

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

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To..... Tom Neelands From..... D. A. Lowrie

Subject..... Kierans Property, Sheep Creek Area, B.C. Date..... December 31, 1980

It should be noted that the ore in the veins in this camp is in shoots and the widths are extremely narrow in terms of modern mining methods.

The Kootenay Belle longitudinal section shows most of the ore widths to be between one and three feet. You probably are aware that widths like these and variable widths were mineable if the grade was high (as it was) by skilled air leg miners. As an exercise take 0.4 oz. Au across two feet width @ \$600/oz. gold and try to determine how this can be mined today - assuming of course that the shoots pinch and swell horizontally and vertically. I think that you will find that an economic rate of production will be difficult to achieve given the general low tons per vertical foot availability and the obvious impracticality of using blast hole methods.

Considerations such as these are important to the overall evaluation of an exploration prospect and should be noted when you are postulating a target ore deposit. The exploration geologist is more often than not unskilled in mining, however, he should carry around some concept of how much it costs to make a hole in the ground under varied conditions.

D. A. Lowrie

DAL/sw

JK

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DEC 30 1980

To D.A. Lowrie From W.M. Sirola

Subject Martin Kierans Property, Date December 17, 1980.
Sheep Creek Area, B.C. (82-F-3E)

Herewith brief appraisal by Tom Neelands on the subject property.

Kierans property is on the east flank of the Sheep Creek anticline whereas all the productive properties have been on the west flank. It would take some pioneering spirit and optimism to explore for gold mineralization on Kierans claims in the light of this knowledge but on the other hand we don't know how much search has been done and by what methods.

We will advise Martin that we have no immediate plans for optioning his ground but we will not dismiss it out of hand.

Lazru
DL

Bill

W.M. Sirola,
Regional Exploration Manager.

WMS/al: Encl.

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To W.M. Sirola From J.T. Neelands

Subject Sheep Creek Area Date November 17, 1980.

The Sheep Creek gold deposits occur on the west limb and the nose of two parallel and gently south plunging anticlines. The axial plane of the anticlines strikes 015° T and dips east between 65 and 75 degrees. A total of 597,235 oz of Au (averaging 0.43 oz/ton Au) was mined from the western anticline; and 741,515 oz of Au (averaging 0.43 oz/ton Au) was mined from the eastern anticline. The mineralization occurs in quartz veins cutting folded quartzites that are part of a thick succession of Lower Cambrian and Precambrian (?) sedimentary rocks. The quartz veins strike northeasterly across the axes of the folded sediments and generally dip steeply southeast. The quartz in the veins is probably derived in large part by recrystallization of the quartzite walls. Visible gold is rare. Of the thirty-three productive veins most occur in the Upper Nugget and Upper Nevada quartzitic members. Mineralization also occurs in the Motherlode Member in the Motherlode Mine and the Reno formation in the Reno Mine. The veins thicken with depth and pinch out towards the surface. Grade is generally constant over a vertical distance of 1,600 feet along a south-dipping slope from the Reno in the north at 7,000 feet to the Sheep Creek Mine in the south at 4,000 feet.

One is in shoots in the veins

Motherlode Extension Claims

one shoots are narrow !!

These claims incorporate part of the Motherlode Mine claims but there is no indication that the Motherlode vein traverses these claims. The property occurs on the east limb of the larger eastern anticline and as such does not conform to the model of the camp. The only other showing on the east limb of the anticline is the Eureka Mine which did not contain sufficient mineralization to warrant deeper exploration.

According to W.H. Mathews of the B.C. Department of Mines who recommended that the eastern limb be explored, there is evidence in the east for the stresses that created the veins in the west. I believe that the concept should be given a chance if the option terms can be made more reasonable.

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To W.M. Sirola From J.T. Neelands

Subject Motherlode Extension Claims Date Nov. 17, 1980

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Example

First payment	- December 1, 1980	\$ 1,500
Work commitment	- September 1, 1981*	15,000
Second payment	- September 1, 1981	5,000
Work commitment	- September 1, 1982	30,000
Third payment	- September 1, 1982	15,000

*If he has a due date of July 31 we can submit reports.



J.T. Neelands.

JtN/al:

LEGEND

u
 0 5 **HR3** IGNEOUS ROCKS
 QUARTZ PORPHYRY
 O 1 I GRANITE, GRANODIORITE
 S L-AIB GROUP
 UPPER MEMBERS - ARGILLITE,
 MINOR ARGILLACEOUS QUARTZITE
 LOWER MEMBERS - LIMESTONE
 D ARGILLITE
 i RENO FORMATION
 J ARGILLITE, ARGILLACEOUS QUARTZITE,
 I DARK QUARTZITE, GRIT
 QUARTZITE RANGE FORMATION
 J NAVADA MEMBER - QUARTZITE,
 I ARGILLACEOUS QUARTZITE
 I UPPER AND MIDDLE NUGGET MEMBERS -
 I QUARTZITE AND ARGILLACEOUS QUARTZITE
 LOWER NUGGET MEMBER - ARGILLITE,
 ARGILLACEOUS QUARTZITE
 MOTHERLODE MEMBER - QUARTZITE, MINOR
 ARGILLITE, GRIT, GREEN SCHIST
 THREE SISTERS FORMATION
 Eg^s I GREY GRIT, WHITE GRIT AND QUARTZITE,
 H GREEN SCHIST

CONTACT, POSITION LOCATED

CONTACT, POSITION APPROXIMATE

CONTACT, POSITION INFERRED

S FAULT, POSITION APPROXIMATE

/ STRIKE AND DIP OF BEDDING

X DIRECTION AND PLUNGE OF DRAG FOLD

AXIAL PLANE OF ANTICLINE

AXIAL PLANE OF SYNCLINE

GLACIAL STRIAE

ROAD, PASSABLE FOR VEHICLES

ROAD, IMPASSABLE FOR VEHICLES

ADIT

SHAFT

PROPERTY BOUNDARY SURVEYED

PROPERTY BOUNDARY UNSURVEYED

SB. SILVER BELL MINERAL CLAIM

G.E. GOLDEN EAGLE MINERAL CLAIM

E.D. EDWARD D. MINERAL CLAIM

L.C. LUCKY GEORGE MINERAL CLAIM

GEOLOGICAL MAP
 OF THE
 SHEEP CREEK MINING CAMP
 MARTIN KIERANS PROPERTY

ST KOOTENAY DISTRICT, BRITISH COLUMBIA

COO 1000

CONTOUR INTERVAL 100 FT