

# ORVANA

MINERALS CORP.

## MANAGEMENT'S DISCUSSION AND ANALYSIS – For the first quarter ended December 31, 2008

This management's discussion and analysis ("MD&A") of results of operations and financial condition of Orvana Minerals Corp. ("Orvana" or the "Company") was prepared on February 12, 2009 (the "Report Date") and describes the operating and financial results of the Company for the three months ended December 31, 2008. The MD&A should be read in conjunction with Orvana's audited consolidated financial statements and related notes for the fiscal year ended September 30, 2008. The Company prepares and files its financial statements and MD&A in accordance with Canadian generally accepted accounting principles ("Canadian GAAP"). In this MD&A, all dollar amounts (except per unit amounts) are in thousands of United States dollars unless otherwise stated and gold production, in fine troy ounces, is referred to as "ounces".

Throughout this MD&A, the Company has also used some non-GAAP measures, including direct mine operating costs, cash operating costs, total cash costs and total production costs, and related unit cost information, because it understands that certain investors use this information to determine the Company's ability to generate earnings as cash flow for use in investing and other activities. The Company believes that conventional measures of performance prepared in accordance with Canadian GAAP do not fully illustrate the ability of its operating mine to generate cash flow. Non-GAAP measures do not have any standardized meaning prescribed under Canadian GAAP, should not be construed as an alternative to Canadian GAAP reporting of operating expenses, and may not be comparable to similar measures presented by other companies. The measures are not necessarily indicative of cost of sales as determined under Canadian GAAP. Cash costs are determined in accordance with the former Gold Institute's Production Cost Standard.

Certain statements in this MD&A constitute forward-looking statements or forward-looking information within the meaning of applicable securities laws ("forward-looking statements"). Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, potentials, future events or performance (often, but not always, using words or phrases such as "believes", "expects" or "does not expect", "is expected", "anticipates" or "does not anticipate", or "intends" or stating that certain actions, events or results "may", "could", "would", "might" or "will" be taken or achieved) are not statements of historical fact, but are "forward-looking statements". Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of Orvana, or developments in Orvana's business or in its industry, to differ materially from the anticipated results, performance, achievements or developments expressed or implied by such forward-looking statements. Forward-looking statements include disclosure regarding possible events, conditions or results of operations that are based on assumptions about future conditions, courses of action and consequences. Forward-looking statements may also include, without limitation, any statement relating to future events, conditions or circumstances. Orvana cautions you not to place undue reliance upon any such forward-looking statements, which speak only as of the date they are made. Forward-looking statements relate to, among other things, all aspects of the possible development of the Upper Mineralized Zone deposit at the Company's Don Mario Mine in eastern Bolivia and of its potential operation and production; the possible development of the Copperwood Project in the State of Michigan: mineral resource and mineral reserve estimates; the realization of mineral reserve estimates; estimates of future capital expenditures and timing of development and production and estimates of the outcome and timing of decisions with respect to whether and how to proceed with such development and production; permitting time

lines; statements and information regarding future feasibility studies and their results; production forecasts; future transactions; the successful completion of reclamation projects; future gold prices; the ability to achieve additional growth and geographic diversification; future production costs; accounting estimates and assumptions; future tax benefits; the renewal or renegotiation of agreements; future financial performance, including the ability to increase cash flow and profits; future financing requirements; mine development plans; and possible changes in the regulatory, political, social and economic environment in Bolivia. A variety of inherent risks, uncertainties and factors, many of which are beyond the Company's control, affect the operations, performance and results of the Company and its business, and could cause actual results to differ materially from current expectations of estimated or anticipated events or results. Some of these risks, uncertainties and factors include fluctuations in the price of gold; the need to recalculate estimates of reserves and resources based on actual production experience; the failure to achieve production estimates; variations in the grade of ore mined; variations in the cost of operations; the availability of qualified personnel; risks generally associated with mineral exploration and development, including the Company's ability to develop the Upper Mineralized Zone deposit or the Copperwood Project if it determines to do so and to acquire and develop mineral properties; the Company's ability to obtain additional financing when required on terms that are acceptable to the Company; challenges to the Company's interests in its property and mineral rights; current, pending and proposed legislative or regulatory developments or changes in political, social or economic conditions in Bolivia; general economic conditions worldwide and the risks identified below under the heading "Risks and Uncertainties". This list is not exhaustive of the factors that may affect any of the Company's forward-looking statements and reference should also be made to the Company's Annual Information Form for a description of additional risk factors. Forward-looking statements are based on management's current plans, estimates, projections, beliefs and opinions, and except as required by law, the Company does not undertake any obligation to update forward-looking statements should assumptions related to these plans, estimates, projections, beliefs and opinions change. Readers are cautioned not to put undue reliance on forward-looking statements.

Management accepts responsibility for the reliability and timeliness of the information disclosed and confirms the existence and effectiveness of the systems of internal control that are in place to provide this assurance. The Board of Directors assesses the integrity of Orvana's public financial disclosures through the oversight of the Audit Committee.

## **BUSINESS OVERVIEW AND STRATEGY**

### **The Company**

Orvana is a Canadian mining and exploration company based in Toronto, Canada involved in the evaluation, development and mining of precious and base metals deposits in the Americas. The Company owns and operates the Don Mario Mine in eastern Bolivia. The Company's goal is to become a low cost, long-life, diversified producer primarily focused on precious metals in the Americas. The Company's shares have been listed on the Toronto Stock Exchange since 1992 under the trading symbol ORV.

### **Business Strategy**

Orvana's business plan is to use its cash resources and mining capability to achieve additional growth and geographic diversification through projects in the Americas by acquisition of producing mines with characteristics that best fit with its mine development and operating expertise and advanced-stage properties that could potentially be brought into production within three to five years. Management continues to devote a significant amount of time to investigating and evaluating other possible opportunities, largely in the Americas.

During the past year the Company had evaluated numerous properties, had negotiations with vendors, and made several acquisition proposals. The Company completed one transaction, being the mineral leases of the Copperwood Project in Michigan, and continues to aggressively pursue the acquisition of interests in other properties fitting its investment criteria. Current capital market conditions are advantageous to the execution of the Company's strategy, given that the Company has significant cash resources.

The Company is also undertaking exploration activities consisting of regional sampling, trenching and ground geophysics and drilling on other targets located in the ten concessions contiguous to the concession on which the Don Mario Mine is situated to ascertain whether there is any additional gold-bearing ore that could be processed through the existing plant.

Orvana does not currently hedge its gold production.

### **The Don Mario Mine – Lower Mineralized Zone and the Las Tojas Concession**

Through its wholly-owned subsidiary, Empresa Minera Paititi S.A. ("EMIPA"), the Company owns and operates the Don Mario Mine, which includes the Lower Mineralized Zone ("LMZ"), in eastern Bolivia. The principal product of the LMZ is gold in the form of dore bullion, which also contains a small amount of payable silver.

Toward the end of fiscal 2008, Orvana retained AMEC (Perú) S.A. to review the Company's internal estimate of the LMZ mineral reserves and the Las Tojas mineral resources. The mineral reserves estimate was reviewed by AMEC Senior Mining Engineer and Qualified Person Margaret Podhorski-Thomas, P.Eng. The mineral resources estimate for the Las Tojas Project was audited by AMEC Senior Geologist and Qualified Person Christopher Wright, P.Geo. (APGO, 901). An updated National Instrument 43-101 Technical Report on the Don Mario Property including the estimates of the LMZ mineral reserves and the Las Tojas mineral resources will be available within the required time on the Company's website at [www.orvana.com](http://www.orvana.com) and on SEDAR at [www.sedar.com](http://www.sedar.com).

The LMZ is located in the Crystal Schist Belt of eastern Bolivia. Orvana commenced mining at the LMZ in fiscal 2003 and over 370,000 ounces of gold have been produced through September, 2008. The deposit is estimated to have 60,000 ounces of proven reserves of gold remaining as at October 1, 2008 and is expected to be depleted during the third quarter of fiscal 2009. Exploration drilling and development along strike and down dip of the LMZ deposit have not defined additional mineralization of sufficient grade or width to be considered resources to extend the mine life.

### **Mineral Reserves for Don Mario LMZ Effective 30 September 2008**

<b>Classification</b>	<b>'000 tonnes</b>	<b>Au, gpt</b>	<b>Au, oz.</b>
<b>Proven</b>	<b>188</b>	<b>9.98</b>	<b>60,000</b>

**Note:** The remaining mineral reserves for the LMZ have been included in the current LMZ mine plan and have been estimated with 34% dilution at 0 g/t Au, mining recovery of 85% and metallurgical recovery of 94%.

The Las Tojas gold deposit is hosted within a series of parallel northwest-striking, shear zones located within the Eastern Schist Belt of eastern Bolivia. The host rock, a quartz-amphibole-garnet-magnetite-cordierite schist, is similar to that at the LMZ.

The table below summarizes the Las Tojas mineral resources using a cut off of 1 gram per tonne (g/t) gold and contained by an open pit shell optimized to a base mining cost of \$1.20/tonne, a total direct cost of \$23.50/tonne and a gold price of \$750/oz.

## Mineral Resources for Las Tojas Effective 19 December 2008

Type	'000 tonnes	Au, g/t
Measured	262	2.27
Indicated	125	2.07
Inferred	76	1.80

Note: The mineral resources for the Las Tojas Project are contained within an optimized pit shell and are above a 1 g/t Au cut off grade

Given that the grades encountered at Las Tojas are lower than those at the LMZ, the Company has purchased equipment to accommodate an increase in throughput from 750 tonnes/day to 1,900 tonnes/day. Gold mineralization extends below the optimized pit shell and management believes that mine production from the Las Tojas deposit will continue into the third quarter of fiscal 2010.

The lower ore grade of the remaining LMZ ore relative to that mined in fiscal 2008 and the lower grade of the Las Tojas deposit are expected to result in year-on-year declines in gold production in 2009 and 2010 from the 79,604 ounces produced in fiscal 2008.

### The Don Mario Mine – Upper Mineralized Zone

In February 2009, Orvana announced progress of a detailed operational study prepared by Kappes, Cassidy & Associates (“KCA”) of Reno, Nevada on the Don Mario Upper Mineralized Zone (“UMZ”) polymetallic deposit. In addition, AMEC (Peru) S.A. (“AMEC”) audited a NI 43-101 compliant mineral resources estimate completed by Orvana for the UMZ. The mineral resources estimate audited by AMEC is different from that used for the operational study, which demonstrated favourable economics, but with a revised flow sheet.

The detailed operational study of the UMZ described below was completed by or under the supervision of Dan Kappes, an independent Qualified Person for the purposes of NI 43-101. The KCA report will be available on the Company’s website, [www.orvana.com](http://www.orvana.com). It should be noted that the KCA detailed operation study will be modified using the updated mineral resources estimate. The UMZ resources estimate presented below was reviewed by AMEC (Peru) S.A. Senior Geologist Christopher Wright, P.Geo. (APGO, 901), an independent Qualified Person for the purposes of NI 43-101. The NI 43-101 compliant Technical Report on the Don Mario Property including the UMZ mineral resources estimate will be available within the required time on the Company’s website at [www.orvana.com](http://www.orvana.com) and on SEDAR at [www.sedar.com](http://www.sedar.com).

Orvana has commissioned a revised mine plan and economic model based on the revised flow sheet and updated mineral resources estimate.

On the basis of metallurgical test work and more detailed cost estimation and economic analysis, KCA has determined that a simplified process flow sheet that contemplates flotation treatment instead of a combined heap-leach and flotation operation has better economics, with a mill throughput of 1,875 tonnes per day over a nine-year mine life. During the first five years, Oxide and Porous Zone mineralization would be stockpiled and the Transition Zone and Sulphide Zone ore would be treated to recover copper, gold, and silver. In the subsequent

years, the stockpiled oxide material would be treated to recover gold and silver. All the material would be mined by open pit.

In September 2008, Orvana contracted AMEC to audit the updated mineral resources estimate completed by Orvana. The results of the audited mineral resources estimate for the UMZ are as follows:

### Mineral Resources Estimate for UMZ Effective December 2008

Zone	Type	'000 tonnes	Cu, %	Au, g/t	Ag, g/t	AuEq, g/t
Porous	Indicated	539	1.99	1.39	43.4	7.30
	Inferred	45	2.54	1.44	29.3	8.52
Oxide	Indicated	1,788	1.74	1.63	50.7	7.03
	Inferred	173	1.74	1.43	43.8	6.72
Transition	Measured	913	1.32	1.45	51.7	5.78
	Indicated	1,041	1.23	1.33	46.6	5.35
	Inferred	82	1.08	0.95	45.1	4.56
Sulphide	Measured	774	1.19	1.18	32.3	4.82
	Indicated	1,148	1.11	1.05	33.5	4.53
	Inferred	17	0.78	0.95	18.2	3.29
<b>TOTAL</b>	<b>M&amp;I</b>	<b>6,203</b>	<b>1.43</b>	<b>1.37</b>	<b>44.0</b>	<b>5.85</b>

Note: Au equivalent is calculated as  $AuEq = Au (g/t) + Ag (g/t) * (US\$11/oz) / (600 US\$/oz) + Cu (%) / (100 * 2204.64 lb/t * US\$2.25/lb) / (US\$600/oz / 31.103 g/oz)$ . Mineral resources are contained by a pit shell from a 2006 study by NCL Ingenieria y Construccion S.A. (Kolin and Bentzen, 2006) and above a cut off of 1 g/t Au Eq and grades have not been adjusted for metallurgical recovery. Measured and indicated mineral resources are denoted M&I. Mineral resources for the UMZ Project have been verified by QP Christopher Wright, P.Geol.

#### Other Don Mario Concessions

The Don Mario property comprises eleven mineral concessions covering 53,900 hectares providing opportunities for further exploration.

#### Other Mineral Properties in Bolivia

The Company holds certain joint venture interests in a number of mineral concessions located in the Altiplano region of Bolivia as well as a small net smelter return royalty ("NSR") interest in the Central Inlier property in Jamaica. These assets are carried at a nominal amount in the Company's consolidated financial statements and related liabilities and expenses are not material.

#### The Copperwood Project

In September and October, 2008, through its wholly-owned subsidiary Orvana Resources US Corp., Orvana entered into mineral leases covering 712 hectares (1,759 acres) within the "Western Syncline", which is located in the Upper Peninsula of the State of Michigan, USA. The leased areas are referred to as the Copperwood Project. The Copperwood Project is located about 30 kilometers southwest of the now-closed White Pine mine, which produced over 1.7 million tonnes (3.75 billion pounds) of copper between 1952 and 1996, principally from chalcocite-bearing siltstone and shale units at the base of the Nonesuch Formation.

In consideration for annual lease payments, Orvana will have mineral rights until the later of the 20<sup>th</sup> anniversary of the date of the lease or the date Orvana ceases to be actively engaged in

development, mining, or related operations on the property. The lessors have also retained an NSR interest on production from their leases, which will be determined quarterly. The royalty rate ranges from 2% to 4% on a sliding scale based on inflation-adjusted copper prices. Orvana has also acquired exclusive options in the general area of the current mineral leases to lease mineral rights over an additional 1,559 hectares (3,852 acres) on identical terms to the mineral leases.

The Company began baseline studies for the Environmental Impact Assessment at Copperwood during the first quarter of fiscal 2009. The initial phase of surface and subsurface water sampling was completed during January, 2009. This sampling is the first step in the two-year long process of developing a seasonal and long-term characterization of the site, as required by the State of Michigan as part of its mine permit application process. In completing this phase of the assessment, 20 holes for 4,065 feet (1,239 meters) were drilled, packer-tested, and completed as groundwater monitoring wells. Refer to the related press release at [www.orvana.com](http://www.orvana.com) for more details.

In February, 2009, the Company announced the results of five of six water monitor wells that targeted the mineralized sequence. A summary of the results is detailed in the table below:

Hole	From (Feet)	To (Feet)	Interval (Feet)	Cu %	Ag ppm
CW-08-09	124.10	135.35	11.25	1.52	3.0
CW-08-13	449.65	460.35	10.70	2.21	6.9
CW-08-16	668.30	678.30	10.00	2.24	6.4
CW-08-17	538.80	549.30	10.50	1.82	4.2
CW-08-20	310.75	321.00	10.25	1.66	2.9

The Company also reported results from the resampling of core from the 1950s drilling. The results compared well. Refer to the related press release at [www.orvana.com](http://www.orvana.com) for more details. Orvana intends to begin a NI 43-101 compliant resource estimate during fiscal 2009 with the target of production start up in 2013.

### **Social and Environmental Policies**

Orvana is governed by three principles: 1) to be a model of environmental stewardship; 2) to minimize the impact and footprint of operations; and 3) to maximize the use of local services and labour.

In fiscal 2006, Orvana made a five-year financial commitment to the villages in the surrounding area of the Don Mario Mine. The Company is actively involved in the areas of education, sanitation, purchasing of local goods and services and generally working with communities to contribute to and to improve their standard of living. Projects supported by Orvana included supervision of and financial support for community infrastructure development projects such as utilities and parks; education and information technology; cultural events; community business development initiatives; and maintenance of community roads.

As mentioned above, the Company is committed to developing and operating its projects in full compliance with recognized international and local environmental standards and to protect and enhance natural habitats and sensitive species, including reclamation efforts, continuous reforestation efforts and the establishment of water sources for wildlife. As further evidence of its commitments, the Company retained AMEC to provide the design and supervise the construction of the expansion of its tailings dam facility, which has now been completed.

The first significant expenditures on the Copperwood Project are focused on the environmental assessment. In addition to the water monitor wells, a meteorological and air-quality monitoring station was installed on the site and data collection commenced in December 2008. Studies of the site's ecosystem, habitat features and terrestrial and aquatic flora and fauna, have also begun.

## OVERALL PERFORMANCE

### Key Performance Factors

The key factors affecting Orvana's financial performance include gold prices, tax rates, ore reserves, ore grades and recoveries, energy costs, cost control management and efficient mine development and capital spending programs.

### Revenues and Net Income

The Company's results for the three months ended December 31, 2008 and 2007 are summarized in the table below:

	Three months ended December 31	
	2008	2007
Revenues	\$14,165	\$16,077
Net income	3,914	6,865
Earnings per share – basic and diluted	\$0.03	\$0.06

Tonnes treated in the first quarter of fiscal 2009 were 64,238 compared to 66,581 in the first quarter of fiscal 2008. Gold production for the first quarter of fiscal 2009 was 16% lower, at 18,025 ounces, compared to 21,083 ounces for the same period of the prior year, due to lower tonnes milled and lower head grades.

Revenue for the first quarter fiscal 2009 decreased by 12% to \$14,165 on 17,678 ounces sold compared to \$16,077 on 20,607 ounces sold during the same period last year. Lower ounces sold accounted for 14% of the decline in revenue which was partially offset by higher average gold prices which accounted for a 2% increase in revenue. The quantity of gold sold in any period is affected by fluctuations in production volumes and the timing of shipments, which is also subject to weather conditions, timing of smelting to produce gold dore, and security considerations.

Direct mine operating costs were \$3,536 to produce 18,025 ounces in the first quarter of fiscal 2009 compared to \$2,991 to produce 21,083 ounces in the first quarter of fiscal 2008. Increases have been experienced in numerous costs including labour, consumables, reagents, maintenance parts and supplies. Total direct mine operating costs increased on a unit cost per ounce basis to \$196.20 for the first quarter of fiscal 2009 compared to \$141.85 in the first quarter of fiscal 2008, reflecting the unfavourable impact of lower gold production as well as higher costs of inputs.

Direct mine operating costs per treated tonne and per ounce produced are noted in the table below:

	Three months ended December 31	
	2008	2007
Direct mine operating costs	\$3,536	\$2,991
Direct mine operating cost per treated tonne	\$55.28	\$44.92
Direct mine operating cost per ounce produced	\$196.20	\$141.85

A reconciliation of direct mine operating costs to cost of sales is included in the section entitled "Don Mario Mine – Production Cost Analysis".

In the first quarter of fiscal 2009, general and administration expenses of \$840 decreased by \$73 from the \$913 incurred in the first quarter of fiscal 2008. Expenses incurred for legal and other professional fees declined by \$262 offset by increases in compensation and other costs of \$189 related to business development activities.

Exploration expenditures were \$147 in the first quarter of fiscal 2009 compared to \$306 a year ago.

The Company does not capitalize exploration and pre-feasibility study expenditures until the results of such work indicate that a property is economically feasible and the decision is taken to proceed with development and further investment. During the first quarter the Company capitalized expenditures of \$162 relating to the UMZ full feasibility study which commenced in fiscal 2007. Total UMZ-related costs capitalized from the start of the full feasibility study in fiscal 2007 to the end of the first quarter of fiscal 2009 amount to \$2,199.

Community relations expenses were \$34 in the first quarter of fiscal 2009 compared to \$54 for the same period last year. Included in these costs were financial donations and expertise contributed by the Company to support infrastructure and other program initiatives in seven communities in the vicinity of the Don Mario Mine.

Interest and other income for the three months ended December 31, 2008 of \$624 (2007 - \$678) was primarily generated on the short-term investment of excess cash in investment-grade bank-issued investment certificates. In the past several months, there has been a significant decline in interest rates on investment-grade deposit certificates.

The effective income tax rate of 44.2% for the three months ended December 31, 2008 is higher than the rate of 28.1% for the same period last year due a number of changes to the Bolivian taxation of mining companies introduced near the end of the first quarter of fiscal 2008, all of which had a negative impact on the Company's after-tax income and which were in effect for the full first quarter of fiscal 2009.

Net income for the three months ended December 31, 2008 was \$3,914 (\$0.03 per share) compared to \$6,865 (\$0.06 per share) for the same period last year.

## Cash Flows

The following table summarizes the principal sources and uses of cash for the three months ended December 31, 2008 and 2007:

	Three months ended December 31	
	2008	2007
Cash provided by operating activities	\$7,806	\$12,590
Capital expenditures	(1,761)	(886)
Long-term debt – repayment	(389)	-

### *Cash provided by operating activities*

Cash provided by operating activities of \$7,806 decreased by \$4,784 or 38% in the first quarter of fiscal 2009 compared to the first quarter of fiscal 2008. Cash flow from operations before non-cash working capital changes declined by \$3,945 for a number of reasons: revenues being lower by \$1,912; cost of sales being higher by \$382; the new mining royalty taxes being higher by \$871; and current income taxes being higher by \$1,040. A net decrease in non-cash working capital of \$2,605 in the first quarter of fiscal 2009 was due primarily to the collection of gold sales receivable (\$1,785) and higher income taxes payable (\$3,025) offset by lower accounts payable (\$1,776) and higher supplies inventories (\$824).

### *Capital expenditures*

Capital expenditures for the first quarter of fiscal 2009 were \$1,761 (2008 - \$886), made up of \$787 for the Don Mario Mine property, plant and equipment expenditures, Don Mario mine development costs capitalized of \$83 and UMZ full feasibility study costs capitalized of \$162, and for the Copperwood Project in Michigan costs capitalized of \$754.

## Financial Condition – December 31, 2008 compared to September 30, 2008

The following table provides a comparison of key elements of the Company's balance sheet at December 31, 2008 and September 30, 2008:

	December 31, 2008	September 30 2008
Cash and cash equivalents	\$96,605	\$91,041
Non-cash working capital (deficit)**	(7,316)	(5,006)
Total assets	124,985	120,685
Long-term debt	3,856	4,245
Shareholders' equity	100,801	96,862

\*\*Non-cash working capital (deficit) excludes the current portion of long-term debt

Cash and cash equivalents increased by \$5,564 for the three months ended December 31, 2008. The non-cash working capital deficit increased by \$2,310 to a deficit of \$7,316 from a deficit of \$5,006 at the end of fiscal 2008, as explained above.

The Company's policy is to invest excess cash in highly liquid, highly-rated financial instruments. The Company's excess cash is not invested in non-bank asset-backed commercial paper.

Shareholders' equity increased by \$3,939 to \$100,801 for the three months ended December 31, 2008, primarily due to net income earned by the Company. No dividends were paid in the first quarter of fiscal 2009.

### Outlook

During first quarter of fiscal 2009, the mill treated 64,238 tonnes of ore in the production of 18,025 ounces of gold. Head grades of ore treated averaged 9.24 g/t.

There will be year-over-year declines in gold production in fiscal 2009 and fiscal 2010 from the 79,604 ounces produced in fiscal 2008. As a consequence of the depletion of higher grade ore from the LMZ and the start of processing of lower grade ore from the Las Tojas deposit. Installation of a new ball mill will increase milling capacity, which will partially offset the decline in gold production.

The drilling results on the Las Tojas Concession of the Don Mario Property suggest that it is possible that the current Don Mario gold mining operation may be extended into the third quarter of fiscal 2010. The mineral resources estimate in respect of the Las Tojas concession has been prepared by AMEC.

The UMZ project, if it proceeds, will utilize the expanded milling capacity and could extend the expected life of the Don Mario Mine operation well into the next decade. On January 25, 2009, a national referendum in Bolivia resulted in the approval of a new constitution. The new constitution could have adverse implications for the Company due to, among other things, increased powers that the Bolivian government would have to control the commercialization of minerals. The Company intends to expand its subsidiary level financing to fund the majority of the UMZ project.

The Company has evaluated and continues to evaluate numerous properties, had negotiations with vendors, and made several acquisition proposals. The Company concluded one transaction in fiscal 2008 and continues to aggressively pursue the acquisition of interests in properties fitting its investment criteria. Current capital market conditions continue to be advantageous to the execution of the Company's strategy given that the Company has significant cash resources.

## **CORPORATE RESOURCES**

### **Management and Staffing**

On December 3, 2008, the Board of Directors announced the appointment of James Komadina as a director of the Company. Mr. Komadina is also a director of certain private investment companies involved in the mining industry and is a member of the Society of Mining Engineers. He holds a Master of Business Administration and a Bachelor of Science in Metallurgical Engineering and has also held a number of senior positions in mining and resource companies.

### **Liquidity and Capital Resources**

#### *Liquidity and Commitments*

The Company has recorded an asset retirement obligation at a discounted amount of \$2,198 at December 31, 2008 to dismantle the facilities and structures of the Don Mario Mine and to complete environmental reclamation of areas affected by current mining operations, including the tailings dam. The Company estimates that the total amount of undiscounted cash flows required to settle the Company's asset retirement obligations is \$2,800. If the Don Mario operation is discontinued at the end of 2010, it is expected that this obligation will be settled as follows over the years indicated: 2010 - \$1,100; 2011 - \$400; 2012 - \$500; 2013 - \$400; 2014 - \$400. However, as described elsewhere in this MD&A, the UMZ represents a major project which would extend the Don Mario operation's life well into the next decade. Estimates of these closure costs and the expected timing of their incurrence are reviewed periodically. These estimates are based on expected remediation requirements relating to the LMZ and will change if the Company proceeds with the UMZ base metals project.

During the first quarter of fiscal 2009, the net increase in cash and cash equivalents, after capital expenditures, foreign exchanges losses and long-term debt repayments, was \$5,564, resulting in total cash and cash equivalents of \$96,605 at December 31, 2008.

#### *Capital Resources*

At December 31, 2008, the Company had capital resources of \$104,657 represented by long-term debt of \$3,856 and shareholders' equity amounting to \$100,801.

Shareholders' equity increased by 4% or \$3,939 to \$100,801 (\$0.87 per share) during the three months ended December 31, 2008, compared to \$77,893 (\$0.68 per share) at December 31, 2007.

## RESULTS

### Results of Operations

The following table and analysis compare operating results for the three months ended December 31, 2008 and 2007:

	Three months ended December 31	
	2008	2007
Revenues	\$14,165	\$16,077
Costs and expenses of mining operations	6,556	5,800
Expenses and other income	596	731
Net income	3,914	6,865
Earnings per share – basic and diluted	\$0.03	\$0.06

#### *Revenues*

Orvana's sales are determined according to spot gold prices. The Company's policy is to not hedge its gold production. Bullion is shipped to a single customer for refining and sale. The following table summarizes gold revenues and prices realized:

	Three months ended December 31	
	2008	2007
Revenues	\$14,165	\$16,077
Ounces sold	17,678	20,607
Average gold prices realized	\$801	\$780

Revenue for the first quarter of fiscal 2009 decreased 12% to \$14,165 on 17,678 ounces sold compared to \$16,077 on 20,607 ounces sold for the same quarter last year. Lower ounces sold accounted for 14% of the decline in revenue, which was partially offset by higher average gold prices which accounted for a 2% increase in revenue. The quantity of gold sales in any period is affected by fluctuations in production volumes and the timing of shipments, which is also subject to weather conditions, timing of smelting to produce gold dore, and security considerations.

Further information on production operations and costs is presented below under "Don Mario Mine – Production Cost Analysis".

#### *Don Mario Mine - Development*

Development of the LMZ is complete to the lowest planned depth at the -40 metre level and mining of the Las Tojas deposit has commenced.

The following table shows the tonnages treated and the head grade in g/t gold at the Don Mario Mine for the first quarter of fiscal 2009 compared to first quarter of fiscal 2008:

		Three months ended December 31	
		2008	2007
Underground mine	Tonnes	53,126	62,808
	g/t	10.72	11.06
Mini pit & stockpile	Tonnes	11,112	3,773
	g/t	2.15	1.94
Total	Tonnes	64,238	66,581
	g/t	9.24	10.54
Recovery rate		94.5%	93.5%
Gold produced – ounces		18,025	21,083

At December 31, 2008, the Don Mario Mine and Santa Cruz administrative office had a total of 246 employees and 187 contracted personnel who provide various support services. Levels of contracted personnel fluctuate from month to month depending on the mine's requirements.

#### *Don Mario Mine – Production Cost Analysis*

The table below presents the cash operating costs and total production costs at the Don Mario Mine in producing 18,025 ounces in the first quarter of fiscal 2009 compared to 21,083 ounces in the first quarter of fiscal 2008.

	Three months ended December 31			
	2008		2007	
	Costs	Cost/oz.	Costs	Cost/oz.
Direct mine operating costs	\$3,536	\$196.20	\$2,991	\$141.85
Third-party smelting, refining and transportation costs	111	6.15	55	2.62
Cash operating costs	3,647	202.35	3,046	144.47
Royalties and mining rights	431	23.88	511	24.23
Mining royalty tax	988	54.81	117	5.55
Total cash costs	5,066	281.04	3,674	174.25
Depreciation and amortization	1,209	67.10	2,148	101.91
Total production costs	\$6,275	\$348.14	\$5,822	\$276.16
Gold production	18,025 ozs.		21,083 ozs.	

Total unit production costs increased by \$71.98 per ounce, a 26% increase, to \$348.14 per ounce for the first quarter of fiscal 2009 from a unit cost of \$276.16 for the first quarter of fiscal 2008. Of the total unit production cost increase of \$71.98 per ounce, lower ounces produced accounted for \$21.47 (or 30%) and the new mining royalty tax accounted for \$48.26 (or 68%). Other unit cost increases were minor.

The difference between direct mine operating costs of \$3,536 and cost of sales of \$3,400 reported in the consolidated financial statements for the first quarter of fiscal 2009 is due to changes in gold inventories and gold in circuit. A reconciliation of the non-GAAP measure of direct mine operating costs to the cost of sales as shown in the Company's Canadian GAAP-based statement of income is presented in the table below:

	Three months ended December 31	
	2008	2007
Cost of sales	\$3,400	\$3,018
Changes in gold inventories and gold in circuit	136	(27)
Direct mine operating costs (non-GAAP measure)	\$3,536	\$2,991

#### **Update on Other Exploration Activities**

The Company is also actively exploring within the contiguous concessions referred to collectively as the Don Mario district with the objective of identifying additional LMZ-type ore that could feed the current gold plant. The focus of the exploration is as follows:

- Pursue the extensions of the Las Tojas gold-bearing structures,
- Continue regional geochemical sampling.

## Summary of Quarterly Results

The following two tables include results for the eight quarters ended December 31, 2008:

	Quarters ended			
	Dec. 31, 2008	Sept. 30, 2008	June 30, 2008	Mar. 31, 2008
Revenues	\$14,165	\$15,681	\$18,244	\$19,062
Net income	\$3,914	\$4,605	\$7,135	\$7,102
Earnings per share – basic and diluted	\$0.03	\$0.04	\$0.06	\$0.06
Total assets	\$124,985	\$120,685	\$112,538	\$100,633
Total long-term financial liabilities	\$3,856	\$4,245	\$4,626	\$3,500
Gold production - ozs.	18,025	17,656	20,877	19,988
Gold sales – ozs.	17,678	18,109	20,453	20,644
<i>Non-GAAP measures</i>				
Per ounce data -				
- Total cash costs	\$281.04	\$304.85	\$249.38	\$244.80
- Average gold price realized	\$801.28	\$865.96	\$891.97	\$923.40
Operating statistics -				
- Gold ore grade – g/t	9.24	9.18	11.12	10.72
- Gold recovery rate - %	94.8%	93.6%	95.6%	94.0%

	Quarters ended			
	Dec. 31, 2007	Sept. 30, 2007	June 30, 2007	Mar. 31, 2007
Revenues	\$16,077	\$14,183	\$15,623	\$14,984
Net income	\$6,865	\$6,944	\$7,609	\$7,679
Earnings per share – basic and diluted	\$0.06	\$0.06	\$0.07	\$0.07
Total assets	\$90,127	\$81,153	\$73,859	\$65,049
Total long-term financial liabilities	-	-	-	-
Gold production - ozs.	21,083	21,571	23,425	22,538
Gold sales – ozs.	20,607	20,991	23,771	23,201
<i>Non-GAAP measures</i>				
Per ounce data -				
- Total cash costs	\$174.25	\$158.82	\$160.54	\$143.22
- Average gold price realized	\$780.15	\$675.67	\$657.25	\$645.83
Operating statistics -				
- Gold ore grade – g/t	10.54	11.99	11.64	12.33
- Gold recovery rate - %	93.5%	93.2%	93.4%	93.4%

### *Comments on the tables of quarterly results*

The quantity of gold sales in any period is affected by fluctuations in production volumes and the timing of shipments, which is also subject to weather conditions, timing of smelting to produce gold dore and security considerations.

Average gold prices realized during each of the eight quarters ended December 31, 2008 ranged from \$646 to \$923 per ounce. Higher quarterly revenues in the second and third quarters of fiscal 2008 did not translate into higher quarterly net incomes when compared to the quarters of fiscal 2007 due to lower production, higher production costs, and the impact of higher taxes due to an increase in the corporate income tax rate from 25% to 32.5% and the new mining royalty tax on revenues. Lower gold sales in the first quarter of fiscal 2009 were due to lower production and to a small increase in the number of ounces in inventory at the end of December 2008 compared to September 30, 2008.

## **RISKS AND UNCERTAINTIES**

The Company holds the rights to mineral concessions in Bolivia and as such is subject to the laws governing the mining industry in that country. In view of the new constitution expected to be in force soon following its approval by 60% of the voters in the national referendum held on January 25, 2009; new mining policy and mining tax changes that have been implemented and that are being proposed; and the composition of the Company's shareholder base, there could be changes in governmental regulation or governmental actions in Bolivia that adversely affect the Company. The new constitution could have adverse implications for the Company due to, among other things, increased powers that the Bolivian government would have under the constitution to control the commercialization of minerals.

There could also be changes to governmental regulation with respect to such matters as repatriation of profits, restrictions on production, export controls, environmental compliance, and expropriation of property or limitations on foreign ownership. There could also be shifts in the political stability of the country and labour or civil unrest. In May 2006, the Bolivian government moved to increase its share of the country's oil and gas sector by imposing a profit-sharing arrangement in which the government receives a 50% share in operating profits of companies operating in the sector. On May 1, 2008, the Bolivian government announced additional measures to increase its control over the oil and gas and telecommunications sectors. Similar actions on the part of the government with respect to the mining sector, in addition to the recent increase in income and other taxes, could materially adversely affect the Company.

Statements by members of the government with respect to new government policies in the mining sector have been contradictory, sometimes referring to "nationalization", but at other times stating that "nationalization" will not occur. It is not clear whether the Bolivian government will nationalize any portion or all of the mining industry. If the Don Mario Mine were to be nationalized, the Company would cease to have any producing assets. Other changes in governmental regulation or governmental actions such as those described above could also have a material adverse effect on the results of operations or financial condition of Orvana. Orvana's management continues to monitor the situation closely.

The Bolivian government has indicated that it intends to amend the mining code to require that, in the future, Corporacion Minera de Bolivia ("COMIBOL"), the state-owned mining company, will control Bolivian land subject to the grant of mineral concession rights. Under these amendments, an application will have to be made for new mineral concessions in the future and all concessions granted may result in some form of joint venture with COMIBOL in the exploitation of any minerals found. The government has stated that this new law will not affect mineral concessions that have already been granted, however, the proposals have yet to be passed into law and their potential effect on future activities on the Company's mineral concessions remains unclear.

Additional recent proposed modifications to the mining code have been published by the government. One such proposal would see mineral concessions revert to the state in a time-

frame depending on the length of time since any exploration work was undertaken ranging from immediate reversion for concessions not worked for more than five years to reversion after one year for concessions not worked for one year. A second proposed modification would affect companies that are presently in joint ventures with COMIBOL. In this proposal, COMIBOL would control 100% of production and would receive 50% of the gross revenue derived from the sale of mine production. Negotiations regarding such modifications continue with affected companies, with the government stating that it now wants 55% of a project's gross revenue. Orvana's Bolivian subsidiary, EMIPA, has no joint venture operations with COMIBOL and, thus, would not be affected by the second proposal.

Mineral reserve and resource figures provided by the Company are estimates and no assurances can be given that the indicated amount will be produced. Estimated reserves and resources may have to be recalculated based on actual production experience and the prevailing prices of the metals produced.

The economics of developing mineral deposits are affected by many factors including variations in the grade of ore mined, the cost of operations and fluctuations in the sales price of products. The value of the Company's mineral properties is heavily influenced by metal prices, particularly the price of gold for the LMZ and copper and gold for the UMZ. Metal prices can and do change significantly over short periods of time and are affected by numerous factors beyond the control of the Company, including changes in the level of supply and demand, international economic and political trends, expectations of inflation, currency exchange fluctuations, interest rates, global or regional consumption patterns, speculative activities and increased production arising from improved mining and production methods and new discoveries. There can be no assurance that the prices of mineral products will be sufficient to ensure that the Company's properties can be mined profitably. Depending on the price received for minerals produced, the Company may determine that it is impractical to commence or continue commercial production. The grade of any ore ultimately mined from a mineral deposit may differ from that predicted from drilling results or past production. Production volumes and costs can be affected by such factors as permitting regulations and requirements, weather, environmental factors, unforeseen technical difficulties, unusual or unexpected geological formations and work interruptions. Short-term factors relating to ore reserves, such as the need for orderly development of ore bodies or the processing of new or different grades, may also have an adverse effect on the results of operations. Moreover, there can be no assurance that because minerals are recovered in small scale laboratory tests that similar recoveries will be achieved under production scale conditions. Although precautions to minimize risks will be taken, processing operations are subject to hazards such as equipment failure or failure of tailings impoundment facilities, which may result in environmental pollution and consequent liability.

Mineral exploration and mining involve considerable financial, technical, legal and permitting risks. Substantial expenditures are usually required to establish ore reserves and resources, to evaluate metallurgical processes and to construct mining and processing facilities at a particular site. With the exception of the Don Mario Mine, the Company's properties are without known bodies of commercial ore. It is impossible to ensure that the exploration programs conducted by the Company will result in profitable commercial mining operations, as, within the mining industry, few properties that are explored are ultimately developed into producing mines. Unusual or unexpected geological formations, unstable ground conditions that could result in cave-ins or landslides, floods, power outages, water or fuel shortages, labour disruptions, fires, explosions, and the inability to obtain suitable or adequate machinery, equipment or labour are risks associated with the conduct of exploration programs and the operation of mines. In addition, social unrest in areas adjacent to the Company's properties could have a material adverse effect on the Company's activities. The Company has been dependent upon and may continue to be dependent upon consultants and outside contractors for construction and operating expertise.

Beyond 2010 and in the absence of new operations or reserves being added, the Company's revenue stream will depend on production from the UMZ project of the Don Mario Mine and the Copperwood Project. The Company anticipates that, if undertaken, the UMZ project may be brought on stream following the processing of the remaining ore from the LMZ and Las Tojas projects. Given the extent of changes to taxation and to other laws affecting the mining industry and the political uncertainties in the country, the Company may experience difficulty in obtaining satisfactory financing terms or adequate project financing for the UMZ.

The Company's business, results of operations and financial condition, and the trading price of its common shares could be materially adversely affected by any of the foregoing risks and by other risks, including risks related to development of mineral deposits; metal prices; labour costs and the supply and price of energy and other consumables; exploration; development and operating risks; water supply; production estimates; mineral reserves and resources; title matters; reclamation costs; gold price volatility; competition; additional funding requirements; insurance; currency fluctuations; conflicts of interest and share trading volatility. Any of these risks could have a material adverse effect on the business, operations or financial condition of the Company.

A high percentage of the Company's revenues, costs and assets are denominated in United States dollars, and the remainder is primarily denominated in Bolivian and Canadian currencies. The Company is exposed to foreign currency fluctuations; however, management does not expect these fluctuations to have a significant impact on the Company's financial position or results.

## **OTHER INFORMATION**

### **Critical Accounting Estimates**

The preparation of financial statements in accordance with Canadian GAAP requires management to make estimates and assumptions that affect the reported amounts of certain assets and liabilities at the date of the financial statements and the reported amounts of certain revenues and expenses during the period. Actual results could differ significantly from those estimates. Specific items requiring estimates are gold ore reserves, accounts receivable, property, plant and equipment, depreciation and amortization, asset retirement obligations, future income taxes, stock-based compensation and other accrued liabilities and contingent liabilities.

#### *Mineral reserves*

The LMZ is expected to be depleted during the third quarter of fiscal 2009. Ore from the Las Tojas deposit is being processed concurrently with ore from the LMZ deposit.

#### *Net realizable values of property, plant and equipment*

At December 31, 2008, the net book value of LMZ and Las Tojas-related property, plant and equipment amounted to \$16,273 (excluding UMZ feasibility study costs capitalized of \$2,199 and the Copperwood project costs of \$923). Amortization of these costs is calculated on the units-of-production method over the expected economic life of the mine. The expected economic life is dependent upon the estimated remaining proven and probable reserves, gold prices and cash operating costs. Based upon current estimates of reserves, with gold prices in excess of \$600 per ounce and total cash costs that are less than \$300 per ounce, net realizable values are in excess of related net book value of property, plant and equipment.

### *Asset retirement obligations*

The Company has estimated the present value of estimated future costs to decommission the Don Mario Mine (asset retirement obligations) to be \$2,198 at December 31, 2008. It is estimated that the amount of future expenditures to dismantle mine installations and to complete reclamation will be \$2,800 on an undiscounted basis. If the Don Mario operation is discontinued at the end of 2010, it is expected that this obligation will be settled approximately as follows over the years indicated: 2010 - \$1,100; 2011 - \$400; 2012 - \$500; 2013 - \$400; 2014 - \$400. Estimates of these closure costs and the expected timing of their incurrence are reviewed periodically. These estimates are based on expected remediation requirements relating to the LMZ and will change if the Company proceeds with the UMZ base metals project.

It is possible that the Company's estimates of its ultimate asset retirement obligations could change as a result of changes in regulations, the extent of environmental remediation required, the means of reclamation, cost estimates or the estimated remaining ore reserves.

### *Stock-based compensation*

The Company recorded stock-based compensation expense of \$25 for the first quarter ended December 31, 2008 compared to \$72 for the same period a year ago. The stock-based compensation expense is based on an estimate of the fair value on the grant date of stock options issued. This accounting required estimates of interest rates, life of options, stock price volatility and the application of the Black-Scholes option pricing model.

### **Financial and Other Instruments**

The Company has not used any hedging or other financial instruments in the current fiscal year to date or in the prior three fiscal years.

### **Off-Balance-Sheet Arrangements**

Orvana has not entered into any off-balance-sheet arrangements.

### **Outstanding Share Data**

Orvana shares are traded on the Toronto Stock Exchange under the symbol ORV. As at the Report Date, there were 115,233,173 common shares outstanding with a stated value of \$74,777. There were also 2,925,001 stock options outstanding at the Report Date with a weighted average exercise price of Cdn. \$0.90. Stock options outstanding have expiry dates ranging from 2010 to 2013.

### **Other Information**

Management, including the Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures as of December 31, 2008. Based on this evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures, as defined in National Instrument 52-109 - Certification of Disclosure in Issuer's Annual and Interim Filings, are effective to ensure that information required to be disclosed in reports filed or submitted by the Company under Canadian securities legislation is recorded, processed, summarized and reported within the time periods specified in those rules.

There were no significant changes in the Company's internal controls or in other factors that could significantly affect those controls subsequent to the date the Chief Executive Officer and Chief Financial Officer completed their evaluation, nor were there any significant deficiencies or material weaknesses in the Company's internal controls requiring corrective actions.

The Canadian Accounting Standards Board will require all public companies to adopt International Financial Reporting Standards ("IFRS") for interim and annual financial statements

relating to fiscal years beginning on or after January 1, 2011. Companies will also be required to provide IFRS comparative information for the previous year. The transition from Canadian GAAP to IFRS will be applicable for the Company for its first quarter ended December 31, 2011 of fiscal 2012 when the Company will prepare both current and comparative financial information using IFRS. The Company will continue to monitor and assess the impact of the planned convergence to IFRS throughout the next year including the establishment of an implementation plan.

Other operating and financial information, including the Company's Annual Information Form, is available in public disclosure documents filed on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Company's website at [www.orvana.com](http://www.orvana.com).