TECK EXPLORATIONS LIMITED

INTER-OFFICE LETTER

DATE: July 31st 1981

COPIES TO:

JLM

TO:

W. MEYER

FROM:

ALAN REED

WHEN FEASIBLE, CONFINE LETTER
TO ONE SUBJECT

RE:

PRELIMINARY EVALUATION OF GRENOBLE PROPERTY - Job #1282

Splitting and assaying of diamond drill core from the Grenoble property is not yet complete, but a preliminary evaluation of geological and mineable ore reserves has been made.

Geological ore reserves were estimated using the GEOBEX interactive computer program of Geomin Computer Services Corporation. Mineable ore reserves were estimated manually on plans and sections.

## GEOLOGICAL ORE RESERVES

Table 1 presents the results of the GEOBEX estimation using the polygon method on horizontal slices of three-metre thickness. The 15-metre polygon influence radius may be a little optimistic according to the available variograms - this will be investigated further, but I think that this is a good estimate because of the thickness (3 metres) of the horizontal slices which enhances the precision of the estimate.

## MINEABLE ORE RESERVES

The mineable ore zone is a gently-sinuous ribbon, 375 metres in length, 37 metres average width and 8 metres average thickness, which plunges gently towards the east-southeast. Using a density factor of 2.94 short tons per cubic metre yields 326,340 tons, of which 75% is estimated to be recoverable by blasthole openstoping resulting in mineable ore reserves of 245,000 tons with an average gross metal content of \$86.00 (1.02% copper, 0.160 cz. Au/ton, 0.17 oz. Ag/ton and 0.006% molybdenum).

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## CONCLUSIONS

The mineable orebody has a gross value of \$21,000,000. With mining and milling costs estimated at about \$10,000,000, this appears insufficient to warrant the capital expense of production.

Additional ore may be sought in two directions:

- a) down the plunge of the orebody onto the claims held under option from Seraphim et al;
- b) along the strike of the dacite/serpentenite contact towards the Lexington crown grant.

It is recommended that exploration should continue, and be concentrated in these two directions.

Alan Reed

AR/sp

TABLE 1

Geological ore reserves by grade

Cutoff increment:

\$20.000

Polygon influence radius:

15 metres

Density:

2.940 short tons per cubic yard.

			AVERAGE VALUES				
Cutoff Value (gross metal value/ton)	Ore Tons ('000)	Primary (gross metal value/ton) \$	Au oz./ton	Ag oz./ton	Cu oz./ton	Mo oz./ton	
20.000	621	67.5883	.1161	.1510	.8401	.0050	
40,000	312	108.1514	.2067	.2124	1.2067	.0072	
60,000	194	143.6857	.2815	.2444	1.4805	•0133 ·	
80.000	107	203.3510	.4119	.2117	1.8671	.0134	
100.000	85	234.7488	.4825	.2124	2.0322	.0136	
120.000	62	279.1867	.5832	.2662	2.2505	-0144	
140,000	54	304.0183	.6345	.2778	2.4693	.0146	
160.000	50	314.4143	.6603	.2675	2.4820	.0141	
180.000	47	325.2538	.6806	.2674	2.6188	.0137	
200.000	43	335.9219	.7088	.2674	2.5827	.0130	