m

* All individual samples are cut at 30 g/t in line with procedures applied to the Nyafé Deposit. This conservative approach is applied until a statistically representative database is collected to establish a specific cutting grade for this area.

** All lengths are measured along the hole axis; additional information is required to determine true widths.

Exploration Programs (continued)

Burkina Faso (continued)

Fofina Area Core Diamond Drilling Highlights (continued)

DDH No.	Zone	From	To	Au* / Length**
MRC10-435	Fofina	6.0	18.0	1.70 g/t / 12.0 m
	Including	6.0	9.0	4.54 g/t / 3.0 m
MRC10-435	V1	43.0	47.0	1.47 g/t / 4.0 m
MRC10-436	V1	108.0	116.0	1.05 g/t / 8.0 m
MRC10-437	Fofina	126.0	129.0	1.77 g/t / 3.0 m
WDC258	Fofina	333.0	338.0	10.60 g/t / 5.0 m

* All individual samples are cut at 30 g/t in line with procedures applied to the Nyafé Deposit. This conservative approach is applied until a statistically representative database is collected to establish a specific cutting grade for this area.
** All lengths are measured along the hole axis; additional information is required to determine true widths.

Core hole WDC258 is considered very promising as it represents the south western most cut along the Fofina to date and therefore suggests additional potential in this direction.

The reinterpretation of the V zones suggests that the system consists at least of four main mineralized trends (Fofina, V1, V2 and V3) with some intermediate parallel zones, particularly between the V1 and V2 zones (V1 FW). Although there is an occurrence of pinch-and-swell, the V3 zone hosts an area of good width and grade over a strike length of more than 250 meters and remains open to the southwest (Figure 1). The intersections of holes WDC-244 and WDC-247 are interpreted as being part of a previously reported structure and proximal to holes MRC10-68 (10.32 g/t Au across 12 meters – 17.21 g/t Au uncut), MRC10-70 (10.84 g/t Au over 9 meters) and MRC10-67 (7.01 g/t Au over 4 meters) (Reference: SEMAFO's press release dated June 17, 2010).

The strength and width of the deformation zone continues to be present over the Fofina zone. Its trend however, is now interpreted to be more north-northeast than northeast with a shallower dip, which resulted in only three holes crossing the structure including WDC-259 for which assays remain pending. Hole WDC-236 crossed the wide structure but in saprolite, and gold grades were low, returning 0.28 g/t Au across 31.5 meters. The core program provided a better understanding of the stratigraphy that hosts the zones. The sediment-volcanoclastic package hosting the Fofina-V1 corridor is now observed on all sections drilled as opposed to what was originally believed. The stratigraphy appears fairly continuous across the area and therefore the rheological constraints most probably remained consistent, which is more favourable for lateral extension than discontinuous stratigraphic environments.

Ongoing regional exploration RC drilling were progressing well with three rigs completing systematic lines laterally along the most favourable gold-bearing intervals identified from prior RC or AC drilling results (Figure 2). Among these, the Fobiri 1 zone has returned good widths of mineralization, including hole MRC10-273 (1.26 g/t Au over 15 meters). In addition, a second area located 1.2 kilometers southwest of the Nyafé Pit has returned several interesting results which require additional follow-up including MRC10-267 (4.14 g/t Au across 2 meters). A third area located 2.2 kilometers north of the Fofina zone is also producing interesting results such as in holes MRC10-243, MRC10-245, and MRC10-246.

Reverse-Circulation Drilling Highlights

Hole No.	Zone	From	To	Au / Length*
MRC10-127	New	43.0	44.0	4.03 g/t / 1.0 m
MRC10-243	New	28.0	29.0	3.79 g/t / 1.0 m
MRC10-245	New	30.0	31.0	4.21 g/t / 1.0 m
MRC10-246	New	23.0	24.0	3.12 g/t / 1.0 m
MRC10-251	H zone	48.0	53.0	1.40 g/t / 5.0 m
	Including	48.0	51.0	2.16 g/t / 3.0 m
MRC10-267	H zone	42.0	44.0	4.14 g/t / 2.0 m
MRC10-273	FOB1	87.0	93.0	1.18 g/t / 6.0 m
MRC10-273	FOB1	119.0	134.0	1.26 g/t / 15.0 m
MRC10-275	FOB1	114.0	118.0	1.57 g/t / 4.0 m
MRC10-280	New	111.0	112.0	4.95 g/t / 1.0 m
MRC10-286	New	17.0	20.0	1.06 g/t / 3.0 m
MRC10-295	FOB1	112.0	115.0	1.37 g/t / 3.0 m

* All lengths are measured along the hole axis; additional information is required to determine true widths.

Exploration Programs (continued)

Burkina Faso (continued)

The AC exploration program designed to test auger anomalies continued to produce significant intersections within the Fofina and Fobiri areas. High grade values over narrow widths were obtained, including hole MAC10–513 (11.43 g/t Au over 2 meters) and MAC10-299 (14.60 g/t Au over 1 meter). Both intersections are located immediately to the northwest of the Nyafé Pit (Figure 2). Also of interest are two wider zones emanating from two contiguous AC holes (MAC10-368 and MAC10-369) which returned 3.99 g/t Au over 4 meters and 1.19 g/t Au over 5 meters. These zones are located 1.6 kilometers along strike of the Fobiri 1 zone, possibly representing its extension, and seem along strike of the H zone. Intermediate lines will be extended in order to test this hypothesis.

Core Drilling Highlights

Hole No.	Zone	From	To	Au / Length*
MAC10-110	New	30.0	31.0	6.23 g/t / 1.0 m
MAC10-128	New	1.0	2.0	4.35 g/t / 1.0 m
MAC10-176	H zone	30.0	33.0	2.77 g/t / 3.0 m
MAC10-244	New	34.0	39.0	1.65 g/t / 5.0 m
MAC10-250	New	22.0	25.0	1.31 g/t / 3.0 m
MAC10-252	New	6.0	13.0	1.03 g/t / 7.0 m
MAC10-270	New	3.0	5.0	2.54 g/t / 2.0 m
MAC10-282	New	17.0	19.0	2.23 g/t / 2.0 m
MAC10-294	New	17.0	19.0	3.49 g/t / 2.0 m
MAC10-298	New	15.0	17.0	2.05 g/t / 2.0 m
MAC10-299	New	16.0	17.0	14.60 g/t / 1.0 m
MAC10-300	New	16.0	17.0	2.97 g/t / 1.0 m
MAC10-301	New	22.0	23.0	2.75 g/t / 1.0 m
MAC10-305	New	20.0	21.0	1.29 g/t / 1.0 m
MAC10-306	New	6.0	7.0	1.05 g/t / 1.0 m
MAC10-307	New	2.0	3.0	4.68 g/t / 1.0 m
MAC10-309	New	22.0	23.0	1.53 g/t / 1.0 m
MAC10-310	New	8.0	9.0	3.53 g/t / 1.0 m
MAC10-312	New	15.0	16.0	5.35 g/t / 1.0 m
MAC10-368	New	34.0	38.0	3.99 g/t / 4.0 m
MAC10-369	New	45.0	50.0	1.19 g/t / 5.0 m
MAC10-450	New	15.0	17.0	6.05 g/t / 2.0 m
MAC10-486	New	14.0	19.0	1.15 g/t / 5.0 m
MAC10-513	Nyafé	15.0	17.0	11.43 g/t / 2.0 m

* All lengths are measured along the hole axis; additional information is required to determine true widths.

The first phase of systematic RC drilling was completed in late 2010. The new interpretation of the V zones are expected to generate additional targets to be further investigated as part of our Phase II exploration program, which commenced in Q4 2010 and will continue well into 2011. Finally, the AC program commenced on the Y1 Block, located along strike and to the southwest of the Wona zone to test newly identified auger anomalies. Further targets will be integrated into the program as auger drilling progresses.

Figure 1

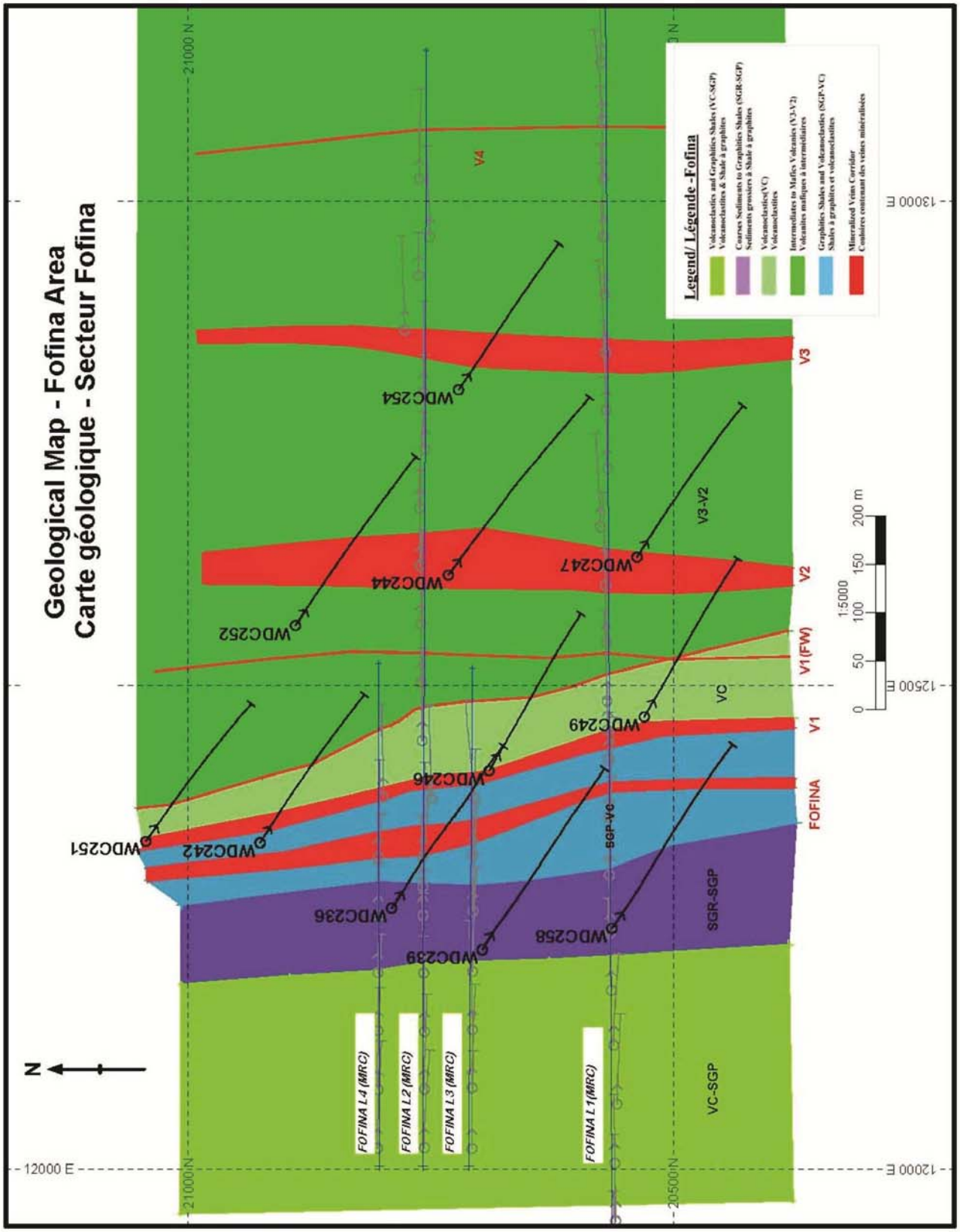
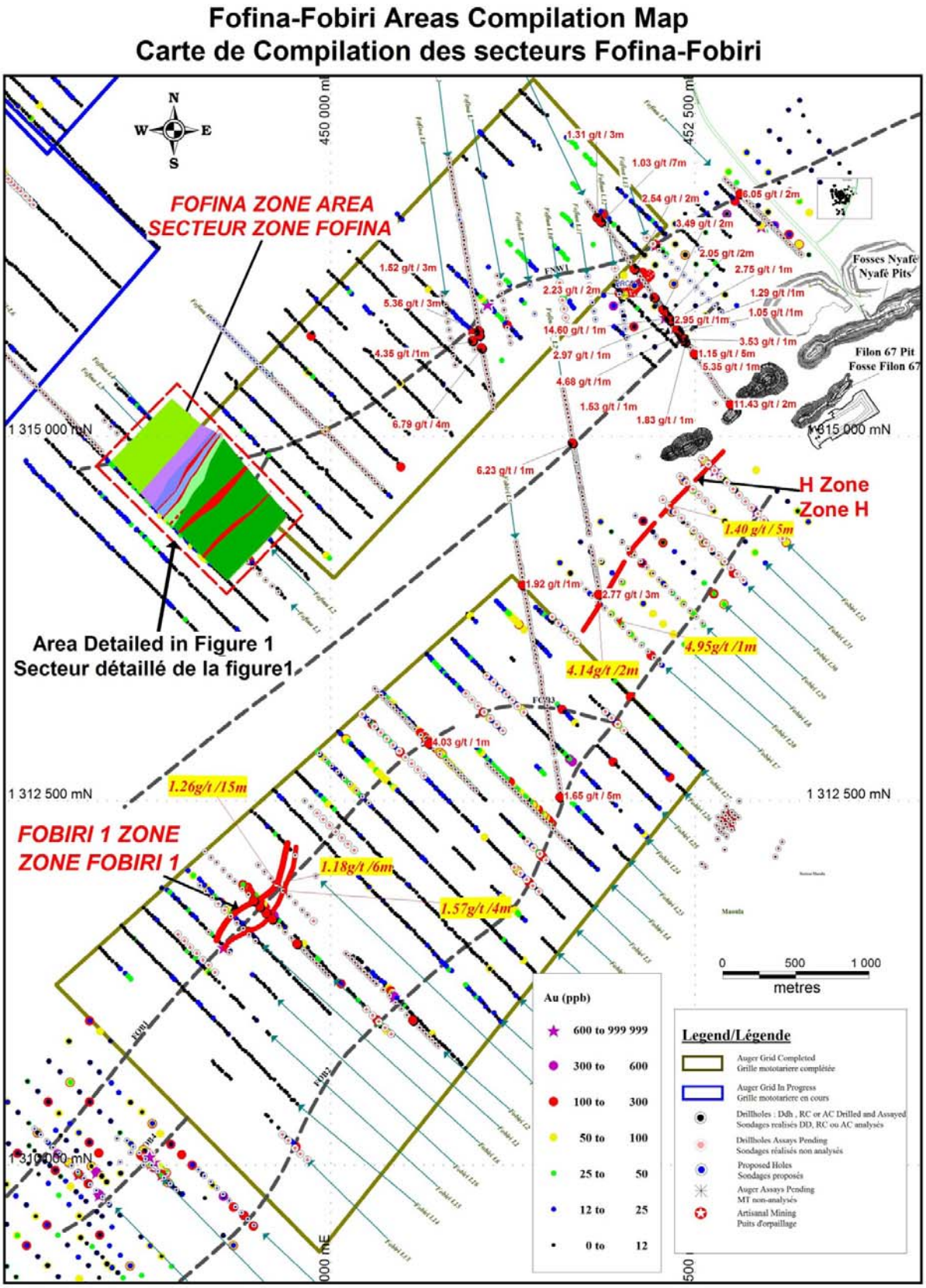

Geological Map - Fofina Area
Carte géologique - Secteur Fofina
Legend/ Légende -Fofina
Volcaniclastics and Graphitics Shales (VC-SGP)
Volcaniclastites & Shale à graphites
Courses Sediments to Graphitics Shales (SGR-SGP)
Sediments grossiers à Shale à graphites
Volcaniclastics(VC)
Volcaniclastites
Intermediates to Mafics Volcanics (V3-V2)
Volcanites mafiques à intermédiaires
Graphitics Shales and Volcaniclastics (SGP-VC)
Shales à graphites et volcaniclastites
Mineralized Veins Corridor
Couloires contenant des veines minéralisées
N
12000 E
21000N
20500N
21000 N
13000 E
12500 E
12000 E
FOFINA L4 (MRC)
FOFINA L2 (MRC)
FOFINA L3 (MRC)
FOFINA L1 (MRC)
WDC251
WDC242
WDC236
WDC239
WDC258
WDC246
WDC249
WDC252
WDC244
WDC247
WDC254
SGP-VC
VC-SGP
SGR-SGP
VC
V3-V2
V4
V3
V2
V1(FW)
V1
FOFINA
1:5000
0
50
100
150
200 m

Figure 2


Fofina-Fobiri Areas Compilation Map
Carte de Compilation des secteurs Fofina-Fobiri
N
S
W
E
450 000 mE
452 500 mE
FOFINA ZONE AREA
SECTEUR ZONE FOFINA
1 315 000 mN
1 315 000 mN
Area Detailed in Figure 1
Secteur détaillé de la figure1
H Zone
Zone H
1.40 g/t / 5m
4.95g/t /1m
4.14g/t /2m
1.26g/t /15m
1.18g/t /6m
1.57g/t /4m
FOBIRI 1 ZONE
ZONE FOBIRI 1
1 312 500 mN
1 312 500 mN
1 310 000 mN
Fosses Nyafé
Nyafé Pits
Filon 67 Pit
Fosse Filon 67
1.31 g/t / 3m
1.03 g/t /7m
2.54 g/t / 2m
6.05 g/t / 2m
3.49 g/t / 2m
2.05 g/t /2m
2.75 g/t / 1m
1.52 g/t / 3m
5.36 g/t / 3m
2.23 g/t / 2m
1.29 g/t /1m
1.05 g/t /1m
14.60 g/t / 1m
2.95 g/t /1m
3.53 g/t / 1m
4.35 g/t /1m
2.97 g/t / 1m
1.15 g/t / 5m
5.35 g/t / 1m
4.68 g/t /1m
1.53 g/t / 1m
11.43 g/t / 2m
1.83 g/t / 1m
6.79 g/t / 4m
6.23 g/t / 1m
1.92 g/t /1m
2.77 g/t / 3m
4.03 g/t / 1m
1.65 g/t / 5m
0
500
1 000
metres
Au (ppb)
600 to 999 999
300 to 600
100 to 300
50 to 100
25 to 50
12 to 25
0 to 12
Legend/Légende
Auger Grid Completed
Grille mototariere complétée
Auger Grid In Progress
Grille mototariere en cours
Drillholes : Ddh , RC or AC Drilled and Assayed
Sondages realisés DD, RC ou AC analysés
Drillholes Assays Pending
Sondages réalisés non analysés
Proposed Holes
Sondages proposés
Auger Assays Pending
MT non-analysés
Artisanal Mining
Puits d'orpaillage

Exploration Programs (continued)

Burkina Faso (continued)

A 985-km² magnetic survey was carried out across most peripheral groups of permits and an extensive induced polarization ("IP") survey was completed over the Nyafé-Fofina area at its flagship Mana Mine in Burkina Faso.

The integration of the new airborne magnetic survey with the 2009 survey previously completed across the central permits reveals prospective magnetic trends over most of the new permits. This area includes the Massala and Saoura blocks where high-grade grab sample values ranging up to 13.8 g/t Au were obtained coincident with some of the trends observed. The IP survey over the Nyafé-Fofina area revealed new key structural information which will guide the 2011 program in this area.

The ultra high-resolution low elevation helicopter-borne magnetic geophysical survey virtually doubles our magnetic coverage in the area. Important magnetic trends reminiscent of the Wona Trend (Figure 3) are observed within the newly covered areas. At our recently acquired permit site, Bombouela Nord, Trend 1 seems to represent the north extension of the Wona Trend, while at Mana East we identified a new trend which merits further investigation.

The Massala and Saoura permits located immediately north of the central group of permits covers a 15-kilometer long gold-bearing volcano-sedimentary unit, which demonstrates similarities to the Wona host rocks. Extensive old artisanal mining activity is evident at various locations within the Massala and Saoura areas. In addition, SEMAFO grab sampling completed along a 12-kilometer section of the more extensive corridor returned many high-grade values ranging up to 13.8 g/t Au. The new survey clearly shows the continuation of the Oula Trend on to the Massala and Saoura areas, while two other trends (Massala-Saoura Trend 1 and Massala-Saoura Trend 2) were also identified. Historical gold values associated with these trends highlight their potential to host gold deposits. The 2011 exploration program will focus on the priority trends identified herein through our systematic approach that has proven successful in 2010, particularly in the Fofina and Fobiri areas.

Although the magnetic survey only shows subtle trends associated with the Nyafé Deposit and the Fofina-Fobiri zones, ground IP surveying provides additional geophysical information that supports the structural and lithological environment within the Fofina-Fobiri area. The rocks in the Fofina-Fobiri area show zones of variable resistivity and chargeability that appear to suggest open folding of the different lithologies (Figure 4). The Fofina zone and associated V zones appear to be located near the hinge of one fold, while the Fobiri and Nyafé zones are related to their flanks. The Fofina zone is more precisely located within a distinct resistive zone within the broad chargeable zone. Other anomalies of this type have been identified near the fold hinges. The fold hinges as such remain untested by either drilling or auger sampling and are devoid of outcrops. These areas are favorable structural traps for hydrothermal fluids and hence gold mineralization.

The 302-km² airborne HELITEM electromagnetic ("EM") survey over part of the central Mana group of properties is expected to commence during Q1 2011.

In early 2011, we were granted the new Bombouela Nord permit, which is continuous and to the north of the current group of permits (Figure 3). The Bombouela Nord permit covers an additional 115 km^2 of favorable Hounde greenstone rocks.

Figure 3

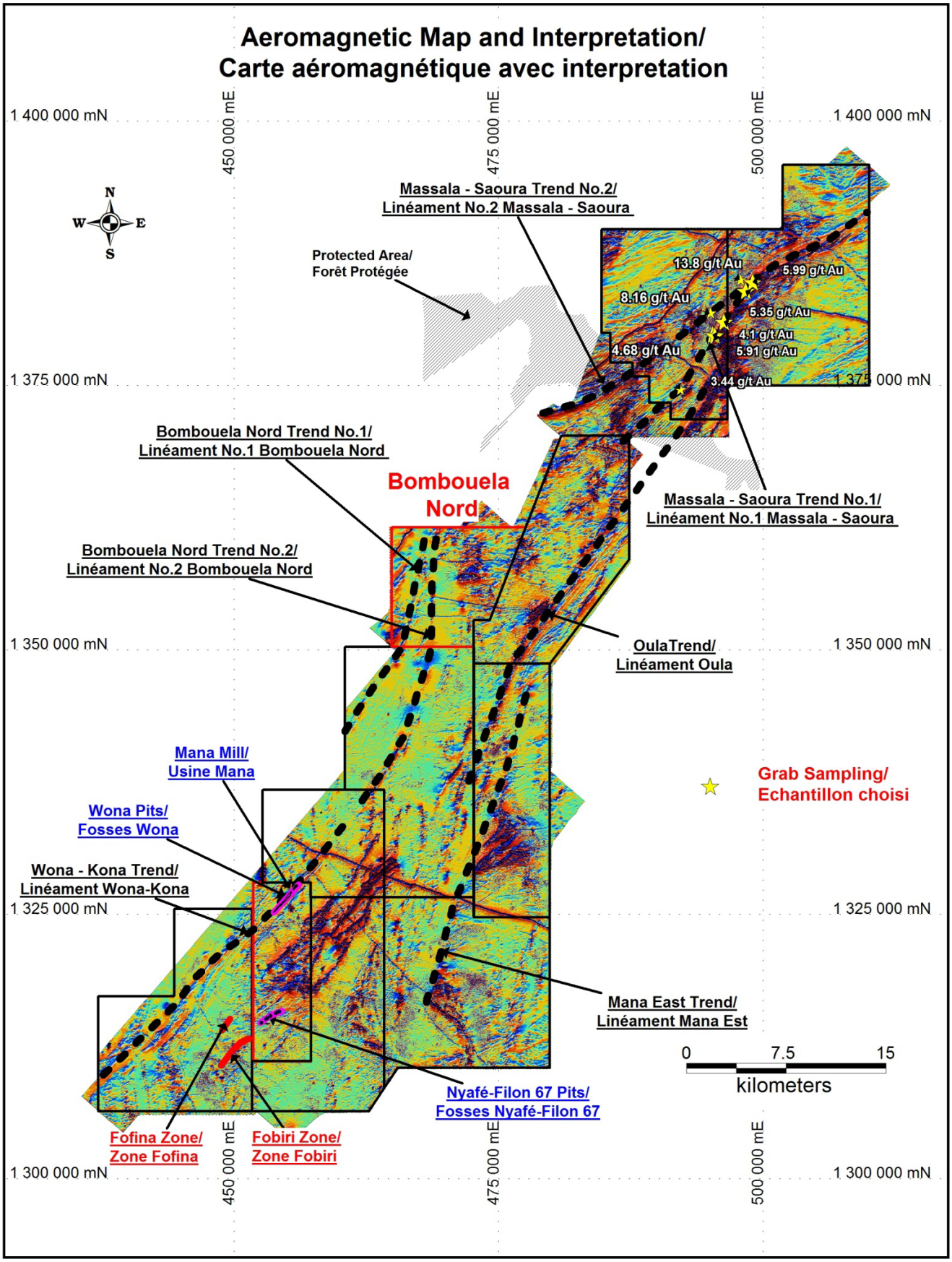
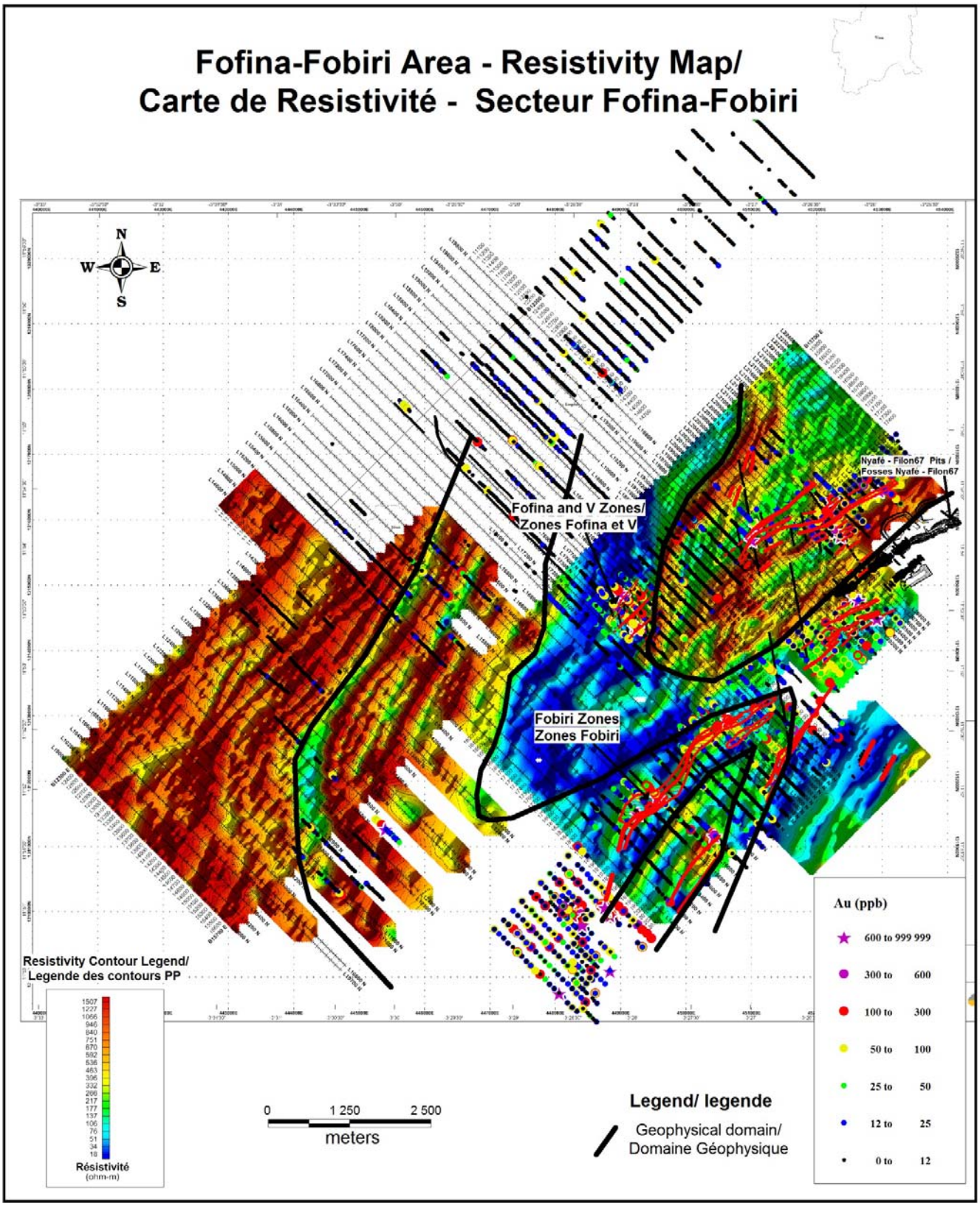

Aeromagnetic Map and Interpretation/
Carte aéromagnétique avec interpretation
1 400 000 mN
1 375 000 mN
1 350 000 mN
1 325 000 mN
1 300 000 mN
450 000 mE
475 000 mE
500 000 mE
N
W
E
S
Massala - Saoura Trend No.2/
Linéament No.2 Massala - Saoura
Protected Area/
Forêt Protégée
13.8 g/t Au
5.99 g/t Au
8.16 g/t Au
5.35 g/t Au
4.1 g/t Au
4.68 g/t Au
5.91 g/t Au
3.44 g/t Au
Bombouela Nord Trend No.1/
Linéament No.1 Bombouela Nord
Bombouela
Nord
Massala - Saoura Trend No.1/
Linéament No.1 Massala - Saoura
Bombouela Nord Trend No.2/
Linéament No.2 Bombouela Nord
OulaTrend/
Linéament Oula
Mana Mill/
Usine Mana
Grab Sampling/
Echantillon choisi
Wona Pits/
Fosses Wona
Wona - Kona Trend/
Linéament Wona-Kona
Mana East Trend/
Linéament Mana Est
0
7.5
15
kilometers
Nyafé-Filon 67 Pits/
Fosses Nyafé-Filon 67
Fofina Zone/
Zone Fofina
Fobiri Zone/
Zone Fobiri

Figure 4


Fofina-Fobiri Area - Resistivity Map/
Carte de Resistivité - Secteur Fofina-Fobiri
N
W
E
S
Fofina and V Zones/
Zones Fofina et V
Nyafé - Filon67 Pits /
Fosses Nyafé - Filon67
Fobiri Zones
Zones Fobiri
Resistivity Contour Legend/
Legende des contours PP
1507
1227
1066
946
840
751
670
582
536
463
396
332
266
217
177
137
106
76
51
34
18
Résistivité
(ohm-m)
0
1 250
2 500
meters
Legend/ legende
Geophysical domain/
Domaine Géophysique
Au (ppb)
600 to 999 999
300 to 600
100 to 300
50 to 100
25 to 50
12 to 25
0 to 12

Exploration Programs (continued)

Burkina Faso (continued)

Preliminary systematic follow-up drilling was carried out on the Fobiri zones, located 14 kilometers southwest of the Mana Mill in Burkina Faso. A series of sections using a 200-meter spacing grid were completed over the original discovery (reference: SEMAFO's press release dated August 3, 2010). RC and core drilling has returned continuous mineralization from three separate zones, 150 meters apart and over a strike length of more than 1,400 meters. Values obtained include 2.66 g/t Au over 22 meters (hole MRC10-383 – zone FOB3), 2.75 g/t Au over 12 meters (hole WDC-259 – zone FOB3), 1.84 g/t Au over 36 meters (MRC10-312 – zone FOB2), 2.78 g/t Au over 8 meters (MRC10-382 – zone FOB1), and 2.44 g/t Au over 10 meters (WDC259 – zone FOB2). In addition, the three zones remain open and unexplored towards the southwest where previous auger drilling produced anomalous results.

Follow-up drilling over the Fobiri discovery commenced in August and was completed in December 2010. Although assay results remain pending on one northeast section (drill holes WDC261 and WDC263), the results thus far clearly show a series of three parallel zones trending northeast and dipping steeply towards the northwest. Highlights from the three zones (FOB1, FOB2, and FOB3) are presented in the table below.

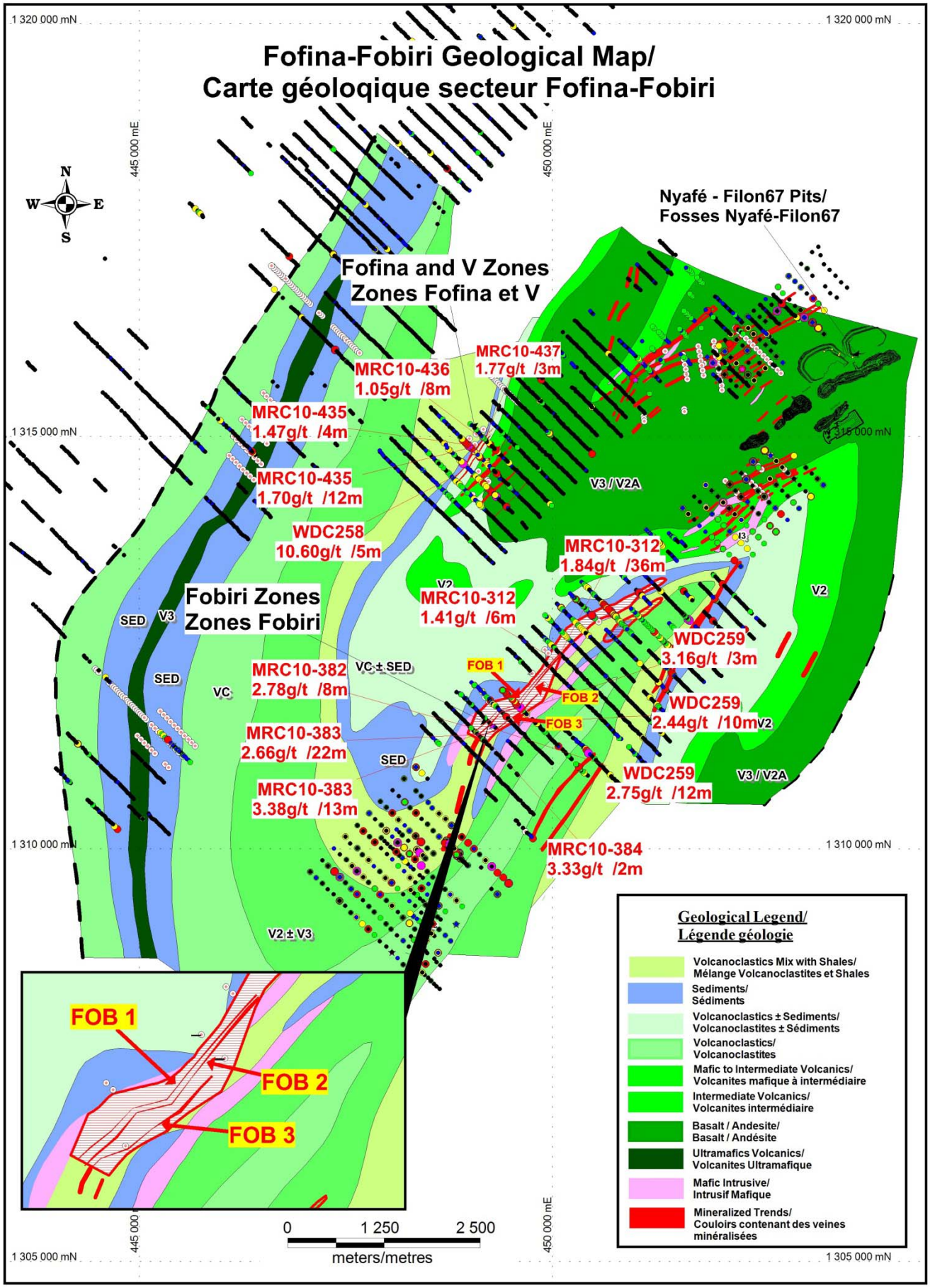
Fobiri Area Reverse-Circulation Core Drilling Highlights

DDH No.*	Zone	From	To	Au / Length**
WDC259	FOB1	118.0	121.0	3.16 g/t / 3.0 m
WDC259	FOB2	182.0	192.0	2.44 g/t / 10.0 m
	Including	182.0	188.0	3.39 g/t / 6.0 m
WDC259	FOB3	331.0	343.0	2.75 g/t / 12.0 m
	Including	336.0	339.0	4.90 g/t / 3.0 m
MRC10-312	FOB1	66.0	72.0	1.41 g/t / 6.0 m
MRC10-312	FOB2	81.0	117.0	1.84 g/t / 36.0 m
	Including	84.0	92.0	3.02 g/t / 8.0 m
	Including	104.0	114.0	2.50 g/t / 10.0 m
MRC10-382	FOB1	97.0	105.0	2.78 g/t / 8.0 m
	Including	97.0	101.0	3.96 g/t / 4.0 m
MRC10-383	FOB2	94.0	107.0	3.38 g/t / 13.0 m
MRC10-383	FOB3	124.0	146.0	2.66 g/t / 22.0 m
	Including	124.0	133.0	4.48 g/t / 9.0 m
MRC10-384	FOB3	61.0	63.0	3.33 g/t / 2.0 m

* WDC-259 is a core hole while all MRC are RC drill holes.
** All lengths are measured along the hole axis; additional information is required to determine true widths.

The short distance between the zones, their significant strike length, consistent good widths, and good continuity are all factors which will enhance the economic potential in this area. The Fofina and Fobiri areas along with the area surrounding the Nyafé open pit represented a major target in our 2010 exploration program and our litho-structural understanding has developed significantly since (Figure 5). Based on recent drilling and a ground IP survey (reference: SEMAFO's press release dated January 18, 2011), the Fobiri and Fofina zones appear to be located along the limbs of a fold at contact between intermediate to felsic tuffs with fine sediments, locally graphitic. These units are underlain and overlain by massive basalts found at the core of the folds. The Fobiri mineralized corridor seems to continue to the northeast towards the Nyafé Deposit, suggesting that the mineralization is post-folding and controlled by deformation and hydrothermal alteration which has followed rheological weaknesses along the folded stratigraphy. Based on this interpretation, the area near the fold hinge towards the southwest of both the Fobiri and Fofina zones represent excellent exploration targets for the 2011 program.

Figure 5


Fofina-Fobiri Geological Map/
Carte géoloqique secteur Fofina-Fobiri
1 320 000 mN
1 315 000 mN
1 310 000 mN
1 305 000 mN
445 000 mE
450 000 mE
N
S
W
E
Nyafé - Filon67 Pits/
Fosses Nyafé-Filon67
Fofina and V Zones
Zones Fofina et V
Fobiri Zones
Zones Fobiri
MRC10-437
1.77g/t /3m
MRC10-436
1.05g/t /8m
MRC10-435
1.47g/t /4m
MRC10-435
1.70g/t /12m
WDC258
10.60g/t /5m
MRC10-312
1.84g/t /36m
MRC10-312
1.41g/t /6m
WDC259
3.16g/t /3m
WDC259
2.44g/t /10m
WDC259
2.75g/t /12m
MRC10-382
2.78g/t /8m
MRC10-383
2.66g/t /22m
MRC10-383
3.38g/t /13m
MRC10-384
3.33g/t /2m
FOB 1
FOB 2
FOB 3
V3 / V2A
V2
V3
SED
VC
VC ± SED
V2 ± V3
0
1 250
2 500
meters/metres
Geological Legend/
Légende géologie
Volcanoclastics Mix with Shales/
Mélange Volcanoclastites et Shales
Sediments/
Sédiments
Volcanoclastics ± Sediments/
Volcanoclastites ± Sédiments
Volcanoclastics/
Volcanoclastites
Mafic to Intermediate Volcanics/
Volcanites mafique à intermédiaire
Intermediate Volcanics/
Volcanites intermédiaire
Basalt / Andesite/
Basalt / Andésite
Ultramafics Volcanics/
Volcanites Ultramafique
Mafic Intrusive/
Intrusif Mafique
Mineralized Trends/
Couloirs contenant des veines
minéralisées

Exploration Programs (continued)

Burkina Faso (continued)

In March 2011, we announced the discovery of the new Yaho gold zone, located 4.5 kilometers southwest of the Fofina zone and 20 kilometers southwest of the Mana mill. Three RC drilling sections were carried out across this wide alteration zone with each section returning wide, significant grade intervals such as 2.27 g/t Au across 54 meters (hole MRC10-540 – section 15450N), 2.00 g/t Au across 20 meters (hole MRC10-542 – section 15450N), 1.37 g/t Au across 16 meters (hole MRC10-514 – section 15650N), 4.59 g/t Au (10.73 g/t Au uncut) across 10 meters (hole MRC10-526 – section 15850N), and 1.88 g/t Au across 88 meters (hole MRC10-529 – section 15850N).

Yaho Area Reverse-Circulation Drilling Highlights

DDH No.	Section	From	To	Au / Length*
MRC10-499	15450 N	139	156	1.58 g/t / 17 m **
MRC10-540	15450 N	107	148	1.46 g/t / 41 m **
MRC10-541	15450 N	88	142	2.27 g/t / 54 m
MRC10-542	15450 N	11	23	1.28 g/t / 12 m
		48	53	1.35 g/t / 5 m
		66	73	1.91 g/t / 7 m
		82	102	2.00 g/t / 20 m
MRC10-543	15450 N	132	139	1.83 g/t / 7 m
MRC10-544	15450 N	6	16	1.05 g/t / 10 m
MRC10-544	15450 N	87	96	1.68 g/t / 9 m
MRC10-507	15650 N	120	124	2.29 g/t / 4 m
MRC10-509	15650 N	4	10	1.17 g/t / 6 m
		135	145	1.16 g/t / 10 m
MRC10-510	15650 N	91	98	2.07 g/t / 7 m
		145	155	1.79 g/t / 10 m
MRC10-512	15650 N	80	87	1.67 g/t / 7 m
MRC10-513	15650 N	65	72	2.89 g/t / 7 m
MRC10-514	15650 N	5	21	1.37 g/t / 16 m
	Including	17	21	2.73 g/t / 4 m
MRC10-526	15850 N	93	103	4.59 g/t / 10 m
				(10.73 g/t uncut)***
		112	125	1.23 g/t / 13 m
MRC10-527	15850 N	90	97	2.43 g/t / 7 m
		114	123	2.20 g/t / 9 m
MRC10-528	15850 N	95	109	2.60 g/t / 14 m
MRC10-529	15850 N	5	93	1.10 g/t / 88 m
	Including	18	43	1.34 g/t / 25 m
	Including	55	79	1.59 g/t / 24 m

* All lengths are measured along the hole axis; additional information is required to determine true widths.
** Hole ended in mineralization.
*** All values above 15 g/t Au are cut at 15 g/t Au as per Wona type deposits.

The three RC sections were completed in late 2010, as a follow-up to auger drilling anomalies. Results from these sections were received in January and February 2011 and therefore represent an addition to our December 31, 2010 reserves and resources estimate. The sections are 200 meters apart and each one has returned significant grades over large widths. The best results so far, come from section 15450N, the southern-most section drilled to date. Moreover, holes MRC10-499 and MRC10-540 ended in mineralization, therefore leading us to believe that the reported mineralization will most likely be wider. Figure 6 presents a plan view of the discovery and its relationship with current geological data, while Figure 7 illustrates a cross-section looking north.

Exploration Programs (continued)

Burkina Faso (continued)

The Yaho zone appears to follows a lithological contact between mafic volcanic flows and a sequence of interbedded graphitic sediments and intermediate tuffs. A wide zone of alteration, measuring up to 80 meters thick and dipping moderately to the west, hosts the mineralization (Figure 7). It consists of sericite-silica alteration coupled with pyrite-arsenopyrite mineralization, similar to what is observed at Wona. In fact, based on current geological and geophysical data, the Yaho host stratigraphy appears to continue north before turning northeast towards the Wona host stratigraphy (Figure 6).

The Yaho discovery shows outstanding widths, surpassing those originally obtained at Wona. It is also consistent with our current interpretation. Located near a regional fold hinge, the Yaho zone demonstrates that the fold hinges could represent an ideal structural environment for gold deposition, as observed at some world-class deposits elsewhere in West Africa and around the world.

A follow-up program on the Yaho zone is currently in progress in order to trace its extensions both north and south of the discovery area. We will subsequently perform a delineation program in order to establish its economic potential.

Figure 6

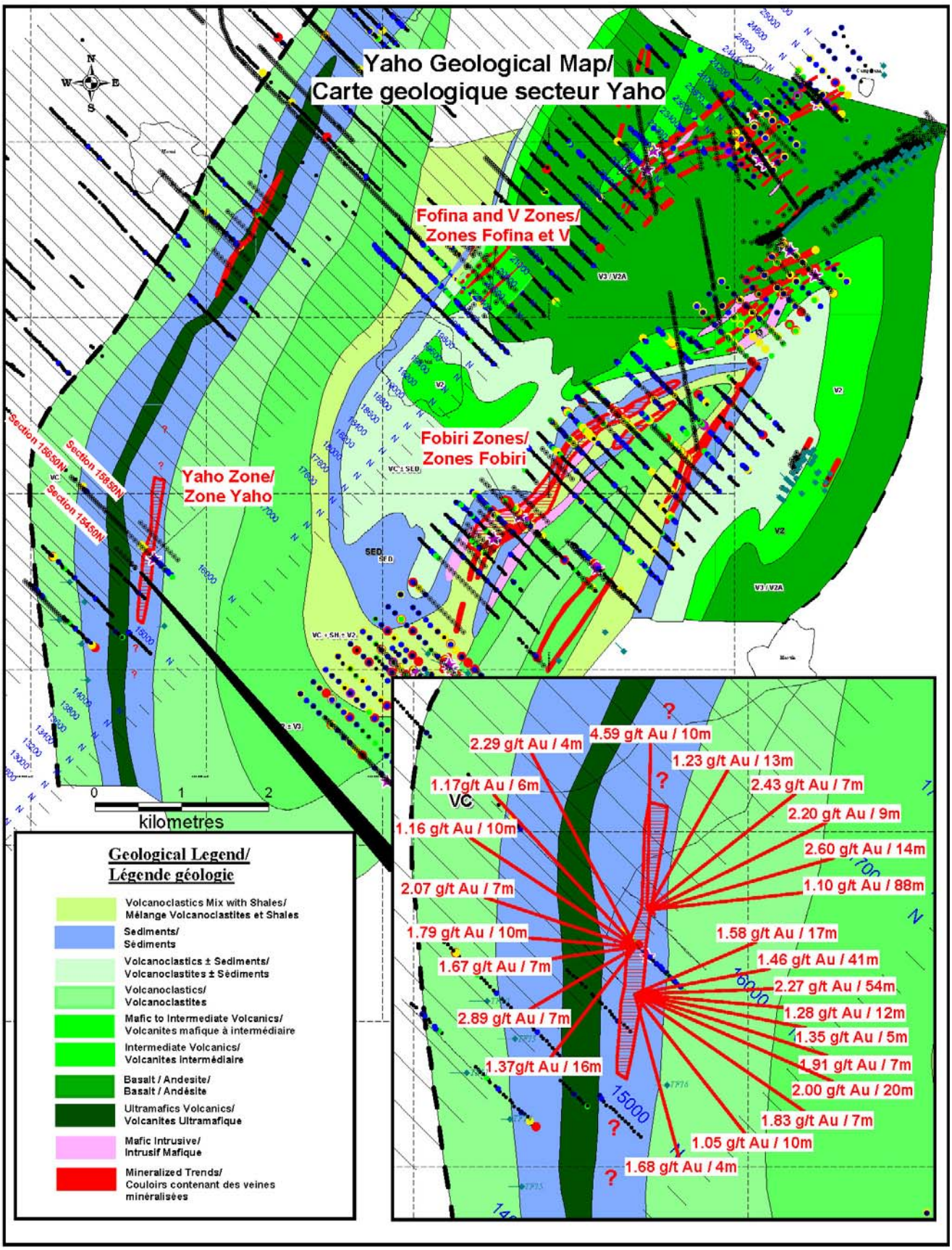
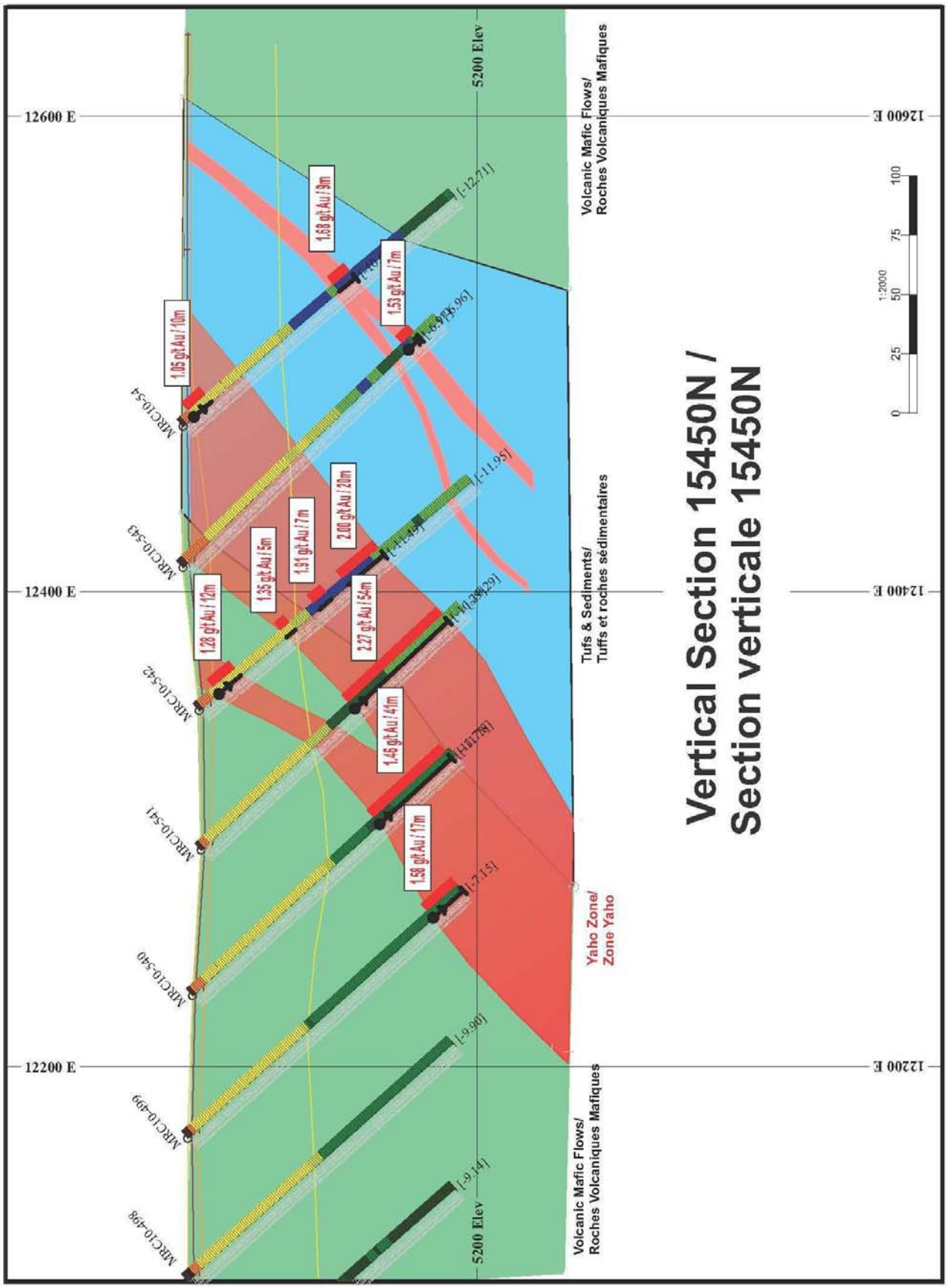

Yaho Geological Map/
Carte geologique secteur Yaho
Fofina and V Zones/
Zones Fofina et V
Fobiri Zones/
Zones Fobiri
Yaho Zone/
Zone Yaho
Section 15650N
Section 15550N
Section 15450N
kilometres
Geological Legend/
Légende géologie
Volcanoclastics Mix with Shales/
Mélange Volcanoclastites et Shales
Sediments/
Sédiments
Volcanoclastics ± Sediments/
Volcanoclastites ± Sédiments
Volcanoclastics/
Volcanoclastites
Mafic to Intermediate Volcanics/
Volcanites mafique à intermédiaire
Intermediate Volcanics/
Volcanites Intermédiaire
Basalt / Andesite/
Basalt / Andésite
Ultramafics Volcanics/
Volcanites Ultramafique
Mafic Intrusive/
Intrusif Mafique
Mineralized Trends/
Couloirs contenant des veines minéralisées
2.29 g/t Au / 4m
4.59 g/t Au / 10m
1.23 g/t Au / 13m
1.17g/t Au / 6m
2.43 g/t Au / 7m
2.20 g/t Au / 9m
1.16 g/t Au / 10m
2.60 g/t Au / 14m
1.10 g/t Au / 88m
2.07 g/t Au / 7m
1.79 g/t Au / 10m
1.58 g/t Au / 17m
1.46 g/t Au / 41m
1.67 g/t Au / 7m
2.27 g/t Au / 54m
1.28 g/t Au / 12m
2.89 g/t Au / 7m
1.35 g/t Au / 5m
1.91 g/t Au / 7m
1.37g/t Au / 16m
2.00 g/t Au / 20m
1.83 g/t Au / 7m
1.05 g/t Au / 10m
1.68 g/t Au / 4m

Figure 7


Vertical Section 15450N /
Section verticale 15450N
12600 E
12400 E
12200 E
5200 Elev
1:2000
0
25
50
75
100
Volcanic Mafic Flows/
Roches Volcaniques Mafiques
Tufs & Sediments/
Tuffs et roches sédimentaires
Yaho Zone/
Zone Yaho
MRC10-54
MRC10-543
MRC10-542
MRC10-541
MRC10-540
MRC10-499
MRC10-498
1.05 g/t Au / 10m
1.28 g/t Au / 12m
1.35 g/t Au / 5m
1.91 g/t Au / 7m
2.00 g/t Au / 20m
2.27 g/t Au / 54m
1.46 g/t Au / 41m
1.58 g/t Au / 17m
1.68 g/t Au / 9m
1.53 g/t Au / 7m

Exploration Programs (continued)

Burkina Faso (continued)

2010 Drilling Statistics - Mana Property

Zone	Type of Work	Drill Type	No holes	Meters
Wona Main	Delineation	RC	17	1,906
Wona (for metallurgical testing)		Core	4	1,390
Wona Deep	Exploration	Core	12	9,191
Wona Southwest	Delineation	Core	68	25,688
Wona Southwest	Delineation	RC	42	8,680
Kona	Delineation	RC	68	9,755
Kona	Delineation	Core	3	1,278
Kona	Delineation	AC	28	890
Fofina	Exploration	Core	14	4,453
Fofina	Exploration	RC	71	10,291
Fobiri	Exploration	Core	4	1,330
Fobiri	Exploration	RC	78	11,129
General Exploration	Exploration	Core	5	1,550
General Exploration	Exploration	RC	280	41,170
General Exploration	Exploration	AC	1,048	43,623
General Exploration	Exploration	Auger	11,342	78,795
	Total Auger		**11,342**	**78,795**
	Total AC		**1,076**	**44,513**
	Total RC		**556**	**82,931**
	Total Core		**110**	**44,880**

Exploration Programs (continued)

Niger

Phase II of the 2010 program at Samira Hill Mine commenced in July and was designed to test and define new proximal gold zones that can quickly become part of the near-term mine plan. It has returned results including 27.77 g/t Au over four meters.

Libdorado NW

The Libdorado NW zone is characterized by narrow but high-grade quartz zones found in altered sediments and located immediately north of the Libiri Pit. Results returned high grade values. The Libdorado NW zone is scheduled for definition drilling in 2011.

Phase II Libdorado NW Highlights

Hole No.	From	To	Au / Length
10RC080	40	44	4.09 g/t / 4 m
10RC082	63	67	27.77 g/t / 4 m
10RC083	29	32	10.40 g/t / 3 m
10RC085	99	104	13.78 g/t / 5 m
10RC087	39	42	2.75 g/t / 3 m
10RC089	53	58	3.69 g/t / 5 m
10RC090*	31	35	2.60 g/t / 4 m
10RC100	54	58	3.74 g/t / 4 m
10RC101	17	21	10.43 g/t / 4 m

* Parallel zone

Figure 8 illustrates a longitudinal section of the main zone found at Libdorado NW, where late doleritic dykes cross the zone. Results suggest a shallow east plunge of the mineralization, where it reaches the north wall of the Libiri Pit.

Libiri SE

The area to the south of the Libiri Pit (Figure 9) contains many gold zones which were previously under defined. Current surface mapping and modelling has helped to provide a better understanding of the geometry of the mineralization and an extensive drilling program was designed to test the models. Results are very encouraging.

Phase II Libiri SE Highlights

Hole No.	From	To	Au / Length
10RC142	73	78	2.04 g/t / 5 m
10RC144	22	25	3.75 g/t / 3 m
10RC144	37	45	1.01 g/t / 8 m
10RC146	50	71	2.17 g/t / 21 m
10RC147	123	129	1.93 g/t / 6 m
10RC148	2	8	2.83 g/t / 6 m
10RC148	25	38	1.13 g/t / 13 m
10RC149	55	61	1.20 g/t / 6 m
10RC149	64	74	2.31 g/t / 10 m
10RC150	3	7	2.04 g/t / 4 m
10RC150	45	94	1.36 g/t / 49 m
10RC152	10	15	1.97 g/t / 5 m
10RC153	1	49	1.03 g/t / 48 m
10RC153	98	109	1.03 g/t / 11 m
10RC157	15	29	1.06 g/t / 14 m
10RC158	39	45	2.88 g/t / 6 m

Exploration Programs (continued)

Niger (continued)

The second half of the program focused primarily on the Boulon Jounga area, located 10 kilometers northwest of the Samira processing plant. Boulon Jounga is host to the open pit of the same name and has accounted for a good portion of Samira Hill's 2010 production. The ore from Boulon Jounga is characteristically above average grade. In addition, recoveries are generally higher than average within the saprolitic parts of the deposit. The deposit itself is compact and locally shallow dipping. As described in SEMAFO's press release dated March 8, 2010, other Boulon Jounga type deposits have been identified to the east of the pit. Further drilling will be completed to test the extensions of these new zones along with other nearby areas where auger drilling has identified priority drill targets.

Figure 8

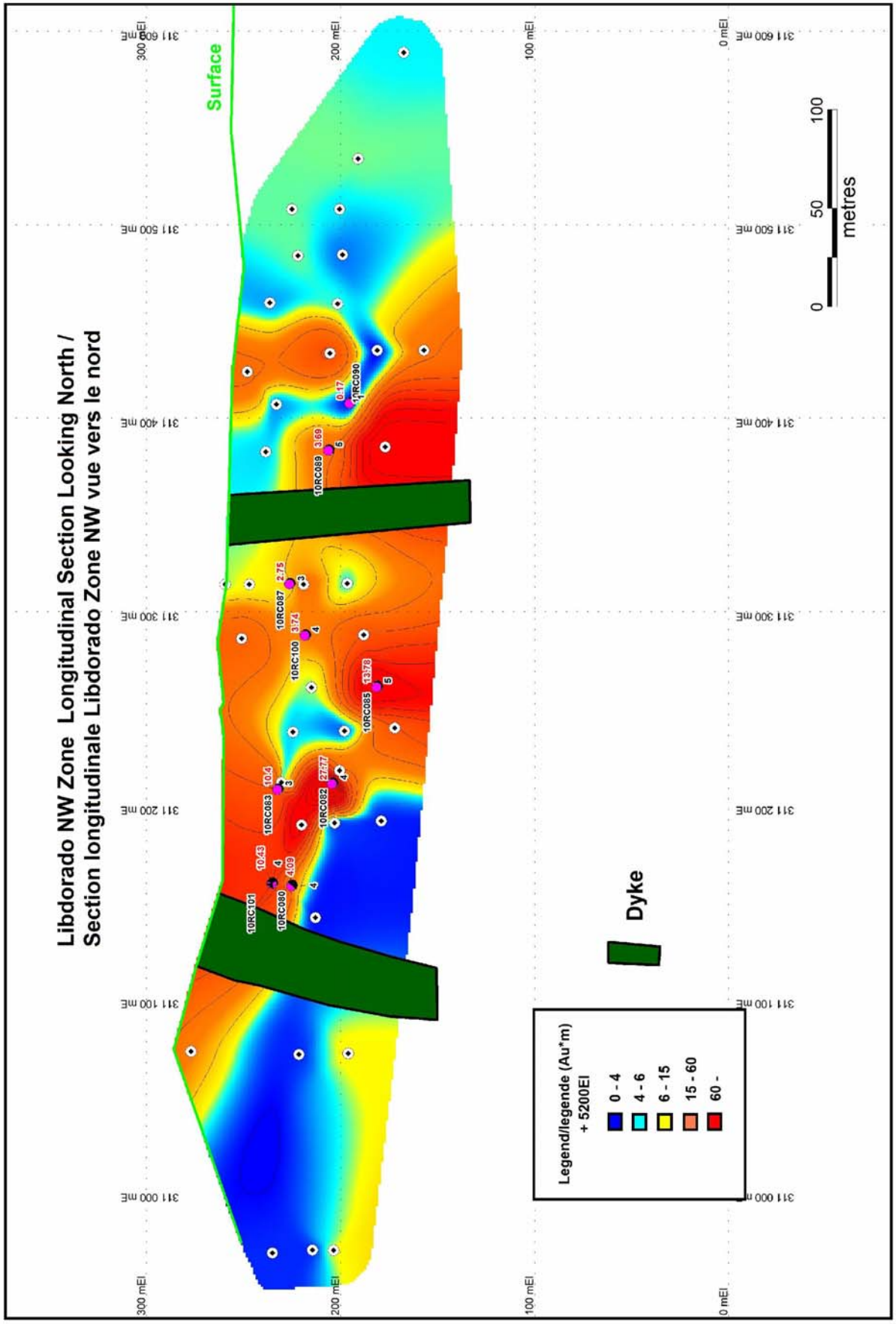
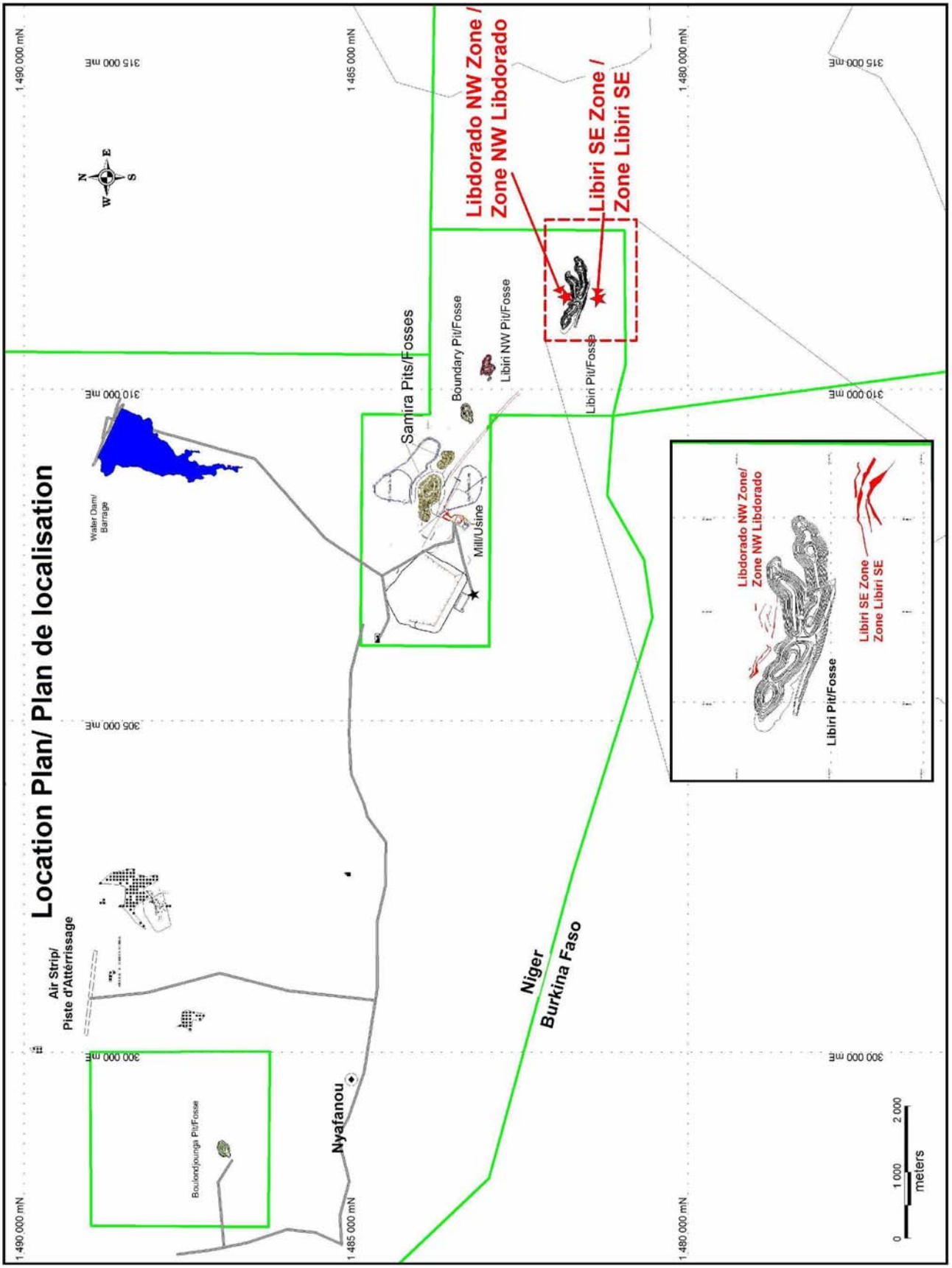

Libdorado NW Zone Longitudinal Section Looking North /
Section longitudinale Libdorado Zone NW vue vers le nord
Surface
Dyke
Legend/legende (Au*m)
+ 5200EI
0 - 4
4 - 6
6 - 15
15 - 60
60 -
0
50
100
metres
300 mEl
200 mEl
100 mEl
0 mEl
311 600 mE
311 500 mE
311 400 mE
311 300 mE
311 200 mE
311 100 mE
311 000 mE
10RC101
10RC080
10RC083
10RC082
10RC100
10RC087
10RC085
10RC089
10RC090
10.43
4.09
10.4
27.77
13.78
3.74
2.75
3.69
0.17

Figure 9


Location Plan/ Plan de localisation
Air Strip/
Piste d'Atterrissage
Water Dam/
Barrage
Boulondjounga Pit/Fosse
Nyafanou
Samira Pits/Fosses
Mill/Usine
Boundary Pit/Fosse
Libiri NW Pit/Fosse
Libiri Pit/Fosse
Libdorado NW Zone /
Zone NW Libdorado
Libiri SE Zone /
Zone Libiri SE
Niger
Burkina Faso
Libdorado NW Zone/
Zone NW Libdorado
Libiri SE Zone
Zone Libiri SE
Libiri Pit/Fosse
1 490 000 mN
1 485 000 mN
1 480 000 mN
315 000 mE
310 000 mE
305 000 mE
300 000 mE
0
1 000
2 000
meters

Exploration Programs (continued)

Niger (continued)

2010 Drilling Statistics - Samira Property

Zone	Type of Work	Drill Type	No holes	Meters
Libdorado	Certification	RC	70	6,699
Libiri SE	Exploration	RC	68	7,199
Libiri NO PG	PG	RC	60	3,791
Libiri NO	Certification	RC	15	2,010
Libiri NO	Exploration	RC	25	2,297
Sud Libiri	Exploration	RC	27	2,625
BJ Gisement	Exploration	RC	5	525
BJ Gisement Nord	Exploration	RC	29	2,656
BJ Gisement Nord	Certification	RC	52	4,540
BJ Est Gisement	Exploration	RC	47	4,474
Boundary Sud PG	PG	RC	32	2,534
BJ village - NE village	Exploration	RC	41	4,191
Total RC			**471**	**43,541**
Zone H	Exploration	Auger	32	219
Boundary	Exploration	Auger	33	272
Libiri NO Stérilisation	Exploration	Auger	18	186
Long Tom/Long Tom Nord	Exploration	Auger	202	1,330
Long Dave	Exploration	Auger	1,033	8,825
Nord, Est et NE BJ (Prog 11?)	Exploration	Auger	640	10,457
Nord BJ Gisement 12	Exploration	Auger	263	3,661
Total Auger			**2,221**	**24,950**

Reserves and Resources

As at December 31, 2010, SEMAFO's proven and probable mineral reserves increased by 90% to 36,147,800 tonnes at an average grade of 2.43 g/t Au for 2,817,300 ounces compared to 1,485,900 ounces in December 2009. SEMAFO's total measured and indicated resources, including reserves, attained 6 million ounces, compared to 5 million ounces the year prior. Inferred resources increased by 108%, to 55,286,300 tonnes at 1.94 g/t Au for 3,459,400 ounces compared to 1,663,800 last year.

Mana, Burkina Faso

Mana's proven and probable reserves increased by 180%. taking into account the 205,875 ounces mined during the year, our reserves totaled 25,468,000 tonnes at an average grade of 2.64 g/t Au for 2,159,700 ounces as at December 31, 2010, compared to 769,700 ounces in December 2009. As at December 31, 2010, Mana's underground project contained mineral reserves totaling 13,198,000 tonnes at 2.74 g/t Au for 1,163,700 ounces. Measured and indicated resources ("M&I") totaled 23,662,700 tonnes at 1.5 g/t Au, for 1,126,000 ounces, compared to 1,581,900 in December 2009. Mana's inferred resources rose 195% year over year to 36,466,300 tonnes at 2.28 g/t Au for 2,678,000 ounces from 909,100 ounces, due in large part to the new Fofina-Fobiri zones. The Wona-Kona zone hosts 17,872,300 tonnes at 2.02 g/t Au, for 1,158,800 ounces in the inferred resources category and remains open.

The systematic exploration program at Mana that began with a geophysical survey followed by auger drilling geochemical programs enabled the identification of new targets. The Fofina-Fobiri area was selected for more extensive work such as AC, RC and core drilling, which led to the discovery of new zones: Fofina, Fofina V1 to V7, and Fobiri FOB1, FOB2 and FOB3. Thus far, the area's mineralization aggregates 17,932,200 tonnes at 2.5 g/t Au, for 1,443,300 ounces in the inferred category. Geological work over the area has enhanced our understanding of the metallogenic context that not only opens two extensions of the zones, but other potential lodes such as fold hinges as well.

Exploration Programs (continued)

Reserves and Resources (continued)

At Mana, the 2010 exploration program included 11,342 holes representing 78,795 meters of auger drilling, 1,076 holes of AC drilling for 44,513 meters, 556 holes of RC drilling for 82,931 meters and 110 holes of core drilling for 44,880 meters for follow-up exploration to ore body delineation.

The success of our 2010 exploration program is impressive and, more importantly, our new geological understanding of the property allows us to see Mana's enormous potential, which is even greater than previously anticipated.

The 2011 Mana exploration program budget has been established at $30 million (refer to SEMAFO's press release of January 27, 2011) with activities to include: an airborne geophysical survey, 60,000 meters of auger drilling, 50,000 meters of AC drilling, 130,000 meters of RC drilling and 69,000 meters of core drilling. Approximately $18 million and $12 million will be allocated to exploration and in-fill drilling respectively, with a portion of the activities to focus on the very promising Massala area where grab samples returned many high-grade values ranging up to 13.8 g/t Au.

Samira Hill

Samira Hill total reserves stand at 9,472,700 tonnes at 1.67 g/t Au, for 507,600 ounces, compared to 529,500 ounces in December 2009, representing a slight reduction of 4% or 21,900 ounces less than the 69,500 ounces of reserves mined in 2010. M&I resources increased by 10% to 29,024,400 tonnes at 1.51 g/t Au for 1,405,200 ounces, compared to 1,276,200 in 2009, mainly due to the new zones in the Boulon Jounga area.

The 2010 exploration program at Samira Hill consisted mainly of 379 holes for 37,216 meters of RC drilling in the Boulon Jounga area as well around Libiri in Libdorado NW, Libiri NW and Libiri SE.

The 2011 exploration budget for Samira Hill has been established at $5 million with activities to include 16,850 meters of auger drilling, 70,865 meters of combined AC and RC drilling.

Kiniero

As a result of an absence of exploration at Kiniero in 2010, reserves and resources broadly reflect the reduction in ounces mined. As at December 31, 2010, mineral reserves and resources totaled 11,117.400 tonnes at an average grade of 2.21 g/t Au for 790,200 ounces, compared to 829,800 ounces in December 2009.

Kiniero's 2011 exploration budget has been established at $4 million and is scheduled to include 27,200 meters of RC and 4,000 meters of core drilling.

Reserves and resources were estimated using a gold price of $1,100 per ounce.

The mineral reserves and resources were estimated as at December 31, 2010 in accordance with the definitions adopted by the Canadian Institute of Mining Metallurgy and Petroleum and incorporate into National Instrument 43-101 – Standards of Disclosure for Mineral Projects (NI 43-101). Mineral reserves and resources estimates for the Mana Mine were carried out by Met-Chem Canada Inc. (reserves) and SGS Geostat Ltd (resources), under the direction of Michel Crevier P.Geo MScA, Geology Manager and SEMAFO's Qualified Person.

2. Consolidated Results and Mining Operations

	2010	2009	Variation
Operating Highlights			
Gold ounces produced	**261,100**	242,400	8%
Gold ounces sold	**260,800**	243,800	7%
(In thousands of dollars, except amounts per ounce and per tonne)			
Revenues – Gold sales	**323,275**	240,788	34%
Mining operating costs	**122,144**	114,795	6%
Government royalties	**12,712**	9,470	34%
Operating income	**128,873**	60,905	112%
Income tax expense	**20,204**	10,875	86%
Non-controlling interest	**1,752**	–	–
Net income	**103,246**	43,505	137%
Adjusted net income [1]	**103,246**	39,968	158%
Cash flow from operating activities [2]	**147,451**	92,147	60%
Basic net income per share	**0.39**	0.18	117%
Diluted net income per share	**0.38**	0.18	111%
Operating cash flow per share [3]	**0.56**	0.38	47%
Average realized price (per ounce)	**1,240**	988	26%
Cash operating cost (per ounce produced) [4]	**466**	463	1%
Cash operating cost (per tonne processed) [4]	**33**	33	-
Total cash cost (per ounce sold) [5]	**517**	510	1%

1 Adjusted net income is a non-GAAP measure. For 2009, the adjusted net income represents the net income excluding a gain on settlement of advances payable totaling $3,537,000.

2 Cash flow from operating activities excludes changes in non-cash working capital items and settlement of liabilities related to asset retirement obligations.

3 Operating cash flow per share is a non-GAAP measure. See the "Non-GAAP Measures'' section of this MD&A.

4 Cash operating cost is a non-GAAP measure and is calculated using ounces produced and tonnes processed. See the "Non-GAAP Measures'' section of this MD&A.

5 Total cash cost is a non-GAAP measure and represents the mining operating costs and government royalties per ounce sold.

- For the year ended December 31, 2010, our gold sales increased by 34% to $323,275,000 compared to $240,788,000 for the corresponding period in 2009. The improvement is a direct result of our higher average realized price of gold, which remained superior to the average London Gold Fix, as well as an increase in ounces sold resulting from higher production at the Mana Mine.

	2010					2009
(In dollars)	**Q1**	**Q2**	**Q3**	**Q4**	**YTD**	**YTD**
Average London Gold Fix	1,109	1,197	1,227	1,367	**1,225**	972
Average realized gold price	1,111	1,210	1,241	1,391	**1,240**	988

- Our operating income increased by 112% over 2009. This increase is a direct result of higher gold sales, as explained above, combined with our costs containment efforts, resulting in stable consolidated cash operating cost per ounce produced and per tonne processed.
- The income tax expense increase of $9,329,000 is mainly due to the increase in taxable income for our subsidiary located in Burkina Faso.

2. Consolidated Results and Mining Operations (continued)

- A non-controlling interest charge of $1,752,000 was recorded in the fourth quarter of 2010. This amount pertains to the ownership of SEMAFO Burkina Faso S.A., our subsidiary in Burkina Faso, 10% of which belongs to the Government of Burkina Faso. Their ownership in the subsidiary entitles the Government of Burkina Faso to 10% of SEMAFO Burkina Faso S.A.'s net income once the subsidiary's retained earnings attained the initial capital investment, which occurred in the fourth quarter. The $1,752,000 will be payable only after SEMAFO has recovered advances disbursed to the subsidiary totaling $74,357,000 as at December 31, 2010.
- Our net income improved by 137%, an increase of $59,741,000 over 2009 mainly due to an increase in operating income, while our cach flows from operating activities reached $147,451,000 as a result of higher operating income.

Operating Income by Segment

(In thousands of dollars)	2010	2009	Variation
Mana Mine, Burkina Faso	**122,592**	62,738	95%
Samira Hill Mine, Niger	**11,646**	5,381	116%
Kiniero Mine, Guinea	**6,351**	2,267	180%
Corporate and others	**(11,716)**	(9,481)	24%
Total	**128,873**	60,905	112%

Mining Operations

Mana, Burkina Faso

	2010	2009	Variation
Operating Data			
Ore mined (tonnes)	**1,910,200**	1,533,300	25%
Ore processed (tonnes)	**1,947,800**	1,401,700	39%
Head grade (g/t)	**3.29**	3.50	(6%)
Recovery (%)	**88**	95	(7%)
Gold ounces produced	**179,700**	153,500	17%
Gold ounces sold	**180,300**	152,000	19%
Financial Data (in thousands of dollars)			
Revenues – Gold sales	**224,109**	150,304	49%
Mining operations expenses	**67,585**	55,947	21%
Government royalties	**7,273**	4,518	61%
Amortization	**24,831**	25,622	(3%)
Administration	**1,679**	1,366	23%
Accretion expense of asset retirement obligations for property, plant and equipment	**149**	113	32%
Segment operating income	**122,592**	62,738	95%
Statistics ($)			
Average selling price (per ounce)	**1,243**	989	26%
Cash operating cost (per ounce produced) [1]	**370**	364	2%
Cash operating cost (per tonne processed) [1]	**34**	39	(13%)
Total cash cost (per ounce sold) [2]	**415**	398	4%
Amortization (per ounce sold) [3]	**138**	169	(18%)

[1] Cash operating cost is a non-GAAP measure and is calculated using ounces produced and tonnes processed. See the "Non-GAAP Measures'' section of this MD&A.
[2] Total cash cost is a non-GAAP measure and represents the mining operating costs and government royalties per ounce sold.
[3] Amortization per ounce sold is a non-GAAP measure and represents the amortization expense per ounce sold.

- In 2010, a total of 1,910,200 tonnes of ore and 10,210,000 tonnes of waste material were extracted resulting in a stripping ratio of 5.3:1. In addition, 558,000 tonnes of waste material were extracted from the Wona pit during the pre-stripping phase. This compares to 1,533,300 tonnes of ore and 9,919,800 tonnes of waste material for the same period in 2009, which resulted in a stripping ratio of 6.5:1. The 25% increase in ore mined is the result of a lower strip ratio and the commissioning of additional mining equipment during the year. The new equipment was added to accommodate the plant expansion and increase in open pit reserves announced in June 2010. The decrease in strip ratio is mainly attributable to mining lower elevations with better strip at Wona and Nyafé compared to 2009.
- The 39% increase in ore processed is a direct result of higher throughput following the completion of Phase I and II of the plant expansion.
- The 6% decrease in head grade is a direct result of the incremental throughput of lower grade ore related to our higher processing capacity.
- The recovery rate decreased as a result of the processing of a higher ratio of transitional ore in 2010 as opposed to the higher oxide ratio of ore in 2009, combined with the reduced leach time following the completion of phase I of the plant expansion. This temporary situation, anticipated for 2010, was rectified in the fourth quarter with the successful completion of Phase III of the plant expansion, which increased leach time and plant recovery.
- The 17% increase in ounces produced is due to increased plant throughput.
- Our cash operating cost per tonne processed decreased to $34, compared to $39 in 2009. This improvement is mainly due to increased throughput, lower strip ratio and a lower fuel price.

Mining Operations (continued)

Mana, Burkina Faso (continued)

- During the first eleven months of 2010, at our Mana Mine in Burkina Faso, the Corporation was subject to a royalty rate of 3%, which was calculated using the retail market value of gold ounces sold at the time of shipment. In December 2010, the Government of Burkina Faso approved a new graduated royalty rate schedule based on the spot price of gold on the date of delivery. Under the new regime, gold spot prices lower or equal to $1,000 per ounce are subject to royalty fees of 3%, a 4% rate applies for spot prices between $1,000 and $1,300 per ounce, and a 5% royalty rate is levied on all shipments with a gold spot price greater than $1,300 per ounce. The new decree has been in effect since December 1, 2010. Government royalties of $7,273,000 were paid in 2010 compared to $4,518,000 in 2009 in Burkina Faso.
- The amortization per ounce decreased due to the increase in reserves in the second quarter of 2010.

Project Updates

Plant Expansion – Phase I: 6,000 tpd in Saprolite

- This phase of the plant expansion, aimed at increasing throughout to 6,000 tpd in saprolite ore was successfully completed during the first quarter of 2010.

Plant Expansion – Phase II: SAG Mill: 6,000 tpd in Bedrock

- The second phase of the plant expansion aimed at increasing plant capacity from 4,000 tpd to 6,000 tpd in hard rock was successfully commissioned in July 2010.

Plant Expansion – Phase III: Leach time

- The third phase consisted mainly of the addition of two CIL tanks which aimed to extend the leach time to accommodate increased throughput. This third phase of the plant expansion was successfully completed during the fourth quarter of 2010.

Wona Deep Development - Feasibility Progress

- The interpretation and new geological model including Wona SW Zone have been completed.
- Rock mechanics and mine dewatering studies have been completed.
- Trade off study on shaft vs. ramp was completed.
- Trade off study on paste vs. hydraulic vs. rockfill backfill was completed.
- Mine refrigeration and ventilation study was completed.
- Mine electrical needs with suppliers are completed.
- Mine design and planning are completed.
- Updates of OPEX and CAPEX costs with suppliers are completed.
- Contract Mining vs. Owner Miner study are in final stage.
- Feasibility study report is scheduled for completion in Q1 2011.

Mining Equipment

- Given our excellent exploration results, the increased mine life and reserves/resources and in order to fully accommodate our operations after successful completion of the plant expansion, a decision was made to relocate part of the newly acquired mining fleet originally destined for Samira Hill to Mana.
- Mana's new fleet will contribute largely to availability and productivity, thus generating more flexibility in the mine plan for 2011. Part of Mana's existing fleet was transferred to Samira Hill during the fourth quarter of 2010, and the rest of the fleet to be transferred to Samira Hill will follow in the first six months of 2011.

Mining Operations (continued)

Samira Hill, Niger

	2010	2009	Variation
Operating Data			
Ore mined (tonnes)	**913,800**	1,389,400	(34%)
Ore processed (tonnes)	**1,207,500**	1,505,900	(20%)
Head grade (g/t)	**1.79**	1.62	10%
Recovery (%)	**72**	74	(3%)
Gold ounces produced	**51,300**	56,900	(10%)
Gold ounces sold	**50,500**	59,100	(15%)
Financial Data (in thousands of dollars)			
Revenues – Gold sales	**62,154**	58,300	7%
Mining operations expenses	**35,676**	39,573	(10%)
Government royalties	**3,456**	3,243	7%
Amortization	**9,247**	8,222	12%
Administration	**1,921**	1,705	13%
Accretion expense of asset retirement obligations for property, plant and equipment	**208**	176	18%
Segment operating income	**11,646**	5,381	116%
Statistics ($)			
Average selling price (per ounce)	**1,231**	986	25%
Cash operating cost (per ounce produced) [1]	**708**	665	6%
Cash operating cost (per tonne processed) [1]	**30**	26	15%
Total cash cost (per ounce sold) [2]	**775**	724	7%
Amortization (per ounce sold) [3]	**183**	139	32%

[1] Cash operating cost is a non-GAAP measure and is calculated using ounces produced and tonnes processed. See the "Non-GAAP Measures'' section of this MD&A.
[2] Total cash cost is a non-GAAP measure and represents the mining operating costs and government royalties per ounce sold.
[3] Amortization per ounce sold is a non-GAAP measure and represents the amortization expense per ounce sold.

- During the year ended December 31, 2010, 913,800 tonnes of ore and 1,612,000 tonnes of waste material were extracted primarily from the Boundary and Boulon Jounga pits, resulting in a strip ratio of 2:1. In addition, 4,579,000 tonnes of waste material were extracted from the Samira Main pit, Boundary South and Libiri pits during the pre-stripping phase. For the corresponding period in 2009, 1,389,400 tonnes of ore and 5,230,300 tonnes of waste material were extracted from the Long Tom and Boulon Jounga pits for a stripping ratio of 4:1. In addition, 625,800 tonnes of waste material had been extracted from the Boulon Jounga, Long Tom and Boundary pits during the pre-stripping phase. The decrease in ore mined is due to the focus on pre-stripping work in the Samira Main pit, which as at December 31, 2010 was approximately 65% complete.
- Throughput decreased as a result of processing harder ore sourced from Boundary and Boulon Jounga pits as opposed to the processing of mainly saprolite ore sourced from the Long Tom and Boundary pits in 2009.
- The increase in head grade is due to the processing of ore sourced from the Boulon Jounga pit compared to the Long Tom and Boundary pits in 2009.
- The decrease in gold production is mainly the result of reduced throughput from the processing of harder ore. Considering the nature of current reserves, we are presently examining various options to increase throughput and are focusing exploration activities on oxide zones.

Mining Operations (continued)

Samira Hill, Niger (continued)

- Our cash operating cost per ounce produced increased to $708 due to a higher cash operating cost per tonne processed. This increase, from $26 to $30 per tonne processed during the year, is mainly due to higher energy costs resulting from lower availability from the National power grid combined with an increase in reagent consumption associated with the processing of a higher ratio of sulphides compared to 2009.
- The amortization per ounce increased following the amortization calculated using the declining balance method coupled with the reduction in ounces sold.
- For the next few quarters, until completion of Samira Hill Main pit stripping expected in the third quarter 2011, operating results are expected to be in line with those of the second half of 2010 (see page 51).

Mining Operations

Kiniero, Guinea

	2010	2009	Variation
Operating Data			
Ore mined (tonnes)	**510,900**	456,800	12%
Ore processed (tonnes)	**469,900**	492,200	(5%)
Head grade (g/t)	**1.99**	2.34	(15%)
Recovery (%)	**93**	89	4%
Gold ounces produced	**30,100**	32,000	(6%)
Gold ounces sold	**30,000**	32,700	(8%)
Financial Data (in thousands of dollars)			
Revenues – Gold sales	**37,012**	32,184	15%
Mining operations expenses	**18,883**	19,275	(2%)
Government royalties	**1,983**	1,709	16%
Amortization	**7,646**	6,872	11%
Administration	**2,036**	1,962	4%
Accretion expense of asset retirement obligations for property, plant and equipment	**113**	99	14%
Segment operating income	**6,351**	2,267	180%
Statistics ($)			
Average selling price (per ounce)	**1,234**	984	25%
Cash operating cost (per ounce produced) [1]	**624**	584	7%
Cash operating cost (per tonne processed) [1]	**37**	40	(8%)
Total cash cost (per ounce sold) [2]	**696**	642	8%
Amortization (per ounce sold) [3]	**255**	210	21%

[1] Cash operating cost is a non-GAAP measure and is calculated using ounces produced and tonnes processed. See the "Non-GAAP Measures'' section of this MD&A.
[2] Total cash cost is a non-GAAP measure and represents the mining operating costs and government royalties per ounce sold.
[3] Amortization per ounce sold is a non-GAAP measure and represents the amortization expense per ounce sold.

- During the year ended December 31, 2010, 510,900 tonnes of ore and 3,407,000 tonnes of waste material were extracted, for a strip ratio of 7:1. In addition, 676,000 tonnes of waste material were extracted from the West Balan and Banfara area pits during the pre-stripping phase. For the corresponding period in 2009, 456,800 tonnes of ore and 3,471,400 tonnes of waste material were extracted, for a strip ratio of 8:1.
- The 15% decrease in head grade is mainly due to the mixture of ore sourced from the bottom of the West Balan pit and lower grade material from stockpiles. The higher recovery rate is attributable to a higher percentage of oxide ore sourced from stockpiles.
- The slight decrease in gold ounces produced and the 7% increase in cash operating cost per ounce produced are direct results of the processing of lower grade ore.
- Although we continue to monitor the current geopolitical situation in Guinea, warranted investments will be made in order to maintain plant throughput.
- Administration costs include a bad debt provision expense totaling $1,290,000 for taxes receivable (VAT) ($1,392,000 in 2009).

Administration
Administration expenses totaled $17,145,000 in 2010 compared to $14,367,000 in 2009. The increase is consistent with our efforts to sustain growth, particularly human resources pertaining to technical support for exploration and operations activities as well as increased public and investor relations activities.

Charitable Donations
For year ended December 31, 2010, SEMAFO donated a total of $1,068,000 to *Fondation SEMAFO,* a non-profit organization established in 2008 ($722,000 in 2009). Our objective is to continue our corporate philanthropy program by providing support to *Fondation SEMAFO* in their projects with donations reaching up to two percent of SEMAFO's previous year net income. During the year, *Fondation SEMAFO* was active in our host countries with efforts including the implementation of sustainable development projects, the construction of schools and the distribution of cereals to famine-strickened villages.

Interest on Long-Term Debt
The interest on long-term debt totaled $2,728,000 in 2010 compared to $4,947,000 for 2009. The decrease results from the long-term debt repayments made during the last twelve months. Our $20,000,000 bank loan was fully repaid during the third quarter. The remaining portion of our term facility of $45,000,000 will be fully repaid in 2011.

Stock-Based Compensation
The higher stock-based compensation expense is due to the higher cost per option granted due to a rise in the value of our share.

Change in fair value of derivative financial instruments
Pursuant to the increase in gold prices in 2010, a loss of $145,000 on derivative financial instruments (gold sales contracts, gold purchase contracts and put options) was recorded (reducing the fair value of our put options to nil), compared to a loss of $2,383,000 for 2009.

Since July 1, 2009, the change to the fair value of derivative financial instruments relates solely to the put options as we closed out our hedging program (gold sales and gold purchase contracts) in June 2009. Accordingly, we have since benefited from upward trend in the market price of gold.

Gain on Settlement of Advances Payable
In June 2009, the Corporation acquired from Etruscan Resources Inc. their minority interest in the subsidiary operating the Samira Hill mine located in Niger. The Corporation now holds an 80% interest in the subsidiary with the balance held by the government of Niger. Etruscan's 40% participation in the operating subsidiary, comprised of preferred shares, loans and common shares, was purchased for $3,000,000 along with a 1.5% net smelter royalty. The royalty comes into effect after which time the mine has produced 750,000 ounces, calculated as from July 1, 2009. The Corporation has been granted a right of first refusal should Etruscan decide to sell this royalty. This transaction led to a gain on settlement of advances payable of $3,537,000.

Foreign exchange gain / loss
In 2010, the appreciation of the US dollar in the face of the Euro as well as in comparison to the local currencies in our host countries generated a gain of $3,923,000 to the income statement.

Income Tax Expenses
Our income tax expense totaled $20,204,000 during 2010 compared to $10,875,000 in 2009. The increase is mainly a result of higher taxable income realized at the Mana Mine in Burkina Faso. Taxable income at the Mana Mine is subject to a tax rate of 17.5%.

We received, from Burkina Faso tax authorities, at the end of the first quarter of 2010, a tax assessment for the years 2007 and 2008 of $13,800,000 plus an additional $14,400,000 in penalties. During the fourth quarter of 2010, SEMAFO received confirmation that Burkina Faso tax authorities dismissed the 2007-2008 tax assessment and penalties issued to the Corporation. SEMAFO paid a total of $770,000 in lieu of the original amounts of $28,200,000. The amount owing was paid out and recorded as a tax expense in the fourth quarter 2010, bringing this matter to a close for all parties.

Non-Controlling Interests

A non-controlling interest charge of $1,752,000 was recorded in the fourth quarter of 2010. This amount pertains to the ownership of SEMAFO Burkina Faso S.A., our subsidiary in Burkina Faso, 10% of which belongs to the Government of Burkina Faso. Their ownership in the subsidiary entitles the Government of Burkina Faso to 10% of SEMAFO Burkina Faso S.A.'s net income once the subsidiary's retained earnings attained the initial capital investment, which occurred in the fourth quarter. The $1,752,000 will be payable only after SEMAFO has recovered advances disbursed to the subsidiary totaling $74,357,000 as at December 31, 2010.

3. Cash Flow

The following table summarizes our cash flow activities:

(In thousands of dollars)	2010	2009
Cash flow		
Operations	**147,451**	92,147
Working capital items	**12,311**	(6,984)
Operating activities	**159,762**	85,163
Financing activities	**94,937**	3,550
Investing activities	**(96,741)**	(49,674)
Change in cash during the period	**157,958**	39,039
Cash - Beginning of period	**62,481**	23,442
Cash - End of period	**220,439**	62,481

Operating

Operating activities, before working capital items, generated cash flows of $147,451,000 in 2010, reflecting the increase in production and ounces sold combined with a higher realized price of gold. During the same period in 2009, the operating activities generated liquidities of $92,147,000. Working capital items contributed to an increase in liquidities of $12,311,000 in 2010 due to higher income taxes payable and reduced accounts receivable, compensated by an increase in inventories. Reduced accounts receivable included VAT reimbursements received from the Government of Burkina Faso in the amount of $4,945,000. Detail of changes in working capital items is provided in note 17a) of our financial statements.

Financing

During 2010, we reimbursed $20,065,000 of our long-term debt compared to $26,951,000 during 2009. Our $20,000,000 bank loan was fully repaid during the third quarter of 2010 and the $45,000,000 term facility will be fully repaid in 2011.

On June 4, 2010, we closed a public offering at $6.55 (CA $6.95) per common share, which resulted in an issuance of 17,250,000 common shares for gross proceeds of $113,018,000 (CA $119,887,500). Share issue expenses related to this public offering amounted to $6,311,000.

On June 23, 2009, the Corporation closed a public offering of 17,850,000 common shares at $1.97 (CA $2.27) per share, for gross proceeds of $35,237,000 (CA $40,519,500). Share issue expenses related to this public offering totaled $2,212,000.

3. Cash Flow (continued)

Financing (continued)

Use of proceeds as at December 31, 2010 in comparison to the previously proposed use of proceeds of our 2010 and 2009 public offerings is broken down as follows:

	Investment announced financing 2010 $	Actual use of proceeds, December 31, 2010 $	Investment announced financing 2009 $	Actual use of proceeds December 31, 2010 $
New Mining fleet	25,000,000	21,458,000	–	–
Exploration and development at the Mana Mine	15,000,000	5,888,000	18,500,000	18,500,000
Mana plant expansion	–	–	8,000,000	8,000,000
General corporate purposes	73,018,000	9,716,000	8,737,000	8,737,000
	113,018,000	**37,062,000**	**35,237,000**	**35,237,000**

A total of 2,325,000 options were exercised during 2010 for a cash consideration of $4,695,000. In 2009, a total of 307,000 options were exercised for a cash consideration of $476,000.

All 1,800,000 warrants were exercised on July 21, 2010, for gross proceeds of $3,600,000 (CA $3,800,000).

Investing

During 2010, we made investments of $96,741,000 in property, plant and equipment compared to $35,084,000 in 2009.

Investments represented exploration expenditures amounting to $23,445,000, expansion costs at the Mana Mine totaling $17,960,000, purchase of mining equipment totaling $25,505,000, capitalized stripping costs of $12,342,000, as well as sustainable capital expenditures in the amount of $17,492,000. In 2009, liquidities of $35,084,000 were invested as follows: $9,714,000 in exploration expenditures, $10,096,000 for the expansion of the Mana Mine, $2,220,000 for the finalization of the Mana project, as well as sustainable capital expenditures in the amount of $13,054,000.

Financial Position

As at December 31, 2010, we maintain a strong financial position with $224,846,000 in cash and restricted cash. At the end of the year, our debt to equity ratio stands at only 3%.

With our existing cash balances and forecast cash flow from operations, we are well positioned to fund our cash requirements for 2011, which relates primarily to the following activities:

Requirements

- Exploration programs
- Long-term debt reimbursement
- Mana plant expansion projects
- Development of the Wona underground deposit
- Purchase of additional new mining equipment

4. Balance Sheets

(In thousands of dollars)	2010	2009
Current assets	**304,400**	137,231
Restricted cash	**657**	4,407
Property, plant and equipment	**257,413**	200,375
Investment and other assets	**19,600**	19,743
Total assets	**582,070**	361,756
Total liabilities	**85,882**	89,093
Non-Controlling interest	**1,752**	–
Shareholders' equity	**494,436**	272,663

As at December 31, 2010, our total assets amounted to $582,070,000, compared to $361,756,000 as at December 31, 2009.

As at December 31, 2010, we held cash of $220,439,000, compared to $62,481,000 as at December 31, 2009. This increase is a result of higher cash flows from operating activities combined with proceeds from the public offering closed in June 2010. In addition, we still hold $4,407,000 in restricted accounts according to conditions associated with our loans and for environmental rehabilitation purposes. The remaining portion of our asset base is primarily comprised of property, plant and equipment, reflecting the capital intensive nature of our business. The carrying value of our property, plant and equipment increased to $257,413,000 as at December 31, 2010 compared to $200,375,000 as at December 31, 2009.

Total liabilities as at December 31, 2010 remained stable when compared to 2009, as our reimbursements totaling $20,065,000 made on our long-term debt were compensated in large part by an increase of $16,212,000 in income taxes payable.

A non-controlling interest charge of $1,752,000 was recorded in the fourth quarter of 2010. This amount pertains to the ownership of SEMAFO Burkina Faso S.A., our subsidiary in Burkina Faso, 10% of which belongs to the Government of Burkina Faso. Their ownership in the subsidiary entitles the Government of Burkina Faso to 10% of SEMAFO Burkina Faso S.A.'s net income once the subsidiary's retained earnings attained the initial capital investment, which occurred in the fourth quarter. The $1,752,000 will be payable only after SEMAFO has recovered advances disbursed to the subsidiary totaling $74,357,000 as at December 31, 2010.

Share capital increased to $452,542,000 as at December 31, 2010, from $329,759,000 as at December 31, 2009 further to the June 4, 2010 public offering of 17,250,000 common shares for gross proceeds of $113,018,000 (CA $119,887,500).

5. Critical Accounting Estimates

Our accounting policies are described in Note 2 of our financial statements. The preparation of our financial statements, in conformity with GAAP, requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. The following are critical accounting estimates which are highly uncertain and for which changes could materially impact our results and financial situation.

Mineral Reserve Estimates

The estimation of mineral reserves is a complex process involving variables of very uncertain natures and requiring important and advisable decisions. This process involves variables such as geological data on the structure of each pit, production cost estimates and future gold price. Our mineral reserve estimates are calculated by qualified persons in accordance with the definitions and guidelines adopted by the Canadian Institutes of Mining, Metallurgy and Petroleum.

SEMAFO's proven and probable mineral reserves as at December 31, 2010 are estimated at 2,817,300 ounces.

Mineral reserve estimates may vary as a result of changes in the price of gold, production costs and based on additional knowledge of the ore deposits and mining conditions.

Our reserve estimates can have a significant impact on the information contained in our financial statements. A large portion of our property, plant and equipment is amortized using the units of production method over the expected operating life of the mine based on estimated recoverable ounces of gold. Estimated recoverable ounces of gold include proven and probable reserves and non-reserved material when sufficient objective evidence exists that it is probable that the non-reserve material will be produced. As described in our accounting policies, in some cases, stripping costs may be capitalized when the stripping activity can be shown to be a betterment of the mineral property. A decrease in our mineral reserves would increase amortization expense which could have a material impact on our operating results.

Whenever environmental, political or social events or changes in circumstances indicate that the carrying amount may not be recoverable, we perform an impairment test to assess the recoverability of its property, plant and equipment and mining assets. Mineral reserve estimates are the most important variable in such impairment tests. A decrease in our reserves could jeopardize the recoverability of the assets, which could in turn lead to a significant loss.

Estimated cash flows relating to the asset retirement obligations may also be affected by a modification to the quantity or quality of our reserves, which could lead to an unexpected liability and have a material impact on our operating results.

Asset Retirement Obligation

Asset retirement obligations arise from the development, construction and normal operation of mining property, plant and equipment as mining activities are subject to various laws and regulations governing the protection of the environment. In general, these laws and regulations are continually changing. We have made, and intend to make in the future, expenditures to comply with such laws and regulations.

At the end of each reporting period, future remediation costs are accrued based on management's best estimate of the undiscounted cash costs expected to be incurred at each site. Accounting for reclamation and remediation obligations requires management to make estimates of the future costs that we will incur to comply with existing laws and regulations at each mining operation. Changes in estimates are reflected in the corresponding assets and liabilities for the period during which an estimate is revised.

Actual costs incurred may differ from estimated amounts. Also, future changes to environmental laws and regulations could increase the extent of reclamation and remediation work required to be performed by SEMAFO. Increases in future costs could materially impact the amounts charged to operations for reclamation and remediation.

Valuation Allowances

Periodically, we evaluate whether it is more likely than not that some portion of our future tax asset will not be realized. Once the evaluation is completed, if we believe that it is more likely than not that some portion our future tax asset will fail to be realized, we record a valuation allowance against the amount we do not expect to realize. Assessing the recoverability of future income tax assets requires management to make significant estimates of future taxable income. To the extent that future cash flows and taxable income differ significantly from estimates, our ability to realize the net future tax assets recorded at the balance sheet date could be impacted. In addition, future changes in tax laws could limit our ability to obtain tax deductions in future periods from future income and tax assets.

6. Accounting Policies Modification

Future Accounting Changes

We will cease to prepare our financial statements in accordance with Canadian GAAP as set out in Part V of the CICA Handbook - Accounting ("Canadian GAAP") for the periods beginning on January 1, 2011 when we will start to apply International Financial Reporting Standards as published by the International Accounting Standards Board as set out in Part I of the CICA Handbook – Accounting as its primary basis of accounting. Consequently, future accounting changes to Canadian GAAP are not discussed in our financial statements as they will normally never be applied by us.

7. Derivative Financial Instruments

Put Options

In 2007, we implemented a 55,000 ounce gold price put protection program for the Mana Mine, a requirement under its $45,000,000 debt facility. As at December 31, 2010, 45,000 ounces are still outstanding and will expire in 2011. Consequently, the entire production is available to be sold at spot price and is fully exposed to any upward increase in the gold price with the downward price protected at $600 for all 45,000 ounces outstanding.

8. Contractual Obligations

Asset Retirement Obligations

Our operations are governed by mining agreements that include the protection of the environment. We conduct our operations in such manner as to protect public health and the environment. We implement progressive measures for rehabilitation work during the operation, in accordance with our mining agreements, closing-down and follow-up work upon closing of a mine. The estimated undiscounted cash flow required to settle the asset retirement obligations is $8,921,000. These disbursements are expected to be made during the years 2011 to 2020. The amount accounted for as liabilities in our financial statements represents the discounted obligations from rehabilitation and closing plans. An 8% discount rate was used to evaluate the obligations.

Government Royalties and Development Taxes

Pursuant to our mining agreements, we have royalty commitments that generate obligations upon gold deliveries. If our mines do not produce gold, we have no payment obligation. Each gold shipment is subject to royalty fees of 5.5% in Niger and 5% in Guinea, based on the value of the shipments, calculated using the spot price on the delivery date. In Guinea, we are also committed to invest 0.4% of gold sales in local development projects. In 2010, government royalties and development taxes of $3,456,000 (2009 - $3,243,000) and $1,983,000 (2009 - $1,709,000) were paid out in Niger and Guinea, respectively.

During the first eleven months of 2010, at our Mana Mine in Burkina Faso, the Corporation was subject to a royalty rate of 3%, which was calculated using the retail market value of gold ounces sold at the time of shipment. In December 2010, the Government of Burkina Faso approved a new graduated royalty rate schedule based on the spot price of gold on the date of delivery. Under the new regime, gold spot prices lower or equal to $1,000 per ounce are subject to royalty fees of 3%, a 4% rate applies for spot prices between $1,000 and $1,300 per ounce, and a 5% royalty rate is levied on all shipments with a gold spot price greater than $1,300 per ounce. The new decree has been in effect since December 1, 2010. Government royalties of $7,273,000 were paid in 2010 compared to $4,518,000 in 2009 in Burkina Faso.

Net Smelter Royalty – Samira Hill Mine

Futher the acquisition from Etruscan Resources Inc. of their minority interest in the subsidiary operating the Samira Hill mine located in Niger, the Corporation is subject to a 1.5% net smelter royalty. The royalty comes into effect after which time the mine has produced 750,000 ounces, calculated as from July 1, 2009. Since July 1, 2009, the Samira Hill mine produced 77,100 ounces. The Corporation has been granted a right of first refusal should Etruscan decides to sell this royalty.

8. Contractual Obligations (continued)

Payments to Maintain Mining Rights

In the normal course of business, in order to obtain and maintain all the advantages of our mining permits, we must commit to invest a specific amount in exploration and development on the permits during their validity period. Moreover, we must make annual payments in order to maintain certain property titles. As at December 31, 2010, we were in compliance with all obligations related to the ownership of our permits.

Purchase Obligations

As at December 31, 2010, our purchase commitments related to the Mana plant expansion and the purchase of our new mining fleet totaled $1,148,000 and $9,313,000 respectively.

9. Subsequent event

On March 15, 2011, the board of directors of SEMAFO has approved the adoption of a shareholder rights plan ("Rights Plan") for which shareholder approval will be sought at the Corporation's annual and special meeting of shareholders to be held on May 10, 2011.

The purpose of the Rights Plan is to provide our shareholders and directors with adequate time to consider and evaluate any unsolicited bid and to provide the directors with adequate time to identify, develop and negotiate value-enhancing alternatives, if considered appropriate, to any such unsolicited bid.

The Rights Plan has been accepted by the Toronto Stock Exchange and is effective as of March 15, 2011 (the "Effective Date"). At the close of business on the Effective Date, one right (a "Right") will be issued and attached to each common share of SEMAFO outstanding at that time. A Right will also be attached to each common share issued after the Effective Date. The issuance of the rights will not change the manner in which shareholders trade their common shares of SEMAFO. If the Rights Plan is not ratified by shareholders at the upcoming annual and special meeting, it and all rights outstanding at that time will terminate. If the Rights Plan is ratified by shareholders at such meeting, the Rights Plan will be in effect until the termination of the Corporation's annual meeting in 2014.

The Rights Plan is similar to other rights plans adopted by many Canadian corporations. The Rights Plan is not triggered if an offer to acquire common shares of SEMAFO is made as a "Permitted Bid" and thereby allows sufficient time for shareholders to consider and react to the offer. A "Permitted Bid" is a take-over bid made by way of a take-over bid circular that, among other things, remains open for a minimum of 60 days and requires that it be accepted by more than 50% of the common shares held by independent shareholders. The Rights Plan will be triggered by an acquisition, other than pursuant to a Permitted Bid, of 20% or more of the outstanding of our common shares or the commencement of a take-over bid that is not a Permitted Bid.

The Rights Plan was not proposed in response to, or in anticipation of, any pending, threatened or proposed acquisition or take-over bid. The directors did not adopt the Rights Plan to deter take-over proposals.

10. Risks and Uncertainties

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 could be considered speculative. Prospective purchasers or holders of our common shares should give careful consideration to all of our risks factors.

Financial Risks

Fluctuation in Gold Prices

The profitability of our operations will be significantly affected by changes in the market price of gold. Gold production from mining operations and the willingness of third parties, such as central banks, to sell or lease gold affects the gold supply. Demand for gold can be influenced by economic conditions, gold's attractiveness as an investment vehicle and the strength of the US dollar and local investment currencies. Other factors include the level of interest rates, exchange rates, inflation and political stability. The aggregate effect of these factors is impossible to predict with accuracy. Gold prices are also affected by worldwide production levels.

In addition, the price of gold has on occasion been subject to very rapid short-term changes because of speculative activities. Fluctuations in gold prices may materially adversely affect our financial condition and results of operation.

10. Risks and Uncertainties (continued)

Financial Risks (continued)

Fluctuation in Petroleum Prices

Because we use petroleum fuel to power our mining equipment and to generate electrical energy to power our mining operations, our financial condition and results of operation may be materially adversely affected by rising petroleum prices.

Exchange Rate Fluctuations

Our operations in West Africa are subject to currency fluctuations that may materially adversely affect our financial condition and results of operation. Gold is currently sold in US dollars and although the majority of our costs are also in US dollars, certain costs are incurred in other currencies. The appreciation of non-US dollar currencies against the US dollar can increase the cost of exploration and production in US dollar terms, which could materially adversely affect our financial condition and results of operation.

Access to Capital Markets

To fund our growth, we are often dependent on securing the necessary capital through loans or permanent capital. The availability of this capital is subject to general economic conditions and lender and investor interest in our projects.

Operational Risks

Uncertainty of Reserve and Resource Estimates

Reserves and resources are estimates based on limited information acquired through drilling and other sampling methods. No assurance can be given that anticipated tonnages and grades will be achieved or that level of recovery will be realized. The ore grade actually recovered may differ from the estimated grades of the reserves and resources. Such figures have been determined based upon assumed gold prices and operating costs. Future production could differ dramatically from reserve estimates for, among others, the following reasons:

- mineralization or formations could differ from those predicted by drilling, sampling and similar examinations
- increases in operating mining costs and processing costs could materially adversely affect reserves
- the grade of the reserves may vary significantly from time to time and there is no assurance that any particular level of gold may be recovered from the reserves, and
- declines in the market price of gold may render the mining of some or all of the reserves uneconomic.

Any of these factors may translate into increased costs or a reduction in our estimated reserves. Short-term factors, such as the need for the additional development of a deposit or the processing of new different grades, may impair our profitability. Should the market price of gold fall, we could be required to materially write down our investment in mining properties or delay or discontinue production or the development of new projects.

Production and Operating Cash Cost

No assurance can be given that the intended or expected production schedules or the estimated operating cash costs will be achieved in respect of our operating gold mines. Many factors may cause delays or cost increases, including labour issues, disruptions in power, transportation or supplies, and mechanical failure. Our net income will depend, among other things, on the extent to which expected operating costs are achieved. In addition, short-term operating factors, such as the need for the orderly development of ore bodies or the processing of new or different ore grades, may cause a mining operation to be unprofitable in any particular period. Furthermore, our activities may be subject to prolonged disruptions due to weather conditions. Hazards, such as unusual or unexpected formations, rock bursts, pressures, cave-ins, flooding or other conditions may be encountered in the drilling and removal of material. Our operating cash cost to produce an ounce of gold is further dependent on a number of factors, including the grade of reserves, recovery and plant throughput. Our future performance may hence materially adversely differ from the estimated performance. As these factors are beyond our control, there can be no assurance that our cash operating cost will be similar from year to year.

10. Risks and Uncertainties (continued)

Operational Risks (continued)

Nature of Mineral Exploration and Mining

Our profitability is significantly affected by our exploration and development programs. The exploration and development of mineral deposits involves significant financial risks over a significant period of time, which even a combination of careful evaluation, experience and knowledge may not eliminate. While the discovery of a gold-bearing structure may result in substantial rewards, few properties explored are ultimately developed into mines. Major expenses may be required to establish and replace reserves by drilling and to construct mining and processing facilities at a site. It is impossible to ensure that our current or proposed exploration programs will result in profitable commercial mining operations.

Whether a gold deposit will be commercially viable depends on a number of factors, some of which are the particular attributes of the deposit, such as its size and grade, proximity to infrastructure, financing costs and governmental regulations, including regulations relating to prices, taxes, royalties, infrastructure, land use, importing and exporting of gold, revenue repatriation and environmental protection. The effects of these factors cannot be accurately predicted, but the combination of these factors may preclude us from receiving an adequate return on invested capital.

Our operations are, and will continue to be, subject to all of the hazards and risks normally associated with the exploration, development and production of gold, any of which could result in damage to life or property, environmental damage and possible legal liability for any or all damage.

Depletion of our Mineral Reserves

We must continually replace mining reserves depleted by production to maintain production levels over the long term. This is done by expanding known mineral reserves or by locating or acquiring new mineral deposits. There is, however, a risk that depletion of reserves will not be offset by future discoveries. Exploration for minerals is highly speculative in nature and involves many risks. Many, if not most gold projects are unsuccessful and there are no assurances that current or future exploration programs will be successful. Further, significant costs are incurred to establish mineral reserves, open new pits and construct mining and processing facilities. Development projects have no operating history upon which to base estimates of future cash flow and are subject to the successful completion of feasibility studies, obtaining necessary government permits, obtaining title or other land rights and the availability of financing. In addition, assuming discovery of an economic mine or pit, depending on the type of mining operation involved, many years may elapse before commercial operations commence. Accordingly, there can be no assurances that our current programs will result in any new commercial mining operations or yield new reserves to replace or expand current reserves.

Availability of Infrastructure and Fluctuation in the Price of Energy and other Commodities

The exploration and development of mineral deposits is dependent on adequate infrastructure. Reliable roads, bridges, energy and power sources and water supply are important determinant susceptible to affect our capital and operating costs. Lack of such infrastructure or unusual or infrequent weather phenomena, sabotage, terrorism, government or other interference in the maintenance or provision of such infrastructure could adversely affect our financial condition and results of operation.

In addition, our profitability is affected by the market price and availability of commodities that are consumed or otherwise used in connection with our operations such as diesel, fuel, electricity, steel, concrete and chemical (including cyanide). Prices of such commodities are affected by factors that are beyond our control. An increase in the cost or decrease in the availability may materially adversely affect the timing and costs of our operations and projects.

Licenses and Permits

We require licenses and permits from various governmental authorities. We believe that we hold all necessary licenses and permits under applicable laws and regulations in respect of our properties and that we presently comply in all material respects with the terms of such licenses and permits. Such licenses and permits, however, are subject to change in various circumstances. There can be no guarantee that we will be able to obtain or maintain all necessary licenses and permits that may be required to explore and develop our properties, commence construction or operation of mining facilities and properties under exploration or development or to maintain continued operations that economically justify the cost.

10. Risks and Uncertainties (continued)

Operational Risks (continued)

Political Risk

While the governments in Burkina Faso, Niger and Guinea have historically supported the development of their natural resources by foreign companies, there is no assurance that these governments will not in the future adopt different policies or new interpretations respecting foreign ownership of mineral resources, rates of exchange, environmental protection, labor relations, repatriation of income or return of capital. Any limitation on transfer of cash or other assets between SEMAFO and our subsidiaries could restrict our ability to fund our operations or repay our debts and materially adversely affect our financial condition and results of operation.

Moreover, mining tax regimes in foreign jurisdictions are subject to differing interpretations and constant changes and may not include fiscal stability provisions. Our interpretation of taxation law as applied to our transactions and activities may not coincide with that of the tax authorities. As a result, transactions may be challenged by tax authorities and our operations may be assessed, which could result in significant addition in taxes, penalties and interest.

The possibility that a future government in any of these countries may adopt substantially different policies or interpretations, which might extend to the expropriation of assets, cannot be ruled out. Political risk also includes the possibility of civil disturbances and political instability in these countries.

Title Matters

While we have no reason to believe that the existence and extent of any mining property in which we have an interest is in doubt, title to mining properties is subject to potential claims by third parties. The failure to comply with all applicable laws and regulations, including failure to pay taxes and carry out and file assessment work, may invalidate title to all or portions of the properties covered by our permits and licences.

Insufficient Insurance

While we may obtain insurance against certain risks in such amounts as we consider adequate, available insurance may not cover all the potential risks associated with a mining company operations. We may also be unable to maintain insurance to cover insurable risks at economically feasible premiums and insurance coverage may not be available in the future or may not be adequate to cover any resulting loss. Moreover, insurance risks such as the validity of ownership of unpatented mining claims and mil sites and environmental pollution or other hazards as a result of exploration and production is not generally available to gold mining companies on acceptable terms. The potential costs which may be associated with any liabilities not covered by insurance or in excess of insurance coverage or compliance with applicable laws and regulations may cause substantial delays and require significant capital outlays, materially adversely affecting our financial condition and results of operation.

Outside Contractor Risk

A significant portion of our operations in Niger continues to be conducted by contractors. As a result, our operations are subject to a number of risks, some of which are outside of our control, including:

- negotiating agreements with contractors on acceptable terms
- the inability to replace a contractor and its operating equipment in the event that either party terminates the agreement
- reduced control over such aspects of operations that are the responsibility of the contractor;
- failure of a contractor to perform under our contractual arrangement
- interruption of operations in the event that a contractor ceases its business due to insolvency or other events
- failure of a contractor to comply with applicable legal and regulatory requirements, to the extent that it is responsible for such compliance, and
- problems of a contractor with managing its workforce, labor unrest or other employment issues.

In addition, we may incur liability to third parties as a result of the actions of a contractor. The occurrence of one or more of these risks could have a material adverse effect on our financial condition and results of operation.

10. Risks and Uncertainties (continued)

Operational Risks (continued)

Competition

The mineral exploration and mining business is competitive in all of its phases. We compete with numerous other companies and individuals, including competitors with greater financial, technical and other resources, in the search for and the acquisition of attractive mineral properties, equipment and increasingly, human resources. There is no assurance that we will continue to be able to compete successfully with our competitors.

Qualified and Key Personnel

In order to operate successfully, we must find and retain qualified employees with strong knowledge and expertise in the mining environment. SEMAFO and other companies in the mining industry compete for qualified and key personnel and if we are unable to attract and retain qualified personnel or fail to establish adequate succession planning strategies with respect to same, our operations could be materially adversely affected.

Labour and Employment Relations

We are dependent on our workforce to extract and process minerals. Our relations with our employees may be impacted by changes in labour relations which may be introduced by, among others, employee groups, unions and the relevant governmental authorities. Labour disruptions at any of our properties could have a material adverse impact on our financial condition and results of operation. Some of our employees are represented by labour unions under collective labour agreements. We may not be able to satisfactorily renegotiate our collective labour agreements upon their expiration. In addition, existing labour agreements may not prevent a strike or work stoppage at our facilities in the future. Labour disruptions at any of our properties could have a material adverse impact on our financial condition and results of operation.

Surrounding Communities Relations

Our properties in Burkina Faso, Niger and Guinea may be subject to the rights or asserted rights of various community stakeholders. Moreover, artisanal miners may make use of some or all of our properties which would interfere with exploration and development activities on such properties.

Environmental Risks and Hazards

All phases of our operations are subject to environmental regulation in the various jurisdictions in which we operate. Environmental legislation is evolving in a manner which will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects, and a heightened degree of responsibility for companies and their officers, directors and employees. Environmental hazards which are unknown to us at present and which have been caused by previous or existing owners or operations of the properties may exist on our properties. Failure to comply with applicable environmental laws and regulations may result in enforcement actions and may include corrective measures that require capital expenditures or remedial actions. There is no assurance that future changes in environmental laws and regulations and permits governing operations and activities of mining companies, if any, will not materially adversely affect our operations or result in substantial costs and liabilities to us in the future.

Production at our mines involves the use of sodium cyanide which is a toxic material. Should sodium cyanide leak or otherwise be discharged from the containment system, we may become subject to liability for clean up work that may not be insured. While all steps have been taken to prevent discharges of pollutants into ground water and the environment, we may become subject to liability for hazards that may not be insured.

Litigation

All industries, including the mining industry, are subject to legal claims, with and without merit. We have in the past been, currently are, and may in the future be, involved in various legal proceedings. While we believe it is unlikely that the final outcome of these legal proceedings will have an adverse effect on our financial condition and results of operation, defense costs will be incurred, even with respect to claims that have no merit. Due to the inherent uncertainty of the litigation process, there can be no assurance that the resolution of any particular legal proceeding will not have a material adverse effect on our financial condition and results of operation.

11. Quarterly Information

(unaudited, in accordance with Canadian GAAP)

Summary of Quarterly Information

	First quarter 2010	Second quarter 2010	Third quarter 2010	Fourth quarter 2010	**Year 2010**	First quarter 2009	Second quarter 2009	Third quarter 2009	Fourth quarter 2009	**Year 2009**
Operating Data										
Gold ounces produced	65,800	68,300	65,500	61,500	**261,100**	58,100	64,100	62,300	57,900	**242,400**
Gold ounces sold	57,200	72,000	69,500	62,100	**260,800**	53,600	63,000	61,200	66,000	**243,800**
Results and Financial Situation **(In thousands of dollars, except for amounts per share)**										
Revenues – Gold sales	63,575	87,085	86,223	86,392	**323,275**	49,495	58,646	59,361	73,286	**240,788**
Operating income	19,523	37,526	38,615	33,209	**128,873**	11,173	17,043	15,195	17,494	**60,905**
Net income	13,805	33,631	28,809	27,001	**103,246**	8,902	10,721	13,399	10,483	**43,505**
Basic net income per share	0.06	0.13	0.11	0.09	**0.39**	0.04	0.05	0.05	0.04	**0.18**
Diluted net income per share	0.05	0.13	0.10	0.09	**0.38**	0.04	0.05	0.05	0.04	**0.18**
Cash flow from operating activities[1]	26,457	42,210	40,041	38,743	**147,451**	18,500	25,444	24,301	23,902	**92,147**
Balance Sheet										
Cash	61,160	178,967	193,268	220,439	**220,439**	20,416	44,310	55,379	62,481	**62,481**
Total assets	368,184	505,380	545,310	582,070	**582,070**	310,564	340,742	348,120	361,756	**361,756**
Total long-term debt (including short-term portion)	29,368	24,252	19,323	14,824	**14,824**	55,387	48,127	43,165	34,420	**34,420**

[1] Cash flow from operating activities excludes changes in non-cash working capital items and settlement of liabilities related to asset retirement obligations.

11. Quarterly Information (continued)

(unaudited, in accordance with Canadian GAAP)

	First quarter 2010	Second quarter 2010	Third quarter 2010	Fourth quarter 2010	**Year 2010**	First quarter 2009	Second quarter 2009	Third quarter 2009	Fourth quarter 2009	**Year 2009**
CONSOLIDATED										
Operating Data										
Gold ounces produced	65,800	68,300	65,500	61,500	**261,100**	58,100	64,100	62,300	57,900	**242,400**
Gold ounces sold	57,200	72,000	69,500	62,100	**260,800**	53,600	63,000	61,200	66,000	**243,800**
Financial Data (in thousands of dollars)										
Revenues – Gold sales	63,575	87,085	86,223	86,392	**323,275**	49,495	58,646	59,361	73,286	**240,788**
Mining operations expenses	27,115	30,411	31,267	33,351	**122,144**	25,525	26,945	28,697	33,628	**114,795**
Government royalties	2,534	3,260	3,236	3,682	**12,712**	1,990	2,375	2,312	2,793	**9,470**
Amortization	11,316	11,311	9,259	10,045	**41,931**	8,190	9,485	9,930	13,258	**40,863**
Administration	2,969	4,460	3,728	5,988	**17,145**	2,520	2,701	3,131	6,015	**14,367**
Accretion expense of asset retirement obligations for property, plant and equipment	118	117	118	117	**470**	97	97	96	98	**388**
Operating Income	**19,523**	**37,526**	**38,615**	**33,209**	**128,873**	**11,173**	**17,043**	**15,195**	**17,494**	**60,905**
Statistics ($)										
Average selling price (per ounce)	1,111	1,210	1,241	1,391	**1,240**	923	931	969	1,110	**988**
Cash operating cost (per ounce produced) [1]	455	426	454	533	**466**	460	419	472	506	**463**
Cash operating cost (per tonne processed) [1]	32	31	34	36	**33**	31	31	34	36	**33**
Total cash cost (per ounce sold) [2]	518	468	496	596	**517**	513	465	507	552	**510**
Amortization (per ounce sold) [3]	198	157	133	160	**161**	153	151	162	201	**168**
MANA										
Operating Data										
Ore mined (tonnes)	455,700	487,400	482,200	484,900	**1,910,200**	381,500	425,800	334,900	391,100	**1,533,300**
Ore processed (tonnes)	435,500	520,200	501,800	490,300	**1,947,800**	353,400	345,500	347,700	355,100	**1,401,700**
Head grade (g/t)	3.60	3.19	3.16	3.24	**3.29**	2.86	3.74	3.92	3.50	**3.50**
Recovery (%)	91	86	87	88	**88**	95	96	95	94	**95**
Gold ounces produced	41,400	45,700	46,400	46,200	**179,700**	36,000	37,300	41,600	38,600	**153,500**
Gold ounces sold	35,000	50,500	49,700	45,100	**180,300**	31,100	36,800	40,100	44,000	**152,000**
Financial Data (in thousands of dollars)										
Revenues – Gold sales	38,950	60,756	61,598	62,805	**224,109**	28,466	34,209	38,951	48,678	**150,304**
Mining operations expenses	13,326	17,833	17,822	18,604	**67,585**	12,427	12,067	14,174	17,279	**55,947**
Government royalties	1,171	1,812	1,872	2,418	**7,273**	848	1,029	1,163	1,478	**4,518**
Amortization	6,375	6,770	5,464	6,222	**24,831**	4,997	5,873	6,473	8,279	**25,622**
Administration	388	200	330	761	**1,679**	274	186	404	502	**1,366**
Accretion expense of asset retirement obligations for property, plant and equipment	38	36	38	37	**149**	28	28	28	29	**113**
Segment Operating Income	**17,652**	**34,105**	**36,072**	**34,763**	**122,592**	**9,892**	**15,026**	**16,709**	**21,111**	**62,738**
Statistics ($)										
Average selling price (per ounce)	1,113	1,203	1,239	1,393	**1,243**	915	930	971	1,106	**989**
Cash operating cost (per ounce produced) [1]	363	353	355	408	**370**	388	320	348	399	**364**
Cash operating cost (per tonne processed) [1]	36	31	34	37	**34**	33	37	41	43	**39**
Total cash cost (per ounce sold) [2]	414	389	396	466	**415**	427	356	382	426	**398**
Amortization (per ounce sold) [3]	182	134	110	138	**138**	161	160	161	188	**169**

1 See the "Non-GAAP Measures" section of this MD&A.
2 Total cash cost is a non-GAAP measure and represents the mining operating costs per ounce sold.
3 Amortization per ounce sold is a non-GAAP measure and represents the amortization expenses per ounce sold.

11. Quarterly Information (continued) (unaudited, in accordance with Canadian GAAP)

	First quarter 2010	Second quarter 2010	Third quarter 2010	Fourth quarter 2010	**Year 2010**	First quarter 2009	Second quarter 2009	Third quarter 2009	Fourth quarter 2009	**Year 2009**
SAMIRA HILL										
Operating Data										
Ore mined (tonnes)	693,800	130,500	89,500	–	**913,800**	393,300	263,500	307,800	424,800	**1,389,400**
Ore processed (tonnes)	316,000	286,600	299,300	305,600	**1,207,500**	310,300	410,200	400,000	385,400	**1,505,900**
Head grade (g/t)	1.82	2.21	1.59	1.56	**1.79**	1.84	1.58	1.49	1.61	**1.62**
Recovery (%)	81	74	69	60	**72**	64	79	74	77	**74**
Gold ounces produced	15,500	15,600	10,800	9,400	**51,300**	10,900	17,400	13,600	15,000	**56,900**
Gold ounces sold	13,900	15,000	12,100	9,500	**50,500**	11,600	16,800	14,200	16,500	**59,100**
Financial Data (in thousands of dollars)										
Revenues – Gold sales	15,489	18,344	15,012	13,309	**62,154**	10,659	15,654	13,702	18,285	**58,300**
Mining operations expenses	8,067	8,432	9,626	9,551	**35,676**	8,075	10,370	9,614	11,514	**39,573**
Government royalties	864	1,021	849	722	**3,456**	593	881	788	981	**3,243**
Amortization	2,308	2,363	2,330	2,246	**9,247**	1,410	2,123	1,859	2,830	**8,222**
Administration	382	468	451	620	**1,921**	410	392	341	562	**1,705**
Accretion expense of asset retirement obligations for property, plant and equipment	52	52	52	52	**208**	44	44	44	44	**176**
Segment Operating Income	**3,816**	**6,008**	**1,704**	**118**	**11,646**	**127**	**1,844**	**1,056**	**2,354**	**5,381**
Statistics ($)										
Average selling price (per ounce)	1,114	1,223	1,241	1,401	**1,231**	919	932	965	1,108	**986**
Cash operating cost (per ounce produced) [1]	567	564	846	1,021	**708**	714	597	689	686	**665**
Cash operating cost (per tonne processed) [1]	26	30	31	32	**30**	28	24	25	27	**26**
Total cash cost (per ounce sold) [2]	643	630	866	1,081	**775**	747	670	733	757	**724**
Amortization (per ounce sold) [3]	166	158	193	236	**183**	122	126	131	172	**139**
KINIERO										
Operating Data										
Ore mined (tonnes)	162,400	144,200	105,200	99,100	**510,900**	106,900	142,300	90,500	117,100	**456,800**
Ore processed (tonnes)	143,200	123,400	91,500	111,800	**469,900**	132,100	122,000	117,300	120,800	**492,200**
Head grade (g/t)	1.64	1.89	2.93	1.78	**1.99**	2.68	2.83	1.86	1.92	**2.34**
Recovery (%)	92	90	96	93	**93**	87	91	90	88	**89**
Gold ounces produced	8,900	7,000	8,300	5,900	**30,100**	11,200	9,400	7,100	4,300	**32,000**
Gold ounces sold	8,300	6,500	7,700	7,500	**30,000**	10,900	9,400	6,900	5,500	**32,700**
Financial Data (in thousands of dollars)										
Revenues – Gold sales	9,136	7,985	9,613	10,278	**37,012**	10,370	8,783	6,708	6,323	**32,184**
Mining operations expenses	5,722	4,146	3,819	5,196	**18,883**	5,023	4,508	4,909	4,835	**19,275**
Government royalties	499	427	515	542	**1,983**	549	465	361	334	**1,709**
Amortization	2,595	2,139	1,428	1,484	**7,646**	1,762	1,467	1,574	2,069	**6,872**
Administration	510	564	236	726	**2,036**	536	459	474	493	**1,962**
Accretion expense of asset retirement obligations for property, plant and equipment	28	29	28	28	**113**	25	25	24	25	**99**
Segment Operating Income (loss)	**(218)**	**680**	**3,587**	**2,302**	**6,351**	**2,475**	**1,859**	**(634)**	**(1,433)**	**2,267**
Statistics ($)										
Average selling price (per ounce)	1,101	1,228	1,248	1,370	**1,234**	951	934	972	1,150	**984**
Cash operating cost (per ounce produced) [1]	689	598	495	737	**624**	446	483	784	838	**584**
Cash operating cost (per tonne processed) [1]	34	32	45	41	**37**	33	40	46	41	**40**
Total cash cost (per ounce sold) [2]	750	704	563	765	**696**	511	529	764	940	**642**
Amortization (per ounce sold) [3]	313	329	185	198	**255**	162	156	228	376	**210**

[1] See the "Non-GAAP Measures" section of this MD&A.
[2] Total cash cost is a non-GAAP measure and represents the mining operating costs per ounce sold.
[3] Amortization per ounce sold is a non-GAAP measure and represents the amortization expenses per ounce sold.

12. Fourth Quarter Results

During the fourth quarter of 2010, we realized gold sales of $86,392,000 and operating income of $33,209,000 compared to $73,286,000 and $17,494,000, respectively in 2009. These accomplishments mainly stemmed from a higher average realized price of gold of $1,391 per ounce. Net income amounted to $27,001,000 or $0.09 per share compared to $10,483,000 or $0.04 per share in 2009.

Production totaled 61,500 ounces for the quarter at a cash operating cost of $533 per ounce or $36 per tonne processed. Comparatively, in the fourth quarter 2009, we produced 57,900 ounces at a cash operating cost of $506 per ounce or $36 per tonne processed.

At the Mana Mine, we processed 490,300 tonnes during the fourth quarter of 2010 compared to 355,100 tonnes for the corresponding period in 2009. This increased throughput, further to the commissioning of our plant expansions, compensated for the decrease in head grade recovered. Accordingly, our fourth quarter gold production increased by 20%, from 38,600 ounces of gold in 2009 to 46,200 in 2010. Our cash operating cost per ounce produced increased from $399 to $408 mainly due to a decrease in recovered head grade, which is due to the increased throughput of lower grade ore related to our higher processing capacity.

At the Samira Hill Mine, we processed 305,600 tonnes of ore during the quarter, a decrease of 21% when compared to the same period in 2009, as a result of processing harder ore as opposed to saprolite ore in 2009. Our cash cost per tonne increased from $27 to $32 as a result of increased energy cost and higher reagent consumption. No ore was extracted during the fourth quarter of 2010 in order to allow the mining equipment to focus on the stripping of the Samira Main and Libiri pits. We therefore only processed ore sourced from stockpiles in the fourth quarter. Accordingly, the cash operating cost increased to $1,021 per ounce following the increase in cost per tonne and the lower head grade recovered.

At the Kiniero Mine, we processed 111,800 tonnes and produced 5,900 ounces of gold during the fourth quarter of 2010 at a cash operating cost of $737 per ounce. For the corresponding period in 2009, we processed 120,800 tonnes and produced 4,300 ounces of gold at a cash operating cost of $838 per ounce. Although the recovered head grade decreased by 2% during the fourth quarter of 2010 compared to 2009, production of gold increased by 1,600 ounces (37%) due to the variations in gold-in-circuit inventory in the last quarter of 2009. The cash cost decrease is mainly related to the impacts of fixed costs on higher production.

13. Information on Outstanding Shares

As at December 31, 2010, 2010, our share capital is comprised of 272,238,000 common shares issued and outstanding. All 1,800,000 warrants were exercised on July 21, 2010, for gross proceeds of $3,600,000 (CA $3,800,000).

We have two stock option plans for our employees, officers, consultants and directors and those of our subsidiaries. At the last Annual General and Special Shareholders' Meeting, our shareholders adopted the 2010 Stock Option Plan (the "2010 Plan") providing, among other things, for a five year option term instead of the 10-year option term provided under the Stock Option Plan (the "Original Plan"). Since the adoption of the 2010 Plan by SEMAFO's shareholders, no further options have been granted under the Original Plan. The grant of options under the 2010 Plan has been taken into account in the calculation of the stock based compensation expense for the period and had no significant impact.

The plans provide for the grant of non-transferable options for the purchase of common shares. As at March 15, 2011 stock options allowing its holders to purchase 9,989,250 common shares were outstanding.

14. Additional Information

Exchange rates are as follows:

CA $ / US $	2010	2009
March 31 (closing)	**1.0156**	1.2602
June 30 (closing)	**1.0606**	1.1630
September 30 (closing)	**1.0298**	1.0722
December 31 (closing)	**0.9946**	1.0466
First quarter (average)	**1.0403**	1.2424
Second quarter (average)	**1.0253**	1.1315
Third quarter (average)	**1.0399**	1.0998
Fourth quarter (average)	**1.0131**	1.0551
Year (average)	**1.0297**	1.1425

15. International Financial Reporting Standards – Changeover Plan

The Canadian Accounting Standards Board (AcSB) confirmed that the use of International Financial Reporting Standards ("IFRS") will be required for Canadian publicly accountable enterprises for years beginning on or after January 1, 2011.

We have established our changeover plan to adopt IFRS by 2011. An implementation team has been created to plan for and achieve a smooth transition to IFRS. External resources have also been retained to assist, under the direction of SEMAFO's management, with certain aspects of the project to complete the transition plan on a timely basis. The Audit Committee of the Board of Directors receives timely progress reports on the status of the IFRS implementation project as well as indications, decisions and conclusions regarding IFRS options. External auditors are also involved in the conversion process throughout each stage of the project.

The implementation project consists of three major phases: (1) the scoping and diagnostic phase; (2) the impact analysis, evaluation and design phase; and (3) the implementation and review phase.

Phase 1 – Scoping and diagnostic
During the first phase, completed in October 2008, we performed a high-level assessment to identify key differences between Canadian GAAP and IFRS which were most likely to impact SEMAFO. We established project strategy, infrastructure and timeframe and trained core internal resources to be involved in the conversion project.

Phase 2 – Impact analysis, evaluation and design
In our second phase, which began in 2009, we performed a detailed assessment, from an accounting, reporting and business perspective, of the changes that will result from the conversion to IFRS. The following summarizes the key elements of SEMAFO's changeover plan for transitioning to IFRS, including impacts on accounting policies and procedures, financial statement preparation, training and communications, business impacts and IT systems:

1. Accounting policies and procedures

First-Time Adoption of IFRS
IFRS 1, First-Time Adoption of International Financial Reporting Standards ("IFRS 1"), provides entities adopting IFRSs for the first time with a number of optional exemptions and mandatory exceptions, in certain areas, to the general requirement for full retrospective application of IFRSs. We have completed our analysis of the various accounting policy choices available and presented them to the members of the Audit Committee of the Board of Directors. Upon approval, we will implement those that were determined to be most appropriate in the circumstances. Certain adjustments required on transition to IFRSs will be made, retrospectively, against opening retained earnings (deficit) as of the date of the first comparative statement of financial position presented, based on standards that will be applicable as at December 31, 2011. Transitional adjustments relating to those standards where comparative figures are not required to be restated will only be made as of the first day of the year of adoption.

15. International Financial Reporting Standards – Changeover Plan (continued)

The following paragraphs outline the significant optional IFRS 1 exemptions we will apply in our first IFRS financial statements.

- Business combination election: This election allows the Corporation to adopt IFRS 3(R) prospectively from the date of transition. The impact of this exemption is that all prior business combinations will continue to be accounted for as they were under Canadian GAAP.
- Share-based payments election: IFRS 2's requirements apply to all grants of shares, share options or other equity instruments made after November 7, 2002, that have not yet vested by the date of transition to IFRS. SEMAFO elected not to apply IFRS 2's requirements to other grants of equity instruments.
- Decommissioning liabilities election: IFRIC 1 "Changes in Existing Decommissioning, Restoration and Similar Liabilities" requirements, with respect to changes in such liabilities that occurred before January 1, 2010, will not be applied. This election enables the Corporation to apply a simplified approach for the determination of the provision and the corresponding asset balance on the date of transition and is not expected to have any material impact for SEMAFO.
- Borrowing costs election: IFRS 1 permits the Corporation to apply IAS 23 Borrowing Costs (''IAS 23'') prospectively from the transition date; therefore the accounting of borrowing costs prior to the transition date does not have to be reassessed in the opening IFRS Statement of financial position.
- Leases election: Since the Corporation made the same determination of whether an arrangement contained a lease in accordance with previous GAAP as that required by IFRIC 4 but at a date other than that required by IFRIC 4, SEMAFO need not to reassess that determination when it adopts IFRSs.
- The remaining optional exemptions are not expected to be applicable to the Corporation's adoption of IFRS.

Accounting policies changes and expected areas of significance

We have completed our technical analysis in each of the key areas, identified during the initial assessment completed in Phase 1, where IFRSs differed from Canadian GAAP. As a result, we have established a number of IFRS accounting policies, subject to future changes or revisions that may be needed as a result of conversion to the IFRS standards. These IFRS accounting policies were presented and discussed with the members of the Audit Committee of the Board of Directors for their review during the third quarter of 2010. Set out below are the main key areas, where changes in accounting policies are expected, and that may impact our financial statements, including presentation and disclosure.

1) Impairment of assets

Canadian GAAP generally uses a two-step approach to impairment testing: first comparing asset carrying values with undiscounted future cash flows to determine whether impairment exists; and then measuring any impairment by comparing asset carrying values with fair values. *IAS 36 Impairment of Assets*, uses a one-step approach for both testing for and measurement of impairment, with asset carrying values compared directly with the higher of fair value less costs to sell and value in use (which uses discounted future cash flows). This may potentially result in more write-downs where carrying values of assets were previously supported under Canadian GAAP on an undiscounted cash flow basis, but could not be supported on a discounted cash flow basis. However, the extent of any new write-downs may be partially offset by the requirement under IAS 36 to reverse any previous impairment losses where circumstances have changed such that the impairments have been reduced. Canadian GAAP prohibits reversal of impairment losses. We have identified the IFRS impairment indicators that trigger the need for the calculations of an impairment and it was determined that no impairment test was required at the transition date as none of the indicators existed. Therefore, no asset impairment is expected upon transition to IFRS.

2) Property, plant and equipment

IAS 16 Property, Plant and Equipment requires a componentization approach, separately identifying and measuring significant individual components of assets which have different useful lives. Significant components will be depreciated based on their individual useful lives. IAS 16 requires the depreciable amount to be the asset cost less its residual value, rather than using the greater of the asset cost less its residual value or asset cost less its salvage value. Under IAS 16, an entity shall choose either the cost model or the revaluation model as its accounting policy and shall apply that policy to an entire class of property, plant and equipment. The cost model will be retained at the date of transition and subsequently.

15. International Financial Reporting Standards – Changeover Plan (continued)

3) Assets retirement obligations

IAS 37 Provisions, Contingent Liabilities and Contingent Assets define site restoration and environmental provisions as legal or constructive obligations; Canadian GAAP limits the definition to legal obligations. IAS 37 requires the use of management's best estimate of the Corporation's cash outflows, rather than fair value measurement on initial recognition under Canadian GAAP, and requires provisions to be updated at each balance date using a current pre-tax discount rate (which reflects current market assessment of the time value of money and the risk specific to the liability). Canadian GAAP requires the use of a current credit-adjusted, risk-free rate for upward adjustments, and the original credit-adjusted, risk-free rate for downward revisions. As presented in the IFRS 1 section above, the election of the exemption for the determination of the provision at the transition date will be retained and is not expected to have any material impact for SEMAFO.

4) Deferred stripping costs

Under Canadian GAAP, stripping costs are expensed unless they represent a betterment of the mineral property. Unlike Canadian GAAP, IFRS has no specific guidance related to the accounting for waste rock stripping costs at open pit mining operations yet. Under IFRS, reference must be made to the conceptual framework for assets. Accordingly, IFRS currently allows stripping costs that represent future economic benefit to be capitalized as a "deferred stripping cost". We currently monitor the International Financial Reporting Interpretations Committee ("IFRIC") to whom a draft interpretation was presented in July 2010.

5) Financial instruments

Investments in equity instruments classified as available-for-sale that do not have a quoted market price in an active market should be measured at cost under Canadian GAAP. IFRS will require SEMAFO's investment in GoviEx and a related company of GoviEx be measured at fair value.

6) Extractive Activities

"Extractive Activities" discussion paper was published in April 2010 and was open for comments until July 30, 2010. This project was discussed by the IASB Board members at their October 2010 meeting. As current IFRS 6 allows mining entities to retain their existing policies for the capitalization of exploration and evaluation costs until more definitive guidance is developed, we concluded that, until the publication of the final standard, the better option would be to retain the existing policy.

7) Income taxes

IAS 12, Taxes contains different guidance related to the recognition and measurement of future income taxes. It requires the recognition of future taxes in situations not required under Canadian GAAP. Specifically, a future tax liability (asset) is recognized for exchange gains and losses relating to foreign non-monetary assets and liabilities that are re-measured into the functional currency using historical exchange rates. Furthermore, Canadian GAAP requires that the current and long term portions of future income tax assets, and future income tax liabilities, be shown separately on the financial statements, whereas IFRS does not.

The differences identified above are those existing based on Canadian GAAP and IFRS as of today. This list should not be regarded as a complete list of changes that will result from transition to IFRS. It is intended to highlight those areas we believe to be most significant; however, our analysis of possible changes is still in process and not all decisions have been made where choices of accounting policies are available. Until our adoption date is finalized, financial impacts could differ from those quantitative disclosures presented in this MD&A and other changes might be expected on our consolidated financial statements. We would also note that the IASB that promulgate IFRS continue to have significant ongoing projects that could affect the ultimate differences between Canadian GAAP and IFRS and their impact on SEMAFO's consolidated financial statements in future years. Many of these projects may become required after 2011. However, it may be possible to early-adopt them to reduce the number of accounting policy changes in the future. Such projects and interpretations that may be relevant for SEMAFO, other than Extractive activities and Production stripping costs as discussed above, include Liabilities, Financial instruments and Financial Statements presentation.

15. International Financial Reporting Standards – Changeover Plan (continued)

2. Financial statements preparation

IFRS will require more in depth disclosure. SEMAFO is already taking the necessary steps to develop a model for IFRS financial statements, identify information gaps and necessary changes in reporting, processes, systems and controls, and design a process to prepare the IFRS comparative information. Management will continue to adjust SEMAFO's IFRS financial statements model throughout the year 2011 so it will be in compliance with IFRS for the quarters and at year-end.

3. Training and communication

SEMAFO has also started training of the key internal resources. IFRS training will continue as IFRS accounting policies are developed and the implementation process begins. SEMAFO's communications and investor relations team will be involved in the conversion project to ensure that the stakeholder queries during the time leading up to the conversion are addressed. During 2011, SEMAFO will continue to provide updates on the project progress throughout the conversion period to allow stakeholders to assess the impact of the conversion on SEMAFO's financial performance.

4. Business impacts

SEMAFO assessed impacts on all areas of the business, including contractual arrangements, financial covenant calculations, incentive plans, budgeting, etc. The effects on SEMAFO's commercial activities in terms of financial covenants, contractual agreements, incentive plans, budgeting and financial risk management strategies, for example, have been assessed as minor.

5. IT systems

SEMAFO is determining the change necessary to information technology and data systems, including how to accumulate the data necessary for the fiscal 2010 comparatives. The additional financial information that will need to be presented and disclosed in the financial statements should not lead to significant presentation and process changes to report more detailed information in the notes of the financial statements.

6. Control environment

SEMAFO has been reviewing its existing internal controls over financial reporting and disclosure controls and procedures to address significant changes to the existing accounting policies and practices. Some modifications or additions to internal controls over financial reporting will be required due to the fact that IFRS requires more judgment with respect to various accounting treatments.

Phase 3 – Implementation and review

During the third quarter of 2010, key IFRS 1 exemption decisions and accounting policies changes were approved by management and presented to the Audit Committee of the Board of Directors. During the fourth quarter of 2010, we have completed the work to quantify our preliminary opening statement of financial position as of January 1, 2010 under IFRS, applying the IFRS1 elections/exemptions and accounting policies that were approved during the development work performed earlier in the changeover plan. Accordingly, the transition status is currently on track with our implementation schedule which calls for initial reporting under IFRS starting for the forthcoming interim periods ending March 31, 2011 and the year ending December 31, 2011.

Quantitative disclosures

The following summarizes the preliminary expected quantitative impacts of differences between Canadian GAAP and IFRS in our opening statement of financial position as of January 1, 2010:

Investment in GoviEx Uranium Inc. (formely Govi High Power Exploration Inc.)

- Under IFRS, our non-quoted equity investment in GoviEx is a financial instrument classified as an available-for-sale financial asset, which must be measured at fair value. Based on our preliminary estimates determined using the market approach valuation technique, the investment will be recorded at its fair value of $26,950,000 in our opening statement of financial position. The $7,350,000 latent gain on the increase in the value of this investment will be recorded as part of other comprehensive income (gross of income taxes of $990,000).

15. International Financial Reporting Standards – Changeover Plan (continued)

Advance to the Government of Niger

- Under IFRS, our advance from the Government of Niger has to be measured at its amortized cost using the original effective interest method. Based on preliminary conclusions, the amortized cost calculated under IFRS amounts to $1,737,000 in our opening statement of financial position, resulting in a $1,270,000 increase in opening shareholders' equity and corresponding decrease in liability.

Income taxes

- All changes to the opening statement of financial position will require that a corresponding tax asset or liability be established based on the resultant differences between the carrying value of assets and liabilities and their associated tax bases. In addition, a future tax liability (asset) will be recognized for exchange gains and losses relating to foreign non-monetary assets and liabilities that are re-measured into the functional currency using historical exchange rates. Although impacts are mostly quantified at the end of 2010, the review of such tax transition adjustments is still underway.

Net effect on Equity

- Per our preliminary estimate, the impact of the conversion to IFRS will increase opening shareholders' equity by approximately $10 million. As a result, the shareholders' equity, as reported under Canadian GAAP as at December 31, 2009, would increase approximately from $273 million to $283 million, following conversion to IFRS.

The adjustments identified reflect our best estimate given all information available as at the date of this MD&A. The IFRS project team is consistently monitoring any new announcements from the standard setters and regulatory authorities, and will report to management immediately if there are any pronouncements that would result in a change to the above transition adjustment quantified for the opening statement of financial position as at January 1, 2010. At the present time however, we are not aware of any significant expected changes that would materially impact the quantitative disclosures presented above.

16. Disclosure Controls and Procedures

In accordance with Multilateral Instrument 52-109 – Certification of Disclosure in Issuers' Annual and Interim Filings, an evaluation of the effectiveness of the Corporation's disclosure controls and procedures ("DC&P") and its internal control over financial reporting ("ICFR") was conducted. Based on this evaluation, the President and Chief Executive Officer and the Chief Financial Officer have concluded that DC&P and ICFR were effective as of the year-end ended December 31, 2010, and that, as a result, ICFR design provides reasonable assurance that material information relating to the Corporation is made known to them by others within those entities, particularly during the period in which the annual filings are being prepared, and the information that the Corporation must present in its annual documents, its interim documents or in other documents it files or submits under securities regulations is recorded, processed, condensed and presented within the times frames prescribed by this legislation. Furthermore, ICFR design provides reasonable assurance that the Corporation's financial information is reliable and that its financial statements have been prepared, for the purpose of publishing financial information, in accordance with the Corporation's GAAP. Lastly, no changes to the ICFR that have had or are likely to have a significant effect on this control mechanism were identified by management during the accounting period commencing on October 1, 2010 and ending on December 31, 2010.

17. Non-GAAP Measures

Throughout this document, we have provided measures prepared according to Canadian GAAP, as well as some non-GAAP performance measures. Because the non-GAAP performance measures do not have any standardized meaning prescribed by GAAP, they may not be comparable to similar measures presented by other companies. We provide these non-GAAP measures as they may be used by some investors to evaluate our performance. Accordingly, they are intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with Canadian GAAP. For the non-GAAP measures not already reconciled within the document, we have defined the non-GAAP measures below and reconciled them to reported GAAP measures.

Cash Operating Cost

A reconciliation of cash operating cost calculated in accordance with the Gold Institute Standard to the operating costs is included in the following table:

Per Ounce Produced	Mana	Samira Hill	Kiniero	2010 Total
Gold ounces produced	**179,700**	**51,300**	**30,100**	**261,100**
(In thousands of dollars except per ounce)				
Operating costs and government royalties (relating to ounces sold)	**74,858**	**39,132**	**20,866**	**134,856**
Government royalties and selling expenses	**(8,133)**	**(3,744)**	**(2,184)**	**(14,061)**
Effects of inventory adjustments (doré bars)	**(236)**	**935**	**97**	**796**
Operating costs (relating to ounces produced)	**66,489**	**36,323**	**18,779**	**121,591**
Cash operating cost (per ounce produced)	**370**	**708**	**624**	**466**

Per Ounce Produced	Mana	Samira Hill	Kiniero	2009 Total
Gold ounces produced	153,500	56,900	32,000	242,400
(In thousands of dollars except per ounce)				
Operating costs and government royalties (relating to ounces sold)	60,465	42,816	20,984	124,265
Government royalties and selling expenses	(5,365)	(3,800)	(1,938)	(11,103)
Effects of inventory adjustments (doré bars)	713	(1,201)	(348)	(836)
Operating costs (relating to ounces produced)	55,813	37,815	18,698	112,326
Cash operating cost (per ounce produced)	364	665	584	463

17. Non-GAAP Measures (continued)

Per Tonne Processed	Mana	Samira Hill	Kiniero	2010 Total
Tonnes of ore processed	**1,947,800**	**1,207,500**	**469,900**	**3,625,200**
(In thousands of dollars except per ounce)				
Operating costs (relating to ounces sold including government royalties)	**74,858**	**39,132**	**20,866**	**134,856**
Government royalties and selling expenses	**(8,133)**	**(3,744)**	**(2,184)**	**(14,061)**
Effects of inventory adjustments (doré bars and gold in circuit)	**361**	**553**	**(1,234)**	**(320)**
Operating costs (relating to tonnes processed)	**67,086**	**35,941**	**17,448**	**120,475**
Cash operating cost (per tonne processed)	**34**	**30**	**37**	**33**

Per Tonne Processed	Mana	Samira Hill	Kiniero	2009 Total
Tonnes of ore processed	1,401,700	1,505,900	492,200	3,399,800
(In thousands of dollars except per ounce)				
Operating costs and government royalties (relating to ounces sold)	60,465	42,816	20,984	124,265
Government royalties and selling expenses	(5,365)	(3,800)	(1,938)	(11,103)
Effects of inventory adjustments (doré bars and gold in circuit)	(523)	(427)	549	(401)
Operating costs (relating to tonnes processed)	54,577	38,589	19,595	112,761
Cash operating cost (per tonne processed)	39	26	40	33

Operating Cash Flow Per Share

(In thousands)	2010	2009	2008
Cash flow from operating activities [1]	**147,451**	**92,147**	56,339
Weighted average number of outstanding common shares	**262,512**	**242,124**	213,547
Operating cash flow per share	**0.56**	**0.38**	0.26

[1] Cash flow from operating activities excludes changes in non-cash working capital items and settlement of liabilities related to asset retirement obligations for property, plant and equipment.

18. Additional Information and Continuous Disclosure

This MD&A has been prepared as of March 15, 2011. Additional information on the Corporation is available through regular filings of press releases, financial statements and its Annual Information Form on SEDAR (www.sedar.com). You may also find these documents and other information about SEMAFO on our web site at www.semafo.com

19. Forward-Looking Statements

This MD&A contains forward-looking statements. These forward-looking statements include, but are not limited to, statements regarding expectations of the Corporation as to the market price of gold, strategic plans, future commercial production, production targets, timetables, mining operating expenses, capital expenditures, and mineral reserve and resource estimates. Forward-looking statements involve known and unknown risks and uncertainties and accordingly, actual results and future events could differ materially from those anticipated in such statements. Factors that could cause future results or events to differ materially from current expectations expressed or implied by the forward-looking statements include, but are not limited to, fluctuations in the market price of precious metals, mining industry risks, uncertainty as to calculation of mineral reserves and resources, risks related to hedging strategies, risks of delays in construction, requirements of additional financing, increase in tax or royalty rates or adoption of new interpretations related thereto and other risks described in this MD&A and in the Corporation's other documents filed from time to time with Canadian securities regulatory authorities. Although the Corporation is of the opinion that these forward-looking statements are based on reasonable assumptions, those assumptions may prove to be incorrect. Accordingly, readers should not place undue reliance on forward-looking statements. Readers can find further information with respect to risks in the Annual Information Form of the Corporation and other filings of the Corporation with Canadian securities regulatory authorities available at www.sedar.com. The Corporation disclaims any obligation to update or revise these forward-looking statements, except as required by applicable law.