



## MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEAR ENDED SEPTEMBER 30, 2017

### 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, 2017.*

*This MD&A should be read in conjunction with the audited consolidated financial statements of Orvana for the year ended September 30, 2017 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 12, 2017, 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 and Carlés Mine (collectively, "El Valle"), two underground gold-copper-silver mines with process facilities that produce copper concentrates and gold doré, located in the northern part of Spain; and (ii) Don Mario Mine ("Don Mario"), an open-pit gold-copper-silver mine with process facilities that produce copper concentrates and gold doré, 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 unitary operating costs and realize growth in its future production base through exploration within and in proximity to its existing operations. Orvana is an Ontario registered company and its common shares ("Common Shares") are listed on the Toronto Stock Exchange under the symbol TSX:ORV.

### Fiscal 2017 Consolidated Operating Highlights and Financial Results

The Company's strategy to increase production at its operations target productivity enhancements to allow for delivery of greater throughput, increased gold recovery and reduced unitary costs. The Company is pleased to report the following positive developments in fiscal 2017 as follows:

- **El Valle – Transitioning towards increased oxide mining:** At the El Valle Mine, mine production increased significantly over fiscal 2017 by 53% to 733,086 tonnes compared with fiscal 2016, supported by the investments made into infrastructure and heavy equipment through the year. As a result, plant throughput was sustained at nameplate capacity through the latter half of the year, achieving an average of 2,230 tonnes per day ("tpd"). Despite declining metal grades in mined skarn areas during fiscal 2017, gold, copper and silver production increased by 15%, 29% and 26% at El Valle, respectively, compared with fiscal 2016. The primary objectives in fiscal 2018 are to (i) increase gold production by increasing the proportion of higher gold grade oxide ore processed in the plant; (ii) enhance grade control in the mine by minimizing the amount of inferred resources in the mining sequence; and (iii) maintain or improve gold recovery in the plant.
- **Don Mario – CIL production surpassed targets:** Gold production achieved at Don Mario during fiscal 2017 reached its highest levels since fiscal 2009, supported by the re-commissioned carbon-in-leach circuit (the "CIL Project") completed in early 2017. Gold recovery rates averaged 87.8% over

the second half of fiscal 2017, exceeding Don Mario's targeted average gold recovery of 80%. Don Mario commenced further investments towards its future by starting a tailings facility expansion project that is expected to support a three-year extension to its mine life. This expansion is being financed primarily through local debt facilities totalling \$11.3 million from Banco BISA SA ("BISA"), which closed on June 30, 2017.

- **Record gold production, realized reductions in unitary costs:** As a result of the above productivity increases, the Company reached record gold production of 90,292 ounces during fiscal 2017, a 37% increase compared to fiscal 2016. The Company also realized significant decreases in its unitary costs, exceeding the Company's unitary cost guidance targets for fiscal 2017. Consolidated all-in sustaining costs per ounce of gold sold fell to \$1,015 per ounce, compared with \$1,082 per ounce in fiscal 2016 and below the Company's guidance of between \$1,050 and \$1,150 per ounce.
- **Improved financial performance:** Supported by productivity increases and higher commodity prices, revenue increased 47% to \$138.0 million in fiscal 2017, compared with fiscal 2016. EBITDA in fiscal 2017 was \$16.5 million, a 275% improvement compared with fiscal 2016. Consolidated cash balances increased from \$18.9 million at September 30, 2016 to \$23.8 million at September 30, 2017.

	Q4 2017	Q3 2017	Q4 2016	FY 2017	FY 2016
<b>Operating Performance</b>					
<i>Gold</i>					
Grade (g/t)	2.62	2.49	1.91	2.41	2.10
Recovery (%)	90.3	90.6	75.8	84.7	77.4
Production (oz)	27,666	26,414	14,842	90,292	65,785
Sales (oz)	29,639	24,287	14,705	88,636	61,816
Average realized price / oz	\$1,268	\$1,262	\$1,313	\$1,258	\$1,211
<i>Copper</i>					
Grade (%)	0.64	0.65	0.82	0.70	0.81
Recovery (%)	69.9	73.7	63.1	65.4	65.8
Production ('000 lbs)	3,601	3,837	3,630	13,893	14,735
Sales ('000 lbs)	3,850	4,244	3,296	14,686	13,367
Average realized price / lb	\$2.74	\$2.45	\$2.17	\$2.50	\$2.16
<i>Silver</i>					
Grade (g/t)	7.85	8.81	15.55	10.02	17.36
Recovery (%)	74.3	73.3	76.9	71.8	74.9
Production (oz)	68,164	75,578	122,589	318,507	525,934
Sales (oz)	72,587	77,173	96,520	362,827	469,847
Average realized price / oz	\$16.91	\$17.25	\$19.74	\$17.22	\$16.29
<b>Financial Performance (in 000's, except per share amounts)</b>					
Revenue	\$46,156	\$36,671	\$24,044	\$137,999	\$93,850
Mining costs	\$34,562	\$31,180	\$22,884	\$116,370	\$84,544
Gross margin	\$3,274	(\$1,909)	(\$3,599)	(\$5,480)	(\$7,883)
Net loss	(\$1,722)	(\$3,446)	(\$1,528)	(\$15,555)	(\$8,455)
Net loss per share (basic/diluted)	(\$0.01)	(\$0.03)	(\$0.01)	(\$0.11)	(\$0.06)
EBITDA <sup>(1)</sup>	\$10,313	\$4,782	\$960	\$16,535	\$4,417
Operating cash flows before non-cash working capital changes	\$8,595	\$2,930	\$1,186	\$11,914	\$5,199
Operating cash flows	\$12,328	\$7,769	\$221	\$20,726	\$3,437
Ending cash and cash equivalents	\$23,811	\$18,504	\$18,939	\$23,811	\$18,939
Capital expenditures <sup>(2)</sup>	\$5,818	\$3,294	\$5,394	\$21,332	\$14,977
Cash operating costs (by-product) (\$/oz) gold <sup>(1)</sup>	\$902	\$1,032	\$1,205	\$1,015	\$1,082
All-in sustaining costs (by-product) (\$/oz) gold <sup>(1)(2)</sup>	\$1,145	\$1,199	\$1,699	\$1,269	\$1,428

(1) Earnings before interest, taxes, depreciation and amortization ("EBITDA"), cash operating costs ("COC") and all-in sustaining costs ("AISC") are non-IFRS performance measures. For further information and a detailed reconciliation of these measures not presented elsewhere, 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 Results

- Record consolidated annual gold production of 90,292 ounces during fiscal 2017, an increase of 37% compared to fiscal 2016.
- Production of 13.9 million pounds (6,302 tonnes) of copper and 318,507 ounces of silver during fiscal 2017. Copper and silver production decreased by 6% and 39%, respectively, compared with fiscal 2016, primarily due to declining grades.
- Production of 124,039 gold equivalent ounces during fiscal 2017, compared with 98,960 during fiscal 2016. <sup>(1)</sup>
- Sales of 88,636 ounces of gold, 14.7 million pounds (6,661 tonnes) of copper and 362,827 ounces of silver during fiscal 2017, an increase in gold and copper sales of 43% and 10%, respectively, and a decrease in silver sales of 23%, compared with fiscal 2016.
- Production of 27,666 ounces of gold, 3.6 million pounds (1,633 tonnes) of copper and 68,164 ounces of silver during the fourth quarter of fiscal 2017, an increase in gold production of 86% and a decrease in copper and silver production of 1% and 44%, respectively, compared with the fourth quarter of fiscal 2016.
- Production of 36,676 gold equivalent ounces during the fourth quarter of fiscal 2017, compared with 22,470 during the fourth quarter of fiscal 2016. Error! Reference source not found.
- Sales of 29,639 ounces of gold, 3.9 million pounds (1,746 tonnes) of copper and 72,587 ounces of silver during the fourth quarter of fiscal 2017, an increase in gold and copper sales of 102% and 17%, respectively, and a decrease in silver sales of 25% compared with the fourth quarter of fiscal 2016.

### El Valle

- Fiscal 2017 gold, copper and silver production increased by 15%, 29% and 26%, respectively, compared with fiscal 2016, driven primarily by an increase of tonnes milled of 56% despite declining head grades and recoveries.
- Mill throughput rates at El Valle were maintained above nameplate capacity through the second half of fiscal 2017.
- Annual oxide tonnes mined improved by 69% between fiscal 2016 and fiscal 2017. Historically, the ratio of mined oxide to skarn ore has been under 20%. Over fiscal 2017, this ratio increased from 16% in the first half of the year to 24% over the second half of the year. The Company is targeting a ratio of 50% of oxides or more as part of the initiatives to improve ore grade in fiscal 2018.
- The above productivity gains were supported by improved development; at the El Valle Mine, total development improved by an average of over 200 meters per month, or 33% year over year.

### Don Mario

- In fiscal 2017, Don Mario's gold production increased by 84% to 38,746 ounces as a result of a 64% improvement in head grades and a 31% improvement in gold recoveries from the re-commissioned CIL circuit.
- Copper and silver production decreased by 20% and 64%, respectively, primarily as a result of the lower copper and silver grades mined.

## Financial Results

- At September 30, 2017, consolidated cash and cash equivalents were \$23.8 million, an increase of \$4.9 million from September 30, 2016.

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<sup>(1)</sup> 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.

- Net revenue of \$138.0 million for fiscal 2017, or 47% higher, compared with \$93.9 million for fiscal 2016, primarily due to higher gold and copper sales volumes and realized metal prices.
- Mining costs of \$116.4 million for fiscal 2017, or 38% higher, compared with \$84.5 million for fiscal 2016 primarily due to higher sales volumes, as well as higher underlying mining costs at El Valle in respect of labour increases, increased material costs for ground support and maintenance and the contract mining costs at Carlés, and at Don Mario as a result of increased reagents, supplies and labour required by the re-commissioned CIL circuit.
- Net loss for fiscal 2017 of \$15.6 million compared with \$8.5 million for fiscal 2016, primarily due to substantially higher depreciation and a material provision for income taxes at Don Mario.
- EBITDA for fiscal 2017 of \$16.5 million compared with \$4.4 million for fiscal 2016. <sup>(2)</sup>
- Cash flows provided by operating activities of \$20.7 million in fiscal 2017, compared with \$3.4 million in fiscal 2016 and cash flows provided by operating activities before changes in non-cash working capital of \$11.9 million in fiscal 2017, compared with \$5.2 million in fiscal 2016. <sup>(2)</sup>
- Capital expenditures of \$21.3 million in fiscal 2017 compared with \$15.0 million in fiscal 2016.
- COC and AISC on a by-product basis (net of copper and silver by-product revenue from El Valle and Don Mario) per ounce of gold sold in fiscal 2017 of \$1,015 and \$1,269, respectively, compared with COC and AISC (by-product) of \$1,083 and \$1,429, respectively, in fiscal 2016. Higher ounces of gold sold at both El Valle and Don Mario positively impacted both COC and AISC. <sup>(2)</sup>
- Net revenue of \$46.2 million for the fourth quarter of fiscal 2017, a 92% increase, over the \$24.0 million recorded in the fourth quarter of fiscal 2016, driven primarily by higher realized metal sales prices and higher gold volumes sold.
- Mining costs of \$34.6 million for the fourth quarter of fiscal 2017, or 51% higher, compared with \$22.9 million for the fourth quarter of fiscal 2016 due to higher sales volumes as well as increases at El Valle for material costs for ground support and maintenance and the contract mining costs at Carlés impacting El Valle, and increases in mining costs at Don Mario for reagents, supplies and labour required by the re-commissioned CIL circuit.
- Net loss for the fourth quarter of fiscal 2017 of \$1.7 million compared with \$1.5 million for the fourth quarter of fiscal 2016.
- EBITDA for the fourth quarter of fiscal 2017 of \$10.3 million compared with \$1.0 million for the fourth quarter of fiscal 2016.
- Cash flows provided by operating activities of \$12.3 million in the fourth quarter of fiscal 2017, compared with \$0.2 million in the fourth quarter of fiscal 2016 and cash flows provided by operating activities before changes in non-cash working capital of \$8.5 million in the fourth quarter of fiscal 2017, compared with \$1.2 million in the fourth quarter of fiscal 2016. <sup>(2)</sup>
- Capital expenditures of \$5.8 million in fourth quarter of fiscal 2017 compared with \$5.4 million in the fourth quarter of fiscal 2016.
- COC and AISC on a by-product basis (net of copper and silver by-product revenue from El Valle and Don Mario) per ounce of gold sold in the fourth quarter of fiscal 2017 of \$902 and \$1,145, respectively, compared with COC and AISC (by-product) of \$1,205 and \$1,699, respectively, in the

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<sup>(2)</sup> EBITDA, cash flows provided by operating activities before non-cash working capital, COC and AISC 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 detailed reconciliations, please see the "Other Information - Non-IFRS Measures" section of this MD&A.

fourth quarter of fiscal 2016. Higher gold volumes sold and higher copper by-product revenues drove improvements on COC and AISC.<sup>(3)</sup>

## **Growth Initiatives Highlights**

### El Valle

- A number of important productivity improvements and initiatives were made during fiscal 2017 at El Valle including the following:
  - The construction of a surface explosives magazine was completed in the second half of fiscal 2017, with final permitting for usage expected in the first quarter of fiscal 2018. This magazine is expected to replace the current underground magazine, both facilitating the handling and delivery of explosives to the mine and improving the efficiency of the current ventilation circuit.
  - Licensing, permitting and the construction of a new power line was completed subsequent to fiscal 2017. The connection of the line to OroValle's substation is subject to a final inspection and approval from Spanish regulatory authorities, and is expected to occur by early 2018. The completion of this power line is expected to enhance power stability, provide access to additional power capacity and reduce reliance on on-site generators.
  - During fiscal 2017, a pebble crushing circuit was added to the current plant, improving recoveries from skarn ore. Additional plant improvements to improve recoveries are planned during fiscal 2018 in order to allow for the processing of a higher ratio of oxide ore. Further Studies are underway to maintain copper recoveries in a higher oxide blend, targeting 68% to 70% recovery.
  - The planned mining campaign at the Carlés Mine concluded in August 2017. With a view towards opportunistic production at Carlés in the future, the Company completed underground infill drilling in Carlés NW, and is evaluating the potential for profitable re-initiation of open pit mining at the Carlés Mine.

### Don Mario

- Don Mario finalized a mine plan for its Cerro Felix deposit in the fourth quarter of fiscal 2017, a satellite mineral deposit located 500 metres from the current LMZ pit, and expects to begin pre-stripping activities beginning in the first quarter of fiscal 2018. Production from Cerro Felix is expected to begin in the second quarter of fiscal 2018.
- The first phase of a drilling campaign was completed at Don Mario's Las Tojas deposit, with the objective of providing sufficient information to define a mineral resource estimate for this deposit. The Company plans to spend approximately \$2.0 million on greenfield exploration at Don Mario during fiscal 2018, including a second phase of drilling at Las Tojas.
- The Company has recently been re-evaluating the economic potential of its existing mineral stockpiles at Don Mario. Initial testing results have yielded positive indications, and the Company expects to complete larger scale tests in the coming months. The Company has also commenced an evaluation of re-processing tailings to determine the viability of recovering gold from material deposited in the tailings impoundment since the commencement of production at Don Mario.
- In support of the mine life extension activities underway, the Company closed debt financing in the aggregate amount of \$11.3 million from BISA during the third quarter of fiscal 2017. The primary use of proceeds is towards construction of a major tailing storage facility expansion, which is expected to be able to support up to three years of operations beyond the second quarter of fiscal 2018.

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<sup>(3)</sup> COC and AISC 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 detailed reconciliations, please see the "Other Information - Non-IFRS Measures" section of this MD&A.

## Outlook

The Company continues 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, supported by capital infrastructure and development investments, the Company achieved its target of a sustained mill throughput rate of over 2,000 tonnes per day over the second half of fiscal 2017. Increased access to higher gold grade oxide ore fronts at the El Valle Mine and production from the Carlés Mine allowed El Valle to improve its gold production and lower its unitary cash costs progressively over 2017. Objectives in fiscal 2018 include continuing to improve access to oxide ore fronts in the El Valle Mine in order to bring the proportion of oxide ore processed in the plant up to 50%, an increase from historical levels lower than 20%, with the objective of substantially increasing ore grades delivered to the mill. Through additional geotechnical work and infill drilling, the Company also expects to significantly increase the reliability of the mine plan by minimizing the proportion of inferred material in its mine planning in fiscal 2018. Infrastructure investments to improve productivity and efficiency will continue to be made through fiscal 2018 as planned. It is anticipated that these actions will also positively impact El Valle's unitary costs in fiscal 2018.

At Don Mario, the Company successfully re-commissioned the CIL circuit and completed two full quarters of commercial production of gold doré, increasing gold ounce production to its highest levels since 2009. Gold recoveries exceeded the targeted rate of 80%, reaching an average of 87.8% over the second half of fiscal 2017, up from previous average recoveries of 55% from the flotation process. Don Mario is now pursuing realization of a number of known opportunities for mine life extension. In the near term, the Company expects to commence pre-stripping activities at Cerro Felix in the first quarter of fiscal 2018, and intends to transition its mine production to this satellite deposit following the depletion of the LMZ, expected in mid-fiscal 2018. The Company has been evaluating opportunities to extend the life of Don Mario, including processing existing mineral stockpiles, potential mining of the Company's Las Tojas deposit, and reprocessing gold bearing tailings.

The following table sets out Orvana's fiscal 2017 results and guidance as well as its fiscal 2018 production and cost guidance:

	FY 2017 Guidance	FY 2017 Actual	FY 2018 Guidance <sup>(1)</sup>
<b>El Valle Production</b>			
Gold (oz)	50,000 – 55,000	<b>51,546</b>	65,000 – 72,000
Copper (million lbs)	6.0 – 6.5	<b>5.5</b>	4.1 – 4.5
Silver (oz)	170,000 – 200,000	<b>182,635</b>	N/A
<b>Don Mario Production</b>			
Gold (oz)	35,000 – 40,000	<b>38,746</b>	45,000 – 48,000
Copper (million lbs)	7.0 – 7.5	<b>8.4</b>	2.0 – 2.3
Silver (oz)	130,000 – 150,000	<b>135,872</b>	N/A
<b>Total Production</b>			
Gold (oz)	85,000 – 95,000	<b>90,292</b>	110,000 – 120,000
Copper (million lbs)	13.0 – 14.0	<b>13,893</b>	6.1 – 6.8
Silver (oz)	300,000 – 350,000	<b>318,507</b>	N/A
Total capital expenditures	\$27,000 – \$30,000	<b>\$21,332</b>	\$24,000 – \$27,000
Cash operating costs (by-product) (\$/oz) gold <sup>(2) (3)</sup>	\$1,050 – \$1,150	<b>\$1,015</b>	\$950 – \$1,050
All-in sustaining costs (by-product) (\$/oz) gold <sup>(2) (3)</sup>	\$1,300 – \$1,400	<b>\$1,269</b>	\$1,150 – \$1,250

(1) Due to declining relevance, silver production guidance will no longer be provided beginning in fiscal 2018.

(2) FY 2018 guidance assumptions for COC and AISC include by-product commodity prices of \$2.75 per pound of copper and an average Euro to US Dollar exchange of 1.20.

(3) FY 2017 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.

### Year Ended September 30, 2017 Compared with Year Ended September 30, 2016

The Company recorded a net loss of \$15.6 million for fiscal 2017 or \$0.11 per share compared with \$8.5 million for fiscal 2016 or \$0.06 per share. The Company's net loss was impacted significantly by the following factors:

- Revenue for fiscal 2017 increased by \$44.1 million or 47% to \$138.0 million from sales of 88,636 ounces of gold, 14.7 million pounds of copper and 362,827 ounces of silver from El Valle and Don Mario compared with revenue of \$93.9 million from sales of 61,816 ounces of gold, 13.4 million pounds of copper and 469,847 ounces of silver in fiscal 2016. The increase in revenue was primarily due to higher gold and copper sales volumes and higher realized metal prices.
- Mining costs were \$116.4 million or \$31.8 million higher for fiscal 2017 compared with \$84.5 million for fiscal 2016 due to higher sales volumes as well as increases in mining costs at Don Mario for reagents, supplies and labour required by the re-commissioned CIL circuit and increases at El Valle in respect of labour increases, increased materials costs for ground support and maintenance and the contract mining costs at Carlés.
- As a result of increased mining rates at El Valle and Don Mario, depreciation expense increased by \$9.9 million to \$27.1 million for fiscal 2017 compared with \$17.2 million for fiscal 2016.
- Gross margin improved by \$2.4 million to negative \$5.5 million for fiscal 2017 compared with negative \$7.9 million for fiscal 2016.
- EBITDA increased by \$12.1 million to \$16.5 million for fiscal 2017 compared with \$4.4 million for fiscal 2016.
- Current income tax expense at Don Mario increased by \$4.8 million to \$5.0 million for fiscal 2017 compared with \$0.2 million for fiscal 2016.

Total consolidated COC (by-product) of \$1,015 per ounce of gold sold in fiscal 2017 were \$67 or 6% lower than in fiscal 2016. Total AISC (by-product) of \$1,269 per ounce of gold sold in fiscal 2017 were \$159 or 11% lower than in fiscal 2016. COC and AISC were positively impacted by the increase in gold ounces sold.

### Fourth Quarter Ended September 30, 2017 Compared with Fourth Quarter Ended September 30, 2016

The Company recorded a net loss of \$1.7 million or \$0.01 per share for the fourth quarter of fiscal 2017 compared with \$1.5 million or \$0.01 per share for the fourth quarter of fiscal 2016. The Company's net loss was impacted significantly by the following factors:

- Revenue for the fourth quarter of fiscal 2017 increased by \$22.1 million or 92% to \$46.2 million from sales of 29,639 ounces of gold, 3.8 million pounds of copper and 72,587 ounces of silver from El Valle and Don Mario compared with revenue of \$24.0 million from sales of 14,705 ounces of gold, 3.3 million pounds of copper and 96,520 ounces of silver in the fourth quarter of fiscal 2016. The increase in revenue was primarily due to higher gold sales volumes and higher realized metal prices.
- Mining costs were \$34.6 million or \$11.7 million higher for the fourth quarter of fiscal 2017 compared with \$22.9 million for the fourth quarter of fiscal 2016, primarily due to higher gold sales volumes, as well as higher mining costs at Don Mario as a result of increased reagent, supplies and labour costs required by the re-commissioned CIL circuit and increases at El Valle in respect of increased material costs for ground support and maintenance and contract mining costs at Carlés.
- Depreciation increased by \$3.6 million to \$8.3 million for the fourth quarter of fiscal 2017 compared with \$4.8 million for the fourth quarter of fiscal 2016, as a result of increased mining rates.

- Gross margin increased by \$6.9 million to \$3.3 million for the fourth quarter of fiscal 2017 compared with negative \$3.6 million for the fourth quarter of fiscal 2016.
- EBITDA increased by \$9.7 million to \$10.3 million for the fourth quarter of fiscal 2017 compared with \$1.0 million for the fourth quarter of fiscal 2016.
- Current income tax expense at Don Mario increased by \$2.6 million to \$2.8 million for the fourth quarter of fiscal 2017 compared with \$0.2 million for the fourth quarter of fiscal 2016.

Total consolidated COC (by-product) of \$903 per ounce of gold sold in the fourth quarter of fiscal 2017 were \$302 or 25% lower than the fourth quarter of fiscal 2016. Total AISC (by-product) of \$1,146 per ounce of gold sold in the fourth quarter of fiscal 2017 were \$553 or 33% lower than in the fourth quarter of fiscal 2017. Higher consolidated ounces of gold sold positively impacted COC and AISC.

#### Fourth Quarter Ended September 30, 2017 Compared with Third Quarter Ended June 30, 2017

The Company recorded a net loss of \$1.7 million or \$0.01 per share for the fourth quarter of fiscal 2017 compared with \$3.4 million or \$0.03 per share for the third quarter of fiscal 2016. The Company's net loss was impacted significantly by the following factors:

- Revenue for the fourth quarter of fiscal 2017 increased by \$9.5 million or 26% to \$46.2 million on sales of 29,639 ounces of gold, 3.8 million pounds of copper and 72,587 ounces of silver from El Valle and Don Mario compared with revenue of \$36.7 million on sales of 24,287 ounces of gold, 4.2 million pounds of copper and 77,173 ounces of silver in the third quarter of fiscal 2017. The increase in revenue was primarily due to higher gold sales volumes and higher realized gold and copper prices.
- Mining costs were \$34.6 million or \$3.4 million higher for the fourth quarter of fiscal 2017 compared with \$31.2 million for the third quarter of fiscal 2017, primarily due to higher gold sales volumes, as well as higher mining costs at El Valle due to the change in foreign exchange rates.
- Depreciation increased by \$0.9 million to \$8.3 million for the fourth quarter of fiscal 2017 compared with \$7.4 million for the third quarter of fiscal 2017.
- Gross margin increased by \$5.2 million to \$3.3 million for the fourth quarter of fiscal 2017 compared with negative \$1.9 million for the third quarter of fiscal 2017.
- EBITDA increased by \$5.5 million to \$10.3 million for the fourth quarter of fiscal 2017 compared with \$4.8 million for the third quarter of fiscal 2017.
- Current income tax expense at Don Mario increased by \$1.8 million to \$2.8 million for the fourth quarter of fiscal 2017 compared with \$0.9 million for the third quarter of fiscal 2017.

Total consolidated COC (by-product) of \$902 per ounce of gold sold in the fourth quarter of fiscal 2017 were \$130 or 13% lower than the third quarter of fiscal 2017. Total AISC (by-product) of \$1,145 per ounce of gold sold in the fourth quarter of fiscal 2017 were \$54 or 4% lower than in the third quarter of fiscal 2017. Higher consolidated ounces of gold sold positively impacted COC and AISC.

## El Valle

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. At the El Valle Mine, the Company mines skarns and oxides underground. At the Carlés Mine, the Company mined skarns underground until February 2015, when the mine was placed on care and maintenance due to market conditions. In the fourth quarter of fiscal 2016, mining activities restarted at Carlés on a short-term basis. Planned mining activity at Carlés concluded in August 2017 and the mine has been placed on care and maintenance.

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

	Q4 2017	Q3 2017	Q4 2016	FY 2017	FY 2016
<b>Operating Performance</b>					
Ore mined (tonnes) (wmt)	183,503	201,987	125,487	733,086	479,077
Ore milled (tonnes) (dmt)	190,151	197,469	119,200	707,362	452,003
Daily average throughput (dmt)	2,176	2,284	1,296	2,040	1,235
<i>Gold</i>					
Grade (g/t)	2.65	2.35	2.53	2.46	3.27
Recovery (%)	93.8	91.9	94.9	92.2	94.0
Production (oz)	15,201	13,705	9,209	51,546	44,682
Sales (oz)	16,543	11,929	9,821	49,518	44,009
<i>Copper</i>					
Grade (%)	0.40	0.53	0.58	0.46	0.56
Recovery (%)	77.5	80.2	81.0	75.6	76.5
Production ('000 lbs)	1,299	1,857	1,244	5,506	4,257
Sales ('000 lbs)	1,701	1,657	1,263	5,590	4,292
<i>Silver</i>					
Grade (g/t)	9.63	11.69	11.72	10.61	12.47
Recovery (%)	79.1	75.0	80.7	75.7	79.7
Production (oz)	46,552	55,682	36,223	182,635	144,411
Sales (oz)	52,066	52,095	36,636	178,364	145,588
<b>Financial Performance</b> (in 000's, except per share amounts)					
Revenue	\$24,652	\$17,491	\$14,411	\$71,556	\$59,517
Mining costs	\$22,284	\$17,935	\$16,751	\$73,268	\$57,400
Loss before tax	(\$3,802)	(\$5,810)	(\$4,494)	(\$20,944)	(\$9,837)
Capital expenditures <sup>(1)</sup>	\$2,030	\$1,994	\$4,317	\$9,702	\$9,510
Cash operating costs (by-product) (\$/oz) gold <sup>(2)</sup>	\$1,168	\$1,288	\$1,508	\$1,293	\$1,172
All-in sustaining costs (by-product) (\$/oz) gold <sup>(2)</sup>	\$1,359	\$1,546	\$1,974	\$1,574	\$1,468
All-in costs (by-product) (\$/oz) gold <sup>(2)</sup>	\$1,359	\$1,546	\$1,974	\$1,574	\$1,468

(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 2017, El Valle produced 51,546 ounces of gold, 5.5 million pounds of copper and 182,635 ounces of silver compared with 44,682 ounces of gold, 4.3 million pounds of copper and 144,411 ounces of silver during fiscal 2016. Gold, copper and silver production increased by 15%, 29% and 26% compared with fiscal 2016, primarily due to a 56% increase in tonnes milled, offset by lower head grades delivered to the mill.

Fourth quarter gold production increased by 11% to 15,201 ounces, while copper and silver production decreased by 30% and 16%, respectively, to 1.3 million pounds and 46,552 ounces, respectively, compared with the third quarter of fiscal 2017. The increase in gold production was driven by higher gold grade oxides mined during the fourth period, while copper and silver production decreased due to declining grades.

During fiscal 2017, and supported by capital investments in infrastructure, equipment, development and the additional production from Carlés, El Valle continued its mine productivity gains achieved in skarn areas,

improving skarn tonnage by 15% compared with fiscal 2016. Mining tonnage in oxide areas was also significantly improved, increasing by 69% over the same period. The continued improvement in mining rates at both mines allowed El Valle to provide sufficient ore feed to its plant, consistently meeting nameplate processing capacity over the second half of fiscal 2017.

At El Valle, a number of infrastructure and mine life extension projects continue to be underway.

The construction of a surface explosives magazine was completed in the second half of fiscal 2017, with final permitting for usage expected in early fiscal 2018. This magazine is expected to replace the current underground magazine, improving the efficiency of access to explosives. The removal of the underground magazine is also expected to improve the efficiency of the main ventilation fan.

Licensing, permitting and the construction of a new power line was completed subsequent to fiscal 2017. The connection of the line to OroValle's substation is subject to a final inspection and approval from Spanish regulatory authorities, and is expected to occur by early 2018. The completion of this power line is expected to enhance power stability, provide access to additional power capacity and reduce reliance on on-site generators.

Plant improvements to improve recoveries are planned during fiscal 2018 in order to allow for the processing of a higher ratio of oxide ore. Studies are underway to improve copper recoveries in a higher oxide blend, targeting 68% to 70%. During fiscal 2017, a pebble crushing circuit was added to the current plant, improving recoveries from skarn ore.

El Valle continues its focus on improving average mine grades and gold production through the gradual increase of mined higher gold grade oxide ore tonnes relative to skarn ore. This is expected to be supported by the gains realized in development and backfill rates, allowing for access to a greater number of oxide faces. El Valle expects to further increase mine production flexibility and grade control by significantly reducing the proportion of inferred ore material in its mine planning through planned infill drilling campaigns.

#### El Valle Financial Performance

Revenue from El Valle for fiscal 2017 increased by 20% to \$71.6 million on sales of 49,518 ounces of gold, 5.6 million pounds of copper and 178,364 ounces of silver from \$59.5 million in fiscal 2016 on sales of 44,009 ounces of gold, 4.3 million pounds of copper and 145,588 ounces of silver as a result of higher metal volumes sold as well as higher realized metal prices.

Mining costs increased by 28% from \$57.4 million in fiscal 2016 to \$73.3 million in fiscal 2017 primarily due to contract mining costs at Carlés, additional labour and higher maintenance and ground support material costs.

Loss before tax for fiscal 2017 was \$20.9 million compared with \$9.8 million in fiscal 2016.

Total capital expenditures at El Valle during fiscal 2017 were \$9.7 million compared with \$9.5 million for fiscal 2016. Capital expenditures in fiscal 2017 consisted substantially of primary development, mining infrastructure and a tailings dam lift.

Total COC (by-product) of \$1,293 per ounce of gold sold in fiscal 2017 were \$121 or 10% higher than in fiscal 2016. Total AISC (by-product) of \$1,574 per ounce of gold sold in fiscal 2017 were \$106 or 7% higher than in fiscal 2016. COC was positively impacted by higher gold ounces sold, but offset by higher mining costs, while AISC benefitted from lower general and administrative costs and capital expenditures in fiscal 2017.

#### El Valle Growth Exploration

The planned mining campaign at the Carlés Mine concluded in August 2017. With a view towards opportunistic production at Carlés in the future, the Company completed a 2,700m underground infill drilling program in Carlés NW and is evaluating the potential for profitable re-initiation of open pit mining at the Carlés Mine.

Additionally, 23,000 meters of infill definition diamond drilling was completed at the El Valle Mine during fiscal 2017, primarily targeting the Black Skarn Oxide and East Breccia zones.

Greenfield exploration continues on the Company's Quintana and Lidia investigation permits in the immediate vicinity of the El Valle Mine.

## Don Mario

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. From 2012 to the end of 2016, EMIPA mined the Upper Mineralized Zone (“UMZ”) as an open-pit mine and in 2016, EMIPA commenced mining of new material at the upper extension of the LMZ as an open-pit mine. EMIPA is currently focused on processing the higher grade LMZ ore in its recently re-commissioned CIL circuit.

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

	Q4 2017	Q3 2017	Q4 2016	FY 2017	FY 2016
<b>Operating Performance</b>					
Ore mined (tonnes) (dmt)	160,712	184,355	173,010	718,692	679,512
Ore milled (tonnes) (dmt)	173,295	166,370	199,774	668,376	806,187
Daily average throughput (dmt)	2,107	2,033	2,369	2,088	2,436
Gold					
Grade (g/t)	2.59	2.66	1.54	2.36	1.44
Recovery (%)	86.4	89.3	57.0	74.0	56.3
Production (oz)	12,465	12,709	5,633	38,746	21,102
Sales (oz)	12,358	12,358	4,884	38,963	17,807
Copper					
Grade (%)	0.91	0.79	0.96	0.95	0.95
Recovery (%)	66.2	68.3	56.2	60.6	62.2
Production ('000 lbs)	2,302	1,980	2,386	8,387	10,478
Sales ('000 lbs)	2,144	2,587	2,033	9,091	9,075
Silver					
Grade (g/t)	5.89	5.40	17.84	9.40	20.10
Recovery (%)	65.83	68.8	75.4	65.8	73.4
Production (oz)	21,612	19,896	86,366	135,872	381,523
Sales (oz)	20,521	25,078	59,884	184,463	324,260
<b>Financial Performance</b> (in 000's, except per share amounts)					
Revenue	\$21,504	\$19,180	\$9,633	\$66,443	\$34,333
Mining costs	\$12,278	\$13,245	\$6,133	\$43,102	\$27,144
Income before tax	\$6,409	\$3,286	\$1,851	\$11,889	\$1,480
Capital expenditures	\$5,651	\$371	\$2,594	\$12,249	\$6,667
Cash operating costs (by-product) (\$/oz) gold <sup>(1)</sup>	\$567	\$784	\$598	\$663	\$863
All-in sustaining costs (by-product) (\$/oz) gold <sup>(1)</sup>	\$850	\$844	\$885	\$871	\$1,249
All-in costs (by-product) (\$/oz) gold <sup>(1)</sup>	\$1,080	\$866	\$1,236	\$1,050	\$1,378

(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 Operating Performance

During fiscal 2017, 38,746 ounces of gold, 8.4 million pounds of copper and 135,872 ounces of silver were produced at Don Mario compared with 21,102 ounces of gold, 10.5 million pounds of copper and 381,523 ounces of silver during fiscal 2016.

Gold production increased by 84%, while copper and silver production decreased by 20%, and 64%, respectively, compared with fiscal 2016. Higher gold grades from the LMZ ore along with higher recoveries from the CIL process resulted in the significant improvement of gold production during 2017, while lower by-product grades and recoveries impacted the production of copper and silver.

Fourth quarter gold production decreased by 2% to 12,465 ounces, while copper and silver production increased by 16% and 9%, respectively, to 2.3 million pounds and 21,612 ounces, respectively, compared with the third quarter of fiscal 2017.

### Don Mario Financial Performance

During fiscal 2017, revenue from Don Mario increased by 94% from \$34.3 million in fiscal 2016 to \$66.4 million on sales of 38,963 ounces of gold, 9.1 million pounds of copper and 184,463 ounces of silver in fiscal 2017 compared with sales of 17,807 ounces of gold, 9.1 million pounds of copper and 324,260 ounces of silver in fiscal 2016.

Mining costs of \$43.1 million for fiscal 2017 increased by \$16.0 million or 59% compared with \$27.1 million for fiscal 2016 primarily due to the higher volume of sales as well as increases in reagent and power costs in respect of the re-commissioned CIL circuit.

Income before tax for fiscal 2017 was \$11.9 million compared with \$1.5 million for fiscal 2016.

Total capital expenditures at Don Mario in fiscal 2017 were \$12.2 million compared with \$6.7 million in fiscal 2016. Capital expenditures in fiscal 2017 related primarily to the remaining costs of re-commissioning of the CIL Project and tailings facility expansion projects.

For fiscal 2017, COC (by-product) were \$663 per ounce of gold or 23% lower compared to fiscal 2016. Total AISC (by-product) were \$871 per ounce of gold or 30% lower compared to fiscal 2016. The decreases in COC and AISC were driven by the significant increase in gold production, decrease in deductions and other refining costs from moving to doré production and improved copper realized prices.

### Don Mario Exploration and Mine Life Extension

As described above, the Company began mining the upper extension of the LMZ in the second quarter of fiscal 2016, and the LMZ continued to be Don Mario's primary source of ore through fiscal 2017. Historically, ore previously mined from the LMZ was processed through a CIL circuit, realizing gold recoveries of over 80%. The re-commissioned CIL circuit completed during the second quarter of fiscal 2017 exceeded these historical recoveries, averaging a gold recovery of 87.8% over the second half of fiscal 2017. As a result, gold production at Don Mario has reached its highest levels since fiscal 2009, and Don Mario is poised to realize its known opportunities for mine life extension.

A mine plan for the Company's Cerro Felix deposit, located 500 meters from the current operations at Don Mario, was completed during the fourth quarter of fiscal 2017. In the near term, the Company expects to commence pre-stripping activities at Cerro Felix in the first quarter of fiscal 2018, and intends to transition its mine production to this satellite deposit following the depletion of the LMZ, expected in mid-fiscal 2018. Mined ore from Cerro Felix is expected to benefit from the re-commissioning of the CIL circuit due to its higher estimated gold grades and demonstrated amenability to CIL processing.

The first phase of a drilling campaign was completed at Don Mario's Las Tojas deposit, with the objective of providing sufficient information to define a mineral resource estimate for this deposit. The Company plans to spend approximately \$2.0 million on greenfield exploration at Don Mario during fiscal 2018, including a second phase of drilling at Las Tojas.

The Company also continues to re-evaluate the economic potential of processing existing mineral stockpiles, including the oxide material previously treated through the leach-precipitation-flotation process. Initial testing results have yielded positive indications, and the Company expects to conclude larger scale tests in the coming months. As at September 30, 2017, EMIPA had oxide stockpile mineral resources of approximately 2.2 million tonnes with an average gold grade of 1.84 g/t. The Company has also commenced an evaluation of reprocessing of tailings, to determine the viability of recovering gold from the material deposited in the tailings impoundment since the commencement of production at Don Mario.

In support of the mine life extension projects described above, the Company has concluded that the construction of a major tailings storage facility expansion is required to add sufficient capacity of up to three years of operations beyond the second quarter of fiscal 2018. The Company engaged Amec Foster Wheeler ("AMEC") to evaluate alternatives, provide design parameters and engineer this project. As a result, AMEC developed a capital cost estimate of \$9.7 million within 10% accuracy, including owner's costs and 10% contingency. Execution of the construction project commenced in the fourth quarter of fiscal 2017, in order to take advantage of the favorable dry season in Bolivia, targeting completion by the second quarter of fiscal 2018. Construction is being financed through the \$8.3 million BISA TSF facility closed in the third quarter of fiscal 2017.

## Market Review and Trends

### Metal Prices

The market prices of gold and copper are primary drivers of Orvana's earnings and ability to generate free cash flows. During fiscal 2017, gold traded in a range from \$1,126 to \$1,351 per ounce and averaged \$1,244 per ounce compared with \$1,220 per ounce in fiscal 2016. Orvana's average gold realized price in fiscal 2017 was \$1,258 per ounce, as compared to \$1,211 per ounce in fiscal 2016. The Company derived approximately 71% of its revenue from sales of gold in fiscal 2017.

Copper prices during fiscal 2017 traded in a range of \$2.10 to \$3.13 per pound and averaged \$2.62 per pound compared with \$2.16 per pound in fiscal 2016. Orvana's average copper realized price in fiscal 2017 was \$2.50 per pound. The Company derived approximately 25% of its revenue from sales of copper in fiscal 2017.

In fiscal 2017, silver prices traded in a range from \$15.22 per ounce to \$19.18 per ounce and averaged \$17.18 per ounce compared with \$16.49 in fiscal 2016. Orvana's average silver realized price in fiscal 2017 was \$17.22 per ounce. The Company derived approximately 4% of its revenue from sales of silver in fiscal 2017.

### Currency Exchange Rates

The results of Orvana's operations are affected by US dollar exchange rates. Orvana's largest exposure is to the Euro/US Dollar exchange rate. The Company incurs operating and administration costs at El Valle in Euros, while revenue is denominated in US dollars. Orvana's Euro costs increased year over year, with the Euro to US Dollar exchange rate moving from an average of 1.11 in fiscal 2016 to 1.13 in fiscal 2017. As a result of foreign exchange movements, mining costs at El Valle were higher by approximately \$1.3 million in fiscal 2017 compared with fiscal 2016.

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, 2017 and September 30, 2016.

<i>(in 000's)</i>	September 30, 2017	September 30, 2016
Cash and cash equivalents	\$23,811	\$18,939
Restricted cash (short term)	\$1,027	\$2,092
Non-cash working capital <sup>(1)</sup>	(\$9,732)	\$4,328
Total assets	\$171,363	\$174,262
Total liabilities	\$82,753	\$70,151
Shareholders' equity	\$88,610	\$104,111

(1) Working capital represents current assets of \$53.0 million less cash and cash equivalents and short-term restricted cash totaling \$24.8 million and less \$37.9 million in current liabilities composed of accounts payable and accrued liabilities, income taxes payable and derivative instruments (not including current debt).

Total assets decreased by \$2.9 million from \$174.3 million to \$171.4 million primarily as a result of the decrease in (i) property, plant and equipment of \$5.8 million as a result of depreciation and (ii) net restricted cash movements of \$1.1 million, offset by increases in (iii) cash of \$4.9 million.

Short-term restricted cash as at September 30, 2017 was \$1.0 million (September 30, 2016 – \$2.1 million), consisting of guarantees on VAT credit notes which expire after 120 days and which are pending the final approval and audit of these credit notes by the Bolivian government.

Total liabilities increased by \$12.6 million or 18% to \$82.8 million at September 30, 2017 from \$70.2 million at September 30, 2016 primarily as a result of an increase in (i) accounts payable and accrued liabilities of \$5.8 million, (ii) income taxes payable at Don Mario of \$4.1 million and (iii) the additional drawdown of the Prepayment Facility of \$4.5 million, offset by a reduction of deferred income tax liabilities of \$1.8 million.

### *BISA CIL Loan*

In May 2016, EMIPA closed a Boliviano denominated loan of approximately \$7.9 million with BISA (the "BISA CIL Loan"), the proceeds of which were used for the re-commissioning of the CIL circuit. Under the terms of the BISA CIL Loan, five disbursements of specified amounts were drawn down by EMIPA as expenditures were incurred for the CIL Project. The BISA CIL Loan had an interest rate of 6% per annum, with ten monthly principal repayments that began in December 2016. Security included the CIL asset and other equipment at Don Mario. EMIPA completed repayment of the BISA CIL Loan on September 8, 2017.

### *BISA TSF Loan and Revolving Facility*

In June 2017, EMIPA closed Boliviano denominated debt facilities of approximately \$11.3 million with BISA, comprised of an \$8.3 million term facility (the "BISA TSF Loan") and a \$3.0 million revolving working capital facility.

The proceeds of the BISA TSF Loan will be primarily used to fund a major tailings storage facility expansion project that will add sufficient capacity to support future operations. Under the terms of the BISA TSF Loan, seven disbursements of specified amounts will be drawn down as expenditures are incurred for the tailings storage facility expansion, with the first draw down occurring on June 30, 2017. The BISA TSF Loan matures in January 2021 and has an interest rate of 5.3% per annum, with twelve repayments beginning in April 2018.

The revolving working capital facility of up to \$3.0 million can be drawn down in the form of cash of up to \$2.0 million, bank guarantees of \$3.0 million or a combination of the two up to the limit of \$3.0 million. The revolving working capital facility is renewable every six months until November 2020 and interest will be determined at the date of drawdown and is dependent on the form of the drawdown. As at September 30, 2017, no amounts were drawn down from this facility.

Security for both the BISA TSF Loan and the revolving working capital facility include the CIL asset and other equipment at Don Mario.

### *Samsung C&T Prepayment Facility*

In August 2016, the Company entered into a \$12.5 million copper concentrates and gold doré prepayment agreement ("Prepayment Facility") with Samsung C&T U.K. Ltd. ("Samsung C&T"), the proceeds of which were 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 received \$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 the first of eighteen equal monthly repayments was made in September 2017. The second instalment of \$4.5 million was drawn down in February 2017 and will be repaid beginning December 2017 in nine equal monthly payments. The Prepayment Facility bears interest at USD 3M LIBOR plus 4.5%. Interest payments and principal repayments under the terms of the Prepayment Facility are made against Orvana's on-going shipments of copper concentrates and/or 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 the El Valle and Carlés Mines in Spain.

### **Shareholders' Equity**

Shareholders' equity at September 30, 2017 decreased by 15% to \$88.6 million compared with \$104.1 million at September 30, 2016. The table below sets out the number of each class of securities of the Company outstanding at September 30, 2017 and as at the date hereof.

	<b>At September 30, 2017</b>
Common Shares	136,623,171
Warrants <sup>(1)</sup>	600,000
Options <sup>(2)</sup>	1,569,444

- (1) All of the outstanding warrants are held by Fabulosa. 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 \$0.41 and expiry dates ranging from 2018 to 2021.

## Derivative Instruments

The Company had the following derivative instruments outstanding as at September 30, 2017:

	Contract Prices	Cash Settlement	Contract Amounts
<b>Copper</b>			
Copper forwards (Oct 2017)	\$5,900 / tonne	Monthly	375 tonnes
Copper puts (Nov 2017 – Mar 2018)	\$5,515 / tonne	Monthly	1,875 tonnes
Copper calls (Nov 2017 – Mar 2018)	\$6,125 / tonne	Monthly	1,875 tonnes
<b>Gold</b>			
Gold forwards (Nov 2017 – Mar 2018)	\$1,250 to \$1,310 / troy oz	Monthly	18,700 troy oz
Gold capped calls (Jan 2018 – Mar 2018)	\$1,320 / troy oz	Monthly	7,500 troy oz

The Company paid net cash proceeds of \$695 during fiscal 2017 in settlement of the derivative instruments that matured in the period.

As at September 30, 2017, the Company's outstanding derivative instruments were valued on the balance sheet as follows:

	Spot Price	Contract Price	Avg. Forward Price	Fair Value
<b>Derivative instrument assets</b>				
Gold capped calls	\$1,283 / troy oz	\$1,320 / troy oz	-	\$102
Total fair value of derivative instrument assets				\$102
<b>Derivative instrument liabilities</b>				
Gold forwards	\$1,283 / troy oz	\$1,250 to \$1,310 / troy oz	\$1,286 / troy oz	\$360
Copper forwards	\$6,485 / tonne	\$5,900 / tonne	\$6,515 / tonne	\$230
Copper collars	\$6,485 / tonne	-	-	\$434
Total fair value of derivative instrument liabilities				\$1,024
Total fair value of derivative instrument liabilities, net				\$922

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:

<i>(in 000's)</i>	Q4 2017	Q3 2017	Q4 2016	FY 2017	FY 2016
Change in unrealized fair value	\$527	\$844	(\$114)	\$862	\$60
Realized gain (loss) on cash settlements of derivative instruments	896	(320)	260	695	338
Derivative instruments gain	\$1,423	\$524	\$116	\$1,557	\$398

## Capital Resources

At September 30, 2017, the Company had cash and cash equivalents of \$23.8 million and restricted cash of \$3.0 million. The Company considers its capital employed to consist of shareholders' equity (including share capital, contributed surplus and retained earnings) and total debt net of cash and cash equivalents as follows:

<i>(in 000's)</i>	September 30, 2017	September 30, 2016
Shareholders' equity	\$88,610	\$104,111
Revolving facilities	2,000	517
Capital leases	1,359	1,783
BISA facilities <sup>(1)</sup>	3,352	4,928
Prepayment Facility	11,502	6,825
	\$106,823	\$118,164
Less: Cash and cash equivalents	(23,811)	(18,939)
Capital employed	\$83,012	\$99,225

(1) The BISA facilities include the BISA CIL Loan and the BISA TSF Loan.

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 closed the \$7.9 million BISA CIL Loan and the \$12.5 million Prepayment Facility, and during fiscal 2017 the Company closed the \$11.3 million BISA TSF Loan and revolving working capital facility. 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 securing 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 for 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 fiscal 2018 is to manage its existing capital resources and liquidity in a prudent fashion to sustain ongoing capital projects and exploration programs at EMIPA and OroValle, and to meet all of its existing debt repayment obligations.

## Cash Flows, Commitments, Liquidity and Contingencies

### Cash Flows

Total cash and cash equivalents as at September 30, 2017 was \$23.8 million, primarily denominated in US dollars, representing an increase of \$4.9 million from \$18.9 million at September 30, 2016. Short-term

restricted cash was \$1.0 million at September 30, 2017 compared with \$2.1 million at September 30, 2016, and include \$1.0 million in guarantees on VAT credit notes which expire after 120 days and are pending the final approval and audit of these credit notes by the Bolivian government. The Company's total debt was \$16.9 million at September 30, 2017. This compares with total debt as at September 30, 2016 of \$12.3 million.

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

<i>(in 000's)</i>	<b>Q4 2017</b>	<b>Q3 2017</b>	<b>Q4 2016</b>	<b>FY 2017</b>	<b>FY 2016</b>
Cash provided by operating activities before changes in non-cash working capital	<b>\$8,595</b>	\$2,930	\$1,186	<b>\$11,914</b>	\$5,199
Cash provided by operating activities	<b>12,328</b>	7,769	221	<b>20,726</b>	3,437
Cash used in investing activities <sup>(1)</sup>	<b>(5,830)</b>	(2,050)	(4,300)	<b>(19,025)</b>	(14,206)
Cash provided by (used in) financing activities	<b>(964)</b>	(1,019)	10,996	<b>3,539</b>	12,475
Change in cash	<b>\$5,534</b>	\$4,700	\$6,917	<b>\$5,240</b>	\$1,706

(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 source of liquidity continues to be from operating cash flows. Cash flows provided by operating activities before changes in non-cash working capital were \$11.9 million for fiscal 2017 compared with \$5.2 million for fiscal 2016. Cash flows provided by operating activities were \$20.7 million for fiscal 2017 compared with \$3.4 million for fiscal 2016.

Significant drivers of the change in operating cash flow are production and realized gold and copper prices on sales. 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 have been the funding of the Company's planned capital expenditures.

Cash used in investing activities was \$19.0 million in fiscal 2017 compared with \$14.2 million in fiscal 2016. Capital expenditures and movements in the Company's restricted cash and reclamation bond accounts drive the majority of cash flows used in investing activities. The receipt of a deferred payment from the Copperwood divestiture in 2014 also positively impacted cash flows used in investing activities in the third quarter of fiscal 2016.

Cash provided by financing activities was \$3.5 million in fiscal 2017 compared with \$12.5 million in fiscal 2016, and is driven by the timing of drawdowns and repayments by the Company's debt facilities.

#### Capital Expenditures

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

<i>(in 000's)</i>	<b>Q4 2017</b>	<b>Q3 2017</b>	<b>Q4 2016</b>	<b>FY 2017</b>	<b>FY 2016</b>
El Valle	<b>\$2,030</b>	\$1,994	\$4,317	<b>\$9,702</b>	\$9,510
Don Mario	<b>5,651</b>	371	2,594	<b>12,249</b>	6,667
Corporate	<b>2</b>	-	15	<b>4</b>	36
Sub-total capital expenditures	<b>\$7,683</b>	\$2,365	\$6,926	<b>\$21,955</b>	\$16,213
Accounts payable adjustments <sup>(1)</sup>	<b>(1,865)</b>	929	(1,532)	<b>(623)</b>	(1,236)
Total capital expenditures <sup>(1)</sup>	<b>\$5,818</b>	\$3,294	\$5,394	<b>\$21,332</b>	\$14,977

(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.

At El Valle, capital expenditures in fiscal 2017 consisted mainly of primary development, mining infrastructure improvements, including power, tailings facility expansion and updates to its underground mining fleet. Significant capital expenditures at Don Mario included tailings facility expansions, the re-commissioning costs of the CIL Project and planned maintenance overhauls.

The Company expects sustaining capital expenditures for fiscal 2018 to be in the range of \$24.0 million to \$27.0 million. Refer to the "Outlook" section of the MD&A.

## Other Commitments

The Company's current contractual obligations are summarized in the following table:

As at September 30, 2017 <i>(in 000's)</i>	Total	Payment Due by Period			
		Less than 1 Year	1-3 Years	4-5 Years	After 5 Years
BISA facilities <sup>(1)</sup>	\$3,352	\$559	\$2,793	-	-
Prepayment Facility	\$12,056	\$9,833	\$2,223	-	-
Operating leases	\$3,807	\$2,472	\$1,330	\$5	-
Finance leases	\$1,359	\$1,003	\$356	-	-
Decommissioning liabilities <sup>(2)</sup>	\$23,559	\$180	\$335	\$742	\$22,302
Reclamation bond <sup>(3)</sup>	\$5,903	\$5,903	-	-	-
Purchase obligations	\$6,579	\$6,579	-	-	-
Provision for statutory labour obligations <sup>(4)</sup>	\$3,400	-	\$3,400	-	-
Long-term compensation	\$631	\$107	\$224	-	\$300
Total contractual obligations <sup>(5)</sup>	\$60,646	\$26,636	\$10,661	\$747	\$22,602

(1) The BISA facilities include the BISA CIL Loan and the BISA TSF Loan.

(2) Decommissioning liabilities are undiscounted. Total cash deposited with a Spanish financial institution for Euro denominated reclamation bonds amounted to approximately \$8.9 million at September 30, 2017 (September 30, 2016 - \$8.4 million). Decommissioning liabilities are discussed below under "Other Information - Critical Accounting Estimates - Decommissioning Liabilities".

(3) 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 Company is challenging the requirement to fund the additional reclamation bond through an administrative appeal process. The Company is also working with the Spanish regulatory authorities to come to an agreement regarding posting this bond, including the consideration of alternatives to posting this bond, while preserving the Company's rights during the appeal process.

(4) 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.

(5) 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, 2017. 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 \$2.1 million for fiscal 2017, compared with \$1.7 million for fiscal 2016.

Production from Don Mario is subject to a 3% NSR. This expense totaled \$2.2 million for fiscal 2017, compared with \$1.2 million for fiscal 2016. 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 \$4.9 million for fiscal 2017, compared with \$2.9 million for fiscal 2016.

## Liquidity

Orvana's primary sources of liquidity in fiscal 2017 were operating cash flows and financing proceeds from the Prepayment Facility and the BISA facilities. During fiscal 2017, Orvana generated cash of \$20.7 million from operating activities and \$3.5 million from financing activities, supporting \$19.0 million in investing activities.

As at September 30, 2017, the Company had cash of \$23.8 million, and together with forecasted operating cash flows, expects to cover the Company's commitments due in less than one year of \$26.6 million.

In August 2016, the Company entered into the \$12.5 million Prepayment Facility with Samsung C&T, the proceeds of which were invested into El Valle. The acceleration of underground mine development and the execution of water and power infrastructure projects allowed El Valle to improve its ore production to sustain throughput in excess of nameplate capacity of 2,000 tpd during fiscal 2017, improving gold production despite mining through lower gold grade skarn areas. Going forward, El Valle is planning a significant reduction on the reliance of inferred material in mine production and, by increasing the amount of high gold

grade oxide ore relative to skarn ore, expects to improve average gold head grades. These efforts are expected to continue to assist in reducing unitary costs during fiscal 2018.

At Don Mario, the Company concluded the re-commissioning of the CIL circuit in the second quarter of fiscal 2017. Gold recovery results from the CIL circuit exceeded the Company's expectations, and the repayment of the \$7.9 million BISA CIL Loan was completed by the end of fiscal 2017. Mine life extension projects are currently underway at Don Mario, and the \$8.3 million BISA TSF Loan was closed in the third quarter of fiscal 2017 to support a tailings dam expansion project expected to provide an additional three years of mining capacity. Future working capital requirements at Don Mario are expected to be covered by operating cash flows as well as the recently closed revolving facility, also with BISA.

Through the completion of the recent debt financings, 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.

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 the 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. The results of recent scientific studies conducted by the Company have confirmed the Company's belief that past and prevailing levels of selenium in waterways impacted by the OroValle operations do not constitute a health or environmental risk.

Spanish regulatory authorities have taken the position that the levels of selenium in the river flowing past the El Valle Mine exceed the levels permitted by applicable regulations as a result of discharges attributed to OroValle which may not be in compliance with certain of OroValle'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 the 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 judged to successfully 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.

## SUMMARY OF QUARTERLY RESULTS

The following two tables include results for the eight quarters ended September 30, 2017:

<i>(in 000's, except per share amounts)</i>	Quarters ended			
	Q4 2017	Q3 2017	Q2 2017	Q1 2017
Revenue	\$46,156	\$36,671	\$31,714	\$23,458
Net loss	(\$1,722)	(\$3,446)	(\$2,233)	(\$8,154)
Loss per share (basic and diluted)	(\$0.01)	(\$0.03)	(\$0.02)	(\$0.06)
Total assets	\$171,363	\$171,429	\$174,767	\$171,155
Total financial liabilities <sup>(1)</sup>	\$19,135	\$19,019	\$20,449	\$15,626

  

	Quarters ended			
	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 <sup>(1)</sup>	\$14,113	\$2,957	\$1,971	\$1,971

(1) Financial liabilities include current and long-term portions of debt, obligations under finance leases and derivative liabilities.

## 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 most recent Annual Information Form ("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 most recent AIF at [www.sedar.com](http://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, 2017, the net carrying value of the property, plant and equipment in respect of El Valle and Don Mario amounted to \$83.4 million and \$16.6 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 management's 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, 2017.

These estimates were prepared by management with the assistance of independent third party experts.

<b>September 30, 2017</b>	<b>Undiscounted Cash Flows Estimated to Settle Decommissioning Liabilities</b>	<b>Discount Rate</b>	<b>Discounted Cash Flows Required to Settle Decommissioning Liabilities</b>
<i>(in 000's)</i>			
El Valle <sup>(1)</sup>	\$15,546	1.54%	\$13,300
Don Mario <sup>(1)</sup>	\$8,013	3.20%	\$6,639
<b>Total</b>	<b>\$23,559</b>		<b>\$19,939</b>

(1) Accretion expense is recorded using the discount interest rate set out above. It is estimated that these amounts will be incurred beginning in 2018 and 2019 at 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 a stock-based compensation expense of \$54.4 thousand in fiscal 2017 compared with \$18.2 thousand in fiscal 2016. The stock-based compensation expense is based on an estimate of the fair value of 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 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 its minesites (El Valle and Don Mario), which are 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, 2017 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, 2017 of \$88.3 million, following the completion of an impairment test in respect of each CGU at the end of fiscal 2017, 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, 2017. As such, there was no impairment of such carrying values as at September 30, 2017.

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 fiscal 2017, 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, 2017.

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

#### COC, AISC and AIC

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	Q4 2017	Q3 2017	Q4 2016	FY 2017	FY 2016
<b>Cash operating costs, all-in sustaining costs and all-in costs (by-product)<sup>(1)</sup> (in 000’s)</b>					
<b>Total mining costs (sales based)</b>	<b>\$34,562</b>	<b>\$31,181</b>	<b>\$22,884</b>	<b>\$116,371</b>	<b>\$84,544</b>
Deductions, refining, treatment, penalties, freight & other costs	5,228	5,697	4,185	19,004	19,324
<b>Sub-total - other operating costs</b>	<b>\$5,228</b>	<b>\$5,697</b>	<b>\$4,185</b>	<b>\$19,004</b>	<b>\$19,324</b>
Copper sales - gross revenue value	(11,723)	(10,599)	(7,252)	(39,276)	(28,937)

<b>Orvana Consolidated</b>	<b>Q4 2017</b>	<b>Q3 2017</b>	<b>Q4 2016</b>	<b>FY 2017</b>	<b>FY 2016</b>
Silver sales - gross revenue value	(1,337)	(1,225)	(2,059)	(6,114)	(7,910)
Other by-product gross revenue value	-	-	(27)	(43)	(77)
<b>Sub-total by-product revenue</b>	<b>(\$13,060)</b>	<b>(\$11,824)</b>	<b>(\$9,338)</b>	<b>(\$45,433)</b>	<b>(\$36,924)</b>
<b>Cash operating costs</b>	<b>\$26,730</b>	<b>\$25,054</b>	<b>\$17,731</b>	<b>\$89,942</b>	<b>\$66,944</b>
Corporate general & administrative costs	1,073	965	1,540	3,518	5,332
Community costs related to current operations	99	90	110	508	401
Reclamation, accretion & amortization	889	571	323	2,490	1,269
Exploration and study costs (sustaining)	381	360	90	923	345
Primary development (sustaining)	768	1,035	1,224	4,036	3,781
Other sustaining capital expenditures <sup>(2) (3)</sup>	4,007	1,052	3,972	11,020	10,245
<b>All-in sustaining costs</b>	<b>\$33,947</b>	<b>\$29,127</b>	<b>\$24,990</b>	<b>\$112,437</b>	<b>\$88,317</b>
Capital expenditures (non-sustaining) <sup>(3)</sup>	3,011	280	1,715	7,002	2,288
<b>All-in costs</b>	<b>\$36,958</b>	<b>\$29,407</b>	<b>\$26,705</b>	<b>\$119,439</b>	<b>\$90,605</b>
Au/oz sold	29,639	24,287	14,705	88,636	61,816
Cash operating costs (\$/oz) gold	<b>\$902</b>	<b>\$1,032</b>	<b>\$1,205</b>	<b>\$1,015</b>	<b>\$1,082</b>
All-in sustaining costs (\$/oz) gold	<b>\$1,145</b>	<b>\$1,199</b>	<b>\$1,699</b>	<b>\$1,269</b>	<b>\$1,429</b>
All-in costs (\$/oz) gold	<b>\$1,248</b>	<b>\$1,211</b>	<b>\$1,816</b>	<b>\$1,348</b>	<b>\$1,466</b>

(1) Costs are reported per ounce of gold sold in the period.

(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.

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:

<b>El Valle</b>	<b>Q4 2017</b>	<b>Q3 2017</b>	<b>Q4 2016</b>	<b>FY 2017</b>	<b>FY 2016</b>
<b>Cash operating costs, all-in sustaining costs and all-in costs (by-product) <sup>(1)</sup> (in 000's)</b>					
<b>Total mining costs</b>	<b>\$22,284</b>	<b>\$17,936</b>	<b>\$16,751</b>	<b>\$73,269</b>	<b>\$57,400</b>
Deductions, refining, treatment, penalties, freight & other costs	2,761	2,428	1,371	8,447	5,713
<b>Sub-total - other operating costs</b>	<b>\$2,761</b>	<b>\$2,428</b>	<b>\$1,371</b>	<b>\$8,447</b>	<b>\$5,713</b>
Copper sales - gross revenue value	(4,796)	(4,198)	(2,625)	(14,718)	(9,076)
Silver sales - gross revenue value	(928)	(796)	(684)	(2,988)	(2,466)
<b>Sub-total by-product revenue</b>	<b>(\$5,724)</b>	<b>(\$4,994)</b>	<b>(\$3,309)</b>	<b>(\$17,706)</b>	<b>(\$11,542)</b>
<b>Cash operating costs</b>	<b>\$19,321</b>	<b>\$15,370</b>	<b>\$14,813</b>	<b>\$64,010</b>	<b>(\$51,571)</b>
Corporate general & administrative costs	625	625	14	2,500	2,414
Reclamation, accretion & amortization	394	431	220	1,577	856
Exploration and study costs (sustaining)	10	23	18	64	102
Primary development (sustaining)	768	1,035	1,224	4,036	3,781
Other sustaining capital expenditures <sup>(2) (3)</sup>	1,367	964	3,093	5,775	5,858
<b>All-in sustaining costs</b>	<b>\$22,485</b>	<b>\$18,448</b>	<b>\$19,382</b>	<b>\$77,962</b>	<b>\$64,582</b>
<b>All-in costs</b>	<b>\$22,485</b>	<b>\$18,448</b>	<b>\$19,382</b>	<b>\$77,962</b>	<b>\$64,582</b>
Au/oz sold	16,543	11,929	9,821	49,518	44,009
Cash operating costs (\$/oz) gold	<b>\$1,168</b>	<b>\$1,288</b>	<b>\$1,508</b>	<b>\$1,293</b>	<b>\$1,172</b>
All-in sustaining costs (\$/oz) gold	<b>\$1,359</b>	<b>\$1,546</b>	<b>\$1,974</b>	<b>\$1,574</b>	<b>\$1,468</b>
All-in costs (\$/oz) gold	<b>\$1,359</b>	<b>\$1,546</b>	<b>\$1,974</b>	<b>\$1,574</b>	<b>\$1,468</b>

(1) Costs are reported per ounce of gold sold in the period.

(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.

Previously, the Company reported unitary costs from Don Mario on a co-product per pound of copper and per ounce of gold and silver as a result of revenue from the sale of copper and silver representing more than 60% of total gross revenue. As a result of the changes in product mix realized during fiscal 2017 and an increase in gold revenue relative to copper and silver revenue, the Company began presenting its 2017 unitary costs for Don Mario on a by-product basis and has restated its comparatives accordingly. The following table provides a reconciliation of AISC per ounce of gold sold for Don Mario for the periods set out below:

Don Mario Mine	Q4 2017	Q3 2017	Q4 2016	FY 2017	FY 2016
<b>Cash operating costs, all-in sustaining costs and all-in costs (by-product)<sup>(1)</sup> (in 000's)</b>					
<b>Total mining costs</b>	<b>\$12,278</b>	<b>\$13,245</b>	<b>\$6,134</b>	<b>\$43,102</b>	<b>\$27,145</b>
Deductions, refining, treatment, penalties, freight & other costs	2,467	3,269	2,814	10,557	13,611
<b>Sub-total - other operating costs</b>	<b>\$2,467</b>	<b>\$3,269</b>	<b>\$2,814</b>	<b>\$10,557</b>	<b>\$13,611</b>
Copper sales – gross revenue value	(6,927)	(6,401)	(4,627)	(24,558)	(19,861)
Silver sales – gross revenue value	(409)	(429)	(1,375)	(3,126)	(5,444)
Other by-product gross revenue value	-	-	(27)	(43)	(77)
<b>Sub-total by-product revenue</b>	<b>(\$7,336)</b>	<b>(\$6,830)</b>	<b>(\$6,029)</b>	<b>(\$27,727)</b>	<b>(\$25,382)</b>
<b>Cash Operating Costs</b>	<b>\$7,409</b>	<b>\$9,684</b>	<b>\$2,919</b>	<b>\$25,932</b>	<b>\$15,374</b>
Corporate general & administrative costs	92	86	238	581	1,433
Community costs related to current operations	99	90	110	508	401
Reclamation, accretion & amortization	495	140	103	913	413
Capital expenditures (sustaining) <sup>(2)(3)</sup>	2,640	88	879	5,245	4,379
Exploration and study costs (sustaining)	371	337	72	859	243
<b>All-in sustaining costs</b>	<b>\$11,106</b>	<b>\$10,425</b>	<b>\$4,321</b>	<b>\$34,038</b>	<b>\$22,243</b>
Capital expenditures (non-sustaining)	3,011	280	1,715	7,002	2,288
<b>All-in costs</b>	<b>\$14,117</b>	<b>\$10,705</b>	<b>\$6,036</b>	<b>\$41,040</b>	<b>\$24,531</b>
Au/oz sold	13,096	12,358	4,884	39,118	17,807
Cash operating costs (\$/oz) gold	<b>\$566</b>	<b>\$784</b>	<b>\$598</b>	<b>\$663</b>	<b>\$863</b>
All-in sustaining costs (\$/oz) gold	<b>\$848</b>	<b>\$844</b>	<b>\$885</b>	<b>\$870</b>	<b>\$1,249</b>
All-in costs (\$/oz) gold	<b>\$1,078</b>	<b>\$866</b>	<b>\$1,236</b>	<b>\$1,049</b>	<b>\$1,378</b>

(1) Costs are reported per ounce of gold sold in the period.

(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 includes unpaid capital expenditures incurred in the period.

## EBITDA

The Company has included Earnings before Interest, Taxes, Depreciation and Amortization ("EBITDA") as a non-IFRS performance measure in this MD&A. The Company excludes these items from net loss to provide a measure which allows the Company and investors to evaluate the results of the underlying core operations of the Company and its ability to generate cash flows. Accordingly, it is 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.

The following table provides a reconciliation of EBITDA to the Company's consolidated financial statement for their respective periods:

<i>(in 000's)</i>	<b>Q4 2017</b>	<b>Q3 2017</b>	<b>Q4 2016</b>	<b>FY 2017</b>	<b>FY 2016</b>
Net loss	<b>(\$1,722)</b>	(\$3,446)	(\$1,528)	<b>(\$15,555)</b>	(\$8,455)
Less:					
Finance costs	<b>419</b>	447	224	<b>1,627</b>	441
Income taxes	<b>3,296</b>	381	(2,495)	<b>3,354</b>	(4,758)
Depreciation and amortization	<b>8,320</b>	7,400	4,759	<b>27,109</b>	17,189
EBITDA	<b>\$10,313</b>	\$4,782	\$960	<b>\$16,535</b>	\$4,417

## Other Information

Other operating and financial information with respect to the Company, including the AIF, is available on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Company's website at [www.orvana.com](http://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 including specifically, but not limited to in the case of Don Mario, the completion of the major tailings storage facility expansion, the mining of the Cerro Felix deposit, the processing of the mineral stockpiles and the reprocessing of the tailings material; 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 – Reserve and Resource Estimates**

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.