



## Pre-Feasibility Study for Gryphon Gold's Borealis Oxide Resources in Nevada

**Reno, Nevada – (June 4, 2009) - Gryphon Gold Corporation (GGN: TSX / GYPH:OTC.BB)** announces that the company is moving forward with a pre-feasibility study for mine development on the oxide portion of its Borealis gold resource property in Nevada, which consists of 1,422,500 Measured and Indicated ounces of gold (M&I) and 1,104,500 Inferred ounces of gold (Infd.). The study is being prepared by Telesto Nevada Inc. of Reno entirely on a deferred fee basis to facilitate moving forward prior to completion of the financing required for mine construction and development.

The pre-feasibility study is the next step toward completing the company's long-range plan. The plan anticipates cash flow generated through a mining operation used to fund a program of drilling for high-grade zones within two additional large, high sulphidation systems discovered under the pediments in 2007, as defined in the company's NI 43-101 Technical Report on the Mineral Resource dated April 28, 2008. As well, the plan calls for completion of technical work to confirm the feasibility of a sulphide mine.

"We are moving forward with the at-risk pre-feasibility study on the Borealis deposit because we believe that the results will assist Gryphon Gold to begin financing and mine development," says Telesto Nevada president John Welsh. The estimate for the deferred fee is \$130,000 and is due upon successful financing of the project.

In September 2008, Gryphon Gold released a Preliminary Assessment<sup>(1)</sup> produced by Telesto Nevada, accessing the potential economics of an open pit, heap leach mining operation and the processing of 350,000 ounces of gold yielding 232,000 ounces of recovered gold. This five-year plan indicated that the project had an unlevered internal rate of return at 26 per cent assuming a US\$775 per ounce gold price. The Preliminary Assessment indicated that at defined operating costs, for every one per cent change in the price of gold, the projected internal rate of return changed by 1.7 per cent.

As well, an independent scoping study was commissioned to determine the potential of mining the sulphide gold resource which consists of 1,085,000 M&I ounces of gold and 715,000 Infd. ounces of gold at an average grade of 0.044 ounces per ton (opt). The scoping study was delayed in line with the company's cash conservation plan and will be re-instituted when cash flow is available.

"We're very optimistic that the pre-feasibility study will lead to our ability to raise the capital to put a mine into production on this property that has been a strong gold producer historically and shows so much promise for the future," says Gryphon Gold CEO John Key.

The Borealis property consists of over 23 square miles of highly altered rock containing multiple high sulphidation gold bearing systems. The property has 1.8 million ounces of NI 43-101 compliant measured and indicated gold resources (M&I) and 1.1 ounces of NI 43-101 compliant inferred (Infd.) gold resources. Historically, the property has produced over 500,000 ounces of gold.

The current Borealis gold resource is in two distinct oxidation horizons:

- The Oxide deposit consists of 340,000 M&I ounces of gold (contained in 15.6 million tons grading at 0.022 opt), composed of 107,000 measured ounces and 233,000 indicated ounces, and 385,000 Infd. ounces of gold (contained in 26.8 million tons grading at 0.014 opt).
- The Sulphide deposit consists of 1,085,000 M&I ounces of gold (contained in 21.0 million tons grading at 0.05 opt), composed of 277,000 of measured ounces and 807,000 indicated ounces, and 715,000 Infd. ounces of gold (contained in 22.5 million tons grading at 0.03 opt).

Vancouver-based Gryphon Gold is a Nevada-focused gold exploration company. Its principal gold resource, the Borealis deposit, is located in the Walker Lane gold belt of western Nevada. The Borealis gold system is one of the largest known volcanic-hosted high-sulphidation gold bearing mineralized systems in Nevada. Nevada Eagle Resources, a wholly-owned subsidiary of Gryphon Gold, has approximately 54 highly prospective gold properties located in gold trends in Nevada. Nevada Eagle's principal properties have a cumulative 900,000 ounces of historical gold (the historical estimates are based on internal reports prepared by prior owners prior to February 2001 and were not prepared in accordance with CIM NI 43-101 standards and thus their reliability has not been verified). A number of Nevada Eagle's principal properties are subject to joint venture or farm in agreements in favor of third parties.

**For more information please contact:**

[www.gryphongold.com](http://www.gryphongold.com)

John L. Key, CEO  
Ph: 775 315-4828  
[jkey@gryphongold.com](mailto:jkey@gryphongold.com)

Alyn Edwards, Peak Communicators  
Ph: (604) 689-5559  
[aedwards@peakco.com](mailto:aedwards@peakco.com)

*This press release contains "forward-looking information" within the meaning of Canadian and United States securities laws, which may include, but is not limited to, statements with respect to projections and expectations related to the results and projections contained in the Preliminary Assessment, the timing of delivery of the pre-feasibility study and scoping study regarding the Borealis resource, the anticipated conclusions of the pre-feasibility study and scoping study, the expected mine life, recovery, capital and other costs and anticipated production of the described open-pit oxide heap leach mine at the Borealis property, anticipated internal rate of return, availability of capital for development and the affect of the pre-feasibility study on the company's ability to raise capital for development, sensitivity to metal prices and ore grade, resource estimates on the Borealis resource, pediment exploration plans and other plans, projections, estimates and expectations. Such forward-looking statements reflect our current views with respect to future events and are subject to certain risks, uncertainties and assumptions, including, the risks and uncertainties outlined under the section headings "Forward-Looking Statements" and "Risks Factors" in our annual report on Form 10-KSB, as filed with the SEC on June 26, 2008, as amended July 7, 2008, under the section heading "Risk Factors" in our most recent quarterly report on Form 10-Q, as filed with the SEC on February 13, 2009, as amended March 10, 2009, and in our most recent financial statements, reports and registration statements filed with the SEC (available at [www.sec.gov](http://www.sec.gov)) and with Canadian securities administrators (available at [www.sedar.com](http://www.sedar.com)). In addition, the Preliminary Assessment is the first in a series of development studies for the project assessing the potential viability of an open-pit oxide heap leach mining operation on the Borealis gold property using an estimate of metal prices based on historical and future metal prices. The operating and capital costs in the Preliminary Assessment were developed to be reasonable estimates within industry benchmarks. There is no certainty that the results of the Preliminary Assessment will ever be realized. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, believed, estimated or expected. We do not undertake to update forward-looking statements, except as may be required by law.*

Full financial statements and securities filings are available on our website: [www.gryphongold.com](http://www.gryphongold.com) and [www.sec.gov](http://www.sec.gov) or [www.sedar.com](http://www.sedar.com). For further information contact: John Key, CEO, by phone: 775-853-8814, or email at [jkey@gryphongold.com](mailto:jkey@gryphongold.com). The Borealis property is described in the technical report (the "technical reports") dated April 28, 2008 titled Technical Report on the Mineral Resources of the Borealis Gold Project Located in Mineral County, Nevada, U.S.A. and dated September 2, 2008 titled "Preliminary Assessment of the Mineral Resources of the Borealis Gold Project located in Mineral County, Nevada, U.S.A., and prepared in accordance with National Instrument 43-101 of the Canadian Securities Administrators ("NI 43-101"). The technical reports describe the exploration history, geology and style of gold mineralization at the Borealis property. Disclosure in this press release of mineral resources is based on the technical report. Details of the quality or grade of each category of mineral resources and key assumptions, parameters and methods used to estimate the mineral resources is included in the technical reports. The reports also include a description of environmental and permitting matters.

The information in this press release as it relates to the Preliminary Assessment (the "PA") was reviewed by J.R. Danio, PE., Teleso Nevada Inc. of Reno, NV, a Qualified Person as defined by NI 43-101 of the Canadian Securities Administrators. Mr. Danio is considered independent of Gryphon Gold for the purposes of NI 43-101. The information in this press release as it relates to the mineral resources of the Borealis property was reviewed by Dr. R. Steininger of Reno, NV, a Qualified Person as defined by NI 43-101 of the Canadian Securities Administrators. Dr. Steininger in a consulting geologist retained by Gryphon Gold, is the principal author of the technical report and is considered independent of Gryphon Gold for the purposes of NI 43-101.

All mineral resources have been estimated in accordance with the definition standards on mineral resources and mineral reserves of the Canadian Institute of Mining, Metallurgy and Petroleum referred to in National Instrument 43-101, commonly referred to as NI 43-101. U.S. reporting requirements for disclosure of mineral properties are governed by the United States Securities and Exchange Commission (SEC) Industry Guide 7. Canadian and Guide 7 standards are substantially different and the information contained in this press release is not comparable to similar information disclosed by U.S. companies. This press release uses the terms "measured," "indicated," and "inferred" resources. We advise investors that while those terms are recognized and required by Canadian regulations, the SEC does not recognize them. Inferred mineral resources are considered too speculative geologically to have economic considerations applied to them that enable them to be categorized as mineral reserves. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies, except in rare cases. U.S. investors are cautioned not to assume that part or all of an inferred resource exists, or is economically or legally minable.

<sup>(1)</sup> The Preliminary Assessment is preliminary in nature and includes inferred mineral resources. The economic viability of mineral resources that are not mineral reserves has not been and can not be demonstrated. Mineral resource estimates used in the Preliminary Assessment include inferred resources. These estimates are considered too geologically speculative to have any economic considerations apply to them that would enable them to be considered as mineral reserves. In addition, there is no assurance that the Preliminary Assessment will be realized and that further work will lead to reserves that can be mined economically. Mineral resources that are not mineral reserves have no demonstrated economic viability. The basis of the Preliminary Assessment and the qualifications and the assumption made by the author are contained in the Preliminary Assessment as filed on [www.sedar.com](http://www.sedar.com).