



## Trevalli Reports Fourth Quarter And Full Year 2019 Results Beats Production Guidance With Record Production Year

February 20, 2020

**Vancouver, British Columbia: Trevalli Mining Corporation (“Trevalli” or the “Company”) (TSX: TV, BVL: TV; OTCQX: TREVF, Frankfurt: 4TI)** today released financial and operating results for the three and twelve months ended December 31<sup>st</sup>, 2019. A strong focus on operational improvements led Trevalli to exceed on annual production guidance and deliver an annual production record of 417 million pounds of zinc at an all-in-sustaining-cost<sup>1</sup> (“AISC”) of \$1.01 per pound. All financial figures are in U.S. dollars.

### FINANCIAL AND OPERATIONAL HIGHLIGHTS

- **Significantly improved safety performance** with 46% reduction in Total Recordable Injury Frequency in 2019 compared to 2018.
- **Exceeded 2019 zinc production guidance by producing a record annual 417 million payable pounds of zinc** (3% increase on 2018). Total 2019 lead and silver production also exceeded guidance (21% and 15% increase, respectively, on 2018).
- **Adjusted EBITDA<sup>1</sup> of \$106.9 million** (\$20.4 million during Q4 2019) and annual operating cash flows of \$111.9 million (2018: \$119.0 million) which facilitated voluntary debt repayments of \$69.5 million during 2019.
- **Successful completion of the Rosh Pinah filtration and grinding upgrade project on schedule and on budget.**
- **The T90 Program has identified \$42 million of the \$50 million targeted sustainable efficiencies, \$14 million of which have been implemented** and will be realized on an ongoing annual basis at end of 2019 as part of the goal to achieve an AISC<sup>1</sup> of \$0.90 per pound by the beginning of 2022.
- **Advanced the RP2.0 Expansion Project with the Pre-Feasibility Study now expected in Q2 2020.**
- **Achieved record zinc payable sales of 440 million pounds in 2019**, surpassing prior year by 9%, reducing stock levels to 15,000 tonnes, a 40% reduction of zinc concentrate inventories from Q3.
- **A fixed zinc pricing arrangement at \$1.10 per pound was entered into for a six-month period**, for December 2019 to May 2020, equal to 70% of the zinc concentrate produced at Caribou and Santander.
- **Discovered a third VMS lens at Perkoa named “T3” and began the resource conversion program at the Santander Pipe.** Exploration spend of \$10.4 million achieving 41,000 metres drilled during 2019.

Ricus Grimbeek, Trevalli’s President and CEO commented “We are pleased to report in 2019 we exceeded the top end of production guidance for all metals and broke company annual production records for both zinc and lead. Both Cash Costs and All-In-Sustaining Cost came in at the lower end of guidance despite higher than expected industry treatment charges demonstrating that our T90 Business Improvement Program is firmly in place.

While 2019 was a great year we have much work to do to continue to transform Trevalli by developing our operational platform, delivering our organic growth projects, deploying technology and further integrating safety and sustainability into our business.

Thank you to everyone that was involved in making 2019 a success and looking forward to keeping the momentum going in 2020.”

This news release should be read in conjunction with Trevali's quarterly consolidated financial statements and management's discussion and analysis for the three and twelve months ended December 31<sup>st</sup>, 2019, which is available on Trevali's website and on SEDAR. Certain financial information is reported herein using non-IFRS measures. See Non-IFRS Financial Performance Measures below and in Trevali's accompanying Q4 and Full Year 2019 Management's Discussion and Analysis.

## Q4 AND FULL YEAR 2019 SUMMARY RESULTS

|                                             |       | 2019     | 2018      | YoY  | Q4'19   | Q3'19    | Q4'18     | Q4'19<br>vs<br>Q3'19 | Q4'19<br>vs<br>Q4'18 |
|---------------------------------------------|-------|----------|-----------|------|---------|----------|-----------|----------------------|----------------------|
| Zinc payable production                     | Mlbs  | 417.4    | 406.9     | 3%   | 104.8   | 106.8    | 102.7     | -2%                  | 2%                   |
| Lead payable production                     | Mlbs  | 50.3     | 41.7      | 21%  | 13.8    | 13.6     | 9.7       | 1%                   | 42%                  |
| Silver payable production                   | Moz   | 1.5      | 1.3       | 15%  | 0.4     | 0.4      | 0.3       | 0%                   | 33%                  |
| Revenue                                     | \$    | 386,110  | 464,347   | -17% | 91,466  | 87,135   | 121,763   | 5%                   | -25%                 |
| Adjusted EBITDA <sup>1</sup>                | \$    | 106,864  | 198,807   | -46% | 20,364  | 22,487   | 39,427    | -9%                  | -48%                 |
| Net (loss) income                           | \$    | (35,411) | (230,595) | 85%  | (3,833) | (16,131) | (251,778) | 76%                  | 98%                  |
| Net (loss) income per share                 | \$    | (0.04)   | (0.27)    | 85%  | 0.00    | (0.02)   | (0.29)    | 100%                 | 100%                 |
| Operating Cost <sup>1</sup>                 | \$/t  | 67       | 68        | -1%  | 67      | 63       | 76        | 6%                   | -12%                 |
| C1 Cash Cost <sup>1</sup>                   | \$/lb | 0.88     | 0.77      | 14%  | 0.86    | 0.84     | 0.90      | 2%                   | -4%                  |
| AISC <sup>1</sup>                           | \$/lb | 1.01     | 0.96      | 5%   | 1.02    | 0.96     | 1.15      | 6%                   | -11%                 |
| Sustaining capital expenditure <sup>1</sup> | \$    | 52,004   | 76,781    | -32% | 15,752  | 11,975   | 26,373    | 32%                  | -40%                 |
| Exploration expenditure                     | \$    | 10,362   | 12,837    | -19% | 2,755   | 2,576    | 7,952     | 7%                   | -65%                 |

Conversion of tonnes to pounds, 1 tonne = 2,204.62 pounds or lbs.

Revenue amounts in the table above, including previous and comparative annual and quarterly amounts have been restated to reflect the change in accounting policy set out in Note 3 of the audited consolidated financial statements for the year ended December 31, 2019.

## Q4 AND FULL YEAR 2019 RESULTS CONFERENCE CALL

The Company will host a conference call and presentation webcast at 01:00PM Eastern Time on Friday, February 21<sup>st</sup>, 2020 to review the operating and financial results. Participants are advised to dial in five minutes prior to the scheduled start time of the call. A presentation will be made available on the Company's website prior to the conference call.

Conference call dial-in details:

Date: Friday, February 21<sup>st</sup>, 2020 at 01:00PM Eastern Time

Toll-free (North America): 1 (877) 291-4570

International: +1 (647) 788-4919

Webcast: <http://www.gowebcasting.com/10472>

## T90 PROGRAM



At the end of Q3 2019, Trevali launched the T90 Business Improvement Program which targets \$50 million of annual sustainable efficiencies and a reduction in AISC<sup>1</sup> to \$0.90 per pound of zinc by the beginning of 2022. As of the end of 2019, \$42 million in annual sustainable efficiencies have been identified and \$14 million in sustainable efficiencies have been implemented and will be realized on an ongoing annual basis.

## FINANCIAL AND OPERATIONAL SUMMARY

The following table sets forth selected consolidated financial and operating information for each of the eight most recently completed quarters:

|                                                 | Q4'19   | Q3'19    | Q2'19    | Q1'19   | Q4'18     | Q3'18    | Q2'18   | Q1'18   |
|-------------------------------------------------|---------|----------|----------|---------|-----------|----------|---------|---------|
| Revenues                                        | 91,466  | 87,135   | 82,297   | 125,212 | 121,763   | 73,095   | 151,593 | 117,895 |
| Zinc sales (Mlbs)                               | 110     | 111      | 93       | 125     | 124       | 76       | 114     | 89      |
| EBITDA <sup>1</sup>                             | 19,611  | 12,945   | (7,443)  | 46,674  | (271,499) | (22,401) | 58,785  | 58,546  |
| Adjusted EBITDA <sup>1</sup>                    | 20,364  | 22,487   | 17,558   | 46,455  | 39,427    | 21,249   | 83,039  | 52,427  |
| Net (loss) income                               | (3,833) | (16,131) | (31,563) | 16,116  | (251,778) | (30,846) | 23,454  | 28,575  |
| Net (loss) income per share – basic and diluted | 0.00    | (0.02)   | (0.04)   | 0.02    | (0.29)    | (0.04)   | 0.03    | 0.03    |
| Adjusted (loss) income per share <sup>1</sup>   | 0.00    | (0.01)   | (0.01)   | 0.02    | 0.01      | (0.01)   | 0.04    | 0.02    |

<sup>1</sup> Revenue amounts in the table above have been restated to reflect the Company's change in accounting policy.

Revenue amounts in the table above, and comparable quarter amounts, have been restated to reflect the Company's change in accounting policy.

Revenues increased by 5% from Q3 2019 due to higher quarterly lead payable sales as quarterly London Metal Exchange (“LME”) average zinc prices and zinc payable sales remained consistent. EBITDA<sup>1</sup> and Adjusted EBITDA<sup>1</sup> were similar during the quarter due to minimal settlement mark-to-market adjustments (refer to summary on page 5).

Net loss in Q4 2019 was \$3.8 million or \$0.00 per share, compared to net loss of \$251.8 million or (\$0.29) per share, for the same period a year ago. The decrease in loss per share during Q4 2019 is largely attributable to the 2018 Q4 net non-cash impairment charge of \$263.0 million primarily driven by the decline in the price of zinc.

Quarterly Adjusted EBITDA<sup>1</sup> has stabilized during 2019, with the main source of variations being commodity price fluctuations and improved logistics of concentrate inventories at the African operations. The Company's mining activities are conducted throughout the year, and there are no notable variations due to seasonality.

EBITDA<sup>1</sup> was higher and net loss lower for Q4 2019 compared to Q4 2018 despite significantly higher benchmark smelting and refining charges and lower zinc prices. The Q4 2019 negative settlement mark-to-market amounted to \$0.3 million compared to a positive settlement mark-to-market of \$1.7 million during the same period in 2018.

|                                                 | 2019     | 2018      | 2017      |
|-------------------------------------------------|----------|-----------|-----------|
| Revenues                                        | 386,110  | 464,347   | 328,614   |
| Zinc sales (Mlbs)                               | 440      | 403       | 244       |
| EBITDA <sup>1</sup>                             | 71,787   | (176,569) | 100,960   |
| Adjusted EBITDA <sup>1</sup>                    | 106,864  | 198,807   | 117,110   |
| Net (loss) income                               | (35,411) | (230,595) | 20,227    |
| Net (loss) income per share – basic and diluted | (0.04)   | (0.27)    | 0.03      |
| Adjusted income per share <sup>1</sup>          | 0.00     | 0.12      | 0.07      |
| Totals assets                                   | 744,570  | 825,740   | 1,180,159 |

The above trend analysis shows a large increase in zinc sales volumes during 2018 which is the first full year of operations following the acquisition of the Perkoa and Rosh Pinah mines in September 2017. A net loss was reported in 2018 despite high revenues due to a net non-cash impairment charge of \$263.0 million. Revenues for 2019 have decreased, despite increased sales volumes which was caused by the year-over-year decline in the price of zinc and higher benchmark smelting and refining charges.

<sup>1</sup> See “Use of Non-IFRS Financial Performance Measures”.

|                             |         |           |           |     |         |         |         | Q4'19<br>vs<br>Q3'19 | Q4'19<br>vs<br>Q4'18 |
|-----------------------------|---------|-----------|-----------|-----|---------|---------|---------|----------------------|----------------------|
|                             |         |           |           |     | Q4'19   | Q3'19   | Q4'18   |                      |                      |
| <b>Production</b>           |         |           |           |     |         |         |         |                      |                      |
| Ore mined                   | t       | 3,150,423 | 2,973,669 | 6%  | 790,927 | 824,935 | 723,384 | -4%                  | 9%                   |
| Ore milled                  | t       | 3,234,358 | 3,054,768 | 6%  | 822,278 | 838,543 | 737,496 | -2%                  | 11%                  |
| Zinc head grade             |         | 8.0%      | 8.3%      | -4% | 7.8%    | 7.9%    | 8.8%    | -1%                  | -11%                 |
| Lead head grade             |         | 1.5%      | 1.4%      | 7%  | 2.0%    | 1.5%    | 1.2%    | 33%                  | 67%                  |
| Silver head grade           | (ozs/t) | 1.4       | 1.2       | 17% | 1.3     | 1.3     | 1.1     | 0%                   | 18%                  |
| Zinc recovery               |         | 87.2%     | 87.0%     | 0%  | 88.2%   | 87.1%   | 85.9%   | 1%                   | 3%                   |
| Lead recovery               |         | 67.2%     | 65.1%     | 3%  | 69.5%   | 69.6%   | 70.3%   | 0%                   | -1%                  |
| Silver recovery             |         | 46.2%     | 43.9%     | 5%  | 47.4%   | 45.9%   | 48.5%   | 3%                   | -2%                  |
| Zinc payable                | Mlbs    | 417.4     | 406.9     | 3%  | 104.8   | 106.8   | 102.7   | -2%                  | 2%                   |
| Lead payable                | Mlbs    | 50.3      | 41.7      | 21% | 13.8    | 13.6    | 9.7     | 1%                   | 42%                  |
| Silver payable              | Moz     | 1.5       | 1.3       | 15% | 0.4     | 0.4     | 0.3     | 0%                   | 33%                  |
| <b>Sales</b>                |         |           |           |     |         |         |         |                      |                      |
| Zinc payable                | Mlbs    | 440.1     | 403.3     | 9%  | 110.4   | 111.1   | 124.1   | -1%                  | -11%                 |
| Lead payable                | Mlbs    | 47.5      | 39.9      | 19% | 14.8    | 10.6    | 10.7    | 40%                  | 38%                  |
| Silver payable              | Moz     | 1.4       | 1.2       | 17% | 0.3     | 0.3     | 0.3     | 0%                   | 0%                   |
| <b>Cost per unit</b>        |         |           |           |     |         |         |         |                      |                      |
| Operating Cost <sup>1</sup> | \$/t    | 67        | 68        | -1% | 67      | 63      | 76      | 6%                   | -12%                 |
| C1 Cash Cost <sup>1</sup>   | \$/lb   | 0.88      | 0.77      | 14% | 0.86    | 0.84    | 0.90    | 2%                   | -4%                  |
| AISC <sup>1</sup>           | \$/lb   | 1.01      | 0.96      | 5%  | 1.02    | 0.96    | 1.15    | 6%                   | -11%                 |

Quarterly zinc payable production reduced slightly (2%) to 104.8 million pounds compared to Q3, following two consecutive record production quarters in Q2 and Q3 and a 2% increase from the comparative quarter in 2018. Compared to the comparative quarter of 2018, ore tonnes milled at Rosh Pinah, Perkoa, Santander and Caribou improved sequentially, with overall lower grades as planned due to lower grade ore milled at all operations except Santander where higher grades are attributed to continued improvement with dilution control and to higher grade ore access recently developed in accordance with the mine plan.

Zinc payable sales in Q4 2019 were 110.4 million pounds, representing a balanced sales quarter at 25% of annual production. Cost per unit during the quarter increased compared to Q3 2019 due primarily to higher than average development meter costs at Caribou, as well as scheduled mill maintenance and implementation of improvements in the grinding and flotation circuits to improve recoveries and concentrate grades at Santander. During 2019, sales of zinc payable increased due to improved logistics and to the successful sale of inventory backlog achieving a record low balance.

Initiatives across Trevali to improve shipping logistics during 2019 realized benefits with concentrate inventory levels steadily decreasing to the point of effectively just-in-time inventory levels at December 31, 2019. A new zinc concentrate filter press was installed at Rosh Pinah during Q4 2019, which is expected to reduce the volatility of concentrate sales volumes and to reduce stock levels in conjunction with an improved concentrate logistics performance.

2019 costs were positively impacted by the decreasing operating cost trend and increased production. There is an overall net decrease in 2019 operating costs over the prior year except for the significantly higher benchmark zinc concentrate smelting and refining charges in 2019 compared to 2018 which had an impact of adding \$0.10 per pound (13% of C1 Cash Cost<sup>1</sup>) to both C1 Cash Cost<sup>1</sup> and AISC<sup>1</sup>.

<sup>1</sup> See "Use of Non-IFRS Financial Performance Measures".

## OUTLOOK

### Commodity Markets

We believe the outlook for the zinc market is supportive of higher prices. In 2019, global consumption of the metal was greater than what the market could supply for a fourth consecutive year. Over the past year, zinc smelters globally have been slow to respond to increasing smelting and refining charges. As a result, refined zinc inventories are currently at levels which have not been experienced since July 2007 at a time when the zinc price was approximately \$1.60 per pound. This deficit to refined zinc inventories occurred despite two years of demand contraction. Despite demand growth of the metal forecasted to return in 2020 and 2021 at rates of 1.0% and 1.6%, respectively, we believe the inventory deficit will continue, counter to what some market participants forecast. The combination of a relatively low zinc price coupled with higher smelting and refining charges will lead to a widening inventory deficit resulting in marginal and restarting mining operations curtailing or suspending production much more rapidly and in higher volume than forecast by the market. This should provide fundamental support for a higher zinc price.

## OPERATIONS REVIEW

### Consolidated Revenues

In addition to our operating results, financial performance is directly affected by several factors, including metals prices, foreign exchange rates and input costs, including energy prices. The average LME metal prices are included below, the Q4 2019 average zinc price increased slightly (2%) compared to the previous quarter and remains volatile.

|                             |       |           |           |      |          |          |          | Q4'19<br>vs<br>Q3'19 | Q4'19<br>vs<br>Q4'18 |
|-----------------------------|-------|-----------|-----------|------|----------|----------|----------|----------------------|----------------------|
|                             |       |           |           |      | Q4'19    | Q3'19    | Q4'18    | Q3'19                | Q4'18                |
| <b>Revenues</b>             |       |           |           |      |          |          |          |                      |                      |
| Zinc revenue                | \$    | 497,160   | 526,177   | −6%  | 117,406  | 116,771  | 145,594  | 1%                   | −19%                 |
| Lead and silver revenue     |       | 70,339    | 62,309    | 13%  | 21,278   | 17,198   | 14,709   | 24%                  | 45%                  |
| Smelting and refining costs |       | (181,389) | (124,139) | −46% | (47,218) | (46,834) | (38,540) | −1%                  | −23%                 |
| Net revenue                 | \$    | 386,110   | 464,347   | −17% | 91,466   | 87,135   | 121,763  | 5%                   | −25%                 |
| Average zinc LME price      | \$/lb | 1.16      | 1.33      | −13% | 1.08     | 1.06     | 1.19     | 2%                   | −9%                  |
| Average lead LME price      | \$/lb | 0.91      | 1.02      | −11% | 0.92     | 0.92     | 0.89     | 0%                   | 3%                   |
| Average silver LBMA price   | \$/oz | 16.20     | 15.71     | 3%   | 17.33    | 17.02    | 14.55    | 2%                   | 19%                  |
| <b>Sales quantities</b>     |       |           |           |      |          |          |          |                      |                      |
| Payable zinc                | Mlbs  | 440.1     | 403.3     | 9%   | 110.4    | 111.1    | 124.1    | −1%                  | −11%                 |
| Payable lead                | Mlbs  | 47.5      | 39.9      | 19%  | 14.8     | 10.6     | 10.7     | 40%                  | 38%                  |
| Payable silver              | Mozs  | 1.4       | 1.2       | 17%  | 0.3      | 0.3      | 0.3      | 0%                   | 0%                   |

Revenue amounts in the table above, and comparative quarter amounts, have been restated to reflect the Company's change in accounting policy.

All Trevali's zinc and lead concentrate sales contracts provide final pricing in a future month based primarily on quoted LME monthly average zinc and lead prices. The Company recognizes revenues at the time of shipment based on estimated final pricing, with mark-to-market adjustments made each subsequent period until final pricing on the date of settlement. Concentrate smelting and refining charges and freight, included within smelting and refining cost, are negotiated at market-related rates.

Zinc sales volumes and zinc price both remained stable compared to the prior quarter, however the net revenue decreases over Q4 2018 are due to lower sales volumes and zinc price. Benchmark smelting and refining rates have increased at an amount equating to an additional \$0.10 per pound, with 2019 revenues before smelting and refining costs slightly below prior year with the increase in volumes unable to offset the decrease in price.

<sup>1</sup> See "Use of Non-IFRS Financial Performance Measures".

## Settlement Mark-to-market

|                                                    |       | Zinc  | Lead |
|----------------------------------------------------|-------|-------|------|
| Spot 3-month future price as at September 30, 2019 | \$/lb | 1.05  | 0.95 |
| Provisionally priced metal – September 30, 2019    | Mlbs  | 151.5 | 3.5  |
| Average 3-month future price for September 2019    | \$/lb | 1.05  | 0.94 |
| Average Q4 LME price                               | \$/lb | 1.08  | 0.92 |
| Provisionally priced metal – December 31, 2019     | Mlbs  | 147.4 | 5.9  |
| Average 3-month future price for December 2019     | \$/lb | 1.03  | 0.87 |
| Spot 3-month future price as at December 31, 2019  | \$/lb | 1.04  | 0.88 |

Management estimates that each \$0.05 change in the zinc price per pound realized from the December 31, 2019 provisional price recorded of \$1.03 per pound would result in approximately \$7.0 million on 2019 settlement mark-to-market and EBITDA.

The negative \$0.3 million settlement mark-to-market for Q4 2019 primarily reflects the decrease in the estimated final zinc pricing at December 31, 2019 from \$1.05 per pound to \$1.03 per pound compared to the average zinc prices during Q3 and Q4 2019 of \$1.06 and \$1.08 per pound, respectively. This is also impacted by the quantity of provisionally priced metal at various stages during the quarter and the timing of sales weighted towards the end of the quarter with 56% of Q4 sales occurring during the month of December.

A fixed zinc pricing arrangement was entered into in November 2019 for 70% of the zinc concentrate produced at Caribou and Santander and for a six-month period covering December 2019 to May 2020 at a price of \$1.10 per pound. Management made a strategic decision to fix the zinc price at the two higher cost operations when the opportunity arose with the temporary strengthening of the zinc price in November. This will reduce the quantity of provisionally priced metal in future quarters and reduce the impact of the settlement mark-to-market adjustments. As a result of the fixed pricing arrangement which covered December 2019, net income for Q4 2019 was \$0.7 million higher.

<sup>1</sup> See "Use of Non-IFRS Financial Performance Measures".

## PERKOA MINE, BURKINA FASO

|                                           |       |         |         |       | Q4'19<br>vs<br>Q3'19 |         |          |       |       |
|-------------------------------------------|-------|---------|---------|-------|----------------------|---------|----------|-------|-------|
|                                           |       |         |         |       | Q4'19<br>vs<br>Q4'18 |         |          |       |       |
|                                           |       |         |         |       | Q4'19                | Q3'19   | Q4'18    | Q3'19 | Q4'18 |
| <b>Production</b>                         |       |         |         |       |                      |         |          |       |       |
| Ore mined                                 | t     | 751,681 | 708,263 | 6%    | 181,165              | 195,058 | 161,815  | -7%   | 12%   |
| Ore milled                                | t     | 739,849 | 724,995 | 2%    | 189,740              | 189,445 | 185,662  | 0%    | 2%    |
| Zinc head grade                           |       | 14.3%   | 14.9%   | -4%   | 14.0%                | 14.9%   | 15.4%    | -6%   | -9%   |
| Zinc recovery                             |       | 91.6%   | 91.8%   | 0%    | 93.9%                | 92.1%   | 90.0%    | 2%    | 4%    |
| Zinc concentrate grade                    |       | 50.5%   | 50.3%   | 0%    | 52.0%                | 50.8%   | 49.6%    | 2%    | 5%    |
| Zinc payable                              | Mlbs  | 179.8   | 184.0   | -2%   | 46.2                 | 48.3    | 47.6     | -4%   | -3%   |
| <b>Sales</b>                              |       |         |         |       |                      |         |          |       |       |
| Zinc payable                              | Mlbs  | 191.5   | 182.5   | 5%    | 47.3                 | 48.5    | 52.7     | -2%   | -10%  |
| Operating Cost <sup>1</sup>               | \$/t  | 96      | 105     | -9%   | 89                   | 88      | 118      | 1%    | -25%  |
| C1 Cash Cost <sup>1</sup>                 | \$/lb | 0.88    | 0.80    | 10%   | 0.83                 | 0.77    | 0.88     | 8%    | -6%   |
| AISC <sup>1</sup>                         | \$/lb | 0.94    | 0.91    | 3%    | 0.90                 | 0.82    | 1.13     | 10%   | -20%  |
| <b>FINANCE</b>                            |       |         |         |       |                      |         |          |       |       |
| Revenues, net                             | \$    | 151,980 | 193,341 | -21%  | 33,365               | 34,861  | 48,295   | -4%   | -31%  |
| Mine operating expenses                   |       | 105,011 | 108,402 | -3%   | 23,607               | 22,116  | 36,402   | 7%    | -35%  |
| Adjusted EBITDA <sup>1</sup>              |       | 46,969  | 84,939  | -45%  | 9,758                | 12,745  | 11,893   | -23%  | -18%  |
| Other expenses (income)<br>and impairment |       | 16,038  | 57,722  | -72%  | (3,138)              | 8,972   | 23,278   | -135% | -113% |
| EBITDA <sup>1</sup>                       |       | 30,931  | 27,217  | 14%   | 12,896               | 3,773   | (11,385) | 242%  | 213%  |
| Depreciation, depletion &<br>amortization |       | 35,702  | 27,904  | 28%   | 7,769                | 9,954   | 1,390    | -22%  | 459%  |
| EBIT <sup>1</sup>                         | \$    | (4,771) | (687)   | -594% | 5,127                | (6,181) | (12,775) | 183%  | 140%  |

Revenue amounts in the table above, and comparative quarter amounts, have been restated to reflect the Company's change in accounting policy.

Payable zinc production for Q4 2019 was 46.2 million pounds, a 4% and 3% reduction over the prior and corresponding quarter in 2018, respectively. High production levels have been sustained through higher plant throughput, and higher recoveries. Recoveries were higher due to decreasing mining dilution from 15% during the first half of 2019 to 11% while a higher plant throughput rate was realized as a result of more consistent ore feed and improved mill availability. Improved zinc recoveries have been sustained following the modification of the existing flotation circuit to pre-float iron prior to the flotation of zinc during Q2 2019. The resulting benefits from decreasing the iron content in the zinc concentrate, through reduced freight costs and reduced smelting and refining penalties, are being realized.

C1 Cash Cost<sup>1</sup> reduced by 6% compared to the corresponding quarter in 2018, reflecting the lower production costs per pound associated with increased mining and processing performance and reduced iron grades in zinc concentrate produced. This reduction was offset by significant increases to industry benchmark zinc concentrate smelting and refining charges and higher volumes of concentrate trucking. The AISC<sup>1</sup> decrease of \$0.23 per pound compared to Q4 2018 is due to a decrease in sustaining capital expenditures, primarily due to the construction of the heavy fuel oil power conversion plant in the prior year. C1 Cash Cost<sup>1</sup> and AISC<sup>1</sup> increased quarter-over-quarter as a result of one-off credits recorded in Q3 2019.

2019 production guidance was exceeded while achieving cost guidance, despite the higher benchmark smelting and refining charges during 2019. Improved dilution control along with the modifications to the processing plant to eliminate iron prior to floating the zinc potentially facilitates the processing of additional mineral resources not currently in the mine plan and is expected to, in combination with other cost efficiencies, provide a basis to review, and potentially extend Perkoa Mine's life.

<sup>1</sup> See "Use of Non-IFRS Financial Performance Measures".

## ROSH PINAH MINE, NAMIBIA

|                                        |       |         |          |      | Q4'19   | Q3'19   | Q4'18    | Q4'19<br>vs<br>Q3'19 | Q4'19<br>vs<br>Q4'18 |
|----------------------------------------|-------|---------|----------|------|---------|---------|----------|----------------------|----------------------|
|                                        |       | 2019    | 2018     | YoY  |         |         |          |                      |                      |
| <b>Production</b>                      |       |         |          |      |         |         |          |                      |                      |
| Ore mined                              | t     | 714,356 | 627,295  | 14%  | 196,723 | 179,289 | 158,354  | 10%                  | 24%                  |
| Ore milled                             | t     | 705,651 | 641,980  | 10%  | 181,408 | 181,490 | 149,201  | 0%                   | 22%                  |
| Zinc head grade                        |       | 8.2%    | 9.2%     | -11% | 7.4%    | 7.2%    | 10.9%    | 3%                   | -32%                 |
| Lead head grade                        |       | 1.3%    | 1.0%     | 30%  | 2.0%    | 1.2%    | 0.8%     | 67%                  | 150%                 |
| Silver head grade                      | oz/t  | 0.6     | 0.5      | 20%  | 1.1     | 0.5     | 0.4      | 120%                 | 175%                 |
| Zinc recovery                          |       | 85.9%   | 86.8%    | -1%  | 84.5%   | 83.8%   | 84.9%    | 1%                   | 0%                   |
| Lead recovery                          |       | 63.9%   | 64.7%    | -1%  | 72.1%   | 74.4%   | 65.4%    | -3%                  | 10%                  |
| Silver recovery                        |       | 47.1%   | 46.8%    | 1%   | 54.3%   | 49.8%   | 53.2%    | 9%                   | 2%                   |
| Zinc concentrate grade                 |       | 49.6%   | 47.7%    | 4%   | 50.0%   | 49.8%   | 49.7%    | 0%                   | 1%                   |
| Lead concentrate grade                 |       | 45.3%   | 30.5%    | 49%  | 52.0%   | 49.4%   | 19.8%    | 5%                   | 163%                 |
| Zinc payable                           | Mlbs  | 92.0    | 94.2     | -2%  | 20.9    | 20.3    | 25.4     | 3%                   | -18%                 |
| Lead payable                           | Mlbs  | 12.1    | 8.5      | 42%  | 5.3     | 3.2     | 1.5      | 66%                  | 253%                 |
| Silver payable                         | Moz   | 0.2     | 0.1      | 100% | 0.2     | -       | -        | 100%                 | 100%                 |
| <b>Sales</b>                           |       |         |          |      |         |         |          |                      |                      |
| Zinc payable                           | Mlbs  | 105.5   | 91.4     | 15%  | 26.7    | 24.2    | 39.1     | 10%                  | -32%                 |
| Lead payable                           | Mlbs  | 9.3     | 7.7      | 21%  | 6.0     | -       | 3.3      | 100%                 | 82%                  |
| Silver payable                         | Moz   | 0.1     | 0.1      | 0%   | 0.1     | -       | -        | 100%                 | 100%                 |
| Operating Cost <sup>1</sup>            | \$/t  | 54      | 59       | -8%  | 59      | 52      | 71       | 13%                  | -17%                 |
| C1 Cash Cost <sup>1</sup>              | \$/lb | 0.84    | 0.70     | 20%  | 0.82    | 1.01    | 0.91     | -19%                 | -10%                 |
| AISC <sup>1</sup>                      | \$/lb | 1.03    | 0.90     | 14%  | 1.00    | 1.25    | 1.11     | -20%                 | -10%                 |
| <b>FINANCE</b>                         |       |         |          |      |         |         |          |                      |                      |
| Revenues, net                          | \$    | 89,440  | 102,937  | -13% | 24,040  | 16,030  | 37,284   | 50%                  | -36%                 |
| Mine operating expenses                |       | 53,288  | 50,233   | 6%   | 16,036  | 11,425  | 19,287   | 40%                  | -17%                 |
| Adjusted EBITDA <sup>1</sup>           |       | 36,152  | 52,704   | -31% | 8,004   | 4,605   | 17,997   | 74%                  | -56%                 |
| Other expenses (income) and impairment |       | 2,182   | 91,262   | -98% | 1,943   | (3,269) | 82,449   | 159%                 | -98%                 |
| EBITDA <sup>1</sup>                    |       | 33,970  | (38,558) | 188% | 6,061   | 7,874   | (64,452) | -23%                 | 109%                 |
| Depreciation, depletion & amortization |       | 24,502  | 17,991   | 36%  | 6,607   | 5,995   | 9,432    | 10%                  | -30%                 |
| EBIT <sup>1</sup>                      | \$    | 9,468   | (56,549) | 117% | (546)   | 1,879   | (73,884) | -129%                | 99%                  |

Revenue amounts in the table above, and comparative quarter amounts, have been restated to reflect the Company's change in accounting policy.

Payable zinc production for Q4 2019 was 20.9 million pounds, 18% lower than during the corresponding quarter in 2018 due to a 32% decrease in ore feed grade offset by 22% increase in milled tonnes. Payable zinc production for Q4 2019 represents a 3% improvement from the previous quarter as grades improved during the fourth quarter, in line with expectations and guidance. Ore blending efforts to optimize grade and ore type continue to have success, improving the process plant stability and increasing ore processing rates. A significant increase in the ready-to-blast, drilled-off stope tonnes available provides the blending flexibility to further improve processing plant stability.

C1 Cash Cost<sup>1</sup> and AISC<sup>1</sup> reduced by \$0.09 per pound and \$0.11 per pound, respectively, when compared to the corresponding quarter in 2018 due primarily to an 82% increase in by-product sales. As well, the decrease in operating costs and sustaining capital was partially offset by an 18% decrease in zinc payable production and by the significant increase to industry benchmark zinc concentrate smelting and refining charges. C1 Cash Cost<sup>1</sup> and AISC<sup>1</sup> decreased quarter-over-quarter primarily due to increased by-product revenues with the second lead shipment of 2019 as scheduled and a 15% decrease in sustaining capital expenditures.

2019 production guidance was exceeded and AISC<sup>1</sup> guidance achieved. The zinc concentrate filter press was commissioned two weeks earlier than planned in mid-December and is expected to reduce zinc concentrate moisture content, re-handling costs and variability as well as improved metal accounting accuracy due to lower concentrate levels.

<sup>1</sup> See "Use of Non-IFRS Financial Performance Measures".

## CARIBOU MINE, CANADA

|                                        |       |          |          |      | Q4'19   | Q3'19   | Q4'18    | Q4'19 vs Q3'19 | Q4'19 vs Q4'18 |
|----------------------------------------|-------|----------|----------|------|---------|---------|----------|----------------|----------------|
|                                        |       | 2019     | 2018     | YoY  |         |         |          |                |                |
| <b>Production</b>                      |       |          |          |      |         |         |          |                |                |
| Ore mined                              | t     | 909,298  | 887,141  | 2%   | 239,113 | 244,707 | 184,635  | -2%            | 30%            |
| Ore milled                             | t     | 913,178  | 884,529  | 3%   | 232,055 | 248,710 | 174,180  | -7%            | 33%            |
| Zinc head grade                        |       | 5.7%     | 5.9%     | -3%  | 5.6%    | 5.6%    | 6.0%     | 0%             | -7%            |
| Lead head grade                        |       | 2.3%     | 2.3%     | 0%   | 2.0%    | 2.3%    | 2.3%     | -13%           | -13%           |
| Silver head grade                      | oz/t  | 2.1      | 2.0      | 5%   | 1.7     | 2.1     | 1.9      | -19%           | -11%           |
| Zinc recovery                          |       | 79.1%    | 75.6%    | 5%   | 80.1%   | 79.5%   | 72.9%    | 1%             | 10%            |
| Lead recovery                          |       | 63.6%    | 61.8%    | 3%   | 62.7%   | 63.9%   | 67.6%    | -2%            | -7%            |
| Silver recovery                        |       | 37.6%    | 36.4%    | 3%   | 35.1%   | 37.8%   | 38.2%    | -7%            | -8%            |
| Zinc concentrate grade                 |       | 47.0%    | 46.9%    | 0%   | 46.7%   | 47.7%   | 44.9%    | -2%            | 4%             |
| Lead concentrate grade                 |       | 38.7%    | 38.8%    | 0%   | 38.1%   | 38.6%   | 39.3%    | -1%            | -3%            |
| Zinc payable                           | Mlbs  | 75.0     | 72.0     | 4%   | 18.9    | 20.3    | 13.7     | -7%            | 38%            |
| Lead payable                           | Mlbs  | 26.7     | 25.3     | 6%   | 5.9     | 7.5     | 5.5      | -21%           | 7%             |
| Silver payable                         | Moz   | 0.7      | 0.7      | 0%   | -       | 0.2     | 0.1      | -100%          | -100%          |
| <b>Sales</b>                           |       |          |          |      |         |         |          |                |                |
| Zinc payable                           | Mlbs  | 73.9     | 72.9     | 1%   | 18.1    | 20.5    | 15.0     | -12%           | 21%            |
| Lead payable                           | Mlbs  | 26.7     | 24.4     | 9%   | 6.1     | 7.8     | 4.6      | -22%           | 33%            |
| Silver payable                         | Moz   | 0.7      | 0.7      | 0%   | -       | 0.2     | 0.1      | -100%          | -100%          |
| Operating Cost <sup>1</sup>            | \$/t  | 73       | 68       | 7%   | 71      | 66      | 90       | 8%             | -21%           |
| C1 Cash Cost <sup>1</sup>              | \$/lb | 1.03     | 0.85     | 21%  | 1.05    | 0.93    | 1.28     | 13%            | -18%           |
| AISC <sup>1</sup>                      | \$/lb | 1.17     | 1.14     | 3%   | 1.24    | 1.05    | 1.93     | 18%            | -36%           |
| <b>FINANCE</b>                         |       |          |          |      |         |         |          |                |                |
| Revenues, net                          | \$    | 75,219   | 97,384   | -23% | 17,084  | 19,235  | 16,527   | -11%           | 3%             |
| Mine operating expenses                |       | 68,520   | 60,802   | 13%  | 16,541  | 17,917  | 15,084   | -8%            | 10%            |
| Adjusted EBITDA <sup>1</sup>           |       | 6,699    | 36,582   | -82% | 543     | 1,318   | 1,443    | -59%           | -62%           |
| Other expenses and impairment          |       | 5,325    | 80,906   | -93% | 1,308   | 2,113   | 66,808   | -38%           | -98%           |
| EBITDA <sup>1</sup>                    |       | 1,374    | (44,324) | 103% | (765)   | (795)   | (65,365) | 4%             | 99%            |
| Depreciation, depletion & amortization |       | 12,940   | 10,751   | 20%  | 478     | 4,683   | 2,319    | -90%           | -79%           |
| EBIT <sup>1</sup>                      | \$    | (11,566) | (55,075) | 79%  | (1,243) | (5,478) | (67,684) | 77%            | 98%            |

Revenue amounts in the table above, and comparative quarter amounts, have been restated to reflect the Company's change in accounting policy.

Payable zinc production for Q4 2019 was 18.9 million pounds, 38% higher than the corresponding quarter in 2018 due to increased ore mined from production stopes, and 7% lower than Q3 after milling fewer tonnes. Milled tonnes were higher compared to Q4 2018 as a result of increased ore mined for the same period. Mill performance continues to exceed expectations with strong metallurgical recoveries and throughput rates.

C1 Cash Cost<sup>1</sup> and AISC<sup>1</sup> were higher quarter-over-quarter due to lower zinc payable production and higher sustaining capital expenditures due to an increase in development meters. C1 Cash Cost<sup>1</sup> and AISC<sup>1</sup> have decreased when compared to the corresponding quarter in 2018, reflecting increases in zinc payable production and cost reduction initiatives such as mining contractor services being insourced and decreased sustaining capital expenditures. These reductions were partially offset by significant increases to industry benchmark zinc concentrate smelting and refining charges.

2019 production and cost guidance were achieved. Mill throughput rates and recoveries remained strong. The improved ore production compared to Q4 2018 is based on the improved ground control and mining sequence. The first ore tonnes were extracted from Zone 6 in late Q4 as an additional ore source. Record mine rehabilitation for secondary support was achieved in Q4 2019 along with higher than normal development meters.

<sup>1</sup> See "Use of Non-IFRS Financial Performance Measures".

## SANTANDER MINE, PERU

|                                        |       | 2019    | 2018     | YoY  | Q4'19   | Q3'19   | Q4'18    | Q4'19<br>vs<br>Q3'19 | Q4'19<br>vs<br>Q4'18 |
|----------------------------------------|-------|---------|----------|------|---------|---------|----------|----------------------|----------------------|
| <b>Production</b>                      |       |         |          |      |         |         |          |                      |                      |
| Ore mined                              | t     | 775,088 | 750,970  | 3%   | 173,926 | 205,881 | 218,580  | -16%                 | -20%                 |
| Ore milled                             | t     | 875,680 | 803,265  | 9%   | 219,075 | 218,898 | 228,454  | 0%                   | -4%                  |
| Zinc head grade                        |       | 5.0%    | 4.3%     | 16%  | 5.3%    | 5.1%    | 4.3%     | 4%                   | 19%                  |
| Lead head grade                        |       | 0.8%    | 0.6%     | 33%  | 0.7%    | 0.8%    | 0.7%     | -13%                 | 0%                   |
| Silver head grade                      | oz/t  | 1.2     | 0.9      | 33%  | 1.1     | 1.1     | 1.1      | 0%                   | 0%                   |
| Zinc recovery                          |       | 87.7%   | 89.3%    | -2%  | 88.3%   | 87.5%   | 89.2%    | 1%                   | -1%                  |
| Lead recovery                          |       | 83.0%   | 80.0%    | 4%   | 83.7%   | 83.6%   | 80.4%    | 0%                   | 4%                   |
| Silver recovery                        |       | 62.1%   | 61.3%    | 1%   | 62.0%   | 60.9%   | 61.9%    | 2%                   | 0%                   |
| Zinc concentrate grade                 |       | 46.8%   | 47.7%    | -2%  | 46.5%   | 46.1%   | 47.9%    | 1%                   | -3%                  |
| Lead concentrate grade                 |       | 49.9%   | 50.0%    | 0%   | 49.0%   | 49.2%   | 51.4%    | 0%                   | -5%                  |
| Zinc payable                           | Mlbs  | 70.6    | 56.8     | 24%  | 18.8    | 17.9    | 16.0     | 5%                   | 18%                  |
| Lead payable                           | Mlbs  | 11.5    | 7.9      | 46%  | 2.6     | 2.8     | 2.7      | -7%                  | -4%                  |
| Silver payable                         | Moz   | 0.6     | 0.5      | 20%  | 0.2     | 0.1     | 0.2      | 100%                 | 0%                   |
| <b>Sales</b>                           |       |         |          |      |         |         |          |                      |                      |
| Zinc payable                           | Mlbs  | 69.2    | 56.5     | 22%  | 18.3    | 17.9    | 17.3     | 2%                   | 6%                   |
| Lead payable                           | Mlbs  | 11.5    | 7.8      | 47%  | 2.7     | 2.9     | 2.8      | -7%                  | -4%                  |
| Silver payable                         | Moz   | 0.6     | 0.5      | 20%  | 0.2     | 0.1     | 0.2      | 100%                 | 0%                   |
| Operating Cost <sup>1</sup>            | \$/t  | 45      | 43       | 5%   | 50      | 45      | 33       | 11%                  | 52%                  |
| C1 Cash Cost <sup>1</sup>              | \$/lb | 0.76    | 0.72     | 6%   | 0.79    | 0.71    | 0.59     | 11%                  | 34%                  |
| AISC <sup>1</sup>                      | \$/lb | 0.99    | 0.99     | 0%   | 1.10    | 0.92    | 0.63     | 20%                  | 75%                  |
| <b>FINANCE</b>                         |       |         |          |      |         |         |          |                      |                      |
| Revenues, net                          | \$    | 69,471  | 70,687   | -2%  | 16,977  | 17,009  | 19,666   | 0%                   | -14%                 |
| Mine operating expenses                |       | 43,766  | 37,863   | 16%  | 12,581  | 11,265  | 9,070    | 12%                  | 39%                  |
| Adjusted EBITDA <sup>1</sup>           |       | 25,705  | 32,824   | -22% | 4,396   | 5,744   | 10,596   | -23%                 | -59%                 |
| Other expense (income) and impairment  |       | 1,301   | 94,277   | -99% | 626     | 1,021   | 87,588   | -39%                 | -99%                 |
| EBITDA <sup>1</sup>                    |       | 24,404  | (61,453) | 140% | 3,770   | 4,723   | (76,992) | -20%                 | 105%                 |
| Depreciation, depletion & amortization |       | 10,738  | 10,916   | -2%  | 2,844   | 1,674   | 1,224    | 70%                  | 132%                 |
| EBIT <sup>1</sup>                      | \$    | 13,666  | (72,369) | 119% | 926     | 3,049   | (78,216) | -70%                 | 101%                 |

Revenue amounts in the table above, and comparative quarter amounts, have been restated to reflect the Company's change in accounting policy.

Payable zinc production for Q4 2019 was 18.8 million pounds, an 18% improvement over the corresponding quarter in 2018 as higher grades were processed and consistent with the previous quarter. During Q4 2019, Santander achieved better zinc recoveries than the previous quarter as a direct result of improvements implemented in the cyclones and zinc flotation circuit combined with improved blending of the plant feed which in turn led to improved zinc concentrate grades. Further, plant reliability has been improved with the implementation of a more disciplined maintenance program. A new tertiary crusher was commissioned during the quarter contributing to more than 0.5% increased recoveries. The primary crusher was also replaced during the January 2020 maintenance shutdown. These improvements to the crushing circuit will improve comminution and ensure metallurgical recoveries and concentrate grades are aligned to the 2020 targets.

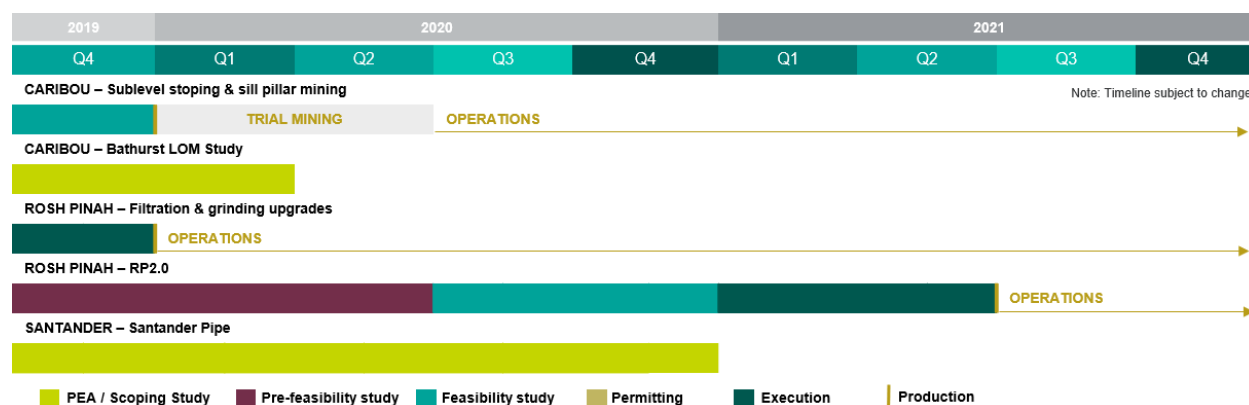
C1 Cash Cost<sup>1</sup> and AISC<sup>1</sup> increased compared to the corresponding quarter in 2018 primarily due to the higher benchmark zinc concentrate smelting and refining charges, offset by increased by-product revenues resulting from higher silver prices. The quarter-over-quarter increase in C1 Cash Cost<sup>1</sup> reflects scheduled maintenance costs for the mill, implementation of improvements in the grinding and flotation circuits to improve recoveries and concentrate grades discussed above. AISC<sup>1</sup> costs for Q4 increased due to higher sustaining capital expenditures.

2019 production guidance was exceeded while C1 Cash Cost<sup>1</sup> guidance was achieved and AISC<sup>1</sup> guidance was below the low end of guidance despite higher than expected smelting and refining charges. Head grades improved as well due to higher mill reliability with the trend of improved concentrate grades and recoveries continuing during Q4.

<sup>1</sup> See "Use of Non-IFRS Financial Performance Measures".

## GROWTH PROJECTS AND STUDIES

The current anticipated milestones for 2020 through 2021 for some of the Company's numerous projects are outlined below:



### Growth projects and anticipated milestones for 2019 through 2021

#### Caribou: Sublevel Stopping and Sill Pillar Mining

During Q4 2019, trial mining of a historical mining zone was successful, allowing for inclusion of additional ore tonnes not previously in the mine plan. Trial mining of sublevel stoping in the East has also been identified as the location where the new top-down method will be trialed in H1 2020, informed by flowability of ore in the historical zone. Mining of sill pillars is currently still being evaluated through numerical modeling which is expected to be completed in Q1 2020.

#### Caribou: Bathurst Life of Mine Review

In Q3 2019, a study began on Restigouche considering it as a supplemental ore source for the Caribou mill. Initial results show that other satellite deposits owned by Trevali with higher grade and more tonnes may be better suited to feed the Caribou mill in the near term. The study was expanded to include Halfmile as potential ore feed to the Caribou mill. The study is estimated to be completed in Q4 2020.

#### Rosh Pinah: Filtration and Grinding Project

The filtration and grinding upgrade project was completed during Q4 2019 on schedule and on budget. Ramp-up is advancing and the benefits of the project are improved metallurgical recoveries, reduced processing times, and reduced inventory levels as a result of the project delivering a finer grind size and decreasing moisture levels in the concentrate.

#### Rosh Pinah: RP2.0 Project

The RP2.0 feasibility study continued to advance during Q4 2019 and Trevali plans on publishing a pre-feasibility study during Q2 2020 to support the initial long lead procurement investment decision. This will be followed by the feasibility study in Q4 2020. The feasibility study will be used to support the full execution funding decision.

#### Santander: Santander Pipe

Drilling continued during Q4 2019 targeting an increase in inferred mineral resources and converting additional inferred mineral resources to an indicated mineral resource level. Three drills were actively drilling the pipe as of the end of Q4 2019. An internal preliminary economic assessment is expected to be completed by the end of Q4 2020 which will evaluate the economic viability of incorporating the Santander Pipe ore into the existing operation.

## EXPLORATION AND DEVELOPMENT

The primary goal of Trevali's 2019 exploration program was to focus on near-mine exploration targets with the objective to discover new mineral resources in proximity to existing mine infrastructure. The Company had committed to invest an original budget of \$8.4 million in 2019 which included ground geophysical surveys, geochemical surveys, first pass air-core drilling and approximately 36,000 metres of diamond drilling from surface and underground primarily focused on the Perkoa and Santander mineral systems. Given the positive results to date, the budget was increased in Q4 to cover further drilling programs at all operations which included additional drilling along the Northern extension of the Western Orefield at Rosh Pinah, additional drilling at Perkoa to test the down-plunge extension of the T3 horizon, additional exploration work at Caribou to test anomalies at Murray Brook South and additional drilling at Santander to extend and convert the Mineral Inferred resources at the Santander Pipe at depth.

Exploration expenditures for 2019 amounted to \$10.4 million. A total of approximately 41,000 meters of exploration drilling was completed during the year. Given the recent exploration successes, the 2020 exploration budget has been increased to \$12.0 million and 53,000 drill meters which represents a 43% growth over the 2019 original budget of \$8.4 million and an increase of 15% over the 2019 final exploration expenditures of \$10.4 million. Additional funds could be allocated to exploration in 2020 contingent on positive exploration results.

The 2020 exploration program will continue to focus on advancing near-mine exploration targets towards the development of new mineral resources located within trucking distance of existing mines, while also maintaining a necessary level of expenditures on regional programs to make new discoveries. Updated Mineral Resource statements are expected to be released at the end of Q1 2020.

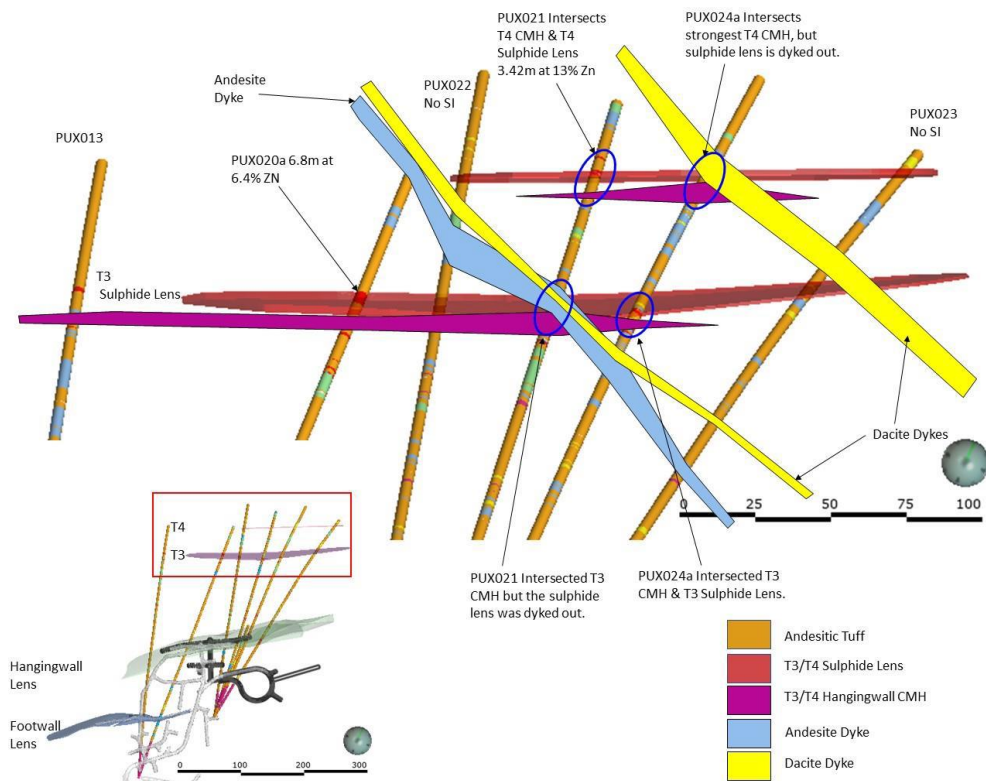
### Perkoa Exploration, Burkina Faso

A new volcanogenic massive sulfide ("VMS") horizon was discovered at Perkoa during Q2 2019 and exploration drilling programs were modified to further test the newly discovered T3 horizon during the second half of 2019. Two underground holes intersected a VMS horizon referred to as T3, which is located approximately 200 metres in the hanging wall of the main Footwall lens as illustrated in Figure A. The T3 horizon represents the third VMS horizon discovered at the Perkoa Mine. The discovery was made using a combination of geochemical and alteration vectoring and downhole electromagnetic ("EM") survey.

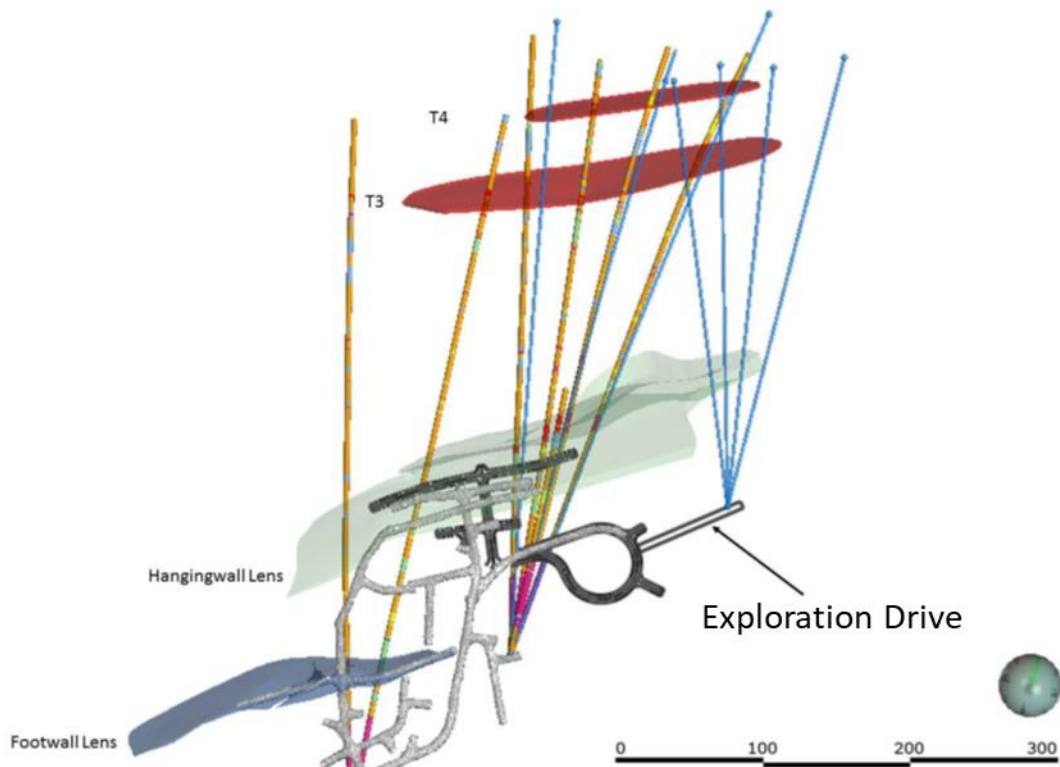
A news release was published on December 2, 2019 presenting the latest drill results of the T3 and hanging wall underground drilling program.

During Q4, an additional 3 underground holes were drilled to follow up on the T3 discovery, holes PUX022 to PUX024. Hole PUX024 intersected the T3 horizon approximately 50 metres along strike from hole PUX021, a zone of semi-massive to massive mineralization was intersected between 453.0 to 455.9 metres. The hole was continued and intersected another zone of mineralization approximately 120 metres deeper, between 549.5 to 563.3 metres. The zone is characterized by sphalerite rich massive sulphide mineralization and although at an early stage, this second mineralized horizon has been intersected by two holes as illustrated in Figure A.

Exploration of the T3 area was slow in the last months of 2019 due to increasingly difficult access from underground developments and poor drilling angles. To improve drilling performances, a decision was made to develop a new exploration drive which will improve drilling position as illustrated in Figure B. Initial planning of 4 holes has been designed from the new exploration drive to test the northern extension of the T3 horizon.



**Figure A: Perkoa Mineralized lenses showing Perkoa Main Zone (blue), Hanging Wall Zone (green) and new T3 and T4 horizons (red) and the associated marker horizons and dykes.**



**Figure B: Plan view showing exploration drift with planned holes in blue.**

Regional exploration programs were scheduled to resume in Q4 following the cessation of the rainy season, but due to the current security situation in Burkina Faso, only limited exploration resumed, mostly mapping, soil geochemistry and ground Fluxgate EM surveys.

A total of 12,750 metres of exploration drilling was accomplished at Perkoa from both underground and surface drilling in 2019 targeting regional anomalies and the T3 area.

### **Rosh Pinah Exploration, Namibia**

Late in Q3 2019, surface exploration drilling began targeting the Northern extension of the Western Orefield, with an initial program of 1,600 metres completed in that quarter. Following the success in extending the WF3 mineralization towards the North, an additional 2,910 metres of drilling was completed on this underexplored area of Rosh Pinah in Q4, targeting new inferred mineral resources by extending the known mineralization to the North. A total of 9 holes were drilled on the Northern Western Orefield area.

Drilling from underground continued during Q4 2019 at the Western Orefield and the AAB orebody targeting areas at depth for mineral resource conversion. This mineral resource conversion program will also be included in the updated year-end Mineral Resource disclosure.

Surface EM surveys which started in the second quarter continued in the fourth quarter along the Northern Extension of the Western Orefield and along the Eastern Limb of the Rosh Pinah deposit. New targets have been identified, with the most prospective being two conductive targets adjacent to a large rhyolite dome, 1.5 kilometres east of the Rosh Pinah Mine. Mineralization within the belt is associated with felsic volcanic flows and these untested targets will be drill tested in 2020.

A total of 10,760m of exploration drilling was accomplished at Rosh Pinah from both underground and surface drilling in 2019, targeting the Western Orefield at depth and the northern extension along strike as well as the AAB orebody at depth.

### **Santander Exploration, Peru**

Exploration continued at Santander during the fourth quarter with surface EM surveys, Magneto-Telluric ("MT") surveys and drilling at Magistral, the Santander Pipe and Blanquita with both surface and underground drill rigs.

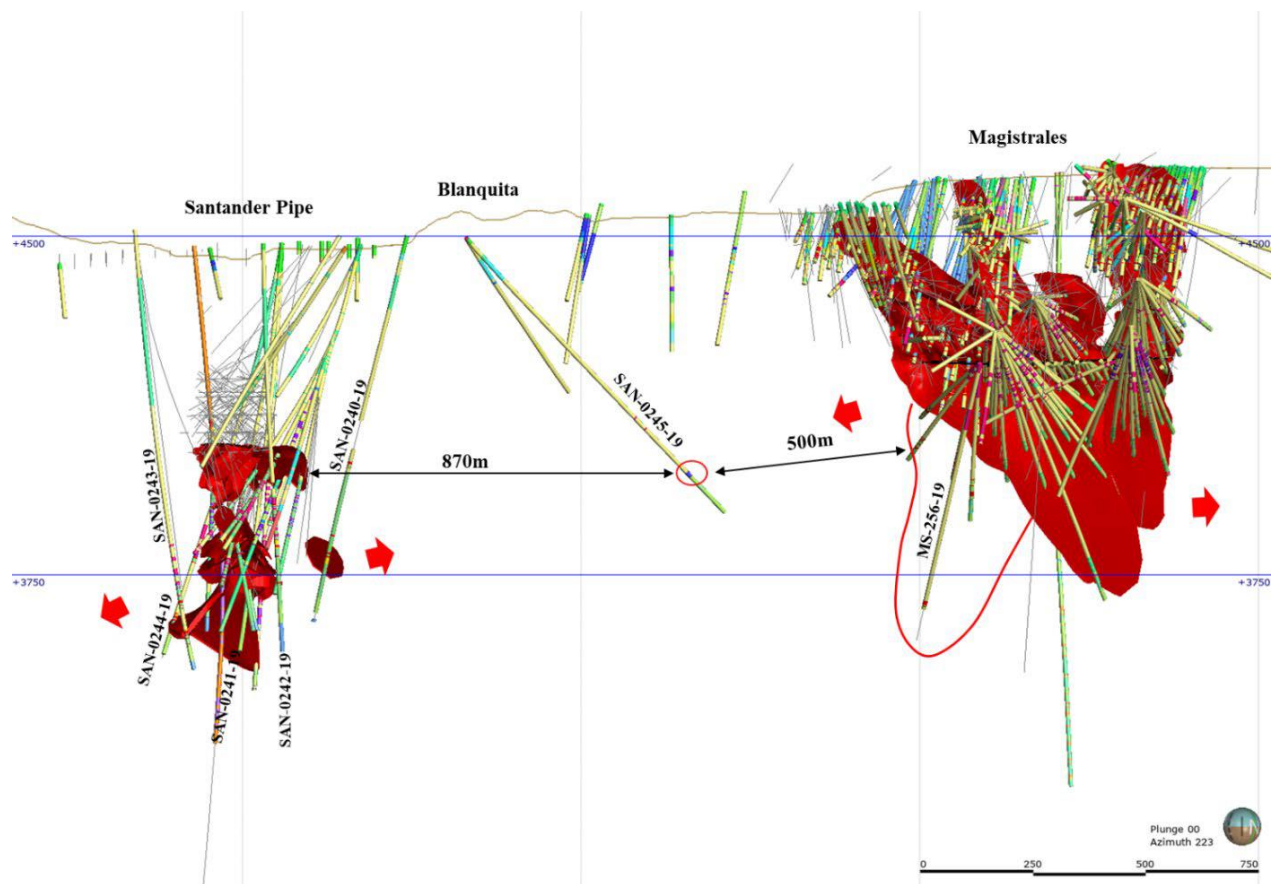
At the Santander Pipe, where an indicated mineral resource is defined, mineral resource expansion drilling which began in Q3 continued in Q4. The program is designed to test the down-plunge and lateral extents of mineralization on both flanks of the deposit. Exploration at the Santander Pipe is targeting an increase in Mineral Inferred Resources and converting additional Mineral Resources to an Indicated Mineral Resource level in support of the ongoing evaluation of the deposit's potential to contribute to production in future years.

At Magistral, an underground exploration drill program was initiated in September to test the southern extension of the Magistral South deposit continued in the fourth quarter. A total of 6 holes were drilled on the Magistral South area in 2019 and the program was successful in extending the mineralization at depth and along strike as illustrated in Figure C.

One hole was also drilled at depth at Blanquita which is located South along strike from Magistral and was also successful in intersecting narrow mineralization. As illustrated in Figure C, the Blanquita area is under explored at depth and is highly prospective being located in between the Magistral and Santander Pipe deposits.

A magneto-telluric survey was initiated in early September with the goal of probing the deeper exploration potential (approximately 500 metres – 2 kilometres) of the property for possible porphyry and skarn type mineralization. The survey was completed in Q4 2019 with data processing beginning in Q1 2020. A helicopter supported magnetic survey scheduled to begin in October, but the survey has been postponed to the first half of 2020. Data from both the MT and magnetic surveys will be used for target generation.

A total of 13,650 metres of drilling was accomplished at Santander from both underground and surface drilling in 2019.



**Figure C: Santander Magistral and Pipe longitudinal section looking West showing the mineralization extension at depth at Magistral with hole MS-256-19 and hole SAN-0245-19 intersecting mineralization at Blanquita.**

### **Caribou Mine Exploration, Canada**

The surface Mineral Resource conversion drilling program which began in Q3 at Caribou to test the Northern Extension of the Caribou North Limb below the current development was completed in Q4. A total of 6 holes amounting to 3,815 metres were drilled for the program with assays disclosed in a January 6, 2020 news release.

The aim of the program along the Northern limb was to target a Mineral Resource upgrade from Inferred to Indicated further North and at depth below the current Measured and Indicated Mineral Resource, improve the accuracy of the geological model and provide insight into the economic viability of development along the Northern Limb.

At Murray Brook South, a Time-Domain Electro-Magnetic ("TDEM") survey was completed over portions of the Murray Brook South claim in order to refine targets for drill testing scheduled to begin in Q1 2020. Trenching performed in 2018 as part of a joint venture agreement between Puma Exploration and Trevali discovered a narrow gossan within the Mount Brittain formation, which hosts the Murray Brook deposit located 1.5 kilometres to the north-east. A drilling program is currently underway to test the Murray Brook South anomalies.

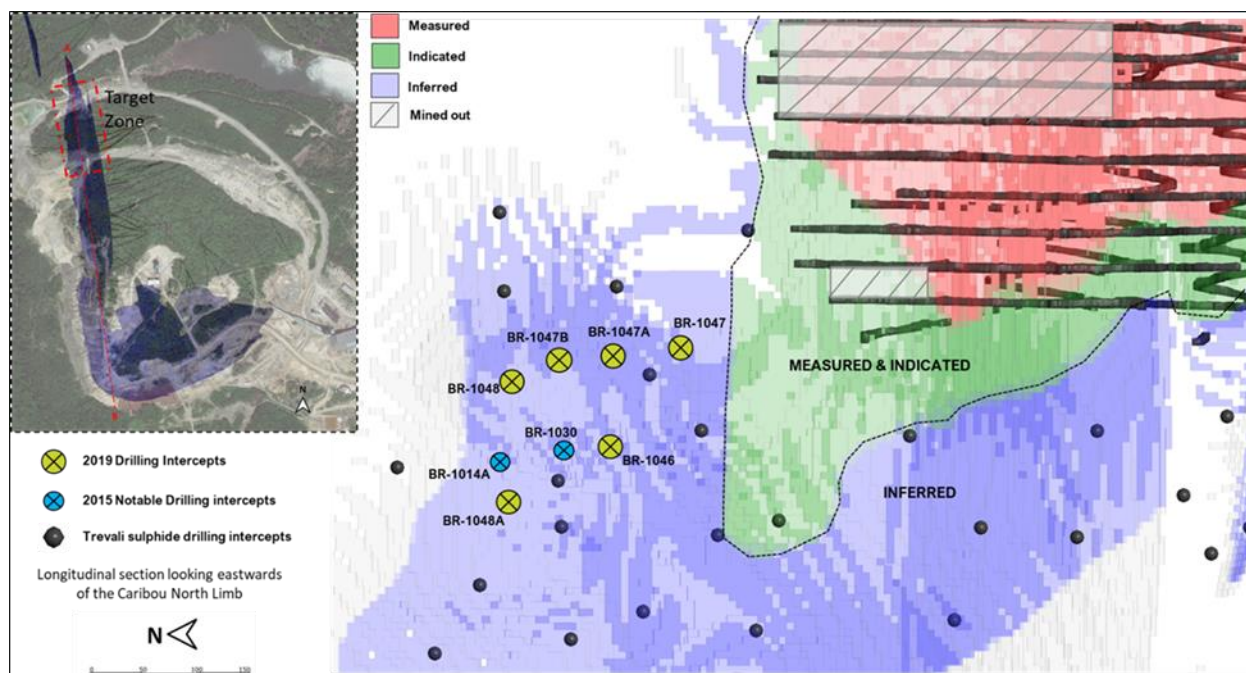


Figure D: Caribou North Limb longitudinal section with Northern extension 2019 drilling.

## OUR BUSINESS

Trevali is a global base-metals mining company, headquartered in Vancouver, Canada. The bulk of Trevali's revenue is generated from base-metals mining at its four operational assets: the 90%-owned Perkoa Mine in Burkina Faso, the 90%-owned Rosh Pinah Mine in Namibia, the wholly-owned Caribou Mine in northern New Brunswick, Canada and the wholly-owned Santander Mine in Peru. In addition, Trevali owns the Halfmile and Stratmat Properties and the Restigouche Deposit in New Brunswick, Canada, and the past-producing Ruttan Mine in northern Manitoba, Canada. Trevali also owns an effective 44%-interest in the Gergarub Project in Namibia, as well as an option to acquire a 100% interest in the Heath Steele deposit located in New Brunswick, Canada.

The shares of Trevali are listed on the TSX (symbol TV), the OTCQX (symbol TREVF), the Lima Stock Exchange (symbol TV), and the Frankfurt Exchange (symbol 4TI). For further details on Trevali, readers are referred to the Company's website ([www.trevali.com](http://www.trevali.com)) and to Canadian regulatory filings on SEDAR at [www.sedar.com](http://www.sedar.com).

## CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This news release contains "forward-looking information" within the meaning of Canadian securities legislation and "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 (collectively, "forward-looking statements"). Forward-looking statements are based on the beliefs, expectations and opinions of management of the Company as of the date the statement are published, and the Company assumes no obligation to update any forward-looking statement, except as required by law.

Forward-looking statements relate to future events or future performance and reflect management's expectations or beliefs regarding future events including, but not limited to, statements with respect to the Company's growth strategies, expected annual savings from capital projects, anticipated effects of commodity prices on revenues, estimation of mineral reserves and mineral resources, the realization of mineral reserve estimates, the timing and amount of estimated future production, costs of production and capital expenditures, success of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims, future anticipated property acquisitions, the content, cost, timing and results of future exploration programs and life of mine expectancies. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects", "outlook", "guidance", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "believes", or variations of such words and

phrases or statements that certain actions, events or results “may”, “could”, “would”, “might”, “will be taken”, “occur” or “be achieved” or the negative of these terms or comparable terminology. By their very nature, forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include, among others, risks related to actual results of current exploration activities; changes in project parameters as plans continue to be refined; future prices of zinc, lead, silver and other minerals and the anticipated sensitivity of our financial performance to such prices; possible variations in ore reserves, grade or recoveries; dependence on key personnel; potential conflicts of interest involving our directors and officers; labour pool constraints; labour disputes; availability of infrastructure required for the development of mining projects; delays or inability to obtain governmental and regulatory approvals for mining operations or financing or in the completion of development or construction activities; counterparty risks; increased operating and capital costs; foreign currency exchange rate fluctuations; operating in foreign jurisdictions with risk of changes to governmental regulation; compliance with governmental regulations; compliance with environmental laws and regulations; land reclamation and mine closure obligations; challenges to title or ownership interest of our mineral properties; maintaining ongoing social license to operate; impact of climatic conditions on the Company’s mining operations; corruption and bribery; limitations inherent in our insurance coverage; compliance with debt covenants; competition in the mining industry; our ability to integrate new acquisitions into our operations; cybersecurity threats; litigation; and other risks of the mining industry including, without limitation, other risks and uncertainties that are more fully described in the Company’s annual information form, interim and annual audited consolidated financial statements and management’s discussion and analysis of those statements, all of which are filed and available for review under the Company’s profile on SEDAR at [www.sedar.com](http://www.sedar.com). Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Trevali provides no assurance that forward-looking statements will prove to be accurate, as actual results and future events may differ from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

### **Compliance with NI 43-101**

Unless otherwise indicated, Trevali has prepared the technical information in this news release (“Technical Information”) based on information contained in the technical reports, news releases and MD&A’s (collectively the “Disclosure Documents”) available under the Company’s company profile on SEDAR at [www.sedar.com](http://www.sedar.com). Each Disclosure Document was prepared by, or under the supervision of, a qualified person (a “Qualified Person”) as defined in National Instrument 43-101 *Standards of Disclosure for Mineral Projects* of the Canadian Securities Administrators (“NI 43-101”). Readers are encouraged to review the full text of the Disclosure Documents which qualifies the Technical Information. Readers are advised that mineral resources that are not mineral reserves do not have demonstrated economic viability. The Disclosure Documents are each intended to be read as a whole, and sections should not be read or relied upon out of context. The Technical Information is subject to the assumptions and qualifications contained in the Disclosure Documents. The disclosure of Technical Information in this news release was reviewed and approved by Yan Bourassa, P. Geol., Vice President, Mineral Resource Management, a Qualified Person under NI 43-101.

### **Note to United States Investors**

In accordance with applicable Canadian securities regulatory requirements, all mineral resource estimates of the Company disclosed or incorporated by reference in this news release have been prepared in accordance with NI 43-101, classified in accordance with Canadian Institute of Mining Metallurgy and Petroleum’s “CIM Standards on Mineral Resources and Reserves Definitions and Guidelines”. The Company uses the terms “measured mineral resources”, “indicated mineral resources” and “inferred mineral resources”. While these terms are recognized by Canadian securities regulatory authorities, they are not recognized by the United States Securities and Exchange Commission. US investors are cautioned not to assume that any part or all of the material in these categories will ever be converted into reserves.

### **Non-IFRS Financial Performance Measures**

The items marked with a “1” are non-IFRS measures and readers should refer to “Use of Non-IFRS Financial Performance Measures” in the Company’s Management’s Discussion and Analysis for the three and nine months ended September 30, 2019.

### **Investor Relations Information**

Brendan Creaney –Vice President, Investor Relations

Email: [bcreaney@trevali.com](mailto:bcreaney@trevali.com)

Phone: +1 (604) 638-5623

Source: Trevali Mining Corporation

