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Kinross Options Kena Gold Project

Veteran explorers Frank Lang and Art Troup have a promising gold discovery on their hands and a new deal with Kinross Gold Corp.

rank Lang and geologist Art Troup have explored for gold together for over 20 years. During that time, along with former partner Richard Hughes, they have participated in some important gold discoveries and have brought several gold mines into production. Now the Kena gold prospect near Nelson, southeast British Columbia, is getting a great deal of attention by their junior exploration company, Sultan Minerals Inc. [SUL-TSX Venture].

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Frank Lang, P.Eng., is head of the Lang Mining Group in Vancouver,

BC that comprises several junior exploration companies. During the late 1970s, under the umbrella of the Hughes-Lang Group, northern Quebec was the focus of exploration. Efforts paid off and three underground gold mines were built – the Balmoral, D'Or Val, both near Val d'Or, and the Sleeping Giant near the small town of Amos.

However, their greatest success was participating in the great Hemlo, Ontario gold discovery. Frank recalls how Richard Hughes scribbled out an option agreement on a restaurant napkin that gave their companies, Golden Sceptre and Goliath Gold, the mineral rights to what became one of the richest mines in Canada, the Hemlo gold mine. The huge Hemlo ore body supports two other operating gold mines – the David Bell and Williams mines.



Frank Lang, left, Chairman of *Sultan Minerals Inc.*, and Art Troup, President, examine a gold-bearing diamond drill core from the Kena gold project in southeast British Columbia. *Photo by Ellsworth Dickson*

Frank Lang and Richard Hughes eventually decided to go their separate ways. For the last dozen or so years, Frank, chairman, and Art Troup, geological engineer and president of Sultan Minerals, have explored in South America, Mexico (Valerie Gold Resources Ltd. VLG-TSX Venture), California's Mother lode country (Emgold Mining Corp. EMR-TSX Venture) and British Columbia (Cream Minerals Ltd. [CMA-TSX Venture; CRMXF-OTC BB]). Currently, it is their 100% optioned Kena gold discovery that is seeing active exploration.

The Kena claim group, near the hamlet of Ymir, is located in an historic placer and lode mining district – no less than five formerly producing mines are on the property, some dating back to the 1880s. The Silver King mine produced By Ellsworth Dickson

247,100 tonnes averaging 3.29% copper and 665.2 grams gold/tonne. When Sultan optioned the property in 2000 considerable exploration had already taken place, including 72 drill holes, 43 of them in the Kena Zone.

At first, the target was a vein-style gold deposit; however, company geologist Linda Dandy noticed high gold values ran right to the end of the soil sampling surveys. The surveys ended at that location since it was believed the rock beneath was not mineralized. On a hunch Linda directed

trenching to pass beyond the assumed limits of the gold-in-soil anomaly. It was an exciting discovery when a gold porphyry deposit was identified. Fanning out over the new area, Linda and her crew discovered 11 outcrops of porphyry-style gold mineralization with samples grading up to 5.0 grams gold/tonne.

Sultan then proceeded to raise \$100,000 by way of flow through shares to fund an extensive exploration program. The results were more than favourable. Excavator trenching along 185 metres yielded an average of 1.4 grams gold/tonne and ranged up to 11 grams/tonne. Seven drill holes were also completed.

It is now known that the Kena property hosts numerous gold-rich zones, including the recently discovered

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Gold Mountain Zone that may be part of the Kena Gold Target two km distant. This theory is bolstered by the fact that the gold-in-soil anomaly has been defined over a distance of seven km and 600 metres wide. Visible gold has been recognized in over half of the 40 holes drilled to date. Every hole intersected elevated gold values with 14 holes yielding assays over 10.0 grams gold/tonne with one hole returning a bonanza grade of 240.07 grams gold/tonne across a width of 1.23 metres. It was results like this that prompted several major mining companies to make visits to the site.

Other explorers have taken note of the Kena discovery and active claim staking has been ongoing in the area. Meanwhile, Sultan has been continuing with further exploration programs. This summer's work included geophysical surveys in the Kena Gold Zone, the South Gold Zone and the Silver King Mine area. Geological mapping and sampling has been conducted on the Great Western and Starlight areas. As of press time, five 50-metre step-out holes had been completed to test for gold mineralization down-dip and along strike of the known porphyry deposit, which remains open to depth.

Art Troup says that another \$2 million in drilling is needed in the Gold Mountain Zone before a reserve can be calculated. However, a preliminary study on the Gold Mountain Zone by Snowden Mining Industry Consultants envisages an open pit operation with the gold extracted by flotation methods as the best approach. With nine zones of gold mineralization discovered to date, the Kena property has the size potential necessary for an economic mining operation.

The Kena property is located 45 km north of the Teck Cominco smelter at Trail. Power lines, gas and a railroad pass through the property. With nearly \$1 million in the treasury, Sultan is sufficiently funded to continue its exploration programs; however, the company may not need it as Kinross Gold Corp. [K-TSX; KGC-NY] recently stepped in and optioned a 60% interest in the 77 square km Kena project. To earn its interest, Kinross must spend \$1 million



within a year and a further \$9 million over five years and pay \$250,000 annually.

Kinross is presently conducting a 4,800-metre diamond drilling program designed to test the bulk tonnage potential of the Gold Mountain Zone and will also evaluate the Great Western, Starlight and South Gold zones. Assays have been received from the first hole, an extension of hole 01GM-10. Visible gold was noted in several locations between 213 and 307.8 metres. This 94.8-metre interval averaged 0.895 grams gold/tonne. Geophysical surveys are also planned.

... no less than five formerly producing mines are on the property, some dating back to the 1880s.



Geologists Linda Dandy and David Rhyss check out an outcrop at the Kena gold project of Sultan Minerals Ltd. Photo courtesy of Sultan Minerals Inc.

Over the past 10 to 20 years, there have been many fundamental and influential changes in both the gold bullion demand/supply equation and in the nature and structure of publicly traded gold mining securities. Because gold miners are commodity producers, investors wishing to find potential long-term buy-and-holds must follow the same criteria as any other commodity sector such as steel and oil. It must have large increases in physical production,

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A PRIMER ON Evaluating Gold Stocks

By Ellsworth Dickson

F or the inexperienced gold stock investor, there can be something of a mystery surrounding the evaluation of gold stocks – strange geological terminology, vague descriptions of "encouraging values" and how to interpret the importance of drill results. Basically, gold (and other mineral companies) can be divided into four categories:

- · Grassroots explorers seeking an ore deposit
- Companies that have found an ore deposit and are defining its size and grade
- Companies that have defined an ore deposit and are preparing a feasibility study to determine the economic viability of the project
- · Companies that are actually producing gold

The only category of companies that can be evaluated like other industrial projects are those producing metal – the earlier stage projects have a different set of rules. Gold producers must be assessed according to how much gold they produce, cash flow, net present value of estimated future cash flow, the payback of capital invested, remaining gold reserves and exploration potential and the price-to-earnings ratio.

Finally, what is known as the book value must also be considered. The Canadian Securities Course textbook describes book value as "the amount of net assets belonging to the owners of a business (or shareholders of a company) based on balance sheet values." So, dividing the total assets by the shareholders' equity gives a ratio that indicates the remaining growth potential of the company. As an example, use the IAMGold Corp. shareholders' equity (or book value) figure (\$127,475,000) in their 2001 annual report and divide it into the shares outstanding (77,982,690) times the current share price (\$5.85) – the market capitalization. This computes to 3.6, a favourable number. If, on the other hand, the ratio were 1.0 or less, the company would be already fully valued with little remaining potential.

Investing in grassroots exploration companies offers the highest risk and the highest reward. An important aspect is what is nicknamed "closeology" - the proximity of a company's claims to a major discovery. During the Voisey's Bay staking rush some juniors soared from 7¢ to \$7 on nothing but a close proximity to the discovery. When exploration results were negative, those stocks collapsed. This was a "get in and get out fast" situation.

It is easier to have faith in a grassroots exploration

company when management has a successful track record of mineral discoveries. This indicates they have sound geological theories and know how to evaluate early-stage mineral prospects.

When looking at companies that have found a mineral deposit, it is necessary to know if the deposit remains "open along strike and to depth." A few high grade "grab" samples don't make a mine – they are encouraging as they prove there is mineralization on the property – but they are usually the most attractive specimens knocked off an outcrop in the field. As well, one or two good drill holes don't make a mine. It takes dozens, sometimes hundreds of drill holes "stepping out" to define the outer limits of an ore body as well as "infill" drilling to prove the continuity and grade of the deposit between the wide-spaced holes.

When considering a company that has more or less defined a mineral deposit and is proceeding with a pre-feasibility or feasibility study to determine the cost of operating expenses per tonne of ore, many facts must be considered. There are strict rules in place governing how a company reports mineral reserves. The lowest category is called a resource, then can be upgraded by drilling, sampling and tunneling to inferred reserves, probable and proven reserves.

It is at this point other things must be considered such as favourable metallurgy – if the gold cannot be extracted economically, there won't be a mine. Other things to consider include location. A mine at the Arctic Circle needs a higher grade than one on the Highland Valley of British Columbia. What about access to power, water, labour costs, civil strife, environmental sensitivities, mining dilution and current metal prices? In this case, consider the net present value of estimated cash flows. These figures are usually evaluated in research reports written by mining analysts.

As a rough rule of thumb, an open pit mine needs at least 0.8 grams gold/tonne (0.023 oz/ton) over several hundred feet to be economic; e.g Glamis Gold's Picacho Mine, California. An underground mine needs considerably higher grades, perhaps 3.5 grams gold/tonne (0.102 oz/ton); however, much depends on location, depth of overburden, labour costs and so on.

Then there is the technical analysis of the stock's market performance. Resource stocks usually follow a definite cycle – accumulation, run up, top and the fall. Space limitations prohibit us from going into the intricacies of technical analysis – we will save that for a later issue.

James Sinclair, Chairman/CEO of Tan Range Exploration Corp., has written a good article entitled "How to Identify a Good Buy - Top 10 Criteria on Selecting Juniors" that can be viewed at http://www.financialsense.com/editorials/sinclair/082102.htm

Huge Frozen GAS DEPOSITS DISCOVERED OFF B.C.

surprising haul from a fishing boat off the west coast of Vancouver Island, British Columbia two years ago has led to the discovery of what could eventually be a major new energy source for Canada.

University of Victoria scientists using a submersible vehicle called ROPOS, or Remotely Operated Platform for Ocean Science, took samples of the ice found in several 15-square-feet mounds scattered over an area covering one km by two km on the sea floor 80 km off Vancouver Island's town of Ucluelet in an area known as Barkley Canyon.

According to Dr. Ross Chapman, a geophysicist from the University of Victoria, "there is likely enough methane gas and natural gas out there in the hydrates to satisfy energy reserves in Canada for 40 years at the present rate of consumption." This estimate is based on the belief there are similar fields at similar depths along the coast, he said.

"We have never seen this kind of display or manifestation of the hydrate on the sea floor. Most of this material that we know about in terms of gas hydrates exists about 200 metres below the sea floor," says Chapman.

The pingos (mounds of frozen methane gas) are exciting for Chapman and his team of scientists because of the yellow colour of the ice. "This hydrate contains much higher hydrocarbons than just methane. It resembles the stuff found around the Gulf of Mexico," he said.

Whenever the team of scientists poked into the sediments beside the hydrates they released large quantities of gas and bubbles of oil. The oil turned out to be highly refined and the scientists believe its presence indicates some kind of oil deposits below the frozen gas.

Scientists have long known about possible ice formations, but have accelerated research projects in recent years amid concern about the planet's long-term supply of energy needs. Gas hydrates is a hot topic in the international scientific community. Canada is among the world leaders studying the frozen resources, as are the United States and Japan. In late 2001, more than 50 scientists began testing for gas hydrates in the Canadian Arctic by drilling three wells. Researchers are looking at the possibility of turning methane into commercial energy sources. But this is the first time that a large deposit has been found in Canadian waters.

Some observers have even wondered whether the release of large quantities of gas hydrate bubbles destabilized ships that have vanished mysteriously in the so-called Bermuda Triangle off the U.S. East Coast.

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