

92 I

Krain Copper

Highland Valley area, B.C.

Dec. 16, 1974



MINERAL RESOURCES
VICTORIA
V8V 4S2

92 I
attach to Previous
Dec 14

WHEN REPLYING PLEASE REFER TO
FILE NO. 820323

KRAIN PROSP.
HIGHLAND VALLEY
BC

December 9th, 1974

W.J.	
D.M.H.	✓
G.M.H.	✓
M.D.R.	
I.D.B.	
R.D.S.	
G.R.	
I.W.B.	
B.M.N.	✓
E.C.J.	

Mr. W. M. Sjörola,
Kerr Addison Mines Ltd.,
Ste. 405, 1112 W. Pender St.,
Vancouver, B. C.
V6E 2S1

Dear Mr. Sjörola,

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If I can help you with further information, please don't hesitate to contact me. Please send my regards to John Lund.

Yours sincerely,

RECEIVED

DEC 11 1974

KERR ADDISON MINES LTD.

PER _____

W. J. McMillan

W. J. McMILLAN, Ph.D., P.Eng.,
Geologist, Geological Division,
Mineral Resources Branch

WJMcm/crd

ENCLS: (1)



DEPARTMENT OF MINES AND PETROLEUM RESOURCES
VICTORIA
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KERR ADDISON MINES LIMITED

MEMO

VANCOUVER OFFICE

DATE

Dec 23/74TO: Glen HoggFROM: Sm S.SUBJECT: KRAM Near Highland Valley, B.C.

There is some similarity between the
Loran property & the Cyprus property at
Johnson Camp, Arizona. (See attached article)

Leaching costs however, would probably
be higher at Kram, & the climate would be
different. It is however intriguing
that 15 million tons ^{of 0.5% Cu} can be mined
at a profit in some circumstances.
Granted, the profit remains to be
seen. The 15 x 10⁶ tons at Kram
would be a mixture of oxides &
sulphides while the Johnson Camp
deposit is entirely oxide.

Bill

○
DDH in
Eocene Volcs.

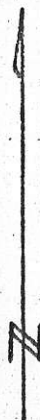
FORGE
▲
MTN

○→
DDH 73-2
(-60°)

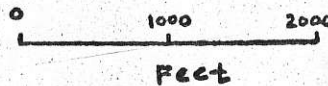


KRAIN
DEPOSIT

○
DDH 73-1



x Percussion drill holes, 1972.





PAY DIRT

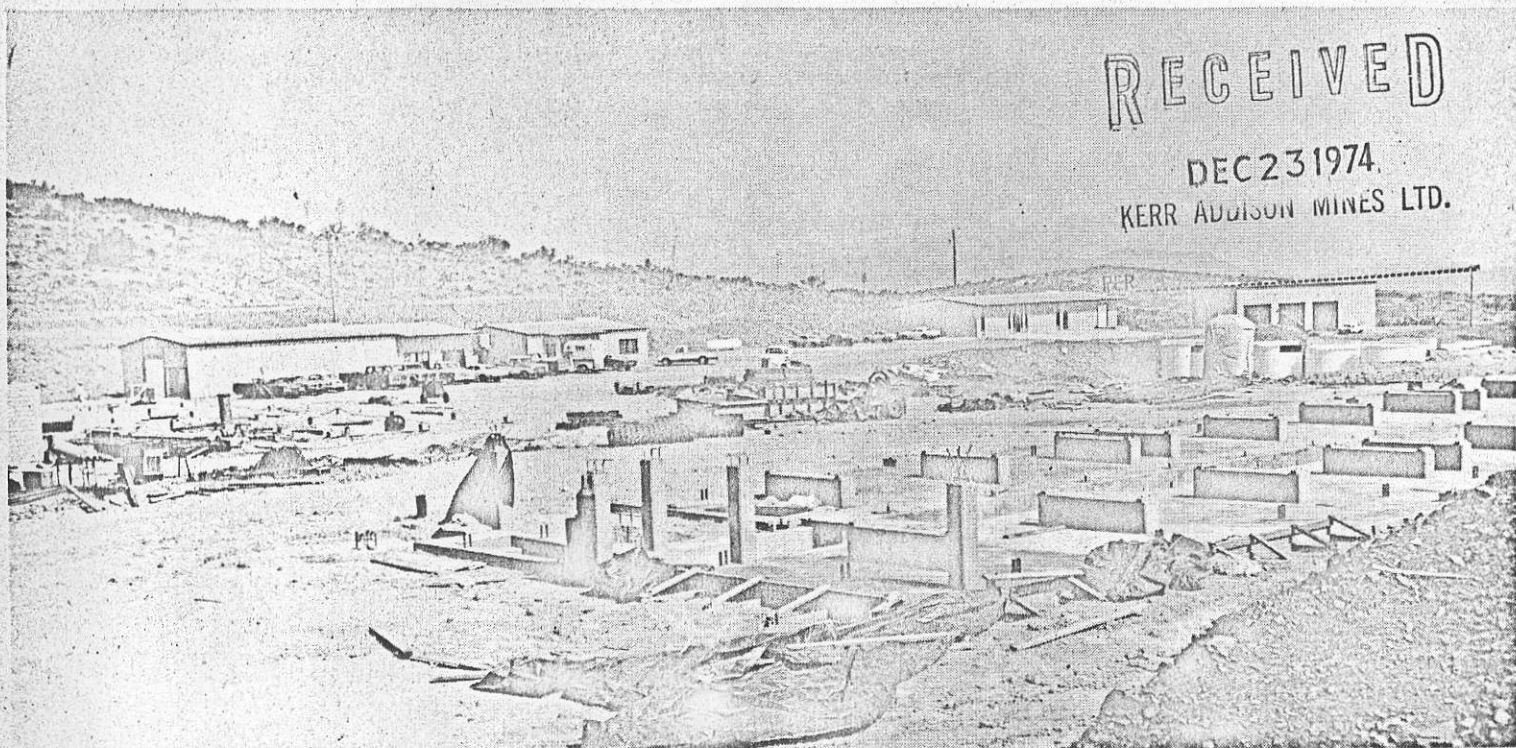


A PUBLICATION DEVOTED TO THE INTERESTS OF ALL THE ARIZONA MINE OPERATORS

Number 424

P. O. Drawer 48, Bisbee, Arizona 85603

October 28, 1974



Foundations for the electro-winning cells take shape in the foreground, while to the rear are the buildings for shops, warehousing, offices and equipment servicing and repair at the new operation of Cyprus Johnson Copper Company. The new open pit mine and solvent extraction - electro-winning operation

is located at Johnson Camp, an old copper producing area located just north of Interstate 10 between Benson and Willcox in northern Cochise County. (Photos courtesy San Pedro Valley News - Sun, weekly newspaper in Benson.)

Cyprus Developing Solvent Extraction-Electrowinning Operation at Johnson

With development pretty well on schedule, production is slated to begin in the first quarter of 1975 on Cyprus Mines' new copper operation at Johnson Camp, an historic Cochise County mining locality about midway between Benson and Willcox.

The comparatively small operation is geared to produce between 25,000 and 27,000 pounds of copper per day from approximately 4,000 tons of low - grade oxide ore.

The operation is being operated under the name of Cyprus Johnson Copper Company, a division of Cyprus Mines, one of Arizona's large and growing copper producers.

Resident manager at Johnson is Joseph O. Sierakoski, who has been with Cyprus for 23 years. Taking over the assignment was like coming home for Sierakoski, who was born in nearby Bisbee and whose first job with Cyprus was at Johnson.

William J. Rundle of Tucson, a vice

president of Cyprus, described the Johnson operation as a "minature Bagdad." He was alluding to the highly successful solvent extraction - electro-winning plant constructed by Bagdad Copper Company at its Bagdad mine. This company was acquired by Cyprus last year and is now known as Cyprus Bagdad Copper.

Design of the new plant at Johnson has been patterned after the plant at Bagdad, modified slightly to handle some variances in the ore.

Comparatively small, the Johnson Camp operation will produce about 10 million pounds of copper annually, with a currently projected life of about 10 years.

Rundle said the company had delineated about 15 million tons of oxide ore averaging about 0.5 percent copper. Stripping ratio is computed at 1.6 to 1.

The ore, which comes right up to the surface in places, will be mined with a six - yard

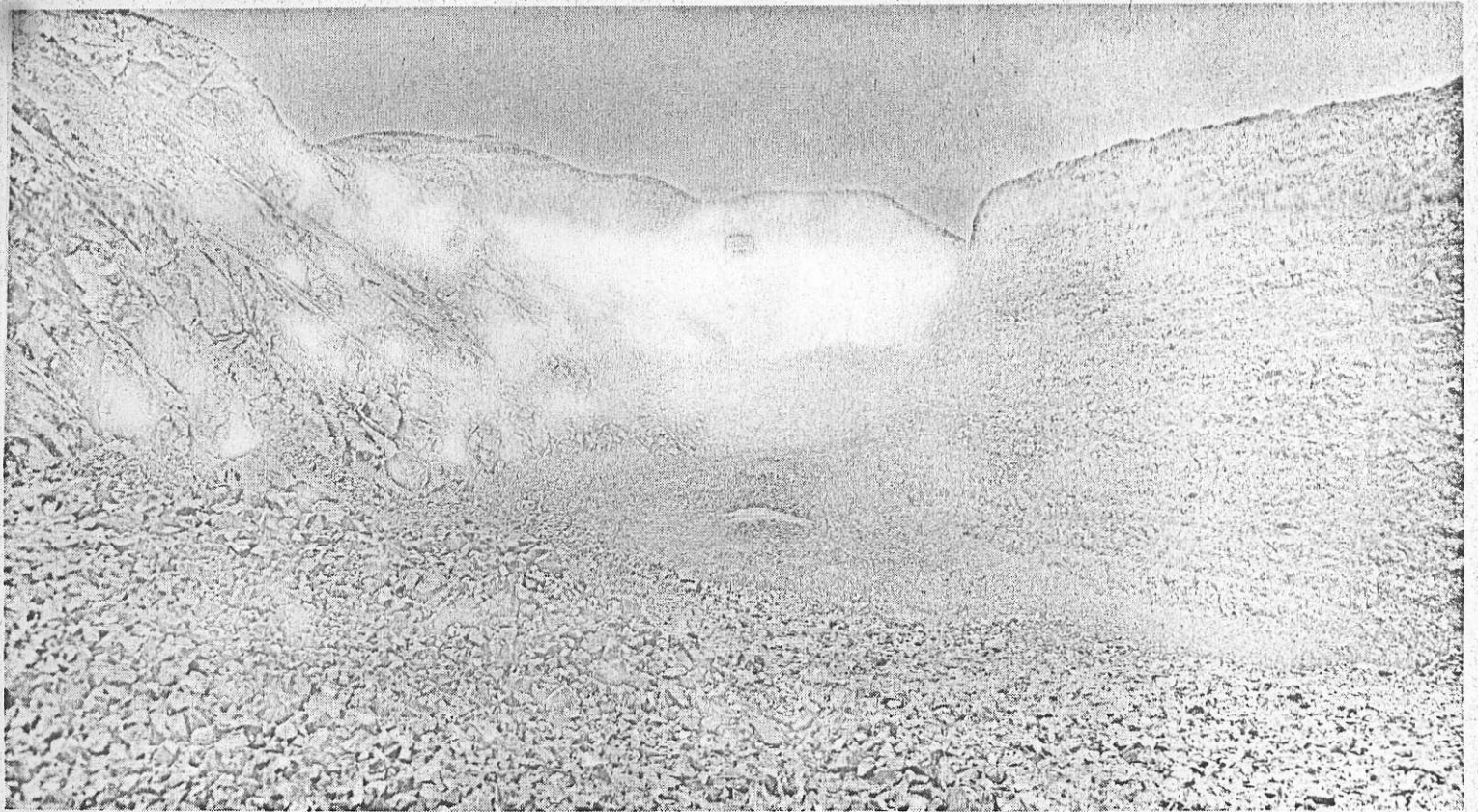
shovel and hauled in 50 - ton trucks to dumps located in natural drainage areas, where it will be heap leached.

While the amount of daily production is comparatively small, so is the investment cost, Rundle pointed out. It was originally projected at \$6 million, but inflation has had a hand in the project and costs are currently estimated at about \$7.2 million.

End product of the electro-winning plant, of course, will be electrolytic grade copper ready for shipment to market, thus eliminating any smelting problems.

Water for the operation will be pumped 900 feet to the surface from the ample underground reservoir in the old Republic, Moore and Black Prince mines. Electricity will be purchased from Sulphur Spring Valley Electric Co-op, which has a generating plant at nearby Cochise.

(Continued on Page Four)



This is the initial cut in the low - grade oxide ore where mining will start at Johnson Camp during the first quarter of next year.

The deposit has been known for many years, waiting for the right kind of a process to profitably recover the copper.

Johnson Mine . . .

(Continued from Page One)

Cyprus owns about two square miles in an irregular area at Johnson Camp, where several thousand people lived in its hey-day. (See "Scenes In Old Arizona" elsewhere in this issue.)

Cyprus has owned the property for about 30 years through another subsidiary, Coronado Copper and Zinc Company. It operated a low -

grade, sulphide ore operation there for a number of years before shutting it down about 1958.

The company has known about the low-grade oxide orebody for many years, but had been waiting for the proper process to be developed and for favorable economic conditions. The solvent extraction - electrowinning technique perfected at Bagdad proved to be the catalyst.

Homes & Narver holds the contract for engineering and design of the plant at Johnson. M. M. Sundt Construction Company of Tucson has the prime construction contract. Newbery Energy Company has the subcontract for the electrical work, which is a large part of this particular plant.

At present about 30 people are employed on the job, with a number of small firms in the Benson and Willcox areas holding sub-contracts for portions of the construction.

When the operation comes on stream between 50 and 60 people, most of them residents of the general area, will be employed, adding considerably to the economic well being of the northern part of the county.

The operation will work two shifts a day, five days a week. Required maintenance and service work will be scheduled for the third shift time as much as possible.

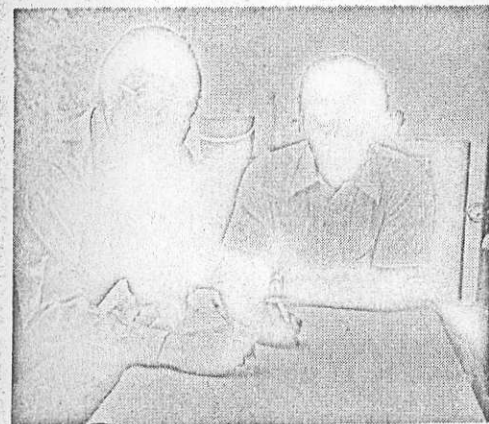


Joseph O. Sierakoski

Sierakoski Is Resident Manager At Johnson

Taking on the assignment of bringing the new operation at Johnson Camp into production was like coming home for Joseph O. Sierakoski, resident manager.

Joe was born and reared in nearby Bisbee, one of the great old copper camps of the world, where his father was an underground miner. After graduation from high school, Joe also turned to mining and was employed



Members of the production staff at the Johnson mine are (right) Rogelio L. Caculitan, engineer, and his assistant, Tommy Torrez, shown going over some engineering drawings in the new office building at the mine.



KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

92 I

attach to previous Dec 74.

To..... M. D. Rowswell

From..... G. M. Hogg

Subject..... Krain Copper, Highland Valley Area, B.C.

Date..... December 16, 1974

W.J.	
D.M.H.	✓
G.M.H.	✓
M.D.R.	
I.D.B.	
R.D.S.	
G.R.	
J.W.B.	✓
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Checking on the Krain Copper property, which was offered to us by a Mr. Lapinski of Ashcroft, B.C., (released by Getty and recently staked by Lapinski), has shown the following:

The Krain copper property has been known for many years. It lies to the north of the Guichon batholith along the north extension of the Bethlehem dike swarm. The contact with overlying later volcanics occurs just to the north of the showing area.

Drilling on the prospect most recently to the north through the overlying volcanics has indicated a tonnage of 30 to 35 million tons of material grading around 0.5% Cu. About 1/3 of this is estimated to consist of oxide material running somewhat above the average grade figure. The unoxidized material below grades less than 0.5% Cu. The deposit is lensitic and plunges to the north under the volcanics. It has been tested to a depth of approximately 600 feet.

It is of very doubtful economic value, and it is probable that Getty dropped the ground because of this rather than by error.

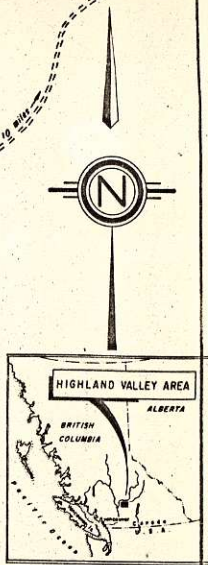
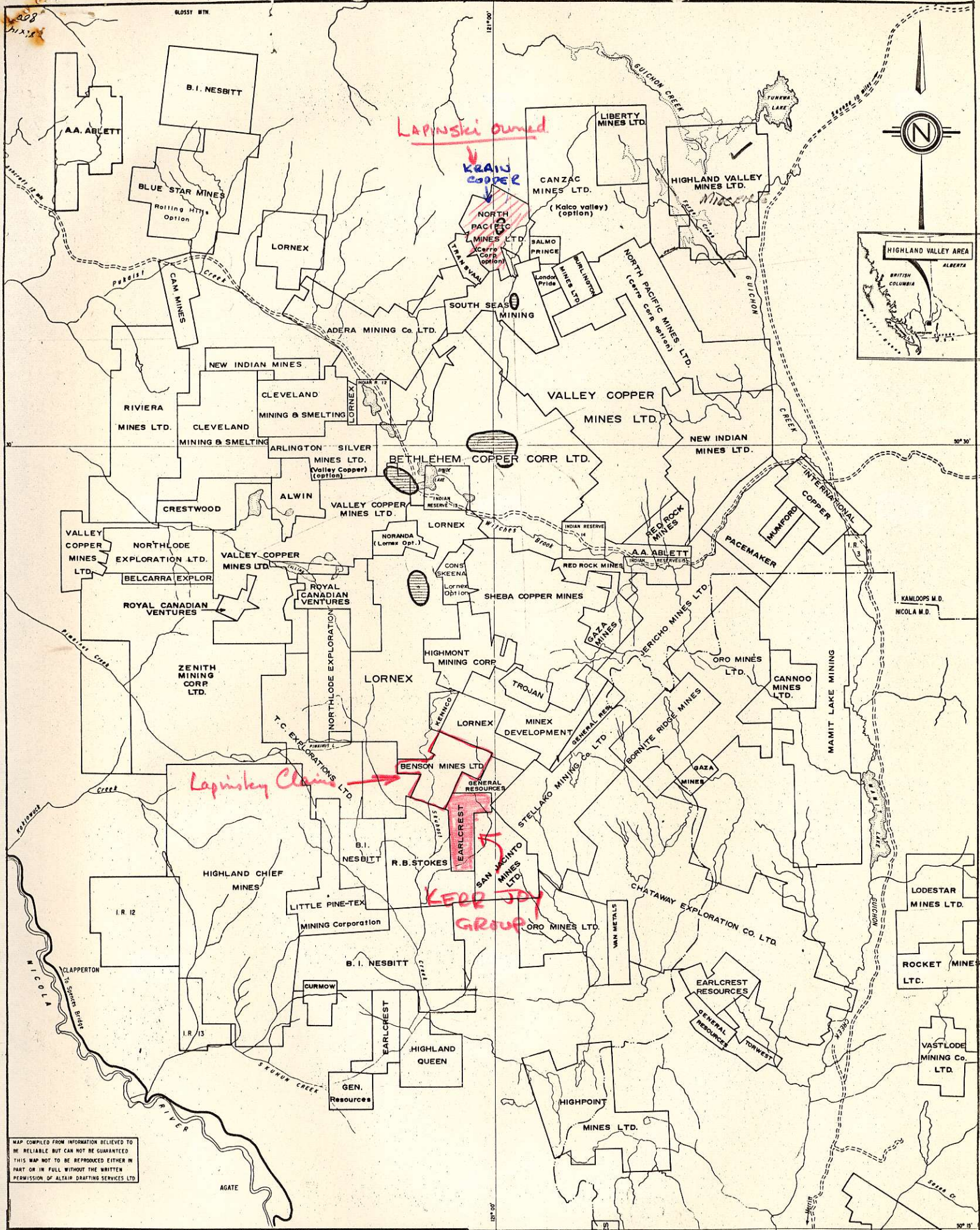
No interest is recommended.

Agreed

[Signature]

G. M. Hogg

GMH:js



MAP COMPILED FROM INFORMATION BELIEVED TO BE RELIABLE BUT CAN NOT BE GUARANTEED. THIS MAP NOT TO BE REPRODUCED EITHER IN PART OR IN FULL WITHOUT THE WRITTEN PERMISSION OF ALTAIR DRAFTING SERVICES LTD.

PROPERTY MAP
OF
THE HIGHLAND VALLEY
NICOLA & KAMLOOPS MINING DIVISIONS
BRITISH COLUMBIA

SCALE IN MILES
0 1 2 3 4 5 6 Miles

PREPARED BY:
ALTAIR drafting services ltd.,
Ste. 5 - 821 W. PENDER ST., VANCOUVER, B.C.
Phone : 688-4134.

Copper-Molybdenum

Krain

(50° 121° N.E.) Company office, 408, 409 Granville Street, Vancouver 2. R. J. Wiley, president; A. R. Allen, consulting engineer. This company holds by option from its partly owned company, Comet-Krain Mining Corp. Ltd., 32 recorded claims in the Krain and D.W. groups, east of the north peak of Forge Mountain. In 1967 four vertical holes totalling 2,739 feet were diamond drilled in the north part of the area previously explored by drilling on the Krain Copper mineral claim. The new drilling was financed by I. Shulman and associates, and it brought the total surface diamond drilling done in the vicinity of this mineral claim since 1955 to 27,385 feet in 55 holes.

On the Krain Copper claim, low-grade copper and molybdenum mineralization is shown by drilling to extend more or less continuously for a northerly distance of 1,300 feet across widths of as much as 500 feet, and to persist in sub-commercial grades to depths in places of as much as 1,200 feet. Estimates by various companies indicate the existence of between 8 and 20 million tons of material to depths of 700 to 900 feet at grades approaching half a per cent copper. The north part of the deposit is more or less oxidized to depths of as much as 260 feet beneath overlying unmineralized Tertiary volcanic and sedimentary rocks of the Kamloops Group, which reach a thickness of 250 feet in the northernmost recent drill-hole. The deposit occurs in the Guichon quartz diorite and in later intrusions composed variously of the Bethlehem quartz diorite and porphyries. The rocks are faulted, fractured, and traversed by seams of quartz, chlorite, and calcite, near which they are variously altered and bleached. Pyrite, chalcopyrite, and locally bornite and molybdenite are mainly in fractures and partly disseminated. Where oxidized, the sulphides give way to chrysocolla, malachite, azurite, cuprite, native copper, and rarely chalcocite.

The four recent holes were all drilled close to the 5,700-foot contour in the vicinity of a small lake in the north of the mineral claim. Three were drilled at 250-foot spacing on a line extending east-southeastward through the south end of the lake, and the fourth hole was drilled 400 feet farther north and is the northernmost hole on the property. The cores were briefly examined, and all showed mineralization, which was best in the two southernmost holes.

[Reference: *Minister of Mines, B.C., Ann. Rept., 1966, p. 151.*]



DEPARTMENT OF MINES AND PETROLEUM RESOURCES
VICTORIA
V8V 4S2

December 9th, 1974

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Geologist, Geological Division,
Mineral Resources Branch

WJMCM/crd

ENCLS: (1)

○
DDH in
Eocene Volcs.

FURGE
▲
MTN

○→
DDH 73-2
(-60°)

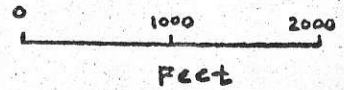
KRAIN
DEPOSIT

○
DDH 73-1



Access
Road

x Percussion drill holes, 1972.



924

KERR ADDISON MINES LIMITED
P.O. BOX 91
COMMERCE COURT WEST
TORONTO, ONTARIO
M5L 1C7

COPY

M. D. Rowswell

G. M. Hogg

Krain Copper, Highland Valley Area, B.C.

December 16, 1974

W.J.
<input checked="" type="checkbox"/> G.M.H.
<input checked="" type="checkbox"/> C.M.H.
<input type="checkbox"/> M.D.R.
<input type="checkbox"/> I.D.B.
<input type="checkbox"/> R.D.S.
<input type="checkbox"/> G.R.
<input type="checkbox"/> T.M.B.
<input checked="" type="checkbox"/> BUN

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G. M. Hogg

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