ORVANA
MINERALS CORP

MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE YEAR ENDED SEPTEMBER 30, 2018

Introduction

The present 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, 2018 ("FY2018 or fiscal 2018").

This MD&A should be read in conjunction with the fiscal 2018 audited consolidated financial statements of Orvana 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.

All currency amounts (except per unit amounts), unless otherwise stated, are in United States dollars ("US dollars"). Gold and silver production and sales are in fine troy ounces ("ounces" or "oz"), while copper is in pounds ("lbs"). Information presented in this MD&A is as of December 20, 2018, unless otherwise stated.

Orvana is an Ontario registered company and its common shares ("Common Shares") are listed in the Toronto Stock Exchange (TSX) under the symbol **ORV**.

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

Company Overview

Orvana is a multi-mine gold-copper-silver producer with organic growth opportunities. Orvana's operating properties consist of:

(i) El Valle and Carlés underground mines with their El Valle processing plant (collectively, "El Valle"), producer of copper concentrates and doré bars; located in Asturias, northern Spain; and,

(ii) The Don Mario Mine Complex ("Don Mario"), a set of assets that includes Cerro Felix satellite open pit, Las Tojas ore body, and the previously mined Lower Mineralized Zone ("LMZ") and Upper Mineralized Zone ("UMZ"), with processing facilities that currently produce doré bars, and previously produced copper concentrates, located in Santa Cruz southeastern Bolivia.

Orvana's strategic focus is on initiatives and opportunities that deliver long-term shareholder value. In that regard, 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.

Fiscal 2018 Consolidated Operating and Financial Highlights

Orvana is pleased to report the following positive developments in fiscal 2018:

- **El Valle delivers 13% higher gold production (58,259 oz) due to 27% grade increase:**

  Oxides ore productivity enhancements allowed higher-grade ore volumes to the mill, resulting in higher gold output and reduced unitary costs. Mechanical advance rates in oxides areas continued to improve, increasing by 82% to 6,861 meters in fiscal 2018, as compared to fiscal 2017.

  Primary objectives in fiscal 2019 are to:

- Increase gold production by continually growing the proportion of higher-grade oxides ore feeding the plant;
- Increase underground mining fleet reliability by enhancing preventive maintenance programs;
- Continue addressing ore grade variability risks through additional geological reviewing steps in the short-term mine planning phase, in addition to introducing conservatism when mine planning particular zones with even higher grades (this ore bodies are now known to be non-homogenous or non-contiguous, and
- Maintain or improve gold recovery at the plant (already in good standing, benchmarking-wise)

▪ **Don Mario delivers 16% higher gold production (45,125 oz) due to 19% ore tonnage increase:**

Mining operations transitioned from the now depleted LMZ to Cerro Felix satellite open pit. Mine tonnage increased by 19% in fiscal 2018, to 856,018 tonnes, compared to fiscal 2017; supported by investments in heavy equipment through the year. Fiscal 2017-recomissioned CIL circuit exceeded expectations during fiscal 2018 based on ore quality and skillful crew performance. The company is analysing an economic way to treat its oxides stockpiles. Studies conducted in fiscal 2018 show an economic metallurgical option combining a SART circuit, with preceding heap leaching, and ending up in conventional CIC.

Primary objectives in fiscal 2019 are to:

- Continue ore production from Cerro Felix, optimizing ore mining through enhanced grade control procedures;
- Maintain or improve gold recovery at the plant;
- Continue fiscal 2018 efforts to develop an economic metallurgical option to treat 2.1Mt oxides stockpile by implementing a SART circuit (Sulphidization-Acidification-Recycling-Thickening), associated leach pad and ancillary minor facilities. Target is to have metallurgical option deployed by fiscal 2020;
- Continue exploring gold deposits and concessions to extend Don Mario's mine life.

	Q4 2018	Q3 2018	Q4 2017	FY 2018	FY 2017
Operating Performance					
Gold					
Grade (g/t)	**2.72**	2.62	2.62	**2.61**	2.41
Recovery (%)	**92.3**	92.0	90.3	**91.7**	84.7
Production (oz)	**28,661**	26,761	27,666	**103,384**	90,292
Sales (oz)	**28,044**	26,490	29,639	**102,018**	88,636
Average realized price / oz	**$1,208**	$1,298	$1,268	**$1,273**	$1,258
Copper					
Grade (%)	**0.51**	0.51	0.64	**0.60**	0.70
Recovery (%)	**81.6**	81.6	69.9	**65.9**	65.4
Production ('000 lbs)	**1,291**	1,575	3,601	**8,233**	13,893
Sales ('000 lbs)	**1,231**	2,225	3,850	**8,687**	14,686
Average realized price / lb	**$2.81**	$3.11	$2.74	**$2.89**	$2.50
Financial Performance *(in 000's, except per share amounts)*					
Revenue	**$36,298**	$38,438	$46,156	**$145,836**	$137,999
Mining costs	**$30,632**	$31,729	$34,562	**$120,946**	$116,370
Gross margin	**$3,019**	$73	$3,274	**$3,156**	($5,480)
Net loss	**($1,231)**	($2,982)	($1,722)	**($11,097)**	($15,555)
Net loss per share (basic/diluted)	**($0.01)**	($0.02)	($0.01)	**($0.08)**	($0.11)
EBITDA (1)	**$1,165**	$3,930	$10,313	**$13,750**	$16,535
Operating cash flows before non-cash working capital changes	**$3,049**	$4,282	$8,596	**$11,864**	$11,914
Operating cash flows	**$1,129**	$4,010	$12,329	**$1,800**	$20,726
Ending cash and cash equivalents	**$11,634**	$13,484	$23,811	**$11,634**	$23,811
Capital expenditures (2)	**$3,051**	$5,618	$5,818	**$20,338**	$21,332
Cash operating costs (by-product) ($/oz) gold (1)	**$1,003**	$1,027	$902	**$1,021**	$1,015
All-in sustaining costs (by-product) ($/oz) gold (1)(2)	**$1,187**	$1,291	$1,145	**$1,259**	$1,269

(1) Earnings before interest, taxes, depreciation and amortization ("EBITDA"), cash operating costs and all-in sustaining costs 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 103,384 ounces during fiscal 2018, an increase of 14% compared to fiscal 2017.
- Production of 126,017 gold equivalent ounces during fiscal 2018, compared with 124,039 during fiscal 2017. [(1)]
- Production of 8.2 million pounds (3,735 tonnes) of copper, a decrease of 41% compared with fiscal 2017, primarily due to the shutdown of the flotation circuit at Don Mario mine.
- Sales of 102,018 ounces of gold and 8.7 million pounds (3,940 tonnes) of copper during fiscal 2018, an increase in gold sales of 15% and a decrease in copper sales of 41%, compared with fiscal 2017.
- Production of 28,661 ounces of gold and 1.3 million pounds (1,633 tonnes) of copper during the fourth quarter of fiscal 2018, an increase in gold production of 4% and a decrease in copper production of 64%, compared with the fourth quarter of fiscal 2017.
- Production of 32,221 gold equivalent ounces during the fourth quarter of fiscal 2018, compared with 36,676 during the fourth quarter of fiscal 2017.
- Sales of 28,044 ounces of gold and 1.2 million pounds (558 tonnes) of copper during the fourth quarter of fiscal 2018, a decrease in gold and copper sales of 5% and 68% respectively, compared with the fourth quarter of fiscal 2017.

El Valle

- Fiscal 2018 gold production increased by 13% and copper production decreased by 7%, compared with fiscal 2017. Gold production increased due mainly to 27% higher gold grades, partially offset by 12% reduction in tonnes milled. Copper production decreased due mainly to lower tonnes milled.
- Historically, the ratio of mined oxide to skarn ore had been approximately 22% until the end of fiscal 2017. The ratio of oxides to skarns processed in the mill was at the level of 37% over fiscal 2018, increasing to 231,000 tonnes. The 50% increase in oxides ore milled resulted in a 13% increase to gold production during fiscal 2018, as compared to fiscal 2017.
- The Company is targeting to continue increasing the ratio of oxides processed as part of the initiatives to improve ore grade in fiscal 2019 ("fiscal 2019").
- Mechanical advance rates in oxide areas continued to improve, increasing by 82% to 6,861 meters during fiscal 2018, as compared to fiscal 2017.
- Maintenance investment in progress continues to support the reliability on mine equipment.

Don Mario

- Mining of LMZ deposit was completed and production began to ramp up from the Cerro Felix satellite deposit along the second quarter of fiscal 2018. As a result of the transition process, lower than expected gold grades were experienced. Gold production in the fourth quarter was 13,171 ounces, an increase of 33% compared to 9,916 ounces in the previous quarter.

Financial Results

- Consolidated cash and cash equivalents were $11.6 million as at September 30, 2018, a decrease of $12.2 million from September 30, 2017.

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

- Net revenue of $145.8 million for fiscal 2018, or 6% higher, compared with $138.0 million for fiscal 2017, primarily due to higher gold sales volume and realized metal prices, partially offset by lower copper sales volume.
- Mining costs of $120.9 million for fiscal 2018, or 4% higher, compared with $116.4 million for fiscal 2017, primarily due to exchange movements in the EURO to USD rate at El Valle, as well as higher costs at Don Mario for reagents and labour required for the CIL plant.
- Net loss for fiscal 2018 of $11.1 million compared with $15.6 million loss for fiscal 2017.
- EBITDA for fiscal 2018 of $13.7 million compared with $16.5 million for fiscal 2017. (2)
- Cash flows provided by operating activities of $1.8 million in fiscal 2018, compared with $20.7 million in fiscal 2017 and cash flows provided by operating activities before changes in non-cash working capital of $11.9 million in fiscal 2018, compared with $11.9 million in fiscal 2017. (2)
- Capital expenditures of $20.3 million in fiscal 2018 compared with $21.3 million in fiscal 2017.
- 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 2018 of $1,021 and $1,259, respectively, compared with COC and AISC (by-product) of $1,015 and $1,269, respectively, in fiscal 2017. Positive impact of higher ounces of gold sold at El Valle and Don Mario was off-set by lower copper by-product revenue at both companies. (2)
- Net revenue of $36.3 million for the fourth quarter of fiscal 2018, a 21% decrease, over the $46.2 million recorded in the fourth quarter of fiscal 2017, driven primarily by lower realized gold sales prices and lower copper volumes sold.
- Mining costs of $30.6 million for the fourth quarter of fiscal 2018, or 11% lower, compared with $34.6 million for the fourth quarter of fiscal 2017 due to lower sales volumes as well as exchange movements in the EURO to USD rate at El Valle.
- Net loss for the fourth quarter of fiscal 2018 of $1.2 million compared with $1.7 million for the fourth quarter of fiscal 2017.
- EBITDA for the fourth quarter of fiscal 2018 of $1.2 million compared with $10.3 million for the fourth quarter of fiscal 2017.
- Cash flows provided by operating activities of $1.1 million in the fourth quarter of fiscal 2018, compared with $12.3 million in the fourth quarter of fiscal 2017 and cash flows provided by operating activities before changes in non-cash working capital of $3 million in the fourth quarter of fiscal 2018, compared with $8.6 million in the fourth quarter of fiscal 2017. (2)
- Capital expenditures of $3.1 million in fourth quarter of fiscal 2018 compared with $5.8 million in the fourth quarter of fiscal 2017.
- 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 2018 of $1,003 and $1,187, respectively, compared with COC and AISC (by-product) of $902 and $1,145, respectively, in the fourth quarter of fiscal 2017. Lower ounces of gold sold and lower copper by-product revenue drove the increase in COC and AISC(3).

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(2) 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.

(3) 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

Growth Initiatives Highlights

El Valle

A number of important productivity improvements and initiatives started in fiscal 2018 are in progress, including the following:

- Making further investments for the existing fleet and enhancing preventive maintenance.
- Reorganizing labour and available equipment to allow cut and fill crews in oxide zones to address the variability of rock hardness being encountered.
- Addressing grade variability risk through additional geological review steps in the short-term mine planning phase, in addition to introducing conservatism in high grade zone planning where ore bodies have been known to be non-homogenous or non-contiguous.
- The Company restarted during the fourth quarter of fiscal 2018 the Carlés Mine as a short-term project to take advantage of near surface underground mineralized tonnage. Carlés is expected to continue to provide skarn material in the future.

Don Mario

- Mined from years past, the company is analysing an economic way to treat its Oxides Stockpile of 2.1 million tonnes (1.85 g/t Au and 1.9% Cu). Studies conducted in fiscal 2018 show an economic metallurgical option combining a SART circuit, with preceding heap leaching, and ending up in conventional CIC. The Company is currently developing designs and detail CAPEX and OPEX estimates. Focus is to implement resulting solution by fiscal 2020, granting three further years of mine life to Don Mario, just due to this stockpile.
- 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.
- Targeted development and infill drilling at Las Tojas deposit was completed during the third quarter of fiscal 2018. The Company previously identified Las Tojas deposit as a potential, near-term opportunity to extend the life of mine of Don Mario site. Work efforts continue now focused on analysis of the drilling results, estimation of potential mineral resources, optimization of open pit designs for the exploitation and recovery of high-grade ore and completion of economic analysis.

Outlook

The Company continues to pursue its objectives of optimizing production, lowering unitary cash costs, maximizing free cash flow, extending the life-of-mine of its operations while increasing its output.

At El Valle, the primary objective in fiscal 2019 is to continue increasing higher-grade oxides mining, therefore targeting more gold output than the one realized in fiscal 2018. To keep working on the maximization of high-grade oxides in the mill feed, we are conducting additional geological and geotechnical work, in order to increase mining reliability (due to the challenging grade variability and ground stability issues).

At Don Mario, ore production in fiscal 2019 is planned from Cerro Felix deposit. The Company continues to produce consistent results from its re-commissioned CIL circuit, with a recovery rate averaging above 92% during the fourth quarter of fiscal 2018. Next focus for life of mine extension is processing the existing oxides stockpile. This undertaking will require the implementation of a SART circuit, subject to securing the required financing. The SART circuit, together with the existing flotation and CIL-CIC circuits, best positions Don Mario for a longer mine life based on processing flexibility.

IFRS. For further information and detailed reconciliations, please see the “Other Information - Non-IFRS Measures” section of this MD&A.

In August 2016, the Company entered into a $12,5M copper concentrates and gold doré Prepayment Facility with Samsung C&T U.K. Limited ("Samsung C&T"), the proceeds of which were used at El Valle for mine development activities and infrastructure upgrades. As at September 30, 2018, the principal outstanding was $9,118, and principal repayments are due from November 2018 to February 2019.

Throughout the year, the Company has been evaluating financing alternatives with the objective to refinance the Samsung Prepayment Facility by extending the repayment period. Through its wholly owned subsidiary OroValle, the Company obtained in December, 2018 the conditional approval from three Spanish financial institutions of a syndicated credit facility (the "New Facility") for a total amount of €6 million subject to the concurrent completion of the early repayment of the Samsung Prepayment Facility, the release of guarantees and collateral pledged in favour of Samsung, and the execution of the applicable legal documentation. The New Facility will be subject to a 2% bank commission fee, bear a fixed interest rate of 2.55%, semi-annual principal repayments and semi-annual interest payments over a term of four years. Additionally, the financial institutions will hold 12.5% of the total facility as restricted cash. The Company plans to close the process in January 2019.

Subsequent to September 30, 2018, the Company paid Samsung $1.7 million and an additional $1.6 million is schedule to be paid before December 31, 2018, according to the repayment schedule agreed in March 2018. The remaining Samsung Prepayment Facility of $5.8 million, subject to a 1.75% commission fee, will be repaid with the New Facility and Samsung will retain their rights on the Company's future gold dore or copper concentrate shipments according to the terms agreed in the March 2018 amendment.

The following table sets out Orvana's fiscal 2018 results and guidance as well as its fiscal 2019 production and cost guidance:

	FY 2018 Revised Guidance (1)	FY 2018 Actual	FY 2019 Guidance (2)
El Valle Production			
Gold (oz)	55,000 – 62,000	**58,259**	62,000 – 68,000
Copper (million lbs)	4.9 – 5.3	**5.123**	3.2 – 3.6
Don Mario Production			
Gold (oz)	45,000- 48,000	**45,125**	38,000 – 42,000
Copper (million lbs)	3.1	**3.110**	-
Total Production			
Gold (oz)	100,000 – 110,000	**103.384**	100,000 – 110,000
Copper (million lbs)	8.0 – 8.4	**8.233**	3.2 – 3.6
Total capital expenditures	$21,000 - $24,000	**$20,338**	$12,000 – $13,500
Cash operating costs (by-product) ($/oz) gold (2) (3)	$1,000 – $1,050	**$1,021**	$950 – $1,050
All-in sustaining costs (by-product) ($/oz) gold (2) (3)	$1,250 – $1,300	**$1,259**	$1,150 – $1,250

(1) Fiscal 2018 Revised 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 1.18 in the fourth quarter of fiscal 2018.

(2) Fiscal 2019 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 1.16.

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, 2018 Compared with Year Ended September 30, 2017

The Company recorded a net loss of $11.1 million for fiscal 2018 or $0.08 per share compared with $15.6 million loss for fiscal 2017 or 0.11 per share. The Company's net loss was impacted significantly by the following factors:

- Revenue for fiscal 2018 increased by $7.8 million or 6% to $145.8 million from sales of 102,018 ounces of gold and 8.7 million pounds of copper, compared with revenue of $138 million from sales of 88,636 ounces of gold and 14.7 million pounds of copper. The increase in revenue was primarily due to higher gold sales volume and realized metal prices, partially offset by lower copper sales volume.
- Mining costs were $121 million or $4.6 million higher for fiscal 2018 compared with $116.4 million for fiscal 2017 due to exchange movements in the EURO to USD rate at El Valle, as well as higher costs at Don Mario for reagents and labour required for the CIL plant.
- Depreciation expense decreased by $3.7 million to $23.4 million for fiscal 2018 compared with $27.1 million for fiscal 2017, primarily due to depletion at Don Mario.
- Gross margin improved by $8.6 million from negative $5.5 million for fiscal 2017 to positive $3.2 million for fiscal 2018.
- EBITDA decreased by $2.7 million to $13.8 million for fiscal 2018 compared with $16.5 million for fiscal 2017.
- Current income tax expense decreased by $4.6 million to $0.4 million for fiscal 2018 compared with $5.0 million for fiscal 2017, due to lower taxable income at Don Mario.

Total consolidated COC (by-product) of $1,021 per ounce of gold sold in fiscal 2018 were $6 or 1% higher than in fiscal 2017. Total AISC (by-product) of $1,259 per ounce of gold sold in fiscal 2017 were $10 or 1% lower than in fiscal 2017. COC and AISC were positively impacted by the increase in gold ounces sold and negatively by the decrease in copper by-product credits.

Fourth Quarter Ended September 30, 2018 Compared with Fourth Quarter Ended September 30, 2017

The Company recorded a net loss of $1.2 million or $0.01 per share for the fourth quarter of fiscal 2018 compared with $1.7 million or $0.01 per share for the fourth quarter of fiscal 2017. The Company's net loss was impacted significantly by the following factors:

- Revenue for the fourth quarter of fiscal 2018 decreased by $9.9 million or 21% to $36.3 million on sales of 28,044 ounces of gold and 1.2 million pounds of copper from El Valle and Don Mario compared with revenue of $46.2 million on sales of 29,639 ounces of gold and 3.8 million pounds of copper.
- Mining costs were $30.6 million or $3.9 million lower for the fourth quarter of fiscal 2018 compared with $34.6 million for the fourth quarter of fiscal 2017, primarily due to lower gold and copper sales volumes and exchange movements in the Euro to USD rate at El Valle.
- Depreciation decreased by $4 million to $4.3 million for the fourth quarter of fiscal 2018 compared with $8.3 million for the fourth quarter of fiscal 2017.
- Gross margin decreased by $0.2 million to $3 million for the fourth quarter of fiscal 2018 compared with $3.2 million for the fourth quarter of fiscal 2017.

Total consolidated COC (by-product) of $1,003 per ounce of gold sold in the fourth quarter of fiscal 2018 were $101 or 11% higher than the fourth quarter of fiscal 2017. Total AISC (by-product) of $1,187 per ounce of gold sold in the fourth quarter of fiscal 2018 were $42 or 4% higher than the fourth quarter of fiscal 2017. Lower copper by-product revenue resulted in higher COC, mostly offset in AISC by lower capex.

Fourth Quarter Ended September 30, 2018 Compared with Third Quarter Ended June 30, 2018

The Company recorded a net loss of $1.2 million or $0.01 per share for the fourth quarter of fiscal 2018 compared with $3 million or $0.02 loss per share for the third quarter of fiscal 2018. The Company's net loss was impacted significantly by the following factors:

- Revenue for the fourth quarter of fiscal 2018 decreased by $2.1 million or 6% to $36.3 million from sales of 28,044 ounces of gold and 1.2 million pounds of copper from El Valle and Don Mario compared with revenue of $38.4 million from sales of 26,490 ounces of gold and 2.2 million pounds of copper in the third quarter of fiscal 2018. The decrease in revenue was primarily due to lower copper sales volume and realized metals prices, partially offset by higher gold sales volume.
- Mining costs were $30.6 million or $1.1 million lower for the fourth quarter of fiscal 2018 compared with $31.7 million for the third quarter of fiscal 2018, primarily due to lower copper sales volume and exchange movements in the Euro to USD rate at El Valle.
- Depreciation decreased by $2.3 million to $4.3 million for the fourth quarter of fiscal 2018 compared with $6.6 million for the third quarter of fiscal 2018, primarily due to revised reserves and ore mined during fiscal 2018 at Don Mario.
- Gross margin increased by $2.9 million to $3 million for the fourth quarter of fiscal 2018, compared with $0.1 million for the third quarter of fiscal 2018.

Total consolidated COC (by-product) of $1,003 per ounce of gold sold in the fourth quarter of fiscal 2018 were $24 or 2% lower than the third quarter of fiscal 2018. Total AISC (by-product) of $1,187 per ounce of gold sold in the fourth quarter of fiscal 2018 were $104 or 8% lower than the third quarter of fiscal 2018. Higher gold volumes sold, lower operating costs and lower capex positively impacted COC and AISC, partially offset by lower copper by-product credits.

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, where the Company mines skarns and oxides underground.

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

	Q4 2018	Q3 2018	Q4 2017	**FY 2018**	**FY 2017**
Operating Performance					
Ore mined (tonnes) (wmt)	**174,851**	177,972	183,503	**647,852**	733,086
Ore milled (tonnes) (dmt)	**170,927**	169,958	190,151	**623,137**	707,362
Daily average throughput (dmt)	**1,942**	1,966	2,113	**1,830**	2,025
Gold					
Grade (g/t)	**3.06**	3.36	2.65	**3.13**	2.46
Recovery (%)	**92.2**	91.8	93.8	**92.9**	92.2
Production (oz)	**15,490**	16,845	15,201	**58,259**	51,546
Sales (oz)	**15,186**	16,947	16,543	**56,136**	49,518
Copper					
Grade (%)	**0.44**	0.51	0.40	**0.47**	0.46
Recovery (%)	**77..4**	81.6	77.5	**80.1**	75.6
Production ('000 lbs)	**1,291**	1,575	1,299	**5,123**	5,506
Sales ('000 lbs)	**1,231**	1,573	1,701	**4,901**	5,590
Financial Performance *(in 000's, except per share amounts)*					
Revenue	**$20,802**	$24,740	$24,652	**$80,204**	$71,556
Mining costs	**$18,638**	$20,007	$22,284	**$72,722**	$73,268
Income (loss) before tax	**($4,194)**	$342	($3,802)	**($9,390)**	($20,944)
Capital expenditures	**$849**	$1,012	$2,030	**$6,461**	$9,702
Cash operating costs (by-product) ($/oz) gold (1)	**$1,063**	$991	$1,168	**$1,129**	$1,293
All-in sustaining costs (by-product) ($/oz) gold (1)	**$1,174**	$1,181	$1,359	**$1,331**	$1,574
All-in costs (by-product) ($/oz) gold (1)	**$1,174**	$1,181	$1,359	**$1,331**	$1,574

(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.

El Valle Operating Performance

During fiscal 2018, El Valle produced 58,259 ounces of gold and 5.1 million pounds of copper compared with 51,546 ounces of gold and 5.5 million pounds of copper during fiscal 2017. Gold production increased by 13%, primarily due to higher grades, while copper production decreased by 7% primarily due to lower tonnes milled.

Fourth quarter production increased to 15,490 ounces of gold and 1.3 million pounds of copper compared with 15,201 ounces of gold and 1.3 million pounds of copper during the fourth quarter of fiscal 2017. Gold production increased by 2%, primarily due to higher grades, partially offset by lower tonnes milled.

Consistent with the third quarter of fiscal 2018, the Company mined higher gold grade oxide tonnes and blended them with a ratio of 38% together with skarn ore. Historically, the ratio of mined oxide to skarn ore has been approximately 22%. The Company is targeting to continue increasing oxide ore production as part of the initiatives to improve ore grade in fiscal 2019.

Mechanical advance rates in oxide areas stayed steady reaching 1,925 meters during the fourth quarter of fiscal 2018, as compared to 1,919 meters during the third quarter of fiscal 2018.

Plant improvements were developed during fiscal 2018 in order to allow for the processing of a higher ratio of oxide ore. Studies are progressing to improve copper recoveries in a higher oxide blend, targeting 68% to 72%. Metallurgical studies are also being conducted to reduce the buildup of in-process gold from the increase in oxide ore processed in the plant.

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, as well as addressing grade variability risk through additional geological review steps in the mine planning phase, in addition to introducing conservatism in high grade zone planning where ore bodies have been known to be non-homogenous or non-contiguous.

El Valle restarted a sector of the Carlés Mine as a short-term project during the fourth quarter of fiscal 2018. The Carlés Mine is expected to continue to deliver skarn material to El Valle in the future.

El Valle Financial Performance

Revenue from El Valle for the fiscal 2018 increased by 12% to $80.2million on sales of 56,136 ounces of gold and 4.9 million pounds of copper from $71.6 million for fiscal 2017 on sales of 49,518 ounces of gold and 5.5 million pounds of copper.

Mining costs decreased by 1% from $73.3 million for the fiscal 2017 to $72.7 million for the fiscal 2018.

Loss before tax for the fiscal 2018 was $9.4 million compared with loss of $20.9 million for the fiscal 2017.

Total capital expenditures at El Valle during the fiscal 2018 were $6.5 million, compared with $9.7 million for the fiscal 2017. Capital expenditures in fiscal 2018 consisted substantially of primary development, mining infrastructure upgrades and a tailings dam lift.

Total COC (by-product) of $1,129 per ounce of gold sold for the fiscal 2018 was $164 or 13% lower than fiscal 2017. Total AISC (by-product) of $1,331 per ounce of gold sold for the fiscal 2018 was $243 or 15% lower than fiscal 2017. COC and AISC were positively impacted by higher gold sales volume and lower capex.

El Valle Growth Exploration

Over 5,100 meters of drilling were completed in the fourth quarter of fiscal 2018 in El Valle Mine. 3,750 meters were carried out in infill drilling production in oxides areas, according to the mine plan, to convert inferred resources into measured and indicated resources. The Q4 drilling program was a continuation of the previous months in areas Oxide Black Skarn, A107. A208 started to be drilled in the fourth quarter of fiscal 2018 to define better the orebody, i.e DDH 18V1644 intersected 1.4 mts with 27.4 g/t Au and 1.3 mts with 9 g/t Au. In Oxide Black Skarn, the drill holes intersected mineralization proving the continuity in 100 level; i.e. DDH 18V1646 intersected 4.2 mts with 23.3 g/t Au-5.1%Cu and 11 mts with 7.5 g/t Au. Brownfield program was carried out in Oxide Black Skarn and A107 with 1352 mts according to the plan. After being granted the local Authorization, greenfield exploration drilling started in the second part of September in Quintana Investigation Permit (located close to El Valle Mine´s southern tip). Along this quarter 173 mts were completed in the first drill hole. The length planned for this drill hole is 600 mts and it is expected to intersect mineralization around 500 mts. Regarding Lidia Investigation Permit (located in the Navelgas Gold Belt), detail mapping into the limestone band is ongoing and detailed samples are taken to do mineralogical studies.

During fiscal 2018, 23,299 drilling meters were carried out in El Valle Boinás and Carlés deposits (23,299 in Boinás and 306 in Carlés). The main focus areas in El Valle Boinás were oxides zones: Oxides Black Skarn, A107, Villar and A208, the target was to convert Inferred Resources into Measured and Indicated Resources in the oxides production areas besides providing better confidence in these areas completing almost 18,400 mts. In addition, about 5,000 mts were focused on defining new resources in these same areas and in Breccia East orebody (oxidized orebody located at the north of the deposit). A smaller drilling program has been carried out in the skarn, with 2,400 mts focused on infill and stope definition. Regarding Greenfield Exploration, the Quintana Investigation Permit drilling program started in September, completing 173 mts of the first hole in fiscal 2018.

Don Mario

Through its wholly-owned subsidiary, Empresa Minera Paititi S.A. ("EMIPA"), the Company owns and operates Don Mario under a number of concessions in the Don Mario district 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. From 2012 to the end of 2016, EMIPA mined the UMZ as an open-pit mine. From 2016 to 2018, EMIPA mined new material at the upper extension of the LMZ as an open-pit mine. EMIPA is currently focused on mining at its Cerro Felix property within the Don Mario area.

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

	Q4 2018	Q3 2018	Q4 2017	FY 2018	FY 2017
Operating Performance					
Ore mined (tonnes) (dmt)	**205,978**	224,051	160,712	**856,018**	718,692
Ore milled (tonnes) (dmt)	**184,094**	175,446	173,295	**719,328**	668,376
Daily average throughput (dmt)	**2,194**	2,226	2,107	**2,188**	2,088
Gold					
Grade (g/t)	**2.41**	1.90	2.59	**2.16**	2.36
Recovery (%)	**92.2**	92.4	86.4	**90.20**	74.0
Production (oz)	**13,171**	9,916	12,465	**45,125**	38,746
Sales (oz)	**12,858**	9,543	12,358	**48,882**	38,963
Copper					
Grade (%)	**-**	-	0.91	**0.72**	0.95
Recovery (%)	**-**	-	66.2	**53.7**	60.6
Production ('000 lbs)	**-**	-	2,302	**3,110**	8,387
Sales ('000 lbs)	**-**	652	2,144	**3,786**	9,091
Financial Performance *(in 000's, except per share amounts)*					
Revenue	**$15,496**	$13,698	$21,504	**$65,632**	$66,443
Mining costs	**$11,994**	$11,722	$12,278	**$48,224**	$43,102
Income (loss) before tax	**3,282**	($1,436)	$6,409	**$6,076**	$11,889
Capital expenditures	**$1,750**	$4,508	$5,651	**$12,652**	$12,249
Cash operating costs (by-product) ($/oz) gold (1)	**$933**	$1,091	$567	**$890**	$663
All-in sustaining costs (by-product) ($/oz) gold (1)	**$1,019**	$1,479	$850	**$1,087**	$871
All-in costs (by-product) ($/oz) gold (1)	**$1,170**	$1,701	$1,080	**$1,287**	$1,050

(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 2018, Don Mario produced 45,125 ounces of gold compared with 38,746 ounces of gold during fiscal 2017. Gold production increased by 16% primarily due to higher recoveries and higher tonnes milled, partially offset by the reduction in gold grade during the transition to the Cerro Felix area.

Fourth quarter production increased to 13,171 ounces of gold compared with 12,465 ounces during the fourth quarter of fiscal 2017. Gold production increased by 6%, primarily due to higher recoveries and higher tonnes milled, partially offset by lower gold grade.

Don Mario Financial Performance

Revenue from Don Mario decreased by 1% from $66.4 million in fiscal 2017 to $65.6 million on sales of 48,882 ounces of gold and 3.1 million pounds of copper in the fiscal 2018 compared with sales of 38,963 ounces of gold and 9.1 million pounds of copper in the fiscal 2017.

Mining costs of $48.2 million for the fiscal 2018 increased $5.1 million or 12% compared with $43.1 million for the fiscal 2017 primarily due to increase in labour and reagent costs required for the re-commissioned CIL plant.

Income before tax for the fiscal 2018 was $6.1 million compared with income before tax of $11.9 million for the fiscal 2017.

Total capital expenditures at Don Mario in fiscal 2018 were $12.7 million compared with $12.2 million in the fiscal 2017. Capital expenditures in the fiscal 2018 related primarily to tailings facility expansion, plant improvements and purchases of mining equipment.

Total COC (by-product) of $890 per ounce of gold sold for the fiscal 2018 was $227 or 34% higher than fiscal 2017. Total AISC (by-product) of $1,087 per ounce of gold sold for the fiscal 2018 was $216 or 25% higher than fiscal 2017. COC and AISC were negatively impacted by lower copper by-product revenue, partially offset by higher gold sales volume.

Don Mario Exploration and Mine Life Extension

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 up to mid-fiscal 2018. 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 fiscal 2017, together with the existing flotation circuit, exceeded these historical recoveries, and it is expected that Don Mario now has the required infrastructure to maximize the Company's ability to realize on 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. The Company initiated stripping activities at Cerro Felix during the second quarter of fiscal 2018, and the transition of production from the LMZ to Cerro Felix was substantially completed in the quarter. Mined ore from Cerro Felix benefited gold recovery results from the CIL circuit in fiscal 2018, exceeding the Company's expectations, due to its higher estimated gold grades with lower deleterious elements and demonstrated amenability to CIL processing.

The Company undertook a new technical and economic review of its Oxides Stockpile in fiscal 2018, concluding that the best option is to include a SART process (allows for recovery of copper sulfide, cyanide recycling and optimal gold recovery) in the plant flowsheet. The existing CIC circuit form part of the option under development, as well as a leach pad. As of September 30, 2018, the company has an oxides stockpile reserves of approximately 2.1 million tonnes with an average gold grade of 1.85 g/t and copper grade of 1,90%. The Company is currently involved in completing the detail designs and costing. Target is for deployment in fiscal 2020.

The Company spent approximately $0.4 million on greenfield exploration in fiscal 2018. The program focus was to extend is exploration area in most of the Concepción area in Bolivia, on existing geochemical, geophysical information as well as basic artisanal mining works on the surroundings.

In support of the mine life extension projects described above, the Company determined that the construction of a major tailings storage facility expansion would be required to add sufficient capacity of up to three years of operations beyond the third 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, and the tailings project was completed by the end of the second quarter of fiscal 2018. Construction was financed by the $8.3 million BISA TSF facility closed in the third quarter of fiscal 2017.

Other Projects

The Company spent approximately $1 million on other projects exploration in fiscal 2018, mainly focused on Argentina and Perú. The Company is actively looking for and evaluating projects that could be aligned with the Company's strategy, to add a third project to the current portfolio. In this regard, the Company expects to disclose further advancements in due course.

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 2018, gold traded in a range from $1,178 to $1,355 per ounce and averaged $1,280 per ounce compared with $1,244 per ounce in fiscal 2017. Orvana's average gold realized price in fiscal 2018 was $1,273 per ounce, as compared to $1,258 per ounce in fiscal 2017. The Company derived approximately 80% of its revenue from sales of gold in fiscal 2018.

Copper prices during fiscal 2018 traded in a range of $2.64 to $3.30 per pound and averaged $3.03 per pound compared with $2.62 per pound in fiscal 2017. Orvana's average copper realized price in fiscal 2018 was $2.89 per pound, as compared to $2.50 per pound in fiscal 2017. The Company derived approximately 16% of its revenue from sales of copper in fiscal 2018.

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 2017 to 1.19 in fiscal 2018. As a result of foreign exchange movements, mining costs at El Valle were higher by approximately $5 million in fiscal 2018 compared with fiscal 2017.

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, 2018 and September 30, 2017.

(in 000's)	**September 30, 2018**	**September 30, 2017**
Cash and cash equivalents	$11,634	$23,811
Restricted cash (short term)	$61	$1,027
Non-cash working capital (1)	($2,833)	($9,732)
Total assets	$158,800	$171,363
Total liabilities	$81,089	$82,753
Shareholders' equity	$77,711	$88,610

(1) Working capital represents current assets of $39.3 million less cash and cash equivalents and short-term restricted cash totaling $11.7 million and less $30.5 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 $12.6 million from $171.4 million to $158.8 million primarily as a result of the decrease in (i) cash and cash equivalents of $12.2 million (ii) plant, property and equipment of $3.4 million, (iii) restricted cash of $1 million, (iv) Gold and Concentrate receivable of $0.9 million offset by increases in (v) VAT receivables of $3.1 million, (iv) inventory of $3.3 million and (v) deferred tax asset of $0.3 million.

Total liabilities decreased by $1.6 million or 2% to $81.1 million at September 30, 2018 from $82.8 million at September 30, 2017 primarily as a result of a decrease in (i) income taxes payable, mainly at Don Mario of $4.0 million, (ii) accounts payable & accrued liabilities of $2.4 million, (iii) current portion of lease obligations by $0.2 million offset by (iii) an increase to current & long-term debt by $3.2 million, (iv) an increase to the credit line at OroValle of $0.9 million.

BISA TSF Loan, Heavy equipment Loan and Revolving Facility

In June 2017, EMIPA closed a Bolivian loan denominated approximately $11.3 million with BISA bank, 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 were 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 quarterly repayments beginning in April 2018. As at September 30, 2018, $8.3 million were drawn down this facility and $1.25 million of principal were repaid.

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, 2018, 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.

In May 2018, EMIPA obtained a new Bolivian loan with BISA of $2.4 million for heavy equipment purchases. This loan matures in April 2021, it has monthly repayments and interest rate of 5.5% per annum. Security for the loan includes heavy equipment purchased. At September 30, 2018, the total amount was drawn from this loan and $259 thousand of principal were paid.

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 second instalment of $4.5 million was drawn down in February 2017. 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 Prepayment Facility was amended in March 2018 such that the payments on the remaining principal outstanding at March 2018 was rescheduled and extended by two months, in exchange for a higher interest rate and an extension of gold doré deliveries to April 2020, amongst other terms.

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.

The Company has been evaluating alternatives to refinance the Prepayment Facility, and plans to close the process in January 2019. Refer to the "Outlook" section of the MD&A.

Shareholders' Equity

Shareholders' equity at September 30, 2018 decreased by 12% to $77.7 million compared with $88.6 million at September 30, 2017. The table below sets out the number of each class of securities of the Company outstanding at September 30, 2018 and as at the date hereof.

	At September 30, 2018
Common Shares	136,623,171
Warrants (1)	100,000
Options (2)	1,185,823

(1) All of the outstanding warrants are held by Fabulosa Mines Limited, the Company's majority shareholder. Warrants were issued in connection with amendments to the Fabulosa Loan in 2013 and 2014 as follows: 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 $0.24 and expiry dates ranging from 2019 to 2022.

Derivative Instruments

The Company had the following derivative instruments outstanding as at September 30, 2018:

	Contract Prices	Cash Settlement	Contract Amounts
Gold			
Gold forwards (Oct. 2018)	$1,100 / troy oz	Monthly	1,500 / troy oz

The Company paid net cash of $1,864 in settlement of the derivative instruments that matured in the fiscal 2018.

As at September 30, 2018, the Company's outstanding derivative instruments were valued on the balance sheet as follows:

	Spot Rate / Price	Contract Rate / Price	Fair Value
Derivative instrument assets			
Gold forwards	$1,204/oz	$1,100 / troy oz	$108
Total fair value of derivative instruments assets at September 30, 2018			$108

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 unrealized 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 counterparty for all derivative instruments is Auramet International LLC.

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

(in 000's)	**FY 2018**	FY 2017
Change in unrealized fair value	**$(1,030)**	$862
Realized gain (loss) on cash settlements of derivative instruments	**1,864**	695
Derivative instruments gain (loss)	**834**	$1,557

Capital Resources

At September 30, 2018, the Company had cash and cash equivalents of $11.6 million and restricted cash of $61 thousands. 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:

(in 000's)	**September 30, 2018**	**September 30, 2017**
Shareholders' equity	**$77,711**	$88,610
Revolving facilities	**2,894**	2,000
Capital leases	**1,031**	1,359
BISA Heavy Equipment Loan	**2,114**	-
BISA TSF Loan	**7,085**	3,352
Prepayment Facility	**8,865**	11,502
	$99,700	$106,823
Less: Cash and cash equivalents	(11,634)	(23,811)
Capital employed	**$88,066**	$83,012

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. 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. In fiscal 2016, the Company closed 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. In fiscal 2018, the company closed the $ 2.4 million BISA Heavy Equipment loan.

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 for fiscal 2019 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. In connection with this, as mentioned in the Outlook section, the Company plans to close the refinancing of the Samsung Prepayment Facility extending the repayment schedule to a longer term.

Cash Flows, Commitments, Liquidity and Contingencies

Cash Flows

Total cash and cash equivalents as at September 30, 2018 was $11.6 million, primarily denominated in US dollars, representing a decrease of $12.2 million from $23.8 million at September 30, 2017. Short-term restricted cash was $61 thousand at September 30, 2018 compared with $1.0 million at September 30, 2017. The Company's total debt was $21 million at September 30, 2018. This compares with total debt as at September 30, 2017 of $16.9 million.

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

(in 000's)	**Q4 2018**	**Q3 2018**	**Q4 2017**	**FY 2018**	**FY 2017**
Cash provided by operating activities before changes in non-cash working capital	**$3,049**	$4,282	$8,595	**$11,864**	$11,914
Cash provided by (used in) operating activities	**1,129**	4,010	12,328	**$1,800**	20,726
Cash used in investing activities (1)	**(3,055)**	(5,257)	(5,830)	**(17,500)**	(19,025)
Cash provided by financing activities	**64**	2,124	(964)	**3,476**	3,539
Change in cash	**$(1,862)**	$877	$5,534	**($12,224)**	$5,240

(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 2018 compared with $11.9 million for fiscal 2017. Cash flows provided by operating activities were $1.8 million for fiscal 2018 compared with $20.7 million for fiscal 2017.

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 working capital and the funding of the Company's planned capital expenditures.

Cash provided by financing activities was $3.5 million in fiscal 2018 compared with $3.5 million in fiscal 2017, and is driven by the timing of drawdowns and repayments by the Company's debt facilities.

Cash used in investing activities was $17.5 million in fiscal 2018 compared with $19.0 million in fiscal 2017. Capital expenditures and movements in the Company's restricted cash and reclamation bond accounts drive the majority of cash flows used in investing activities.

Capital Expenditures

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

(in 000's)	**Q4 2018**	Q3 2018	Q4 2017	**FY 2018**	FY 2017
El Valle	**$849**	$1,012	$2,030	**$6,461**	$9,702
Don Mario	**1,750**	4,508	5,651	**12,652**	12,249
Corporate	**2**	1	2	**22**	4
Sub-total capital expenditures	**$2,601**	$5,521	$7,683	**$19,135**	$21,955
Accounts payable adjustments (1)	**$450**	$98	$(1,865)	**$1,203**	$(623)
Total capital expenditures (1)	**$3,051**	$5,619	$5,818	**$20,338**	$21,332

(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 2018 consisted substantially of primary development, mining infrastructure upgrades and a tailings dam lift. Significant capital expenditures at Don Mario included mainly a tailings facility expansion and acquisitions of mining equipment.

The Company expects sustaining capital expenditures for fiscal 2019 to be in the range of $12 million to $13.5 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, 2018		**Payment Due by Period**			
(in 000's)	**Total**	**Less than 1 Year**	**1-3 Years**	**4-5 Years**	**After 5 Years**
BISA TSF Loan	**$7,612**	$3,377	$4,235	-	-
BISA Heavy Equipment Loan	**$2,271**	$890	$1,381	-	-
Prepayment Facility	**$8,865**	$8,865	-	-	-
Operating leases	**$1,966**	$1,575	$391		
Finance leases	**$1,031**	$786	$245	-	-
Decommissioning liabilities (1)	**$24,756**	$50	-	$5,988	$18,718
Reclamation bond (2)	**$5,788**	$5,788	-	-	-
Purchase obligations	**$3,251**	$2,861	$390	-	-
Provision for statutory labour obligations (3)	**$3,833**	-	$3,833	-	-
Long-term compensation	**$314**	-	-	-	$314
Total contractual obligations (4)	**$59,687**	**$24,192**	**$10,475**	**$5,988**	**$19,032**

(1) Decommissioning liabilities are undiscounted. Total cash deposited with a Spanish financial institution for Euro denominated reclamation bonds amounted to approximately $8.8 million at September 30, 2018 (September 30, 2017 -

$8.9 million). Decommissioning liabilities are discussed below under "Other Information - Critical Accounting Estimates - Decommissioning Liabilities".

(2) Spanish regulatory authorities have requested that an additional reclamation bond of €5.0 million be deposited by the Company under Spanish mining regulations in respect of El Valle. The 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 additional bond, including the consideration of alternatives to posting this bond.

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

(4) Production from El Valle and Don Mario is subject to certain royalties for which amounts have not been included in total contractual obligations at September 30, 2018. 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 $2.4 million for fiscal 2018, compared with $2.1 million for fiscal 2017.

Production from Don Mario is subject to a 3% NSR. This expense totaled $2.2 million for fiscal 2018, compared with $2.2 million for fiscal 2017. 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 $4.8 million for fiscal 2018, compared with $4.9 million for fiscal 2017.

Liquidity

Orvana's primary sources of liquidity in fiscal 2018 were operating cash flows, generating cash of $11.9 million from operating activities before changes in non-cash working capital. During fiscal 2018, Orvana generated cash of $1.8 million from operating activities and $3.5 million from financing activities, supporting $17.5 million in investing activities.

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. El Valle is currently focused on increasing the amount of high gold grade oxide ore processed relative to skarn ore, improving average gold head grades. These efforts are expected to continually increase gold production and decrease unitary costs through fiscal 2019. As a result of these efforts taking longer than planned, the Company closed an amendment to the Prepayment Agreement in March 2018, deferring repayment until April 2019.

Throughout the year, the Company has been evaluating financing alternatives with the objective of refinancing the Samsung Prepayment Facility, extending the repayment schedule to a longer term, and plans to close the process in January 2019.

As at September 30, 2018, the Company had cash of $11.6 million, and together with forecasted operating cash flow, the renewal of current revolving lines and the planned refinancing of the Prepayment Facility, expects to cover the Company's commitments due in less than one year of $24.2 million.

The Company's strategy during fiscal 2019 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. Capital expenditures in respect to the SART-based in Don Mario would only be incurred should financing acceptable to the Company is realized.

The Company has been pursuing a number of initiatives at El Valle and Don Mario 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. The Company is currently evaluating and implementing further cost reductions at its operations.

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 Water 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 an outstanding fine 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 further investigation and/or charge OroValle/Orvana, or both. If the Company 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.

In connection with workplace accidents at OroValle in 2015 and 2017, the affected employees filed claims with the Instituto Nacional de la Seguridad Social (INSS) for social security benefit surcharges, to be paid by OroValle. In late June 2018, INSS granted the two affected employees' in the 2015 workplace accident their social security benefits request for an aggregate amount of approximately $0.5 million. In October 2018, OroValle filed claims before the Labour Court in order to dispute the payment of the abovementioned surcharges. The trials have been scheduled for March and May 2019, respectively. In respect of the 2017 workplace accident, the affected employee has filed a claim with the INSS for social security benefit surcharges. The INSS has not affirmed this claim yet. If the request of the employee is affirmed by the INSS and the amount is estimated, OroValle will file a claim before the Labour Court.

SUMMARY OF QUARTERLY RESULTS

The following two tables include results for the eight quarters ended September 30, 2018:

	Quarters ended			
(in 000's, except per share amounts)	**Q4 2018**	**Q3 2018**	**Q2 2018**	**Q1 2018**
Revenue	$36,298	$38,438	$36,930	$34,170
Net loss	($1,231)	($2,982)	($3,505)	($3,379)
Loss per share (basic and diluted)	($0.01)	($0.02)	($0.03)	($0.02)
Total assets	$158,800	$160,451	$163,542	$171,035
Total financial liabilities (1)	$21,989	$21,748	$19,486	$20,751
	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 (1)	$19,135	$19,019	$20,449	$15,626

(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.

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, 2018, the net carrying value of the property, plant and equipment in respect of El Valle and Don Mario amounted to $76 million and $21 million, respectively. Effective from the point that they are ready for their intended use, property, plant and equipment are amortized on a straight-line basis or using the units-of-production method over the shorter of the estimated economic life of the asset or mineral property. The method of depreciation is determined based on that which best represents the use of the assets.

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

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

Decommissioning Liabilities

Decommissioning liabilities relate to the dismantling of the mine facilities and environmental reclamation of the areas affected by mining operations. Mine facilities include structures and the tailings dam. Environmental reclamation requirements include mine water treatment, reforestation and dealing with soil contamination. It is possible that the Company’s estimates of the ultimate amounts required to decommission its mines could change as a result of changes in regulations, the extent of environmental remediation required, the means of reclamation, cost estimates or the estimated remaining ore reserves. The following table sets out the Company’s estimates, prepared by management with the assistance of independent third-party experts, of the undiscounted and discounted cash flows required to settle such decommissioning liabilities in respect of El Valle and Don Mario at September 30, 2018.

As at September 30, 2018	Undiscounted Cash Flows Estimated to Settle Decommissioning Liabilities	Discount Rate	Discounted Cash Flows Required to Settle Decommissioning Liabilities
(in 000’s)			
El Valle (1)	$16,641	1.47%	$14,547
Don Mario (1)	$8,115	3.20%	$6,689
Total	**$24,756**		**$21,236**

(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 $197 thousand in fiscal 2018 compared with $54.4 thousand in fiscal 2017. 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 mine sites (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, 2018 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, 2018 of $77.7 million, following the completion of an impairment test in respect of each CGU at the end of the fourth quarter of fiscal 2018, 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, 2018. As such, there was no impairment of such carrying values as at September 30, 2018.

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 2018, there can be no assurances that an impairment adjustment may not be taken at either or both CGUs in future periods.

Management used a long-term price per ounce of gold of between $1,266 to $1,378 to perform its impairment assessments for OroValle and EMIPA as at September 30, 2018. A 5% decrease in the long-term price per ounce would have resulted in an impairment of $17,776 at OroValle and no impairment at EMIPA. The 5% decrease in gold price was not modeled with a corresponding depreciation in EUR.

Management used long-term Euro/USD exchange rates between 1/1.19 to 1/1.24 to perform its impairment assessments for OroValle as at September 30, 2018. A 5% depreciation of the annual Euro/USD exchange rates would have resulted in an impairment of $11,962 at OroValle and no impairment at EMIPA. The 5% depreciation in Euro/USD exchange rates was not modeled with a corresponding increase in gold price.

As it is mentioned in the Financial Statements, the company is subjected to price risks:

Gold prices

The net loss of $11,097 for the 2018 fiscal year would be impacted by changes in average realized gold prices on gold ounces sold. A 10% increase/decrease in average realized gold prices would affect the gross revenue by an increase/decrease of approximately $13,040.

Copper prices.

The net loss of $11,097 for the 2018 fiscal year would be impacted by changes in average realized copper prices. A 10% increase/decrease in average realized copper prices would affect gross revenue by an increase/decrease of approximately $2,487.

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, 2018.

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 expenses, costs of community relations, 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 2018**	**Q3 2018**	**Q4 2017**	**FY 2018**	**FY 2017**
Cash operating costs, all-in sustaining costs and all-in costs (by-product) (1) *(in 000's)*					
Total mining costs (sales based)	**$30,280**	**$31,729**	**$34,562**	**$120,595**	**$116,371**
Deductions, refining, treatment, penalties, freight & other costs	1,864	3,553	5,228	12,788	19,004
Sub-total - other operating costs	**$1,864**	**$3,553**	**$5,228**	**$12,788**	**$19,004**
Copper sales - gross revenue value	(3,331)	(6,856)	(11,723)	(25,123)	(39,276)
Silver sales - gross revenue value	(680)	(1,218)	(1,337)	(4,051)	(6,114)
Other by-product gross revenue value			-		(43)
Sub-total by-product revenue	**($4,011)**	($8,074)	($13,060)	**($29,174)**	**($45,433)**
Cash operating costs	**$28,133**	$27,208	$26,730	**$104,209**	**$89,942**
Corporate general & administrative costs	2,069	859	1,073	5,572	3,518
Community costs related to current operations	126	199	99	1,290	508
Reclamation, accretion & amortization	268	423	889	1,513	2,490
Exploration and study costs (sustaining)	41	(40)	381	124	923
Primary development (sustaining)	1,190	1,034	768	3,853	4,036
Other sustaining capital expenditures (2) (3)	1,455	4,521	4,007	11,837	11,020
All-in sustaining costs	**$33,282**	$34,204	$33,947	**$128,398**	**$112,437**
Exploration and study costs (non-sustaining)	1,771	1,271	-	4,642	-
Capital expenditures (non-sustaining) (3)	587	1,444	3,011	5,534	7,002
All-in costs	**$35,640**	$36,919	$36,958	**$138,574**	**$119,439**
Au/oz sold	28,044	26,489	29,639	102,017	88,636
Cash operating costs ($/oz) gold	**$1,003**	$1,027	$902	**$1,021**	**$1,015**
All-in sustaining costs ($/oz) gold	**$1,185**	$1,291	$1,145	**$1,259**	**$1,269**
All-in costs ($/oz) gold	**$1,271**	$1,394	$1,248	**$1,358**	**$1,348**

(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:

El Valle	Q4 2018	Q3 2018	Q4 2017	FY 2018	FY 2017
Cash operating costs, all-in sustaining costs and all-in costs (by-product) [1] *(in 000's)*					
Total mining costs	**$18,286**	**$20,007**	**$22,284**	**$72,370**	**$73,269**
Deductions, refining, treatment, penalties, freight & other costs	1,858	2,624	2,761	8,034	8,447
Sub-total - other operating costs	**$1,858**	**$2,624**	**$2,761**	**$8,034**	**$8,447**
Copper sales - gross revenue value	(3,418)	(4,875)	(4,796)	(14,066)	(14,718)
Silver sales - gross revenue value	(591)	(955)	(928)	(2,969)	(2,988)
Sub-total by-product revenue	**($4,009)**	**($5,830)**	**($5,724)**	**($17,035)**	**($17,706)**
Cash operating costs	**$16,135**	**$16,801**	**$19,321**	**$63,369**	**$64,010**
Corporate general & administrative costs	(375)	625	625	1,500	2,500
Reclamation, accretion & amortization	304	308	394	1,146	1,577
Exploration and study costs (sustaining)	41	24	10	124	64
Primary development (sustaining)	1,190	1,034	768	3,853	4,036
Other sustaining capital expenditures [2] [3]	531	1,214	1,367	4,718	5,775
All-in sustaining costs	**$17,826**	**$20,006**	**$22,485**	**$74,710**	**$77,962**
All-in costs	**$17,826**	**$20,006**	**$22,485**	**$74,710**	**$77,962**
Au/oz sold	15,186	16,947	16,543	56,136	49,518
Cash operating costs ($/oz) gold	**$1,063**	**$991**	**$1,168**	**$1,129**	**$1,293**
All-in sustaining costs ($/oz) gold	**$1,174**	**$1,181**	**$1,359**	**$1,331**	**$1,574**
All-in costs ($/oz) gold	**$1,174**	**$1,181**	**$1,359**	**$1,331**	**$1,574**

(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 Don Mario for the periods set out below:

Don Mario Mine	Q4 2018	Q3 2018	Q4 2017	FY 2018	FY 2017
Cash operating costs, all-in sustaining costs and all-in costs (by-product) (1) *(in 000's)*					
Total mining costs	**$11,994**	**$11,722**	**$12,278**	**$48,224**	**$43,102**
Deductions, refining, treatment, penalties, freight & other costs	6	929	2,467	4,754	10,557
Sub-total - other operating costs	**$6**	**$929**	**$2,467**	**$4,754**	**$10,557**
Copper sales – gross revenue value	87	(1,981)	(6,927)	(11,057)	(24,558)
Silver sales – gross revenue value	(88)	(263)	(409)	(1,081)	(3,126)
Other by-product gross revenue value	-	-	-	-	(43)
Sub-total by-product revenue	**($1)**	**($2,244)**	**($7,336)**	**($12,138)**	**($27,727)**
Cash Operating Costs	**$11,999**	**$10,407**	**$7,409**	**$40,840**	**$25,932**
Corporate general & administrative costs	93	87	92	261	581
Community costs related to current operations	126	199	99	1,290	508
Reclamation, accretion & amortization	(36)	115	495	366	913
Capital expenditures (sustaining) (2)(3)	923	3,306	2,640	7,119	5,245
Exploration and study costs (sustaining)	-	-	371	-	859
All-in sustaining costs	**$13,105**	**$14,114**	**$11,106**	**$49,876**	**$34,038**
Capital expenditures (non-sustaining)	1,351	673	-	3,624	-
Exploration and study costs (non-sustaining)	587	1,444	3,011	5,534	7,002
All-in costs	**$15,043**	**$16,231**	**$14,117**	**$59,034**	**$41,040**
Au/oz sold	12,858	9,543	13,096	45,882	39,118
Cash operating costs ($/oz) gold	**$933**	**$1,091**	**$566**	**$890**	**$663**
All-in sustaining costs ($/oz) gold	**$1,019**	**$1,479**	**$848**	**$1,087**	**$870**
All-in costs ($/oz) gold	**$1,170**	**$1,701**	**$1,078**	**$1,287**	**$1,049**

(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:

(in 000's)	Q4 2018	Q3 2018	Q4 2017	FY 2018	FY 2017
Net loss	($1,231)	($2,982)	($1,722)	($11,097)	($15,555)
Less:					
Finance costs	399	498	419	1,786	1,627
Income taxes	(650)	(222)	3,296	1,327	3,354
Depreciation and amortization	4,325	6,636	8,320	23,412	27,109
Impairment	(1,678)			(1,678)	
EBITDA	$1,165	$3,930	$10,313	$13,750	$16,535

Other Information

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

Cautionary Statements – Forward-Looking Information

Certain statements in this MD&A constitute forward-looking statements or forward-looking information within the meaning of applicable securities laws ("forward-looking statements"). Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, potentials, future events or performance (often, but not always, using words or phrases such as "believes", "expects", "plans", "estimates" or "intends" or stating that certain actions, events or results "may", "could", "would", "might", "will" or "are projected to" be taken or achieved) are not statements of historical fact, but are forward-looking statements.

The forward-looking statements herein relate to, among other things, Orvana's ability to achieve improvement in free cash flow; the potential to extend the mine life of El Valle and Don Mario beyond their current life-of-mine estimates including specifically, but not limited to in the case of Don Mario, 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; mine development plans and closing the New Facility.

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, 2018 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.