

Fortune Minerals Retains Worley to Update the NICO Project Feasibility Study and Alberta Site Permitting

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NICO Project development advancing with U.S. and Canadian Government financial support

[Fortune Minerals Ltd.](#) (TSX: FT) (OTCQB: FTMDF) ("Fortune" or the "Company") (www.fortuneminerals.com) is pleased to announce that it has retained Worley Canada Services Ltd. ("Worley") to conduct additional engineering and lead the preparation of an updated Feasibility Study for the NICO Cobalt-Gold-Bismuth-Copper Project in Canada ("NICO Project"). The NICO Project is an advanced Critical Minerals development comprised of a planned mine and concentrator in the Northwest Territories ("NWT") and a hydrometallurgical recovery plant in Lamont County, Alberta ("Hydrometallurgical Facility") where concentrates from the mine, and other feed sources, will be processed to value-added products for the energy transition and new technologies. Worley has also been retained to assist with permitting for the Hydrometallurgical Facility, which is planned to be constructed at a brownfield site held under a purchase option arrangement from JFSL Field Services LLC ("JFSL") (see news release dated, August 19, 2024). Development of the vertically integrated NICO Project would provide a reliable North American supply of cobalt sulphate, gold doré, bismuth ingots, and copper cement produced with supply chain transparency, Canadian Environmental-Social-Governance ("ESG") standards, and compliance with the U.S. Inflation Reduction Act ("IRA").

Fortune was recently awarded ~C\$17 million of non-dilutive grants and contribution funding from the U.S. Department of Defense ("DoD"), Natural Resources Canada ("NRCan") and Alberta Innovates to help finance the work needed to advance the NICO Project to a project finance and construction decision (see news releases dated, May 16, 2024, and December 5, 2023). The funds are supporting metallurgical test work at SGS Canada Inc. ("SGS") to validate recent process optimizations and flow sheet modifications, update the Feasibility and Front-End Engineering and Design studies for the planned development, permit the Hydrometallurgical Facility, and secure the remaining authorizations, management plans, and satisfy the environmental assessment measures and water license conditions required to construct and operate the NICO mine and concentrator.

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The NICO Project was assessed in a positive Feasibility Study in 2014 by Micon International Limited ("Micon") but is now out of date. Micon, and P&E Mining Consultants Inc. ("P&E") who also contributed to the 2014 study, will assist Worley with preparation of the NI 43-101 Technical Report, and the updated Mineral Reserve estimates and Mine Plan for the new Feasibility Study, respectively. Worley's discipline experts have reviewed historical technical data for the NICO Project and have visited the NWT and Alberta sites. The updated Feasibility Study will assess the NICO Project economics at current costs, commodity prices, and currency exchange rates, while also incorporating recent improvements and project optimizations that include:

- Completion of the Tliche Highway in the NWT, eliminating capital cost redundancies and reducing the construction schedule for the mine and concentrator;
- Incorporation of the new brownfield Alberta site for the Hydrometallurgical Facility and re-purposing of the 42,000 square feet of serviced buildings on 77 acres of lands adjacent to the Canadian National Railway;
- Proximity of the Hydrometallurgical Facility site to services and reagents available in Alberta's Industrial Heartland, such as process and potable water, natural gas, low-cost power, sulphuric acid, oxygen, lime, and a commutable pool of skilled engineers and chemical plant workers;
- Enhanced transportation logistics and reduced concentrate haulage distances between the NWT and Alberta sites;

- A new waste residue disposal strategy for the Hydrometallurgical Facility, including potential sequential precipitation of a saleable gypsum by-product to reduce process residue transportation and disposal costs;
- Incorporation of recent process optimizations to reduce capital and operating costs and assessing the potential for improved metallurgical recoveries from the test work programs in progress at SGS;
- A new Resource Model with more constrained wireframe boundaries to reduce internal and external modelling dilution and providing better differentiation of higher-grade Mineral Resource blocks for earlier processing;
- A new Mine Plan focused on earlier mining and processing of higher margin ores to accelerate cash flows, together with a stockpiling strategy to defer processing lower margin ores;
- Sensitivity analyses for processing other feed sources in the Hydrometallurgical Facility, including intermediate products from the Kennecott Smelter waste streams pursuant to the process collaboration between Fortune and Rio Tinto.

About the NICO Project

The NICO Project is a vertically integrated Critical Minerals asset that Fortune has expended more than C\$138 million to advance from an in-house mineral discovery to a near shovel-ready development. The economics for the project were previously assessed in a positive Feasibility Study, and the Company has secured environmental assessment approval and the major mine permits for the facilities in the NWT.

The NICO Deposit is situated in Tlicho Territory, approximately 160 km northwest of the City of Yellowknife and 50 km north of the community of Whati where the new Tlicho Highway currently terminates. The deposit contains open pit and underground Proven and Probable Mineral Reserves totaling 33.1 million tonnes containing 1.11 million ounces of gold, 82.3 million pounds of cobalt, 102.1 million pounds of bismuth, and 27.2 million pounds of copper that are sufficient to support an approximate 20-year mine life. NICO and the Company's nearby Sue-Dianne copper deposit are IOCG-type mineral deposits with world class global analogues, including the 'super giant' Olympic Dam Deposit in South Australia. IOCG-type deposits are typically very large copper-gold deposits but are notably also enriched in important technology metals.

The NICO Deposit is planned to be mined primarily by conventional truck and shovel open pit methods with a low waste to ore strip ratio. A portion of the higher-grade Mineral Reserves are planned to be mined by underground open stoping methods to accelerate cash flows during early years of the mine life using the existing ramp and underground workings from previous test mining for access and ore haulage.

Ores from the mine will be processed by crushing, grinding and bulk flotation methods with a low (~4%) mass pull that reduces 4,650 tonnes of daily mill throughput to approximately 180 tonnes of bulk concentrate containing the recoverable metals. The bulk concentrate will be subjected to re-grinding and secondary flotation to produce gold-bearing cobalt and bismuth concentrates for low-cost transportation by truck and rail to Alberta and downstream processing to value-added products.

The Hydrometallurgical Facility is planned to be constructed in Lamont County in Alberta's Industrial Heartland, approximately 30 km north of Edmonton, where the municipal planning approvals are already in place for heavy industry. The cobalt concentrate will be processed in an autoclave using pressure-oxidation to dissolve the metals, followed by sequential neutralization, copper cementation, and solvent extraction purification and crystallization of cobalt sulphate heptahydrate. The bismuth concentrate will be processed by ferric chloride leaching, followed by cementation, and smelting to pour pure ingots. Gold will be recovered by leaching the autoclave residue, followed by carbon elution and smelting to doré bars. Test work is underway at SGS to determine if a saleable gypsum by-product can also be produced during sequential neutralization of the autoclave effluent to increase revenues and reduce the amount of waste that would need to be trucked to an offsite disposal facility.

NICO Commodities

NICO is a polymetallic deposit containing three Critical Minerals (cobalt, bismuth and copper) and more than one million ounces of in-situ gold as a highly liquid and countercyclical co-product to mitigate Critical Mineral price volatility.

Cobalt is a particularly important Critical Mineral due to its expanding consumption in the cathodes of lithium-ion rechargeable batteries used in electric vehicles, portable electronics and stationary storage cells. Cobalt is also used in aerospace superalloys, cutting tools, magnets, catalysts and pigments. There are concerns with the current sources of supply for cobalt because of the geographic concentration of mine

production in the politically unstable and ESG-challenged Democratic Republic of the Congo (77% of mine supply) and geopolitical risks associated with China's ownership of most of these mines, 80% of the world's refinery production, and 90% of cobalt chemical supply.

Bismuth is another Critical Mineral with a supply chain controlled by China (~80% of the world production). Bismuth has unique physical and chemical properties leveraged to make automotive glass and steel coatings, paints and pigments, and brake pads. It is also used in low melting temperature and dimensionally stable alloys, fire depressants, and pharmaceuticals. Bismuth consumption is increasing as an environmentally safe and non-toxic replacement for lead in brass, solders, free machining steel and aluminum, galvanizing alloys, glass, ceramic glazes, radiation shielding, ammunition, and fishing weights. Bismuth-tin alloy is used to make environmentally safe plugs to properly seal decommissioned oil and gas wells to prevent greenhouse gas leakage, blowouts and groundwater contamination. Manganese-bismuth magnets are also being commercialized as a potential replacement for Rare Earth Elements in the magnets used in electric vehicle powertrain motors.

Fortune will be pleased to provide periodic updates on the progress of its various metallurgical, engineering and permitting programs.

For more detailed information about the NICO Mineral Reserves and certain technical information in this news release, please refer to the Technical Report on the NICO Project, entitled "Technical Report on the Feasibility Study for the NICO-Gold-Cobalt-Bismuth-Copper Project, Northwest Territories, Canada", dated April 2, 2014 and prepared by Micon International Limited which has been filed on SEDAR and is available under the Company's profile at www.sedar.com.

The disclosure of scientific and technical information contained in this news release have been approved by Robin Goad, M.Sc., P.Geo., President and Chief Executive Officer of Fortune and Alex Mezei, M.Sc., P.Eng. Fortune's Chief Metallurgist, who are "Qualified Persons" under National Instrument 43-101.

About Worley Group

Worley is an international engineering, construction management and environmental services company listed for trading on the Australian Stock Exchange.

About Fortune Minerals:

Fortune is a Canadian mining company focused on developing the NICO Cobalt-Gold-Bismuth-Copper Project in the NWT and Alberta. Fortune also owns the satellite Sue-Dianne Copper-Silver-Gold Deposit located 25 km north of the NICO Deposit and a potential future source of incremental mill feed to extend the life of the NICO concentrator.

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This press release contains forward-looking information and forward-looking statements within the meaning of applicable securities legislation. This forward-looking information includes statements with respect to, among other things, the exercise of the option by the Company and the purchase of the JFSL site, the construction of the proposed Hydrometallurgical Facility at the JFSL site, the potential for expansion of the NICO Deposit and the Company's plans to develop the NICO Project. Forward-looking information is based on the opinions and estimates of management as well as certain assumptions at the date the information is given (including, in respect of the forward-looking information contained in this press release, assumptions regarding: the successful completion of the Company's due diligence investigations on the JFSL site, the Company's ability to secure the necessary financing to fund the exercise of the option and complete the purchase of the JFSL site, the Company's ability to complete construction of a NICO Project Hydrometallurgical Facility; the Company's ability to arrange the necessary financing to continue operations and develop the NICO Project; the receipt of all necessary regulatory approvals for the construction and operation of the NICO Project and the related Hydrometallurgical Facility and the timing thereof; growth in

the demand for cobalt; the time required to construct the NICO Project; and the economic environment in which the Company will operate in the future, including the price of gold, cobalt and other by-product metals, anticipated costs and the volumes of metals to be produced at the NICO Project). However, such forward-looking information is subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking information. These factors include the risks that the 2021 drill program may not result in a meaningful expansion of the NICO Deposit, the Company may not be able to complete the purchase of the JFSL site and secure a site for the construction of a Hydrometallurgical Facility, the Company may not be able to finance and develop NICO on favourable terms or at all, uncertainties with respect to the receipt or timing of required permits, approvals and agreements for the development of the NICO Project, including the related Hydrometallurgical Facility, the construction of the NICO Project may take longer than anticipated, the Company may not be able to secure offtake agreements for the metals to be produced at the NICO Project, the Sue-Dianne Property may not be developed to the point where it can provide mill feed to the NICO Project, the inherent risks involved in the exploration and development of mineral properties and in the mining industry in general, the market for products that use cobalt or bismuth may not grow to the extent anticipated, the future supply of cobalt and bismuth may not be as limited as anticipated, the risk of decreases in the market prices of cobalt, bismuth and other metals to be produced by the NICO Project, discrepancies between actual and estimated Mineral Resources or between actual and estimated metallurgical recoveries, uncertainties associated with estimating Mineral Resources and Reserves and the risk that even if such Mineral Resources prove accurate the risk that such Mineral Resources may not be converted into Mineral Reserves once economic conditions are applied, the Company's production of cobalt, bismuth and other metals may be less than anticipated and other operational and development risks, market risks and regulatory risks. Readers are cautioned to not place undue reliance on forward-looking information because it is possible that predictions, forecasts, projections and other forms of forward-looking information will not be achieved by the Company. The forward-looking information contained herein is made as of the date hereof and the Company assumes no responsibility to update or revise it to reflect new events or circumstances, except as required by law.

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