

## MINSUR S.A. MANAGEMENT DISCUSSION AND ANALYSIS FOR THE THIRD QUARTER OF THE YEAR 2016

Lima, October 28, 2016 – MINSUR S.A. (BVL: MINSURI1) (“the Company” or “Minsur”) a Peruvian mining Company, dedicated to the exploration, processing and commercialization of tin and other minerals, announced its individual results for the third quarter of 2016 (“3Q16”). These results are reported in accordance with International Financial Reporting Standards (IFRS) and are expressed in U.S. dollars (US\$), unless otherwise mentioned.

### I. OPERATING RESULTS AND FINANCIAL HIGHLIGHTS:

- **Production:**
  - a. **Tin:** in 3Q16 reached **5,186 tons, a 25% increase** compared to 3Q15, the increase is due to programmed maintenance of the smelting & refining plant during the past period. Cumulative production reached **14,550 tons**, a 4% increase compared to the previous period.
  - b. **Gold:** in 3Q16 reached **24,956 ounces, a decrease of 25%** compared to 3Q15, in line with the years’ production plan. Cumulative production reached **86,108 ounces**, a 8% decrease compared to the previous period.
- **Cash Cost**
  - a. **San Rafael/Pisco:** In 3Q16 cash cost per treated ton at San Rafael was **US\$ 60, 50% below** the 3Q15 cash cost. Similarly, cash cost per refined ton of tin in 3Q16 was **US\$7,569, 12% below** 3Q15.
  - b. **Pucamarca:** In 3Q16, cash cost per treated ton was **US\$ 4.0, a 10% increase** compared to 3Q15. Similarly, cash cost per ounce of gold reached **US\$ 331/oz., a 38% increase** compared to 3Q15.
- **Metal Price:**
  - a. **Tin:** average metal price in 3Q16 was **US\$ 18,629** per ton, representing a **23% increase** compared to 3Q15.
  - b. **Gold:** average metal price in 3Q16 was **US\$ 1,335** per ounce, representing a **19% increase** compared to 3Q15.
- **Net revenue:** **US\$ 126.9 M** in 3Q16, **16% higher** than 3Q15 as a result of higher tin and gold prices registered in the quarter (+23% and +19%, respectively).
- **Exploration and project expenses:** reached **US\$ 1.7 M** in 3Q16, **a decrease of 71%** compared to 3Q15, mainly due to the optimization and prioritization of exploration efforts in the surroundings of San Rafael.
- **EBITDA:** **US\$ 72.0 M** in 3Q16, **55% increase** compared to 3Q15. EBITDA margin in 3Q16 was 57% vs 43% in 3Q15, mainly due to higher prices and operative cost reductions at San Rafael.
- **Net income:** reached **US\$ 9.0 M** in 3Q16 vs a loss of -US\$ 25 M in 3Q15.
- **Adjusted net income<sup>1</sup>:** Excluding results from subsidiaries and associates and exchange difference, adjusted net income reached **US\$ 31.0 M**, a **167% increase** compared to 3Q15.
- **Hedging Operations:** The Company holds derivatives (zero cost collars) for 24,000 oz. of gold

<sup>1</sup> Adjusted net profit = Net Profit excluding Loss from Subsidiaries and Associates and exchange difference, net

from July to December (4,000 oz. per month) setting a floor price of US\$ 1,250/oz. and a cap of US\$ 1,420/oz. Also, Minsur holds derivatives (zero cost collars) for 3,200 tons of tin (800 tons per month) from September to December with a floor price of US\$ 17,000/t and caps up to US\$ 19,500/t.

**Table N° 1: Operating & Financial Highlights**

Highlights	Unit	3Q16	3Q15	Var (%)	9M16	9M15	Var (%)
<b>Production</b>							
Tin (Sn)	t	5,182	4,130	25%	14,550	13,924	4%
Gold (Au)	oz	24,956	33,464	-25%	86,108	93,782	-8%
<b>Financial Results</b>							
Net Revenue	US\$ M	126.9	109.0	16%	354.9	364.7	-3%
EBITDA	US\$ M	72.0	46.5	55%	180.9	157.8	15%
EBITDA Margin	%	57%	43%	33%	51%	43%	18%
Net Income	US\$ M	9.0	-25.2	-	49.3	-24.1	-
Adjusted Net Income <sup>2</sup>	US\$ M	31.0	11.6	167%	86.6	43.7	98%

## II. MAIN CONSIDERATIONS:

### a. Average metal prices:

Average Tin (Sn) Price in 3Q16 was US\$ 18,629 per ton, an increase of 23% compared to the same period of the previous year.

Average Gold (Au) Price in 3Q16 was US\$ 1,335 per ounce, an increase of 19% compared to the same period of the previous year.

**Table N° 2: Average metal prices**

Average Metal Prices	Unit	3Q16	3Q15	Var (%)	9M16	9M15	Var (%)
Tin	US\$/t	18,629	15,207	23%	17,047	16,399	4%
Gold	US\$/oz	1,335	1,125	19%	1,259	1,179	7%

Source: Bloomberg

### b. Exchange rate:

The Peruvian Sol average exchange rate for the 3Q16 was S/. 3.34 per US\$ 1, compared to S/. 3.21 per US\$ 1 in 3Q15, which represents a depreciation of 4% for the Peruvian Sol.

**Table N°3: Exchange Rate**

Average Exchange Rate	Unit	3Q16	3Q15	Var (%)	9M16	9M15	Var (%)
PEN/USD	S/.	3.34	3.21	4%	3.37	3.14	7%

Source: Banco Central de Reserva del Perú

### III. OPERATING MINING RESULTS:

#### a. San Rafael – Pisco (Perú):

**Table N° 4: San Rafael - Pisco Operating Results**

San Rafael - Pisco	Unit	3Q16	3Q15	Var (%)	9M16	9M15	Var (%)
Ore Treated	t	492,554	264,004	87%	989,783	761,348	30%
Head Grade	%	2.01	2.02	0%	2.04	2.09	-2%
Tin production (Sn) - San Rafael	t	5,114	4,852	5%	13,961	14,382	-3%
Tin production (Sn) - Pisco	t	5,182	4,130	25%	14,550	13,924	4%
Cash Cost per Treated Ton <sup>2</sup> - San Rafael	US\$/t	60	119	-50%	85	130	-35%
Cash Cost per Ton of Tin <sup>3</sup>	US\$/t Sn	7,569	8,562	-12%	7,874	8,850	-11%

In 3Q16, tin production reached 5,182 tons, a 25% increase compared to the same period of the previous year. This is mainly explained by the lower production levels registered on September 2015 due to the scheduled smelting & refining plant maintenance and to the start-up of the Ore Sorting plant that treats low grade ore.

Cash cost per treated ton<sup>2</sup> at San Rafael in 3Q16 was US\$ 60 vs. US\$ 119 in 3Q15, a reduction of 50%. It is relevant to note that this periods cash cost per ton includes, unlike 2015, the low grade ore being fed to the pre-concentration Ore Sorting plant (257,103 tons), plus 235,451 tons treated at the main concentration plant coming from the mine itself. This effect is temporary due to the fact that the low grade ore located at “Cancha 35” that is being used at the Ore Sorter will be consumed by 2017. Cash cost per treated ton is also as expected to fulfill the years’ guidance.

Cash cost per ton of tin<sup>3</sup> in 3Q16 was US\$ 7,569 vs. US\$ 8,562 in 3Q15, a 12% decrease compared to 3Q15, mainly due to higher tin production levels and cost reductions in the plant.

<sup>2</sup> Cash Cost per treated ton = San Rafael production costs / (Tons of Ore treated at Concentration + Tons of Ore treated at Pre-Concentration)

<sup>3</sup> Cash Cost per ton of tin = (San Rafael and Pisco production costs + selling expenses + change in tin concentrates inventory, excluding employee profit sharing, depreciation and amortization) / (Tin Production, in tons, excluding the tons recovered when treating Pitinga’s concentrate at Pisco)

## b. Pucamarca (Perú)

**Table N°5. Pucamarca Operating Results**

Pucamarca	Unit	3Q16	3Q15	Var (%)	9M16	9M15	Var (%)
Ore Treated	t	2,046,546	2,190,881	-7%	6,208,714	6,027,524	3%
Head Grade	g/t	0.43	0.60	-29%	0.38	0.61	-38%
Gold production (Au)	oz	24,956	33,464	-25%	86,108	93,782	-8%
Cash Cost per Treated Ton	US\$/t	4.0	3.7	10%	3.9	4.1	-6%
Cash Cost per Ounce of Gold <sup>4</sup>	US\$/oz Au	331	240	38%	278	264	5%

In 3Q16, gold production reached 24,956 ounces, a 25% decrease compared to the same period of the previous year. Nevertheless, this production levels are higher than the declared annual production guidance. In accordance with Pucamarca's geological and mine plan model, head grade was 0.43 g/t in 3Q16, 29% below 3Q15.

Cash cost per treated ton at Pucamarca was US\$ 4.0 in 3Q16 vs. US\$ 3.7 in 3Q15, a 10 % increase, mainly as a result of a lower volume of treated ore, in accordance with the mining plan parameters.

Cash cost per ounce of gold<sup>4</sup> in 3Q16 was US\$ 331, an increase of 38% compared to 3Q15. This increase is explained by the lower gold production in 3Q16 and higher cash cost per treated ton. This rise in the cash cost responds to the lower head grade expected in the mining plan.

## IV. CAPEX:

**Table N°6. CAPEX**

CAPEX	Unit	3Q16	3Q15	Var (%)	9M16	9M15	Var (%)
San Rafael	US\$ M	5.7	4.0	43%	20.0	8.2	146%
Pisco	US\$ M	1.8	0.4	335%	1.9	0.6	210%
Pucamarca	US\$ M	3.0	2.2	33%	5.8	2.5	133%
Other	US\$ M	0.1	0.0	3359%	1.8	0.1	2102%
<b>Total Capex</b>	<b>US\$ M</b>	<b>10.5</b>	<b>6.6</b>	<b>60%</b>	<b>29.6</b>	<b>11.4</b>	<b>161%</b>

In 3Q16, capex was US\$ 10.5 M, an increase of US\$ 3.9 M compared to the same period of the previous year. In 3Q16 the major investments were:

- San Rafael: Construction of the Pre-Concentration Plant ("Ore Sorting" project) for the low grade ore stockpiled at the "Cancha 35".
- Pucamarca: General trucks overhaul campaign and other investments to improve Pucamarca's productivity.

<sup>4</sup> Cash Cost per ounce of gold = (Pucamarca production cost + selling expenses, excluding employee profit sharing, depreciation and amortization) / (Gold production in ounces)

## V. FINANCIAL RESULTS:

**Table N°7. Financial Statements**

Financial Statements	Unit	2Q16	2Q15	Var (%)	9M16	9M15	Var (%)
Net Revenue	US\$ M	126.9	109.0	16%	354.9	364.7	-3%
Cost of Sales	US\$ M	-55.7	-64.8	-14%	-171.7	-207.2	-17%
<b>Gross Profit</b>	<b>US\$ M</b>	<b>71.2</b>	<b>44.2</b>	<b>61%</b>	<b>183.3</b>	<b>157.4</b>	<b>16%</b>
Selling Expenses	US\$ M	-1.0	-1.4	-28%	-3.3	-4.8	-32%
Administrative Expenses	US\$ M	-7.5	-5.1	48%	-21.6	-22.3	-3%
Exploration & Project Expenses	US\$ M	-1.7	-5.8	-71%	-8.7	-17.9	-51%
Other Operating Expenses, net	US\$ M	-1.6	-1.2	32%	-3.4	-3.1	9%
<b>Operating Income</b>	<b>US\$ M</b>	<b>59.4</b>	<b>30.8</b>	<b>93%</b>	<b>146.2</b>	<b>109.4</b>	<b>34%</b>
Finance Income (Expenses) and Others, net	US\$ M	-8.1	-7.2	12%	-21.7	-19.7	10%
Results from Subsidiaries and Associates	US\$ M	-21.3	-36.5	-	-36.8	-67.5	-45%
Exchange Difference, net	US\$ M	-0.7	-0.3	122%	-0.4	-0.3	41%
<b>Profit before Income Tax</b>	<b>US\$ M</b>	<b>29.3</b>	<b>-13.3</b>	<b>-</b>	<b>87.3</b>	<b>21.8</b>	<b>300%</b>
Income Tax Expense	US\$ M	-20.3	-11.9	70%	-38.0	-46.0	-17%
<b>Net Income</b>	<b>US\$ M</b>	<b>9.0</b>	<b>-25.2</b>	<b>-</b>	<b>49.3</b>	<b>-24.1</b>	<b>-</b>
Net Income Margin	%	7%	-23%	-	14%	-7%	-
<b>EBITDA</b>	<b>US\$ M</b>	<b>72.0</b>	<b>46.5</b>	<b>55%</b>	<b>180.9</b>	<b>157.8</b>	<b>15%</b>
EBITDA Margin	%	57%	43%	33%	51%	43%	18%
<b>Adjusted Net Income</b>	<b>US\$ M</b>	<b>31.0</b>	<b>11.6</b>	<b>167%</b>	<b>86.6</b>	<b>43.7</b>	<b>98%</b>

### a. Net revenue:

In 3Q16, net revenue reached US\$ 126.9 M, an increase of 16% (+US\$ 17.9 M) compared to 3Q15. This increase is mainly explained by higher tin and gold prices (+23% and +19%, respectively), partially offset by lower sold volumes of tin (-1%) and gold (-11%).

**Table N°8. Net revenue Volume by product**

Net Revenue Volume	Unit	3Q16	3Q15	Var (%)	9M16	9M15	Var (%)
Tin	t	4,721	4,771	-1%	14,066	15,352	-8%
Gold	oz	25,600	28,661	-11%	82,767	88,076	-6%

**Table N°9. Net revenue in US\$ by product**

Net Revenue in US\$	Unit	3Q16	3Q15	Var (%)	9M16	9M15	Var (%)
Tin	US\$ M	92.3	76.3	21%	250.4	259.8	-4%
Gold	US\$ M	34.6	32.8	6%	104.6	104.9	0%
<b>TOTAL</b>	<b>US\$ M</b>	<b>126.9</b>	<b>109.0</b>	<b>16%</b>	<b>354.9</b>	<b>364.7</b>	<b>-3%</b>

### b. Gross Profit:

Gross profit during 3Q16 reached US\$ 71.2 M, a 61% increase (US\$ 27.0 M) compared to the same

Adjusted Net Income = Net income excluding Results from Subsidiaries and Associates and Exchange Difference, net

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period of the previous year, mainly due to production cost savings, improved productivity at San Rafael and Pucamarca and higher tin and gold prices during the quarter.

**c. Administrative Expenses:**

Administrative expenses in 3Q16 were US\$ 7.5 M, 48% higher than 3Q15, mainly due to higher workers profit participation, consequently with the higher income achieved in the period. Also, due to the extraordinary effect occurred in 3Q15 as a consequence of an adjustment in the accrued cumulative participations.

**d. Exploration & Project Expenses:**

In 3Q16, exploration & project expenses totaled US\$ 1.7 M, a decrease of 71% (US\$ 4.1 M) compared to 3Q15. This decrease is mainly due to optimization and prioritization of exploration efforts at San Rafael surrounding areas. Also, the transition to feasibility phase of the B2 and Marcobre projects at the end of 2Q16 has caused an expense capitalization in the period.

**e. EBITDA:**

EBITDA in 3Q16 amounted to US\$ 72.0 M, an increase of 55% (US\$ 25.5 M) compared to 3Q15. This was mainly due to higher gross profit as well as optimization in Explorations & Projects expenses. The EBITDA margin in 3Q16 reached 57% vs 43% in 3Q15. The cumulative EBITDA reached US\$ 180.9 M vs US\$ 157.8 M obtained in the same period of the past year.

**f. Results from Subsidiaries and Associates:**

Results from subsidiaries and associates impacted Minsur's individual results in -US\$ 21.3 M in 3Q16, due to the losses recorded in our associate companies during the quarter. This losses don't have an impact on the company's cash flow.

**g. Net Income and Adjusted Net Income:**

Net income in 3Q16 reached US\$ 9.0 M, an increase of US\$ 34.2 M compared to 3Q15, mainly due to better results in our operations. Similarly, the adjusted net income reached US\$ 31.0 M, an 167% increase vs 3Q15. The cumulative Net Income reached US\$ 49.3 M vs -US\$ 24.1 M obtained in the same period of the past year. Also, the adjusted cumulative Net Income reached US\$ 86.6 M vs -US\$ 43.7 M obtained in the same period of the past year

## VI. LIQUIDITY:

As of September 30, 2016, cash and cash equivalents totaled US\$ 480.4 M, a 17% decrease compared to the US\$ 575.5 M at the end of 2015. The cash reduction is explained by a transfer of funds to one of Minsurs' subsidiaries for the acquisition of the remaining 30% equity in the Marcobre project. Likewise, a capital contribution was made directly to other subsidiaries for investments in the quarter (US\$ 17 M). Regarding the debt level, total financial debt reached US\$ 439.8 M, in line with the total debt recorded by the end of 2015. The net leverage ratio reached -0.2x as of September 2016 vs. -0.7x at the end of 2015.

**Table N°10. Total Debt**

Financial Ratios	Unit	sep-16	dic-15	Var (%)
Total Debt	US\$ M	439.8	439.4	0%
Cash	US\$ M	480.4	575.5	-17%
Net Debt	US\$ M	-40.7	-136.1	-70%
Total Debt / EBITDA	x	1.9x	2.1x	-10%
Net Debt / EBITDA	x	-0.2x	-0.7x	73%