

# KING & KING

MINING ENGINEERS

115 EMPORIUM BLDG. WHITTIER, CALIF. OXFORD 4-3249

cc 1206  
Let's to King 1/9/59  
Original to: 1206 Files  
cc to: P.W. Allen  
DAN M. KING

CLARENCE R. KING  
7648 BOLSA RD.  
MIDWAY CITY, CALIF.  
TWINOAKS 3-3711

11762 MINES BLVD.  
WHITTIER, CALIF.  
OXFORD 44361

Jan. 6, 1959

JAN 6 1959		RETURN TO	
TO	FOR REPLY		
	COMMENT		
✓ PWA	KL	CWS	
LDC	HTM	WFS	
GDD	PJM	ART	
RDF	IGM	WSV	
JOH	HSN	EW	
RJM		CKW	

Mr. George D. Dub,  
Cyprus Mines Corp.,  
Room 1216,  
523 W. 6th St.,  
Los Angeles 14, Calif.;

Dear George:

I enclose a memo upon a silver-lead prospect in the Yukon Territory, Canada, that might be of interest to Cyprus Mines.

This prospect was brought to my attention by Dick Belliveau, whom you know. Mr. Kirwan was master mechanic for Dick for years, in the iron range pits and other operations under Dick's supervision. Both men are "professionals" and are not apt to be foding themselves.

They have asked me to represent them in handling this prospect, at least in the initial stages of negotiation and exploration. They have had offers from Consolidated Mining & Smelting and from Conwest; but these offers were, frankly, rather tough, in that the maximum stock in an operating company was 10%; which would leave very little for Mr. Kirwan, who would have to have 15% to take care of himself and associates.

If Cyprus is interested in this type of prospect at this time, we can go into the matter in more detail, together with Dick Belliveau.

With best wishes for the New Year, I am,

Sincerely,

*Ray*  
Clarence R. King

CRK/vr

# KING & KING

MINING ENGINEERS

## MEMO ON THE KEY GROUP OF CLAIMS, YUKON TERRITORY, CANADA.

The following summary of data upon the Key silver-lead deposit were supplied by Mr. Richard R. Kirwan, (Equipment Supt., Cassiar Asbestos Corp., Ltd., Cassiar, B. C.); one of the principal controlling interests in the property.

### Location and access:

The Key group of claims is located on the Ketsa river, Yukon Terr., Canada, about 16 miles east of the end of a road built by Canol Metals, Ltd. for access to a large molybdenum deposit controlled by this corporation. The Canol road leaves the Alcan highway at Johnsons Crossing and proceeds about 100 miles to Ross River Siding, a small village where store, telephone, airplane, and helicopter facilities are available.

Present access to the Key group is by pack trail from Ross River Siding, or by helicopter from this point or Whitehorse. The McIntyre Gold Mines Co. Ltd., of Timmins, Ont. is however, going to build a road from the end of the existing road to their extensive holdings contiguous to the Key group, this spring, (spring of 1959). This will remove the necessity for interests exploring the Key group building road at their expense.

The following freight costs are conservatively estimated by Mr. Kirwan:

From Key group to Whitehorse:	\$20.00 per ton
From Whitehorse to Vancouver, B. C.:	\$17.00 per ton
From Vancouver to Trail, B. C.:	\$17.00 per ton

Trail, B. C., is the nearest lead smelter and ore or concentrate would probably be sold there; or shipped to deep water and thence to Selby smelter.

### Property holdings and title:

A total of 44 claims and fractions are held and registered under Canadian law in the names of Erick Erickson, Jim Shorty, Pat Bill, Field Johnny, Roddy Black Jack, and George Fairclough. These holdings are controlled by Richard R. Kirwan and others under a contract of sale. Mr. Kirwan and associates have registered this contract. Mr. Kirwan has full power of attorney to deal for his associates in any disposition of the property.

The 44 claims cover a rectangular area roughly 12,000 ft. long by 3500 ft. wide; or roughly 1000 acres. The claims have been registered long enough, and sufficient work has been done upon them, to qualify for Crown Lease, (equivalent to patenting in U. S. mining law), if desired.

### General Information:

**Climate:** snowfall is fairly heavy in the winter and below freezing temperature may be expected from September to March or April. Summers are warm and due to the latitude, (60°30' N), nearly 24 hours of daylight prevail in the summer. The snowfall limits surface exploration to a season lasting from about May 15th to Oct. 15th; but once facilities are installed, mining, milling and hauling can be carried on the year 'round, as is the large asbestos operation at Cassiar, in the same region.

**Topography:** at and near the property is rugged. Many streams and small rivers have cut narrow canyons of steep gradient in the well-timbered mountain range. Due to the steep slopes and many canyons, about 60% of the bedrock is exposed or can be inferred; the remainder of the property is covered by talus, till, and/or heavy vegetation.

**Facilities on property:** At present, the property is reached by some 16 miles of pack trail from the Canol truck road; or by helicopter from Ross River or other points. A well-built cabin near helicopter landing site is the only present facility upon the property.

# KING & KING

MINING ENGINEERS

Taxes: attention should be called to the fact that the property is in the Yukon Territory, not British Columbia. During the exploration period, no taxes apply other than the assessment requirements amounting to about \$100 per claim per year. Further, no taxes are assessed for a period of three years after production begins.

Water, power, etc.: Water is plentiful on and near the property, and hydroelectric sites are nearby, if an operation is large enough to justify hydro installation. All fuel oil and other supplies of all kinds would be truck hauled from Whitehorse or Vancouver, as a return load for trucks hauling ore or concentrate, in the case of a small to medium-sized operation.

## Nearby or adjoining properties:

Eight miles west of the Key group, a large molybdenum deposit is being explored by Canol Metals Co., Ltd.; and a good all-weather road extends from this operation to the Alcan highway.

Between 400 and 500 claims adjoin and partially surround the Key group. These holdings cover high-grade copper-bearing outcrops and outcrops of massive replacement bodies of auriferous arsenopyrite, as well as other showings of silver-lead. All of these claims are held by Conwest Exploration, Ltd., and are leased by McIntyre Mines, of Timmins, Ontario.

All of the above holdings, as well as the Key group, are shown on Sheet 105 F- 9, Lat. 61°30' to 61°45'; Long. 132° to 132°30'; Canadian Dept. Northern Affairs and National Resources; Northern Admin. & Lands Br.; Lands Divn. Topography is also shown on this sheet, 500 ft. contour interval.

## Economic geology:

Little or no detailed geological mapping or underground exploration work has been done upon the property. According to Mr. Kirwan, the prevailing rocks are argillites, slates, and schists, with some limestone beds. The prevailing rocks and habits and type of ore found are similar to the Keno Hill deposit of Conwest Exploration.

So far as known, mineralization occurs in several well defined and persistent veins varying from a few feet to twenty or more feet in width. Vein structure appears to be banded; ribbons and masses of massive steel galena between quartz and breccia bands in which galena is disseminated. At one place on the property, a brecciated zone cemented with massive chalcopyrite and bornite outcrops; otherwise, known outcrops are entirely silver-lead.

Exploration to date consists of three short adits less than 100 feet long, driven upon widely separated outcrops; and two or three trenches across other outcrops. In addition, some chip sampling of untrenched outcrops has been done.

The tenor of the ore, as represented by sampling in trenches and virgin outcrops over widths varying from 1 ft. to 10 or 15 ft., is as

# KING & KING

MINING ENGINEERS

follows:

Sample No.	Ounces per ton:		Percent:	
	Gold	Silver	Lead	Copper
Key No. 3	0.005	107.6	82.0	-----
Key-A-1	0.005	21.3	25.7	-----
Summit No. 1	0.010	1.6	-----	18.8
Key No. 34	0.010	138.9	10.3	-----
Key No. 6	Tr	367.4	61.6	-----
Key No. 11	Tr	66.2	63.4	-----

Sample numbers refer to the claim number upon which the outcrop occurs. Other samples taken in the three short adits upon Key No. 3 claim are of the same tenor, over widths of two to six feet; i.e. - the silver ratio, while variable, averages about 4.5 ounces silver per percent lead in the ore; excepting the copper outcrop on Summit No. 1 claim.

All of the known outcropping ore is unoxidized sulfide; apparently glaciation has prevented the formation of any oxidized zone.

Due to the occurrence of segregated bands and pockets of almost pure galena in the veins and outcrops, it has been suggested that while exploration by drilling and adit driving is in progress, shipments of hand sorted ore be made to reduce the cost of exploration. The economics of this proposal are estimated by Mr. Kirwan to be as follows:

Assume:

- 1) A hand-sorted shipping ore averaging 40% lead and 180 oz. silver.
- 2) Ore shipped to Trail smelter, via pack train and truck.

Then:

Smelter payment is approx.:		
92.5% of lead @ 10.5¢/lb.; or:		\$ 77.70 per ton
95% of silver @ 88¢/oz.; or:		\$150.48
Total gross value per ton at smelter:		\$228.18 per ton
Less:		
Base smelter charge:	\$ 11.00	
Drying & sampling:	\$ 2.00	
Penalties:	\$ 3.00	\$ 16.00
Net payment at smelter, per ton:		\$212.18
Less:		
Frts., Canol road to Trail:	\$ 54.00	
Mng., sorting, pack to road:	\$ 46.00	\$100.00
Approx. net operating profit per ton of ore:		\$112.18
Say, \$100 per ton in round numbers.		

If and when exploration discloses orebodies of sufficient size to justify treatment plant and mining facilities, no trouble in concentration is anticipated. The ore is clean sulfide, and will respond to normal flotation practice, or, in the case of a very small operation, to gravity concentration. It is probable that in any operation, sorting belts will be economic because of the fairly high percentage of pockets of massive galena easily recovered on sorting belts.

# KING & KING

MINING ENGINEERS

## Proposed terms:

The present status of the Key property is: Mr. Kirwan, et. al. have an option to buy the claims outright for the total sum of \$36,000. Of this, \$12,000 has been paid. No further payments are due until December 31st, 1959; at which time the balance of \$24,000 must be paid or the option dropped. In addition, Mr. Kirwan has spent something over \$16,000 in assessment work, etc. on the claims. Mr. Kirwan has full power of attorney to deal for his associates and himself.

The following terms are proposed by Mr. Kirwan:

1) Prospective buyer may examine and sample the property this season, (by or before June 30th, 1959). A representative of the owners will assist buyers engineers in all ways possible; buyers to defray expenses of representative.

2) If results of examination are favorable and buyer desires to proceed, Kirwan, et. al. will assign option to a Canadian corporation organized to explore and operate the property, under a contract whereby buyer is bound to:

a) assign 15% of the stock in the operating corporation to Kirwan, et. al.; and allocates calls on a negotiated additional amount of stock at par or issuing price; calls to be valid for an agreed upon time.

b) Buyer is bound to make the \$24,000 payment on or before Dec. 31st, 1959; and \$16,000 is placed in escrow to guarantee this. If buyer defaults, ie. - does not make the final payment of \$24,000 by, say, November, 1959, then the \$16,000 reverts to Kirwan, et. al.

The above basic terms are equitable. Assuming snow conditions are such that the surface is accessible by May 15th; ample time for examination and a good deal of diamond drilling is granted or can be arranged; provided the seasonal and contract limitations are recognized before an examination is made and provision is made to proceed "under forced draft" with initial exploration as soon as and if the examination results favorably.

Mr. Kirwan can make arrangements for necessary helicopter and other required facilities. Telephone facilities are available at Casstar, as are other facilities to be expected in a fairly large town supporting a thousand ton per day asbestos operation.