

# MINNOVA

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MEMORANDUM

DATE: April 30th, 1992  
A TO: Alex Davidson  
COPIES A COPIES TO: Bob Friesen  
DE FROM: Ian Pirie  
SUJET SUBJECT: Kamad Silver Property

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82m/4w

As you know, Homestake is dropping it's option on the Kamad property and Kamad have approached us to see if we're interested in doing anything.

There are basically three targets to consider on the property. These are:-

- a) the easterly strike extent of the Rea and Sam stratigraphic packages
- b) the known mineralized zones on Kamad 7
- c) the Homestake deposit area on the Homestake bluffs.

In case a), Homestake traced both favourable packages for at least 2 km to the east and they are open in that direction. However, their best geological encouragement was at considerable depth and there is no evidence that things are improving to the east. While the concept of a large deposit at depth was a sound one, they have already pursued it further than we would have and there is no point in chasing it further.

In case b), the small mineralized pods that are known are, like the Rea lenses, relatively gold rich, but highly arsenical in nature. There may optimistically be a total of 500,000 tonnes of this type of material if the Rea zone is included, with a total gold resource of between 100,000 and 150,000 ounces. This isn't really enough to make the metallurgical problems worth trying to

solve.

As for the Homestake deposit itself, Bob has reviewed this again and his recommendations, with which I fully concur, are given in the attached memo. The potential simply is not attractive enough for Minnova.

Thus it is not recommended that Minnova pursue the Kamad property. The best scenario is that a smaller company will see enough potential in the area to warrant them purchasing the mill. While Kamad are unlikely to have the resources to do this, Rea Gold are a possible candidate, especially given their apparent continued interest in the area.

MINNOVA INC.  
SAMATOSUM PROJECT

## MEMORANDUM

DATE: 27 April, 1992  
TO: Ian Pirie  
COPIES TO: Mike Bell  
FROM: Bob Friesen  
SUBJECT: Kamad--Underground Reserves for Mill Feed

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This memo is in response to your inquiry last week re the use of Kamad underground "high-grade" ore as possible mill feed for the Sam mill. This ore is estimated to be 27,884 tonnes grading 1.07% Cu, 4.61% Pb, 7.66% Zn, 826g/t Ag, and 1.0 g/t Au (est).

It would be inappropriate to consider mill feed from outside the Sam Deposit at this time. The site buildings are now up for sale and if a good enough offer is received in the near future, they will be sold upon completion of known mine reserves. It is doubtful a sale would be delayed pending feasibility results (see below) of what amounts to two extra months of mill feed.

Regardless, the Kamad scenario is not economic. Consider the following:

The "high grade" reserve is, at best, "drill-indicated" (5 diamond drill holes drilled at varying dips and azimuths from 2 set-ups); with an inferred continuity. Thus, it cannot be assumed the reserve is proven and mineable.

Underground rehabilitation and/or new access, definition drilling, and a feasibility study must first be completed.

A new tailings dam lift may be required before any additional ore other than known Sam reserves is processed in the mill.

Even if the reserve estimate is substantiated, the NSR value of the ore (assuming same parameters as Sam; even though the ore is hosted in barite and may have different metallurgy) would be too low--\$114/tonne, or \$3,200,000 gross to the operation; vs cost estimates of \$132/tonne, or \$3,700,000 to prove, develop, and mine the zone.

Despite the uneconomic nature of this "high-grade" occurrence, and the fact the Kamad underground deposit(s) no longer meet Minnova's exploration criteria, I consider the underground

potential an attractive exploration play for smaller, higher-risk oriented companies. Reserve estimates of up to 1.8 million tonnes grading 0.35% Cu, 1.8% Pb, 2.9% Zn, 240g/t Ag, and 0.7g/t Au have been reported. Perhaps Rea Gold may be interested in optioning the property; they appear intent on maintaining a presence in the area.

Bob Innes

COST ESTIMATES RE KAMAD "HIGH-GRADE" UNDERGROUND ZONE

Rehabilitation/access (300 meters @ \$1500/m):	\$450,000
D. drilling:	\$63,000
Incidentals:	\$50,000
Total:	\$563,000
	(\$20.20/t)
Tailings Dam Lift	\$500,000+
	(\$17.93/t)

Operating Costs are estimated to be as follows (using current Sam costs):

Mining 27,884 tonnes @ \$55/t:	\$1,533,620
Milling @ \$17/t:	\$474,028
Administration @ \$10/t:	\$278,840
Plant Services @ \$1.65/t:	\$46,009
Other (incl trucking ore to mill) @ \$10/t:	\$278,840
Total:	\$2,611,337
	(\$93.65/t)

GRAND TOTAL:	\$3,674,337
	say \$3,700,000