



MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE YEAR ENDED DECEMBER 31, 2019

# MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis ("MD&A") has been prepared as at March 12, 2020 and should be read in conjunction with the audited consolidated financial statements of Ero Copper Corp. ("Ero", the "Company", or "we") as at, and for the year ended December 31, 2019, and related notes thereto, which are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board (the "IASB"). All references in this MD&A to "Q4 2019" and "Q4 2018" are to the three months ended December 31, 2019 and December 31, 2018, respectively. All references to "Fiscal 2019", "Fiscal 2018", and "Fiscal 2017" are to the years ended December 31, 2019, December 31, 2018, and December 31, 2017, respectively. All dollar amounts are expressed in United States ("US") dollars and tabular amounts are expressed in thousands of US dollars, unless otherwise indicated. References to "\$" or "dollars" are to US dollars, references to "C\$" are to Canadian dollars, and references to "R\$" are to Brazilian Reals.

This MD&A refers to various non-IFRS measures, such as C1 cash cost of copper produced (per lb), C1 cash cost of gold produced (per ounce), EBITDA, Adjusted EBITDA, Adjusted net income attributable to owners of the Company, Adjusted net income per share attributable to owners of the Company, Working Capital (Deficit), Available Liquidity, and Net Debt. Please refer to the section titled "NON-IFRS MEASURES" within this MD&A for a discussion of non-IFRS measures.

This MD&A contains "forward-looking information" that is subject to risk factors set out in a cautionary note contained at the end of this MD&A. The Company cannot assure investors that such information will prove to be accurate, and actual results and future events may differ materially from those anticipated in such information. The results for the periods presented are not necessarily indicative of the results that may be expected for any future period. Investors are cautioned not to place undue reliance on this forward-looking information. All information contained in this MD&A is current and has been approved by the Board of Directors of the Company (the "Board") as of March 12, 2020, unless otherwise stated.

## BUSINESS OVERVIEW

Ero, headquartered in Vancouver, B.C., is focused on copper production growth from the Vale do Curaçá Property, located in Bahia, Brazil. The Company's primary asset is a 99.6% interest in the Brazilian copper mining company, Mineração Caraíba S.A. ("MCSA"), 100% owner of the Vale do Curaçá Property with over 40 years of operating history in the region. The Company currently mines copper ore from the Pilar and Vermelhos underground mines. In addition to the Vale do Curaçá Property, MCSA owns 100% of the Boa Esperança development project, an IOCG-type copper project located in Pará, Brazil and the Company, directly and indirectly, owns 97.6% of the NX Gold Mine, an operating gold and silver mine located in Mato Grosso, Brazil. Additional information on the Company and its operations, including technical reports on the Vale do Curaçá, Boa Esperança and NX Gold properties, can be found on the Company's website ([www.ero-copper.com](http://www.ero-copper.com)) and on SEDAR ([www.sedar.com](http://www.sedar.com)).

## HIGHLIGHTS

|   | 2019 - Q4  | 2019 - Q3  | 2019       | 2018 - Q4  | 2018       |
|---|------------|------------|------------|------------|------------|
| <b>Operating Information</b>  |            |            |            |            |            |
| <b>Copper (MCSA Operations)</b>                                     |            |            |            |            |            |
| Ore Processed (tonnes)  | 589,065    | 587,915    | 2,424,592  | 777,480    | 2,257,917  |
| Grade (% Cu)  | 2.16       | 1.84       | 1.93       | 1.77       | 1.56       |
| Cu Production (tonnes)  | 11,526     | 9,674      | 42,318     | 12,104     | 30,426     |
| Cu Production (lbs)   | 25,411,100 | 21,326,717 | 93,295,598 | 26,685,324 | 67,076,849 |
| Cu Sold in Concentrate (tonnes)                                     | 11,595     | 10,200     | 42,759     | 12,900     | 30,107     |
| Cu Sold in Concentrate (lbs)  | 25,562,212 | 22,486,742 | 94,267,101 | 28,439,667 | 66,374,564 |
| C1 cash cost of copper produced (per lb)                            | \$ 0.80    | \$ 1.01    | \$ 0.93    | \$ 0.99    | \$ 1.19    |
| <b>Gold (NX Gold Operations)</b>                                    |            |            |            |            |            |
| Au Production (ounces)  | 6,043      | 4,356      | 30,434     | 10,008     | 39,808     |
| C1 cash cost of gold produced (per ounce)                           | \$ 980     | \$ 1,169   | \$ 691     | \$ 540     | \$ 520     |
| <b>Financial information (\$millions, except per share amounts)</b> |            |            |            |            |            |
| Revenues  | \$ 75.7    | \$ 60.6    | \$ 284.8   | \$ 85.1    | \$ 233.1   |
| Gross profit  | \$ 31.1    | \$ 21.3    | \$ 117.1   | \$ 39.0    | \$ 82.2    |
| EBITDA  | \$ 34.3    | \$ 35.1    | \$ 141.4   | \$ 40.2    | \$ 70.5    |
| Adjusted EBITDA   | \$ 31.2    | \$ 27.3    | \$ 134.1   | \$ 39.0    | \$ 99.9    |
| Cash flow from operations   | \$ 35.9    | \$ 29.5    | \$ 127.8   | \$ 24.0    | \$ 82.9    |
| Net income (loss)   | \$ 45.4    | \$ 16.3    | \$ 92.5    | \$ 11.3    | \$ (3.0)   |
| Net income (loss) attributable to owners of the Company             | \$ 45.2    | \$ 16.3    | \$ 91.9    | \$ 11.2    | \$ (3.2)   |
| Net income (loss) per share attributable to owners of the Company   |            |            |            |            |            |
| - Basic   | \$ 0.53    | \$ 0.19    | \$ 1.08    | \$ 0.13    | \$ (0.04)  |
| - Diluted   | \$ 0.49    | \$ 0.18    | \$ 1.01    | \$ 0.13    | \$ (0.04)  |
| Adjusted net income attributable to owners of the Company           | \$ 40.7    | \$ 10.2    | \$ 86.3    | \$ 7.9     | \$ 10.9    |
| Adjusted net income per share attributable to owners of the Company |            |            |            |            |            |
| - Basic   | \$ 0.47    | \$ 0.12    | \$ 1.01    | \$ 0.09    | \$ 0.13    |
| - Diluted   | \$ 0.44    | \$ 0.11    | \$ 0.94    | \$ 0.09    | \$ 0.12    |
| Cash and Cash Equivalents   | \$ 21.5    | \$ 21.7    | \$ 21.5    | \$ 18.9    | \$ 18.9    |
| Working Capital (Deficit)   | \$ (4.9)   | \$ 6.4     | \$ (4.9)   | \$ (9.3)   | \$ (9.3)   |
| Net Debt  | \$ (136.4) | \$ (133.4) | \$ (136.4) | \$ (130.3) | \$ (130.3) |

## 2019 Highlights

### 2019 Operational Highlights

#### Another record year of copper production

- Increased year-on-year copper production by 39.1%, with 42,318 tonnes of copper produced in concentrate compared to 30,426 tonnes produced in 2018.
- Exceeded the Company's 2019 original guidance of 37,000 tonnes of copper by 14.3%.
- C1 cash cost of \$0.93 per pound of copper produced for 2019, \$0.07 below the low-end of the Company's 2019 guidance range of \$1.00 to \$1.10 per pound of copper produced.
- Total of approximately 2.4 million tonnes of ore grading 1.93% copper processed during the year producing 42,318 tonnes of copper in concentrate after average metallurgical recoveries of 90.5%.
- Advanced several key capital programs in 2019 including completion of approximately 235,000 meters of drilling, acceleration of development at Pilar and Vermelhos Mines to enhance operational flexibility and production volumes, commencement of civil works and infrastructure installation for the Company's high-intensity grinding mill which is expected to be commissioned during Q2 2020, and installation of a 200,000 tonne per annum ore sorting plant that was commissioned in Q1 2020.
- Total annual gold and silver production at the NX Gold operations of 30,434 ounces gold and 19,641 ounces silver at C1 cash costs of \$691 per ounce of gold produced.

### 2019 Financial Highlights

Cash position, liquidity and available lines of credit: Total cash and cash equivalents and available liquidity at December 31, 2019 was \$21.5 million and \$25.1 million compared to \$18.9 million and \$4.7 million, respectively, at the end of 2018. Increased liquidity is due to a reduction in the Company's working capital deficit from \$9.3 million at the end of 2018 to \$4.9 million at the end of 2019, as well as an increase in the Company's credit facilities during the year. As at the end of 2019, the Company had \$14.0 million undrawn on its secured, revolving credit facility in Canada, plus an additional R\$64.8 million in available undrawn lines of credit in Brazil.

Revenue: The Company increased year-on-year revenues from its copper operations at MCSA by 33.3%, totalling \$246.2 million in 2019 compared to \$184.7 million in 2018. The increase in revenue was attributed to the increase in year-on-year copper production.

Year-on-year decline in gold revenue from the Company's gold operations at NX Gold was a result of decreased production volumes as we transition into the Santo Antonio vein, partially offset by increased gold prices, resulting in a net decrease in gold revenue of 20.1% totalling \$38.6 million in 2019 compared to \$48.4 million in 2018.

Mine gross profit: The Company significantly increased year-on-year mine gross profit from its copper operations at MCSA totalling \$105.6 million in 2019 compared to \$66.1 million in 2018. The increase in mine gross profit was primarily driven by increased revenues from increased copper production, and a decrease in cash costs over the prior year as a result of higher grades processed and improved metallurgical recoveries. The Company also recognized mine gross profit of \$11.4 million in 2019 compared to \$16.1 million in 2018 from its gold operations at NX Gold as a result of lower gold production volumes.

Net income: The Company recognized net income of \$92.5 million (net income per share of \$1.08) in 2019 compared to a net loss of \$3.0 million in 2018 (loss per share of \$0.04), attributable to increased mine gross profit, a recovery related to value added taxes previously paid on sales in Brazil, and the recognition of available tax losses and tax credits in MCSA.

During the year, the Company recognized a recovery of \$21.6 million in net income related to value added taxes previously paid on sales in Brazil. The recovery was recognized as a result of a Brazil Supreme Court ruling in 2017 that concluded that the relevant taxing authorities had historically used an incorrect methodology to determine such taxes. The ruling set a precedent for all companies in Brazil but was required to be confirmed for the

Company's specific claim, for which approval was received in July 2019. These credits can be used to offset a variety of other taxes, including income taxes and taxes on future sales.

In addition, the Company recognized a \$28.3 million net deferred tax recovery primarily resulting from the recognition of available tax losses and tax credits in MCSA. At December 31, 2019, the Company considered the taxable income generated since acquisition of MCSA and forecasted future taxable income and determined that it was now considered probable that the benefit of these losses and tax credits in MCSA would be realized.

## Q4 2019 Highlights

### Q4 Operational Highlights

#### Continued Strong Performance at MCSA Operations

- 589,065 tonnes processed grading 2.16% copper producing 11,526 tonnes of copper in concentrate after metallurgical recoveries that averaged 90.7% during the period.
- C1 cash cost of \$0.80 per pound of copper produced during Q4 2019, a \$0.21 per pound improvement over the third quarter, resulting in full-year 2019 C1 cash costs of \$0.93 per pound of copper produced.

#### Exploration focus turns to regional greenfield targets in 2020

- One of the most comprehensive exploration programs underway globally with 26 drill rigs operating within the Curaçá Valley plus an additional four drill rigs operating at the NX Gold Mine.
- Prior to the end of the quarter, the Company released its fourth quarter exploration results outlining continued success within the Curaçá Valley including two new regional discoveries at N1 South and Vermelhos North, the identification of the "Keel Zone" - a nickel-platinum-group metals rich zone at Siriema in the Vermelhos District, plus the most significant set of holes drilled to date in the Deepening Extension of the Pilar Mine.
- Within the Vermelhos District, where 12 drill rigs are currently operating, the identification of a brecciated massive sulphide zone within the Siriema deposit containing copper, nickel, cobalt and platinum, palladium, rhodium and gold ("3PGE+Au") was released. Results were highlighted by hole FSI-40 that intersected 9.1 meters grading 2.66% copper, 1.74% nickel, 0.07% cobalt and 1.46 grams per tonne 3PGE+Au including 5.6 meters grading 3.37% copper, 2.59% nickel, 0.10% cobalt, and 2.08 grams per tonne 3PGE+Au. The zone remains open at depth and has been delineated over approximately 150 meters in strike length, 105 meters down plunge and over an average thickness of 10 meters. The results of the multi-element analysis at Siriema represents the first evidence in the history of the Curaçá Valley of a consistent zone of elevated nickel and platinum-group metals ("PGMs"). Work continues to test the extension of the zone to depth and to the north is planned in 2020.
- In the Pilar District, where 11 drill rigs are currently operating, drilling in the Deepening Extension zone continues to significantly extend the known extent of high-grade copper mineralization at the mine both with respect to thickness and grade. The latest results are indicative of the emergence of a new high-grade mineralized chamber, or "Superpod", highlighted by hole FC5616 that intersected 51.8 meters grading 3.49% copper including 33.4 meters grading 4.96% copper and hole FC5615 that intersected 62.5 meters grading 1.65% copper including 26.1 meters grading 2.37% copper. These results are complemented by previously announced intercepts FC47142 that intersected 34.7 meters grading 2.29% copper including 18.6 meters grading 3.15% copper and hole FC47139 that intersected 7.1 meters grading 6.50% copper including 4.1 meters grading 9.01% copper, both located on section 47, approximately 400 meters south of the new intercepts on section 56 (as referenced in the Company's press release dated September 12, 2019).
- Three drill rigs are currently operating on regional exploration targets within the Surubim District.

## Q4 NX Gold Operational Highlights

- Q4 2019 gold and silver production at the Company's high-grade NX Gold Mine of 6,043 ounces of gold and 4,315 ounces of silver, a 39% improvement over the third quarter as first ore from the Santo Antonio vein was mined and processed.
- 43,207 tonnes grading 6.32 grams per tonne gold processed during the period, producing 6,043 ounces of gold after metallurgical recoveries that averaged 68.9% during Q4 2019.
- Fourth quarter C1 cash cost of \$980 per ounce of gold produced, resulting in full year 2019 C1 cash costs of \$691 per ounce of gold produced.
- The Company expects production to stabilize throughout 2020 as production reaches planned capacity from the Santo Antonio vein.
- An updated NI 43-101 (as defined herein) compliant mineral resource and mineral reserve estimate, and associated mine plan, was announced in the fourth quarter of 2019, outlining an updated, high-grade mineral reserve demonstrating a production profile averaging 40,500 oz per year over an initial three-year mine life.
- Four drill rigs are currently operating at the NX Gold Mine and exploration efforts are focused on conversion of the inferred portions of the Santo Antonio vein discovery and extensions of the Brás vein aimed at further increasing the life-of-mine.

## Q4 Financial Highlights

Revenue: Revenues from the Company's copper operations at MCSA decreased by 6.4% from \$72.3 million in Q4 2018 to \$67.7 million in Q4 2019. The decrease in revenue was attributed to the decrease in copper production.

Revenues from the Company's gold operations at NX Gold decreased 37.1% from \$12.8 million in Q4 2018 to \$8.0 million in Q4 2019. The decline was primarily a result of decreased production volumes, partially offset by increased gold prices.

Mine gross profit: Mine gross profit from the Company's copper operations at MCSA totaled \$30.4 million in Q4 2019 compared to \$33.9 million in Q4 2018. The decrease in mine gross profit was primarily driven by decreased revenues from decreased copper production, partially offset by a decrease in cash costs over the comparative period as a result of higher grades processed and improved metallurgical recoveries. The Company also recognized mine gross profit of \$0.6 million in Q4 2019 compared to \$0.6 million in Q4 2018 from its gold operations at NX Gold.

Net income: The Company recognized net income of \$45.4 million (net income per share of \$0.53) in Q4 2019 compared to a net income of \$11.3 million in Q4 2018 (net income per share of \$0.13), primarily attributable the recognition of available tax losses and tax credits in MCSA.

During Q4 2019, the Company recognized a \$27.4 million net deferred tax recovery primarily resulting from the recognition of available tax losses and tax credits in MCSA. At December 31, 2019, the Company considered the taxable income generated since acquisition of MCSA and forecasted future taxable income and determined that it was now considered probable that the benefit of these losses and tax credits in MCSA would be realized.

## REVIEW OF OPERATIONS

### Mineração Caraíba S.A. (Vale do Curaçá):

|  | 2019 - Q4  | 2019 - Q3  | 2019       | 2018 - Q4  | 2018       |
|--|------------|------------|------------|------------|------------|
| <b>Operating Information</b>             |            |            |            |            |            |
| <b>Copper (MCSA Operations)</b>          |            |            |            |            |            |
| Ore Processed (tonnes)                   | 589,065    | 587,915    | 2,424,592  | 777,480    | 2,257,917  |
| Grade (% Cu)                             | 2.16       | 1.84       | 1.93       | 1.77       | 1.56       |
| Cu Production (tonnes)                   | 11,526     | 9,674      | 42,318     | 12,104     | 30,426     |
| Cu Production (lbs)                      | 25,411,100 | 21,326,717 | 93,295,598 | 26,685,324 | 67,076,849 |
| Concentrate Grade (% Cu)                 | 35.0       | 33.7       | 34.8       | 34.5       | 34.5       |
| Recovery (%)                             | 90.7       | 89.2       | 90.5       | 87.8       | 86.3       |
| Concentrate Sales (tonnes)               | 33,926     | 29,142     | 122,966    | 37,801     | 87,307     |
| Cu Sold in Concentrate (tonnes)          | 11,595     | 10,200     | 42,759     | 12,900     | 30,107     |
| Cu Sold in Concentrate (lbs)             | 25,562,212 | 22,486,742 | 94,267,101 | 28,439,667 | 66,374,564 |
| C1 cash cost of copper produced (per lb) | \$ 0.80    | \$ 1.01    | \$ 0.93    | \$ 0.99    | \$ 1.19    |

MCSA operations continued to perform well during the fourth quarter, with a significant increase in both tonnes and grade mined from Pilar. During the quarter, 433,258 tonnes of ore were mined grading 1.73% copper, a 19% increase in tonnes mined, and a 15% increase in grade over the prior quarter (362,667 tonnes mined grading 1.51% copper during third quarter). At Vermelhos, production volumes were in-line with the prior quarter with 185,045 tonnes mined. Average grades mined at Vermelhos declined slightly to 3.39% copper due to normal stope sequencing. Increases in tonnage and grade mined from the Pilar mine resulted in a significant improvement in total contained copper, with a total of 618,303 tonnes mined grading 2.22% copper during the period. For the full year 2019, a total of approximately 2.46 million tonnes grading 1.98% copper was mined.

At the Company's milling operations, 589,065 tonnes of ore grading 2.16% copper was processed during Q4 2019. Metallurgical recoveries averaged 90.7% during the period, resulting in average full-year 2019 recovery of 90.5%, an improvement over the Company's guidance of 90.0%. During 2019, a total of 2.42 million tonnes of ore was processed grading 1.93% copper, resulting in the production of 42,318 tonnes of copper in concentrate. The benefit of several low-cost milling and flotation improvement initiatives undertaken at the end of 2018 have continued to support strong metallurgical performance in 2019. Going forward, improved metallurgical performance remains a key focus area of the Company, complimented by the high-intensity regrind mill project, currently underway.

The Company's regrind mill project, sanctioned during the first quarter of 2019, remains on-budget and on-track for equipment delivery during the first quarter of 2020 with commissioning and ramp-up during the second quarter of 2020. A significant improvement in overall metallurgical recoveries of 3% to 4% and plant performance beyond those already realized are expected once the new mill is operational.

In addition to the regrind mill project, the Company completed delivery of a 200,000 tonne per annum ore sorting plant at the end of 2019. Construction of associated infrastructure was completed in the fourth quarter of 2019, and commissioning occurred during first quarter 2020, subsequent to the end of the year. The Company aims to test a variety of ore sources and grades from different deposits throughout the Curaçá Valley over the course of the first half of 2020 with the aim of better evaluating the potential of pre-concentration. The ore sorting project represents an investment in longer-term potential value optimization for deposits within the Company's current portfolio.

C1 cash cost averaged \$0.80 and \$0.93 per pound of copper produced, respectively, during the three and twelve-month period ended December 31, 2019. C1 cash costs during the fourth quarter reflect the increase in contained copper produced driven by mill head-grades, resulting in a \$0.21 decrease in C1 cash costs compared to third quarter. As a result of the Company's increased production, and favorable prevailing foreign exchange rates, C1 cash costs for the full year came in \$0.07 below the low end of the Company's guidance of \$1.00-\$1.10 per pound of copper produced.

Subsequent to the end of the quarter, the Company announced its production, cash cost, and capital guidance for 2020. The Company provided annual copper production guidance of 41,000 to 43,000 tonnes of copper in concentrate at C1 cash costs between \$0.85 and \$0.95 per pound of copper produced. Capital cost guidance for 2020 is \$74 million, with an additional \$28 million to fund the 2020 exploration program through the end of Q3 2020. The program is designed to complete approximately 172,000 meters of drilling through the end of Q3 2020, an annualized run rate of approximately 230,000 meters of drilling. By year end, the Company expects that 60% of total drilling will be allocated to testing new greenfield targets identified through the Company's airborne geophysical survey and ongoing data analysis.

In support of its strategy to drive organic growth of the Company through exploration and new project delivery, Ero will continue to run one of the most comprehensive drill programs globally throughout 2020. With 26 drill rigs currently operating, the Company remains focused on using a data driven approach to exploration. This program has already resulted in several new discoveries since 2016 including two new discoveries announced in the fourth quarter at N1 South and Vermelhos North, as well as the identification of a nickel-PGM rich zone at Siriema.

In the Vermelhos District, approximately 80 kilometers to the north of the Caraiba Mill complex, which includes the high-grade operating Vermelhos Mine, exploration continues to focus on continued testing of high-value exploration targets surrounding the Vermelhos Mine. Systematic testing of targets along the previously identified 10-kilometer trend of soil and induced polarization ("IP") anomalies along the Paredao Antiform (known as the "Vermelhos System") is ongoing, with the most recent discoveries of N1 South and Vermelhos North representing the current known southern and northern extent of the Vermelhos System, respectively.

In-mine exploration in the Vermelhos District also continues to deliver results as new mineralization was identified beneath the Toboggan and Sombrero orebodies with the most significant intercept returning 6.4 meters at 5.03% copper, as well as in the East Zone, where drilling in the deep portion of the East Zone returned 8.4 meters grading 4.02% copper at a depth of approximately 450 meters below surface. In-mine exploration at Vermelhos in 2020 will continue to test targets beneath the known extent of mineralization in the main orebody, as well the vertical extent of the East Zone.

In addition to in-mine exploration, drilling within the broader Vermelhos System remains focused on advancing the Siriema and N8/N9 deposits. Drilling at Siriema in the fourth quarter was focused on testing high priority areas within the "keel zone", a high-grade zone of brecciated massive sulphide containing copper-nickel and PGMs, identified through down-hole electromagnetic ("EM") surveys. Results were highlighted by hole FSI-40 which intersected 9.1 meters grading 2.66% copper, 1.74% nickel, 0.07% cobalt and 1.46 grams per tonne 3PGE+Au. Drilling at N8/N9 during the period was focused on testing the extent of known mineralization, as well as the high-grade zones within each orebody. The planned 2020 exploration program will continue to delineate the extent of the "keel zone" at Siriema and the extent of the N8/N9 orebodies.

During the fourth quarter, the Company re-prioritized drilling of the Deepening Extension where a new set of deep drill holes, drilled down plunge to the north have intersected thick and high-grade mineralization indicative of a newly identified mineralized chamber, or "Superpod", in the Deepening. In addition, drilling of the Baraúna and South Extension zones continued to confirm extensions of mineralization within these zones.



Drilling in the Deepening Extension is currently targeting mineralization on the East Limb of the Pilar Mine between level -725 and level -1300 approximately 1,200 meters to 1,750 meters below surface and approximately 100 meters laterally from the current level of the primary ramp (completed to level -925). Underground drilling during the period continued work that commenced in mid-2019 to re-prioritize testing of the known extent of mineralization within the zone, including down-plunge exploration drilling beneath the deepest known extents of mineralization within the Pilar Mine. The results during the fourth quarter are among the most significant holes on a grade-meter basis drilled by the Company in the Pilar Mine since acquisition of the Vale do Curaçá Property in 2016. Results were highlighted by hole FC5616 that intersected 51.8 meters grading 3.49% copper including 33.4 meters grading 4.96% copper and hole FC5615 that intersected 62.5 meters grading 1.65% copper including 26.1 meters grading 2.37% copper. These results are complemented by the previously announced intercepts of FC47142 that intersected 34.7 meters grading 2.29% copper including 18.6 meters grading 3.15% copper and hole FC47139 that intersected 7.1 meters grading 6.50% copper including 4.1 meters grading 9.01% copper, both located on section 47, approximately 400 meters south of the new intercepts on section 56. Exploration results from the Deepening Extension continue to support the belief that the Pilar Mine is open at depth, where high-grade mineralization continues to be encountered approximately 350 meters below the deepest level of current development at the mine. Currently, five drill rigs are positioned to drill the Deepening, targeting resource conversion and testing the extent of the mineralization to the North, South, and at depth.

Elsewhere within the Pilar underground mine, drilling at Baraúna was performed from surface targeting mineralization beneath the southern portion of the open pit mine and extensions of mineralization to the south. Results were highlighted by hole FC1923 that intersected 31.8 meters grading 0.83% copper including 7.0 meters grading 1.31% copper immediately beneath the south pit wall and FC0901 that intersected 4.5 meters grading 0.44% copper from 19.6 meters down hole, approximately 200 meters south of the known limit of mineralization within the Pilar Mine. While results to date in this area are low-grade disseminated mineralization, additional geophysical work is ongoing to better refine high-grade targeting in this zone. Drilling in the South Extension continued to confirm the continuity of the orebody to the south, and current drilling is testing the extent of this zone at depth and to the South.

## NX Gold S.A.

|   | 2019 - Q4 | 2019 - Q3 | 2019    | 2018 - Q4 | 2018    |
|---|-----------|-----------|---------|-----------|---------|
| <b>Operating Information</b>              |           |           |         |           |         |
| <b>Gold (NX Gold Operations)</b>          |           |           |         |           |         |
| Ore mined (tonnes)                        | 40,453    | 33,601    | 154,271 | 37,950    | 119,469 |
| Ore milled (tonnes)                       | 43,207    | 34,813    | 158,275 | 38,464    | 117,857 |
| Head grade (grams per tonne Au)           | 6.32      | 4.51      | 6.98    | 8.85      | 11.55   |
| Recovery (%)                              | 68.9%     | 86.2%     | 85.7%   | 91.5%     | 91.0%   |
| Gold ounces produced (oz)                 | 6,043     | 4,356     | 30,434  | 10,008    | 39,808  |
| Silver ounces produced (oz)               | 4,315     | 2,909     | 19,641  | 6,186     | 24,700  |
| Gold sold (oz)                            | 5,810     | 4,579     | 29,755  | 10,603    | 39,808  |
| Silver sold (oz)                          | 4,247     | 2,999     | 19,142  | 6,752     | 24,700  |
| C1 cash cost of gold produced (per ounce) | \$ 980    | \$ 1,169  | \$ 691  | \$ 540    | \$ 520  |

The fourth quarter at the NX Gold Mine was a continuation of transitioning mining activity to the Santo Antonio vein. During the period, remaining exposed ore blocks continued to be mined from the Brás vein, while development and mining activities ramped up within Santo Antonio. As a result of first production from the Santo Antonio vein, ore production and grade were 20% and 30% improved versus the third quarter, respectively. During the fourth quarter, 43,207 tonnes of ore grading 6.32 grams per tonne of gold was processed, producing 6,043 ounces of gold and 4,315 ounces of silver as by-product after metallurgical recoveries that averaged 68.9%. Recoveries during the quarter were adversely impacted due to the transition of ore feed from Brás to Santo Antonio. Recoveries are expected to improve in the first quarter and throughout 2020. C1 cash costs averaged \$980 per ounce of gold produced. For the full year, the NX Gold Mine produced 30,434 ounces of gold at C1 cash costs of \$691 per ounce.

In the fourth quarter, the Company released its National Instrument 43-101, Standards of Disclosure for Mineral Projects ("NI 43-101") compliant Mineral Resource and Mineral Reserve estimate outlining a significantly improved Mineral Reserve extending mine-life by three years and demonstrating average annual production of 40,500 ounces of gold. Subsequent to the end of the quarter, the Company released 2020 production, cash cost, and capital expenditure guidance for the NX Gold Mine. The Company expects to produce 38,000 to 40,000 ounces of gold at C1 cash costs of \$475 to \$575 per ounce. Capital costs are expected to be \$6.0 million, plus an additional \$3.5 million allocated to exploration for 2020.

Following the release of the NI 43-101 compliant Mineral Resource and Mineral Reserve estimate and mine plan in the fourth quarter, the exploration focus at NX Gold has shifted to infill drilling of the inferred portions of the Santo Antonio orebody with the focus of converting additional mineralization into measured and indicated mineral resources. The regional exploration program continues to work to identify new targets within the Company's significant land holding in Mato Grosso. There are currently four drill rigs operating on the property.

## 2020 Guidance/Outlook

- Annual production guidance for the Curaçá Valley operations of 41,000 to 43,000 tonnes of copper in concentrate.
- C1 cash cost guidance of US\$0.85 to US\$0.95 per pound of copper produced and capital expenditure guidance of US\$74.0 million<sup>[1]</sup>.
- An additional US\$28 million<sup>[1]</sup> to fund the 2020 exploration program in the Curaçá Valley. The program is highlighted by 172,000 meters of planned exploration drilling through September 2020, an annualized rate of approximately 230,000 meters, of which approximately 60% is planned for regional exploration including drill testing of new greenfield targets identified during the Company's airborne geophysical survey and ongoing data analysis. This compares to approximately 235,000 meters drilled during 2019 of which only 23% was allocated to regional exploration.
- Annual production guidance for the NX Gold Mine of 38,000 to 40,000 ounces of gold at C1 cash costs of US\$475 to US\$575 per ounce of gold produced. Annual capital expenditure guidance for the NX Gold Mine of US\$5.7 million plus US\$3.5 million<sup>[1]</sup> in ongoing exploration expenditures.

<sup>[1]</sup> Capital and operating cost guidance presented in USD assuming a R\$ / \$ foreign exchange rate of 4.00.

## 2020 Production Outlook

|                                 | 2019 Original Guidance | 2019 Revised Guidance | 2019 Result | 2020 Guidance <sup>[1]</sup> |
|---------------------------------|------------------------|-----------------------|-------------|------------------------------|
| <b>Curaçá Valley Operations</b> |                        |                       |             |                              |
| Tonnes Processed                | 2,050,000              | 2,350,000             | 2,424,592   | 2,150,000                    |
| Copper Grade (% Cu)             | 2.00%                  | 1.95%                 | 1.93%       | 2.15%                        |
| Copper Recovery (%)             | 88.0%                  | 90.0%                 | 90.5%       | 91.0%                        |
| Cu Production (000 tonnes)      | 36.0 - 38.0            | 40.0 - 42.0           | 42.3        | 41.0 - 43.0                  |
| <b>NX Gold Operations</b>       |                        |                       |             |                              |
| Tonnes Processed                | -                      | -                     | 158,275     | 150,000                      |
| Gold Grade (gpt)                | -                      | -                     | 6.98        | 9.00                         |
| Gold Recovery (%)               | -                      | -                     | 85.7%       | 90.0%                        |
| Au Production (000 ounces)      | -                      | -                     | 30.4        | 38.0 - 40.0                  |
| Ag Production (000 ounces)      | -                      | -                     | 19.6        | n/a                          |

<sup>[1]</sup> Guidance is based on certain estimates and assumptions, including but not limited to, mineral reserve estimates, grade and continuity of interpreted geological formations and metallurgical performance. Please refer to the Company's AIF (as defined herein) for complete risk factors.

## 2020 Cash Cost Guidance

The Company's guidance for 2020 assumes a R\$ / \$ foreign exchange rate of 4.00, gold price of \$1,450 per ounce and silver price of \$17.00 per ounce.

|  | 2019 Revised Guidance | 2019 Result | 2020 Guidance   |
|--|-----------------------|-------------|-----------------|
| Curaçá Valley C1 Cash Cost Guidance (US\$/lb) <sup>[1]</sup> | \$1.00 - \$1.10       | \$0.93      | \$0.85 - \$0.95 |
| NX Gold Mine C1 Cash Cost Guidance (US\$/oz) <sup>[1]</sup>  | n/a                   | \$691       | \$475 - \$575   |

<sup>[1]</sup> Guidance is based on certain estimates and assumptions, including but not limited to, mineral reserve estimates, grade and continuity of interpreted geological formations and metallurgical performance. Please refer to the Company's SEDAR filings for complete risk factors.

## 2020 Capital Expenditure Guidance

The Company's capital expenditure guidance for 2020 assumes a R\$ / \$ foreign exchange rate of 4.00 and has been presented below in USD millions. Capital expenditure guidance, including discretionary capital for 2020, is based on a budgeted copper price of US\$2.65 per pound of copper.

| Curaçá Valley / Copper Operations                  | 2019 Revised Guidance | 2020 Guidance |
|--|-----------------------|---------------|
| Pilar Mine and Caraíba Mill Complex <sup>[1]</sup> | \$45.0                | \$58.0        |
| Vermelhos Mine                                     | \$20.0                | \$16.0        |
| Boa Esperança Project                              | \$1.0                 | \$0.2         |
| Capital Expenditure Guidance                       | \$66.0                | \$74.2        |
| Curaçá Valley Exploration <sup>[2]</sup>           | \$30.0                | \$28.0        |

  

| NX Gold Operations           | 2019 Guidance | 2020 Guidance |
|------------------------------|---------------|---------------|
| Capital Expenditure Guidance | n/a           | \$5.7         |
| Exploration <sup>[2]</sup>   | n/a           | \$3.5         |
| Total, NX Gold               | n/a           | \$9.2         |

<sup>[1]</sup> Pilar Mine and Caraíba Mill Complex capital expenditure guidance for 2020 includes completion of the high-intensity grinding mill and operation of the ore-sorting pilot plant.

<sup>[2]</sup> Exploration capital expenditure guidance for 2020 has been forecast through September of 2020 and, as with prior guidance, is dependent, in part, on future exploration success and subject to further review and revision.

### Mineração Caraíba S.A.

Copper production from the Curaçá Valley operations for 2020 is expected to be between 41,000 and 43,000 tonnes, with ore fed solely from the Pilar and Vermelhos underground mines. Production from the Pilar Mine is expected to contribute a total of approximately 1.4 million tonnes grading 1.40% copper while production from the Vermelhos Mine is expected to contribute a total of approximately 750,000 tonnes grading 3.50% copper resulting in a blended mill head grade of approximately 2.15% copper.

### NX Gold S.A.

Approximately 150,000 tonnes of ore will be mined and processed from the Santo Antonio vein in 2020 at an average grade of 9.00 grams per tonne of gold. Following average metallurgical recoveries of 90.0%, Gold production from the NX Gold Mine is expected to reach 38,000 to 40,000 ounces.

### Boa Esperança

A full review of the Boa Esperança Feasibility Study<sup>1</sup> remains ongoing with the goal of extending the potential mine life and increasing copper production among other desktop optimization initiatives. The Company expects to provide an update on these initiatives during the first half of 2020.

<sup>1</sup>. As defined herein under "NOTE REGARDING SCIENTIFIC AND TECHNICAL INFORMATION".

## REVIEW OF FINANCIAL RESULTS

The following table provides a summary of the financial results of the Company for Q4 2019 and Q4 2018. Tabular amounts are in thousands of US dollars, except share and per share amounts.

|  | Notes | Three months ended<br>December 31, 2019 | Three months ended<br>December 31, 2018 |
|--|-------|---|---|
| Revenue  | 1     | \$ 75,688                               | \$ 85,084                               |
| Cost of product sold                                       | 2     | (43,017)                                | (44,661)                                |
| Sales expenses   |       | (1,595)                                 | (1,441)                                 |
| Gross profit   |       | 31,076                                  | 38,982                                  |
| Expenses   |       |   |   |
| General and administrative                                 | 3     | (12,707)                                | (10,456)                                |
| Share-based compensation                                   |       | (1,304)                                 | (723)                                   |
| Income before the undernoted                               |       | 17,065                                  | 27,803                                  |
| Other income (expenses)                                    |       |   |   |
| Finance income   |       | 358                                     | 773                                     |
| Finance expense  | 4     | (2,014)                                 | (6,776)                                 |
| Foreign exchange gain                                      | 5     | 4,423                                   | 7,433                                   |
| Loss on debt settlement                                    | 6     | -                                       | (5,476)                                 |
| Other income (expense)                                     | 7     | 368                                     | (5,625)                                 |
| Income before income taxes                                 |       | 20,200                                  | 18,132                                  |
| Income tax recovery (expense)                              |       |   |   |
| Current  | 8     | (2,232)                                 | (1,853)                                 |
| Deferred   | 8     | 27,441                                  | (4,999)                                 |
|  |       | 25,209                                  | (6,852)                                 |
| Net income for the period                                  |       | 45,409                                  | 11,280                                  |
| Other comprehensive income                                 |       |   |   |
| Foreign currency translation gain                          |       | 6,528                                   | 3,830                                   |
| Comprehensive income                                       |       | \$ 51,937                               | \$ 15,110                               |
| Net income attributable to:                                |       |   |   |
| Owners of the Company                                      |       | \$ 45,169                               | \$ 11,210                               |
| Non-controlling interests                                  |       | 240                                     | 70                                      |
|  |       | \$ 45,409                               | \$ 11,280                               |
| Comprehensive income attributable to:                      |       |   |   |
| Owners of the Company                                      |       | \$ 51,671                               | \$ 15,026                               |
| Non-controlling interests                                  |       | 266                                     | 84                                      |
|  |       | \$ 51,937                               | \$ 15,110                               |
| Net income per share attributable to owners of the Company |       |   |   |
| Net income per share                                       |       |   |   |
| Basic  |       | \$ 0.53                                 | \$ 0.13                                 |
| Diluted  |       | \$ 0.49                                 | \$ 0.13                                 |
| Weighted average number of common shares outstanding       |       |   |   |
| Basic  |       | 85,620,168                              | 84,504,954                              |
| Diluted  |       | 91,670,988                              | 88,638,656                              |

Notes:

1. Revenues for Q4 2019 from copper sales was \$67.7 million (Q4 2018 - \$72.3 million), which included the sale of 11,595 copper tonnes in concentrate as compared to 12,900 copper tonnes for Q4 2018. The Company processed 24% less ore at a higher ore grade during Q4 2019 compared to Q4 2018. Revenues for Q4 2019 from gold sales was \$8.0 million (Q4 2018 - \$12.8 million), which included the sale of 5,810 ounces of gold, compared to 10,603 ounces of gold for Q4 2018.
2. Cost of product sold for Q4 2019 from copper sales was \$35.6 million (Q4 2018 - \$36.9 million) which consisted of \$11.1 million (Q4 2018 - \$9.3 million) in depreciation and depletion, \$9.4 million (Q4 2018 - \$8.5 million) in salaries and benefits, \$4.6 million (Q4 2018 - \$5.7 million) in materials and consumables, \$4.3 million (Q4 2018 - \$7.3 million) in contracted services, \$3.9 million (Q4 2018 - \$3.4 million) in maintenance costs, \$2.2 million (Q4 2018 - \$2.5 million) in utilities, and \$0.2 million (Q4 2018 - \$0.2 million) in other costs.  
  
Cost of product sold for Q4 2019 from gold sales was \$7.4 million (Q4 2018 - \$7.8 million) which primarily comprised of \$2.2 million (Q4 2018 - \$1.8 million) in salaries and benefits, \$1.2 million (Q4 2018 - \$0.8 million) in contracted services, \$1.2 million (Q4 2018 - \$1.4 million) in maintenance costs, \$1.1 million (Q4 2018 - \$1.3 million) in materials and consumables, \$0.9 million (Q4 2018 - \$1.8 million) in depreciation and depletion, and \$0.7 million (Q4 2018 - \$0.6 million) in utilities.
3. General and administrative expenses for Q4 2019 include \$10.3 million (Q4 2018 - \$3.8 million) with respect to MCSA for salaries and incentive payments, professional fees, office and sundry and provisions for tax, legal and labour claims, \$0.5 million (Q4 2018 - \$1.8 million) with respect to NX Gold for salaries and incentive payments, professional fees, office and sundry and provisions for tax, legal and labour claims, and \$1.9 million (Q4 2018 - \$4.8 million) with respect to the corporate head office in Vancouver. Corporate head office costs are primarily comprised of \$1.4 million (Q4 2018 - \$4.0 million) in salaries, incentive payments, and consulting fees, \$0.3 million (Q4 2018 - \$0.2 million) in travel-related costs, and \$0.2 million (Q4 2018 - \$0.4 million) in professional fees. Increases in general and administrative expenses in Q4 2019 as compared to Q4 2018 reflect the growth of operations, which included higher headcounts, incentive payments for exceeding board-mandated performance targets during 2019, as well as rate increases related to annual union contract negotiations at MCSA.
4. Finance expense for Q4 2019 was \$2.0 million (Q4 2018 - \$6.8 million) and is primarily comprised of interest on loans at the corporate head office of \$2.0 million (Q4 2018 - \$1.5 million), interest on loans and borrowings at MCSA and NX Gold of \$0.7 million (Q4 2018 - \$3.1 million), commitment fees of \$0.5 million (Q4 2018 - \$0.6 million), partially offset by other finance income of \$1.0 million (Q4 2018 - \$2.0 million), and the reduction of asset retirement obligation accretion of \$0.2 million (Q4 2018 - accretion of \$3.8 million). Interest on loans and borrowings at MCSA and NX Gold decreased due to the repayments of certain loans during 2018 and 2019.
5. Foreign exchange gain for Q4 2019 was \$4.4 million (Q4 2018 - \$7.4 million). This amount is primarily comprised of a foreign exchange gain on USD denominated debt of \$3.8 million (Q4 2018 - \$4.8 million) in MCSA for which the functional currency is the Brazilian Real and a foreign exchange gain on unrealized derivative contracts of \$1.4 million (Q4 2018 - \$4.0 million), partially offset by a foreign exchange loss on realized derivative contracts of \$0.5 million (Q4 2018 - \$1.0 million). The decrease in foreign exchange gains was primarily a result of the foreign exchange rate between the Brazilian Real and the US dollar fluctuating less during Q4 2019 as compared to Q4 2018 and a decrease in the outstanding USD denominated debt held in MCSA.
6. In Q4 2018, the Company recognized a loss on settlement of debt of \$5.5 million, comprising of a \$3.7 million loss in early repayment fees for the settlement of certain debt in MCSA and a \$1.8 million loss in loan settlement fees when the Company replaced its \$50 million senior secured non-revolving credit facility with a \$130 million facility from a syndicate of Canadian financial institutions.
7. Other income for Q4 2019 was \$0.4 million (Q4 2018 - other expense of \$5.6 million). Other income for Q4 2019 was not significant. Other expense in Q4 2018 primarily consisted of the write-off of state tax credits claimed that were deemed not recoverable for MCSA and NX Gold of \$2.6 million and \$1.6 million, respectively.
8. In Q4 2019, the Company recognized a \$25.2 million income tax recovery (Q4 2018 - income tax expense of \$6.9 million), primarily resulting from the recognition of available tax losses and tax credits in MCSA and partially offset by current tax expense in the period. At December 31, 2019, the Company considered the taxable income generated since acquisition of MCSA and forecasted future taxable income and determined that it was now considered probable that the benefit of these losses and tax credits in MCSA would be realized.

The following table provides a summary of the financial results of the Company for Fiscal 2019, Fiscal 2018, and Fiscal 2017. Tabular amounts are in thousands of US dollars, except share and per share amounts.

|  | Notes | Year ended<br>December 31, 2019 | Year ended<br>December 31, 2018 | Year ended<br>December 31, 2017 |
|--|-------|---------------------------------|---------------------------------|---------------------------------|
| Revenue  | 1     | \$ 284,843                      | \$ 233,105                      | \$ 148,241                      |
| Cost of product sold                                       | 2     | (162,817)                       | (147,611)                       | (128,009)                       |
| Sales expenses   |       | (4,962)                         | (3,268)                         | (2,225)                         |
| Gross profit   |       | 117,064                         | 82,226                          | 18,007                          |
| Expenses   |       |                                 |                                 |                                 |
| General and administrative                                 | 3     | (32,817)                        | (29,000)                        | (22,940)                        |
| Share-based compensation                                   |       | (5,792)                         | (3,225)                         | (879)                           |
| Income before the undernoted                               |       | 78,455                          | 50,001                          | (5,812)                         |
| Other income (expenses)                                    |       |                                 |                                 |                                 |
| Finance income   |       | 701                             | 1,303                           | 2,276                           |
| Finance expense  | 4     | (20,428)                        | (22,562)                        | (20,709)                        |
| Foreign exchange loss                                      | 5     | (5,148)                         | (20,713)                        | (4,296)                         |
| Loss on debt settlement                                    | 6     | (1,783)                         | (5,476)                         | 28,727                          |
| Recovery of value added taxes                              | 7     | 21,584                          | -                               | -                               |
| Other income (expense)                                     |       | 1,448                           | 108                             | 1,788                           |
| Income before income taxes                                 |       | 74,829                          | 2,661                           | 1,974                           |
| Income tax recovery (expense)                              |       |                                 |                                 |                                 |
| Current  | 8     | (10,645)                        | (2,899)                         | (1,104)                         |
| Deferred   | 8     | 28,271                          | (2,753)                         | 16,614                          |
|  |       | 17,626                          | (5,652)                         | 15,510                          |
| Net income (loss) for the period                           |       | 92,455                          | (2,991)                         | 17,484                          |
| Other comprehensive income (loss)                          |       |                                 |                                 |                                 |
| Foreign currency translation loss                          |       | (4,941)                         | (27,801)                        | (973)                           |
| Comprehensive income (loss)                                |       | \$ 87,514                       | \$ (30,792)                     | \$ 16,511                       |
| Net income attributable to:                                |       |                                 |                                 |                                 |
| Owners of the Company                                      |       | \$ 91,883                       | \$ (3,155)                      | \$ 22,466                       |
| Non-controlling interests                                  |       | 572                             | 164                             | (4,982)                         |
|  |       | \$ 92,455                       | \$ (2,991)                      | \$ 17,484                       |
| Comprehensive income (loss) attributable to:               |       |                                 |                                 |                                 |
| Owners of the Company                                      |       | \$ 86,962                       | \$ (30,845)                     | \$ 21,497                       |
| Non-controlling interests                                  |       | 552                             | 53                              | (4,986)                         |
|  |       | \$ 87,514                       | \$ (30,792)                     | \$ 16,511                       |
| Net income per share attributable to owners of the Company |       |                                 |                                 |                                 |
| Net income per share                                       |       |                                 |                                 |                                 |
| Basic  |       | \$ 1.08                         | \$ (0.04)                       | \$ 0.40                         |
| Diluted  |       | \$ 1.01                         | \$ (0.04)                       | \$ 0.34                         |
| Weighted average number of common shares outstanding       |       |                                 |                                 |                                 |
| Basic  |       | 85,244,277                      | 83,927,977                      | 56,252,358                      |
| Diluted  |       | 91,390,425                      | 83,927,977                      | 66,003,387                      |
| Cash and cash equivalents                                  |       | \$ 21,485                       | \$ 18,941                       | \$ 51,098                       |
| Total assets   |       | \$ 462,674                      | \$ 360,439                      | \$ 381,343                      |
| Non-current liabilities                                    |       | \$ 183,135                      | \$ 196,352                      | \$ 196,265                      |

Notes:

1. Revenues for Fiscal 2019 from copper sales was \$246.2 million (Fiscal 2018 - \$184.7 million) which included the sale of 42,759 copper tonnes in concentrate in Fiscal 2019 as compared to 30,107 copper tonnes in Fiscal 2018. The increase in revenue in Fiscal 2019 as compared to Fiscal 2018 includes production from the Vermelhos mine which commenced commercial production in October 2018. The Company processed 64% more ore at a higher ore grade during Fiscal 2019 as compared to Fiscal 2018. In addition, revenues for Fiscal 2019 included \$38.6 million (Fiscal 2018 - \$48.4 million) from the sale of 29,755 (Fiscal 2018 - 39,808) ounces of gold from NX Gold operations.
2. Cost of product sold for Fiscal 2019 from copper sales was \$135.6 million (Fiscal 2018 - \$115.3 million), which consisted of \$40.1 million (Fiscal 2018 - \$34.1 million) in depreciation and depletion, \$33.7 million (Fiscal 2018 - \$29.7 million) in salaries and benefits, \$20.5 million (Fiscal 2018 - \$17.6 million) in contracted services, \$17.9 million (Fiscal 2018 - \$14.9 million) in materials and consumables, \$14.1 million (Fiscal 2018 - \$10.8 million) in maintenance costs, \$8.7 million (Fiscal 2018 - \$7.5 million) in utilities, and \$0.7 million (Fiscal 2018 - \$0.7 million) in other costs. Cost of products sold during Fiscal 2019 increased 18% as compared to Fiscal 2018. Higher recoveries, higher ore grade, and efficiencies contributed towards cost containment relative to the increase in production volume. The increase in cost of products sold in Fiscal 2019 compared to Fiscal 2018 was primarily due to more copper being produced and sold as a result of the commencement of production at the Vermelhos underground mine in October 2018.

Cost of product sold during Fiscal 2019 from gold sales was \$27.2 million (Fiscal 2018 - \$32.3 million), which comprised of \$5.9 million (Fiscal 2018 - \$11.1 million) in depreciation and depletion, \$7.1 million (Fiscal 2018 - \$6.4 million) in salaries and benefits, \$4.3 million (Fiscal 2018 - \$5.0 million) in maintenance costs, \$3.9 million (Fiscal 2018 - \$4.5 million) in materials and consumables, \$3.2 million (Fiscal 2018 - \$3.2 million) in contracted services, \$2.5 million (Fiscal 2018 - \$1.8 million) in utilities, and \$0.3 million (Fiscal 2018 - \$0.3 million) in other costs.

3. General and administrative expenses during Fiscal 2019 include \$21.0 million (Fiscal 2018 - \$16.3 million) with respect to MCSA for salaries and incentive payments, professional fees, office and sundry and provisions for tax, legal and labour claims, \$2.3 million (Fiscal 2018 - \$3.4 million) with respect to NX Gold for salaries and incentive payments, professional fees, office and sundry and provisions for tax, legal and labour claims and \$9.5 million (Fiscal 2018 - \$9.3 million) with respect to the corporate head office in Vancouver. Corporate head office costs are primarily comprised of \$6.7 million (Fiscal 2018 - \$6.4 million) in salaries, incentive payments, and consulting fees, \$1.2 million (Fiscal 2018 - \$0.9 million) in travel-related costs, \$0.7 million (Fiscal 2018 - \$1.0 million) in office and sundry costs, and \$0.5 million (Fiscal 2018 - \$0.9 million) in professional fees. Increases in general and administrative expenses in Fiscal 2019 as compared to Fiscal 2018 reflect the growth of operations, which included higher headcounts, incentive payments for exceeding board-mandated performance targets during 2019, as well as rate increases related to annual union contract negotiations at MCSA.
4. Finance expense for Fiscal 2019 was \$20.4 million (Fiscal 2018 - \$22.6 million) and is primarily comprised of interest on loans at the corporate head office of \$8.3 million (Fiscal 2018 - \$5.4 million), interest on loans and borrowings at MCSA and NX Gold of \$2.9 million (Fiscal 2018 - \$9.6 million), the accretion of asset retirement obligations of \$3.5 million (Fiscal 2018 - \$3.8 million), commitment fees of \$1.7 million (Fiscal 2018 - \$0.6 million), and other finance expenses of \$3.1 million (Fiscal 2018 - \$2.6 million). Interest on loans and borrowings at MCSA and NX Gold decreased due to the repayments of certain loans during 2018 and 2019, while interest on loans at the corporate head office increased due to the senior secured non-revolving credit facility entered into in December 2018, the proceeds of which were used to repay or settle debt at MCSA.
5. Foreign exchange loss for Fiscal 2019 was \$5.1 million (Fiscal 2018 - \$20.7 million), primarily comprised of a foreign exchange loss on US denominated debt of \$4.4 million (Fiscal 2018 - \$9.8 million) in MCSA where the functional currency is the Brazilian Real, a loss on other foreign exchange transactions of \$0.7 million (Fiscal 2018 - \$1.9 million), and a foreign exchange loss on unrealized derivative contracts of \$0.3 million (Fiscal 2018 - \$1.1 million gain), partially offset by a foreign exchange gain on realized derivative contracts of \$0.2 million (Fiscal 2018 - \$10.1 million loss). The decrease in foreign exchange losses in Fiscal 2019 was primarily due to the foreign exchange rate between the Brazilian Real and the US dollar not fluctuating significantly during Fiscal 2019 as compared to Fiscal 2018 and a decrease in the outstanding USD denominated debt held in MCSA.
6. Loss on debt settlement during Fiscal 2019 was \$1.8 million (Fiscal 2018 - \$5.5 million), representing the difference between the accounting fair value made to legally extinguish a bank loan held by MCSA during the second quarter of 2019 and the carrying value of the loan at the time. Loss on settlement of debt during Fiscal 2018 of \$5.5 million was incurred in Q4 2018, comprising of a \$3.7 million loss in early repayment fees for the settlement of certain debt in MCSA and a \$1.8 million loss in loan settlement fees when the Company replaced its \$50 million senior secured non-revolving credit facility with a \$130 million facility from a syndicate of Canadian financial institutions.
7. During Fiscal 2019, the Company recognized a recovery of \$21.6 million (Fiscal 2018 - \$nil) in net income related to value added taxes previously paid on sales in Brazil. The recovery was recognized as a result of a Brazil Supreme Court ruling in 2017 that concluded that the relevant taxing authorities had historically used an incorrect methodology to determine such taxes. The ruling set a precedent for all companies in Brazil but was required to be confirmed for the Company's specific claim, which approval was received in July 2019. These credits can be used to offset a variety of other taxes, including taxes on future sales. Of the recovery recognized, \$3.2 million has been applied to taxes in the current year, \$12.2 million has been included in other current assets based on the expected timing of their use, with the remaining \$6.2 million recognized in other non-current assets in the statement of financial position.
8. During Fiscal 2019, the Company recognized a \$17.6 million income tax recovery (Fiscal 2018 - income tax expense of \$5.7 million), primarily resulting from the recognition of available tax losses and tax credits in MCSA and partially offset by current income tax expense. Current tax



exposure increased as a result of higher taxable income in MCSA. At December 31, 2019, the Company considered the taxable income generated since acquisition of MCSA and forecasted future taxable income and determined that it was now considered probable that the benefit of these losses and tax credits in MCSA would be realized.

## SUMMARY OF QUARTERLY RESULTS

The following table presents selected financial information for each of the most recent eight quarters. Tabular amounts are in millions of US Dollars, except share and per share amounts.

| Selected Financial Information                                | 2019                  |                        |            |            | 2018                  |            |                        |            |
|---|-----------------------|------------------------|------------|------------|-----------------------|------------|------------------------|------------|
|   | Dec 31 <sup>(1)</sup> | Sept 30 <sup>(2)</sup> | June 30    | March 31   | Dec 31 <sup>(3)</sup> | Sept 30    | June 30 <sup>(4)</sup> | March 31   |
| Revenue   | \$ 75.7               | \$ 60.6                | \$ 76.5    | \$ 72.0    | \$ 85.1               | \$ 47.3    | \$ 61.0                | \$ 39.7    |
| Cost of product sold  | \$ (43.0)             | \$ (38.4)              | \$ (43.3)  | \$ (38.1)  | \$ (44.7)             | \$ (27.9)  | \$ (44.2)              | \$ (30.8)  |
| Gross profit  | \$ 31.1               | \$ 21.3                | \$ 32.1    | \$ 32.6    | \$ 39.0               | \$ 18.8    | \$ 15.9                | \$ 8.5     |
| Net income (loss) for period                                  | \$ 45.4               | \$ 16.3                | \$ 15.3    | \$ 15.5    | \$ 11.3               | \$ 5.2     | \$ (18.2)              | \$ (1.3)   |
| Income (loss) per share attributable to owners of the Company |                       |                        |            |            |                       |            |                        |            |
| - Basic   | \$ 0.53               | \$ 0.19                | \$ 0.18    | \$ 0.18    | \$ 0.13               | \$ 0.06    | \$ (0.22)              | \$ (0.02)  |
| - Diluted   | \$ 0.49               | \$ 0.18                | \$ 0.17    | \$ 0.17    | \$ 0.13               | \$ 0.06    | \$ (0.22)              | \$ (0.02)  |
| Weighted average number of common shares outstanding          |                       |                        |            |            |                       |            |                        |            |
| - Basic   | 85,620,168            | 85,505,675             | 85,032,841 | 84,804,389 | 84,736,476            | 84,504,954 | 84,458,914             | 81,974,876 |
| - Diluted   | 91,670,988            | 91,320,363             | 90,696,926 | 89,917,828 | 89,191,707            | 88,638,656 | 84,458,914             | 81,974,876 |

### Notes:

- During Q4 2019, the Company recognized a \$25.2 million income tax recovery primarily resulting from the recognition of available tax losses and tax credits in MCSA. At December 31, 2019, the Company considered the taxable income generated since acquisition of MCSA and forecasted future taxable income and determined that it was now considered probable that the benefit of these losses and tax credits in MCSA would be realized.
- During the quarter ended September 30, 2019, the Company recognized a recovery of \$21.6 million in net income related to value added taxes previously paid on sales in Brazil. The recovery was recognized as a result of a Brazil Supreme Court ruling in 2017 that concluded that the relevant taxing authorities had historically used an incorrect methodology to determine such taxes. The ruling set a precedent for all companies in Brazil but was required to be confirmed for the Company's specific claim, for which approval was received in July 2019. These credits can be used to offset a variety of other taxes, including income taxes and taxes on future sales.
- During Q4 2018, MCSA began commercial production of the Vermelhos Mine. This resulted in increased sales this quarter, generating higher net income for the period.
- During the quarter ended June 30, 2018, the Company had an overall net loss of \$18.2 million, which included \$26.4 million in foreign exchange losses. The foreign exchange losses were comprised of a \$12.2 million loss associated with US dollar denominated debt held by MCSA, whose functional currency is the Brazilian Real, \$11.4 million loss on foreign exchange forward contracts and \$2.8 million related to other operational exchange losses. The foreign exchange losses were unusually high this quarter due to volatility in the foreign exchange rates between the US dollar and the Brazilian Real.

## LIQUIDITY, CAPITAL RESOURCES, AND CONTRACTUAL OBLIGATIONS

### Liquidity

As at December 31, 2019, the Company held cash and cash equivalents of \$21.5 million. Cash and cash equivalents are primarily comprised of cash held with reputable financial institutions and are invested in highly liquid short-term investments with maturities of three months or less. The funds are not exposed to liquidity risk and there are no restrictions on the ability of the Company to use these funds to meet its obligations.

Cash and cash equivalents increased by \$2.5 million during Fiscal 2019. The Company's cash flows from operating, investing and financing activities during Fiscal 2019 are summarized as follows:

- Cash from operating activities of \$127.8 million.

Partially offset by:

- Cash used in investing activities of \$106.7 million, including:
  - \$105.4 million of additions to mineral property, plant and equipment;

- \$0.9 million of additions to exploration and evaluation assets;
  - \$0.5 million of additions to financial investments
  - Cash flows used in financing activities of approximately \$18.0 million, including:
    - \$41.3 million of repayment on loans and borrowings;
    - \$10.3 million of payment of interest on loans and borrowings;
    - \$4.1 million of lease payments;
    - \$3.7 million of other finance expenses
- net of:
- \$37.9 million proceeds from new loans and borrowings;
  - \$1.9 million proceeds from exercise of stock options and warrants;
  - \$1.5 million released from restricted cash

As at December 31, 2019, the Company had working capital deficit of \$4.9 million.

### Capital Resources

The Company's primary sources of capital are comprised of cash from operations, cash and cash equivalents on hand and undrawn debt facilities. The Company will continuously monitor its capital structure and, based on changes in operations and economic conditions, may adjust such structure by issuing new common shares or new debt as necessary. While the Company has been successful in securing financing to date, there are no guarantees that it will be able to secure such financing in the future on terms acceptable to the Company, if at all. Taking into consideration cash flow from existing operations, and the existing undrawn revolving credit facility of \$14.0 million in Canada and undrawn lines of credit totalling R\$64.8 million in MCSA as at December 31, 2019, management believes that the Company has sufficient working capital and financial resources to maintain its planned operations and activities for the foreseeable future.

### Contractual Obligations and Commitments

Certain loan agreements contain operating and financial covenants that could restrict the ability of the Company and its subsidiaries, MCSA and NX Gold S.A., to, among other things, incur additional indebtedness needed to fund its respective operations, pay dividends or make other distributions, make investments, create liens, sell or transfer assets or enter into transactions with affiliates. There are no other restrictions or externally imposed capital requirements of the Company.

### MANAGEMENT OF RISKS AND UNCERTAINTIES

The Company thoroughly examines the various financial instruments and risks to which it is exposed and assesses the impact and likelihood of those risks. These risks may include credit risk, liquidity risk, currency risk, commodity price risk and interest rate risk. Where material, these risks are reviewed and monitored by the Board.

## Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from the Company's receivables from customers. The carrying amount of the financial assets below represents the maximum credit risk exposure as at December 31, 2019 and December 31, 2018:

|  | December 31, 2019 | December 31, 2018 |
|--|-------------------|-------------------|
| Cash and cash equivalents                | \$ 21,485         | \$ 18,941         |
| Restricted cash                          | 1,500             | \$ 3,000          |
| Accounts receivable                      | 7,680             | \$ 7,219          |
| Deposits                                 | 1,200             | \$ 1,334          |
| Derivatives                              | -                 | \$ 254            |
| Other non-current assets - term deposits | 1,196             | \$ 686            |
|  | \$ 33,061         | \$ 31,434         |

The Company invests cash and cash equivalents as well as restricted cash with financial institutions that are financially sound based on their credit rating. The Company's exposure to credit risk associated with accounts receivable is influenced mainly by the individual characteristics of each customer. The Company currently has only three significant customers, all of which have no history of credit default with the Company. The Company has not incurred credit losses during the years ended December 31, 2019 and 2018 nor has a provision for credit losses been recognized.

## Liquidity risk

Liquidity risk is the risk associated with the difficulties that the Company may have meeting the obligations associated with financial liabilities that are settled with cash payments or with another financial asset. The Company's approach to liquidity management is to ensure as much as possible that sufficient liquidity exists to meet their maturity obligations on the expiration dates, under normal and stressful conditions, without causing unacceptable losses or with risk of undermining the normal operation of the Company.

The table below shows the Company's maturity of financial liabilities on December 31, 2019:

| Non-derivative Financial Liabilities     | Carrying value | Contractual cash flows | Up to 12 months | 1-2 years | 3-5 years  | More than 5 years |
|--|----------------|------------------------|-----------------|-----------|------------|-------------------|
| Loans and borrowings                     | \$ 159,370     | \$ 161,377             | \$ 18,984       | \$ 30,318 | \$ 110,208 | \$ 1,867          |
| Interest on loans and borrowings         | -              | 22,788                 | 8,749           | 7,172     | 6,737      | 130               |
| Accounts payable and accrued liabilities | 43,694         | 43,694                 | 43,694          | -         | -          | -                 |
| Value added, payroll and other taxes     | 19,688         | 20,428                 | 13,994          | 1,968     | 4,466      | -                 |
|  | \$ 222,752     | \$ 248,287             | \$ 85,421       | \$ 39,458 | \$ 121,411 | \$ 1,997          |

## Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates, foreign exchange rates, and commodity prices. The purpose of market risk management is to manage and control exposures to market risks, within acceptable parameters, while optimizing return.

The Company may use derivatives, including forward contracts and swap contracts, to manage market risks.

## Foreign exchange currency risk

The Company's subsidiaries in Brazil are exposed to exchange risks related to the US dollars and Euros. In order to minimize currency mismatches, the Company monitors its cash flow projections considering future sales expectations indexed to US dollar variation in relation to the cash requirement to settle the existing financings.

The Company's exposure to foreign exchange currency risk at December 31, 2019 relates primarily to \$9.6 million (December 31, 2018 – \$10.2 million) in loans and borrowings of MCSA denominated in US dollars and Euros. Strengthening (weakening) in the Brazilian Real against the US dollar by 10% and 20%, would have increased (decreased) pre-tax net income by \$0.6 million and \$1.1 million, respectively (2018 – \$0.7 million and \$1.3 million). Strengthening (weakening) in the Brazilian Real against the Euro by 10% and 20%, would have increased (decreased) pre-tax net income by \$0.4 million and \$0.8 million, respectively (2018 – \$0.4 million and \$0.7 million). This analysis is based on the foreign currency exchange variation rate that the Company considered to be reasonably possible at the end of the year. The analysis assumes that all other variables, especially interest rates, are held constant.

The Company may use derivatives, including forward contracts, collars and swap contracts, to manage market risks. At December 31, 2019, the Company's subsidiaries have entered into foreign exchange collar contracts at zero cost for notional amounts of \$336.6 million with an average floor rate of 3.86 R\$ / \$ and an average cap rate of 4.41 R\$ / \$ (December 31, 2018 – notional amount of \$21.5 million in foreign exchange forward contracts). The maturity dates of these contracts are from January 15, 2020 to July 28, 2021 and are financially settled on a net basis. The fair value of these contracts at December 31, 2019 was nil, (December 31, 2018 – an asset of \$0.3 million, which was included in Derivatives in the statement of financial position.) The change in fair value of foreign exchange collar contracts was a loss of \$0.3 million for the year ended December 31, 2019 and (a gain of \$1.1 million for the year ended December 31, 2018) has been recognized in foreign exchange loss. In addition, in the year ended December 31, 2019, the Company recognized a realized gain of \$0.2 million, (a loss of \$10.1 million for the year ended December 31, 2018) related to the settlement of foreign currency forward contracts.

## Interest rate risk

The Company is principally exposed to the variation in interest rates on loans and borrowings with variable rates of interest. Management reduces interest rate risk exposure by entering into loans and borrowings with fixed rates of interest or by entering into derivative instruments that fix the ultimate interest rate paid.

The Company is principally exposed to interest rate risk through its senior credit facilities of \$136.0 million and Brazilian Real denominated bank loans of \$9.8 million. Based on the Company's net exposure at December 31, 2019, a 1% change in the variable rates would have an impact of \$1.5 million on pre-tax annual net income, without consideration of the effects of the swap contracts below.

In order to mitigate the above volatility due to variable rates on loans, as at December 31, 2019, the Company has entered into an interest rate swap contract to manage interest rate risk associated with its Canadian credit facilities. The floating interest on a notional amount of \$65 million was swapped for a fixed interest rate of 2.69%. The fair value of this contract at December 31, 2019 was a liability of \$1.7 million and was included in Derivatives in the statement of financial position.

In addition, as at December 31, 2019, MCSA has entered into an interest rate and currency swap contract on the Plural Loan. The floating interest on a notional amount of R\$12 million was swapped for a fixed interest rate of 9.9% and the BRL currency on the loan was swapped for USD at a rate of 3.9500. The fair value of this contract at December 31, 2019 was a liability of \$0.1 million and was included in derivatives in the statement of financial

position while the change in the fair value of this contract of \$0.1 million was included in Finance Expenses in the statement of operations and comprehensive income.

#### Price risk

The Company may use derivatives, including forward contracts, collars and swap contracts, to manage commodity price risks. During the year ended December 31, 2019, the Company had entered into commodity swap collar contracts. As at December 31, 2019, these commodity swap collar contracts have all matured and the balance was \$nil. The Company recognized a realized loss of \$1.4 million for the year ended December 31, 2019 related to the settlement of commodity forward contracts.

For a discussion of additional risks applicable to the Company and its business and operations, including risks related to the Company's foreign operations, the environment and legal proceedings, see "Risk Factors" in the Company's Annual Information Form for the year ended December 31, 2019 and dated March 12, 2020 (the "AIF").

## OTHER FINANCIAL INFORMATION

### Off-Balance Sheet Arrangements

As at December 31, 2019, the Company had no material off-balance sheet arrangements.

### Contingencies

With the acquisition of MCSA, the Company inherited certain liabilities and MCSA has been subject to a number of claims (including claims related to tax, labour and social security matters and civil action) in the course of its business which individually are not material and have not been accrued for in the Company's financial statements as it is not probable that a cash outflow will occur. While the Company believes that these claims are unlikely to be successful, if all such existing claims were decided against it, the Company could be exposed to a liability of up to approximately \$31.1 million as at December 31, 2019 (December 31, 2018 - \$21.9 million), which could have an adverse impact on the Company's business, financial condition, results of operations, cash flows or prospects.

### Outstanding Share Data

At March 12, 2020, the Company had 85,756,978 common shares, 5,081,541 stock options, 2,866,662 warrants, and 438,463 performance share units issued and outstanding.

### Related Party Disclosures

For the year ended December 31, 2019, amounts paid to related parties were incurred in the normal course of business and measured at the exchange amount, which is the amount agreed upon by the transacting parties and on terms and conditions similar to non-related parties.

Key management personnel consist of the Company's directors and officers and their compensation includes director retainer fees and management salaries paid to these individuals, as well as share-based compensation. The aggregate value of compensation paid to key management personnel for the year ended December 31, 2019 was \$7.5 million (\$5.4 million for the year ended December 31, 2018). In addition, 444,265 options and 171,754 share units were issued to key management personnel during the year ended December 31, 2019 (1,100,155 options and 130,636 share units for the year ended December 31, 2018), with \$4.1 million recognized in share-based compensation expense for the year ended December 31, 2019 (\$2.3 million for the year ended December 31, 2018).

During the year ended December 31, 2019, key management personnel exercised 286,666 options and 300,000 warrants for cash proceeds to the Company of \$0.6 million and \$0.4 million, respectively (133,000 options for \$0.2 million for the year ended December 31, 2018). During the year ended December 31, 2018, key management personnel converted convertible debentures into 1,476,164 common shares and 369,040 common share purchase warrants. The warrants were subsequently exercised into 369,040 common shares.

As at December 31, 2019, \$3.9 million was payable to key management as incentive compensation and is included in the accounts payable and accrued liabilities in the consolidated financial statements (December 31, 2018 - \$2.7 million). Such amounts were unsecured, non-interest bearing and were repaid under normal trade terms.

Subsequent to December 31, 2019, 23,674 deferred share units were issued to directors, and 43,456 options were granted to directors.

## ACCOUNTING POLICIES, JUDGMENTS AND ESTIMATES

### Critical Accounting Judgments and Estimates

The preparation of consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions about future events that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Although these estimates are based on management's best knowledge of the amount, events or actions, actual results may differ from these estimates.

The Company's significant accounting policies and accounting estimates are contained in the Company's December 31, 2019 consolidated financial statements. Certain of these policies, such as, capitalization and depreciation of property, plant and equipment and mining interests, derivative instruments, and decommissioning liabilities provisions involve critical accounting estimates because they require management of the Company to make subjective or complex judgments about matters that are inherently uncertain, and because of the likelihood that materially different amounts could be reported under different conditions or using different assumptions.

In preparing its financial statements, management has made judgments, estimates and assumptions that affect the application of the Company's accounting policies and the reported amounts of the assets, liabilities, revenues and expenses. Actual results may differ from these estimates.

The estimates and assumptions are reviewed on an ongoing basis. Revisions to estimates are recognized prospectively.

#### Critical Judgments

##### Functional currency

The functional currency of the Company and each of its subsidiaries is the currency of the primary economic environment in which the entities operate. The Company has determined that the functional currency for the Company is the US dollar while the functional currency for MCSA and NX Gold is the Brazilian Real. Assessment of functional currency involves certain judgements to determine the primary economic environment and the Company reconsiders the functional currency of its entities if there is a change in events and conditions which determined the primary economic environment.

## Legal claims and contingent liabilities

The recognition of legal provisions and contingent liabilities involves the assessment of claims made against the Company and each of its subsidiaries. The recognition of a legal provision, or disclosure of a contingent liability, involves certain judgements to determine the probability of whether a cash outflow will occur. In making this judgment, management has assessed various criteria and also relies on the opinions of its legal advisers to assist in making this assessment.

## Key Sources of Estimation Uncertainty

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of assets and liabilities at the date of the consolidated financial statements and the reported amounts of expenses during the reporting periods. Actual results could differ from those estimates and such differences could be significant. Significant estimates made by management affecting the consolidated financial statements include:

### Impairment of property, plant and equipment

The Company evaluates each asset or cash generating unit every reporting period to determine whether there are any indications of impairment. If any such indication exists, which is often judgmental, a formal estimate of recoverable amount is performed and an impairment loss is recognized to the extent that the carrying amount exceeds the recoverable amount. The recoverable amount of an asset or cash generating group of assets is measured at the higher of fair value less costs to sell and value in use. The evaluation of asset carrying values for indications of impairment includes consideration of both external and internal sources of information, including such factors as market and economic conditions, production budgets and forecasts, and life-of-mine estimates.

When required, the determination of fair value and value in use requires management to make estimates and assumptions about expected production, sales volumes, commodity prices, mineral reserves, operating costs, closure and rehabilitation costs and future capital expenditures. The estimates and assumptions are subject to risk and uncertainty; hence, there is the possibility that changes in circumstances will alter these projections, which may impact the recoverable amount of the assets. In such circumstances, some or all of the carrying value of the assets may be further impaired or the impairment charge reduced with the impact recorded in profit or loss.

### Mineral reserve and resource estimates including life of mine plan

The Company estimates its mineral reserves and mineral resources based on information compiled by competent individuals. Mineral reserves are used in the calculation of depreciation, impairment assessments and for forecasting the timing of payment of mine closure and rehabilitation costs.

There are numerous uncertainties inherent in estimating mineral reserves, and assumptions that are valid at the time of estimation may change significantly when new information becomes available. Changes in the estimation methodology, forecasted prices of commodities, exchange rates, production costs or recovery rates may change the economic status of mineral reserves and may, ultimately, result in changes in the mineral reserves.

The carrying amounts of the Company's mineral properties, plant and equipment are depleted in part based on recoverable mineral reserve tonnes processed, depending on the use of the asset. Changes to estimates of recoverable quantities of metals, mineral reserve tonnes and depletable costs, including changes resulting from revisions to the Company's mine plans and changes in metals prices forecasts, can result in a change to future

depreciation and depletion rates and may result in impairment charges.

#### Mine closure and rehabilitation costs

Significant estimates and assumptions are made in determining the provision for mine closure and rehabilitation as there are numerous factors that will affect the ultimate liability payable. These factors include estimation of the extent and cost of rehabilitation activities, timing of future cash flows, discount rates, inflation rate, and regulatory requirements.

Changes in the above factors can result in a change to the provision recognized by the Company. Changes to mine closure and rehabilitation costs are recorded with a corresponding change to the carrying amounts of related mineral properties, plant and equipment. Adjustments to the carrying amounts of related mineral properties, plant and equipment can result in a change to future depreciation and depletion expense.

Significant assumptions used to determine mine closure and rehabilitation costs are included in Note 11(a) to the consolidated financial statements.

#### Inventory

The net recoverable value of stockpile inventory and production in work in progress inventory is based on the quantity of recoverable metal inventory which is an estimate based on the tons of ore added and removed from the process, expected grade and recovery rates. The quantity of recoverable metal in finished concentrate inventory is an estimate based on initial weights and assay results. The net recoverable value of these inventories also requires estimates of expected selling prices and, where applicable, costs to complete.

#### Income taxes

The determination of the Company's tax expense for the period and deferred tax assets and liabilities involves significant estimation and judgement by management. In determining these amounts, management interprets tax legislation in a variety of jurisdictions and makes estimates of the expected timing of the reversal of deferred tax assets and liabilities. Management also makes estimates of future earnings, which affect the extent to which potential future tax benefits may be used. The Company is subject to assessments by various taxation authorities, which may interpret legislation differently. These differences may affect the final amount or the timing of the payment of taxes. The Company provides for such differences where known based on management's best estimate of the probable outcome of these matters.

### New Accounting Standards Adopted in the Current Period

The following new and amended IFRS pronouncements were adopted effective January 1, 2019:

#### i) IFRS 16 Leases

IFRS 16 introduces a single, on-balance sheet accounting model for lessees. As a result, the Company, as a lessee, has recognized right-of-use assets representing its rights to use the underlying assets and lease liabilities representing its obligation to make lease payments. The Company may elect to not apply IFRS 16 to leases with a term of less than 12 months, which election is made by underlying class of assets to which the right of use asset relates, or leases where the underlying asset is of low value, which election is made on an asset by asset basis. Lessor accounting remains similar to previous accounting policies.



Previously, the Company determined at contract inception whether an arrangement was or contained a lease under IFRIC 4, Determining Whether an Arrangement contains a Lease. The Company now assesses whether a contract is or contains a lease based on the new definition of a lease. Under IFRS 16, a contract is, or contains, a lease if the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration.

The Company adopted IFRS 16 using the modified retrospective approach. Accordingly, the comparative information presented for 2018 has not been restated. The impact of adoption of IFRS 16 is disclosed in note 2(e) of the consolidated financial statements.

As a result of applying IFRS 16, the Company recognized right-of-use assets of \$4.7 million and lease liabilities of \$4.7 million upon adoption.

## ii) IFRIC 23 – Uncertainty over Income Tax Treatments

The Company has adopted IFRIC Interpretation 23 (“Interpretation 23”) – Uncertainty over Income Tax Treatments from January 1, 2019. The Interpretation provides guidance on the accounting for current and deferred tax liabilities and assets in circumstances in which there is uncertainty over income tax treatments. There is no material impact on the financial statements from the adoption of Interpretation 23.

## Local Currency Operating Metrics – Presented in Brazilian Real

|   |     | 2019 - Q4 | 2019 - Q3 | 2019      | 2018 - Q4 | 2018      |
|---|-----|-----------|-----------|-----------|-----------|-----------|
| <b>Costs (MCSA Operations)</b>                |     |           |           |           |           |           |
| Mining - UG (Pilar)                           | R\$ | 66,743    | 60,294    | 234,887   | 63,863    | 201,948   |
| - UG (Vermelhos)                              |     | 39,864    | 38,952    | 140,124   | 19,288    | 19,288    |
| - OP  |     | 29        | 761       | 8,521     | 16,894    | 62,867    |
| Processing                                    |     | 22,250    | 21,309    | 83,041    | 23,058    | 70,583    |
| Indirect                                      |     | 12,822    | 10,504    | 46,607    | 10,783    | 30,058    |
| Production costs                              |     | 141,708   | 131,820   | 513,180   | 133,886   | 384,744   |
| Capex development                             |     | (45,009)  | (36,108)  | (125,918) | (27,815)  | (68,705)  |
| By-product credits                            |     | (16,876)  | (12,720)  | (50,823)  | (11,090)  | (28,310)  |
| Treatment, refining and other                 |     | 3,895     | 2,622     | 7,358     | (2,676)   | (1,772)   |
| C1 cash costs                                 | R\$ | 83,717    | 85,614    | 343,798   | 92,305    | 285,957   |
| <b>Breakdown Mined and Processed (tonnes)</b> |     |           |           |           |           |           |
| UG Mined                                      |     | 675,258   | 677,535   | 2,527,386 | 687,872   | 1,836,455 |
| OP Mined                                      |     | -         | 15,259    | 727,578   | 700,732   | 4,096,723 |
| Total Mined (t):                              |     | 675,258   | 692,794   | 3,254,964 | 1,388,604 | 5,933,178 |
| Total Processed (t)                           |     | 589,065   | 587,915   | 2,424,592 | 777,480   | 2,257,917 |
| Cu Production (t)                             |     | 11,526    | 9,674     | 42,318    | 12,104    | 30,426    |
| UG Mining Total - R\$/tonne mined             |     | 91.22     | 93.19     | 98.56     | 120.88    | 120.47    |
| Pilar - R\$/tonne mined <sup>(1)</sup>        |     | 78.56     | 87.91     | 91.26     | n/a       | n/a       |
| Vermelhos - R\$/tonne mined <sup>(1)</sup>    |     | 118.52    | 102.63    | 112.93    | n/a       | n/a       |
| OP Mining - R\$/tonne mined <sup>(2)</sup>    |     | n/a       | 49.89     | 11.71     | 24.11     | 15.35     |
| Processing - R\$/tonne processed              |     | 37.77     | 36.25     | 34.25     | 29.66     | 31.26     |
| Indirect - R\$/tonne processed                |     | 21.77     | 17.87     | 19.22     | 13.87     | 13.31     |

### Footnotes

General - Above only includes amounts from MCSA. NX Gold operations are excluded.

[1] Starting 2019, the Company breaks out the cost metrics for underground mining between Pilar and Vermelhos.

[2] There was no OP production in Q4 2019.

## NON-IFRS MEASURES

Financial results of the Company are prepared in accordance with IFRS. The Company utilizes certain non-IFRS measures, including C1 cash cost of copper produced (per lb), C1 cash cost of gold produced (per ounce), EBITDA, Adjusted EBITDA, Adjusted net income (loss) attributable to owners of the Company, Adjusted earnings (loss) per share, net debt and working capital, which are not measures recognized under IFRS. The Company believes that these measures, together with measures determined in accordance with IFRS, provide investors with an improved ability to evaluate the underlying performance of the Company. Non-IFRS measures do not have any standardized meaning prescribed under IFRS, and therefore they may not be comparable to similar measures employed by other companies. The data 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 tables below provide a reconciliation of these non-IFRS measures to the most directly comparable IFRS measures as contained in the Company's financial statements.

Unless otherwise noted, the non-IFRS measures presented below have been calculated on a consistent basis for the periods presented.

## C1 Cash Cost of Copper Produced (per lb)

C1 cash cost of copper produced (per lb) is the sum of production costs, net of capital expenditure development costs and by-product credits, divided by the copper pounds produced. C1 cash costs reported by the Company include treatment, refining charges, offsite costs, and certain tax credits relating to sales invoiced to the Company's Brazilian customer on sales. By-product credits are calculated based on actual precious metal sales (net of treatment costs) during the period divided by the total pounds of copper produced during the period. C1 cash cost of copper produced per pound is a non-IFRS measure used by the Company to manage and evaluate operating performance of the Company's operating mining unit and is widely reported in the mining industry as benchmarks for performance but does not have a standardized meaning and is disclosed in addition to IFRS measures.

The following table provides a reconciliation of C1 cash cost of copper produced per pound to cost of goods sold, its most directly comparable IFRS measure.

|  | 2019 - Q4 | 2019 - Q3 | 2019       | 2018 - Q4 | 2018       |
|--|-----------|-----------|------------|-----------|------------|
| <b>Reconciliation:</b>                   |           |           |            |           |            |
| Cost of Product Sold                     | \$ 35,620 | \$ 32,396 | \$ 135,607 | \$ 36,894 | \$ 115,346 |
| Add (less):                              |           |           |            |           |            |
| Depreciation/amortization/depletion      | (11,128)  | (9,675)   | (40,107)   | (9,244)   | (34,104)   |
| Incentive payments                       | (2,870)   | -         | (2,870)    | -         | -          |
| Net change in inventory                  | 322       | 544       | 1,062      | (1,204)   | 1,491      |
| Transportation costs & other             | 1,479     | 902       | 4,598      | 1,019     | 3,083      |
| By-product credits                       | (4,101)   | (3,202)   | (12,822)   | (2,911)   | (7,607)    |
| Treatment, refining, and other           | 935       | 632       | 1,814      | (263)     | (705)      |
| Foreign exchange translation adjustments | 74        | (77)      | (70)       | 2,161     | 2,001      |
| C1 cash costs                            | \$ 20,330 | \$ 21,520 | \$ 87,212  | \$ 26,452 | \$ 79,505  |

|                               | 2019 - Q4 | 2019 - Q3 | 2019      | 2018 - Q4 | 2018      |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|
| <b>Costs</b>                  |           |           |           |           |           |
| Mining                        | \$ 25,910 | \$ 25,172 | \$ 97,308 | \$ 28,045 | \$ 79,046 |
| Processing                    | 5,406     | 5,363     | 21,035    | 6,052     | 19,167    |
| Indirect                      | 3,116     | 2,644     | 11,581    | 2,830     | 8,134     |
| Production costs              | 34,432    | 33,179    | 129,924   | 36,927    | 106,347   |
| Capex development             | (10,936)  | (9,089)   | (31,705)  | (7,301)   | (18,530)  |
| By-product credits            | (4,101)   | (3,202)   | (12,822)  | (2,911)   | (7,607)   |
| Treatment, refining and other | 935       | 632       | 1,814     | (263)     | (705)     |
| C1 cash costs                 | \$ 20,330 | \$ 21,520 | \$ 87,212 | \$ 26,452 | \$ 79,505 |

### Costs per pound

|   | 2019 - Q4 | 2019 - Q3 | 2019      | 2018 - Q4 | 2018      |
|---|-----------|-----------|-----------|-----------|-----------|
| Payable copper produced (lb) <sup>(1)</sup> | 25,411    | 21,327    | 93,295    | 26,685    | 67,077    |
| Mining                                      | \$ 1.02   | \$ 1.18   | \$ 1.04   | \$ 1.05   | \$ 1.18   |
| Processing                                  | \$ 0.21   | \$ 0.25   | \$ 0.23   | \$ 0.23   | \$ 0.29   |
| Indirect                                    | \$ 0.12   | \$ 0.12   | \$ 0.12   | \$ 0.11   | \$ 0.12   |
| Capex development                           | \$ (0.43) | \$ (0.42) | \$ (0.34) | \$ (0.27) | \$ (0.28) |
| By-product credits                          | \$ (0.16) | \$ (0.15) | \$ (0.14) | \$ (0.11) | \$ (0.11) |
| Treatment, refining and other               | \$ 0.04   | \$ 0.03   | \$ 0.02   | \$ (0.04) | \$ (0.01) |
| C1 cash cost of copper produced (per lb)    | \$ 0.80   | \$ 1.01   | \$ 0.93   | \$ 0.99   | \$ 1.19   |

Footnote

[1] Total includes amount produced from the newly constructed Vermelhos underground mine as of 2018 Q4 and pre-production ore.

## C1 Cash Cost of Gold produced (per ounce)

C1 cash cost of gold produced (per ounce) is the sum of production costs, net of capital expenditure development costs and silver by-product credits, divided by the gold ounces produced. By-product credits are calculated based on actual precious metal sales during the period divided by the total ounces of gold produced during the period. C1 cash cost of gold produced per pound is a non-IFRS measure used by the Company to manage and evaluate operating performance of the Company's operating mining unit and is widely reported in the mining industry as benchmarks for performance but does not have a standardized meaning and is disclosed in addition to IFRS measures.

The following table provides a reconciliation of C1 cash cost of gold produced per ounce to cost of goods sold, its most directly comparable IFRS measure.

|  | 2019 - Q4       | 2019 - Q3       | 2019             | 2018 - Q4       | 2018             |
|--|-----------------|-----------------|------------------|-----------------|------------------|
| <b>Reconciliation:</b>                   |                 |                 |                  |                 |                  |
| Cost of Product Sold                     | \$ 7,397        | \$ 5,982        | \$ 27,210        | \$ 7,768        | \$ 32,265        |
| Add (less):                              |                 |                 |                  |                 |                  |
| Depreciation/amortization/depletion      | (881)           | (1,051)         | (5,907)          | (1,810)         | (11,084)         |
| Incentive payments                       | (634)           | -               | (634)            | -               | -                |
| Net change in inventory                  | 120             | 235             | 710              | (308)           | -                |
| By-product credits                       | (67)            | (47)            | (281)            | (90)            | (354)            |
| Foreign exchange translation adjustments | (18)            | (21)            | (46)             | (150)           | (87)             |
| <b>C1 cash costs</b>                     | <b>\$ 5,917</b> | <b>\$ 5,098</b> | <b>\$ 21,052</b> | <b>\$ 5,410</b> | <b>\$ 20,740</b> |

|                      | 2019 - Q4       | 2019 - Q3       | 2019             | 2018 - Q4       | 2018             |
|----------------------|-----------------|-----------------|------------------|-----------------|------------------|
| <b>Costs</b>         |                 |                 |                  |                 |                  |
| Mining               | \$ 3,255        | \$ 2,791        | \$ 11,413        | \$ 3,033        | \$ 11,958        |
| Processing           | 2,274           | 1,821           | 7,588            | 1,944           | 7,290            |
| Indirect             | 995             | 850             | 3,479            | 668             | 2,541            |
| Production costs     | 6,524           | 5,462           | 22,480           | 5,645           | 21,789           |
| Capex development    | (540)           | (317)           | (1,147)          | (145)           | (695)            |
| By-product credits   | (67)            | (47)            | (281)            | (90)            | (354)            |
| <b>C1 cash costs</b> | <b>\$ 5,917</b> | <b>\$ 5,098</b> | <b>\$ 21,052</b> | <b>\$ 5,410</b> | <b>\$ 20,740</b> |

|  | 2019 - Q4     | 2019 - Q3       | 2019          | 2018 - Q4     | 2018          |
|--|---------------|-----------------|---------------|---------------|---------------|
| <b>Costs per ounce</b>                           |               |                 |               |               |               |
| Payable gold produced (ounces)                   | 6,043         | 4,356           | 30,434        | 10,008        | 39,808        |
| Mining   | \$ 539        | \$ 641          | \$ 375        | \$ 300        | \$ 300        |
| Processing                                       | \$ 376        | \$ 418          | \$ 249        | \$ 190        | \$ 183        |
| Indirect   | \$ 165        | \$ 195          | \$ 114        | \$ 70         | \$ 64         |
| Capex development                                | \$ (89)       | \$ (73)         | \$ (38)       | \$ (10)       | \$ (17)       |
| By-product credits                               | \$ (11)       | \$ (12)         | \$ (9)        | \$ (10)       | \$ (10)       |
| <b>C1 cash cost of gold produced (per ounce)</b> | <b>\$ 980</b> | <b>\$ 1,169</b> | <b>\$ 691</b> | <b>\$ 540</b> | <b>\$ 520</b> |

## Earnings before interest, taxes, depreciation, and amortization (“EBITDA”) and Adjusted EBITDA

EBITDA represents earnings before interest expense, income taxes, depreciation, and amortization. Adjusted EBITDA includes further adjustments for non-recurring items and/or items not indicative to the future operating performance of the Company. The Company believes EBITDA and adjusted EBITDA are appropriate supplemental measures of debt service capacity and performance of its operations.

Adjusted EBITDA is calculated by removing the following income statement items:

- Recovery of value added taxes
- Foreign exchange loss (gain)
- Loss on gold hedge contracts
- Share based compensation
- Loss on debt settlement

|                                     | 2019 - Q4        | 2019 - Q3        | 2019              | 2018 - Q4        | 2018          |
|-------------------------------------|------------------|------------------|-------------------|------------------|---------------|
| <b>Reconciliation:</b>              |                  |                  |                   |                  |               |
| Net income (loss)                   | \$ 45,409        | \$ 16,307        | \$ 92,455         | \$ 11,280        | (2,991)       |
| Adjustments:                        |                  |                  |                   |                  |               |
| Finance expenses                    | 2,014            | 5,206            | 20,428            | 6,776            | 22,562        |
| Tax expense (recovery)              | (25,209)         | 2,825            | (17,626)          | 6,852            | 5,652         |
| Depreciation/amortization/depletion | 12,042           | 10,768           | 46,171            | 15,301           | 45,297        |
| <b>EBITDA</b>                       | <b>34,256</b>    | <b>35,106</b>    | <b>141,428</b>    | <b>40,209</b>    | <b>70,520</b> |
| Recovery of value added taxes       | -                | (21,584)         | (21,584)          | -                | -             |
| Foreign exchange loss (gain)        | (4,423)          | 10,866           | 5,148             | (7,433)          | 20,713        |
| Loss on gold hedge contracts        | 15               | 1,514            | 1,505             | -                | -             |
| Share based compensation            | 1,304            | 1,353            | 5,792             | 723              | 3,225         |
| Loss on debt settlement             | -                | -                | 1,783             | 5,476            | 5,476         |
| <b>Adjusted EBITDA</b>              | <b>\$ 31,152</b> | <b>\$ 27,255</b> | <b>\$ 134,072</b> | <b>\$ 38,975</b> | <b>99,934</b> |

## Adjusted net income attributable to owners of the Company and Adjusted net income per share attributable to owners of the Company

The Company uses the financial measure “Adjusted net income attributable to owners of the Company” and “Adjusted net income per share attributable to owners of the Company” (“Adjusted EPS”) to supplement information in its consolidated financial statements. The Company believes that, in addition to conventional measures prepared in accordance with IFRS, the Company and certain investor and analysts use this information to evaluate the Company’s performance. The Company excludes the following items from net earnings to provide a measure which allows the Company and investors to evaluate the operating results of the underlying core operations: i) net recovery of value added taxes, ii) share based compensation iii) unrealized foreign exchange loss (gain) on USD denominated debt in MCSA, iv) unrealized loss (gain) on foreign exchange derivative contracts, v) unrealized loss on gold hedge contracts, and vi) loss on debt settlement. The presentation of Adjusted EPS is not meant to substitute the net income (loss) per share attributable to owners of the Company (“EPS”) presented in accordance with IFRS, but rather it should be evaluated in conjunction with such IFRS measures.

The following table provides a detailed reconciliation of net income (loss) attributable to owners of the Company as reported in the Company’s consolidated financial statements to adjusted net income attributable to owners of the Company and Adjusted EPS.

|   | 2019 - Q4  | 2019 - Q3  | 2019       | 2018 - Q4  | 2018       |
|---|------------|------------|------------|------------|------------|
| <b>Reconciliation:</b>  |            |            |            |            |            |
| Net income (loss) as reported attributable to the owners of the Company | \$ 45,169  | \$ 16,280  | \$ 91,883  | \$ 11,210  | \$ (3,155) |
| Adjustments for:  |            |            |            |            |            |
| Net recovery of value added taxes                                       | -          | (17,783)   | (17,783)   | -          | -          |
| Share based compensation  | 1,304      | -          | 5,792      | -          | -          |
| Unrealized foreign exchange loss (gain) on USD denominated debt in MCSA | (3,738)    | 9,559      | 4,388      | (4,816)    | 9,769      |
| Unrealized loss (gain) on foreign exchange derivative contracts         | (1,404)    | 1,398      | 249        | (3,977)    | (1,132)    |
| Unrealized loss (gain) on gold hedge contracts                          | (677)      | 719        | -          | -          | -          |
| Loss on debt settlement   | -          | -          | 1,776      | 5,461      | 5,461      |
| Adjusted net income attributed to owners of the Company                 | \$ 40,654  | \$ 10,173  | \$ 86,305  | \$ 7,878   | \$ 10,943  |
| Weighted average number of common shares - basic                        | 85,620,168 | 85,505,675 | 85,244,277 | 84,736,476 | 83,927,977 |
| Weighted average number of common shares - diluted                      | 91,670,988 | 91,320,363 | 91,390,425 | 89,191,707 | 83,927,977 |
| Adjusted earnings per share - basic                                     | \$ 0.47    | \$ 0.12    | \$ 1.01    | \$ 0.09    | \$ 0.13    |
| Adjusted earnings per share - diluted                                   | \$ 0.44    | \$ 0.11    | \$ 0.94    | \$ 0.09    | \$ 0.12    |

## Net Debt

Net debt is determined based on cash and cash equivalents, restricted cash and loans and borrowings as reported in the Company's consolidated financial statements. The Company uses net debt as a measure of the Company's ability to pay down its debt. The following table provides a calculation of net debt based on amounts presented in the Company's consolidated financial statements as at December 31, 2019 and December 31, 2018.

|   | December 31, 2019 | December 31, 2018 |
|---|-------------------|-------------------|
| Cash and cash equivalents                     | \$ 21,485         | \$ 18,941         |
| Restricted cash                               | 1,500             | 3,000             |
| Less: Current portion of loans and borrowings | (18,984)          | (10,602)          |
| Long-term portion of loans and borrowings     | (140,386)         | (141,632)         |
| Net Debt                                      | \$ (136,385)      | \$ (130,293)      |

## Working Capital and Available Liquidity

Working capital is determined based on current assets and current liabilities as reported in the Company's consolidated financial statements. The Company uses working capital as a measure of the Company's short-term financial health and operating efficiency. Available liquidity includes the Company's working capital and undrawn revolving credit facilities in place. The following table provides a calculation for these based on amounts presented in the Company's consolidated financial statements as at December 31, 2019 and December 31, 2018.

|   | December 31, 2019 | December 31, 2018 |
|---|-------------------|-------------------|
| Current Assets                                | \$ 75,565         | \$ 50,954         |
| Less: Current Liabilities                     | (80,481)          | (60,265)          |
| Working Capital (Deficit)                     | \$ (4,916)        | \$ (9,311)        |
| Available undrawn revolving credit facilities | 30,000            | 14,000            |
| Available Liquidity                           | \$ 25,084         | \$ 4,689          |

## Disclosure Controls and Procedures

The Company's management, with the participation of the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"), has evaluated the effectiveness of the Company's disclosure controls and procedures ("DC&P"). Based on the results of that evaluation, the Company's CEO and CFO have concluded that, as of December 31, 2019, the Company's DC&P were effective to provide reasonable assurance that the information required to be disclosed by the Company in reports it files is recorded, processed, summarized, and reported within the

appropriate time periods and is accumulated and communicated to management, including the CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

### Internal Control over Financial Reporting

The Company's management, with the participation of the CEO and CFO, is responsible for establishing and maintaining adequate internal control over financial reporting ("ICFR"). The Company's ICFR is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. Any system of ICFR, no matter how well designed, has inherent limitations and cannot provide absolute assurance that all misstatements and instances of fraud, if any, within the Company have been prevented or detected. The Company's ICFR is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS.

The Company uses the Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The Company's management, under the supervision of the CEO and CFO, has evaluated the design and operating effectiveness of the Company's ICFR and concluded that the Company's ICFR were effective as of December 31, 2019.

There were no changes in the Company's ICFR that materially affected, or are reasonably likely to materially affect, ICFR during Q4 2019.

### NOTE REGARDING SCIENTIFIC AND TECHNICAL INFORMATION

Unless otherwise indicated, scientific and technical information in this MD&A relating to Ero's properties ("Technical Information") is based on information contained in the following reports:

The report prepared in accordance with NI 43-101 and entitled "2019 Updated Mineral Resources and Mineral Reserves Statements of Mineração Caraíba's Vale do Curaçá Mineral Assets, Curaçá Valley", dated November 25, 2019 with an effective date of September 18, 2019, prepared by Rubens Jose De Mendonça, MAusIMM, of Planminas – Projectos e Consultoria em Mineração Ltd. ("Planminas"), Porfirio Cabaleiro Rodrigues, MAIG, Leonardo de Moraes Soares, MAIG, and Bernardo Horta de Cerqueira Viana, MAIG, all of GE21 Consultoria Mineral Ltda. ("GE21"), and each a "qualified person" and "independent" of the Company within the meanings of NI 43-101 (the "Vale do Curaçá Technical Report").

The report prepared in accordance with NI 43-101 and entitled "Mineral Resource and Mineral Reserve Estimate of the NX Gold Mine, Nova Xavantina", dated February 3, 2020 with an effective date of September 30, 2019, prepared by Porfirio Cabaleiro Rodrigues, MAIG, Leonardo de Moraes Soares, MAIG, and Paulo Roberto Bergmann, FAusIMM, each of GE21 and a "qualified person" and "independent" of the Company within the meanings of NI 43-101 (the "NX Gold Technical Report").

The report prepared in accordance with NI 43-101 and entitled "Feasibility Study, Technical Report for the Boa Esperança Copper Project, Pará State Brazil", dated September 7, 2017 with an effective date of June 1, 2017, prepared by Rubens Mendonça, MAusIMM of SRK Consultores do Brasil Ltda. ("SRK" or "SRK Brazil") as at the date of the report (now of Planminas) and Carlos Barbosa, MAIG and Girogio di Tomi, MAusIMM, both of SRK Brazil, and each a "qualified person" and "independent" of the Company within the meanings of NI 43-101 (the "Boa Esperança Feasibility Study").

Reference should be made to the full text of the Vale do Curaçá Technical Report, the NX Gold Technical Report and the Boa Esperança Technical Report, each of which is available for review under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com).

The disclosure of Technical Information in this MD&A was reviewed and approved by Ricardo Emerson Re, MSc, MBA, MAusIMM (CP) (No. 305892), Registered Member (No. 0138) (Chilean Mining Commission) and Resource Manager of the Company who is a "qualified person" within the meanings of NI 43-101.

### Cautionary Note Regarding Forward-Looking Statements

This MD&A contains "forward-looking information" within the meaning of applicable Canadian securities laws. Forward-looking information includes statements that use forward-looking terminology such as "may", "could", "would", "will", "should", "intend", "target", "plan", "expect", "budget", "estimate", "forecast", "schedule", "anticipate", "believe", "continue", "potential", "view" or the negative or grammatical variation thereof or other variations thereof or comparable terminology. Such forward-looking information includes, without limitation, statements with respect to the Company's expected operations at the Vermelhos and Pilar Mines as well as at the NX Gold Property, drilling plans, plans for the Company's exploration program, timing of any updated mineral resource and reserve updates and technical reports, the Company's ability to service its ongoing obligations, the Company's future production outlook, cash costs, capital resources, expenditures, the impact of new accounting standards and amendments on the Company's financial statements, and current global macroeconomic uncertainty stemming from the onset of Covid-19.

Forward-looking information is not a guarantee of future performance and is based upon a number of estimates and assumptions of management in light of management's experience and perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances, as of the date of this Press Release including, without limitation, assumptions about: favourable equity and debt capital markets; the ability to raise any necessary additional capital on reasonable terms to advance the production, development and exploration of the Company's properties and assets; future prices of copper and other metal prices; the timing and results of exploration and drilling programs; the accuracy of any mineral reserve and mineral resource estimates; the geology of the Vale do Curaçá Property, NX Gold Property and the Boa Esperança Property being as described in the technical reports for these properties; production costs; the accuracy of budgeted exploration and development costs and expenditures; the price of other commodities such as fuel; future currency exchange rates and interest rates; operating conditions being favourable such that the Company is able to operate in a safe, efficient and effective manner; political and regulatory stability; the receipt of governmental, regulatory and third party approvals, licenses and permits on favourable terms; obtaining required renewals for existing approvals, licenses and permits on favourable terms; requirements under applicable laws; sustained labour stability; stability in financial and capital goods markets; availability of equipment; positive relations with local groups and the Company's ability to meet its obligations under its agreements with such groups; and satisfying the terms and conditions of the Company's current loan arrangements. While the Company considers these assumptions to be reasonable, the assumptions are inherently subject to significant business, social, economic, political, regulatory, competitive, global health, and other risks and uncertainties, contingencies and other factors that could cause actual actions, events, conditions, results, performance or achievements to be materially different from those projected in the forward-looking information. Many assumptions are based on factors and events that are not within the control of the Company and there is no assurance they will prove to be correct.

Furthermore, such forward-looking information involves a variety of known and unknown risks, uncertainties and other factors which may cause the actual plans, intentions, activities, results, performance or achievements of the Company to be materially different from any future plans, intentions, activities, results, performance or achievements expressed or implied by such forward-looking information. Such risks include, without limitation the risk factors listed under the heading "Risk Factors" in the AIF.



Although the Company has attempted to identify important factors that could cause actual actions, events, conditions, results, performance or achievements to differ materially from those described in forward-looking information, there may be other factors that cause actions, events, conditions, results, performance or achievements to differ from those anticipated, estimated or intended.

The Company cautions that the foregoing lists of important assumptions and factors are not exhaustive. Other events or circumstances could cause actual results to differ materially from those estimated or projected and expressed in, or implied by, the forward-looking information contained herein. There can be no assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information.

Forward-looking information contained herein is made as of the date of this MD&A and the Company disclaims any obligation to update or revise any forward-looking information, whether as a result of new information, future events or results or otherwise, except as and to the extent required by applicable securities laws.

### Cautionary Notes Regarding Mineral Resource and Reserve Estimates

In accordance with applicable Canadian securities regulatory requirements, all mineral reserve and mineral resource estimates of the Company disclosed or incorporated by reference in this MD&A have been prepared in accordance with NI 43-101 and are classified in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards for Mineral Resources and Mineral Reserves, adopted by the CIM Council on May 10, 2014 (the "CIM Standards").

Mineral resources which are not mineral reserves do not have demonstrated economic viability. Pursuant to the CIM Standards, 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. 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.

### ADDITIONAL INFORMATION

Additional information about Ero and its business activities, including the AIF, is available under the Company's profile at [www.sedar.com](http://www.sedar.com).