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MINNOVA INC.

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DATE: February 27, 1991

TO: Gary Wells

COPIES TO:

FROM: John Bradford

SUBJECT: **Adams - Barriere reconnaissance: progress report**

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1. Sam Mill Feed

Properties in the Adams - Clearwater belt can be assessed with two separate goals in mind: rapid development for Sam mill feed, and exploration for an elephant, in accordance with the new exploration strategy. The former requires a property at a fairly advanced stage of exploration, either with known reserves or at least known and easily delineated mineralization, and high grade, polymetallic style of mineralization. Properties falling into this category are at a premium. The following are candidates:

Adams Plateau:	Mosquito King (already acquired),
	Elsie/Lucky Coon/King Tut
Birk Creek:	Harper
	Broken Ridge/May/Copper Cliff/Rainbow
Sinmax Creek:	Homestake
Vavenby:	Foghorn
Raft River:	CK ✓

I would rate these in the following order:

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(1) Mosquito King - potential for small (0.2-0.5 Mt), pittable deposit (or aggregate of deposits) with grades on the order of 10% Zn+Pb, 100g/t Ag, based on intersections at the Mosquito King and Spar showings. Some potential exists in the Bowler Creek area as well.

near Wells Grey Park

(2) CK (Rea Gold) - This is the only property in the belt I know of with good grade mineralization (albeit low PM's), at an advanced stage of exploration. For this reason I recommended a close evaluation of the possibility of developing a mineable reserve (memo to Ian).

Negative evaluation by AA

near Mosquito King

(3) Elsie etc. (Adams Silver) - similar to Mosquito King; apparently, recent drilling by Sirius Resources has been discouraging. It would be worth taking a look at the data as work on MK progresses.

(4) Broken Ridge etc. (Falconbridge) - These comprise two groups of showings, in the Harper Creek and Birk Creek drainages, and include both barren pyritic and Zn-Cu-Pb bearing sulphide lenses. To my knowledge, nothing with any strike length or thickness has been delineated, and no reserves exist. A total of 234 tonnes of ore was shipped from the Birk Creek showings in 1938-1940, with Cu, Ag and Au recovered. Falconbridge may want to make a deal at some point; if so, it would be worth looking at the data.

(5) Harper (Westech Resources) - Dave did a compilation on this last year, recommending acquisition, but the owner (Westech Resources) could not be contacted for some reason. Although known sulphide lenses exist, grades are very low (<0.5% Cu, no Pb, Zn) and would have to improve significantly. For this reason I wouldn't rate Harper very highly.

Needs another look!

(6) Homestake (Kamad Silver/Homestake) - Although various reserve figures exist, they are known to be quite speculative and unreliable. Its location on cliffs overlooking Sinmax valley, and the potential for bad ground in the sericite schists adds up to serious environmental and mining problems, even if a reserve could be delineated.

(7) Foghorn (Goldspring Res.) - High grading of veins in the Foghorn camp produced 73 tonnes of Ag rich ore before 1920. This

property and the adjacent Water and Tia claims have VMS potential, with identified alteration zones and possible stringer systems in EBF stratigraphy (Rea equivalent). Despite a long history of exploration, this property is a long way from development stage. The big problem here is its proximity to Rexspar, with much of the interesting stratigraphy lying within the special U exploration zone. This severely downgrades this one.

2. Elephants

In the context of Barriere, an elephant is a deposit that could support a mining operation independant of Sam, where the ore doesn't represent Sam mill feed. Candidates in this category are:

Vavenby:	Harper Creek
N Barriere L:	EBL
E Barriere L:	Sam/Griz

Although supposedly hosted by different units, these deposits are both close to Devonian orthogneiss, to which they probably bear a genetic relationship.

(1) Harper Creek - Work in the late 60's and early 70's by Quebec Cartier and Noranda delineated about 84 Mt of 0.4% Cu, with minor Mo and low PM's. I think that Harper Creek is a deformed porphyry deposit: it is epigenetic (according to Belik, the zones clearly crosscut stratigraphy), has stringer, fracture - hosted and disseminated mineralization, and the sulphides have a magmatic sulphur isotope signature. Host rocks are mainly chlorite schist (EBA?). Trenching south of the deposit in 1986 exposed massive pyrrhotite-pyrite-magnetite-chalcopyrite (à la the Fennell zone on Griz) over 300 m, with grades of 0.1-0.9% Cu over 1-3 m widths. This is probably skarn - type mineralization.

The data we have on Harper Creek includes pit designs and metallurgical reports - at one point this was an advanced property.

The problem is that accurate relocation of drill holes, grade limits, etc. is probably impossible, due to destruction of collars by logging. Essentially, the deposit would probably have to be redrilled. I have doubts whether this would be economic, even if the original tonnage and grade were enhanced somewhat. Certainly it would be expensive.

(2) EBL - Also explored by Noranda around the same time as Harper Creek. They delineated a "large" tonnage of similar grade Cu mineralization. Host lithologies are similar, although here they are included in EBQ. Again, skarn mineralization is also present, associated with limestone and amphibolite. As far as development, the same remarks apply - due to the time elapsed since initial exploration, the deposit would have to be redrilled.

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(3) Sam/Griz - Probably Harper Creek represents the size and grade of deposit we should be looking for here. The low grade massive sulphide/magnetite (skarn?) lens may be a red herring, and focus on a "horizon" could be futile. A small number of widely spaced holes should make or break the "porphyry"-style potential of Griz.