

# Nicola Mining Announces up to Ten-Fold Copper Upgrading and Solid Copper Recovery from Its Ore Sorting Testing

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Vancouver, November 27, 2019 - [Nicola Mining Inc.](#) (TSXV: NIM) (the "Company") is pleased to announce that it has received positive assay results from ALS Metallurgy Laboratory ("ALS Lab"). The Company announced on March 29, 2019 that testing conducted at Tomra Sorting's Test Center in Hamburg, Germany appeared to successfully separate copper ore<sup>[1]</sup> from waste rock based on sulphide and gravity parameters. The ALS Lab results confirm the ability to ore sort with the TOMRA Tertiary XRT Sorter Conveyor ("XRT Sorter"). The results also highlight the potential of monetising copper contained within the historical mine terraces at the Company's wholly owned New Craigmont Copper Project ("Craigmont Project"). A portion of the approximate 80-90 million-tonnes<sup>[2]</sup>, surrounding the Craigmont Mine pit contains copper and magnetite.

The XRT Sorter utilises x-ray transmission sensors to identify differences in atomic density between copper-containing mineralised material and waste material. All 29 samples were separated into 8 unique tests and shipped from Germany to the ALS Labs to confirm assay percentages, upgrading capabilities and Cu recovery.

- 5 out of the 8 tests provided upgraded Cu grades of greater than 1% Cu with up to 50% Fe

The key parameter utilised in the testing was mass recovery, which is defined as the targeted percentage of material that the Company wishes to have remaining post separation. A lower mass recovery percentage is correlated with increased upgrade percentage and lower copper recovery. Lower mass recovery decreases copper recovery because low-grade copper material may be classified as waste; however, lower mass recovery increases upgrade percentage and lowers operating costs. Thus, understanding the relationship between mass recovery, upgrade percent, and copper recovery is essential for understanding the economic potential of the historic Craigmont mine terraces. Samples were taken from two locations; the southern mine terraces ("Tower Sample") and adjacent to Portal 3060 ("Portal Sample") that are shaded in blue and green, respectively. Figure 1, below, highlights the TOMRA COM Tertiary XRT sorter conveyor upgrade results:

Figure 1: Upgrade Percent and Recovery Results

To view an enhanced version of Figure 1, please visit:

[https://orders.newsfilecorp.com/files/4873/50157\\_cc651043344299ec\\_001full.jpg](https://orders.newsfilecorp.com/files/4873/50157_cc651043344299ec_001full.jpg)

In addition to testing two specific locations, the material samples were screened into <2">1", <1"> ½" and < ½" fractions. Any >2" material was coarse crushed and then screened. The <2">1" and <1"> ½" fractions were sent to Tomra, where they were tested using high and low selectivity settings for the x-ray transmission sensors. All sorted material was subsequently shipped to ALS Metallurgy for crushing and chemical analyses. Sorted material was separated by the two locations and classified into three sizes prior to analysis:

- 2 inches to 1 inch in diameter
- 1 inch to ½ inch diameter
- Material that measured smaller than ½ inch in diameter ("Fines")

Two very important findings in the ALS Lab results include the following:

1. The ability of the XRT Sorter to efficiently upgrade and provide high recovery on larger material. Accurately sorting larger material can more than double throughput capability and decreases screening costs associated with production.

2. Consistent Cu grades contained within the Fines. The historic mine terraces are classified as copper skarn and are characteristically more brittle than host rock, so it was hypothesised that Fines would contain elevated Cu grades. It is also common to have reverse circular drilling results underestimate actual grades because of the inability to capture mineralized Fines. The consistent Cu grades within the Fines warrant additional testing in the future.

Of the 1353-kilogram Tower Sample, 86.4kg was classified as upgraded product, 754 kg as Fines and 513 kg as waste. The average Cu grades of the upgraded product were equal to 1.22% Cu and 19.1% Fe, see Figure 2.

Figure 2: Tower Sample Results

To view an enhanced version of Figure 2, please visit:

[https://orders.newsfilecorp.com/files/4873/50157\\_cc651043344299ec\\_002full.jpg](https://orders.newsfilecorp.com/files/4873/50157_cc651043344299ec_002full.jpg)

The aggregate Cu recovery percentage increases to 89.5% when including the Fines. The average aggregate Cu grade is equivalent to 0.35%; however, there are no costs associated with mining as the material is currently stored in terraces. The Company is currently conducting floatation tests on the material to confirm mill recovery tests.

The Portal Sample Results were also encouraging; however, it should be noted that, although the tested material samples weights are identical, the actual tonnage represented by the Tower Sample is far greater. Upgrading proved very successful but the recovery levels of the upgraded product were lower than those of Tower Samples. From the 1373-kilogram Portal Sample, 86.7 kg was classified as upgraded product, 540 kg as Fines and 748 kg as waste, Figure 3.

Figure 3: Portal Sample Results

To view an enhanced version of Figure 3, please visit:

[https://orders.newsfilecorp.com/files/4873/50157\\_cc651043344299ec\\_003full.jpg](https://orders.newsfilecorp.com/files/4873/50157_cc651043344299ec_003full.jpg)

Peter Espig, Chief Executive Officer, commented, "the positive assay results received from ALS Metallurgy Laboratory on the Tertiary XRT sorter conveyor material is very encouraging. Given the historic material's approximate 80-90 million tonnes and no direct mining costs associated with the extraction, the ability to upgrade material could add significant value to our project. We are currently testing the material for copper and magnetite recovery and will issue the results once received."

#### About Nicola Mining

[Nicola Mining Inc.](#) is a junior mining company listed on the TSX Venture Exchange and is in the process of recommencing mill feed processing operations at its 100% owned state-of-the-art mill and tailings facility, located near Merritt, British Columbia. It has already signed six mill profit share agreements with high-grade gold producers. The fully-permitted mill can process both gold and silver mill feed via gravity and flotation processes. The Company has an active gravel pit that is located adjacent to the milling operation, as well as 100% ownership of the high-grade silver Treasure Mountain property.

#### About New Craigmont Project

In November 2015, Nicola became the first group in decades to consolidate ownership of the New Craigmont Project (the "Property") and has been actively conducting mineral exploration since. The Property is a wholly-owned copper-iron property with an active mine permit (M-68), located 33 km south of the world-class Highland Valley porphyry district. It lies at the southern contact between the Nicola Group and Guichon

Creek batholith, of which the latter is known to be a precursor intrusive event to mineralisation at the Highland Valley.

There are currently no NI 43-101 compliant mineral resource estimates on the Property; however, an estimated 60,000,000 tons of ore grading at >0.4% Cu is reported to have remained unmined in the mineralised hanging wall of the Sub level cave, due to a 0.7% Cu cut-off grade<sup>[3]</sup>. Additionally, five zones of finely mineralised silicified ore (No. 3 type mineralisation) are known, one of which is reported to contain an estimated 269,260 tons grading at 1.68% Cu<sup>3</sup>.

It should be noted that these historical estimates do not meet the requirements needed to conform to the National Instrument 43-101 standards. The Company notes that an independent Qualified Person has not done sufficient work to verify and classify the historical estimates as current mineral resources and is, therefore, not treating the historical estimates as current mineral resources or mineral reserves. For further details on the Property, see the technical report entitled "TECHNICAL REPORT on the THULE COPPER - IRON PROPERTY, Southern British Columbia, Canada", filed on May 8, 2013, on Sedar at [www.sedar.com](http://www.sedar.com).

#### About TOMRA Sorting Mining

TOMRA Sorting Mining designs and manufactures sensor-based sorting technologies for the global mineral processing and mining industries. As the world market leader in sensor-based ore sorting, TOMRA Sorting Mining is responsible for developing and engineering cutting-edge technology that is made to withstand harsh mining environments. TOMRA Sorting Mining maintains its rigorous focus on quality and future-oriented thinking with technology tailor-made for mining.

TOMRA Sorting Mining is part of TOMRA Sorting Solutions, which also develops sensor-based systems for sorting, peeling and process analytics for the food, as well as the recycling and waste management industry.

TOMRA Sorting Mining is owned by the Norwegian company TOMRA Systems ASA, which is listed on the Oslo Stock Exchange. Founded in 1972, TOMRA Systems ASA has a turnover of around  $\text{â,}750\text{m}$  and employs over 3,500 people.

For more information on TOMRA Sorting Mining visit [www.tomra.com/mining](http://www.tomra.com/mining) or follow us on LinkedIn, Twitter or Facebook.

On behalf of the Board of Directors

"Peter Espig"  
Peter Espig  
CEO & Director

For additional information contact:

Peter Espig  
Telephone: (778) 385-1213  
Email: [peter@nicolamining.com](mailto:peter@nicolamining.com)

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[1] In this news release, the word "ore" is used describe a rock that is the characteristic of copper mine grades; however, it cannot be assumed that it will be of a profitable grade at the Craigmont site.

[2] Reference: 3D Surveys report dated June 27, 2016

[3] Bristow, J.F. (Jul. 22, 1985) Internal memo: Continued Exploration at Craigmont Mines Limited's Merritt Property.

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