



OPTIMIZATION STUDY IMPROVES GEOVIC CAMEROON COBALT PROJECT

September 3, 2008 – Grand Junction, CO – Geovic Mining Corp. (“Geovic” or “The Company”, TSX:GMC, OTC:BB:GVCM), on behalf of its 60%-owned subsidiary Geovic Cameroon PLC (GeoCam), is pleased to announce results of an Optimization Study (OS) of the Nkamouna Cobalt-Nickel-Manganese Project in Cameroon, Africa. The OS includes many improvements to the December 2007 Feasibility Study (FS), and should facilitate the completion of project financing. All currency is expressed in US dollars as of the second quarter 2008. OS highlights include:

- **Initial capital disbursements reduced from \$397 million to \$379 million despite the inclusion of an \$11 million circuit to recover manganese**
- **After-tax, undiscounted cash flow estimated at \$2.6 billion on revenues of \$6.6 billion during the initial 17 years of production**
- **Cash operating costs reduced from \$3.12 to \$2.02 per pound of cobalt, net of byproduct credits from nickel, manganese and scandium**
- **Production scheduled to commence in late 2010 and increase to full capacity in early 2011**

Financial Projections – Base Cases	<u>2008 OS</u>	<u>2007 FS</u>
100% Equity – After-Tax		
IRR, % (1)	44	33
NPV 8%, \$ M (2)	1,024	696
NPV 8%, \$ M (GMC 60% Share)	614	417
Payback, Production Years	1.9	2.9
Initial Capital Disbursements, \$ x M		
Plant and Infrastructure	321	351
GeoCam G&A	24	20
Pre-Production Mining & Equipment	<u>34</u>	<u>27</u>
Sub-Total (exclusive of escalation)	379	397
Working Capital during Startup & Commissioning	<u>38</u>	<u>33</u>
Total Initial and Working Capital	417	431
GMC 60% Share of Total Capital	250	259
Sustaining Capital during Production	86	51
Project Life, Years	17	18
Operating Costs, \$/lb cobalt		
Direct, net of byproducts	(0.46)	1.99
Indirect	1.48	0.42
Production Tax	<u>1.00</u>	<u>0.71</u>
Total Cash Costs	2.02	3.12
3-Year Average Metal Pricing, Ending Date	<u>June '08</u>	<u>Oct '07</u>
Cobalt, \$/lb (3)	26.57	20.08
Nickel, \$/lb (4)	12.39	11.16
Spot Pricing (mid-2008)		
Manganese Carbonate, \$/tonne (5)	1,000	na
Scandium, \$/lb(6)	317	na
Revenue Components, % of Total		
Cobalt	66	70
Nickel	22	30
Manganese	12	0
Scandium	<1	0

The OS is based on producing high-purity cobalt oxide, nickel carbonate, and manganese carbonate as well as average purity scandium oxide. No premiums or discounts were applied to the metal prices used in the OS. As project economics are most sensitive to product prices, financial projections are shown below for both metal and commodity prices as of September 1, 2008 and a possible low price scenario.

Financial Sensitivity to Product Prices

Price Bases for Initial Project Life	<u>Sep. 1, 2008</u>	<u>Low Case</u>
Cobalt, \$/lb	33.00	15.00
Nickel, \$/lb	8.73	7.00
Manganese, \$/tonne	1,200	1,000
100% Equity - After Tax		
IRR, %	50	18
NPV 8%, \$ M	1,263	314
NPV 8%, \$ M (GMC 60% share)	758	142
Payback, Production Years	1.7	4.6
Cash Cost, net of byproduct credits, \$/Lb Co	3.86	5.36

Below is a summary of project operating costs, which are the next most sensitive aspect of project economics:

Project Operating Costs	<u>OS, \$ x M</u>	<u>% of OPEX</u>
Direct: Mining	319	12
Processing	1,703	67
General & Administrative	137	5
Indirect: Reclamation, Product Freight, etc.	242	10
Production Taxes at Base Case Prices	<u>166</u>	<u>6</u>
Total	2,566	100

Process operating cost components are estimated at 42% for ocean and land freight on supplies (mainly soda ash, sulfur, and hydrochloric acid), 31% for purchases of those supplies, and 27% for operating and maintenance labor, repair parts, and energy. Operating costs are based on current prices and reasonable projections, however operating and capital costs may increase or decrease hereafter in response to changing global economic conditions.

Optimization Study - Discussion & Analysis

The three engineering companies listed below (the Alliance), in coordination with GeoCam personnel, examined the engineering and construction aspects of the Project with a primary focus on improving processing and related infrastructure costs and performance:

- Bateman International Projects BV of the Netherlands, with an office in Brisbane, Australia
- Roberts & Schaefer Australia Pty. Ltd., with an office in Brisbane, Australia
- Group Five Projects (Pty). Ltd., based in Johannesburg, South Africa

Mine, tailings storage, G&A, and general project infrastructure capital and operating costs in the OS were escalated or modified as appropriate from the 2007 FS prepared by Washington Group International, Pincock Allen & Holt, and Knight Piesold Consulting, with updated local input from GeoCam. Scott Wilson Mining Group of Toronto, Canada reviewed and validated the financial model that includes the new production and cost estimates from the OS.

Processing changes included production of manganese carbonate rather than disposal of manganese hydroxide. Pyrohydrolysis or spray roasting of solutions to form high-purity cobalt and nickel oxides in the FS was replaced with direct precipitation to form high-purity cobalt and nickel carbonates, from which cobalt is further processed to produce high-purity cobalt oxide. A small process circuit was also added in the OS to recover minor quantities of scandium.

Nearly all electrical and thermal energy required by the project will be supplied from a combined heat and power plant fueled with local biomass (trees), thereby minimizing the consumption of much higher cost petroleum-based fuels. This energy system is also expected to earn carbon credits under the Kyoto Protocol.

The financial projections herein are based on 100% equity financing, but GeoCam intends to leverage the project with an appropriate level of debt financing. Consequently, additional capital will be required for debt finance fees plus funding a risk account to cover potential capital cost over-runs and/or construction delays. Such additional costs, financing fees, and risk accounts will be defined as project financing moves forward.

Project Plans

Now that this OS has been completed, GeoCam will focus on the following major activities necessary to advance the project:

- Complete an information memorandum and appoint the lead arranger(s) to provide the debt component of project financing.
- Improve infrastructure to enable initiation of major construction by mid-November 2008.
- Secure product sale agreements in amounts and under terms that meet mutually acceptable requirements of GeoCam and its lenders.
- Investigate long-term chemical pricing and freight arrangements, and evaluate options to produce some of the chemical requirements on-site to lower purchase and freight costs.
- Continue development drilling targeted at expanding project resources and reserves, thereby enabling future production increases and/or extending mine life.
- Further optimize the mine production schedule to increase ore grades, particularly in the early production years.
- Complete an EPCM contract and receive a definitive capital cost estimate based on increased design definition, purchase orders, firm quotations, and advanced negotiations or execution of definitive sub-contracts.
- Acquire additional staff necessary to monitor construction, train operators, and prepare a definitive capital cost estimate for the balance of project development and construction work to be completed by GeoCam (initial infrastructure, pre-production mining, and tailings dam installation).

David C. Beling, P.E., Executive VP and COO, is the Qualified Person responsible for the technical information contained in this press release. The Alliance is responsible for the OS using data obtained from the technical information presented to them by the Company. Additional Company and project information may be found on the websites www.geovic.net, www.sedar.com, and www.sec.gov.

Geovic Background

Geovic is a U.S.-based corporation whose principal asset is a significant cobalt-nickel-manganese deposit in the Republic of Cameroon, Africa, with initial production scheduled for late 2010. Geovic owns 60% of seven related properties on a 1,250 square kilometer Mine Permit in Cameroon. Nkamouna, the first property planned for production, has proven and probable reserves of 299 million pounds Cobalt, 830 million pounds Nickel, and 1,606 million pounds Manganese. Characteristics of these unique Cameroonian deposits can be found on the Company's website at www.geovic.net.

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On behalf of the Board
John E. Sherborne, CEO

Footnotes

- (1) IRR = Internal Rate of Return.
- (2) NPV = Net Present Value using a cash flow analysis discounted at the rate shown; M = million
- (3) US spot 99.8% cobalt cathode monthly mean price published by Platt's Metals Week.
- (4) Nickel metal prices from daily cash averages on London Metal Exchange.
- (5) High-purity manganese carbonate spot price currently exceeds \$1,000/tonne.
- (6) USGS recent spot price for similar grade scandium oxide.

Important Notices

Statements contained in this press release that are not historical facts are forward-looking statements (within the meaning of the Canadian securities legislation) that involve risks and uncertainties. Forward-looking statements include, but are not limited to, statements with respect to the future price of metals; the estimation of mineral reserves and resources; the timing and amount of estimated future 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 Geovic Mining 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, grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accidents, labor disputes and 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 Information Form and 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. Geovic Mining 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.

This press release and other information released by Geovic uses the terms "reserves", "resources", "measured resources", "indicated resources", and "inferred resources". United States investors are advised that, while such terms are recognized and required by Canadian securities laws, the United States Securities and Exchange Commission (the "SEC") does not recognize them. Under United States standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. Mineral resources that are not mineral reserves do not have demonstrated economic viability. United States investors are cautioned not to assume that all or any part of measured or indicated resources will ever be converted into reserve. Inferred resources are in addition to measured and indicated resources. Further, inferred resources have a great amount of uncertainty as to their existence and as to whether they can be mined legally or economically. It cannot be assumed that all or any part of the inferred resources will ever be upgraded to a higher category. Therefore, United States investors are also cautioned not to assume that all or any part of the inferred resources exists, or that they can be mined legally or economically.

National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") is a rule developed by the Canadian Securities Administrators, which established standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. Unless otherwise indicated, all reserve estimates contained in this press release or released by Geovic in the future, have been or will be prepared in accordance with NI 43-101 and the Canadian Institute of Mining, Metallurgy and Petroleum Classification System. The requirements of NI 43-101 are not the same as those of the SEC, and any reserves reported by Geovic in compliance with NI 43-101 may not qualify as reserves under the SEC's standards.