



Kenneth J. Gerbino & Company

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Institutional Research  
For the Gold Mining Industry

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# Special Situation

Copper/Gold Growth Takeover Candidate

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SPECIAL SITUATION - BUY RECOMMENDATION

December, 1992

TASEKO MINES LIMITED (TKOCF, OTC \$10 1/4)

Shares outstanding, fully diluted: 10,681,874  
(All figures are in U.S. dollars unless otherwise noted.)

HIGHLIGHTS:

- \*Taseko controls the 5th largest copper and gold deposit in the world and intends to sell it.
- \*Various valuation methods all point to a substantial price premium over the current stock price.
- \*The deposit contains 5.6 billion pounds of copper and 14.8 million ounces of gold also making it the 5th largest gold deposit in North America.
- \*The Taseko management team has an outstanding track record for developing and selling mining properties. They successfully developed and sold North American Metals (50% Golden Bear Mine) to Homestake for \$38 million and Continental Gold's Mt. Milligan property to Placer Dome for \$210 million.
- \*An expected world copper shortage in the next 2-4 years makes this property a major prize to more than 35 mining companies that are potential bidders on the property.
- \*With the U.S. money supply (M1) increasing over \$1 billion every 3 days for the past year it is only a matter of time before another bull market in gold materializes.

Taseko Mines is developing the largest copper-gold property in Canada and the fifth largest in the world. Management's stated intention is to continue engineering and development work on the property until the property can be sold to a major mining company. Thus far, they have done a commendable job of expanding reserves and moving the project forward. We expect the company to be bought out at substantially higher prices. This is a Strong Buy.

## BACKGROUND

Taseko owns the Fish Lake deposit which is located in south central British Columbia. The property had been lying dormant since the late 1970's. After six years of litigation between Taseko and Cominco, which had the current option on the property, the Hunter/Dickinson management team took over Taseko Mines in March 1991 and ended the litigation.

A deal with Cominco was concluded whereby Taseko had the exclusive right to control the property for 3 years, plus another year's option. If Taseko should sell the property or be taken over during this period, Taseko would pay Cominco a portion of the value reserved for the Project. The maximum Cominco can receive is \$48 million.

## RESERVES

When Taseko first took over the Fish Lake property, it had known reserves of 240 million tons containing 3.6 million oz. gold and 1 billion lbs. of copper. Since then they have expanded the mineral reserves of the deposit by approximately 450%. The company has completed over 180,000 feet of large diameter core drilling, which is substantial. Development costs to date are \$6.5 million.

At a cut-off grade\* of .3% Copper Equivalent\*\* (Cu) which is comparable for existing copper mines in British Columbia, Taseko now has 1.265 Billion tons at a grade of .23% Cu and .012 oz. per ton gold. The deposit contains 14.8 million oz. gold and 5.6 billion lbs. copper. This is a gigantic deposit.

To put this in perspective, the largest copper-gold project in the world is Bingham Canyon, Utah, containing 30 billion lbs. Cu equivalent. Taseko's Fish Lake property ranks fifth with roughly 11.9 billion lbs. Cu equivalent.\*\*

The Net Smelter Return shows the amount of cash flow realized per ton of ore after smelter costs. Looked at as a copper mine, Taseko ranks at the high end of profitability and compares very favorably with similar major copper projects in North America.

\*Cut-off grade: The grade (richness) of the ore below which any material is not included as containing mineral value. In other words, if there is an underground block of rock with only .25% copper it is not even included in calculating the copper content of the deposit.

\*\*This figure converts the value of gold reserves to a copper equivalent dollar value for comparison purposes.

### Copper Mine Comparison

<u>Mine name</u>	<u>Reserves Million tons</u>	<u>Cu-Equiv Grade</u>	<u>Est. Net Smelter Return \$U.S. per ton</u>
Valley Copper (Teck/Cominco)	760	0.42%	\$5.93
Morenci (Phelps Dodge)	1,316	0.51%	6.11
Ray (Asarco)	1,100	0.63%	8.25
La Caridad (Fomento Mexico)	1,000	0.47%	5.84
Fish Lake (Taseko)	1,265	0.52%	7.18

Looked at as a gold mine, Taseko has the 5th largest reserves of all North American companies and compares very favorably on a value basis.

Taseko's property will become one of the largest gold mines in the world. It follows that a major mining company that buys them will also vault into the top tier of world producers.

### Gold Mine Comparisons

<u>Company</u>	<u>Gold Reserves (Million Oz.)</u>	<u>Market Cap. (\$Millions)</u>	<u>Market Cap per Reserve Oz.</u>
American Barrick	24.4	\$4,156	\$170
Newmont Gold	20.1	3,501	174
Homestake	18.5	1,445	78
Placer Dome	18.3	2,577	141
Echo Bay	13.9	573	41
LAC Minerals	7.7	809	106
Taseko Mines	14.8	110	\$7

The sheer size of Taseko's gold reserves are important. The other mining companies shown here are in production and reporting proven and probable reserves. Taseko's reserves are drill indicated at present and will require further engineering work to develop a mining plan and identify proven/probable reserves.

Notice the low market cap per reserve ounce compared to the other companies. This valuation difference is because Taseko is not yet in production. It points out the value that these reserves could command when put into production by a major producer. Therefore we expect strong interest in the property from the major producers.

## MANAGEMENT

Unlike most mining companies which seek to discover, develop, construct and operate mines, Taseko management has chosen to focus only on the development of high quality properties. This is a niche in the mining industry.

Taseko Mines is run by a unique entrepreneurial team - the Hunter/Dickinson management group. This is a collection of very talented mining experts. They successfully developed and sold North American Metals' 50% ownership of Golden Bear Mine to Homestake for \$38 million and Continental Gold's Mt. Milligan deposit to Placer Dome for \$210 million. Both of these buyouts took place at over \$400 gold.

The Hunter/Dickinson team seeks out properties with large developmental and exploration potential. They invest their own money, and then do comprehensive geological and technical work including drilling out reserves, metallurgical studies, mine plans, engineering studies and beginning environmental work. This adds value to the property by expanding the known reserves and, basically, taking a lot of risk out of the project.

They then sell the property to a major mining company which has the financial clout to build the mine and the operating expertise to run it.

Replacing ore reserves is very important for major mining companies. Because mine lives are generally 10 years or less, if they don't replace their reserves, they're out of business. For whatever reason, most mining companies (except American Barrick, Newmont, and Freeport Copper) have been extremely inefficient at exploration. So a prize property like Fish Lake ought to be bid on by several majors.

### Fish Lake vs. Mt. Milligan

While much work remains to be done engineering-wise on Taseko, the data below shows a very favorable comparison to the gold/copper deposit at Mt. Milligan, which was purchased for \$210 million. Despite a lower gold price today, the relative sizes suggests Taseko would be bought out at a higher price.

Besides sheer size, which will allow for economies of scale of mining costs, the Fish Lake property has 70% less sulfide content. Lower sulfides means lower processing cost and little or no acid generation in tailings (waste rock) --- an expensive environmental problem. Also, the Work Index (a technical name for how much power and energy is needed to crush and grind the rock) is 50% less for Taseko. This means much lower milling costs for Taseko as well.

	Taseko <u>Fish Lake</u>	Continental Gold <u>Mt. Milligan</u>
Tons	1.2 Billion	425 Million
Copper %	.23%	.20%
Gold grade/oz.	.012	.013
Lbs. of copper	5.6 Billion	1.7 Billion
Ounces of gold	14.8 Million	5.5 Million
Buy-out price	?	\$210 million

#### VALUATION

There are several methods of valuating this property.

#### COMPARABLE BUYOUTS OF RESERVES

Mineral reserves have different values depending upon metal prices and the degree of development. The greater the development, the lower the risk, and thus, the higher the value.

For gold, industry rule of thumb has been that drill-indicated reserves were worth \$20-25/reserve oz., proven and probable reserves were worth \$30-35/reserve oz., and mineable reserves were worth \$40-45/reserve oz. This was certainly true between \$375-\$425 gold. With gold being at the current depressed price, it might be argued that these measures should be discounted somewhat.

However, in November 1991 at roughly \$355 gold, Galactic sold its 48% stake in Ridgeway Gold Mine, for roughly \$50 per reserve oz. in cash and assumed debt for proven & probable reserves in production.

In September 1991, Amax Gold began the buyout of Fairbanks Gold at roughly \$355 gold. They paid roughly \$90 million in shares for 51% of 4.2 million proven & probable ounces with a prefeasibility study giving a value of \$42 per reserve oz. Amax Gold claimed they were valuing the property at 3.3 million oz. which would boost the per oz. figure to \$56.

In October 1992, MMC Resources acquired 25% of Dayton Mining's Andacollo Gold Project in Chile at roughly \$67 per mineable oz. at roughly \$340 gold. Dayton is still expanding their reserves which would lower MMC's total cost per reserve oz.

So these figures at current metal prices would suggest that industry guidelines are still in effect. That says that the buy out price of Taseko should be better than \$30 per reserve oz. and possibly better than \$40 per reserve ounce when these reserves are moved to the proven/probable category by further engineering work.

Going from drill indicated oz. to proven/probable involves developing a mine plan and outside engineering work. That always involves some shrinkage of reserves, since everything is not included in the pit design (i.e. some mineral inventory is left behind as you dig out the pit).

Going from proven/probable to mineable reserves means even more engineering work which creates an official and comprehensive engineering document called a full feasibility study which can be taken to the bank for financing.

A mineable reserve is the term for how much gold and copper can eventually be recovered. Using a .4% cut-off grade and allowing for shrinkage (meaning the loss of reserves outside the pit design and for non-economic material within the pit), I would estimate approximately 8 million ounces of gold in the mineable category. Considering the recent comparable sales, this property could command a \$40-\$50 per mineable oz. That translates into a \$320-\$400 million price tag, or \$25 - \$33 per share of Taseko.

Clearly, there is still uncertainty to be removed in ongoing engineering work, but just as clearly, there is a lot of upside to the current market cap as well.

As a copper or copper equivalent mine, we can use Placer Dome's recent agreement to buy 50% of the Zaldivar deposit in Chile for \$100 million. This property has 760 million tons at .62% Cu. This values the contained 4.7 billion lbs. copper reserves at 2.2 cents/lb. Cu.

Similarly, Minorco is buying Chevron's 1/3 stake in Chile's Collahuasi copper project for \$185 million. This values the estimated 18 billion lb. copper reserve at 3 cents/lb., but with additional reserve expansion expected which would lower the overall cost per pound.

A North American deposit should have a higher price per reserve pound for a political stability premium. For our comparison purposes, we will assume at least 2.5 cents per pound.

Fish Lake contains roughly 11.9 billion lbs. Cu equivalent (converting gold to copper). That would value the property at \$297 million (\$23.35 per share)\* with a feasibility study as a copper company. Obviously, better metal prices could bid this up.

\*After Cominco is paid off.

## NET PRESENT VALUE

At this stage of development, putting hard numbers on the Fish Lake project involves lots of assumptions and many scenarios. Nonetheless, a net present value analysis based on future expected cash flow is worth looking at.

At the time of the buy out the metal prices can make a significant difference. Sometimes, an average price over a long period of time can be used to smooth out cyclical metal prices.

Using an ultra high 15% discount rate (a high rate in the present interest rate environment), I determined the net present value of the cash flow of the deposit after debt repayment at different metal prices, assuming the buyer purchased the property with cash or shares and financed the rest with debt at 8%.

Since most mining companies evaluate the net present value on only the first ten years, I have presented both life of mine NPV and 10-year NPV.

Open pit mining is an earth moving game. The more dirt you move, the more efficiencies you can achieve. Before the recent drilling program, Taseko was engineering the project for a 66,000 ton per day operation. This scenario would produce roughly 240,000 oz. per year at a cost below \$180 per oz. including copper credits for roughly 100 million lbs. copper per year over 35 years of mine life. Capital costs were estimated at \$360 million.

With the expansion of reserves, it makes sense to increase the size of the project. A 100,000 ton per day operation would have a 25 year mine life and produce an average of 319,000 oz. gold and 148 million lbs. Cu per year with a cash cost of \$136 per oz. gold with copper credits. I estimate initial production would be in the neighborhood of 370,000 oz. gold and 157 million lbs. copper. It would require a capital cost of roughly \$450 million U.S. for the plant and infrastructure.

Here are the comparable NPV figures at various metal prices. Since major mining companies are mostly concerned with the 10-year NPV, I have included those as well:

Cu/Au price	<u>\$1.05/\$350</u>	<u>\$1.10/\$375</u>	<u>\$1.20/\$400</u>	<u>\$1.50/\$500</u>
100,000 Tons/Day				
Life of mine NPV	\$350 Mil	\$403 Mil	\$481 Mil	\$745 Mil
10-Yr NPV	\$293 Mil	\$338 Mil	\$404 Mil	\$627 Mil
Buy out price to shareholders on 10 year NPV only	\$22.90	\$27.15	\$33.35	\$54.20



## SHARE PRICE VALUATION

These property valuation methods give us a range of property values that depend upon the stage of development and metal prices. Taseko has approximately 10.7 million shares outstanding. Also, Cominco will receive \$48 million per their original deal. Here is what the buyout prices mean to Taseko shareholders.

Buy-out Value	-	Less Cominco share	=	Price/TKO share
\$200 Mil	-	\$48	=	\$14 3/16
\$250 Mil	-	\$48	=	\$18 7/8
\$300 Mil	-	\$48	=	\$23 1/2
\$350 Mil	-	\$48	=	\$28 1/4
\$400 Mil	-	\$48	=	\$32 7/8
\$450 Mil	-	\$48	=	\$37 1/5
\$500 Mil	-	\$48	=	\$42 1/4

### BUY-OUT SUMMARY TABLE

Our different buyout scenarios, then, translate into these share prices:

Cu/Au price	<u>\$1.05/\$350</u>	<u>\$1.10/\$375</u>	<u>\$1.20/\$400</u>	<u>\$1.50/\$500</u>
100,000 TPD 10-year NPV	\$22.90	\$27.15	\$33.35	\$54.20
14.8 million oz Drill Indicated Reserves @ \$20/oz.	\$23.20	\$23.20	\$23.20	N/A*
11 million oz. Proven/Probable @ \$30/oz.	\$26.40	\$26.40	\$26.40	N/A*
8.5 million oz. Mineable @ \$45/oz.	\$31.25	\$31.25	\$31.25	N/A*
2.5 cents per Copper Equivalent Pound	\$23.35	\$23.35	\$23.35	N/A*

\*At \$500 gold and \$1.50 copper, the valuation would be much higher.

## COPPER - THE ROARING '90s

Copper is an investment idea for the '90s. For the past 70 years, world copper consumption has mirrored industrial production. Industrial production is now increasing dramatically because various regions of the world are shifting from an agricultural economy to an industrial economy. As more and more agricultural populations get involved in the industrialization process of the world the need for copper will increase.

Because of the vast size of the populations in China, USSR, Eastern Europe and the Pacific Rim (3.2 billion people), copper usage can increase dramatically with only a small advancement of industry. This is one of the reasons why we are very bullish on copper for the '90s.

Annual per capita demand (consumption) for copper has basically been 10 pounds per person since 1968. The key age group for this demand is the population over 20. There were 1 billion children born in the decade between 1972 and 1982. Therefore, the population in the world of people over 20 years old will increase by over 1 billion people between 1992 and the year 2002. If the demand for copper continues at 10 pounds per person, the result will be an increase in demand of at least 10 billion pounds per year by the year 2002. To give you an idea of how significant this is, world mine production is currently only about 22 billion lbs. a year and many mines are running out of ore.

In addition, a much larger portion of the new billion population group (as well as the population in general) will be involved in industrialization (because of the fall of communism) and these numbers, at best, are very conservative. Therefore, the growth in copper consumption could outstrip the supply by a significant amount. The bottom line is there isn't going to be enough copper to go around.

Also, copper inventories are currently at historic lows, and if there is even any kind of a slight recovery from our recession, or if the Europeans come out of a recession, demand is going to pick up briskly.

We are bullish on copper companies and combining them with a gold deposit is probably the best of both worlds.

Many analysts feel that a major imbalance of supply and demand is going to take place within 18 months. Copper companies are aware of this and this will be in Taseko's favor when the bidding starts. Also, by the year 2000 there will only be two open pit copper mines in British Columbia (Gibraltar and Valley) that will not have closed because of the depletion of ore reserves. So this makes Taseko quite a plum for a major Canadian mining company.

## SUMMARY

There is no way to predict when a buyout might occur on Taseko. But the size of the deposit alone commands attention. This property gives you a world class copper deposit and a world class gold property all in one. Meanwhile, you have a quality management team that will continue to add value while you wait.

From the Buy-Out Summary Table, we can infer that the longer a buyout takes, the more developmental work is completed. This raises the value of the property.

I would expect a buyout at least in the range of \$250 to \$300 million on any near-term offer. I would expect proven/probable reserves to be delineated within 6 months. This would increase my buyout target to \$300 to \$400 million. Completion of a full engineering feasibility study providing mineable reserves would be one to two years away, but depending upon metals prices, could command better than a \$400 million price tag.

This is an excellent special situation that also has prospects for more appreciation from any metals price improvement.

The stock at these levels is a strong buy.

Bill Moon  
Analyst

## GOLD REVIEW:

Gold is currently trading around \$335 per ounce. The London Mining Journal estimates 40% of world gold production is uneconomic below \$350. Clearly a sustained price at these levels would create massive mine shut downs and a curtailment of a substantial amount of supply. Already many mine closings have taken place in South Africa and North America. Our opinion is that eventually, the curtailment of supply as well as the record amount of fabrication demand (jewelry) coupled with the extraordinary monetary increases in the U.S. (M1 is up 14% in the past 12 months), will create a sustained bull market in bullion and gold shares.

Gold is generally considered a hedge for inflation and political and financial chaos. As such, it is the money of last resort. In recent years, with inflation declining to a moderate 3 1/2%, a lingering recession and the end of the Cold War, gold has drifted lower and lower with little investor interest.

Generally, gold responds with inflation rates above 6%. With the world in recession, we won't see that for some months yet. But with the Fed pumping the M1 money supply by 14%, inflation will surely return at some point. The banks currently face a regulatory problem and poor balance sheets. When banks have set aside enough reserves to cover bad loans in commercial real estate and have repaired their balance sheets, they will make loans again. Then, the increase in money supply will increase further, working its way through the system, bringing inflation with it. As long as governments can and do print money to handle their budgetary problems, inflation will be with us. It is just a matter of time.

Meanwhile, long term supply/demand factors are working steadily in gold's favor. Because of the maturing of existing gold producers, low current metals prices and falling exploration expenditures over the past few years, world gold mine output should peak out this year and begin declining in 1993.

At the same time, jewelry demand continues to grow. Gold use in jewelry has exceeded mine production for the past 3 years and is growing steadily (see table below). Gold has been historically popular in the Far East, and gold sales have grown rapidly with the economic development of that region. In the industrialized world, more and more women are in the work force and buying their own jewelry. Jewelry demand has grown despite the recent recession.

Continuing growth in jewelry sales and peaking/falling world mine output will put steady upward pressure on the gold price. As can be seen below, a 329 metric tonne shortfall in 1991 was the third year in a row where fabrication demand outpaced mine production. 1992's shortfall is expected to top 400 tonnes. Continued shortfalls will eventually set the stage for a higher metal price.

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
Mine Production (metric tonnes)	1294	1381	1547	1677	1744	1782
Jewelry Fabrication (metric tonnes)	1168	1215	1532	1907	2037	2111
Surplus/(Shortfall)	126	166	15	(230)	(293)	(329)

Source: Gold Fields Mineral Services Ltd.

The swing factors in the gold price have been investor and central bank sales. Over the past few years, Russia's central bank has been a distressed seller, disposing of their gold reserves to earn hard currency in order to buy necessities. Now they have run out, except for current production. As their economy stagnates, their gold production will be reduced dramatically because of deteriorating infrastructure, lack of spare parts and cost increases due to a 700% internal inflation rate.

Just before the French vote on Maastricht, we saw some potential for gold. Gold jumped roughly \$10 an ounce on the idea that France might reject Maastricht and the idea of a United Europe. The Danish rejection and weak French referendum has jeopardized the European Exchange Rate Mechanism (ERM). The ERM looks, at best, tenuous and Europe could be back to floating exchange rates soon. The last time major fixed rate currencies became floating currencies was in 1971. What followed was a major bull cycle of gold because in such circumstances gold becomes a viable alternative currency.

There is just too much paper money floating around today coupled with excessive amounts of government debt globally. Therefore, we expect a gold advance to be just around the corner. Gold functions as an excellent hedge against inflation because of its "store of value" property. But gold is also a debt default or massive deflation hedge as well. If debt is defaulted - financial assets underlying the debt disappears, thus creating a vacuum. In this scenario gold functions as an alternative currency or medium of exchange.

For example, the current basic U.S. money supply (M1 - cash plus checking account deposits) is approximately \$1 trillion. But actual currency (dollar bills) in circulation is only \$289 billion. The difference of \$711 billion has no existence in any exchangeable form (coin or paper or gold). Therefore, a so called debt collapse or financial meltdown would create a default or actual disappearance of this portion of the money supply. This fear of the banking system is why Homestake Mining went from \$27 in 1928 to \$575 in 1935 during our last major debt collapse.

If this scenario would start to materialize, people would exchange their checking account money for gold as an alternative. A scenario such as this would be avoided at all costs by the authorities but their only alternative to this would be to print money and that would depreciate the current monetary base, thus eventually creating inflation and gold would rise in response to this as well.

It is better to be too early than too late when gold investments are being considered. We consider the present an opportune time to invest in gold and mining shares.

Note:

Kenneth J. Gerbino & Company, as investment counselors, have filed a 13D on Taseko Mines since their ownership on behalf of its clients exceeds 5% of the outstanding shares. Information presented here is based upon sources we consider reliable, but its accuracy is not guaranteed. This information is not intended nor should it be relied upon as a complete record or analysis; neither is it an offer nor a solicitation of an offer to sell or buy any security mentioned herein. Kenneth J. Gerbino & Co., their officers, employees, associates and clients may have a position in any security discussed herein or in related securities and may make, from time to time, purchases or sales thereof in the open market or otherwise. The information and expressions of opinion contained herein are subject to change without further notice.

Our computer model tracks 75 gold mining companies, including developmental stage, junior and major producers. We evaluate 70 separate quantitative parameters leading up to a model value. This allows groupings of similar companies to obtain meaningful comparative valuations.

Below are only some of the methods used to rank gold mining stocks. Ranking by various methods gives different valuations. The mining companies below are ranked by size of gold production. A qualitative analysis is also necessary to add to the quantitative. Each issue will attempt to present various guidelines for a proper evaluation of the various companies.

#### Major Gold Mining Companies

Company	Price	Shares (Mil)	Market Cap (Mil)	Est. 1992 Output (000's)	Mkt Cap/ oz. output	Reserve Oz.(Mil)	Mkt Cap/ Reserve Oz.	Mine Life (Years)
Placer Dome	\$10 7/8	237	2577	1900	1080	18.3	141	10
Homestake	\$10 5/8	136	1445	1765	889	18.5	78	11
Newmont Gold	\$33 3/8	105	3501	1600	2049	20.1	174	12
Newmont Mining	\$39	69	2681	1465	1749	19.1	140	12
Amer. Barrick	\$29 1/8	143	4156	1200	3590	24.4	170	17
LAC Minerals	\$ 5 1/2	147	809	1100	601	7.7	106	7
Echo Bay	\$ 4 11/16	122	573	800	850	13.9	41	16
Freeport Copper	\$20	193	3865	600	7252	32.4	119	32
Hemlo Gold	\$ 6 1/8	97	591	475	1063	5.7	104	12
Battle Mtn	\$ 5	80	400	430	1335	7.1	56	14
Pegasus Gold	\$14	31	438	410	916	4.0	109	6
Amax Gold	\$ 8 7/8	77	684	290	2946	8.7	79	11