MINERALS CORP

MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2016

Introduction

This management's discussion and analysis ("MD&A") of results of operations and financial condition of Orvana Minerals Corp. and its consolidated subsidiaries ("Orvana" or the "Company") describes the operating and financial results of Orvana for the year ended September 30, 2016.

This MD&A should be read in conjunction with the audited consolidated financial statements of Orvana for the year ended September 30, 2016 and related notes thereto (the "Audited Financials"). The Audited Financials are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board.

In this MD&A, all currency amounts (except per unit amounts) unless otherwise stated, are in United States dollars ("US dollars"). Production and sales in respect of gold and silver are in fine troy ounces referred to as "ounces" or "oz" and in respect of copper are in pounds also referred to as "lbs". The information presented in this MD&A is as of December 13, 2016, unless otherwise stated.

A cautionary note regarding forward-looking statements follows this MD&A.

Company Overview

Orvana is a multi-mine gold and copper producer with organic growth opportunities. Orvana's operating properties consist of (i) El Valle Mine ("El Valle"), an underground gold-copper-silver mine with process facilities that produce a copper concentrate and gold doré, located in the northern part of Spain; (ii) Carlés Mine ("Carlés"), an underground gold-copper-silver mine adjacent to El Valle; and (iii) Don Mario Mine ("Don Mario"), an open-pit gold-copper-silver mine with process facilities that produce both copper and gold concentrates, located in the south-eastern part of Bolivia. Orvana's strategic focus is on opportunities to deliver long-term shareholder value. To achieve this, Orvana is currently working to optimize its operations, reduce its operating costs and realize growth in its future production base through exploration within and in proximity to its existing operations. Orvana is an Ontario company and its common shares ("Common Shares") are listed on the Toronto Stock Exchange under the symbol TSX:ORV.

2016 Consolidated Operating and Financial Highlights

The Company's strategic objectives to increase production at its operations include productivity enhancements to allow for delivery of greater throughput, increased gold recovery and lower unitary costs. In that regard, the Company accomplished the following milestones in fiscal 2016:

- **Productivity** – At El Valle, recent upgrades to power infrastructure yielded positive results during the second half of fiscal 2016, increasing development rates by 50% over the same period. In addition, improvements to water management and dewatering strategies at El Valle, which will continue during fiscal 2017, materially improved both productivity in affected areas of the mine and the quality of water discharged from the mine. At Don Mario, the Company's mining activities transitioned from mining the remaining Upper Mineralized Zone ("UMZ") to the higher gold grade Lower Mineralized Zone ("LMZ").
- **Financing** – The Company has secured $20 million in debt financing during fiscal 2016 in support of its objectives. A $12.5 million, 30 month copper concentrates and gold doré prepayment financing ("Prepayment Facility") was secured with Samsung C&T U.K. Ltd. ("Samsung C&T") to fund the capital infrastructure improvements and development projects required to support productivity enhancements at El Valle. At Don Mario, $7.9 million in project financing was secured with Banco BISA, S.A. in Bolivia ("BISA Loan") to support the recommissioning of the CIL circuit, which is expected to result in improvements in gold recoveries.
- **Management** – The Company reconstituted its management and board during fiscal 2016, with a mandate to drive repositioning of its El Valle and Don Mario Mine assets.

	Q4 2016	Q3 2016	Q4 2015	FY 2016	FY 2015
Operating Performance					
Gold					
Grade (g/t)	**1.91**	2.12	1.83	**2.10**	2.16
Recovery (%)	**75.8**	76.2	82.1	**77.4**	77.9
Production (oz)	**14,842**	16,038	15,206	**65,785**	72,817
Sales (oz)	**14,705**	16,496	13,887	**61,816**	73,304
Average realized price / oz	**$1,313**	$1,258	$1,119	**$1,211**	$1,196
Copper					
Grade (%)	**0.82**	0.85	0.85	**0.81**	1.00
Recovery (%)	**63.1**	66.3	74.7	**65.8**	76.3
Production ('000 lbs)	**3,630**	3,833	4,409	**14,735**	22,601
Sales ('000 lbs)	**3,296**	3,879	4,666	**13,367**	23,956
Average realized price / lb	**$2.17**	$2.13	$2.40	**$2.16**	$2.72
Silver					
Grade (g/t)	**15.55**	14.92	25.50	**17.36**	20.77
Recovery (%)	**76.9**	75.9	67.6	**74.9**	66.4
Production (oz)	**122,589**	112,507	174,027	**525,934**	598,039
Sales (oz)	**96,520**	111,949	162,566	**469,847**	596,405
Average realized price / oz	**$19.74**	$16.91	$14.94	**$16.29**	$16.12
Financial Performance *(in 000's, except per share amounts)*					
Revenue	**$24,044**	$26,030	$20,385	**$93,850**	$121,425
Mining costs	**$22,884**	$21,806	$23,636	**$84,544**	$105,384
Gross margin	**($3,599)**	$406	($10,589)	**($7,883)**	($13,854)
Net loss	**($1,528)**	($1,181)	($7,819)	**($8,455)**	($16,733)
Net loss per share (basic/diluted)	**($0.01)**	($0.01)	($0.06)	**($0.06)**	($0.12)
Operating cash flows before non-cash working capital changes (1)	**$1,186**	$3,223	($2,670)	**$5,199**	$8,471
Operating cash flows	**$221**	$2,176	($5,475)	**$3,437**	$20,678
Ending cash and cash equivalents	**$18,939**	$12,021	$17,236	**$18,939**	$17,236
Capital expenditures (2)	**$5,394**	$3,122	$2,340	**$14,977**	$10,118
Cash operating costs (by-product) ($/oz) gold (1)	**$1,205**	$1,035	$1,297	**$1,082**	$949
All-in sustaining costs (by-product) ($/oz) gold (1)(2)	**$1,699**	$1,311	$1,540	**$1,428**	$1,210

(1) Operating cash flows before non-cash working capital changes, cash operating costs ("COC") and all-in sustaining costs ("AISC") are non-IFRS performance measures. For further information and a detailed reconciliation, please see the "Other Information - Non-IFRS Measures" section of this MD&A.

(2) These amounts are presented in the consolidated cash flows in the Audited Financials on a cash basis. Each reported period excludes capital expenditures incurred in the period which will be paid in subsequent periods and includes capital expenditures incurred in prior periods and paid for in the applicable reporting period. See the "Cash Flows, Commitments and Liquidity - Capital Expenditures" section of this MD&A. The calculation of AISC includes capex incurred (paid and unpaid) during the period.

Operational Highlights

- Production of 65,785 ounces of gold, 14.7 million pounds (6,683 tonnes) of copper and 525,934 ounces of silver during fiscal 2016, a decrease in gold, copper and silver of 10%, 35% and 12% respectively, compared with fiscal 2015.
- Production of 98,960 gold equivalent ounces during fiscal 2016, compared to 132,117 gold equivalent ounces during fiscal 2015. (1)
- Sales of 61,816 ounces of gold, 13.4 million pounds (6,063 tonnes) of copper and 469,847 ounces of silver during fiscal 2016, a decrease in gold, copper and silver sales of 16%, 44% and 21%, respectively, compared with fiscal 2015.
- Production of 14,842 ounces of gold, 3.6 million pounds (1,647 tonnes) of copper and 122,589 ounces of silver during the fourth quarter of fiscal 2016, an increase in silver production of 9% and a decrease in gold and copper production of 7% and 5%, respectively, compared with the third quarter of fiscal 2016.
- Production of 22,470 gold equivalent ounces during the fourth quarter of fiscal 2016. (1)
- Sales of 14,705 ounces of gold, 3.3 million pounds (1,495 tonnes) of copper and 96,520 ounces of silver during the fourth quarter of fiscal 2016, a decrease in gold, copper and silver sales of 11%, 15% and 14%, respectively, compared with the third quarter of fiscal 2016.
- Appointment of Jim Gilbert as Chairman and Chief Executive Officer of the Company effective August 4, 2016.

El Valle Mine

- Fourth quarter gold production decreased by 6% and copper and silver production increased by 9% and 1% to 9,209 ounces, 1.2 million pounds and 36,223 ounces, respectively, compared with the third quarter of fiscal 2016.
- Skarns production increased by 15% over the fourth quarter of fiscal 2016 compared with the third quarter of fiscal 2016. Skarn development rates also improved by 50% over fiscal 2016. Higher production and development was driven by improved mine planning and operational performance, enabled by upgrades to mine power infrastructure and dewatering actions.
- Oxides production continued to be affected by backfill and ventilation issues. OroValle improved its ventilation circuit in September, while backfill and oxide mining optimization studies are underway.
- The Company restarted mining activities at the Carlés Mine on a short-term basis beginning in the fourth quarter of fiscal 2016. Incremental ore tonnage is readily accessible and is being processed at the existing plant at El Valle. Production is focused on the Carlés East and CZ zones, targeting approximately 115,000 tonnes of ore with an average gold head grade of 2.5 g/t.

Don Mario Mine

- Fourth quarter gold and copper production at Don Mario decreased by 10% and 11% to 5,633 ounces and 2.4 million pounds, respectively, compared to the third quarter of fiscal 2016 primarily as a result of lower grades mined and lower recoveries. Silver production increased by 13% to 86,366 ounces of silver compared to the third quarter of fiscal 2016 primarily due to higher grades mined. Don Mario increased the processing of mined production from the lower gold grade UMZ towards the end of fiscal 2016, while higher gold grade material from the LMZ was stockpiled for use in the carbon-in-leach (CIL) circuit expected to be fully constructed by the end of 2016.

Financial Highlights

- Net cash and cash equivalents balance of $18.9 million at September 30, 2016, an increase of $1.7 million compared to September 30, 2015.
- Net revenue of $93.9 million for fiscal 2016, or 23% lower, compared with $121.4 million for fiscal 2015, due to lower metal volumes sold. Net revenue of $24.0 million for the fourth quarter of fiscal 2016, or 18% higher, compared with $20.4 million for the fourth quarter of fiscal 2015 primarily due to higher gold prices and ounces sold.
- Mining costs of $84.5 million for fiscal 2016, or 20% lower, compared with $105.4 million for fiscal 2015, due to lower metal volumes sold. Mining costs of $22.9 million for the fourth quarter of fiscal 2016, or 3% lower, compared with $23.6 million for the fourth quarter of fiscal 2015 primarily due to lower copper and silver metal volumes sold offset by higher gold volumes sold.
- Net loss of $8.5 million for fiscal 2016 compared with a net loss of $16.7 million for fiscal 2015. Net loss for the fourth quarter of fiscal 2016 of $1.5 million compared with a net loss of $7.8 million for the fourth quarter of fiscal 2015.
- Cash flows provided by operating activities of $3.4 million for fiscal 2016 compared with $20.7 million for fiscal 2015 and cash flows provided by operating activities before changes in non-cash working capital of $5.2 million for fiscal 2016 compared with $8.5 million for fiscal 2015. (2)
- Cash flows provided by operating activities of $0.2 million in the fourth quarter of fiscal 2016 compared with cash flows used in operating activities of $5.5 million in the fourth quarter of fiscal 2015 and cash flows provided by operating activities before changes in non-cash working capital of $1.2 million in the fourth quarter of fiscal 2016 compared with cash flows used in operating activities before changes in non-cash working capital of $2.7 million in the fourth quarter of fiscal 2015. (2)
- Capital expenditures of $15.0 million for fiscal 2016 compared with $10.1 million for fiscal 2015. Capital expenditures of $5.4 million in the fourth quarter of fiscal 2016 compared with $2.3 million in the fourth quarter of fiscal 2015.
- Cash operating costs and all-in sustaining costs on a by-product basis (net of copper and silver by-product revenue from El Valle and Don Mario) per ounce of gold sold for fiscal 2016 of $1,082 and $1,428, respectively, compared with COC and AISC (by-product) of $949 and $1,210, respectively, for fiscal 2015. COC and AISC in fiscal 2016 were higher compared with fiscal 2015 due to lower gold production and sales, as well as lower by-product revenues from copper due to declining copper mined grades. (2)
- Cash operating costs and all-in sustaining costs on a by-product basis (net of copper and silver by-product revenue from El Valle and Don Mario) per ounce of gold sold for the fourth quarter of fiscal 2016 of $1,205 and $1,699, respectively, compared with COC and AISC (by-product) of $1,297 and $1,540, respectively, for fiscal 2015. COC were lower in the fourth quarter of fiscal 2016 compared with the fourth quarter of fiscal 2015 primarily due to a favorable USD to EUR exchange rate and lower deduction and treatment charges at Don Mario, offset by lower copper and silver by-product revenues. AISC in the fourth quarter of fiscal 2016 were higher compared with the fourth quarter of fiscal 2015 primarily due to increased primary development and planned capital infrastructure investments. (2)
- The Supreme Court of Spain recently ordered a retrial regarding the amount of a bond in respect of a regulatory environmental reclamation requirement at El Valle Mine, currently in the amount of €5.0 million. The Company is working with Spanish regulatory authorities to come to an agreement regarding posting this bond, while preserving the Company's rights in court. Funds to cover this commitment have been segregated outside the Company's operating accounts during this interim period.

Growth Initiatives Highlights

El Valle Mine

- As noted above, the Company has planned to restart mining activity at Carlés. Further material may exist in the Carlés NW zone that may provide an opportunity to expand the Carlés mine plan. The Company expects to complete infill drilling on Carlés NW during the project timeframe.
- In February 2016, the Company completed a diamond drilling campaign for the Villar oxide zone. This zone was discovered via a drill program extending through the known resource zone of A107 to test for mineralization that may have been shadowed by the known existing resource. The Company also completed a drilling campaign at the La Brueva property in August 2015, and resource estimates for both properties were published in February 2016:
- During fiscal 2016, exploration was advanced on the greenfield Quintana property. Based on the results of a geophysical survey and the results from a soil sampling program conducted through the second half of 2016, a drilling project is being defined for execution through fiscal 2017.
- El Valle also completed 17,073 meters of infill definition and exploration diamond drilling over 116 drill holes through fiscal 2016.

Don Mario Mine

- Subsequent to fiscal year end, DGCS SA upgraded the mineral resource estimate for the LMZ to a mineral reserve estimate(3). A summary of the estimate is as follows:
    - LMZ – Probable Reserve: approximately 793 tonnes grading 2.62 g/t gold, 0.60% copper and 5.94 g/t silver, containing approximately 66,800 ounces of gold, 10.6 million pounds of copper and 151,400 ounces of silver.
- Don Mario previously processed ore from the LMZ and Cerro Felix in the CIL circuit where it achieved an average gold recovery of over 80%. During fiscal 2016, the Company closed the BISA Loan and entered into a contract with EPCM Consultores SRL (“EPCMC”) for the recommissioning of the CIL circuit (the “CIL Project”), which the Company expects to be substantially completed by the end of December 2016. Based on the results of a metallurgical testing program indicating potential gold recovery of higher than historical rates, the CIL Project is expected to result in lower unitary cash costs and maximize the value of the LMZ material. Upon completion of the CIL Project, Don Mario will shift to production of gold doré in lieu of the current gold concentrate, and will continue to produce copper concentrate.
- The CIL Project may also provide the Company with additional economic opportunities for processing existing material. In recent months, the Company has been re-evaluating the economic potential of its existing mineral stockpile and expects to have the results of this testing by the end of the first quarter of fiscal 2017. The Company will also be commencing an evaluation of processing of tailings material to determine the viability of recovering gold that has been deposited into the tailings facility as a result of the flotation-only process used since 2011.

(1) Gold equivalent ounces include copper pounds and silver ounces produced and converted to a gold equivalent based on a ratio of the average market price for the commodities for the period discussed.

(2) Cash flows provided by operating activities before changes in non-cash working capital, COC, AISC and all-in-costs (“AIC”) are non-IFRS performance measures. The Company believes that, in addition to conventional measures prepared in accordance with IFRS, the Company and certain investors use this information to evaluate the Company’s performance including the Company’s ability to generate cash flows from its mining operations. Accordingly, it is intended to provide additional information and should not be considered in isolation or as substitutes for measures of performance prepared in accordance with IFRS. For further information and a detailed reconciliation, please see the “Other Information - Non-IFRS Measures” section of this MD&A.

(3) Mineral reserve estimates were prepared by DGCS SA under supervision of Gino A. Zandonai, who is an independent Qualified Person under NI 43-101. The effective date of these estimates is September 30, 2016.

Outlook

Through the closing of the Prepayment Facility and the BISA Loan in fiscal 2016, the Company believes it has sufficient financial resources to fully realize its current business plans. By improving its liquidity position through fiscal 2016, the Company is more able to pursue its initiatives at El Valle and Don Mario on an accelerated basis in order to meet its objectives of optimizing production, lowering unitary cash costs, maximizing free cash flow, extending the life-of-mine of its operations and growing its operations to deliver shareholder value.

At El Valle, the Company intends to increase production in fiscal 2017 by increasing underground mining rates in order to supply the processing plant with sufficient ore feed to operate at its name plate capacity of 2,000 tonnes per day of ore. In increasing productivity by 60%, the Company plans to make capital infrastructure and development investments, supported by proceeds from the $12.5 million Prepayment Facility with Samsung C&T. This strategy is expected to result in reductions to unitary costs beginning in fiscal 2018. During fiscal 2016, El Valle advanced with its power and water infrastructure projects by installing a surface diesel generator, upgrading its current power system and executing an improved dewatering strategy to reduce impacts to production. These initiatives have started to yield positive results in the second half of fiscal 2016 and are expected to allow El Valle to deliver higher ore tonnes mined and development meters in fiscal 2017. The proceeds of the Prepayment Facility will also support the restart of mining activity at the Carlés Mine to increase production in the first half of 2017 while the Company executes on its objectives at the El Valle Mine.

At Don Mario, the Company is nearing completion of the CIL Project, and expects to commence commissioning early in the second quarter of fiscal 2017. During the fourth quarter of fiscal 2016, Don Mario began to stockpile mined higher gold grade LMZ ore in order to best maximize the value of the anticipated higher gold recoveries from the CIL circuit. The CIL Project is expected to result in the operation generating free cash flow later in fiscal 2017 and allow for repayment of the BISA Loan in full by the end of fiscal 2017. Unitary costs are expected to decrease through the second half of fiscal 2017 as anticipated enhanced gold recovery is realized from CIL production. Furthermore, the CIL Project could provide enhanced processing capabilities to leverage other known opportunities in the future.

The following table sets out Orvana's fiscal 2016 results and guidance as well as its fiscal 2017 production and cost guidance:

	FY 2016 Revised Guidance	FY 2016 Actual	FY 2017 Guidance
El Valle Mine Production			
Gold (oz)	43,000 – 46,000	**44,683**	50,000 – 55,000
Copper (million lbs)	4.5 – 5.0	**4.3**	6.0 – 6.5
Silver (oz)	120,000 - 130,000	**144,411**	170,000 – 200,000
Don Mario Mine Production			
Gold (oz)	20,000 – 21,000	**21,102**	35,000 – 40,000
Copper (million lbs)	11.0 – 12.0	**10.5**	7.0 – 7.5
Silver (oz)	330,000 – 370,000	**381,523**	130,000 – 150,000
Total Production			
Gold (oz)	63,000 – 67,000	**65,785**	85,000 – 95,000
Copper (million lbs)	15.5 – 17.0	**14.7**	13.0 – 14.0
Silver (oz)	450,000 – 500,000	**525,934**	300,000 – 350,000
Total capital expenditures	$17,000 – $19,000	**$14,977**	$27,000 – $30,000
Cash operating costs (by-product) ($/oz) gold (1)	$1,000 – $1,100	**$1,082**	$1,050 – $1,150
All-in sustaining costs (by-product) ($/oz) gold (1)	$1,300 – $1,400	**$1,428**	$1,300 – $1,400

(1) FY2017 guidance assumptions for COC and AISC include by-product commodity prices of $2.00 per pound of copper and $18.00 per ounce of silver and an average Euro to US Dollar exchange of 1.12.

Overall Performance

The key factors affecting Orvana's operating and financial performance are tonnages mined and treated, metal grade and recoveries, quantities of metals produced and sold, realized metals prices, costs including labour, energy and other supplies and material, mine development and other capital expenditures, foreign exchange rates and tax rates.

Fourth Quarter Ended September 30, 2016 Compared with Third Quarter Ended June 30, 2016

The Company recorded a net loss of $1.5 million for the fourth quarter of fiscal 2016 or $0.01 per share compared with net loss of $1.2 million for the third quarter of fiscal 2016 or $0.01 per share. The Company's net loss was driven by the following factors:

- Revenue for the fourth quarter of fiscal 2016 decreased by $2.0 million or 8% to $24.0 million on sales of 14,705 ounces of gold, 3.3 million pounds of copper and 96,520 ounces of silver from El Valle and Don Mario compared with revenue of $26.0 million on sales of 16,496 ounces of gold, 3.9 million pounds of copper and 111,949 ounces of silver in the third quarter of fiscal 2016. The decrease in revenue was due to lower metal sales volumes, offset by increased realized prices for gold, copper and silver.
- Mining costs were $22.9 million or $1.1 million higher for the fourth quarter of fiscal 2016 compared with $21.8 million for the third quarter of fiscal 2016 primarily due to increases in mining costs associated with the increased investment and activity at El Valle.
- Gross margin decreased by $4.0 million to negative $3.6 million for the fourth quarter of fiscal 2016 compared with gross margin of $0.4 million for the third quarter of fiscal 2016.
- During the fourth quarter of fiscal 2016, the Company realized other income of $1.5 million as a result from a partial settlement of an insurance claim related to a hoist incident in fiscal 2013.

Total consolidated COC (by-product) of $1,205 per ounce of gold sold in the fourth quarter of fiscal 2016 were $172 or 20% higher than the third quarter of fiscal 2016. Total AISC (by-product) of $1,699 per ounce of gold sold in the fourth quarter of fiscal 2016 were $391 or 30% higher than in the third quarter of fiscal 2016. COC in the fourth quarter of fiscal 2016 were higher due to a decrease in copper by-product revenues due to the stockpiling of LMZ material and reduced copper concentrate sales and increased primary development at El Valle.

Year ended September 30, 2016 Compared with Year ended September 30, 2015

The Company recorded a net loss of $8.5 million for fiscal 2016 or $0.06 per share compared with a net loss of $16.7 million for fiscal 2015 or $0.12 per share. The Company's net loss was impacted significantly by the following factors:

- Revenue for fiscal 2016 decreased by $27.6 million or 23% to $93.9 million on sales of 61,816 ounces of gold, 13.4 million pounds of copper and 469,847 ounces of silver from El Valle and Don Mario compared with revenue of $121.4 million on sales of 73,304 ounces of gold, 24.0 million pounds of copper and 596,405 ounces of silver for fiscal 2015. The decrease in revenue was primarily due to lower metal volumes sold due to lower mine production, as well as lower mined copper grades.
- Mining costs were $84.5 million or $20.8 million lower for fiscal 2016 compared with $105.4 million for fiscal 2015 primarily due to lower metal sales volumes and a favorable EUR to USD exchange rate.
- Gross margin increased by $6.0 million to negative $7.9 million for fiscal 2016 compared with gross margin of negative $13.9 million for fiscal 2015.
- During fiscal 2016, the Company realized other income of $1.5 million as a result from a partial settlement of an insurance claim related to a hoist incident in fiscal 2013.

Total consolidated COC (by-product) of $1,082 per ounce of gold sold in fiscal 2016 were $133 or 14% higher than fiscal 2015. Total AISC (by-product) of $1,428 per ounce of gold sold in fiscal 2016 were $218 or 18% higher than fiscal 2015. COC and AISC in fiscal 2016 were higher compared with fiscal 2015 due to lower gold production and sales, as well as lower by-product revenues from copper due to declining copper mined grades.

Fourth Quarter Ended September 30, 2016 Compared with Fourth Quarter Ended September 30, 2015

The Company recorded a net loss of $1.5 million for the fourth quarter of fiscal 2016 or $0.01 per share compared with net loss of $7.8 million for the fourth quarter of fiscal 2015 or $0.06 per share. The Company's net loss was impacted significantly by the following factors:

- Revenue for the fourth quarter of fiscal 2016 increased by $3.7 million or 18% to $24.0 million on sales of 14,705 ounces of gold, 3.3 million pounds of copper and 96,520 ounces of silver from El Valle and Don Mario compared with revenue of $20.4 million on sales of 13,887 ounces of gold, 4.7 million pounds of copper and 162,566 ounces of silver in the fourth quarter of fiscal 2015. The increase in revenue was due to higher average realized metal prices and gold sales volumes.
- Mining costs were $22.9 million or $0.8 million lower for the fourth quarter of fiscal 2016 compared with $23.6 million for the fourth quarter of fiscal 2015.
- Gross margin increased by $7.0 million to negative $3.6 million for the fourth quarter of fiscal 2016 compared with gross margin of negative $10.6 million for the fourth quarter of fiscal 2016.

Total consolidated COC (by-product) of $1,205 per ounce of gold sold in the fourth quarter of fiscal 2016 were $92 or 7% lower than the fourth quarter of fiscal 2015. Total AISC (by-product) of $1,699 per ounce of gold sold in the fourth quarter of fiscal 2016 were $159 or 10% lower than in the fourth quarter of fiscal 2015. COC were lower in the fourth quarter of fiscal 2016 compared with the fourth quarter of fiscal 2015 primarily due to a favorable USD to EUR exchange rate and lower deduction and treatment charges at Don Mario, offset by lower copper and silver by-product revenues. AISC in the fourth quarter of fiscal 2016 were higher compared with the fourth quarter of fiscal 2015 primarily due to increased primary development and planned capital infrastructure investments.

El Valle and Carlés Mines

Through its wholly-owned subsidiary, OroValle Minerals S.L. ("OroValle"), the Company owns and operates the El Valle and Carlés mines located in the Rio Narcea Gold Belt in northern Spain, where skarns and oxides are being mined underground. El Valle and Carlés commenced commercial production in August 2011. At the end of February 2015, Carlés was placed on care and maintenance primarily due to market conditions. As a result of the beneficial gold price and foreign exchange environment experienced through fiscal 2016, the Company performed an economic review of Carlés and, based on the results of this review, restarted mining activities on a short-term basis beginning in September 2016.

The following table includes consolidated operating and financial performance data for El Valle for the periods set out below.

	Q4 2016	Q3 2016	Q4 2015	FY 2016	FY 2015
Operating Performance					
Ore mined (tonnes) (wmt)	**125,487**	116,649	120,573	**479,077**	551,966
Ore milled (tonnes) (dmt)	**119,200**	107,452	109,665	**452,003**	511,213
Daily average throughput (dmt)	**1,296**	1,181	1,192	**1,235**	1,401
Gold					
Grade (g/t)	**2.53**	3.01	3.62	**3.27**	3.53
Recovery (%)	**94.9**	94.3	94.7	**94.0**	92.6
Production (oz)	**9,209**	9,806	12,086	**44,682**	53,733
Sales (oz)	**9,821**	9,665	10,725	**44,009**	51,244
Copper					
Grade (%)	**0.58**	0.62	0.66	**0.56**	0.67
Recovery (%)	**81.0**	77.4	85.2	**76.5**	81.4
Production ('000 lbs)	**1,244**	1,138	1,353	**4,257**	6,128
Sales ('000 lbs)	**1,263**	1,035	1,402	**4,292**	6,058
Silver					
Grade (g/t)	**11.72**	12.96	14.39	**12.47**	13.52
Recovery (%)	**80.7**	80.0	80.0	**79.7**	75.0
Production (oz)	**36,223**	35,810	40,571	**144,411**	166,744
Sales (oz)	**36,636**	32,804	38,779	**145,588**	159,137
Financial Performance *(in 000's, except per share amounts)*					
Revenue	**$14,411**	$14,180	$13,298	**$59,517**	$69,851
Mining costs	**$16,751**	$13,575	$14,694	**$57,400**	$64,967
Loss before tax	**($4,494)**	($2,592)	($6,469)	**($9,837)**	($17,050)
Capital expenditures (1)	**$5,288**	$2,123	$1,269	**$9,510**	$6,376
Cash operating costs (by-product) ($/oz) gold (2)	**$1,508**	$1,249	$1,191	**$1,172**	$1,077
All-in sustaining costs (by-product) ($/oz) gold (2)	**$1,974**	$1,591	$1,425	**$1,468**	$1,308
All-in costs (by-product) ($/oz) gold (2)	**$1,974**	$1,591	$1,425	**$1,468**	$1,308

(1) See "Cash Flows, Commitments and Liquidity - Capital Expenditures" section of this MD&A.

(2) For further information and a detailed reconciliation of COC, AISC and AIC, please see the "Other Information - Non-IFRS Measures" section of this MD&A.

El Valle Operating Performance

During fiscal 2016, El Valle produced 44,682 ounces of gold, 4.3 million pounds of copper and 144,411 ounces of silver compared with 53,733 ounces of gold, 6.1 million pounds of copper and 166,744 ounces of silver during fiscal 2015.

Gold, copper and silver production decreased by 17%, 31% and 13% compared with fiscal 2015 primarily due to a decrease in tonnes milled of 12% over the same period. Decreases in average head grades mined of 7%, 17% and 8% also negatively impacted gold, copper and silver production, respectively.

During the fourth quarter of fiscal 2016, El Valle produced 9,209 ounces of gold, 1.2 million pounds of copper and 36,223 ounces of silver compared with 12,086 ounces of gold, 1.4 million pounds of copper and 40,571 ounces of silver over the same period in fiscal 2015.

Gold, copper and silver production decreased by 24%, 8% and 11%, respectively, primarily due to decreases in gold, copper and silver average head grades mined of 30%, 12% and 19%, respectively.

In respect of skarns production, current mine plans at El Valle are focused on opening additional stoping areas in the Black Skarns and Boinas East areas in order to improve productivity. Interim solutions to increase power capacity and improve efficiencies were completed through the second half of fiscal 2016, including the installation of a high capacity surface diesel generator and improvements to electrical infrastructure, and has assisted in improving development rates by 50% over fiscal 2016. The permitting process continues on a new permanent power line to support El Valle, and subsequent to year end, El Valle received the first of several permits. The Company expects completion and delivery of increased power by the end of 2017. Skarn production at El Valle was also negatively impacted by failures in the transition stopes because of geotechnical problems, and Company is analyzing alternative mining methods.

El Valle also restarted mining activity at Carlés during the fourth quarter of fiscal 2016 on a short-term basis to improve skarns production. Production is focused on the Carlés East and CZ zones, targeting approximately 115,000 tonnes of ore with an average grade of 2.5 g/t of gold. Mining activities are being carried out by a local Spanish mining contractor. The capital commitment required to restart Carlés is minimal as the ore is readily accessible with little to no primary development required. Further material may exist in the Carlés NW zone that could provide opportunity to expand the Carlés Mine. The Company expects to complete infill drilling on Carlés NW during the project timeframe.

Oxide production at El Valle in the fourth quarter remained consistent with the third quarter of fiscal 2016. Continued backfill and ventilation issues impacted both development and production through the second half of 2016. Ventilation circuits were improved during September, while a long-term solution for backfill is being reviewed. Oxide studies, commencing in October 2016, have the aim of developing new production strategies to increase oxide production, such as the benching method, larger cross-section fronts, sequencing and the application of new equipment for a continuous process type advance.

The Company also made improvements to its dewatering strategy and is working to optimize its current water management infrastructure to reduce future impacts to overall production. Additionally, the dewatering of the aquifer to reduce environmental and productivity risks continued through the end of fiscal 2016 based on the recommendations of a hydrological study completed earlier in the year.

El Valle Mine Financial Performance

Revenue from El Valle for fiscal 2016 decreased by 15% to $59.5 million on sales of 44,009 ounces of gold, 4.3 million pounds of copper and 145,588 ounces of silver from $69.9 million for fiscal 2015 on sales of 51,244 ounces of gold, 6.1 million pounds of copper and 159,137 ounces of silver primarily as a result of lower metal volumes sold.

Mining costs decreased by 11% from $65.0 million for fiscal 2015 to $57.4 million for fiscal 2016 primarily due to lower metal sales volumes.

Loss before tax for fiscal 2016 was $10.2 million compared with a loss of $17.1 million for fiscal 2015.

Total capital expenditures at El Valle during fiscal 2016 were $9.5 million compared with $6.4 million during fiscal 2015. Capital expenditures during fiscal 2016 consisted substantially of primary development and underground mine infrastructure investments. Refer to the “Financial Condition Review - Capital Expenditures” section of this MD&A.

COC (by-product) of $1,172 per ounce of gold sold for fiscal 2016 were $95 or 9% higher than for fiscal 2015. Total AISC (by-product) of $1,468 per ounce of gold sold for fiscal 2016 were $160 or 12% higher than for fiscal 2015. COC for fiscal 2016 were higher compared with fiscal 2015 due to a decline in by-product revenues and metal sales volumes. AISC were also higher due to increased capital expenditures during fiscal 2016.

The Company has recovered a portion of its loss for the basic recovery costs of the hoist damaged as a result of the hoisting accident at El Valle in June 2013 from one insurer. The other insurer has denied coverage and the Company is disputing the coverage decision by this insurer. Repair and upgrades to the hoist were completed and the hoist became fully operational in the third quarter of fiscal 2014.

El Valle Growth Exploration

The Company is also pursuing opportunities to define new resources in the areas surrounding El Valle. During fiscal 2016, soil sampling and geophysical surveys were completed at the Quintana property. Based on the results of these surveys, a drilling campaign is being defined for execution in fiscal 2017.

In February 2016, the Company completed a diamond drilling campaign for the Villar oxide zone. This zone was discovered via a drill program extending through the known resource zone of A107 to test for mineralization that may have been shadowed by the known existing resource. The Company also completed a drilling campaign at the La Brueva property in August 2015, and resource estimates for both properties were published in February 2016:

El Valle also completed 17,073 meters of infill definition and exploration diamond drilling over 116 drill holes through fiscal 2016.

Don Mario Mine

Through its wholly-owned subsidiary, Empresa Minera Paititi S.A. ("EMIPA"), the Company owns and operates the Don Mario Mine located in south-eastern Bolivia. Fiscal 2009 marked the last year of six years of production from the Company's LMZ underground gold mine at Don Mario with some gold production from lower-grade open pit satellite deposits and lower grade stockpiles continuing into fiscal 2010 and 2011. Over 420,000 ounces of gold was produced from the LMZ with an average recovery of over 80% from the associated CIL plant. Since January 2012, EMIPA has been mining the UMZ as an open-pit mine. EMIPA is currently focused on mining and processing the remaining ore from the UMZ while stockpiling mined production from the LMZ upper extension.

The following table includes operating and financial performance data for Don Mario for the periods set out below.

	Q4 2016	Q3 2016	Q4 2015	FY 2016	FY 2015
Operating Performance					
Ore mined (tonnes) (dmt)	**173,010**	175,080	194,223	**679,512**	938,492
Ore milled (tonnes) (dmt)	**199,774**	201,336	204,266	**806,187**	837,722
Daily average throughput (dmt)	**2,369**	2,393	2,523	**2,436**	2,532
Gold					
Grade (g/t)	**1.54**	1.65	0.88	**1.44**	1.32
Recovery (%)	**57.0**	58.5	54.3	**56.3**	53.8
Production (oz)	**5,633**	6,232	3,121	**21,102**	19,084
Sales (oz)	**4,884**	6,831	3,163	**17,807**	22,061
Copper					
Grade (%)	**0.96**	0.97	0.96	**0.95**	1.20
Recovery (%)	**56.2**	62.5	70.8	**62.2**	74.4
Production ('000 lbs)	**2,386**	2,695	3,055	**10,478**	16,473
Sales ('000 lbs)	**2,033**	2,844	3,264	**9,075**	17,899
Silver					
Grade (g/t)	**17.84**	15.97	31.47	**20.10**	25.20
Recovery (%)	**75.4**	74.2	64.6	**73.4**	63.3
Production (oz)	**86,366**	76,697	133,456	**381,523**	431,295
Sales (oz)	**59,884**	79,145	123,786	**324,260**	437,267
Financial Performance *(in 000's, except per share amounts)*					
Revenue	**$9,633**	$11,850	$7,087	**$34,333**	$51,574
Mining costs	**$6,133**	$8,234	$8,942	**$27,144**	$40,417
Income (loss) before tax	**$1,851**	$2,411	($4,541)	**$1,480**	($935)
Capital expenditures	**$1,623**	$609	$1,042	**$6,667**	$3,394
Cash operating costs (co-product) ($/oz) gold (1)	**$928**	$925	$1,118	**$1,023**	$948
Cash operating costs (co-product) ($/lb) copper (1)	**$1.68**	$1.69	$2.49	**$1.93**	$2.22
Cash operating costs (co-product) ($/oz) silver (1)	**$15.77**	$13.43	$16.46	**$15.06**	$14.41
All-in sustaining costs (co-product) ($/oz) gold (1)	**$1,080**	$1,025	$1,253	**$1,204**	$1,053
All-in sustaining costs (co-product) ($/lb) copper (1)	**$1.94**	$1.81	$2.77	**$2.25**	$2.45
All-in sustaining costs (co-product) ($/oz) silver (1)	**$18.18**	$14.40	$18.22	**$17.48**	$15.86

	Q4 2016	Q3 2016	Q4 2015	FY 2016	FY 2015
All-in costs (co-product) ($/oz) gold (1)	**$1,265**	$1,050	$1,277	**$1,264**	$1,058
All-in costs (co-product) ($/lb) copper (1)	**$2.25**	$1.85	$2.82	**$2.35**	$2.46
All-in costs (co-product) ($/oz) silver (1)	**$21.12**	$14.72	$18.52	**$18.28**	$15.93

(1) For further information and a detailed reconciliation of COC, AISC and AIC, please see the "Other Information - Non-IFRS Measures" section of this MD&A.

Don Mario Mine Operating Performance

During fiscal 2016, 21,102 ounces of gold, 10.5 million pounds of copper and 381,523 ounces of silver were produced at Don Mario compared with 19,084 ounces of gold, 16.5 million pounds of copper and 431,295 ounces of silver during fiscal 2015.

The 11% increase in gold production compared with fiscal 2015 was due to higher average head grades of 9% and increased recoveries of 5%. Copper and silver production for fiscal 2016 decreased by 36% and 12%, respectively, compared to the same period in 2015 primarily due to lower copper and silver average head grades. Gold average head grades are expected to be higher while copper and silver grades are expected to decrease in fiscal 2017 compared with prior periods, as the Company replaces production previously from the UMZ with production from the LMZ upper extension for processing in the CIL circuit.

Compared with the fourth quarter of fiscal 2015, gold production increased by 80%, while copper and silver production decreased by 22% and 35%, respectively, in the fourth quarter of fiscal 2016. Higher gold production was due primarily to higher average head grades mined of 76%. Copper production was impacted by lower recoveries of 21%, while silver production was impacted by lower average head grades mined of 43%.

Don Mario Mine Financial Performance

Revenue from Don Mario decreased by 33% from $51.6 million for fiscal 2015 on sales of 22,061 ounces of gold, 17.9 million pounds of copper and 437,267 ounces of silver to $34.3 million on sales of 17,807 ounces of gold, 9.1 million pounds of copper and 324,260 ounces of silver for fiscal 2016. Lower revenue was primarily the result of lower gold and copper volumes sold.

Mining costs of $27.1 million for fiscal 2016 decreased by $13.3 million or 33% compared with $40.4 million during fiscal 2015 due to the lower volume of metal sales.

Income before tax for fiscal 2016 was $1.5 million compared with a loss before tax of $0.9 million for fiscal 2015.

Total capital expenditures at Don Mario during fiscal 2016 were $6.7 million compared with $3.4 million during fiscal 2015. Capital expenditures during fiscal 2016 consisted primarily of construction costs for the CIL Project.

For fiscal 2016, COC (co-product) were $1,023 per ounce of gold or 8% higher, $1.93 per pound of copper or 13% lower and $15.06 per ounce of silver or 5% higher compared with $948 per ounce of gold, $2.22 per pound of copper and $14.41 per ounce of silver for fiscal 2015. Total AISC (co-product) were $1,204 per ounce of gold or 14% higher, $2.25 per pound of copper or 8% lower and $18.28 per ounce of silver or 15% higher compared with $1,053 per ounce of gold, $2.45 per pound of copper and $15.86 per ounce of silver for fiscal 2015. The decreases in copper co-product COC and AISC were driven primarily by changes in metal content ratios from the LMZ ore mined through fiscal 2016 against the UMZ ore mined through fiscal 2015, and the increases in gold and silver co-product COC and AISC were driven primarily by lower gold and silver ounces produced.

Don Mario Exploration and Mine Life Extension

As described above, historical mining took place in the LMZ underground gold mine until 2009. As a near term mine life extension opportunity, geotechnical and geological reviews were carried out to investigate the potential of mining the upper extension of the LMZ. The results of this work have demonstrated that a pushback of the pit to allow for the mining of this upper extension of the LMZ is possible. A resource estimate for the LMZ was prepared and a technical report documenting this mineral resource estimate was published on November 16, 2015. The Company began replacing tonnes previously mined at the UMZ with production from the upper extension of the LMZ in the second quarter of fiscal 2016.

Historically, gold and silver from the LMZ were leached with cyanide in a CIL circuit and a gold doré was produced, due to the higher gold grades and lower copper and silver grades associated with the LMZ as compared to the UMZ. Average historical recoveries achieved from the CIL were over 80%. The CIL circuit was placed on care and maintenance in April 2011 when the Company commenced mining the metallurgically more complex UMZ. Results of a metallurgical testing program undertaken by the Company indicate potential gold recovery of higher than historical rates may be achieved by processing LMZ material through a re-commissioned CIL circuit.

EPCMC, together with Lycopodium, completed a capital cost estimate to recommission the CIL circuit. For the selected process option, the capital cost estimate is $6.4 million to accuracy estimate of +/- 15% including owner's costs and 15% contingency. During the third quarter of fiscal 2016, the Company successfully closed the $7.9 million BISA Loan facility, the proceeds of which are being used primarily for the construction of the CIL Project. The Company engaged EPCMC for the construction of the CIL Project and expects to substantially complete construction by the end of December 2016. Upon commissioning of the CIL circuit, Don Mario will shift to production of gold doré in lieu of the current gold concentrate due to the higher expected gold recoveries, and will continue to produce copper concentrate. This is expected to result in lower unitary cash costs and maximize the value of the LMZ, the effects of which will be fully realized in the second half of fiscal 2017.

Subsequent to the fiscal year end, DCGS SA upgraded the mineral resource estimate to a mineral reserve estimate for the LMZ area under the supervision of Gino A. Zandonai, who is an independent Qualified Person under NI 43-101. The effective date of the estimate is September 30, 2016. The following tables summarize the results of the mineral reserve estimate:

Total Proven and Probable

Zone	Tonnage (000 t)	Grade (g/t Au)	Grade (% Cu)	Grade (g/t Ag)	Contained Metal (000 oz Au)	Contained Metal (t Cu)
Proven	-	-	-	-	-	-
Probable	793	2.62	0.60	5.94	66.8	4794.6
Proven and Probable	**793**	**2.62**	**0.60**	**5.94**	**66.8**	**4794.6**

Notes:

1. CIM definitions were followed for Mineral Reserves and were prepared by G. Zandonai, a qualified person for the purposes of NI43-101, who is an employee of DGCS SA and is independent of the Company.
2. Mineral Reserves are estimated using copper equivalent cut-off grade of 1.0% CuEq. Copper equivalent cut-offs were calculated using recent operating results for recoveries, off-site concentrate costs, and on-site operating costs.
3. Mineral Reserves are estimated using average long-term prices of US$1,100 per ounce gold, US$2.75 per lb copper, and US$16.5 per ounce silver.
4. Numbers may not add due to rounding.
5. The mineral reserves at the LMZ have been based on processing by the CIL and flotation methods.

The commissioning of the CIL is also expected to position Don Mario to leverage other potential business opportunities. In recent months, the Company has been re-evaluating the economic potential of processing existing mineral stockpiles, including the oxides previously treated through the leach-precipitation-flotation process, and expects to have the results of this testing by the end of the first quarter of 2017. As at September 30, 2016, EMIPA had oxide stockpile mineral resources of approximately 2.2 tonnes with an average gold grade of 1.84 g/t. The Company will also be commencing an evaluation of processing of tailings material through the CIL circuit to determine the viability of recovering gold that has been deposited into the tailings facility as a result of the flotation-only process used since 2011.

Subsequent to the fiscal year end and as a result of the timing of stockpiling of higher grade LMZ material for use in the CIL circuit at Don Mario, the Company entered into a trade arrangement with a third party to supply alternative copper concentrates to Samsung C&T conforming to the requirements of the Prepayment Facility for approximately two months of production (3,500 DMT). The resulting improvement in anticipated revenue through fiscal 2017 from the stockpiled LMZ material and the enhanced gold recovery from the CIL circuit is expected to provide the Company with positive economic benefit over the life of the LMZ reserve after incurring expected realized net loss on the aforementioned trade agreement of approximately $1.2 million based on current market prices.

In addition, the Company completed an exploration drilling program around the known mineralized zones north-west and south-east of the UMZ (collectively known as "Cerro Felix"). A resource estimate for Cerro Felix was also prepared and published in a technical report on November 16, 2015. The Company is currently assessing mine plan scenarios in order to determine economic viability of mining Cerro Felix.

Market Review and Trends

Metal Prices

The market prices of gold and copper are two of the primary drivers of Orvana's earnings and ability to generate free cash flows. During fiscal 2016, the gold price, while reaching highs not seen since 2014, remained volatile, with the price ranging from $1,049 to $1,366 per ounce and an average price of $1,220 per ounce compared with $1,184 per ounce during fiscal 2015. Orvana's average gold realized price during fiscal 2016 was $1,211 per ounce, as compared to $1,194 per ounce in the third quarter of fiscal 2015. The Company derived approximately 67% of its revenue from sales of gold during fiscal 2016.

Political and economic uncertainty continued to drive market volatility and increased gold prices during fiscal 2016 and beyond, including the results of the recent Presidential election in the United States, the results of the Brexit referendum and the following legal appeals, the demonetization of the Indian currency and the continued expectation of an interest rate hike by the Federal Reserve of the United States.

In managing volatility risk, during 2016, the Company entered into a limited amount of gold and copper fixed price arrangements with Auramet International, LLC. In respect of gold, the Company, as at September 30, 2016, committed to sell approximately 30% of forecast consolidated gold production from October 2016 to February 2017 at a fixed floor price of US $1,300 per ounce with upside participation commencing at US $1,350 per ounce. In respect of copper, the Company, as at September 30, 2016, entered into fixed forward pricing arrangements for approximately 20% of forecast consolidated production from October 2016 to May 2017, at prices ranging between US $2.05 per pound to US $2.20 per pound. Refer to the "Derivative Instruments" section of this MD&A.

Copper prices during fiscal 2016 traded in a range of $1.96 to $2.42 per pound with an average price of $2.16 per pound compared with $2.69 per pound during fiscal 2015. Orvana's average copper realized price during fiscal 2016 was $2.16 per pound. The Company derived approximately 26% of its revenue from sales of copper during fiscal 2016.

During fiscal 2016, silver prices traded in a range from $13.58 per ounce to $20.47 per ounce with an average price of $16.49 per ounce compared with $16.12 during the same period in fiscal 2015. Orvana's average silver realized price for fiscal 2016 was $16.29 per ounce. The Company derived approximately 7% of its revenue from sales of silver during fiscal 2016.

Currency Exchange Rates

The results of Orvana's operations are affected by US dollar exchange rates. Orvana's largest exposure is to the Euro to US Dollar exchange rate. The Company incurs operating and administration costs at El Valle in Euros, while revenue is earned in US dollars. Orvana's cost of sales and expenses was positively affected by the decrease of the Euro to US Dollar exchange rate from an average of 1.14 over fiscal 2015 to 1.11 over fiscal 2016. As a result, mining costs at El Valle were lower by approximately $1.6 million during fiscal 2016 compared with fiscal 2015.

Orvana also has a minor exposure to the Canadian dollar and the Swedish krona through corporate administration costs. Orvana's exposure to the US Dollar to Bolivianos exchange rate is limited as this exchange rate has not fluctuated significantly during previous reporting periods.

FINANCIAL CONDITION REVIEW

Balance Sheet Review

The following table provides a comparison of key elements of Orvana's balance sheet at September 30, 2016 and September 30, 2015.

(in 000's)	**September 30, 2016**	**September 30, 2015**
Cash and cash equivalents	**$18,939**	$17,236
Restricted cash (short term)	**$2,092**	$2,593
Non-cash working capital (1)	**$4,558**	($1,807)
Total assets	**$174,262**	$169,435
Total liabilities	**$70,151**	$56,887
Shareholders' equity	**$104,111**	$112,548

(1) Working capital represents current assets of $52.5 million less cash and cash equivalents and short-term restricted cash totaling $21.0 million and less $34.2 million in current liabilities composed of accounts payable and accrued liabilities and income taxes payable (not including current debt and derivative instruments).

Total assets increased by $4.8 million or 3% from $169.4 million to $174.3 million primarily as a result of increases in (i) inventory of $2.5 million, (ii) VAT receivables and prepaid assets of $2.4 million, and offset by decreases in (iii) property, plant and equipment of $1.8 million due to depreciation and changes in decommissioning assets.

Short-term restricted cash as at September 30, 2016 was $2.1 million (September 30, 2015 – $2.6 million), primarily consisting of $2.0 million of restricted cash placed on deposit with a Canadian bank as security on the BISA Loan. The prior year balance primarily consisted of restricted cash placed on deposit with Canadian and Bolivian commercial banks in favour of Bolivian labour courts pending the result of an ongoing claim. During the first quarter of fiscal 2016, this claim was settled and $2.4 million of restricted cash was released to the Company. Refer to the "Contingencies" section of the MD&A.

Total liabilities increased by $13.3 million or 23% to $70.2 million at September 30, 2016 from $56.9 million at September 30, 2015 primarily as a result of increases in (i) $7.6 million as a result of the closing of the Prepayment Facility and the related deferred revenue, net of capitalized financing costs, (ii) $4.9 million as a result of the closing of the BISA Loan and (iii) accounts payable and accrued liabilities of $1.7 million.

BISA Loan

In May 2016, EMIPA closed the $7.9 million BISA Loan, the proceeds of which are being used for the recommissioning of the CIL Project. Under the terms of the BISA Loan, five disbursements of specified amounts will be made available to EMIPA as expenditures are incurred on the CIL Project. The BISA Loan matures in September 2017 and has an interest rate of 6% per annum, with ten monthly principal repayments beginning near the end of December 2016. Security includes certain assets at Don Mario for the term of the BISA Loan and a stand-by letter of credit held by a Canadian bank of $2.0 million which will be replaced with the CIL asset once operational. As of September 30, 2016, $4.9 million had been drawn from the $7.9 million BISA Loan.

Samsung C&T Loan

In August 2016, the Company entered into a $12.5 million copper concentrates and gold doré Prepayment Facility with Samsung C&T, the proceeds of which are being invested at El Valle for its ongoing development activities and infrastructure projects.

Under the terms of the Prepayment Facility, Orvana is selling gold doré from its El Valle Mine in Spain and copper concentrate from its Don Mario Mine in Bolivia to Samsung C&T, on an exclusive basis for a period of thirty months. In exchange, Orvana receives $12.5 million in prepayment financing from Samsung C&T in two instalments. The first instalment of $8.0 million was drawn on closing and will be repaid beginning in September 2017 in eighteen equal monthly payments. The second instalment of $4.5 million is available for drawdown six to twelve months after closing and will be repaid beginning nine months after drawdown in nine equal monthly payments. The Prepayment Facility bears interest at USD 3M LIBOR plus 4.5%. Interest payments and principal repayments are made against Orvana's future shipments of copper concentrates and gold doré. Samsung C&T has agreed to pay for copper concentrates and gold doré at a price based on the prevailing metal prices for the gold, silver and copper content around time of shipment, less customary treatment, refining and shipping charges, and pursuant to the terms of the Prepayment Facility.

The Company's obligations to Samsung C&T under the Prepayment Facility are secured by the pledge to Samsung C&T of all of Orvana's shares of OroValle, which owns El Valle Mine in Spain.

Shareholders' Equity

Shareholders' equity at September 30, 2016 decreased by 7% to $104.1 million compared with $112.5 million at September 30, 2015. The table below sets out the number of each class of securities of the Company outstanding at September 30, 2016 and as at the date hereof.

	As at September 30, 2016
Common Shares	136,623,171
Warrants (1)	1,050,000
Options (2)	1,716,667

(1) All of the outstanding warrants are held by Fabulosa. In 2011 and 2012, a total of 2,725,000 warrants were issued in two tranches (referred to as the "Warrant Certificates"), as follows: i) warrants to purchase up to 1,300,000 Common Shares were issued on September 6, 2011 with an exercise price of C$1.90 until September 6, 2016 and ii) warrants to purchase up to 1,425,000 Common Shares were issued on March 5, 2012 with an exercise price of C$0.97 until March 5, 2017. As a result of the expiration of the warrants issued on September 6, 2011 and the forfeiture or expiration of certain options to acquire Common Shares, the exercise of which are tied to Fabulosa's ability to exercise the Warrant Certificates, 2,275,000 of the 2,725,000 Warrant Certificates may never be exercised as of the date of the MD&A. The remaining 450,000 Warrant Certificates are exercisable as of the date of the MD&A. Additional warrants were issued in connection with amendments to the Fabulosa Loan in 2013 and 2014 as follows: i) warrants to purchase 500,000 Common Shares were issued on August 22, 2013 with an exercise price of C$0.49 until August 22, 2018, and ii) warrants to purchase 100,000 Common Shares were issued on July 11, 2014 at an exercise price of C$0.54 until July 11, 2019.

(2) The options have a weighted average exercise price of $0.79 and expiry dates ranging from 2016 to 2020.

Derivative Instruments

The Company had the following derivative instruments outstanding at September 30, 2016:

	Contract Prices	**Cash Settlement**	**Contract Amounts**
Copper			
Copper forwards (Oct 2016 – May 2017)	$4,519 to $4,850 / tonne	Monthly	907 tonnes
Gold			
Gold forwards (Oct 2016 – Feb 2017)	$1,300 / troy oz	Monthly	12,500 troy oz
Gold capped calls (Oct 2016 – Feb 2017)	$1,300 to $1,445 / troy oz	Monthly	12,500 troy oz

As at September 30, 2016, approximately 30% of the Company's forecasted gold from October 2016 to February 2017 and 20% of forecasted copper production from October 2016 to May 2017 was hedged under gold and copper derivative instruments. The Company paid net cash of $338 in settlement of the derivative instruments that matured during fiscal 2016.

As at September 30, 2016, the Company's outstanding derivative instruments were valued on the balance sheet as follows:

	Spot Price	**Contract Price**	**Avg. Forward Price**	**Fair Value**
Derivative instrument assets				
Gold capped calls	$1,319/oz	$1,350 to $1,445/oz		$321
Total fair value of derivative instruments assets at September 30, 2016				$321
	Spot Price	**Contract Price**	**Avg. Forward Price**	**Fair Value**
Derivative Instrument Liabilities				
Gold forwards	$1,319/oz	$1,300/oz	$1,317/oz	$209
Copper forwards	$4,872/t	$4,519 to $4,850/t	$4,855/t	$172
Total fair value of derivative instruments liabilities at September 30, 2016				$381

Changes in the fair value of the Company's outstanding derivative instruments are recognized through the Company's income statement as non-cash derivative instrument gains or losses. At maturity of each contract, a cash settlement takes place resulting in a corresponding reduction in the carrying value of the derivative instruments. The mark-to-market fair value of the Company's outstanding derivative instruments is based on independently provided market rates and determined using standard valuation techniques, including the impact of counterparty credit risk.

The Company recorded fair value adjustments on its outstanding derivative instruments as follows:

	FY 2016	**FY 2015**
Change in unrealized fair value	**$60**	$-
Realized loss on cash settlements of derivative instruments closed	**338**	-
Recorded derivative instruments loss	**$398**	$-

Capital Resources

As at September 30, 2016, the Company had cash and cash equivalents of $18.9 million and restricted cash of $3.2 million. The Company considers its capital employed to consist of shareholders' equity (including share capital, contributed surplus and accumulated deficit) and total debt net of cash and cash equivalents as follows:

(in 000's)	**September 30, 2016**	**September 30, 2015**
Shareholders' equity	**$104,111**	$112,548
Bank debt	**517**	1,478
Capital leases	**1,783**	-
BISA Loan	**4,928**	-
Prepayment Facility	**6,825**	-
	$118,164	$114,026
Less: Cash and cash equivalents	**(18,939)**	(17,236)
Capital employed	**$99,225**	$96,790

The Company's financial objective when managing capital is to ensure that it has the cash and debt capacity and financial flexibility to fund its ongoing business objectives including operating activities, investments and growth in order to provide returns for shareholders and benefits for other stakeholders. In order to maintain or adjust the capital structure, in addition to using cash flows from operating activities for this purpose, the Company may issue new shares or obtain additional debt. Through fiscal 2016, the Company has closed the $7.9 million BISA Loan and the $12.5 million Prepayment Facility with Samsung C&T. The Company continues to discuss and evaluate further financing opportunities with a number of Spanish banks at what the Company believes will be a competitive cost of capital, with the objectives of expanding OroValle's in-country banking relationships and to secure access to greater liquidity.

The Company monitors its capital structure and makes adjustments according to market conditions in an effort to meet its objectives given the Company's operating and financial performance and current outlook of the business and industry in general. The Company's alternatives to fund future capital needs include cash flows from operating activities, debt or equity financing or adjustments to capital spending. The capital structure and these alternatives are reviewed by management and the board of directors of the Company on a regular basis to ensure the best mix of capital resources to meet the Company's needs.

The Company manages capital through its operating and financial budgeting and forecasting processes. The Company reviews its working capital and forecasts its future cash flows on a periodic basis, based on operating expenditures and other investing and financing activities. The forecast is regularly updated based on the results of El Valle and Don Mario. Information is regularly provided to the board of directors of the Company.

The Company's strategy during this period of commodity market uncertainty is to manage its existing capital and liquidity in a prudent fashion to sustain its ongoing capital projects at EMIPA and OroValle.

Cash Flows, Commitments, Liquidity and Contingencies

Cash Flows

Total cash and cash equivalents as at September 30, 2016 was $18.9 million primarily denominated in US dollars representing an increase of $1.7 million from $17.2 million at September 30, 2015. Short-term restricted cash was $2.1 million at September 30, 2016 compared with $2.6 million at September 30, 2015 which included $2.0 million placed on deposit with a Canadian bank as security on the BISA Loan. The Company's total debt was $12.3 million at September 30, 2016. This compares with total debt as at September 30, 2015 of $1.5 million.

The following table summarizes the principal sources and uses of cash for the periods specified below:

(in 000's)	**Q4 2016**	**Q3 2016**	**Q4 2015**	**FY 2016**	**FY 2015**
Cash provided by (used in) operating activities before changes in non-cash working capital	**$1,186**	$3,223	($2,670)	**$5,199**	$8,471
Cash provided by (used in) operating activities	**$221**	$2,176	($5,475)	**$3,437**	$20,678
Cash provided by (used in) financing activities	**$10,996**	$986	$1,478	**$12,475**	($24,500)
Cash provided by (used in) investing activities (1)	**($4,300)**	($6,164)	($2,643)	**($14,206)**	$4,324
Change in cash	**$6,917**	($3,002)	($6,641)	**$1,706**	$502

(1) These amounts are presented on a cash basis. Each reported period excludes unpaid capital expenditures incurred in the period which will be paid in subsequent periods and includes capital expenditures incurred in prior periods and paid for in the applicable reported period. See "Cash Flows, Commitments and Liquidity - Capital Expenditures".

Orvana's primary sources of liquidity continues to be from operating cash flows as well as debt financing raised through the closing of the Prepayment Facility and the BISA Loan. Cash flows provided in operating activities before changes in non-cash working capital were $5.2 million for fiscal 2016 compared with $8.5 million for fiscal 2015 and cash flows provided in operating activities were $3.4 million for fiscal 2016 compared with $20.7 million for fiscal 2015.

Significant drivers of changes in operating cash flow are production and realized gold and copper prices. Future changes in the market price of gold and copper, either favourable or unfavourable, will continue to have a material impact on the Company's cash flows and liquidity. The principal uses of operating cash flows during 2016 have been the funding of the Company's capital expenditures.

Cash provided by financing activities were $12.5 million for fiscal 2016, primarily due to the debt financing raised through 2016, compared with cash used in financing activities of $24.5 million for fiscal 2015, primarily due to the repayment of the El Valle Loan and the credit facilities previously held with local Bolivian banks.

Cash used in investing activities was $14.2 million for fiscal 2016 compared with cash provided by investing activities of $4.3 million for fiscal 2015 primarily due to capital expenditures, offset in fiscal 2015 by proceeds from the sale of Copperwood.

Capital Expenditures

The following table sets forth Orvana's capital expenditures for the periods specified below for El Valle and Don Mario:

Capital Expenditures *(in 000's)*	**Q4 2016**	**Q3 2016**	**Q4 2015**	**FY 2016**	**FY 2015**
El Valle Mine	**$5,288**	$2,123	$1,269	**$9,510**	$6,376
Don Mario Mine	**1,623**	609	1,042	**6,667**	3,394
Corporate	**15**	13	-	**36**	8
Subtotal capital expenditures	**$6,927**	$2,745	$2,311	**$16,213**	$9,778
Accounts payable adjustments	**(1,533)**	377	29	**(1,236)**	340
Total capital expenditures (1)	**$5,394**	$3,122	$2,340	**$14,977**	$10,118

(1) Total capital expenditure amounts are presented on a cash basis. Each reported period excludes unpaid capital expenditures incurred in the period which will be paid in subsequent periods and includes capital expenditures incurred in prior periods and paid for in the applicable reported period.

At El Valle, capital expenditures in fiscal 2016 consisted mainly of primary development and underground infrastructure improvements. Significant capital expenditures at Don Mario included the annual tailings dam lift as well as the ongoing recommissioning costs of the CIL Project at Don Mario.

The Company expects sustaining capital expenditures for fiscal 2017 to be in the range of $27.0 to $30.0 million. Refer to the “Outlook” section of the MD&A.

Other Commitments

At September 30, 2016, the Company’s contractual obligations included: the Prepayment Facility; the BISA Loan; term credit facilities; operating and finance leases; decommissioning liabilities; purchase obligations related to certain operating activities at El Valle and Don Mario; provision for statutory labour obligations; and long-term compensation.

Contractual obligations are summarized in the following table below:

At September 30, 2016		**Payment Due by Period**			
(in 000's)	**Total**	**Less than 1 Year**	**1-3 Years**	**4-5 Years**	**After 5 Years**
BISA Loan	**$4,928**	$4,928	-	-	-
Prepayment Facility	**$8,000**	$444	$7,556	-	-
Operating leases	**$2,893**	$1,859	$1,013	$21	
Finance leases	**$1,783**	$885	$888	$10	-
Decommissioning liabilities (1)	**$23,268**	$360	$897	$6,455	$15,556
Reclamation bond (2)	**$5,581**	$5,581	-	-	-
Purchase obligations	**$4,113**	$4,113	-	-	-
Provision for statutory labour obligations (3)	**$2,958**	-	$2,958	-	-
Long-term compensation	**$917**	$188	$508	-	$221
Total contractual obligations (4)	**$54,441**	**$18,357**	**$13,820**	**$6,486**	**$15,777**

(1) Decommissioning liabilities are undiscounted. Total cash deposited with a Spanish financial institution for Euro denominated reclamation bonds amounted to approximately $8.4 million at September 30, 2016 (September 30, 2015 - $8.4 million). Decommissioning liabilities are discussed below under “Other Information - Critical Accounting Estimates - Decommissioning Liabilities”.

(2) Spanish regulatory authorities have requested that an additional reclamation bond of €5.0 million be deposited by the Company under Spanish mining regulations in respect of El Valle. The Supreme Court of Spain recently ordered a retrial regarding the amount of this bond. The Company is working with Spanish regulatory authorities to come to an agreement regarding posting this bond, while preserving the Company’s rights in court.

(3) Under Bolivian law, EMIPA has an obligation to make payments to employees in the amount of one month’s wages for each year of service. The employee can elect to receive payment after five years of service in the amount of five months of wages while continuing employment with EMIPA.

(4) Production from El Valle and Don Mario is subject to certain royalties for which amounts have not been included in total contractual obligations at September 30, 2016. For a description of such royalties and amounts payable, see “Royalties” below.

Royalties

Production from El Valle is subject to a 3% net smelter return royalty (“NSR”), referred to herein as the El Valle Royalty. The El Valle Royalty rate decreases to 2.5% for any quarter in which the average price of gold is below $1,100 per ounce. The El Valle Royalty expense totaled $1.7 million for fiscal 2016, compared with $2.1 million for fiscal 2015.

Production from Don Mario is subject to a 3% NSR. This expense totaled $1.2 million and $1.7 million for fiscal 2016 and fiscal 2015, respectively. The Bolivian government collects a mining royalty tax on the revenue generated from copper, gold and silver sales from Don Mario at rates of 5%, 7% and 6%, respectively. These amounts totaled $2.9 million and $5.0 million for fiscal 2016 and fiscal 2015, respectively. The NSR and the mining royalty tax are referred to herein as “Don Mario Royalties”.

Liquidity

Orvana’s primary sources of liquidity in fiscal 2016 were operating cash flows as well as financing received from the closing of the BISA Loan and the Prepayment Facility in May and August 2016, respectively.

As at September 30, 2016, the Company had cash of $18.9 million designated to cover the Company’s commitments due in less than one year of $18.4 million.

The Company generated positive operating cash flows in fiscal 2016 of $3.4 million. Financing and investing activities including debt financing and capital expenditures resulted in overall cash flow generation of $1.7 million.

In August 2016, the Company entered into the US $12.5 million Prepayment Facility with Samsung C&T, the proceeds of which are being invested into El Valle. Acceleration of previously delayed underground mine development and the execution of planned water and power infrastructure projects are required to meet El Valle's long-term objectives of increasing production and lowering unitary costs, the full benefit of which is expected through fiscal 2018. The proceeds of the Prepayment Facility will also support the restart of the Carlés Mine to increase production in the near-term while the Company executes on the above.

At Don Mario, the Company is nearing completion of the CIL Project, and expects to commence commissioning early in the second quarter of fiscal 2017. The fully commissioned CIL circuit is expected to result in the operation generating free cash flow later in fiscal 2017 and allow for repayment of the BISA Loan in full by the end of fiscal 2017. Unitary costs are expected to decrease through the second half of fiscal 2017 as anticipated enhanced gold recovery is realized from CIL production.

Security for the BISA Loan includes a cash-backed letter of credit of $2.0 million. This restricted cash is expected to be returned one month after the CIL Project commissioning is completed.

Through the completion of the recent debt financings and together with the current Euro to USD foreign exchange environment, the Company believes, based on its current cash flow forecasts, that it has sufficient financial resources to fully realize its current business plans. The Company's cash flow forecasts are developed using best available information at the time of their preparation and rely on certain material assumptions, such as gold and copper market prices and the ability to achieve planned production of gold and copper. There can be no assurances that the Company's cash flow forecasts will not change materially in the future and that the effect of changes to the Company's forecasts, if negative, could result in future financing requirements for the Company.

Additionally, the Company is actively managing its commodity price risk through price fixing a limited amount of its production revenue from July to August 2016. Refer to "Derivative Instruments" above.

If (i) unanticipated events occur that may impact the operations of El Valle and Don Mario and/or (ii) if the Company does not have adequate access to financing on terms acceptable to the Company, the Company may need to take additional measures to increase its liquidity and capital resources, including obtaining additional debt or equity financing, pursuing joint-venture partnerships, equipment financings or other receivables financing arrangements. The Company may experience difficulty in obtaining satisfactory financing terms. Failure to obtain adequate financing on satisfactory terms could have a material adverse effect on Orvana's results of operations or financial condition.

Contingencies

The Company is currently working through one environmental matter involving selenium discharges into the Cauxa River in Asturias, Spain. The Cauxa River flows past El Valle Mine operated by the Company's Spanish subsidiary, OroValle, as well as other industrial properties owned by third parties. Selenium is a naturally occurring element that is found in rocks, land and water and thus is also naturally found in certain food supplies. Based on recent scientific studies conducted by the Company, the Company confirmed its belief that these levels of selenium are not a health or environmental risk.

Spanish regulatory authorities have taken the position that the levels of selenium in the river flowing past El Valle exceed the levels permitted by applicable regulations as a result of discharges attributed to the Company which may not be in compliance with certain of the Company's permits. In recent years, OroValle has received approximately €1.0 million (approximately $1.1 million) in fines relating to these matters and may face further additional fines or other sanctions, including the revocation or suspension of certain permits, in the future. OroValle is appealing the outstanding fines and the enforcement of certain fines has been suspended pending the related criminal matter. A judge of criminal court of Asturias is conducting an investigation into the potential commission by OroValle of a reckless crime under the Spanish penal code relating to these matters. The judge may decide to dismiss the matter, conduct a further investigation and/or charge OroValle and/or certain OroValle individuals. If OroValle is ultimately found responsible, monetary penalties, amongst other sanctions, may be applied. These sanctions could have a material impact on the Company. At this time, OroValle has not been charged. OroValle has cooperated and will continue to cooperate with investigations and is defending itself vigorously.

OroValle has been working to remediate this matter through various activities including the implementation of a reverse osmosis water treatment plant in September 2014 and the development of a long-term water management plan which is in progress. While it appears that these remediation efforts are addressing these matters, there can be no assurances that OroValle's continuing remediation activities will be successful to fully comply with local regulations. In addition, OroValle has been seeking amendments to certain of its permits or, alternatively to receive new permits, and extensions of deadlines to comply with local requirements. Orvana is committed to developing and operating its mines and projects in full compliance with local environmental regulations and recognized international environmental standards.

In Bolivia, EMIPA was subject to a labour claim filed in the fourth quarter of fiscal 2014 by 31 former employees for the payment of certain employment related amounts, including vacation and overtime, for the period of 2007 to 2013. During the period of the labour claim, the Company provided a 100% cash-backed guarantee in the amount of $2,400 as security for the claim, which was returned during the first quarter of fiscal 2016 when the Court made a favourable ruling in the amount of $0.4 million. The claim was appealed and such appeal was settled during the fourth quarter of fiscal 2016 with no increase in the amount of the ruling and no further freezing of EMIPA's accounts.

SUMMARY OF QUARTERLY RESULTS

The following two tables include results for the eight quarters ended September 30, 2016:

	Quarters ended			
(in 000's, except per share amounts)	**Q4 2016**	**Q3 2016**	**Q2 2016**	**Q1 2016**
Revenue	**$24,044**	$26,030	$21,279	$22,497
Net loss	**($1,528)**	($1,181)	($2,670)	($3,076)
Loss per share (basic and diluted)	**($0.01)**	($0.01)	($0.02)	($0.02)
Total assets	**$174,262**	$161,910	$162,394	$163,730
Total financial liabilities (1)	**$14,580**	$2,957	$1,971	$1,971
	Quarters ended			
	Q4 2015	**Q3 2015**	**Q2 2015**	**Q1 2015**
Revenue	$20,385	$32,162	$30,108	$38,770
Net income (loss)	($7,819)	($5,522)	($4,130)	$738
Earnings (loss) per share (basic and diluted)	($0.06)	($0.04)	($0.03)	$0.01
Total assets	$169,435	$183,334	$192,690	$200,991
Total financial liabilities (1)	$1,478	-	$3,943	$3,450

(1) Financial liabilities include the BISA Loan, Prepayment Facility, bank debt, derivative liabilities, the Fabulosa Loan and the El Valle Loan, before deducting financing fees.

FINANCIAL AND OTHER RISKS AND UNCERTAINTIES

Financial Risks

The Company's activities expose it to a variety of financial market risks (including commodity price risks, currency risk and interest rate risk), credit risks, liquidity risks, financing risks and other risks. Enterprise risk management is carried out by management of the Company under policies approved by the board of directors thereof. Management identifies and evaluates the financial risks in co-operation with the Company's operating units. The Board of Directors of the Company reviews management's risk management programs and provides oversight on specific areas. The Company's overall risk management program seeks to minimize potential adverse effects on the Company's financial and operating performance.

Other Risks

The Company identified a variety of additional risks and uncertainties in the Annual Information Form filed on the date hereof ("AIF") including, but not limited to, (i) mineral resources and reserves estimates and replacement of depleted reserves, (ii) production estimates, (iii) development, capital projects and operations of mines, (iv) competition, (v) acquisitions and divestitures, (vi) title matters, (vii) water supply, (viii) regulatory and other risk, (ix) permits, (x) environmental, health and safety regulations, (xi) political and related risks, (xii) insurance, (xiii) reliance on key personnel and labor relations, (xiv) community relations and license to operate, (xv) litigation, (xvi) conflicts of interest, (xvii) controlling shareholder, and (xviii) share trading volatility.

In respect of regulatory and other risks and environmental regulations risks, see “Contingencies” above.

For a more detailed discussion of such financial and other business risks, please see the “Risk Factors” in Orvana’s AIF at www.sedar.com.

OTHER INFORMATION

Critical Accounting Estimates

The preparation of financial statements in accordance with IFRS 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 mineral reserves, accounts receivable, property, plant and equipment, depreciation and amortization, forward metals prices, decommissioning liabilities, future income taxes, stock-based compensation and other accrued liabilities and contingent liabilities.

Net Realizable Amounts of Property, Plant and Equipment

At September 30, 2016, the net carrying value of the property, plant and equipment in respect of El Valle and Don Mario amounted to $91.3 million and $13.1 million, respectively. Effective from the point that they are ready for their intended use, property, plant and equipment are amortized on a straight line basis or using the units-of-production method over the shorter of the estimated economic life of the asset or mineral property. The method of depreciation is determined based on that which best represents the use of the assets.

The reserve and resource estimates for each operation are the prime determinants of the life of a mine. In general, a mineralized deposit where the mineralization is reasonably well defined is amortized over its proven and probable mineral reserves. Non-reserve material may be included in the depreciation calculations in limited circumstances where there is a high degree of confidence in economic extraction. The expected economic life of these mines is dependent upon, among other things, the estimated remaining ore; gold, copper and silver prices; cash operating costs and capital expenditures.

The Company assesses each mine development project to determine when a mine is substantially complete and ready for its intended use and has advanced to the production stage. In its assessment, the Company considers relevant criteria based on the nature of each project, including the completion of a reasonable period of testing of mine plant and equipment, the ability to produce materials in saleable form (within specifications) and the ability to sustain ongoing production of minerals. When a mine development project moves into the production stage, the capitalization of certain mine construction costs ceases and costs are either capitalized to inventory or expensed, except for sustaining capital costs and underground mine or reserve development, which are capitalized to property, plant and equipment.

Decommissioning Liabilities

Decommissioning liabilities relate to the dismantling of the mine facilities and environmental reclamation of the areas affected by mining operations. Mine facilities include structures and the tailings dam. Environmental reclamation requirements include mine water treatment, reforestation and dealing with soil contamination. It is possible that the Company’s estimates of the ultimate amounts required to decommission its mines 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. The following table sets out the estimates of the undiscounted and discounted cash flows required to settle such decommissioning liabilities in respect of El Valle and Don Mario at September 30, 2016. These estimates were prepared by management with the use of independent third party experts.

At September 30, 2016	Undiscounted Cash Flows Estimated to Settle Decommissioning Liabilities	Discount Rate	Discounted Cash Flows Required to Settle Decommissioning Liabilities
(in 000's)			
El Valle Mine (1)	$15,546	0.99%	$13,914
Don Mario Mine (1)	$7,722	3.20%	$6,799
Total	**$23,268**		**$20,713**

(1) Accretion expense is recorded using the discount interest rate set out above. It is estimated that these amounts will be incurred beginning in 2017 and 2019 in respect of Don Mario and El Valle, respectively. The discount rate used to measure decommissioning liabilities under IFRS is based on current interest rates of government bonds of the applicable country and of term that matches the time period to the commencement of the decommissioning liability being incurred.

Stock-based compensation

The Company recorded stock-based compensation expense of $18.2 thousand in fiscal 2016 compared with $81.7 thousand in fiscal 2015. The stock-based compensation expense is based on an estimate of the fair value of the stock options issued and expensed over the vesting period. The accounting for stock options requires estimates of interest rates, life of options, stock price volatility and the application of the Black-Scholes option pricing model.

Long-term Compensation

The Company established a Deferred Share Unit ("DSU") plan, effectively a phantom stock plan, for directors, effective October 1, 2008. For grants before December 1, 2015, the initial fair value of units issued was expensed on grant. For grants subsequent to December 1, 2015, the fair value of the units issued is expensed over the fiscal year in which they are issued, and is included in long-term compensation expense under general and administrative expenses in the statement of income. The fair value of the DSUs are marked to the quoted market price of Common Shares at each reporting date and changes in their fair value are also recorded under general and administrative expenses. Payouts are settled in cash within a specified period following a director's departure, based on the market price of the Common Shares at exercise.

The Company established a Restricted Share Unit ("RSU") plan, effectively a phantom stock plan, for designated executives, effective October 1, 2008. The initial fair value of units issued is expensed and is included in long-term compensation expense under general and administrative expenses in the statement of income. The fair value of the RSUs are marked to the quoted market price of the Common Shares at each reporting date and changes in their fair value are recorded under general and administrative expenses. Payouts are settled in cash after a specified period of vesting, based on the market price of the Common Shares at vesting.

The Company established a Share Appreciation Rights ("SAR") plan for designated executives, effective in respect of fiscal 2013. Unless otherwise determined by the directors of the Company, designated participants are granted SARs in such number equal to two times the number of RSUs granted to such participant in respect of compensation for a particular fiscal year. The Initial Fair Market Value as defined in the SAR plan is determined based on the closing price of the Common Shares on the date of grant. The fair value of the SARs are measured using an option pricing model at each period end, and to the extent that employees have rendered services over a three year vesting period, an expense is recorded under general and administrative expenses in the statement of net income over such vesting period. Vested SARs may be exercised provided there has been an appreciation in the market price of the Common Shares from the Initial Fair Market Value on the grant date and payouts are settled in cash as vested SARs are exercised.

Impairment

The Company assesses the carrying values of each cash-generating unit ("CGU") at each reporting period end date to determine whether any indication of impairment exists. Where an indicator of impairment exists, a formal estimate of the recoverable amount is made which is considered to be the higher of the fair value less costs to sell ("FVLCS") or value-in-use. These assessments require the use of estimates and assumptions such as long-term commodity prices, discount rates, future capital requirements, the resale market for certain property, plant and equipment of the Company and operating performance. Fair value under FVLCS is determined as the amount that would be obtained from the sale, less costs, of the asset in an arm's length transaction between knowledgeable and willing parties. When observable market prices are not available for the asset, value-in-use for mineral properties is generally determined as the present value of estimated future cash flows arising from the continued use of the asset, which includes estimates such as the cost of future expansion plans and eventual disposal, using assumptions that are specific to the Company's circumstances with respect to each CGU. Cash flows are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

Management of the Company has assessed its CGUs to be each country in which it operates (El Valle and Don Mario) which is the lowest level for which cash inflows and outflows are expected to be largely independent of those of other assets. Management projected cash flows over the remaining life-of-mine in respect of El Valle and Don Mario using forecasted production and costs per the current life-of-mine plans and the long-term forecasted price of gold, copper and silver to project future revenues. The key assumptions used in making this assessment at September 30, 2016 included commodity prices, operating costs, capital expenditures, foreign exchange rates and discount rates.

Although the total public market capitalization of the Company was below the carrying amount of Orvana's net assets at September 30, 2016 of $104.4 million, following the completion of an impairment test in respect of each CGU in the fourth quarter of fiscal 2016, the Company estimated that the net recoverable amounts are greater than the carrying values of such assets based on the Company's current life-of-mine plans and the assumptions set out above at September 30, 2016. As such, there was no impairment of such carrying values as at September 30, 2016.

In light of a continued volatile metal price environment, and notwithstanding that the Company concluded that there was no impairment of carrying values at the end of the fourth quarter of fiscal 2016, there can be no assurances that an impairment adjustment may not be taken at either or both CGUs in future periods.

Internal Controls over Financial Reporting and Disclosure Controls and Procedures

Management is responsible for the design and effectiveness of disclosure controls and procedures ("DC&P") and the design of internal control over financial reporting ("ICFR") to provide reasonable assurance that material information related to the Company, including its consolidated subsidiaries, is made known to the Company's certifying officers. The Company uses the *Internal Control – Integrated Framework* (COSO Framework) published by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to design its ICFR. Based on a review of internal control procedures at the end of the period covered by this MD&A, management believes its internal controls and procedures are appropriately designed as at September 30, 2016.

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 material corrective actions.

Management of the Company was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. The result of the inherent limitations in all control systems means no evaluation of controls can provide absolute assurance that all control issues, errors and instances of fraud, if any, have been detected and that all of the objectives of the internal controls over financial reporting have been achieved or will be achieved in the future.

Non-IFRS Measures

<u>COC, AISC and AIC</u>

The Company, in conjunction with an initiative undertaken within the gold mining industry, began reporting COC, AISC and AIC non-IFRS performance measures as set out in the guidance note released by the World Gold Council in June 2013. The Company believes that these performance measures more fully define the total costs associated with producing gold, copper and silver, however, these performance measures have no standardized meaning. Accordingly, they are intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS.

COC include total production cash costs incurred at the Company's mining operations, which form the basis of the Company's cash costs. AISC includes COC plus sustaining capital expenditures, corporate administrative expense, exploration and evaluation costs and reclamation cost accretion. The Company believes that this measure represents the total costs of producing gold from current operations and provides the Company and other stakeholders of the Company with additional information relating to the Company's operational performance and ability to generate cash flows. As the measure seeks to reflect the full cost of gold production from current operations, new project capital is not included in AISC. AIC represents AISC plus non-sustaining capital expenditures and non-sustaining exploration. Certain other cash expenditures including tax payments, debt payments, dividends and financing costs are also not included in the calculation of AIC. The Company reports these measures on a gold ounces sold basis.

Orvana Consolidated (by-product)	**Q4 2016**	**Q3 2016**	**Q4 2015**	**FY 2016**	**FY 2015**
Cash operating costs, all-in sustaining costs and all-in costs (by-product) [(1)] *(in 000's)*					
Total mining costs (sales based)	**$22,885**	**$21,809**	**$23,623**	**$84,544**	**$105,382**
Deductions, refining, treatment, penalties, freight & other costs	4,167	5,570	6,190	19,265	34,121
Sub-total - other operating costs adjustments	**$4,167**	**$5,570**	**$6,190**	**$19,265**	**$34,121**
Copper sales - gross revenue value	(7,249)	(8,315)	(9,467)	(28,933)	(60,636)
Silver sales - gross revenue value	(2,058)	(1,975)	(2,304)	(7,909)	(9,265)
Other by-product credits	(27)	(8)	(43)	(77)	(66)
Sub-total by-product revenue	**($9,334)**	**($10,298)**	**($11,814)**	**($36,919)**	**($69,967)**
Cash operating costs	**$17,718**	**$17,081**	**18,014**	**$66,890**	**$69,536**
Corporate general & administrative costs	1,553	1,506	539	5,325	5,185
Community costs related to current operations	110	111	27	401	531
Reclamation, accretion & amortization	323	311	677	1,268	2,682
Exploration and study costs (sustaining)	90	88	166	346	1,582
Primary development (sustaining)	1,224	1,171	477	3,784	1,948
Other sustaining capital expenditures [(2) (3)]	3,972	1,384	1,496	10,257	7,210
All-in sustaining costs	**$24,990**	**$21,660**	**$21,396**	**$88,271**	**$88,674**
Capital expenditures (non-sustaining)	1,715	308	269	2,268	364
All-in costs	**$26,705**	**$21,960**	**$21,665**	**$90,539**	**$89,038**
Au/oz sold	14,705	16,496	13,888	61,815	73,297
Cash operating costs ($/oz) gold	**$1,205**	**$1,035**	**$1,297**	**$1,082**	**$949**
All-in sustaining costs ($/oz) gold	**$1,699**	**$1,311**	**$1,540**	**$1,428**	**$1,210**
All-in costs ($/oz) gold	**$1,816**	**$1,331**	**$1,560**	**$1,465**	**$1,215**

(1) Costs are reported per ounce of gold sold in the period. Certain mining costs have been classified as part of selling costs for the purposes of this calculation.

(2) Sustaining capital expenditures are those expenditures which do not increase annual gold ounce production at a mine site and excludes all expenditures at the Company's projects and certain expenditures at the Company's operating sites which are deemed expansionary in nature.

(3) Capital expenditures include unpaid capital expenditures incurred in the period.

Consolidated AISC (co-product) for fiscal 2016 were $1,336 per ounce of gold sold and $2.59 per pound of copper sold and for fiscal 2015 were $1,179 per ounce of gold sold and $2.63 per pound of copper sold.

The following table provides a reconciliation of COC, AISC and AIC (by-product) per ounce of gold sold for El Valle for the periods set out below:

El Valle Mine	Q4 2016	Q3 2016	Q4 2015	FY 2016	FY 2015
Cash operating costs, all-in sustaining costs and all-in costs (by-product) [1] *(in 000's)*					
Total mining costs (sales based)	**$16,751**	**$13,575**	**$14,694**	**$57,400**	**$64,967**
Deductions, refining, treatment, penalties, freight & other costs	1,371	1,438	1,393	5,713	7,573
Sub-total - other operating cost adjustments	**$1,371**	**$1,438**	**$1,393**	**$5,713**	**$7,573**
Copper sales - gross revenue value	(2,625)	(2,297)	(2,773)	(9,076)	(14,866)
Silver sales - gross revenue value	(684)	(648)	(540)	(2,466)	(2,489)
Sub-total by-product revenue	**($3,309)**	**($2,945)**	**($3,313)**	**($11,542)**	**($17,355)**
Cash operating costs	**$14,813**	**$12,068**	**$12,774**	**$51,571**	**$55,185**
Corporate general & administrative costs	14	800	805	2,414	3,199
Reclamation, accretion & amortization	220	208	377	855	1,911
Exploration and study costs (sustaining)	18	48	93	103	510
Primary development (sustaining)	1,224	870	477	3,784	1,948
Other sustaining capital expenditures [2] [3]	3,093	1,384	754	5,858	4,250
All-in sustaining costs	**$19,382**	**$15,378**	**$15,280**	**$64,585**	**$67,003**
All-in costs	**$19,382**	**$15,378**	**$15,280**	**$64,585**	**$67,003**
Au/oz sold	9,821	9,665	10,725	44,009	51,244
Cash operating costs ($/oz) gold	**$1,508**	**$1,249**	**$1,191**	**$1,172**	**$1,077**
All-in sustaining costs ($/oz) gold	**$1,974**	**$1,591**	**$1,425**	**$1,468**	**$1,308**
All-in costs ($/oz) gold	**$1,974**	**$1,591**	**$1,425**	**$1,468**	**$1,308**

(1) Costs are reported per ounce of gold sold in the period. Certain mining costs have been classified as part of selling costs for the purposes of this calculation.

(2) Sustaining capital expenditures are those expenditures which do not increase annual gold ounce production at a mine site and excludes all expenditures at the Company's projects and certain expenditures at the Company's operating sites which are deemed expansionary in nature.

(3) Capital expenditures include unpaid capital expenditures incurred in the period.

As a result of revenue from the sale of copper and silver representing up to 60% of total gross revenue from Don Mario in a reporting period and for better costs comparisons to other mines, the Company is reporting COC, AISC and AIC (co-product) per pound of copper and per ounce of gold and silver sold. In fiscal 2017, the Company expects to begin reporting COC, AISC and AIC (by-product) as higher gold recoveries anticipated from the CIL circuit are expected to increase Don Mario's gold revenue relative to other metals.

The following table provides a reconciliation of AISC per ounce of Don Mario for the periods set out below:

Don Mario Mine [1]	Q4 2016	Q3 2016	Q4 2015	FY 2016	FY 2015
Cash operating costs, all-in sustaining costs and all-in costs (co-product) [1] *(in 000's)*					
Total mining costs (sales based)	**$6,134**	**$8,234**	**$8,944**	**$27,144**	**$40,415**
Deductions, refining, treatment, penalties, freight & other costs	2,796	4,131	4,797	13,552	26,548
Sub-total - other operating costs	**$2,796**	**$4,131**	**$4,797**	**$13,552**	**$26,548**
Gross by-product credit	(27)	(8)	(43)	(77)	(66)
Cash Operating Costs	**$8,902**	**$12,358**	**$13,698**	**$40,619**	**$66,897**
Corporate general & administrative costs	238	370	412	1,432	1,825
Community costs related to current operations	110	111	27	401	531
Reclamation, accretion & amortization	103	103	300	413	771
Capital expenditures (sustaining) [3]	879	301	742	4,399	2,960
Exploration and study costs (sustaining)	72	40	73	243	1,072
All-in sustaining costs	**$10,304**	**$13,283**	**$15,252**	**$47,507**	**$74,056**
Capital expenditures (non-sustaining)	1,715	308	269	2,268	364

Don Mario Mine (1)	Q4 2016	Q3 2016	Q4 2015	FY 2016	FY 2015
All-in costs	**$12,019**	**$13,591**	**$15,521**	**$49,775**	**$74,420**
Au/oz sold	4,884	6,831	3,163	17,806	22,053
Cu/lbs sold (000's)	2,033	2,844	3,264	9,075	17,899
Ag/oz sold	59,884	79,145	123,786	324,261	437,199
Cash operating costs (co-product) ($/oz) gold	**$928**	**$952**	**$1,118**	**$1,023**	**$948**
Cash operating costs (co-product) ($/lb) copper	**$1.68**	**$1.69**	**$2.49**	**$1.93**	**$2.22**
Cash operating costs (co-product) ($/oz) silver	**$15.77**	**$13.43**	**$16.46**	**$15.06**	**$14.41**
All-in sustaining costs (co-product) ($/oz) gold	**$1,080**	**$1,025**	**$1,253**	**$1,204**	**$1,053**
All-in sustaining costs (co-product) ($/lb) copper	**$1.94**	**$1.81**	**$2.77**	**$2.25**	**$2.45**
All-in sustaining costs (co-product) ($/oz) silver	**$18.18**	**$14.40**	**$18.22**	**$17.48**	**$15.86**
All-in costs (co-product) ($/oz) gold	**$1,265**	**$1,050**	**$1,277**	**$1,264**	**$1,058**
All-in costs (co-product) ($/lb) copper	**$2.25**	**$1.85**	**$2.82**	**$2.35**	**$2.46**
All-in costs (co-product) ($/oz) silver	**$21.12**	**$14.72**	**$18.52**	**$18.28**	**$15.93**

(1) Costs are reported per ounce of gold or silver or per pound of copper sold in the period. Certain mining costs have been classified as part of selling costs for the purposes of this calculation.

(2) Total mining costs for each metal are based on the percentage of gross revenue that each quantity of metal sold in the period represents of total gross revenue for the period. Refining charges, metallurgical deductions and the Don Mario Royalties allocated to each metal based on actual costs related to each quantity of metal sold in the period.

(3) Sustaining capital expenditures are those expenditures which do not increase annual gold ounce production at a mine site and excludes all expenditures at the Company's projects and certain expenditures at the Company's operating sites which are deemed expansionary in nature. Capital expenditures includes unpaid capital expenditures incurred in the period.

Other Information

Other operating and financial information with respect to the Company, including the AIF which is available on SEDAR at www.sedar.com and on the Company's website at www.orvana.com.

Cautionary Statements - Forward-Looking Information

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", "plans", "estimates" or "intends" or stating that certain actions, events or results "may", "could", "would", "might", "will" or "are projected to" be taken or achieved) are not statements of historical fact, but are forward-looking statements.

The forward-looking statements herein relate to, among other things, Orvana's ability to achieve improvement in free cash flow; the potential to extend the mine life of El Valle and Don Mario beyond their current life-of-mine estimates; Orvana's ability to optimize its assets to deliver shareholder value; the Company's ability to optimize productivity at Don Mario and El Valle; estimates of future production, operating costs and capital expenditures; mineral resource and reserve estimates; statements and information regarding future feasibility studies and their results; future transactions; future metal prices; the ability to achieve additional growth and geographic diversification; future financial performance, including the ability to increase cash flow and profits; future financing requirements; and mine development plans.

Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by the Company as of the date of such statements, are inherently subject to significant business, economic and competitive uncertainties and contingencies. The estimates and assumptions of the Company contained or incorporated by reference in this MD&A, which may prove to be incorrect, include, but are not limited to, the various assumptions set forth herein or as otherwise expressly incorporated herein by reference as well as: there being no significant disruptions affecting operations, whether due to labour disruptions, supply disruptions, power disruptions, damage to equipment or otherwise; permitting, development, operations, expansion and acquisitions at El Valle and Don Mario being consistent with the Company's current expectations; political developments in any jurisdiction in which the Company operates being consistent with its current expectations; certain price assumptions for gold, copper and silver; prices for key supplies being approximately consistent with current levels; production and cost of sales forecasts meeting expectations; the accuracy of the Company's current mineral reserve and mineral resource estimates; and labour and materials costs increasing on a basis consistent with Orvana's current expectations.

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 events or results to differ materially from estimated or anticipated events or results expressed or implied by forward looking statements. Some of these risks, uncertainties and factors include fluctuations in the price of gold, silver and copper; the need to recalculate estimates of 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; the Company's ability to obtain and maintain all necessary regulatory approvals and licenses; the Company's ability to use cyanide in its mining operations; risks generally associated with mineral exploration and development, including the Company's ability to continue to operate the El Valle and/or Don Mario and/or ability to resume long-term operations at the Carlés Mine; the Company's ability to acquire and develop mineral properties and to successfully integrate such acquisitions; the Company's ability to execute on its strategy; the Company's ability to obtain 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 the countries in which the Company operates; general economic conditions worldwide; and the risks identified in the Company's AIF 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 AIF for a description of additional risk factors.

The forward-looking statements made in this MD&A with respect to the anticipated development and exploration of the Company's mineral projects are intended to provide an overview of management's expectations with respect to certain future activities of the Company and may not be appropriate for other purposes.

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.

Cautionary Notes to Investors

In accordance with applicable Canadian securities regulatory requirements, all mineral reserve and mineral resource estimates of the Company disclosed in this MD&A have been prepared as at September 30, 2016 in accordance with NI 43-101, classified in accordance with Canadian Institute of Mining Metallurgy and Petroleum's "CIM Standards on Mineral Resources and Reserves Definitions and Guidelines" (the "CIM Guidelines").

Pursuant to the CIM Guidelines, mineral resources have a higher degree of uncertainty than mineral reserves as to their existence as well as their economic and legal feasibility. Inferred mineral resources, when compared with measured or indicated mineral resources, have the least certainty as to their existence, and it cannot be assumed that all or any part of an inferred mineral resource will be upgraded to an indicated or measured mineral resource as a result of continued exploration. Pursuant to NI 43-101, inferred mineral resources may not form the basis of any economic analysis, including any feasibility study. Accordingly, readers are cautioned not to assume that all or any part of a mineral resource exists, will ever be converted into a mineral reserve, or is or will ever be economically or legally mineable or recovered.