Vendetta Mining Corp. Announces Results of Pegmont Material Sorting Test Work

10.02.2020 | Newsfile

Vancouver, Feb. 10, 2020 - Vendetta Mining Corp. (TSXV: VTT) ("Vendetta" or the "Company") is pleased to announce the positive results of the material sorting test work using commercial X-ray Transmission ("XRT") material sorters.

The purpose of the material sorting test work was to determine the suitability of the XRT sensors to differentiate potential mill feed from waste material at Pegmont.

At Pegmont the potential advantages of XRT material sorters is that they could allow plant feed material to be screened prior to grinding and flotation, removing lower density external dilution (waste) and lower grade internal dilution (material below cut off).

Potential capital cost savings occurs through the reduced mill throughput while potential operating costs savings occur through reduced water and reagent usage, less pumped tails and lower energy requirements. The sorted waste product is ejected and stacked for dry disposal. Flotation recovery often improves with increasing head grade, such a relationship exists in the metallurgical test work performed at Pegmont to date, (see Section 13 of the Pegmont PEA). The higher head grades obtained from the ore sorted product are anticipated to result in enhanced flotation recovery.

The Company tested two drill hole intersections from Zone 5 and one from Zone 2. The sulphide intersections were selected in order to test different lead to zinc ratios (Zone 5 vs Zone 2) and internal grade distributions. All samples included diluting quartzite material from the hangingwall and footwall. The material sorter test work was performed at TOMRA's testing facility in Sydney, Australia. The resulting sorted product and reject material was inspected and described by a Companies Geologist prior to submission to ALS for final assays.

The conclusions of the XRT ore sorting preliminary test work on the three drill intervals are:

- Successfully removed the external dilution from the samples; and
- Successfully removed internal diluting material from within the higher-grade intervals;

Material sorting test summary:

- Total mass tested 139.2 kg
- Mass pull (weight % of feed recovered): ranged from 44.3% to 70.6%, a weighted average of 62.3%
- Lead grade improvement 18 to 88%, a weighted average of 42%
- Zinc grade improvement 21 to 72%, a weighted average of 38%
- Lead recoveries ranged from 83.2% to 90.2%, a weighted average of 88.5%
- Zinc recoveries ranged from 76.4% to 92.2%, a weighted average of 85.9%

Vendetta cautions that while these results are highly encouraging, they are preliminary, in order to apply material sorting results in an updated PEA study pilot scale test work is necessary. TOMRA are recommending 600 kg of material is required for each ore type at Pegmont.

Vendetta plans to pursue this test work and expects these samples will be obtained from the next drilling program. Samples will be obtained from Zone 1 transition, Zone 2-3 sulphide and Zone 5 sulphide.

"At Pegmont the XRT sorter can clearly differentiate between high density / high grade feed from lower density waste material at Pegmont, we are excited by the prospects of advancing to pilot scale test work and

applying this commercially available technology to the next mining study.", commented Michael Williams, President and CEO.

Peter Voulgaris, the Companies QP and Project Manager commented "We are extremely pleased with these proof of concept results, it should be noted that the mass pull achieved in practice depends on the actual mined dilution that reports to the crusher and the amount of fines that are screened off prior to the material sorters. This will be resolved during the pilot scale testing. We are particularly excited about the prospects of the XRF sorting to enhance transition metallurgical performance where density contrasts are more pronounced than in the sulphide material."

X-Ray Transmission Material Sorting (XRT)

X-ray transmission sensors measure the density of the sample. The material was screened in order to have a particle size range between -60 mm and +6 mm. The crushed material is fed along a sorter conveyor belt, which utilises X-Ray transmission ("XRT") sensors. The XRT sensors identify differences in atomic density between high atomic density lead/zinc mineralisation and low atomic density waste material Air jets are used to reject material below a pre-determined density. A schematic of the XRT sorting process is shown in Figure 1.

The Pegmont PEA contemplated a production rate of 1.1 million tonnes per year, this corresponds to two TOMRA COM XTR 1200 - Gen 1.0 ore sorters.

WasteFeed to Mill
Figure 1. Schematic of the XRT ore sorting process (source: TOMRA)

To view an enhanced version of Figure 1, please visit:
https://orders.newsfilecorp.com/files/2983/52267_c9ed7403b457a935_003full.jpg

Individual Test Results

PVRD070 - Zone 5 sulphide, this intersection was selected as it included a one metre low grade lens separated from the main high grade mineralised horizon by one metre of very low grade material. One metre of hangingwall and one metre of footwall dilution was included. Typical of Zone 5, the hangingwall is relatively higher in zinc compared to lead and.

- Head grade: 3.78% Pb & 3.49 % Zn
- Sorted Product grade: 7.09% Pb & 6.02% Zn
- Mass pull: 44.3%
- Lead recovery: 83.2%
- Zinc recovery: 76.4%
- Rejected material grade: 1.18% Pb & 0.93% Zn
- Geological inspection of the rejected material indicated that the sorting performed very well, with no visual rejection of any high-grade material. Logging also indicated that no diluting material was present in the sorted product.

PVRD086 - Zone 5 sulphide, this intersection was selected as it included a two metre thick high grade lens separated from the main high grade mineralised horizon by one metre of very low grade material and a lower grade interval on the hangingwall. Typical of Zone 5, the hangingwall is relatively higher in zinc compared to lead. Ninety centimetres of hangingwall and one metre of footwall dilution was included.

- Head grade: 4.86% Pb & 3.20% Zn
- Sorted Product grade: 6.19% Pb & 4.18% Zn
- Mass pull: 70.6%
- Lead recovery: 89.9%
- Zinc recovery: 92.2%
- Rejected material grade: 1.05% Pb & 0.92% Zn
- Geological inspection of the rejected material indicated that the sorting performed very well, with no visual rejection of any high-grade material. The inspection also indicated that no diluting material was present in the sorted product.

PVRD137 - Zone 2 sulphide, this intersection was selected as being of relatively lower grade compared to the Companies other intersections in Zone 2. Eighty centimetres of hangingwall and one metre of footwall dilution was included.

- Head grade: 6.00% Pb & 2.89% Zn
- Sorted Product grade: 8.05% Pb & 3.67% Zn
- Mass pull: 67.2%
- Lead recovery: 90.2%
- Zinc recovery: 85.5%
- Rejected material grade: 2.50% Pb & 1.29% Zn
- Geological inspection of the rejected material indicated that the sorting performed very well, the waste product included internal diluting (below cut off) material that came from within the iron stone interval, this accounts for higher grades in the rejected material. The inspection also indicated that no diluting material was present in the sorted product.

About TOMRA Sorting Mining

TOMRA Sorting Mining is part of TOMRA Sorting Solutions, a commercial supplier of mineral and other material sorting technology. TOMRA have TOMRA sorters are installed in numerous and varied applications all over the world. For more information on TOMRA Sorting Mining visit www.tomra.com/mining

About the Pegmont Lead Zinc Project

Vendetta's 100% owned Pegmont Lead Zinc Project is situated in the Mount Isa - McArthur Mineral Province, Australia which hosts one of the world's richest endowments of lead-zinc-silver mineralization, including several significant lead-zinc-silver mines.

The current Mineral Resource Estimate at the Project:

Indicated 5,758 Kt @ 6.5% Pb, 2.6% Zn, 11 g/t Ag
Inferred 8,277 Kt @ 5.1% Pb, 2.8% Zn, 8 g/t Ag

The results of a Preliminary Economic Assessment ("PEA") on Pegmont were released by the Company by news release dated January 28, 2019. The PEA outlined a 10-year mine plan that generates a strong economic return with a (base case) pre-tax IRR of 32% (after tax 24%) and NPV8 of $201M ($128M after tax) using long term consensus metal prices of $0.91/lb lead, $1.09/lb zinc and $16.50/oz silver and a US$:A$ exchange rate of $0.75.

The PEA indicated a strong sensitivity to metal prices and US$:A$ exchange rate with a pre-tax IRR of 37% (after tax 27%) and NPV8% of $249M ($158M after tax), using metal prices as of January 22, 2019 of $0.91/lb lead, $1.18/lb zinc and $15.30/oz silver and a US$:A$ exchange rate of $0.71.

The PEA identified further project enhancements and Vendetta has identified several high priority exploration targets.

About Vendetta Mining Corp.

Vendetta Mining Corp. is a Canadian junior exploration company engaged in acquiring, exploring, and developing mineral properties with an emphasis on lead and zinc. It is currently focused on advancing the Pegmont Lead Zinc project in Australia. Additional information on the Company can be found at www.vendettaminingcorp.com.

Notes on Assays

Samples used for the results described herein were prepared and analysed at ALS Laboratory Group, head

assays were performed in Townsville, Queensland. Analysis was undertaken using a four acid digest and ICP (ALS method: ME-ICP61 for 7 elements).

The sorted product and rejects were analysed at ALS Laboratory Group in Brisbane, Queensland. Analysis was undertaken using a four acid digest and ICP (ALS method: ME-ICP61 for 33 elements).

At both Townsville and Brisbane over limit high grade samples (>10,000 ppm lead and zinc and >100 ppm silver) were read with an atomic absorption spectrometer (AAS), (ALS methods: Pb-OG62, Zn-OG62 and Ag-OG62).

Technical Disclosure

Peter Voulgaris, MAIG, MAusIMM, a Director of Vendetta, a "qualified person" as defined by NI 43-101 - Standards of Disclosure for Mineral Projects. Mr Voulgaris has reviewed and approved the technical content of this press release, and consents to the information provided in the form and context in which it appears.

For details of the Pegmont Project including the effective date of the resource estimate, quality control measures applied, key assumptions, parameters and methods used to estimate the mineral resources set forth herein and any known legal, political, environmental or other risks that could materially affect the potential development of the mineral resource estimate, please refer to the technical report entitled "Technical Report - Pegmont Mineral Resource Update and PEA" dated effective January 21, 2019 and available under the Company's profile at www.sedar.com.

The Preliminary Economic Assessment (PEA) referred to herein, is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized.

ON BEHALF OF THE BOARD OF DIRECTORS

"Michael Williams"
Michael Williams
President & CEO
604-448-7855

Forward Looking Information

The TSX Venture Exchange does not accept responsibility for the adequacy or accuracy of this release.

This release includes certain statements and information that may be deemed to be "forward‐looking statements" or "forward looking information" within the meaning of the applicable Canadian Securities laws. All statements in this release, other than statements of historical facts are forward looking statements or information, including without limitation, statements or information regarding the use of proceeds of the Private Placement, and other future events or developments. Forward-looking statements include statements that are predictive in nature, are reliant on future events or conditions, Forward‐looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "plan", "continue", "estimate", "expect", "may", "will", "project", "predict", "potential", "targeting", "intend", "could", "might", "should", "believe" and similar expressions.

These statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated. Although the Company believes the expectations expressed in such forward‐looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward‐looking statements.

Factors that could cause actual results to differ materially from those in forward‐looking statements

include, but are not limited to, changes in commodities prices; changes in expected mineral production performance; unexpected increases in capital costs; exploitation and exploration results; continued availability of capital and financing; differing results and recommendations in the preliminary economic assessment; and general economic, market or business conditions.

In addition, forward‐looking statements are subject to various risks, including but not limited to operational risk; political risk; currency risk; capital cost inflation risk; that data is incomplete or inaccurate; the limitations and assumptions within drilling, engineering and socio‐economic studies relied upon in preparing the PEA; and receipt of regulatory and other approvals and/or consents in respect of the Offering in particular. There can be no assurance that the Offering will be completed on their terms or at all.

The reader is referred to the Company's filings with the Canadian securities regulators for disclosure regarding these and other risk factors, accessible under the Company's profile at www.sedar.com

There is no certainty that any forward‐looking statement will prove to be accurate and investors should not place undue reliance upon forward‐looking statements. The Company does not undertake to provide updates to any of the forward‐looking statements in this release, except as required by law.