RED BACK MINING INC.

First Quarter Report

March 31, 2010

RED BACK MINING INC.
MANAGEMENT DISCUSSION AND ANALYSIS
OF RESULTS OF OPERATIONS AND FINANCIAL CONDITION
THREE MONTHS ENDED MARCH 31, 2010

The following management discussion and analysis of the results of operations and financial condition ("MD&A") for Red Back Mining Inc. ("Red Back" or the "Company") should be read in conjunction with the unaudited consolidated financial statements for the three month period ended March 31, 2010 and related notes thereto. The financial information in this MD&A is partly derived from the Company's consolidated financial statements prepared in accordance with Canadian generally accepted accounting principles. The effective date of this MD&A is April 30, 2010. Additional information about the Company and its business activities is available on SEDAR at www.sedar.com.

The technical contents of this MD&A have been reviewed by Hugh Stuart, BSc, MSc, a Qualified Person pursuant to NI 43-101. Mr. Stuart is the Vice President Exploration of the Company and a Member of the Australasian Institute of Mining and Metallurgy.

Red Back is a company engaged in operating, exploring, acquiring and developing mineral properties. It currently owns two gold mines in West Africa. In Ghana, it holds a 100% interest in the Chirano Gold Mine ("Chirano") through Chirano Gold Mines Limited ("CGML"). The Government of Ghana has a right to acquire a 10% ownership of CGML, at no cost. In Mauritania, the Company holds a 100% interest in the Tasiast Gold Mine ("Tasiast") through Tasiast Mauritanie Limited SA ("TMLSA"). In addition to government royalties, Tasiast is subject to a 2% royalty on gold production in excess of 600,000 oz. Red Back also holds various other exploration properties in Ghana, Mauritania and Côte D' Ivoire.

Highlights

With the gold price averaging over $1,100 per oz and gold production of approximately 100,000 oz in the quarter, Red Back is reporting strong profits and operating cash flows from operations during the first three months of 2010. The Company's production profile is expected to increase in the second and subsequent quarters with greater contributions from underground mining at the higher grade Akwaaba deposit in Chirano and dump leach operations at Tasiast. As a result, annual production is expected to be 485,000 – 525,000 oz at estimated cash operating costs of $390 - $420 per oz, unchanged from the original forecast.

The Company's first quarter highlights were:

- Total gold production of 96,160 oz.
- Average realized gold price of $1,115 per oz.
- Net income of $33.2 million.
- Cash operating costs of $475 per oz.
- 64% increase in reserves at Tasiast, now at 5.0 million oz.

Results of Operations

Net income for the three months ended March 31, 2010 was $33.2 million (March 31, 2009: $25.3 million). The first quarter results include a $2.7 million gain from foreign currency transactions (March 31, 2009: nil). Profits from mining operations are up 69% compared to the same quarter in 2009 due to increased production and higher gold prices, only partially affected by higher costs.

Compared to the same period in 2009, cash operating costs per oz for the first three months of the year have increased mainly as a result of lower grades and higher mining and energy costs at Tasiast and higher mining costs during the ramp-up of underground mining at Chirano. Cash costs are projected to decrease with increasing underground production at Chirano and higher recoveries from dump leach operations at Tasiast as the year progresses.

Summary of Financial Results								
Quarter Ended	**Mar 10**	**Dec 09**	**Sep 09**	**Jun 09**	**Mar 09**	**Dec 08**	**Sep 08**	**Jun 08**
Total revenue ($'000)	109,995	114,026	69,152	69,353	65,858	54,650	54,200	60,396
Net income (loss) ($'000)	33,168	24,038	35,113	24,666	25,345	7,983	10,568	23,485
Net income (loss) per share ($)	0.14	0.10	0.15	0.11	0.12	0.04	0.06	0.12

Key operating statistics for the first quarter are provided below.

	Three months ended March 31, 2010			Three months ended March 31, 2009		
	Chirano	Tasiast	Total	Chirano	Tasiast	Total
Ore tonnes mined, open cut ('000t)	718	1,565	2,830	827	959	1,786
Ore tonnes mined, underground ('000t)	129	-	129	10	-	10
Ore tonnes placed on DL ('000t)	-	958	958	-	-	-
Average grade of DL tonnes (g/t)	-	0.7	0.7	-	-	-
Ore tonnes milled ('000t)	795	517	1,312	613	351	964
Average grade (g/t)	1.9	2.9	2.3	2.0	3.4	2.5
Average recovery	89.5%	89.5%	89.5%	91.0%	94.1%	92.1%
Gold produced, CIL (oz)	43,940	40,685	84,625	34,258	36,150	70,408
Gold produced, dump leach (oz)	-	11,535	11,535	-	-	-
Gold produced, total (oz)	43,940	52,220	96,160	34,258	36,150	70,408
Gold sold (oz) *(Note 2)*	44,421	54,266	98,687	35,547	36,285	71,832
Realized gold price per oz	$1,121	$1,109	$1,115	$914	$920	$917
Cash operating costs per oz *(Note 3)*						
Operating	$595	$377	$475	$509	$271	$389
Royalties	$ 39	$ 62	$ 52	$ 26	$ 28	$ 27
Depreciation, amortization and accretion per oz *(Note 4)*	$138	$151	$145	$ 80	$200	$140

Note 1: Production statistics may not calculate exactly due to rounding.
Note 2: 2009 gold sold at Chirano excludes 1,467 oz recovered from underground operations and capitalized during pre-production development.
Note 3: This is a non-GAAP measure. It is calculated by dividing costs on the statement of income and retained earnings by gold oz sold.
Note 4: For Tasiast, approximately $41 per oz (2009: $94 per oz) of depreciation and amortization are due to the amortization of the fair value excess on purchase of the Tasiast mineral properties in 2007.

Tasiast Gold Mine - Mauritania

Tasiast's 30 year mining lease is located in the north-western part of Mauritania, approximately 300 kilometres north of the capital of Nouakchott and 162 kilometres east-southeast of the port city of Nouâdhibou. Tasiast's exploration licenses include an 80 kilometre strike length of the Aoueouat greenstone belt of Achaean age. To March 31, 2010, drilling in support of the resources and reserves only covers 8 kilometres of this belt.

The life of mine plan includes the Piment and the West Branch deposits. Drilling results to date have expanded the in-situ reserves from 2.3 million oz at December 31, 2008 to 5.0 million oz at December 31, 2009, as detailed in the table below.

	Tonnes (Mt)	Au (g/t)	Ounces (Moz)
Total Proven	49.4	1.36	2.17
Total Probable	61.5	1.40	2.77
Total Stockpile	4.3	0.68	0.09
Total	115.2	1.36	5.03

Note: the ore reserve estimate used a gold price of US$800

The existing ore body is open both at depth and along strike to the north and south. Nine drill rigs currently operate at Tasiast as part of an extensive exploration program to further expand the resource and reserves.

The reserves include lower grade oxide ore which is being processed by dump leaching. The Company is in the final stages of analysis towards establishing the economics of processing low grade fresh ore by heap leaching. Completion of this work should occur in the first half of 2010 followed by the estimation of an initial heap leach reserve in the third quarter.

Tasiast's production in the first quarter of 2010 was 52,220 oz (2009: 36,150 oz) at a cash operating cost of $377 per oz (2009: $271 per oz). Compared to the same period in 2009, quarterly cash costs were adversely affected by lower grade and higher mining and energy costs. Notwithstanding higher production (tonnes mined and processed) and a larger asset base following completion of the expansions in 2009, depreciation for the current quarter has not increased significantly compared to the same period in 2009 because of the increase in reserves which has a positive effect on "unit-of-production" calculations. Subject to the effect of increasing production, this is expected to continue for the balance of the year.

Increased gold production is projected over the next three quarters. Tasiast forecast production for 2010 continues to be estimated at 245,000 - 265,000 oz at a cash operating cost of $325 to $350 per oz.

Royalties for 2010 will exceed the expected rate of 3% of revenues because they include expansion fees due to the government of Mauritania relating to the receipt of final permits for the 2009 plant expansion project. Royalty costs will reduce back to the standard rate of 3% in 2011. An advance payment towards the 2010 expansion fee was made in the first quarter. As a result, at March 31, 2010 $6.4 million has been recorded as a prepaid expense on the balance sheet and will be expensed during the balance of the year.

Chirano Gold Mine - Ghana

The Chirano mining lease, granted in April 2004, is situated in south-western Ghana, 100 kilometres southwest of Kumasi, Ghana's second largest city. The project is within the Bibiani gold belt and the present mining plan includes a series of open pit deposits and the high grade Akwaaba underground mine. Gold mineralization continues at depth below the current open pit designs at many of the deposits currently included in the mine plan. The table below outlines the reserves for the open pit and the Akwaaba underground deposit at December 31, 2009.

	Tonnes (Mt)	Au (g/t)	Ounces (Moz)
Total Proven	16.4	1.55	0.82
Total Probable	13.6	3.00	1.31
Total Stockpile	3.2	1.07	0.11
Total	33.2	2.10	2.24

Note: the ore reserve estimate used a gold price of US$800

In addition, drilling continues at the underground deposits of Paboase and Akoti, which now include an indicated resource of 248,000 oz plus an additional 610,000 oz of inferred resources. An initial underground reserve will be estimated mid-year. Preparations for underground development at Paboase commenced in April 2010.

Chirano's production in the first quarter of 2010 was 43,940 oz (2009: 34,258 oz) at a cash operating cost of $595 per oz (2009: $509 per oz). Cash operating costs are higher compared to the same periods in 2009 due to the impact of the higher cost underground mining operations which have not yet achieved full scale planned throughput. Partially offsetting this were lower production and electricity costs.

Underground mining at the higher grade Akwaaba operation is ramping up and significant increases in production are forecast starting in the second quarter. As a result, the impact of the higher cost underground mining operations on cash cost per oz will lessen as higher mining volumes are reached as the year progresses. For the year, Red Back continues to forecast production from Chirano to be between 240,000 and 260,000 oz at a cash cost of $460 to $490 per oz.

Other Income Statement Items

Interest expense in 2010 relates to stand-by fees and deferred financing charges on an undrawn revolving facility. Interest income is higher in 2010 compared to 2009 because of a higher average cash balance on hand notwithstanding lower interest rates.

General and administrative costs in 2010 include a $402,000 charge relating to common share issued out of treasury for a donation in support of the promotion of mining activities.

The granting of stock-based awards and the determination of their vesting period is at the discretion of the Board. Accordingly, the related expense is not expected to be uniform across quarters or financial years. The increase in stock-based remuneration is also directly affected by the increase in the share price of the Company during the quarter as it affects the valuation of existing stock appreciation rights and deferred share units.

Foreign exchange gains realized in the first quarter were $2.7 million as Red Back reduced its exposure to Canadian dollars following appreciation of this currency during the last twelve months.

Minority interest of $1.0 million reflects the Government of Ghana's right to back-in to a 10% ownership of CGML, at no cost, and is recognized only to the extent of accumulated retained earnings in the operating subsidiary. At March 31, 2009, the subsidiary still had an accumulated deficit and, therefore, no minority interest had been recognized.

Income Taxes

The income tax expense for the quarter relates fully to the Ghanaian operations. Future income taxes were recorded using the Ghanaian income tax rate of 25%. Current income taxes relate to a special tax levy that applies to Ghanaian companies in selected industries, including the mining sector. This levy, calculated at 5% of net income before income taxes, is temporary and applicable to 2010.

No income tax provision is recorded for the Tasiast operations in Mauritania as they are exempt from income tax until the end of 2010.

Other comprehensive income

Other comprehensive income includes the effect of realized and unrealized foreign exchange gains on cash balances held in a currency other than the US dollar. As at March 31, 2010, Red Back held CAD $93.3 million (December 31, 2009: CAD $118.2 million).

Liquidity and Capital Resources

At March 31, 2010 the Company had cash and cash equivalents of $160 million (December 31, 2009: $150 million) and working capital of $236 million (December 31, 2009: $218 million).

Capital cost additions for property, plant and equipment for the first three months of the year total $11.2 million and can be summarized as follows:

(Amounts in millions of dollars)	**Chirano**	**Tasiast**	**Total**
Plant enhancement projects	$ 2.7	$ 1.1	$ 3.8
Mining fleet	-	3.5	3.5
Others	2.3	1.6	3.9
Total	$ 5.0	$ 6.2	$ 11.2

Additions to exploration and development costs totalling $31.4 million are mainly attributable to:
- the underground development activities at Akwaaba and Paboase at Chirano ($7.6 million);
- ongoing discretionary exploration to identify new resources (Chirano: $3.5 million; Tasiast: $7.8 million);
- open pit cut backs to provide access to additional ore reserves at Chirano ($4.6 million);
- tailings dam lifts at Chirano ($4.5 million) and at Tasiast ($1.5 million); and
- dump and heap leach development at Tasiast ($1.3 million).

As at March 31, 2010, the Company had purchase commitments totalling $10.8 million.

Contingency

In late 2009, CGML received a notice of re-assessment of prior years' income tax returns from the Ghanaian tax authorities denying approximately $90 million of past, current and future income tax deductions and imputing additional revenues of approximately $30 million, both related to the tax treatment of hedge contracts entered into in 2005 as part of the original bank project financing required for the construction of the Chirano Gold Mine. CGML is vigorously defending its original tax filing position. The final outcome of this matter is not determinable at this time. Should the re-assessment be ultimately upheld, it would result in the recognition of additional future income tax liabilities of approximately $22 million.

Transactions with Related Parties

During the first three months of the year, Red Back paid $0.1 million (March 31, 2009: $0.1 million) to a company controlled by a director for management services.

Critical Accounting Estimates

There have been no material changes to the critical accounting estimates discussed in the annual MD&A filed on SEDAR on February 26, 2010.

Significant Accounting Policies

The Company continues to follow the accounting policies described in the audited consolidated financial statements for the year ended December 31, 2009 that was filed on SEDAR on February 26, 2010.

International Financial Reporting Standards

In January 2006, the Canadian Accounting Standards Board adopted a strategic plan, which includes the decision to move financial reporting for Canadian publicly accountable enterprises to a single set of globally accepted high-quality standards, namely, International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board. The effective implementation date of the conversion from Canadian generally accepted accounting principles ("Canadian GAAP") to IFRS is January 1, 2011, with an effective transition date of January 1, 2010 for financial statements prepared on a comparative basis. Red Back is engaged in an assessment and conversion process which includes consultation with external consulting firms and expects to be ready for the conversion to IFRS in advance of January 1, 2011. As part of the conversion process, the Company has offered IFRS specific training to senior financial reporting personnel and directors.

The Company's approach to the conversion to IFRS includes three phases.

- Phase one, an initial general diagnostic of its accounting policies and Canadian GAAP relevant to its financial reporting requirements to determine the key differences and options with respect to acceptable accounting standards under IFRS. This phase was completed in late 2008.
- Phase two, an in depth analysis of the IFRS impact in those areas identified under phase one. This phase commenced in 2009 and is nearing completion. A summary of this analysis is provided in Appendix A to the MD&A.
- Phase three, the implementation of the conversion process, including the completion of the opening balance sheet as at January 1, 2010 together with related discussion and notes, will be carried out in the second half of 2010.

At this point, the Company's IT accounting and financial reporting systems are not expected to be significantly impacted. Further, the Company has in place internal and disclosure control procedures to ensure continued effectiveness during this transition period.

The above comments, including the summary in Appendix A, should not be considered as a complete and final list of the changes that will result from the transition to IFRS as the Company intends to maintain a current and proactive approach based on changes in circumstances and no final determinations have been made. In addition, the accounting bodies responsible for issuing Canadian and IFRS accounting standards have significant ongoing projects that could impact the Company's financial statements as at January 1, 2011 and in subsequent years, including projects regarding financial instruments and joint venture accounting. In addition, there is an extractive industries project currently underway that will lead to more definitive guidance on the accounting for exploration and evaluation expenditures, although this is still in the discussion paper stage and may not be completed for some time. The Company is continuing to monitor the development of these projects and will assess their impact in the course of its transition process to IFRS.

Financial Instruments and Related Risks

The Company's financial instruments consist of cash and cash equivalents, accounts receivable, marketable securities, and accounts payable and accrued liabilities. Cash and cash equivalents are classified as available for sale financial assets, recognized at fair value, with any unrealized gain or loss recorded in other comprehensive income. The fair value of all other financial instruments approximates their carrying values, due to their short-term maturity or capacity of prompt liquidation.

As at March 31, 2010, the Company's currency risk was limited to $91.6 million of cash balances denominated in Canadian dollars ($112.5 million at December 31, 2009). Based on this exposure, a 10% change in the Canadian/US dollar exchange rate would give rise to an increase/decrease in other comprehensive income of approximately $9.2 million. The Company has no other significant exposure to single individual currencies other than the US dollar because its revenues and the majority of its costs are measured in US dollars.

Red Back does not currently have financial instruments that are exposed to significant commodity or credit risks because the Company has not engaged in derivative commodity transactions or have large loans and receivables with third parties requiring a review of credit worthiness. Further, the Company is not exposed to significant liquidity risk because of the nature of the financial assets it currently holds. In addition, cash and cash equivalents are held through large financial institutions and, as at March 31, 2010, were with counterparties with high credit ratings.

Outstanding Share Data

As at April 30, 2010 the Company had 232,459,885 common shares issued and outstanding and 4,983,336 share options outstanding under its stock-based incentive plan.

Uncertainties and Risk Factors

There has been no material change in the uncertainties and risk factors affecting Red Back's activities that were discussed in the annual MD&A filed on SEDAR on February 26, 2010.

Outlook

Except for the increase in reserves estimates at Tasiast which are discussed in an earlier section of this MD&A, during the first quarter there were no significant changes in the business outlook of the Company discussed in the annual MD&A filed on SEDAR on February 26, 2010.

Internal Controls over Financial Reporting and Disclosure Controls

Management is responsible for the design of internal controls over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements in accordance with accounting principles generally accepted in Canada. The Company believes its internal controls and procedures are effective in providing reasonable assurance that financial information is recorded, processed, summarized and reported in a timely manner.

There have been no changes in Red Back's internal control over financial reporting during the quarter ended March 31, 2010 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

Management is also responsible for the design and effectiveness of disclosure controls and procedures to provide reasonable assurance that material information related to the Company, including its consolidated subsidiaries, is made known to the Company's certifying officers.

Cautionary Note Regarding Forward-Looking Statements

This document contains "forward looking statements" concerning anticipated developments and events that may occur in the future. Forward looking statements include, but are not limited to, statements with respect to the future price of gold, the estimation of mineral reserves and resources, the realization of mineral reserve estimates, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of the development of new deposits, success of exploration activities, permitting time lines, currency fluctuations, requirements for additional capital, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims and limitations on insurance coverage. In certain cases, forward looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward looking statements. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward looking statements in the section entitled "Risk Factors", there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward looking statements. These forward looking statements are made as of the date of this document and, other than as required by applicable securities laws, the Company assumes no obligation to update or revise them to reflect new events or circumstances.

APPENDIX A: Summary of financial statements impact on transition from Canadian GAAP to IFRS

Key Area	Canadian GAAP (applied by Red Back)	IFRS	Analysis and preliminary conclusions
Property, plant and equipment	PP&E is recorded at historical cost Depreciation is based on their useful lives after due estimation of their residual values	PP&E can be recorded using the cost (on transition to IFRS, the then fair value can be deemed to be the cost) or revaluation models Depreciation must be based on the useful lives of each significant component within PP&E	PP&E will likely continue to be recorded at their historical costs due to the complexity and resources required to determine fair values on an annual basis Based on an analysis of PP&E's significant components, the Company has determined that no change to their useful lives is warranted and, therefore, depreciation expense will continue to be calculated using the same rates under IFRS
Mineral properties	Exploration, evaluation and development costs are capitalized when incurred. They are amortized on the basis of production or written off when the prospect is no longer deemed prospective or is abandoned	IFRS has limited guidance with respect to these costs and currently allows exploration and evaluation costs to be either capitalized or expensed	The existing accounting policy is likely to be maintained
Asset retirement obligations	Canadian GAAP limits the definition of ARO's to legal obligations ARO is calculated using a current credit-adjusted, risk-free rate for upward adjustments, and the original credit-adjusted, risk-free rate for downward revisions. The original liability is not adjusted for changes in current discount rates	IFRS defines ARO's as legal or constructive obligations ARO is calculated 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) and is revised every reporting period to reflect changes in assumptions or discount rates IFRS requires that, on transition, the net book value of the asset related to ARO be adjusted on the basis of the ARO balance existing at inception. IFRS allows a company to use current estimates of future reclamation costs and current amortization rates to determine the net book value on transition to IFRS ("IFRS 1 exemption")	The broadening of this definition is unlikely to cause a significant change in the Company's current estimates The Company is in the final stages of quantifying the impact of this change on the ARO provision. The impact on ARO will have a corresponding opposite effect on opening retained earnings Red Back expects to rely on the IFRS 1 exemption and is in the final stages of quantifying the impact of this change. The impact of this change will have a corresponding opposite effect on opening retained earnings

Impairment of long lived assets	Impairment tests of its long-term assets are considered annually based on indications of impairment Impairment tests are generally done on the basis of undiscounted future cash flows Write-downs to net realizable values under an impairment test are permanent changes in the carrying value of assets	Impairment tests of "cash generating units" are considered annually in the presence of indications of impairment Impairment tests are generally carried out using the discounted future cash flow Write downs to net realizable values under an impairment test can be reversed if the conditions of impairment cease to exist	Assets will continue to be grouped under the Company's two gold mining operations, Chirano and Tasiast. Currently, there are no indications of impairment and, therefore, no impairment test has been performed Impairment tests using discounted values could generate a greater likelihood of write downs in the future Potential significant volatility in earnings could arise as a result of the difference in the treatment of write-downs
Stock-based compensation	Stock-based compensation is determined using fair value models (e.g. Black-Scholes) for equity-settled awards and the intrinsic model for cash-settled awards	Stock-based compensation is determined using fair value models for all awards. However, upon settlement, cash-settled awards are adjusted to the value actually realized (intrinsic model)	The utilization of fair value models for cash-settled awards will change the estimate of the related liability while the awards remain outstanding and create greater volatility in earnings until the awards are settled. The Company is in the final stages of quantifying the impact of this change and the corresponding opposite effect on opening retained earnings
Income taxes	Deferred tax assets or liabilities for temporary differences arising from changes in foreign exchange where the functional currencies for accounting and tax purposes are different are not recognized	Deferred tax assets or liabilities for temporary differences arising from changes in foreign exchange where the functional currencies for accounting and tax purposes are different are recognized	Red Back's currencies for tax purposes are not the same as its functional currency, the US dollar. This will create volatility in future earnings calculated under IFRS because earnings will fully reflect changes in the future tax liability due to ongoing fluctuations between the US dollar and the currencies used for tax purposes. Utilization or elimination of the underlying temporary differences giving rise to the future tax liability will cause the reversal of any related foreign exchange impact recorded previously. The Company is in the final stages of quantifying the impact of this change and the corresponding opposite effect on opening retained earnings

Note: the above assessments and conclusions are based on the analysis completed by the Company as of the date of this report and may be subject to change between now and January 1, 2011, the actual date of the adoption to IFRS.

RED BACK MINING INC.
CONSOLIDATED BALANCE SHEETS
(in Thousands of United States Dollars, Unaudited)

	March 31, 2010	December 31, 2009
ASSETS		
Current assets		
Cash and cash equivalents	$ 160,715	$ 150,471
Accounts receivable	28,621	32,795
Inventories (Note 2)	79,554	76,779
Prepaid expenses	8,415	2,298
	277,305	262,343
Deferred charges	410	490
Property, plant and equipment (Note 3)	273,137	269,246
Mineral properties and related expenditures (Note 4)	453,266	429,052
	$ 1,004,118	$ 961,131
LIABILITIES		
Current liabilities		
Accounts payable and accrued liabilities	$ 41,010	$ 43,256
Taxes payable	748	929
	41,758	44,185
Non current liabilities		
Asset retirement obligations (Note 5)	11,607	11,492
Future income tax liability	58,741	55,000
Other liabilities	4,501	2,073
	74,849	68,565
Minority interest	2,048	1,008
Shareholders' equity		
Share capital (Note 6)	763,331	758,243
Contributed surplus (Note 7)	6,568	7,201
Accumulated other comprehensive income	15,566	15,099
Retained earnings	99,998	66,830
	885,463	847,373
	$ 1,004,118	$ 961,131

Commitments and contingency (Note 10)

Approved by the Board:

"Richard P. Clark" ***"Lukas H. Lundin"***

Director **Director**

See accompanying notes to consolidated financial statements.

RED BACK MINING INC.
CONSOLIDATED STATEMENTS OF INCOME AND RETAINED EARNINGS (DEFICIT)
(in Thousands of United States Dollars, Unaudited)

	Three Months Ended March 31	
	2010	**2009**
Gold revenue	$ 109,996	$ 65,858
Costs and expenses		
Operating	46,863	27,943
Depreciation and amortization	14,327	10,085
Accretion	115	135
Royalties	5,111	1,922
Income from mining operations	43,580	25,773
Depreciation	3	4
General and administrative	2,059	1,285
Interest expense and bank charges	187	147
Stock based compensation	5,386	1,563
Write-off of exploration costs	166	-
Interest income	(247)	(196)
	7,554	2,803
Income before the undernoted items	36,026	22,970
Foreign exchange gain	2,671	-
Gain on sale of marketable securities	-	3,020
Income before income taxes	38,697	25,990
Current income tax expense	(748)	-
Future income tax expense	(3,741)	(645)
	(4,489)	(645)
Net income before minority interest	34,208	25,345
Minority interest	(1,040)	-
Net income	33,168	25,345
Retained earnings (deficit), beginning of the period	66,830	(42,332)
Retained earnings (deficit), end of the period	$ 99,998	$ (16,987)
Income per common share – basic	$ 0.14	$ 0.12
Weighted average number of shares outstanding - basic	232,061,661	217,995,157
Income per common share – diluted	$ 0.14	$ 0.12
Weighted average number of shares outstanding - diluted	234,800,458	219,288,306

See accompanying notes to consolidated financial statements.

RED BACK MINING INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in Thousands of United States Dollars, Unaudited)

	Three Months Ended March 31 2010	2009
Cash flows from (used in) operating activities		
Net income	$ 33,168	$ 25,345
Items not affecting cash		
Amortization and depreciation	14,330	10,089
Accretion	115	135
Deferred charges	80	-
Foreign exchange gain	(2,671)	-
Future income taxes	3,741	645
Gain on sale of marketable securities	-	(3,020)
Minority interest	1,040	-
Shares issued as a donation (note 6(a)(ii))	402	
Stock based compensation	2,448	1,563
Write off of exploration costs	166	-
	52,819	34,757
Net changes in non-cash working capital items		
Accounts receivable and prepaid expenses	(1,943)	(1,004)
Inventories	(2,775)	(1,515)
Accounts payable and accrued liabilities	(11,123)	(2,667)
	36,978	29,571
Cash flows from (used in) investing activities		
Mineral properties and related expenditures	(31,379)	(21,078)
Purchase of property, plant and equipment	(2,179)	(24,867)
Proceeds from the sale of marketable securities	-	26,297
	(33,558)	(19,648)
Cash flows from (used in) financing activities		
Common shares issued, net of cash issue costs	3,686	129,182
Debt issue (repayments)	-	(28,000)
	3,686	101,182
Effect of exchange rate changes on translation of cash denominated in a currency other than the US dollar	3,138	1,392
Increase in cash and cash equivalents	10,244	112,497
Cash and cash equivalents, beginning of the period	150,471	22,205
Cash and cash equivalents, end of the period	$ 160,715	$ 134,702

See accompanying notes to consolidated financial statements.

RED BACK MINING INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in Thousands of United States Dollars, Unaudited)

	Three Months Ended March 31, 2010	2009
Net income	$ 33,168	$ 25,345
Gain on marketable securities reclassified to net income on realization	-	(5,044)
Foreign exchange gain on net assets denominated in other than US dollars reclassified to net income on realization	(2,671)	-
Unrealized foreign exchange gain (loss) on net assets denominated in other than the US dollar	3,138	1,392
Total other comprehensive income	467	(3,652)
Comprehensive income	$ 33,635	$ 21,693

See accompanying notes to consolidated financial statements.

RED BACK MINING INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE THREE MONTHS ENDED MARCH 31, 2010 AND 2009
(Tables in Thousands of United States Dollars, Unaudited)

1. Nature of Operations and Basis of Presentation

Red Back Mining Inc. ("Red Back" or the "Company") is a mineral resource corporation engaged in operating, exploring, acquiring and developing mineral properties. The Company currently owns two gold mines in West Africa. In Ghana, it holds a 100% interest in the Chirano Gold Mine ("Chirano") through Chirano Gold Mines Limited ("CGML"). The Government of Ghana has the right to acquire a 10% ownership of CGML, at no cost. In Mauritania, the Company holds a 100% interest in the Tasiast Gold Mine ("Tasiast") through Tasiast Mauritanie Limited SA ("TMLSA"). The Company also holds various other exploration properties in Ghana, Mauritania and Côte d'Ivoire.

The interim consolidated financial statements are prepared in accordance with Canadian generally accepted accounting principles applicable to interim financial statements. They follow accounting policies and methods of their application consistent with the annual consolidated financial statements as at December 31, 2009, but they do not conform in all respects with the disclosure requirements of generally accepted accounting principles for annual financial statements. Accordingly, they should be read in conjunction with the Company's December 31, 2009 annual consolidated financial statements.

2. Inventories

	March 31, 2010	December 31, 2009
Stockpile ore	$ 26,326	$ 24,059
Dump leach material	4,883	4,521
Gold in circuit	3,684	3,442
Gold in safe	3,695	4,718
Materials and supplies	40,966	40,039
	$ 79,554	$ 76,779

3. Property, Plant and Equipment

	March 31, 2010			December 31, 2009		
	Cost	Accumulated Depreciation	Net Book Value	Cost	Accumulated Depreciation	Net Book Value
Plant and equipment	$ 291,068	$ 46,613	$ 244,455	$287,540	$ 39,706	$ 247,834
Motor vehicles	4,625	2,562	2,063	4,284	2,406	1,878
Buildings	11,573	2,190	9,383	11,475	1,921	9,554
Construction in progress	17,236	-	17,236	9,980	-	9,980
	$ 324,502	$ 51,365	$ 273,137	$313,279	$ 44,033	$ 269,246

4. Mineral Properties and Related Expenditures

	Chirano	Tasiast	Other Projects	Total
Balance, December 31, 2008	$ 126,016	$ 249,276	$ 6,106	$ 381,398
Exploration and evaluation costs	6,302	15,868	2,206	24,376
Development expenditure	49,207	12,392	-	61,598
Change in estimated asset retirement obligations	-	1,333	-	1,333
Amortization	(13,765)	(23,779)	-	(37,544)
Write-off of deferred exploration costs	-	-	(2,110)	(2,110)
Balance, December 31, 2009	$ 167,760	$ 255,090	$ 6,202	$ 429,052
Exploration and evaluation costs	3,479	7,756	635	11,870
Development expenditure	17,189	2,319	-	19,508
Amortization	(3,940)	(3,058)	-	(6,998)
Write-off of deferred exploration costs	-	-	(166)	(166)
Balance, March 31, 2010	$ 184,488	$ 262,107	$ 6,671	$ 453,266

Included in the above balance for Chirano are $37.5 million (December 31, 2009: $32.1 million) of stripping costs incurred subsequent to commencement of production. Amortization of these costs during the three months ended March 31, 2010 amounted to $0.8 million (March 31, 2009: nil).

Chirano Gold Mine

The Chirano Gold Mine comprises one mining lease and one prospecting license held through the Company's 100% subsidiary, CGML. Upon the Government of Ghana exercising its right to back-in to a 10% ownership of CGML, at no cost, the Company will hold a 90% interest in CGML with the Government of Ghana holding 10%.

Tasiast Gold Mine

The Tasiast Gold Mine comprises one mining lease held through the Company's 100% owned subsidiary Tasiast Mauritanie Limited SA ("TMLSA").

Other Exploration Projects

The Company owns interests in a number of other exploration properties in Ghana, Mauritania and Côte d'Ivoire. These interests are represented by various prospecting licenses and option agreements. During the three months ended March 31, 2010, the Company wrote off $0.2 million (2009: nil) of previously deferred exploration costs relating to Ghanaian properties whose interest was relinquished or no longer deemed prospective.

5. Asset Retirement Obligations

Federal, state and local laws and regulations concerning environmental protection affect the Company's operations. Under current regulations, the Company is required to meet performance standards to minimize environmental impact from operations and to perform site restoration and other closure activities. The Company's provisions for future site closure and reclamation costs are based on known requirements at the present time. It is not currently possible to estimate the impact on operating results, if any, of future legislative or regulatory developments.

	Three Months Ended March 31, 2010 Chirano	Tasiast	Total	Year Ended December 31, 2009
Balance, beginning of period	$ 7,512	$ 3,980	$11,492	$ 9,768
Change in estimate	-	-	-	1,333
Accretion expense	75	40	115	391
Balance, end of period	$ 7,587	$ 4,020	$11,607	$11,492

The Company has calculated the fair value of the asset retirement obligation using a discount rate of 4.0%.

6. Share Capital

(a) The Company has an unlimited number of without par value common shares authorized for issuance.

Shares Issued and Outstanding:

	Three Months Ended March 31, 2010 Number of Shares	Amount	Year ended December 31, 2009 Number of Shares	Amount
Balance, beginning of period	231,826,634	$ 758,243	206,095,970	$ 607,914
Issued by short-form prospectus (i)	-	-	22,000,000	126,966
Issued as a share donation (ii)	28,250	402	-	-
Issued on exercise of options	580,000	3,686	3,730,664	17,512
Fair value of options exercised (iii)	-	1,000	-	5,851
Balance, end of period	232,434,884	$ 763,331	231,826,634	$ 758,243

(i) On February 12, 2009, the Company raised gross proceeds of $132.5 million (CAD $165 million) by issuing 22.0 million common shares at a price of CAD $7.50 per share under a short form prospectus financing.

(ii) On March 1, 2010 the Company made a donation of 28,250 common shares from treasury at a total deemed fair value of approximately CAD $500,000.

(iii) Upon exercise of options the pro-rata carrying value is recognized in share capital and the contributed surplus is reduced accordingly.

(b) The Company has two stock option plans (the “2007 Plan” and the “2009 Plan”) to grant new incentive stock options to directors, officers, employees and consultants of the Company. The 2009 Plan is subject to approval by shareholders. The term of any option granted under both plans is fixed by the Board of Directors and may not exceed 10 years from the date of grant. No optionee shall be entitled to a grant of more than 10% of the Company’s outstanding issued shares. The vesting of options is at the discretion of the Board.

Changes in issued and outstanding options under the both plans were as follows:

	Year ended March 31, 2010		Year ended December 31, 2009	
	Options outstanding	Weighted average exercise price (CAD $)	Options outstanding	Weighted average exercise price (CAD $)
Balance, beginning of period	5,733,336	8.30	7,379,000	5.84
Cancelled	-	-	(1,025,000)	6.81
Exercised	(580,000)	6.57	(3,730,664)	5.30
Forfeited	(175,000)	8.84	(110,000)	6.08
Granted	30,000	21.14	3,220,000	9.92
Balance, end of period (i)	5,008,336	8.56	5,733,336	8.30

(i) It includes 1,175,000 stock options granted conditionally under the 2009 Plan at an exercise price of CAD $13.29. The granting of these options is subject to shareholders' approval. The fair value related to these options will be measured as at the shareholders' approval date.

The Company used the Black-Scholes option pricing model in calculating the fair value of stock options granted in the period. The key assumptions used were a risk-free rate of 1.6% (2009: 0.5% - 2.2%), an expected volatility of 76% (2009: 48% - 80%), an expected option life of two years (2009: two to four years), no dividend payments, and a forfeiture rate of 12% (2009: 0% - 12%).

At March 31, 2010, there was $1.2 million (December 31, 2009: $1.8 million) of unearned future compensation costs relating to unvested stock options expected to be recognized over the course of the next three years.

(c) The Company has a SAR's Plan under which the Company can grant SAR's up to a number equal to 2% of its issued and outstanding common shares to officers, employees and consultants or other eligible participants. Under the SAR's Plan, SAR recipients are entitled to receive the cash value equal to the increase in the price of Red Back common shares between the time of grant and the time of the exercise of the SAR's. The term and vesting conditions of any SAR granted under the plan is fixed by the Board of Directors. No SAR recipient is entitled to a grant of SAR's exceeding 1% of the Company's outstanding issued shares.

	Three Months Ended March 31, 2010		Year Ended December 31, 2009	
	Outstanding SAR's	Fair Value	Outstanding SAR's	Fair Value
Balance, beginning of period	1,550,000	$ 1,441,811	-	$ -
Exercised	(50,000)	(367,018)	-	-
Forfeited	(150,000)	(457,500)	-	-
Granted	325,000	-	1,550,000	-
Change in value	-	8,628,479	-	1,441,811
Balance, end of period	1,675,000	$ 9,245,772	1,550,000	$ 1,441,811

Unearned future compensation costs for unvested SAR's expected to be recognized over the course of the next two years account for $6.7 million (December 31, 2009: $1.2 million) of the above balance.

(d) The Company has a DSU's Plan under which the Company can grant DSU's up to a number equal to 1% of its issued and outstanding common shares to non-executive directors of the Board. Under the DSU's Plan, DSU recipients are entitled to receive the cash value of Red Back common shares at the time of their retirement. The vesting conditions of any DSU granted under the plan are fixed by the Board of Directors.

	Three Months Ended March 31, 2010		Year Ended December 31, 2009	
	Outstanding DSU's	Fair Value	Outstanding DSU's	Fair Value
Balance, beginning of period	99,000	$ 1,391,668	-	$ -
Granted	-	-	99,000	1,382,297
Redeemed	(16,000)	(316,258)	-	-
Change in value	-	614,396	-	9,371
Balance, end of period	83,000	$ 1,689,806	99,000	$ 1,391,668

(e) In 2009, the Company granted cash-settled share-based awards based on the increase in Red Back's share price during the period of time in 2009 when no equity-based compensation plan was available to certain officers and employees. The estimated unearned future compensation costs relating to these incentive awards at March 31, 2010 is $3.2 million (December 31, 2009: $4.9 million) and is expected to be recognized over the course of the next 12 to 18 months.

7. Contributed Surplus

	Three Months Ended March 31, 2010	Year Ended December 31, 2009
Balance, beginning of year	$ 7,201	$ 10,506
Fair value of stock-based compensation	367	2,546
Fair value of options exercised	(1,000)	(5,851)
Balance, end of year	$ 6,568	$ 7,201

8. Related Party Transactions

(a) During the three months ended March 31, 2010 the Company paid $0.1 million (2009: $0.1 million) to a company controlled by a director for management services. At March 31, 2010, $nil was due to this company.

9. Segmented Information

	Three Months Ended March 31, 2010			
	Ghana	Mauritania	Others	Total
Gold revenues	$ 49,815	$ 60,181	$ -	$ 109,996
Operating costs and expenses	(28,168)	(23,806)	-	(51,974)
Depreciation, amortization and accretion	(6,225)	(8,217)	-	(14,442)
Profit from mining operations	15,422	28,158	-	43,580
Other income (costs)	(7,413)	(1,883)	(1,116)	(10,412)
Net income (loss)	$ 8,009	$ 26,275	$ (1,116)	$ 33,168

	Three Months Ended March 31, 2009			
	Ghana	Mauritania	Others	Total
Gold revenues	$ 32,490	$ 33,368	$ -	$ 65,858
Operating costs and expenses	(19,030)	(10,835)	-	(29,865)
Depreciation, amortization and accretion	(2,939)	(7,281)	-	(10,220)
Profit from mining operations	10,521	15,252	-	25,773
Other income (costs)	(62)	-	(366)	(428)
Net income (loss)	$ 10,459	$ 15,252	$ (366)	$ 25,345

	As at March 31, 2010			
	Ghana	Mauritania	Others	Total
Current assets	$ 78,291	$ 76,637	$ 122,377	$ 277,305
Capital assets, net of depreciation and amortization	293,821	431,399	1,593	726,813
	372,112	508,036	123,970	1,004,118
Current liabilities	(24,645)	(15,783)	(1,330)	(41,758)
Non-current liabilities	(10,837)	(5,629)	(1,690)	(18,156)
Future income tax liabilities	(12,499)	(46,242)	-	(58,741)
	$ 324,131	$ 440,382	$ 120,950	$ 885,463

	As at December 31, 2009			
	Ghana	Mauritania	Others	Total
Current assets	$ 62,630	$ 69,666	$ 130,047	$ 262,343
Capital assets, net of depreciation and amortization	274,950	422,403	1,435	698,788
	337,580	492,069	131,482	961,131
Current liabilities	(21,166)	(16,115)	(6,904)	(44,185)
Non-current liabilities	(8,702)	(4,123)	(1,748)	(14,573)
Future income tax liabilities	(8,758)	(46,242)	-	(55,000)
	$ 298,954	$ 425,589	$ 122,830	$ 847,373

	Additions to Property Plant and Equipment			
	Ghana	Mauritania	Others	Total
Period ended March 31, 2010	$ 5,012	$ 6,211	$ -	$ 11,223
Period ended March 31, 2009	$ 13,425	$ 9,276	$ -	$ 22,701

The Company operates only in the gold sector.

10. Commitments and Contingency

At March 31, 2010, the Company had purchase commitments totaling approximately $10.8 million (December 31, 2009: $17.1 million).

Late in 2009, CGML received a notice of re-assessment of prior years' income tax returns denying approximately $90 million of past, current and future income tax deductions and imputing additional revenues of approximately $30 million, both related to the tax treatment of hedge contracts entered into in 2005 as part of the original bank project financing required for the construction of the Chirano Gold Mine. CGML is vigorously defending its original tax filing position. The final outcome of this matter is not determinable at this time. Should the re-assessment be ultimately upheld, it would result in the recognition of additional future income tax liabilities of approximately $22 million.

11. Management of Capital

The Company's objectives in managing its capital resources are to safeguard the entity's ability to continue as a going concern and, thereby, maximize returns to shareholders in the context of the market. The Company satisfies its capital requirements through careful management of its cash resources and by utilizing bank indebtedness or equity issues, as necessary, based on the prevailing economic conditions of both the industry and the capital markets and the underlying risks characteristics of the related assets.

In 2009, Red Back completed capital expansion programs at its two mining operations. The Company funded these programs from operating cash flow and existing treasury. In 2009, Red Back also finalized a $30 million corporate bank debt facility to provide it with additional flexibility in pursuing internally generated growth initiatives, or responding to new opportunities.

The Company is not currently subject to any externally imposed requirements on its shareholders' equity and there has been no change with respect to the overall capital risk management strategy during the three month period ended March 31, 2010.

CORPORATE DIRECTORY

OFFICERS
Richard Clark
  President and Chief Executive Officer
Lukas Lundin
  Chairman of the Board
Alessandro Bitelli
  Chief Financial Officer
Simon Jackson
  Vice President – Corporate Development
Kevin Ross
  Chief Operating Officer
Hugh Stuart
  Vice President - Exploration
Kathy Love
  Corporate Secretary

DIRECTORS
Richard Clark
Lukas Lundin
Michael Hunt
  Corporate Governance and Nominating Committee
Robert Chase
  Audit Committee
  Corporate Governance and Nominating Committee
  Compensation Committee
Brian Edgar
  Lead Director
  Audit Committee
  Compensation Committee
  Corporate Governance and Nominating Committee
George Brack
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Computershare Trust Company of Canada
Vancouver, British Columbia and
Toronto, Ontario
Canada

SHARE LISTING
Toronto Stock Exchange
Symbol: RBI
CUSIP No.: 756297107
S.E.C.: 12g3-2(b)
Exemption Number: 82-4286