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SCHAFT CREEK PROPERTY

PROPERTY SYNOPSIS

INTRODUCTION

The Schaft Creek property, also called the 'Liard Project' in some studies, is located between Schaft and Mess creeks in northwestern British Columbia, (Figures 1, 4). It is about 50 kilometres west of Highway 37 (Stewart-Cassiar road). All service and supply have been by air from Terrace, some 350 kilometres to the southeast, to a strip on Schaft Creek.

Topography in the area is quite rugged, being representative of the eastern side of the Coast Mountain Ranges. Elevations on and about the property range from 760 to 2590 metres (2500 to 8500 feet).

The property consists of 381 two post claims, 41 fractional claims, and 16 metric claims containing 189 units. The total area is approximately 130 square kilometres (50 square miles).

HISTORY

The original property was staked in 1957 for a syndicate which included Silver Standard Mines Limited. The syndicate later became Liard Copper Mines Ltd. The exploration conducted by the various operators since the original staking is listed below.

Year	Operator	Exploration Work
1957	BIK Syndicate	Staking, prospecting
1958	BIK Syndicate	Nil
1959	?	Geology, geochemistry, S.P. Hand trenching - 1000 m
1960-63	?	No work
1964	?	Rock trenching - 125 m
1965	Silver Standard	Detailed geology, IP (6.5 km), line cutting (11 km) Airstrip DD - 3 holes, 629 m
1966	Asarco	Airstrip, permanent camp, IP DD - 24 holes, 3334 m
1967	Asarco	DD - 3 holes, 458 m
1968	Hecla	DD - 9 holes, 3991 m
1969	Hecla	Location surveys, roads, bulldozer trenching (990 m) DD - 10 holes, 4725 m
1970	Hecla	Aerial survey, IP (14.5 km), mag, roads DD - 27 holes, 9929 m PD - 113 holes, 6523 m

Year	Operator	Exploration Work
1971	Hecla	Claim staking, surveying, line cutting (113 km), IP (27 km), mag (140 mi) DD - 25 holes, 6,722 m
1972	Hecla	DD - 10 holes, 2,728 m
1973	Hecla	Geology, linecutting (32.5 km), IP (13.5 km), mag (45.4 km)
1974	Hecla	DD - 6 holes, 2,152 m
1975	Hecla	Office studies only
1976	Hecla	Office studies only
1977	Hecla	Petrography DD - 1 hole, 644 m
1978	Hecla	Office studies only
1979	Hecla	No fieldwork
1980	Teck	DD - 45 holes, 14,513 m
1981	Teck	DD - 81 holes, 11,222 m
1982	Teck	No fieldwork
1983	Teck	No fieldwork

GEOLOGICAL SETTING

The Schaft Creek deposit occurs within a north trending structural remnant of Triassic volcanic rocks overlain on the east by Upper Tertiary volcanics of the Spectrum Range and intruded on the west by the Post-Upper Triassic Hickman Batholith and on the northwest by a Jurassic and/or Cretaceous granodioritic body.

The host volcanics consist of intercalated andesitic flows and derived volcaniclastic rocks at least 1200 metres thick. Small intrusive dykes cut the host volcanics.

The deposit consists of a main zone to the south and a narrower but thicker zone to the north. The two zones are continuous from one to the other. Approximate overall dimensions in plan are in the order of 2100 metres in total length and 1100 metres in maximum width. The mineralized zone is somewhat basin-like in shape with a general westerly dip. Thicknesses range up to 360 metres within the limits of the reserve cut-off grade and several hundred metres thicker if lower grade material is included. Mineralization is disseminated in the intrusive dykes but occurs in fractures and veins in the volcanics.

MINERAL RESERVES

Reserves for the Schaft Creek deposit have been computer-calculated by International Geosystems Corporation and hand-checked by Teck Explorations. The calculations are very detailed and thorough. Using a cutoff grade of 0.30% copper-equivalent, the drill proven and probable

reserves are 1,070,000,000 tons having an average grade of 0.298% copper, 0.033% molybdenum, 0.004 oz/ton gold and 0.035 oz/ton silver. (Copper-equivalent was calculated as %Cu + 6.2(%MoS_2) + 18.6(oz/ton Au) + 0.7(oz/ton Ag).) The stripping ratio is 1.2:1 waste to ore.

The reserves were calculated exclusive of the 1981 drilling results. If these results were to be included, the effects probably would be to better define the grade in portions of the deposit, and increase the reserves somewhat in the northern part of the deposit. Any grade changes would be minimal and probably would affect only the third decimal place of the average copper and molybdenum grades of the deposit. The additional tonnage would have essentially no effect on any present value calculations because of the very large reserve already calculated.

ECONOMIC EVALUATION

SUMMARY OF AGREEMENTS

Silver Standard Mines Limited was a partner in the exploration syndicate which discovered the Schaft Creek property in 1957. In 1966, Liard Copper Mines Ltd. (N.P.L.) was formed as a corporate and operating vehicle for the syndicate members. The ownership of Silver Standard in Liard Copper Mines has remained essentially constant to the present time at 65.3 percent.

The Schaft Creek property has been optioned to several major exploration companies since the incorporation of Liard Copper Mines: Asarco, 1966-1967; Hecla, 1968-1979; Teck Corporation, 1980-present. Excluding minor details, the effective interests of the main participants in the present agreement are as follows:

- Teck Corporation is the operator and is responsible for financing the project to production.

- Until the payback of capital (with defined interest) and $1,500,000 of predevelopment costs, the income distribution formula is:

  80% of Net Proceeds - Teck Corporation
  20% of Net Proceeds - 70% Teck Corporation
  - 30% Liard Copper

- After capital payback.

  70% of Net Proceeds - Teck Corporation
  30% of Net Proceeds - Liard Copper

The resulting return to Silver Standard Mines is:

Before payback	3.92%
After payback	19.59%

VALUATION

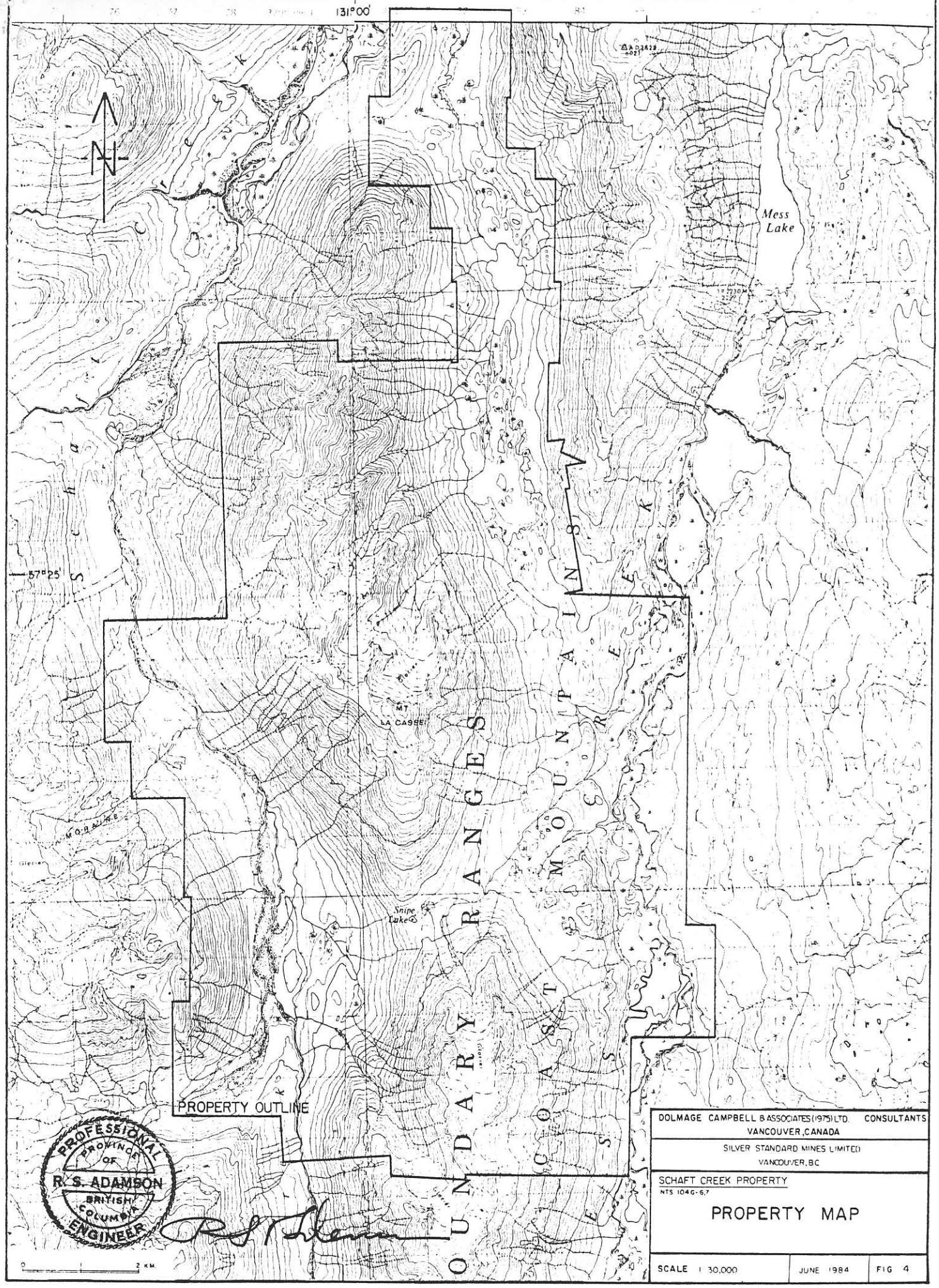
There is little question that the Schaft Creek copper-molybdenum deposit could be a profitable mining operation if metal prices were considerably higher. A copper price relatively similar to copper prices in the early 1970's would be required. Comparative prices, in 1984 dollars, would be in the order of $1.25 to $2.00 per pound. However, using such equivalent prices for a future production period results in a very arbitrary valuation for the property. For example, the difference in the discounted (15%) present value between a copper price of $1.25 per pound and $1.75 per pound is the approximate difference between negative $15 million and positive $425 million (before taxes). Such arbitrary and widely ranging results are unacceptable for a valuation study. For this reason, the Schaft Creek property has been valued on the basis of an applicable portion of completed exploration expenditures. The applicable portion has been calculated from: (i) the amount of useful exploration; (ii) Silver Standards ownership percentage; (iii) an economic factor based on current and required (for a viable operation) metal prices.

At current estimated capital and operating costs, the price of copper (and equivalent prices for the other metals) required to provide an acceptable rate of return is in the order of $1.50 (U.S.) per pound. The current price is $0.60 (U.S.) per pound. Thus the economic factor is 0.60 ÷ 1.50 = 0.40.

Parameters	- Useful exploration	100%
	- Silver Standard ownership	19.59%
	- Economic factor	40%
	- Present value of completed exploration work	$8,355,000

The present value to Silver Standard Mines Limited is:

$$\$8,355,000 \times 0.1959 \times 0.40 = \underline{\$655,000}$$



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SCHAFT CREEK PROPERTY
NTS 104G-6,7

PROPERTY MAP

SCALE 1:30,000 | JUNE 1984 | FIG 4