



## MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE THREE AND NINE MONTHS ENDED JUNE 30, 2019

### Introduction

*This management's discussion and analysis ("MD&A") of results of operations and financial condition of Orvana Minerals Corp. and its consolidated subsidiaries ("Orvana" or the "Company") describes the operating and financial results of Orvana for the three and nine months ended June 30, 2019.*

*This MD&A should be read in conjunction with the unaudited condensed interim consolidated financial statements of Orvana for the three and nine months ended June 30, 2019 and related notes thereto (the "Q3 Financials"). The Q3 Financials are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board.*

*In this MD&A, all currency amounts (except per unit amounts) unless otherwise stated, are in United States dollars ("US dollars"). Production and sales in respect of gold and silver are in fine troy ounces referred to as "ounces" or "oz" and in respect of copper are in pounds also referred to as "lbs". The information presented in this MD&A is as of August 8, 2019, unless otherwise stated.*

*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 Chiquitos, southeastern Bolivia.

On May 14, 2019, the Company entered into a purchase agreement with Compañía Minera Taguas S.A. pursuant to which Orvana agreed to acquire the Taguas property ("Taguas") located in the Province of San Juan, Argentina. Taguas consists of 15 mining concessions over an area of 3,273.87 ha. It is located in the Province of San Juan, Argentina, on the eastern flank of the Andes, between 3,500 m to 4,300 m above sea level. On July 9, the Company filed a Preliminary Economic Assessment Report for the Taguas property. Closing of the transaction is subject to the final acceptance of the Toronto Stock Exchange and a number of closing conditions including, without limitation, completion of satisfactory due diligence by Orvana and applicable local mining rights registration.

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 properties, reduce its unitary operating costs and realize growth in its future production base through exploration within, and in proximity, to its properties.

### Consolidated Financial and Operating Highlights:

- EBITDA of \$0.5 million for the three months ended June 30, 2019 and \$13.3 million for the nine months ended June 30, 2019.
- Net loss of \$3.9 million for the three months ended June 30, 2019 and \$1.6 million for the nine months ended June 30, 2019.

- In the third quarter of fiscal 2019 the Company, through its wholly-owned subsidiary OroValle, has increased its syndicated credit facility with three Spanish Banks by €2 million, to a total amount of €8 million.
- **El Valle:**
  - Quarterly 13,854 ounces gold production was 22% lower than previous quarter. Production decrease was according to operational planning, with Carlés not providing skarn in the third quarter.
  - Gold head grade of 3.25 g/t, compared to 3.49 g/t reported in the second quarter of fiscal 2019
  - Copper production was 1.1 million pounds, compared to 1.4 million pounds in the second quarter of fiscal 2019, with production now exceeding guidance.
  - Brownfield and greenfield intensive exploration programs are focused on high-grade oxides areas in and around the mine, near-plant concessions and exploration permits.
- **Don Mario:**
  - Quarterly production of 6,842 ounces gold was 28% lower than previous quarter. Year-to-date results are on track to meet FY2019 Guidance and are also consistent with planned lower ore grade while working on the last benches of Cerro Felix open pit.
  - Gold recovery of 93.7% was in line with 94.0% recovery in the previous quarter.
  - Engineering continues on the proposed Sulphidization-Acidification-Recycling-Thickening ("SART") circuit, and ancillary facilities. The new circuit, which will allow the processing of oxidized stockpiles is expected to increase the mine life at Don Mario by an additional 2-3 years and is expected to commence production in late fiscal year 2020.
  - Las Tojas exploration activities completed in the third quarter yielded positive results, allowing production to start in late fourth quarter of fiscal 2019.
- **Fiscal 2019 Guidance Maintained:** Based on operating results generated from the first nine months of fiscal 2019, the Company believes that it will be within its stated fiscal 2019 consolidated production and cost guidance. Consolidated cash operating costs ("COC") and all-in sustaining costs ("AISC") per ounce of gold sold for the nine months of fiscal 2019 were \$1,063 and \$1,224, respectively (refer to Outlook section of this MD&A).

## Consolidated Results

	Q3 2019	Q2 2019	Q3 2018	YTD 2019	YTD 2018
<b>Operating Performance</b>					
<i>Gold</i>					
Grade (g/t)	2.08	2.54	2.62	2.39	2.57
Recovery (%)	93.8	93.2	92.0	93.5	91.4
Production (oz)	20,696	27,306	26,761	75,274	74,721
Sales (oz)	22,579	25,507	26,490	75,552	73,974
Average realized price / oz	\$1,277	\$1,299	\$1,298	\$1,266	\$1,299
<i>Copper</i>					
Grade (%)	0.44	0.49	0.51	0.47	0.58
Recovery (%)	78.1	78.1	81.6	77.3	66.5
Production ('000 lbs)	1,071	1,441	1,575	3,887	6,943
Sales ('000 lbs)	1,052	1,531	2,225	3,983	7,456
Average realized price / lb	2.78	2.80	\$3.11	2.80	\$3.11
<b>Financial Performance (in 000's, except per share amounts)</b>					
Revenue	\$30,831	\$36,013	\$38,438	\$103,162	\$109,538
Mining costs	\$28,304	\$27,512	\$31,729	\$86,411	\$90,314
Gross margin	(\$2,561)	\$3,930	\$73	\$2,234	\$137
Net income (loss)	(\$3,914)	\$3,334	(\$2,982)	(\$1,640)	(\$9,866)
Net income (loss) per share (basic/diluted)	(\$0.03)	\$0.02	(\$0.02)	(\$0.01)	(\$0.07)
EBITDA <sup>(1)</sup>	\$540	\$8,265	\$3,930	\$13,254	\$12,585
Operating cash flows before non-cash working capital changes	\$1,368	\$8,684	\$4,282	\$14,221	\$8,815
Operating cash flows	\$4,866	\$1,238	\$4,010	\$9,470	\$671
Ending cash and cash equivalents	\$11,682	\$9,316	\$13,484	\$11,682	\$13,484
Capital expenditures <sup>(2)</sup>	\$4,999	\$1,956	\$5,618	\$8,718	\$17,287
Cash operating costs (by-product) (\$/oz) gold <sup>(1)</sup>	\$1,213	\$971	\$1,027	\$1,063	\$1,028
All-in sustaining costs (by-product) (\$/oz) gold <sup>(1)(2)</sup>	\$1,432	\$1,107	\$1,291	\$1,224	\$1,286
All-in costs (by-product) (\$/oz) gold <sup>(1)(2)</sup>	\$1,492	\$1,138	\$1,394	\$1,256	\$1,392

(1) Earnings before interest, taxes, depreciation and amortization ("EBITDA"), cash operating costs, all-in sustaining costs and all-in 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 Q3 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 all-in sustaining costs and all-in costs includes capex incurred (paid and unpaid) during the period.

## Operational Results

- Production of 20,696 ounces of gold and 1.1 million pounds (486 tonnes) of copper during the third quarter of fiscal 2019, a decrease of 24% in gold production and a decrease of 26% in copper production compared with the second quarter of fiscal 2019.
- Production of 23,481 gold equivalent ounces during the third quarter of fiscal 2019, compared with 31,091 gold equivalent ounces during the second quarter of fiscal 2019. <sup>(1)</sup>
- Sales of 22,579 ounces of gold and 1.1 million pounds (477 tonnes) of copper during the third quarter of fiscal 2019, a decrease in gold sales of 11% and a decrease in copper sales of 31% compared with the second quarter of fiscal 2019.
- Gold and copper production of 75,274 ounces and 3.9 million pounds (1,763 tonnes), respectively, during the first nine months of fiscal 2019, an increase of 1% in gold production and a decrease of 44% in copper production, compared to the nine months of fiscal 2018.
- Production of 85,560 gold equivalent ounces during the first nine months of fiscal 2019, compared with 93,887 gold equivalent ounces during the nine months of fiscal 2018. <sup>(1)</sup>

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

- Sales of 75,552 ounces of gold and 4.0 million pounds (1,807 tonnes) of copper during the first nine months of fiscal 2019, an increase of 2% in gold and a decrease of 47% in copper, compared with the first nine months of fiscal 2018.

#### El Valle

- Gold and copper production decreased by 22% and 26%, respectively, compared with the second quarter of fiscal 2019, driven by lower gold and copper grades, as well as a 18% decrease of mill throughput.
- The ratio of oxides to skarns processed in the mill was at the level of 43% over the third quarter of fiscal 2019, a decrease of 1% compared to the second quarter of fiscal 2019.
- Mechanical advance rates in oxide areas continued to improve, increasing by 2% to 2,054 meters during the third quarter of fiscal 2019, as compared to the second quarter of fiscal 2019.

#### Don Mario

- Gold production in the third quarter of fiscal 2019 was 6,842 ounces, a decrease of 28% compared to 9,564 ounces during the second quarter of fiscal 2019. Production decrease was due to lower head-grade area mined, which was expected and planned for.
- Gold recovery of 93.7% in the third quarter of fiscal 2019 remained stable compared to 94% gold recovery in the second quarter of fiscal 2019.

#### **Financial Results**

- Consolidated cash and cash equivalents were \$11.7 million as at June 30, 2019, an increase of \$2.4 million from March 31, 2019.
- Net revenue of \$30.8 million for the third quarter of fiscal 2019, or 20% lower, compared with \$38.4 million for the third quarter of fiscal 2018, primarily due to lower gold and copper sales volume.
- Mining costs of \$28.3 million for the third quarter of fiscal 2019, or 11% lower, compared with \$31.7 million for the third quarter of fiscal 2018 primarily due to exchange movements in the Euro to USD rate at El Valle, as well as lower royalty taxes and cost of goods sold at Don Mario as a result of lower copper and gold production.
- Net loss for the third quarter of fiscal 2019 of \$3.9 million compared with net loss \$3.0 million for the third quarter of fiscal 2018.
- EBITDA for the third quarter of fiscal 2019 of \$0.5 million compared with \$3.9 million for the third quarter of fiscal 2018. <sup>(2)</sup>
- Cash flows provided by operating activities of \$4.8 million for the third quarter of fiscal 2019, compared with cash flows provided by operating activities of \$4.0 million for the third quarter of fiscal 2018 and cash flows provided by operating activities before changes in non-cash working capital of \$1.4 million in the third quarter of fiscal 2019, compared with \$4.3 million for the third quarter of fiscal 2018. <sup>(2)</sup>
- Capital expenditures of \$5 million for the third quarter of fiscal 2019 compared with \$5.6 million for the third quarter of fiscal 2018.
- 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 for the third quarter of fiscal 2019 of \$1,213 and \$1,432, respectively, compared with COC and AISC (by-product) of \$1,027 and \$1,291, respectively, for the third quarter of fiscal 2018. Decreased production of gold and copper at El Valle and Don Mario negatively impacted both COC and AISC. <sup>(2)</sup>

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

- Net revenue of \$103.2 million for the first nine months of fiscal 2019, or 6% lower, compared with \$109.5 million for the first nine months of fiscal 2018, primarily due lower copper sales volumes and lower realized prices of gold, partially off-set by higher gold sales volume.
- Mining costs of \$86.4 million for the first nine months of fiscal 2019, or 4% lower, compared with \$90.3 million for the first nine months of fiscal 2018.
- Net loss for the first nine months of fiscal 2019 of \$1.6 million compared with loss of \$9.9 million for the first nine months of fiscal 2018.
- EBITDA for the first nine months of fiscal 2019 of \$13.3 million compared with \$12.6 million for the first nine months of fiscal 2018. <sup>(2)</sup>
- Consolidated cash and cash equivalents were \$11.7 million as at June 30, 2019, similar amount to cash and cash equivalents as at September 30, 2018.
- Cash flows provided by operating activities of \$9.5 million in the first nine months of fiscal 2019, compared with cash flows provided by operating activities of \$0.7 million for the first nine months of fiscal 2018 and cash flows provided by operating activities before changes in non-cash working capital of \$14.2 million in the first nine months of fiscal 2019, compared with \$8.8 million in the first nine months of fiscal 2018. <sup>(2)</sup>
- Capital expenditures of \$8.7 million for the first nine months of fiscal 2019 compared with \$17.3 million in the first nine months of fiscal 2018.
- 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 first nine months of fiscal 2019 of \$1,063 and \$1,224, respectively, compared with COC and AISC (by-product) of \$1,028 and \$1,286, respectively, in the first nine months of fiscal 2018. Lower by-product credits from copper sales resulted in higher COC. Despite of the higher COC, AISC was lower due to the lower capital expenditures. <sup>(2)</sup>

## **Growth Initiatives Highlights**

### El Valle

- Carlés is restarting production in the fourth quarter of fiscal 2019 with a new short-term open pit project. Carlés is expected to continue providing skarn in the future, the Company is defining an exploration program for the fiscal year 2020.
- Continuous fine-tuning of oxides fleet with higher capacity equipment (to improve efficiencies and availability).
- Evaluation of backfill processes, to improve logistic efficiencies with focus on cost control.
- Ventilation system upgrade is in progress, with focus on power cost control.

### Don Mario

- Las Tojas exploration activities completed in the third quarter yielded positive results, allowing production to start in late fourth quarter of fiscal 2019 and complete fiscal 2020 tonnage. Additional exploration is in progress in the area giving additional information to optimize the production plan.
- 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 and 2019 show an economic metallurgical option combining a SART circuit, with preceding leaching process, and ending up in conventional CIC. Engineering to develop a SART circuit, and ancillary facilities, continues to progress. This undertaking is designed to add an additional three years of mine life, starting in fiscal 2021, for Don Mario.
- The Company has 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.

## **Outlook**

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

At El Valle, the primary objective for the fourth quarter of fiscal 2019 is to comply with the metal production planned for the quarter to achieve the guidance, lowering unitary cash costs. The Company is working on the FY2020 mine plan and brownfield exploration programs, focused on oxides areas to

continue improving average gold grade. Several productivity initiatives are in progress, including the following: revaluation of the backfill process, reduction of power consumption through different initiatives at the plant and the mine, and fleet use optimization to reduce costs.

At Don Mario, along the fourth quarter is planned the transition from Cerro Felix to Las Tojas. Year-to-date production results are on track to meet FY2019 Guidance. 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 the completion of technical and economic reviews supportive of the project and securing the required financing. Engineering phase is in progress, expecting to be closed along the last quarter of fiscal 2019.

At Taguas, the primary objective for the fourth quarter of fiscal 2019 is the completion of the corporate structure to hold the property and closing the acquisition (including the rights transfer registration and the TSX final acceptance). Subject to closing the transaction and securing the required financing, the Company is preparing a drilling program in order to potentially expand the current resources and to support the potential upgrade in Mineral Resource estimates.

The following table sets out Orvana's results for the third quarter of fiscal 2019 as well as its fiscal 2019 production and cost guidance.

	YTD 2019 Actual	FY 2019 Guidance
<b>El Valle Production</b>		
Gold (oz)	48,142	62,000 – 68,000
Copper (million lbs)	3.9	3.2 – 3.6
<b>Don Mario Production</b>		
Gold (oz)	27,132	38,000 – 42,000
Copper (million lbs)		
<b>Total Production</b>		
Gold (oz)	75,724	100,000 – 110,000
Copper (million lbs)	3.9	3.2 – 3.6
Total capital expenditures	\$8,718	\$12,000 – \$13,500
Cash operating costs (by-product) (\$/oz) gold <sup>(1)</sup>	\$1,063	\$950 – \$1,050
All-in sustaining costs (by-product) (\$/oz) gold <sup>(1)</sup>	\$1,224	\$1,150 – \$1,250

(1) FY 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.

### Third Quarter Ended June 30, 2019 Compared with Third Quarter Ended June 30, 2018

The Company recorded a net loss of \$3.9 million or \$0.03 per share for the third quarter of fiscal 2019 compared with \$3.0 million of net loss or \$0.02 per share for the third quarter of fiscal 2018. The Company's net loss was impacted significantly by the following factors:

- Revenue for the third quarter of fiscal 2019 decreased by \$7.6 million or 20% to \$30.8 million from sales of 22,579 ounces of gold and 1.1 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 gold and copper sales volumes.
- Mining costs were \$28.3 million or \$3.4 million lower for the third quarter of fiscal 2019 compared with \$31.7 million for the third quarter of fiscal 2018, primarily due to exchange movements in the Euro to USD rate at El Valle, as well as lower royalty taxes and cost of goods sold at Don Mario in the absence of copper production.
- Depreciation decreased by \$1.5 million to \$5.1 million for the third quarter of fiscal 2019 compared with \$6.6 million for the third quarter of fiscal 2018, primarily due to incorporation of the oxides-stockpile in the reserves base at Don Mario.

- Gross margin decreased by \$2.6 million to negative \$2.6 million for the third quarter of fiscal 2019, compared with positive \$0.07 for the third quarter of fiscal 2018.

Total consolidated COC (by-product) of \$1,213 per ounce of gold sold in the third quarter of fiscal 2019 were \$186 or 18% higher than the third quarter of fiscal 2018. Total AISC (by-product) of \$1,432 per ounce of gold sold in the third quarter of fiscal 2019 were \$141 or 11% higher than in the second quarter of fiscal 2018. Decreased gold and copper production at El Valle and Don Mario negatively impacted both COC and AISC.

#### First nine months ended June 30, 2019 Compared with first nine months ended June 30, 2018

The Company recorded a net loss of \$1.6 million or \$0.01 per share for the first nine months of fiscal 2019 compared with \$9.9 million of net loss or \$0.07 per share for the first nine months of fiscal 2018. The Company's net loss was impacted significantly by the following factors:

- Revenue for the first nine months of fiscal 2019 decreased by \$6.3 million or 6% to \$103.2 million on sales of 75,552 ounces of gold and 4.0 million pounds of copper from El Valle and Don Mario compared with revenue of \$109.5 million on sales of 73,974 ounces of gold and 7.5 million pounds of copper.
- Mining costs were \$86.4 million or \$3.9 million lower for the first nine months of fiscal 2019 compared with \$90.3 million for the first nine months of fiscal 2018, primarily due to exchange movements in the Euro to USD rate at El Valle, as well as lower royalty taxes and cost of goods sold at Don Mario in the absence of copper production.
- Depreciation decreased by \$4.6 million to \$14.5 million for the first nine months of fiscal 2019 compared with \$19.1 million for the first nine months of fiscal 2018.
- Gross margin increased by \$2.1 million to \$2.2 million for the first nine months of fiscal 2019 compared with \$0.1 million for the first nine months of fiscal 2018.

Total consolidated COC (by-product) of \$1,063 per ounce of gold sold in the first nine months of fiscal 2019 were \$35 or 3% higher than the first nine months of fiscal 2018. Total AISC (by-product) of \$1,224 per ounce of gold sold in the first nine months of fiscal 2019 were \$62 or 12% lower than in the first nine months of fiscal 2018. Lower by-product credits from copper negatively impacted both COC and AISC, while lower capital expenditures positively impacted AISC.

#### Third Quarter Ended June 30, 2019 Compared with Second Quarter Ended March 31, 2019

The Company recorded a net loss of \$3.9 million or \$0.03 per share for the third quarter of fiscal 2019 compared with \$3.3 million of net income or \$0.02 per share for the second quarter of fiscal 2019. The Company's net loss was impacted significantly by the following factors:

- Revenue for the third quarter of fiscal 2019 decreased by \$5.2 million or 14% to \$30.8 million from sales of 22,579 ounces of gold and 1.1 million pounds of copper from El Valle and Don Mario compared with revenue of \$36 million from sales of 25,507 ounces of gold and 1.5 million pounds of copper in the second quarter of fiscal 2019. The decrease in revenue was primarily due to lower gold sales volume.
- Mining costs were \$28.3 million or \$0.8 million higher for the third quarter of fiscal 2019 compared with \$27.5 million for the second quarter of fiscal 2019, primarily due to higher unitary costs of mining on lower production of gold and copper.
- Depreciation increased by \$0.5 million to \$5.1 million for the third quarter of fiscal 2019 compared with \$4.6 million for the second quarter of fiscal 2019.
- Gross margin decreased by \$6.5 million to negative \$2.6 million for the third quarter of fiscal 2019, compared with \$3.9 million positive for the second quarter of fiscal 2019.

Total consolidated COC (by-product) of \$1,213 per ounce of gold sold in the third quarter of fiscal 2019 were \$242 or 25% higher than the second quarter of fiscal 2019. Total AISC (by-product) of \$1,432 per ounce of gold sold in the third quarter of fiscal 2019 were \$325 or 29% higher than the second quarter of fiscal 2019. Lower gold sales volumes and lower by-product credits from copper sales negatively impacted both COC and AISC.

## El Valle

Through its wholly-owned subsidiary, OroValle Minerals S.L. ("OroValle"), the Company owns and operates the El Valle and Carlés mines located in the Rio Narcea Gold Belt in northern Spain, 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.

	Q3 2019	Q2 2019	Q3 2018	YTD 2019	YTD 2018
<b>Operating Performance</b>					
Ore mined (tonnes) (wmt)	150,981	181,996	177,972	515,827	473,001
Ore milled (tonnes) (dmt)	141,246	170,435	169,958	482,080	452,210
Daily average throughput (dmt)	1,634	1,993	1,966	1,859	1,788
<i>Gold</i>					
Grade (g/t)	3.25	3.49	3.36	3.33	3.16
Recovery (%)	94.0	92.7	91.8	93.3	93.1
Production (oz)	13,854	17,742	16,845	48,142	42,768
Sales (oz)	15,256	15,833	16,947	47,279	40,950
<i>Copper</i>					
Grade (%)	0.44	0.49	0.51	0.47	0.47
Recovery (%)	78.1	78.1	81.6	77.3	81.0
Production ('000 lbs)	1,071	1,441	1,575	3,887	3,833
Sales ('000 lbs)	1,052	1,531	1,573	3,983	3,670
<b>Financial Performance</b> (in 000's, except per share amounts)					
Revenue	\$21,234	\$23,271	\$24,740	\$66,925	\$59,402
Mining costs	\$17,908	\$16,319	\$20,007	\$52,990	\$54,084
Income (loss) before tax	\$(709)	\$4,007	\$342	\$3,188	(\$5,196)
Capital expenditures	\$2,496	\$1,643	\$1,012	\$5,962	\$5,613
Cash operating costs (by-product) (\$/oz) gold <sup>(1)</sup>	\$1,087	\$864	\$991	\$987	\$1,153
All-in sustaining costs (by-product) (\$/oz) gold <sup>(1)</sup>	\$1.293	\$1.014	\$1,181	\$1,154	\$1,389
All-in costs (by-product) (\$/oz) gold <sup>(1)</sup>	\$1.297	\$1.020	\$1,181	\$1,161	\$1,389

(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 the third quarter of fiscal 2019, El Valle produced 13,854 ounces of gold and 1.1 million pounds of copper compared with 16,845 ounces of gold and 1.6 million pounds of copper during the third quarter of fiscal 2018. Gold production decreased by 18%, primarily due to lower throughput and head grade, while copper production decreased by 32%, primarily due to lower throughput, head grade and recoveries.

Consistent with the second quarter of fiscal 2019, the Company mined higher gold grade oxide tonnes and blended them with a ratio of 43% together with skarn ore. Historically, the ratio of mined oxide to skarn ore has been approximately 22%.

Mechanical advance rates in oxide areas continued to improve, increasing by 6% to 2,054 meters during the third quarter of fiscal 2019, as compared to the second quarter of fiscal 2019.

Plant improvements were developed during fiscal 2018 in order to allow for the processing of a higher ratio of oxide ore. Studies continue 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. Assessment of possible options will be conducted in third quarter with focus on capital cost.

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.

The Carlés short-term project that started in fiscal 2018 was completed in the second quarter of fiscal 2019. A new short-term project is in progress, restarting production in the fourth quarter of fiscal 2019, providing skarn until the beginning of fiscal 2020. Carlés is expected to continue to provide skarn in the

future. The Company is defining an exploration program for Carlés for the fiscal year 2020.

### El Valle Financial Performance

Revenue from El Valle for the third quarter of fiscal 2019 decreased by 14% to \$21.2 million on sales of 15,256 ounces of gold and 1.1 million pounds of copper from \$24.7 million for the third quarter of fiscal 2018 on sales of 16,947 ounces of gold and 1.6 million pounds of copper.

Mining costs decreased by 10% from \$20 million for the third quarter of fiscal 2018 to \$18 million for the third quarter of fiscal 2019, mainly due to exchange movements in the Euro to USD rate at El Valle.

Loss before tax for the third quarter of fiscal 2019 was \$0.7 million compared with \$0.3 million of income for the third quarter of fiscal 2018.

Total capital expenditures at El Valle during the third quarter of fiscal 2019 were \$2.5 million compared with \$1 million for the third quarter of fiscal 2018. Capital expenditures in the third quarter of fiscal 2019 consisted substantially of primary development.

Total COC (by-product) of \$1,087 per ounce of gold sold in the third quarter of fiscal 2019 were \$96 or 10% higher than in the third quarter of fiscal 2018. Total AISC (by-product) of \$1,293 per ounce of gold sold in the third quarter of fiscal 2019 were \$112 or 9% higher than in the third quarter of fiscal 2018. COC and AISC were negatively impacted by lower gold ounces sold and lower by-product credits, partially off-set by lower mining costs.

### El Valle Growth Exploration

During third quarter of fiscal 2019 6,981 mts of diamond drilling were completed in El Valle Mine. Almost all this drilling program was focused on infill definition with 5,426 mts with the purpose to convert the inferred resources into measured/indicated resources in oxides areas: 3,037 mts were drilled in 19 DDH to define A208 (oxide orebody near A107) and 2,389 mts were completed with 11 DDH in High Angle zone (high-grade vertical oxides structures). The rest of the infill program, 956 mts in 9 DDH, was done in skarn, specifically in Black Skarn, to define the long-term stopes.

Brownfield program was carried out in A208 (oxides) and in Black Skarn (skarn). 397 mts were drilled in A208 extending the mineralization to the South-East. 203 mts were completed in Black Skarn to check the continuity in a high grade and narrow skarn band into the limestone. The total brownfield drilling was 600 mts in this quarter.

Regarding greenfield works, drilling exploration in Quintana that was previously commenced in September 2018, was completed in April 2019. In summary, two drill holes were completed in Quintana Investigation Permit, totaling 1,202.8 mts. These drill holes were planned after detecting anomalies with soil geochemistry and geophysics works. Both holes intersected mineralized structures within the first 100 mts (see the table below) but no feeder zone or intrusive was reached at depth. It has been possible to prove the existence of gold within the main regional structure two kilometers away from the Boinás mine. The next steps in this area will require a detailed study of the new information available, in order to find new targets.

Field and office activities looking for opportunities in other areas of the Orovalle projects portfolio is ongoing.

The following table shows a summary of mineralized intersections at Quintana:

Hole	Zone	Azimuth	Dip	From (m)	To (m)	Core Length (m)	Au (g/t)	Recovery %
18QUIN01	Quintana	282	-60	12.50	31.65	19.15	0.66	92
<i>Including</i>	Quintana			12.50	14.40	1.90	3.56	100
18QUIN01	Quintana			101.40	102.90	1.50	2.80	73
18QUIN02	Quintana	282	-82	20.10	31.20	11.10	0.24	99
18QUIN02	Quintana			57.70	65.60	7.90	0.41	85

Ms. Guadalupe Collar (European Geologist), who supervised the explorations programs, is responsible for all aspects of the work, including the quality control/quality assurance program. Ms. Guadalupe Collar, Chief of Geology at OROVALLE, is a qualified person as defined in NI 43-101 and has approved all of the geological scientific and technical information relating to El Valle disclosed in this MD&A.

## 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.

	Q3 2019	Q2 2019	Q3 2018	YTD 2019	YTD 2018
<b>Operating Performance</b>					
Ore mined (tonnes) (dmt)	170,272	192,447	224,051	563,507	640,040
Ore milled (tonnes) (dmt)	189,240	188,606	175,446	564,842	535,234
Daily average throughput (dmt)	2,215	2,191	2,226	2,202	2,186
Gold					
Grade (g/t)	1.20	1.68	1.90	1.59	2.08
Recovery (%)	93.7	94.0	92.4	93.9	89.8
Production (oz)	6,842	9,564	9,916	27,132	31,953
Sales (oz)	7,323	9,674	9,543	28,273	33,024
Copper					
Grade (%)	-	-	-	-	0.72
Recovery (%)	-	-	-	-	53.7
Production ('000 lbs)	-	-	-	-	3,110
Sales ('000 lbs)	-	-	652	-	3,786
<b>Financial Performance</b> (in 000's, except per share amounts)					
Revenue	\$9,597	\$12,742	\$13,698	\$36,237	\$50,136
Mining costs	\$10,396	\$11,194	\$11,722	\$33,421	\$36,230
Income (loss) before tax	\$(2,816)	\$1,119	(\$1,436)	\$(1,558)	\$2,794
Capital expenditures	\$1,475	\$654	\$4,508	\$2,606	\$10,902
Cash operating costs (by-product) (\$/oz) gold <sup>(1)</sup>	\$1,473	\$1,144	\$1.091	\$1,188	\$873
All-in sustaining costs (by-product) (\$/oz) gold <sup>(1)</sup>	\$1,648	\$1,243	\$1,479	\$1,304	\$1,113
All-in costs (by-product) (\$/oz) gold <sup>(1)</sup>	\$1,789	\$1,300	\$1,701	\$1,365	\$1,332

(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 the third quarter of fiscal 2019, Don Mario produced 6,842 ounces of gold compared with 9,916 ounces of gold in the third quarter of fiscal 2018. Gold production decreased by 31% due to lower head-grade, slightly offset by higher throughput and recoveries.

### Don Mario Financial Performance

Revenue from Don Mario decreased by 30% from \$13.7 million in the third quarter of fiscal 2018 to \$9.6 million on sales of 7,323 ounces of gold in the third quarter of fiscal 2019, compared with sales of 9,543 ounces of gold and 0.7 million pounds of copper in the third quarter of fiscal 2018.

Mining costs of \$10.4 million for the third quarter of fiscal 2019 decreased by \$1.3 million or 11% compared with \$11.7 million for the third quarter of fiscal 2018 primarily due lower royalty taxes and lower costs of goods sold in the absence of copper sales.

Loss before tax for the third quarter of fiscal 2019 was \$2.8 million compared with loss before tax of \$1.4 million for the third quarter of fiscal 2018.

Total capital expenditures at Don Mario in the third quarter of fiscal 2019 were \$1.5 million compared with \$4.5 million in the third quarter of fiscal 2018. Capital expenditures in the third quarter of fiscal 2019 primarily related to improvements at the plant and metallurgical and engineering studies to process the oxides stockpile.

Total COC (by-product) of \$1,473 per ounce of gold sold in the third quarter of fiscal 2019 were \$382 or 35% higher compared to the third quarter of fiscal 2018. Total AISC (by-product) of \$1,648 per ounce of gold in the third quarter of fiscal 2019 were \$169 or 11% higher compared to the third quarter of fiscal 2018. The increase in COC and AISC were driven by lower by-product revenues from copper and lower gold sales volumes.

#### Don Mario Exploration and Mine Life Extension

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 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. Engineering to develop a SART circuit, and ancillary facilities, continues to progress. This undertaking is designed to add an additional three years of mine life for Don Mario.

In fiscal 2019, exploration drilling continued to concentrate around Las Tojas. Las Tojas is a satellite deposit located approximately 12 km northwest of the Don Mario Mine. The Company completed in fiscal 2019 a new drilling program, whereby 22 diamond drill holes (“DDH”) and 59 reverse circulation holes (“RC”) were drilled with a total length of 5,226 metres, 3,127 samples were collected. Additional information on Las Tojas is available in the Company’s annual information form dated December 20, 2018. Based on the historical data and the new information collected, a new model of the deposit has been developed and the estimation of resources as of June 30, 2019 is as follows:

#### **Las Tojas Deposit <sup>(1)</sup>**

Measured							
Zone	Tonnage (000 t)	Grade (g/t Au)	Grade (% Cu)	Grade (g/t Ag)	Contained Metal (000 oz Au)	Contained Metal (t Cu)	Contained Metal (000 oz Ag)
Las Tojas	661	1.55	0.11	2.05	33	705	44
Indicated							
Zone	Tonnage (000 t)	Grade (g/t Au)	Grade (% Cu)	Grade (g/t Ag)	Contained Metal (000 oz Au)	Contained Metal (t Cu)	Contained Metal (000 oz Ag)
Las Tojas	725	1.50	0.12	2.00	35	876	47
Measured + Indicated							
Zone	Tonnage (000 t)	Grade (g/t Au)	Grade (% Cu)	Grade (g/t Ag)	Contained Metal (000 oz Au)	Contained Metal (t Cu)	Contained Metal (000 oz Ag)
Las Tojas	1,386	1.52	0.11	2.02	68	1,581	90
Inferred <sup>(2)</sup>							
Zone	Tonnage (000 t)	Grade (g/t Au)	Grade (% Cu)	Grade (g/t Ag)	Contained Metal (000 oz Au)	Contained Metal (t Cu)	Contained Metal (000 oz Ag)
Las Tojas	241	1.27	0.14	1.79	10	337	14

Mr. Luis Isla (Geologist certified by the “Comisión Calificadora de Competencias en Recursos y Reservas Mineras”, Chile), who supervised the estimate of Las Tojas’s mineral resources as at June 30, 2019, is responsible for all aspects of the work, including the quality control/quality assurance program. Mr. Luis Isla, the Chief of Geology at EMIPA, is a qualified person as defined in NI 43-101 and has approved all of the geological scientific and technical information relating to Las Tojas disclosed in this MD&A.

Based on the positive results yielded by the exploration activities, production from Las Tojas is expected to start in late fourth quarter of fiscal 2019, and continue along fiscal 2020. Preliminary Las Tojas production plan has been developed using a cut-off grade of 1.3 grams per ton of gold, resulting in 6

(1) Mineral Resources have been classified using the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.

(2) Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to the Measured and Indicated Mineral Resource.

small pits optimizing available resources. Based on the additional information provided by the exploration in progress, the production plan will be reviewed and optimized.

An evaluation of re-processing tailings is in progress to determine the viability of recovering gold from material deposited in the tailings impoundment since the commencement of production at Don Mario.

## **Other Projects**

The Company spent approximately \$0.2 million in exploration of other projects during the first and second quarter of fiscal 2019, mainly focused on Argentina and Perú. The Company has been actively looking for and evaluating projects that could be aligned with the Company's strategy, to add a third project to the current portfolio.

On May 14, 2019, the Company entered into a purchase agreement with Compañía Minera Taguas S.A. (the "Vendor") pursuant to which Orvana agreed to acquire the Taguas property located in the Province of San Juan, Argentina. In consideration for 100% of Taguas, Orvana will grant the Vendor an indivisible net smelter royalty equal to 2.5% on all future metals production mined from Taguas.

Taguas consists of 15 mining concessions over an area of 3,273.87 ha. It is located in the Province of San Juan, Argentina, on the eastern flank of the Andes, between 3,500 m to 4,300 m above sea level. The Property is approximately 25km north of Barrick's Veladero operations.

Pursuant to Multilateral Instrument 61-101 – Protection of Minority Security Holders in Special Transactions ("MI 61-101"), entering into the Purchase Agreement with the Vendor is a "related party transaction" as the Vendor is indirectly owned by Orvana's 51.9% shareholder. The Company is exempt from the requirements to obtain a formal valuation or minority shareholder approval in connection with the transaction contemplated by the Purchase Agreement by virtue of sections 5.5(a) and 5.7(a), respectively, of MI 61-101, as neither the fair market value of the subject matter of the Purchase Agreement, nor the fair market value of the consideration for Taguas exceeds 25% of the Company's market capitalization as calculated in accordance with MI 61-101. The purchase agreement was considered and unanimously approved by the board of directors of the Company. Ms. Sara Magner abstained from voting on this matter.

The Toronto Stock Exchange ("TSX") has provided conditional acceptance of Orvana's notice of the transaction, pursuant to the TSX Company Manual. Closing of the transaction is subject to the final acceptance of the TSX and a number of closing conditions including, without limitation, completion of satisfactory due diligence by Orvana and applicable local mining rights registration.

The Company filed on July 9, 2019 a NI 43-101 preliminary economic assessment report on Taguas, which is available on [www.sedar.com](http://www.sedar.com).

Subject to closing the acquisition of Taguas and securing the required financing, the Company is preparing a drilling program in order to potentially expand the current resources and to support the potential upgrade in Mineral Resource confidence categories.

## **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 the third quarter of fiscal 2019, gold traded in a range from \$1,270 to \$1,431 per ounce and averaged \$1,310 per ounce compared with \$1,306 per ounce in the third quarter of fiscal 2018. Orvana's average gold realized price in the third quarter of fiscal 2019 was \$1,277 per ounce, as compared to \$1,298 per ounce in the third quarter of fiscal 2018. The Company derived approximately 88% of its revenue from sales of gold in the first nine months of fiscal 2019.

Copper prices during the third quarter of fiscal 2019 traded in a range of \$2.60 to \$3.00 per pound and averaged \$2.77 per pound compared with \$3.12 per pound in the third quarter of fiscal 2018. Orvana's average copper realized price in the third quarter of fiscal 2019 was \$2.78 per pound. The Company derived approximately 10% of its revenue from sales of copper in the first nine months of fiscal 2019.

## 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 decreased year over year, with the Euro to US Dollar exchange rate moving from an average of 1.19 in the third quarter of fiscal 2018 to 1.12 in the third quarter of fiscal 2019. As a result of foreign exchange movements, mining costs at El Valle were lower by approximately \$2.9 million comparing the first 9 months of fiscal 2019 to the first nine months of fiscal 2018.

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 June 30, 2019 and September 30, 2018.

<i>(in 000's)</i>	<b>June 30, 2019</b>	<b>September 30, 2018</b>
Cash and cash equivalents	<b>\$11,682</b>	\$11,634
Restricted cash (short term)	<b>\$131</b>	\$61
Non-cash working capital <sup>(1)</sup>	<b>\$(4,704)</b>	(\$2,833)
Total assets	<b>\$158,372</b>	\$158,800
Total liabilities	<b>\$82,235</b>	\$81,089
Shareholders' equity	<b>\$76,137</b>	\$77,711

(1) Working capital represents current assets of \$38.8 million less cash and cash equivalents and short-term restricted cash totaling \$11.8 million and less \$31.7 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 \$0.4 million from \$158.8 million to \$158.4 million primarily as a result of the decrease in (i) deferred payment on Copperwood in 1 million, (ii) Income tax receivable in 0.4 million all this offset by increases in (iii) cash and cash equivalents and restricted cash in 0.1, (iv) gold and concentrate receivable in 0.3 million, (v) VAT receivable in 0.3 million and (vi) Inventory in 0.3 million.

Total liabilities increased by \$1.1 million or 1% to \$82.2 million at June 30, 2019 from \$81.1 million at September 30, 2018 primarily as a result of a decrease in (i) debt in 0.4 million, (ii) other long term liabilities in 1.3 million, (iii) income taxes payable in 0.1 million all this offset with increases in (iv) accounts payable in 1.1 million, (v) lease obligations in 0.2 million, (vi) other long term compensation 1.3 million and (vii) other minor variances for 0.3 million in deferred revenues, current portion of derivatives, provision for statutory labour obligations.

### *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 June 30, 2019, \$8.3 million were drawn down this facility and \$3.4 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 June 30, 2019, \$1,972 were drawn down from this facility (September 30, 2018 - \$nil). The funds have to be reimbursed jointly with their interests between July and August 2019.

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 June 30, 2019, the total amount was drawn from this loan and \$0.9 million of principal were paid.

#### *Banco de Crédito Loan*

In May 2019, EMIPA entered into a Bs.3,430,000 (approximately \$0.49 million) term facility with Banco de Crédito in Bolivia. This loan bears an interest rate of 6% per annum and matures in August 2019 with a single repayment installment (jointly with the interests) in August 2019. As at June 30, 2019 EMIPA received the \$0.49 million disbursement.

#### *Samsung C&T Prepayment Facility & the New Facility - Spanish local banks*

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 were 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 were 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.

Throughout fiscal 2018, the Company had been evaluating financing alternatives with the objective to refinance the Samsung Prepayment Facility by extending the repayment period. In January 2018, the Company, through its wholly owned subsidiary OroValle, closed a syndicated credit facility (the "New Facility – Spanish local banks") for a total amount of €6 million (\$6.7 million). The New Facility is subject to a 2% bank commission fee, bears a fixed interest rate of 2.55%, semi-annual principal repayments and semi-annual interest payments over a term of four years. The Company's obligations to the lenders are secured by: (i) the pledge of all of Orvana's shares of OroValle; (ii) the pledge of OroValle's doré sale proceeds; and (iii) 12.5% restricted cash.

Concurrent with the closing of the New Facility, Orvana has repaid the full Samsung C&T Prepayment Facility. That means the Company paid Samsung \$9.1 million in the first half of fiscal 2019. The Company continues its commercial relationship with Samsung C&T for the sale of copper concentrate from its Don Mario Mine and gold doré from its El Valle Mine.

In May 2019, Orovalle increased the New Facility in €2 million, achieving a total aggregated amount of €8 million. The conditions for this funding are the same to the previous tranche (in terms of interest rate, fees, repayment schedule, security and covenants).

#### **Shareholders' Equity**

Shareholders' equity at June 30, 2019 decreased by 2% to \$76.1 million compared with \$77.7 million at September 30, 2018. The table below sets out the number of each class of securities of the Company outstanding at June 30, 2019 and as at the date hereof:

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At June 30, 2019

Common Shares	136,623,171
Warrants <sup>(1)</sup>	100,000
Options <sup>(2)</sup>	771,008

(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 \$0.22 and expiry dates ranging from 2019 to 2022.

## Derivative Instruments

The Company had the following derivative instruments outstanding as at June 30, 2019:

	Contract Prices	Cash Settlement	Contract Amounts
Gold			
Gold forwards (Jul 2019 – Sep 2019)	€1,160-€1,170 / troy oz	Monthly	2,500 troy oz

During the three and nine months ended June 30, 2019, the Company paid net cash of \$362 and \$423, respectively (three and nine months ended June 30, 2018 – paid net cash of \$202 and \$2,440, respectively), in settlement of the derivative instruments that matured in the period.

The outstanding balance at June 30, 2019, for \$228 corresponds to the unrealized portion of these contracts.

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

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

<i>(in 000's)</i>	Q3 2019	Q2 2019	Q3 2018	YTD 2019	YTD 2018
Change in unrealized fair value	(\$175)	(\$50)	\$168	(\$334)	\$1,052
Realized gain (loss) on cash settlements of derivative instruments	(\$359)	(\$98)	(202)	(\$420)	(2,440)
Derivative instruments loss	(\$534)	(\$148)	(\$34)	(\$754)	(\$1,388)

## Capital Resources

At June 30, 2019, the Company had cash and cash equivalents of \$11.7 million and restricted cash of \$1.6 million. The Company considers its capital employed to consist of shareholders' equity (including share capital, contributed surplus and retained earnings) and total debt net of cash and cash equivalents as follows:

<i>(in 000's)</i>	June 30, 2019	September 30, 2018
Shareholders' equity	\$76,137	\$77,711
Revolving facilities	2,975	2,894
Revolving facilities TSF	1,972	-
Capital leases	1,222	1,031
BISA Heavy Equipment Loan	1,500	2,114
BISA TSF Loan	4,959	7,085
Banco de Crédito Loan	493	-
Prepayment Facility	-	8,865
New Facility – Spanish local banks	8,692	-
	\$97,950	\$99,700
Less: Cash and cash equivalents	(11,682)	(11,634)
Capital employed	\$86,268	\$88,066

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 2019, the Company closed the New Facility with local Spanish banks for €8 million.

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

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

The Company's strategy during fiscal 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, and to meet all of its existing debt repayment obligations. In connection with this, the Company is currently evaluating possible, near-term financing alternatives with the objective of re-financing the Prepayment Facility and securing access to additional liquidity for advancement of the Company's strategic objectives.

## Cash Flows, Commitments, Liquidity and Contingencies

### Cash Flows

Total cash and cash equivalents as at June 30, 2019 was \$11.7 million, primarily denominated in US dollars, representing a similar level of cash as at September 30, 2018. Short-term restricted cash was \$0.1 million at June 30, 2019 which is the same amount as at September 30, 2018. The Company's total debt was \$20.5 million at June 30, 2019. This compares with total debt as at September 30, 2018 of \$21 million.

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

<i>(in 000's)</i>	Q3 2019	Q2 2019	Q3 2018	YTD 2019	YTD 2018
Cash provided by operating activities before changes in non-cash working capital	<b>\$1,368</b>	\$8,684	\$4,282	<b>\$14,221</b>	\$8,815
Cash provided by (used in) operating activities	<b>4,866</b>	1,238	4,010	<b>9,470</b>	\$671
Cash used in investing activities <sup>(1)</sup>	<b>(4,367)</b>	(3,097)	(5,257)	<b>(8,902)</b>	(14,445)
Cash provided by (used in) financing activities	<b>1,885</b>	2,826	2,124	<b>(544)</b>	3,412
Change in cash	<b>\$2,384</b>	\$967	\$877	<b>\$24</b>	(\$10,362)

(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 \$1.4 and \$14.2 million for the third quarter and the first nine months of fiscal 2019, respectively, compared with \$4.3 and \$8.8 million for the third quarter and the first nine months of fiscal 2018, respectively. Cash flows provided by operating activities were \$4.9 and \$9.5 million for the third quarter and the first nine months of fiscal 2019, respectively, compared with cash flows used for operating activities of \$4 and \$0.7 million for the third quarter and the first nine months of fiscal 2018, respectively.

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 used in investing activities was \$4.4 and \$9 million in the third quarter and the first nine months of fiscal 2019, respectively, compared with \$5.3 and \$14.4 million in the third quarter and the first nine

months of fiscal 2018, respectively. Capital expenditures and movements in the Company's restricted cash and reclamation bond accounts drive the majority of cash flows used in investing activities.

Cash provided by financing activities was \$1.9 in the third quarter and cash used in financing activities was \$0.5 million in first nine months of fiscal 2019. All this compared with cash provided by financing activities amounting \$2.1 and \$3.4 million in the third quarter and first nine months of fiscal 2018, respectively, and is driven primarily by the repayment of Samsung Facility from Orovalle (Spain). This facility was substituted by local banks for a smaller amount than Samsung Facility.

### Capital Expenditures

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

<i>(in 000's)</i>	Q3 2019	Q2 2019	Q3 2018	YTD 2019	YTD 2018
El Valle	\$2,496	\$1,643	\$1,012	\$5,962	\$5,613
Don Mario	1,475	654	4,508	2,606	10,902
Corporate	-	-	1	-	21
Sub-total capital expenditures	\$3,971	\$2,297	\$5,521	\$8,568	\$16,536
Accounts payable adjustments <sup>(1)</sup>	\$1,028	(\$341)	\$98	\$150	751
Total capital expenditures <sup>(1)</sup>	\$4,999	\$1,956	\$5,619	\$8,718	\$17,287

(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 the third quarter of fiscal 2019 consisted mainly of primary development. Significant capital expenditures at Don Mario included optimization of the CIC/CIL process, and metallurgical and engineering studies to process the oxides stockpile.

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:

<i>(in 000's)</i>	Total	Payment Due by Period			After 5 Years
		Less than 1 Year	1-3 Years	4-5 Years	
Spanish Local Banks	\$9,615	\$2,480	\$5,982	\$1,153	
BISA TSF Loan + Heavy equipment	\$9,342	\$6,286	\$3,056	-	-
Operating leases	\$1,382	\$879	\$407	\$96	-
Finance leases	\$1,222	\$1,075	\$147	-	-
Decommissioning liabilities <sup>(1)</sup>	\$24,475	\$50	-	\$5,988	\$18,437
Reclamation bond <sup>(2)</sup>	\$5,690	\$5,690	-	-	-
Purchase obligations	\$4,876	\$1,606	\$2,550	\$720	-
Provision for statutory labour obligations <sup>(3)</sup>	\$4,033	-	\$4,033	-	-
Long-term compensation	\$1,634	-	-	-	\$1,634
Total contractual obligations <sup>(4)</sup>	\$62,269	\$18,066	\$16,175	\$7,957	\$20,071

(1) Decommissioning liabilities are undiscounted.

(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 June 30, 2019. 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 \$0.6 and \$2 million for the third quarter and the first nine months of fiscal 2019, respectively, compared with \$0.8 and \$1.9 million for the third quarter and the last nine months of fiscal 2018, respectively.

Production from Don Mario is subject to a 3% NSR. This expense totaled \$0.4 and \$1.3 million for the third quarter and first nine months of fiscal 2019, respectively, compared with \$0.4 and \$1.4 million for the third quarter and first nine months of fiscal 2018, respectively. The Bolivian government collects a mining royalty tax on the revenue generated from copper, gold and silver sales from Don Mario at rates of 5%, 7% and 6%, respectively. These amounts totaled \$0.7 and \$2.5 million for the third quarter and first nine months of fiscal 2019, respectively, compared with \$1 and \$3.7 million for the third quarter and first months of fiscal 2018, respectively.

### Liquidity

Orvana’s primary sources of liquidity in the first nine months of the fiscal 2019 were operating cash flows, generating cash of \$14.2 million from operating activities before changes in non-cash working capital. During the first nine months of the fiscal 2019, Orvana generated cash of \$9.5 million from operating activities and used cash for \$0.5 million for financing activities, supporting \$8.9 million in investing activities.

As at June 30, 2019, the Company had cash of \$11.7 million, and together with forecasted operating cash flow, the renewal of current revolving lines and the executed refinancing of the Prepayment Facility (see Samsung C&T Prepayment Facility & New Facility - Spanish local banks section), expects to cover the Company’s commitments due in less than one year of \$18.1 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 continues to work 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 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. Trials were initially scheduled for May to September 2019, however they have been rescheduled by the Labour Court for October, 2019. 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.

During the second quarter EMIPA received from the Bolivian Tax Authorities a re-assessment of its past corporate income tax filings. This re-assessment charged an additional corporate income tax of approximately \$0.669 million on the basis of different tax criteria for depreciations and the deductibility of certain expenses. In February, EMIPA appealed the re-assessment to the regional court. In May the regional court overturned the Tax Authority's re-assessment. The Tax Authority has appealed the regional court's decision and will be filing appeal materials in the following months. Should any part of this additional corporate tax amount be determined to be the final amount payable at the end of this tax resolution process, such amount shall incur additional interest and penalties, the amount of which cannot be determined with certainty at this stage of the process.

## SUMMARY OF QUARTERLY RESULTS

The following two tables include results for the eight quarters ended June 30, 2019:

<i>(in 000's, except per share amounts)</i>	Quarters ended			
	Q3 2019	Q2 2019	Q1 2019	Q4 2018
Revenue	\$30,831	\$36,013	\$36,318	\$36,298
Net income (loss)	(\$3,914)	\$3,334	(\$1,060)	(\$1,231)
Loss per share (basic and diluted)	(\$0.03)	\$0.02	(\$0.01)	(\$0.01)
Total assets	\$158,372	\$156,653	\$154,965	\$158,800
Total financial liabilities <sup>(1)</sup>	\$22,041	\$19,752	\$16,880	\$21,989

  

	Quarters ended			
	Q3 2018	Q2 2018	Q1 2018	Q4 2017
Revenue	\$38,438	\$36,930	\$34,170	\$46,156
Net loss	(\$2,982)	(\$3,505)	(\$3,379)	(\$1,722)
Loss per share (basic and diluted)	(\$0.02)	(\$0.03)	(\$0.02)	(\$0.01)
Total assets	\$160,451	\$163,542	\$171,035	\$171,363
Total financial liabilities <sup>(1)</sup>	\$21,748	\$19,486	\$20,751	\$19,135

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

## **FINANCIAL AND OTHER RISKS AND UNCERTAINTIES**

### **Financial Risks**

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

### **Other Risks**

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

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

For a more detailed discussion of such financial and other business risks, please see the "Risk Factors" in Orvana's most recent AIF at [www.sedar.com](http://www.sedar.com).

## **OTHER INFORMATION**

### **Critical Accounting Estimates**

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

#### Net Realizable Amounts of Property, Plant and Equipment

At June 30, 2019, the net carrying value of the property, plant and equipment in respect of El Valle and Don Mario amounted to \$58.7 million and \$24.6 million, respectively. Effective from the point that they are ready for their intended use, property, plant and equipment are amortized on a straight-line basis or using the units-of-production method over the shorter of the estimated economic life of the asset or mineral property. The method of depreciation is determined based on that which best represents the use of the assets.

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

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

## Decommissioning Liabilities

Decommissioning liabilities relate to the dismantling of the mine facilities and environmental reclamation of the areas affected by mining operations. Mine facilities include structures and the tailings dam. Environmental reclamation requirements include mine water treatment, reforestation and dealing with soil contamination. It is possible that the Company's estimates of the ultimate amounts required to decommission its mines could change as a result of changes in regulations, the extent of environmental remediation required, the means of reclamation, cost estimates or the estimated remaining ore reserves. The following table sets out 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 June 30, 2019.

<b>As at June 30, 2019</b>	<b>Undiscounted Cash Flows Estimated to Settle Decommissioning Liabilities</b>	<b>Discount Rate</b>	<b>Discounted Cash Flows Required to Settle Decommissioning Liabilities</b>
<i>(in 000's)</i>			
El Valle <sup>(1)</sup>	\$16,360	1.47%	\$14,459
Don Mario <sup>(1)</sup>	\$8,115	3.20%	\$6,835
<b>Total</b>	<b>\$24,475</b>		<b>\$21,294</b>

(1) Accretion expense is recorded using the discount interest rate set out above. It is estimated that these amounts will be incurred beginning in 2019 and 2020 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 \$22 thousand and \$66 thousand in the third quarter and first nine month of fiscal 2019, respectively, compared with \$49.3 thousand and \$148 thousand in the third quarter and first nine months of fiscal 2018, respectively. 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 June 30, 2019 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 June 30, 2019 of \$76 million, following the completion of an impairment test in respect of each CGU at the end of the first nine months of fiscal 2019, 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 June 30, 2019. As such, there was no impairment of such carrying values as at June 30, 2019.

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 first nine months of fiscal 2019, there can be no assurances that an impairment adjustment may not be taken at either or both CGUs in future periods.

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

- Gold prices: The net loss of \$1,640 for the first nine months of fiscal 2019 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 \$9,904.
- Copper prices: The net loss of \$1,640 for the first nine months of fiscal 2019 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 \$1,143.

## **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 June 30, 2019.

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.

<b>Orvana Consolidated</b>	<b>Q3 2019</b>	<b>Q2 2019</b>	<b>Q3 2018</b>	<b>YTD 2019</b>	<b>YTD 2018</b>
<b>Cash operating costs, all-in sustaining costs and all-in costs (by-product) <sup>(1)</sup> (in 000's)</b>					
<b>Total mining costs (sales based)</b>	<b>\$28,807</b>	<b>\$27,512</b>	<b>\$31,729</b>	<b>\$86,914</b>	<b>\$90,315</b>
Deductions, refining, treatment, penalties, freight & other costs	1,904	2,818	3,553	6,892	10,924
<b>Sub-total - other operating costs</b>	<b>\$1,904</b>	<b>\$2,818</b>	<b>\$3,553</b>	<b>\$6,892</b>	<b>\$10,924</b>
Copper sales - gross revenue value	(2,708)	(4,831)	(6,856)	(11,431)	(21,792)
Silver sales - gross revenue value	(625)	(741)	(1,218)	(2,087)	(3,371)
Other by-product gross revenue value	-	-	-	-	-
<b>Sub-total by-product revenue</b>	<b>(\$3,333)</b>	<b>(\$5,572)</b>	<b>(\$8,074)</b>	<b>(\$13,518)</b>	<b>(\$25,163)</b>
<b>Cash operating costs</b>	<b>\$27,378</b>	<b>\$24,758</b>	<b>\$27,208</b>	<b>\$80,288</b>	<b>\$76,076</b>
Corporate general & administrative costs	1,120	660	859	2,574	3,504
Community costs related to current operations	116	129	199	357	1,164
Reclamation, accretion & amortization	353	406	423	1,269	1,245
Exploration and study costs (sustaining)	344	220	(40)	846	84
Primary development (sustaining)	1,085	914	1,034	2,966	2,663
Other sustaining capital expenditures <sup>(2) (3)</sup>	1,944	1,141	4,521	4,170	10,382
<b>All-in sustaining costs</b>	<b>\$32,340</b>	<b>\$28,228</b>	<b>\$34,204</b>	<b>\$92,470</b>	<b>\$95,118</b>
Exploration and study costs (non-sustaining)	422	561	1,271	1,270	2,871
Capital expenditures (non-sustaining) <sup>(3)</sup>	922	247	1,444	1,169	4,948
<b>All-in costs</b>	<b>\$33,684</b>	<b>\$29,036</b>	<b>\$36,919</b>	<b>\$94,909</b>	<b>\$102,937</b>
Au/oz sold	22,579	25,507	26,489	75,552	73,973
Cash operating costs (\$/oz) gold	<b>\$1,213</b>	<b>\$971</b>	<b>\$1,027</b>	<b>\$1,063</b>	<b>\$1,028</b>
All-in sustaining costs (\$/oz) gold	<b>\$1,432</b>	<b>\$1,107</b>	<b>\$1,291</b>	<b>\$1,224</b>	<b>\$1,286</b>
All-in costs (\$/oz) gold	<b>\$1,492</b>	<b>\$1,138</b>	<b>\$1,394</b>	<b>\$1,256</b>	<b>\$1,392</b>

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

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

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

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

El Valle	Q3 2019	Q2 2019	Q3 2018	YTD 2019	YTD 2018
<b>Cash operating costs, all-in sustaining costs and all-in costs (by-product) <sup>(1)</sup> (in 000's)</b>					
<b>Total mining costs</b>	<b>\$17,908</b>	<b>\$16,319</b>	<b>\$20,007</b>	<b>\$52,991</b>	<b>\$54,084</b>
Deductions, refining, treatment, penalties, freight & other costs	1,895	2,808	2,624	6,863	6,176
<b>Sub-total - other operating costs</b>	<b>\$1,895</b>	<b>\$2,808</b>	<b>\$2,624</b>	<b>\$6,863</b>	<b>\$6,176</b>
Copper sales - gross revenue value	(2,708)	(4,831)	(4,875)	(11,431)	(10,648)
Silver sales - gross revenue value	(506)	(610)	(955)	(1,737)	(2,377)
<b>Sub-total by-product revenue</b>	<b>(\$3,214)</b>	<b>(\$5,441)</b>	<b>(\$5,830)</b>	<b>(\$13,168)</b>	<b>(\$13,025)</b>
<b>Cash operating costs</b>	<b>\$16,589</b>	<b>\$13,686</b>	<b>\$16,801</b>	<b>\$46,686</b>	<b>\$47,235</b>
Corporate general & administrative costs	375	375	625	1,125	1,875
Reclamation, accretion & amortization	288	341	308	1,074	843
Exploration and study costs (sustaining)	0	0	24	0	84
Primary development (sustaining)	1,085	914	1,034	2,966	2,663
Other sustaining capital expenditures <sup>(2)</sup> <sup>(3)</sup>	1,386	732	1,214	2,726	4,186
<b>All-in sustaining costs</b>	<b>\$19,723</b>	<b>\$16,048</b>	<b>\$20,006</b>	<b>\$54,577</b>	<b>\$56,885</b>
Exploration and study costs (non-sustaining)	64	105	-	300	-
<b>All-in costs</b>	<b>\$19,787</b>	<b>\$16,153</b>	<b>\$20,006</b>	<b>\$54,877</b>	<b>\$56,885</b>
Au/oz sold	15,256	15,832	16,947	47,279	40,950
Cash operating costs (\$/oz) gold	<b>\$1,087</b>	<b>\$864</b>	<b>\$991</b>	<b>\$987</b>	<b>\$1,153</b>
All-in sustaining costs (\$/oz) gold	<b>\$1,293</b>	<b>\$1,014</b>	<b>\$1,181</b>	<b>\$1,154</b>	<b>\$1,389</b>
All-in costs (\$/oz) gold	<b>\$1,297</b>	<b>\$1,020</b>	<b>\$1,181</b>	<b>\$1,161</b>	<b>\$1,389</b>

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

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

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

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

<b>Don Mario Mine</b>	<b>Q3 2019</b>	<b>Q2 2019</b>	<b>Q3 2018</b>	<b>YTD 2019</b>	<b>YTD 2018</b>
<b>Cash operating costs, all-in sustaining costs and all-in costs (by-product) <sup>(1)</sup> (in 000's)</b>					
<b>Total mining costs</b>	<b>\$10,899</b>	<b>\$11,194</b>	<b>\$11,722</b>	<b>\$33,923</b>	<b>\$36,230</b>
Deductions, refining, treatment, penalties, freight & other costs	9	10	929	29	4,748
<b>Sub-total - other operating costs</b>	<b>\$9</b>	<b>\$10</b>	<b>\$929</b>	<b>\$29</b>	<b>\$4,748</b>
Copper sales – gross revenue value	0	0	(1,981)	0	(11,144)
Silver sales – gross revenue value	(121)	(132)	(263)	(349)	(993)
Other by-product gross revenue value	-	-	-	-	-
<b>Sub-total by-product revenue</b>	<b>(\$121)</b>	<b>(\$132)</b>	<b>(\$2,244)</b>	<b>(\$349)</b>	<b>(\$12,137)</b>
<b>Cash Operating Costs</b>	<b>\$10,788</b>	<b>\$11,072</b>	<b>\$10,407</b>	<b>\$33,603</b>	<b>\$28,842</b>
Corporate general & administrative costs	199	133	87	423	168
Community costs related to current operations	116	129	199	357	1,164
Reclamation, accretion & amortization	65	65	115	195	402
Exploration and study costs (sustaining)	344	220		846	-
Capital expenditures (sustaining) <sup>(2)(3)</sup>	559	410	3,306	1,443	6,196
<b>All-in sustaining costs</b>	<b>\$12,071</b>	<b>\$12,029</b>	<b>\$14,114</b>	<b>\$36,867</b>	<b>\$36,772</b>
Capital expenditures (non-sustaining)	922	247	673	1,169	2,273
Exploration and study costs (non-sustaining)	106	301	1,444	561	4,947
<b>All-in costs</b>	<b>\$13,099</b>	<b>\$12,577</b>	<b>\$16,231</b>	<b>\$38,597</b>	<b>\$43,992</b>
Au/oz sold	7,323	9,674	9,543	28,273	33,023
Cash operating costs (\$/oz) gold	<b>\$1,473</b>	<b>\$1,144</b>	<b>\$1,091</b>	<b>\$1,188</b>	<b>\$873</b>
All-in sustaining costs (\$/oz) gold	<b>\$1,648</b>	<b>\$1,243</b>	<b>\$1,479</b>	<b>\$1,304</b>	<b>\$1,113</b>
All-in costs (\$/oz) gold	<b>\$1,789</b>	<b>\$1,300</b>	<b>\$1,701</b>	<b>\$1,365</b>	<b>\$1,332</b>

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

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

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

## EBITDA

The Company has included Earnings before Interest, Taxes, Depreciation and Amortization ("EBITDA") as a non-IFRS performance measure in this MD&A. The Company excludes these items from net loss to provide a measure which allows the Company and investors to evaluate the results of the underlying core operations of the Company and its ability to generate cash flows. Accordingly, it is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS.

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

<i>(in 000's)</i>	<b>Q3 2019</b>	<b>Q2 2019</b>	<b>Q3 2018</b>	<b>YTD 2019</b>	<b>YTD 2018</b>
Net income (loss)	<b>(\$3,914)</b>	\$3,334	(\$2,982)	<b>(\$1,640)</b>	(\$9,866)
Less:					
Finance costs	<b>(293)</b>	(468)	(498)	<b>(1,373)</b>	(1,387)
Income taxes	<b>927</b>	108	222	<b>996</b>	(1,977)
Depreciation and amortization	<b>(5,088)</b>	(4,571)	(6,636)	<b>(14,517)</b>	(19,087)
Impairment	-	-	-	-	-
<b>EBITDA</b>	<b>\$540</b>	<b>\$8,265</b>	<b>\$3,930</b>	<b>\$13,254</b>	<b>\$12,585</b>

## Other Information

Other operating and financial information with respect to the Company, including the AIF, is available on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Company's website at [www.orvana.com](http://www.orvana.com).

## Cautionary Statements – Forward-Looking Information

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

The forward-looking statements herein relate to, among other things, Orvana's ability to achieve improvement in free cash flow; the potential to extend the mine life of El Valle and Don Mario beyond their current life-of-mine estimates including specifically, but not limited to in the case of Don Mario, the mining of the Cerro Felix deposit, the processing of the mineral stockpiles (including, without limitation, the financial and technical ability to implement the SART circuit) 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, including without limitation, the ability to complete the acquisition of the Taguas Property; future financial performance, including the ability to increase cash flow and profits; and future financing requirements and mine development plans.

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

A variety of inherent risks, uncertainties and factors, many of which are beyond the Company's control, affect the operations, performance and results of the Company and its business, and could cause actual events or results to differ materially from estimated or anticipated events or results expressed or implied by forward looking statements. Some of these risks, uncertainties and factors include fluctuations in the price of gold, silver and copper; the need to recalculate estimates of resources based on actual production experience; the failure to achieve production estimates; variations in the grade of ore mined; variations in the cost of operations; the availability of qualified personnel; the Company's ability to obtain and maintain all necessary regulatory approvals and licenses; the Company's ability to use cyanide in its mining operations; risks generally associated with mineral exploration and development, including the Company's ability to continue to operate the El Valle and/or Don Mario and/or ability to resume long-term operations at the Carlés Mine; the Company's ability to acquire and develop mineral properties and to successfully integrate such acquisitions; the Company's ability to execute on its strategy; the Company's ability to obtain financing when required on terms that are acceptable to the Company; challenges to the Company's interests in its property and mineral rights; current, pending and proposed legislative or regulatory developments or changes in political, social or economic conditions in the countries in which the Company operates; general economic conditions worldwide; and the risks identified in the Company's AIF under the heading "Risks and Uncertainties". This list is not exhaustive of the factors that may affect any of the Company's forward-looking statements and reference should also be made to the Company's AIF for a description of additional risk factors.

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

Forward-looking statements are based on management's current plans, estimates, projections, beliefs and opinions and, except as required by law, the Company does not undertake any obligation to update forward-looking statements should assumptions related to these plans, estimates, projections, beliefs and opinions change. Readers are cautioned not to put undue reliance on forward-looking statements.

#### **Cautionary Notes to Investors – Reserve and Resource Estimates**

In accordance with applicable Canadian securities regulatory requirements, all mineral reserve and mineral resource estimates of the Company disclosed in this MD&A have been prepared as at September 30, 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.