

Namibia Critical Metals Confirms Significant Upgrades on Bulk Sample from Lofdal Heavy Rare Earths Project - Comments on Positive Developments in Rare Earth Markets

03.12.2020 | [Accesswire](#)

HALIFAX, December 3, 2020 - Namibia Critical Metals Inc. ("Namibia Critical Metals" or the "Company" or "NMI") (TSXV:NMI) is pleased to provide an update on the metallurgical test work program on the Lofdal Heavy Rare Earth Project in northern Namibia "Lofdal" or "the project"). Lofdal is a joint venture between the Company and Japan Oil, Gas and Metals National Corporation ("JOGMEC") which is operating under a Term 1 budget of CD\$4,100,000 (Company press release September 21, 2020). The Company recently reported an increase of 60% to the strike length of the Area 4 deposit and the inclusion of the first satellite heavy rare earth deposit (Company press release November 26, 2020). Highlights of the metallurgical test work program are reported here as follows:

- XRT and XRF ore sorting technologies successfully identified mineralized particles over a wide range of size fractions
- Test work completed on 8.6 tonnes of sample has achieved 1.5-3X upgrades with high recoveries for dysprosium and other heavy rare earths
- Increased grades and reduction in tonnage for milling will lower operating costs
- Gravity and magnetic separation test work nearing completion at Light Deep Earth (South Africa)
- SGS (Canada) appointed to continue downstream flotation and magnetic separation test work
- Strong price increases in key value drivers for Lofdal - 12 month prices up 24% for dysprosium and up 93% for terbium

Don Burton, President of Namibia Critical Metals stated, "The first step in beneficiation of heavy rare earth mineralization at Lofdal is through ore sorting. These test results have clearly demonstrated the opportunity to increase grade from the Area 4 deposit by a factor of 1.5 to 3 times which will have significant positive impacts on further downstream processing costs. We continue to evaluate early stage beneficiation opportunities through gravity techniques and magnetic separation, and we are pleased to bring SGS on board as we move into flotation. SGS has a wealth of processing experience with rare earths including some of the largest rare earth projects in the world - Mountain Pass (USA), Strange Lake (Canada) and Zandkopsdrift (South Africa).

With xenotime as its dominant rare earth mineral, Lofdal offers the potential to be a significant source of dysprosium and terbium. While the market has taken note of the recent increases in neodymium and praseodymium prices with regards to light rare earth projects, similar increases to dysprosium and terbium prices have not yet been factored into the heavy rare earth contenders."

The Lofdal Heavy Rare Earths Project is located 450 kilometers northwest of the capital city of Windhoek in the Kunene Region of north-western Namibia. The project area covers 314 square kilometers centered on the Lofdal carbonatite complex which hosts a number of rare earth occurrences, including the Area 4 deposit. Mineralization at Area 4 is dominated by xenotime, which is highly enriched in heavy rare earths.

Lofdal is unique as one of only two primary xenotime deposits under development in the world. As demonstrated in the Preliminary Economic Assessment¹ Lofdal has the potential for significant production of dysprosium and terbium, the two most valuable heavy rare earths used in high powered magnets. The joint venture with JOGMEC is driven by Lofdal's potential to be a long term, sustainable supply of heavy rare

earths for Japan.

Rare Earth Market Comments

The two major operating rare earth mines outside of China are Mountain Pass (USA) and Mount Weld (Australia) both of which are light rare earth-enriched projects and therefore major suppliers of the light rare earths praseodymium and neodymium. Prices for all the main magnet-related rare earths - praseodymium, neodymium, terbium and dysprosium have seen significant gains over the past 12 months with particularly sharp increases in the past 6-8 weeks (Table 1). Terbium (up 93.2%) and dysprosium (up 24.5%) are the main value drivers in heavy rare earth projects such as Lofdal.

Metallurgical Test Work Program Summary and Highlights

A number of sequential processing stages have been recommended for treatment of the xenotime mineralization at Lofdal and include upfront ore sorting, magnetic separation, flotation and gangue acid leaching to produce a mineral concentrate. Each of these stages is being evaluated during Term 1 using a representative 18 tonne sample that was collected from trenches along 650 meters of strike length from the Area 4 deposit.

Ore Sorting Tests

Ore sorting technologies provide opportunities to reject considerable volumes of waste thereby upgrading run-of-mine feed before requiring more expensive crushing and milling for downstream processing. Test work has been completed on 8.6 tonnes confirming the amenability of Lofdal mineralization to be significantly upgraded using either x-ray fluorescence ("XRF") or x-ray transmission ("XRT") sorting technology. Mineralization at Lofdal is amenable to XRF sorting by analyzing for the element yttrium, which is directly related to the concentration of the heavy rare earth mineral xenotime. It is amenable to XRT sorting because of the dominance of higher density gangue minerals (carbonates) to host the xenotime mineralization.

XRF sorting tests were carried out by Rados International in Pretoria on size fractions between 20-150 mm, and XRT sorting tests were carried out by IMS/Steinert on size fractions between 10-75 mm in Johannesburg. A total of 8.6 tonnes was prepared from the representative sample for the sorting tests by Light Deep Earth ("LDE") in Pretoria and final ICP-MS analyses appropriate for rare earth element analyses (method code ME-MS81h with lithium meta-borate fusion) were carried out by ALS Minerals (sample preparation in Johannesburg and analyses in Vancouver). QAQC was monitored through internal laboratory standards, blanks and duplicates with the provision of refereed rare earth standards from Lofdal.

Very clear grade, recovery and mass pull curves were established for both technologies and can be used to evaluate the most favourable economic scenarios available to the project. Outcomes for upgrading of dysprosium from all size fractions for both XRF and XRT tests, and grade recovery curves for one size fraction are shown in Figure 1.

In addition to quantifying outcomes for upgrading of heavy rare earths the test work will also be evaluated for efficiencies in rejecting unwanted iron, calcium and silica. Scavenging tests on XRF discard products have demonstrated opportunities for further increased recoveries with minimal additional mass pulls. Sorted products from these bulk runs have been utilized to provide representative samples for next stage process steps - gravity, magnetic separation and flotation.

Gravity, Magnetic Separation and Flotation

Systematic evaluations of gravity separation technologies had not been previously undertaken on Lofdal and this work is now being undertaken by Light Deep Earth using sorted XRF sample and fines. Test work has been completed to evaluate dense media separation on coarse size fractions between 1-10 mm, shaking table separation on size fractions between 0.05-1.0 mm and multi gravity separation on size fractions between <0.05-0.1 mm. Reports are pending.

Previous metallurgical test work at Lofdal had demonstrated the amenability of the mineralization to magnetic

separation using wet high intensity magnetic separation ("WHIMS") equipment and it is expected that magnetic separation will be maintained as an important processing step in beneficiation. The focus of magnetic separation test work at LDE is to evaluate wet belt rare earth magnet separation technology ("WRER") to compare with WHIMS. Test work on this has been completed and reports are pending.

Flotation has also been demonstrated to be an important step in beneficiation and this work will be undertaken by SGS (Canada) in conjunction with additional WHIMS test work. SGS has extensive experience in mineral processing of a number of rare earth deposits including Mountain Pass, Nechalacho, Strange Lake, Bokan Mountain, Bear Lodge, Kipawa, Zandkopsdrift, and Wicheeda Lake. Samples of both XRF and XRT sorted products and fines have been prepared for shipment to the SGS facility in Lakefield, Ontario. The test program will compare upgrades and recoveries of XRF and XRT products through direct flotation followed by magnetic separation, and through direct magnetic separation followed by flotation as shown below:

JOGMEC Joint Venture Agreement

As previously announced (Company press release January 27, 2020), the joint venture agreement with JOGMEC provides for the two companies to jointly explore, develop, exploit, refine and/or distribute mineral products from Lofdal. JOGMEC has the right to earn an interest in stages following an initial non-refundable exploration commitment of CD\$3,000,000 (Term 1). Subsequent financial commitments may be exercised at the sole discretion of JOGMEC upon completion of each phase with Term 2 requiring a CD\$7,000,000 contribution to earn 40% interest in Lofdal, Term 3 requiring a CD\$10,000,000 contribution for an additional 10% interest in Lofdal after which JOGMEC may elect to acquire an additional 1% interest for CD\$5,000,000. The agreement contemplates completion of a feasibility study for Lofdal at the end of Term 3 and makes provision for JOGMEC to elect to exclusively fund development of Lofdal provided that the Company's interest will not be diluted below 26%. The additional expenditure of CD\$1,100,000 during Term 1 can be credited towards the Term 2 expenditure commitment of CD\$7,000,000. Please refer to the Company press release of January 27, 2020 for further details.

About Namibia Critical Metals Inc.

[Namibia Critical Metals Inc.](#) holds a diversified portfolio of exploration and advanced stage projects in the country of Namibia focused on the development of sustainable and ethical sources of metals for the battery, electric vehicle and associated industries. The two advanced stage projects in the portfolio are Lofdal and Epembe. The Company also has significant land positions in areas favourable for gold mineralization.

Rare Earths: The Lofdal Heavy Rare Earth Project is the Company's most advanced project having completed a Preliminary Economic Assessment in 2014 and full Environmental Impact Assessment in 2017. An application has been made for a mining licence at Lofdal. The project is now in joint venture with Japan Oil, Gas and Metals National Corporation ("JOGMEC") who are funding the current \$4,100,000 drilling and metallurgical program with the objective of doubling the resource size and optimization of the process flow sheet. The Otjitanga Light Rare Earth Project is situated within the company's Kunene exploration area and hosts a new discovery of neodymium-rich carbonatite veins which is in the early stages of exploration.

Gold: At the Erongo Gold Project, stratigraphic equivalents to the sediments hosting the recent Osino gold discovery at Twin Hills have been identified but not yet sampled. Soil surveys are progressing over this highly prospective area. The Grootfontein Base Metal and Gold Project which has potential for magmatic copper-nickel mineralization, Mississippi Valley-type zinc-lead-vanadium mineralization and Otjikoto-style gold mineralization. Detailed interpretation of geophysical data and regional geochemical soil sampling surveys are under way.

Tantalum-Niobium: In addition to Lofdal, the Epembe Tantalum-Niobium Project is also at an advanced stage with a well-defined, 10 km long carbonatite dyke that has been delineated by detailed mapping with over 11,000 meters of drilling. Preliminary mineralogical and metallurgical studies including sorting tests (XRT), indicate the potential for significant physical upgrading. Further work will be undertaken to advance the project to a preliminary economic assessment stage.

Copper-Cobalt: The Kunene Copper-Cobalt Project comprises a very large area of favorable stratigraphy ("the DOF") along strike to the west of the Opuwo cobalt-copper-zinc deposit. Secondary copper

mineralization over a wide area points to preliminary evidence of a regional-scale hydrothermal system. Exploration targets on EPLs held in the Kunene project comprise direct extensions of the DOF style mineralization to the west, sediment-hosted cobalt and copper, orogenic copper, and stratabound manganese and zinc-lead mineralization.

The common shares of [Namibia Critical Metals Inc.](#) trade on the TSX Venture Exchange under the symbol "NMI".

Donald M. Burton, P. Geo. and President of Namibia Critical Metals Inc., is the Company's Qualified Person and has reviewed and approved this press release.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

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¹Preliminary Economic Assessment on the Lofdal Rare Earths Project Namibia dated October 1, 2014 authored by David S. Dodd, B. Sc (Hon) FSAIMM - The MDM Group, South Africa, Patrick J.F. Hannon, M.A.Sc., P.Eng. and William Douglas Roy, M.A.Sc., P.Eng. - MineTech International Limited, Canada, Peter Roy Siegfried, MAusIMM (CP Geology) and Michael R. Hall, B.Sc (Hons), MBA, MAusIMM, Pr.Sci.Nat, MGSSA - The MSA Group, South Africa. The PEA should not be considered to be a pre-feasibility or feasibility study, as the economics and technical viability of the Project has not been demonstrated at this time. The PEA 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. Furthermore, there is no certainty that the PEA will be realized.

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