



Geovic Mining Corp

Phil Mason Appointed General Manager of Geovic Cameroon PLC; Nkamouna Project Update

September 24, 2010 – Denver, CO - Geovic Mining Corp. (“Geovic” or “the Company”, TSX:GMC, OTCBB:GVCM), on behalf of its 60.5%-owned subsidiary Geovic Cameroon PLC, is pleased to announce the appointment of Mr. Phillip R. Mason as General Manager of Geovic Cameroon PLC. Mr. Mason is a 30-year mining industry veteran, including 20 years experience in the African countries of Angola, the Democratic Republic of Congo, and the Republic of South Africa. He is a mechanical engineer with a solid background in management, project planning, construction, commissioning, and operations in rural African environments. Greg Hill, CFO of Geovic Mining and Chairman of Geovic Cameroon PLC, states “Phil is a strategic hire for Geovic Cameroon, well qualified to move its flagship Nkamouna project, the first major Cameroonian mining venture, successfully through the construction stage and into production.”

Nkamouna Project Update

Geovic Cameroon retained Lycopodium Minerals Pty. Ltd. of Perth, Australia in December 2009 to prepare a bankable feasibility study based on both prior feasibility study conclusions and recent, dynamic changes to project mining and processing technologies. Lycopodium’s Feasibility Study Update (FSU) is scheduled to be completed by year-end, incorporating key enhancements such as:

- A new mine plan incorporating better grade control and a cost-efficient strip-mining technique
- A new, innovative leach chemistry that reduces process costs and risks
- An on-site refinery, allowing the production of more profitable cobalt oxide and nickel carbonate end products (in addition to cobalt-nickel sulfide intermediate precipitate) and manganese carbonate

Mining

In October 2009, Geovic announced a 97% increase in combined Measured & Indicated Resources at the Nkamouna and Mada properties. Utilizing the additional resources, a new mine plan was developed by Geovic Cameroon and SRK Consulting of Lakewood, Colorado, resulting in an estimated five-year mine life extension to 23 years. The Company used its extensive database to carry out a rigorous statistical evaluation of its ore grade control process, and subsequently further optimized the mine plan, significantly increasing forecast cash flow in the early years of production. The updated mine plan, utilizing excavators, articulated dump trucks, and bulldozers to accomplish strip mining and concurrent reclamation, reduces expected operating costs and is better suited for continuous operation during the wet season.

Processing and Metal Recovery

Geovic Cameroon has finalized the process to be utilized in producing cobalt oxide, nickel carbonate, and manganese carbonate. However, it retains the option to sell a high-quality mixed sulfide precipitate (the end product of the stage two process) should it be necessary or beneficial to do so, in addition to or instead of the final high purity products from the third and final stage.

The first processing stage, involving the physical upgrading of run-of-mine ore, remains unchanged from previous Company plans. This physical upgrading circuit was recently validated through pilot testing at Hazen Research in Golden, Colorado to establish specific engineering parameters for plant design and equipment selection.

The second stage utilizes sulfuric acid leaching with pyrite as a reducing agent to solubilize cobalt, nickel, and manganese while concurrently reducing impurities. Continuous pilot testing completed in early July by Hazen demonstrated this innovative process. Several noteworthy features of the pyrite leach process include creation of the heat required for leaching at 95° C, precipitation of most of the impurities, and re-generation of significant sulfuric acid for further use during the leach process. These tests also established the robustness of the process, in addition to procedures necessary to produce manganese carbonate as a final product by first precipitating the cobalt and nickel as sulfides from the leach solution.

The final stage involves the production of high quality cobalt and nickel products utilizing conventional, industry-proven solvent extraction technology. Project economics are expected to be improved by on-site refining over the sale of intermediate sulfide precipitates. The refining process includes re-leaching the sulfide precipitate; further purifying, separating, and concentrating these re-leach solutions using conventional solvent extraction technology; and precipitating high purity cobalt and nickel carbonates. The cobalt is then roasted to produce cobalt oxide. Test work underway at SGS Lakefield in Perth, Australia to demonstrate the re-leaching process is expected to be completed and included in the FSU.

Product Marketing

Discussions continue with several potential cobalt, nickel, and manganese purchasers to effect long-term metal sales agreements. Some of these off-take discussions are being spearheaded by Geovic Cameroon's financial advisor, Standard Chartered Bank, and include creative proposals involving potential financing and/or strategic partnerships.

Environmental Reports, Community

The Nkamouna Project has an approved Environmental and Social Assessment (ESA) in conformity with both Cameroon regulations and international environmental standards. In May, Knight Piésold and Co. of Denver, Colorado and Rainbow Environmental Consultants of Yaoundé, Cameroon prepared an update to the previous ESA describing impacts associated with the process changes and modifications to the tailings facility. The new tailings facility incorporates a two-celled, fully engineered containment system. The acidic leach tailings will be stored in a separate tailings cell with a geosynthetic liner, isolating the leach tailings from the inert physical upgrade tailings. The updated ESA also includes a new Biodiversity Management Plan, presenting the actions and offsite mitigation measures Geovic Cameroon will take to limit its impact on important habitats to the maximum practical extent.

Separately, Geovic continues its valuable partnership with GeoAid Cameroon, an independent, non-profit humanitarian and social services organization that is retained through a service agreement with Geovic Cameroon to implement health, education, micro-enterprise, agriculture, and livestock programs. For every dollar the Company invested in the Geovic-GeoAid service agreement for Cameroon-based socio-humanitarian programs in 2009, GeoAid generated four dollars of additional in-kind donations, primarily of medicine and medical supplies thanks to GeoAid International's partnership with Medical Teams International of Portland, Oregon and St. Mary's Hospital of Grand Junction, Colorado. In 2010, such external donations are expected to double from the 2009 level.

Geovic Mining Background

Geovic is a U.S.-based corporation whose principal asset is 60.5% ownership of a significant cobalt-nickel-manganese deposit in the Republic of Cameroon, Africa. Additional Company initiatives and Project information may be found on the websites www.geovicenergy.com, www.sedar.com, and www.sec.gov. For more information, please go to www.geovic.net or contact:

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On behalf of the Board
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Cautionary Note Regarding Forward Looking Statements

Statements contained in this press release that are not historical facts are forward-looking statements (within the meaning of Canadian securities legislation) that involve risks and uncertainties. Forward-looking statements include, but are not limited to, statements with respect to the timing and completion of the FSU; future price of metals; the estimation of mineral reserves and resources; the timing and amount of estimated future financing, construction, and production, costs of production, and capital expenditures; costs and timing of the development of new deposits; and success of exploration activities, permitting time lines, currency fluctuations, requirements for additional capital, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims and limitations on insurance coverage. In certain cases, forward-looking statements can be identified by the use of words such as "proposes", "expects", "is expected", "scheduled", "estimated", "intends", or variations of such words and phrases or state that certain actions, events or results "will" occur. 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 risks and other factors include, among others, risks related to operations; actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of metals; possible variations in ore reserves, grades, or recovery rates; failure of plant, equipment or processes to operate as anticipated; accidents, labour disputes, other risks of the mining industry, delays in obtaining

governmental approvals or financing or in the completion of development or construction activities and other factors as described in detail in the Company's Annual Report on Form 10-K, quarterly reports on Form 10-Q, and other filings with the U.S. Securities and Exchange Commission and Canadian securities regulatory authorities. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. The forward-looking statements in this press release speak only as of the date hereof. The Company does not undertake any obligation to release publicly any revisions to these forward-looking statements to reflect events or circumstances after the date hereof to reflect the occurrence of unanticipated events.