DOUGLAS D. CAMPBELL

Consulting Geologist 314 Marine Building Vancouver 1, B.C.

INTRODUCTION

On the request of Mr. L. Belliveau, president of Takla Silver Mines Ltd., the writer has examined all the maps, reports and literature of company's property located 50 miles west of Manson Creek in north-central F.C. This report is an assessment of the property from the existing data only, without the benefit of a personal examination. Reports and maps on the property are available from several sources, namely: Leta Explorations, 1945, E. Bronlund, 1955, and the present owner, Mr. J. Regan. In addition the writer interviewed Mr. Len Belliveau regarding the most recent work that he has conducted on the property.

LOCATION: 55° 30' N lat., 125° 30' E long.

The property consists of fifteen claims named; Lustdust #1 to #15, incl. They are located in the Omineca Mining District east of Takla Lake approximately 50 miles west of Manson Creek. Access is by road from Manson Creek to the Bralorne Takla Mercury mine and from there by cat road for two miles further west.

HISTORY:

The property was first staked in the early '40's and optioned to Leta Explorations Ltd., an affiliate of Leitch Gold Mines Ltd., who drove a 300 ft. adit drift on the Lustdust #1 M.C. in that same year. The property was dropped and the claims lapsed and were restaked in 1950-51 by Mr. J. Regan. Subsequently the property was optioned to Bralorne Mines Ltd. who caused a large number of open cuts to be excavated on various vein structures on the property. In addition, 19 diamond drill holes have been drilled by the owners and option parties on the two main known vein structures on the property.

This year the present owners have done additional stripping and sampling of the surface showings.

WORKINGS:

Besides the adit and the drill holes mentioned above there are approximately 60 pits and open cuts on the property, in various states of disrepair, and about 30 extensive recent bulldozer trenches.

About a mile of cat road connects all the workings on the property. All of the workings lie along a north-northeast trending belt for a distance of 3600 feet, rising up the hill slope an elevation of 300 feet in that distance. Most of the workings lie on Lustdust #1 and #6 mineral claims with extensions onto adjacent claims.

GEOLOGICAL SETTING

GENERAL: The Takla Silver Mines property lies immediately west of the Pinch Fault, a major regional structure, on the east side of which lies the Omineca Batholith made up of granitic intrusives of Jurassic Age. The property itself is underlain by rocks of the Asitka Group of Permian Age. Regionally these rocks generally strike north-north-west and dip fairly steeply to the east. They are comprised of volcanic flows, tuffs and breccias intercolated with phyllites, schists, argillites, cherts and limestone.

PROPERTY: The rock formations underlying the main showings of the Takla Silver property include limestone with minor interbedded chert and argillite, and schistcae green-stone bands which probably represent volcanic flows. The entire sequence is cut by north-trending feldspar porphyry dikes. The formations strike northward and dip steeply to the west. Limestone is the predominant wall rock with considerable chert and argillite cropping out on the Lustdust #1 M.C. and greenstone schist on the Lustdust #6 and #8.

Mapping to date suggests that the rock formations have been rather complexly folded and faulted but since exposures are scattered and limited largely to open cuts the structure is not well established.

ECONOMIC GEOLOGY

The formations on the property at the main showings are cut by at least two major mineralized shear zones; No. 1 zone striking due north and dipping 80° to the east, No. 3 zone striking northnorthwest and dipping 70° to the west. No. 3 zone lies from 600 to 1200 feet west of the north end of No. 1 zone. Between these two zones, in an en echelon orientation is a smaller, poorly exposed vein Zone (No.2) in schist. The wallrocks of No. 1 zone are limestone with chert and argillite appearing near the south exposures. No. 3 zone is flanked by mixed limestone, greenstone (schists) and cherts.

NO. 1 ZONE:

A large number of pits and bulldozer trenches expose No.1 zone on the surface for a distance of 1500 feet of which the southern 700 feet are well exposed and the rest very sparsely exposed. The zone is a highly oxidized limonitic-manganiferous shear ranging in widths from less than one foot to twenty feet. Within the zone are lenses of sphalerite with lesser galena. No record is available which describes the nature of the gangue of the unoxidized vein material. Sampling of the surface pits revealed three sections of appreciable silver mineralization along the zone.

The first silver shoot occurs at the south end of the exposures in four pits scattered over a length of 200 feet. There is a wide range in values and widths, from 10 to 100 oz. Ag/ton across widths of 1 to 6 feet. The silver is also accompanied by small amounts of gold (up to 0.10 oz.). A general average in this area is about 30 oz. Ag. across 3 feet. The mineralization appears richest at the south end where the vein zone is flanked by argillites, and fades out to the north where the wallrocks are limestone. Leta Explorations drove 300 feet of drift on the south end of this zone, under the best surface values, and obtained a few scattered high silver values but the sampling appears to have been very sparse and not comprehensive along the shear zone. The adit is now caved.

A second surface silver shoot lies 250 feet north of the north end of the first shoot and is about 250 feet in length, beyond which there are no exposures for 580 feet. In this second shoot the values range from 10 to 130 oz. Ag/ton and 0.02 to 0.40 oz. Au/ton across widths of 2 - 4 feet. Values and widths in this shoot appear more persistent and consistent than in the first shoot. The wallrocks are limestone.

The third area of values occurs in a few small pits 600 feet further north. Exposures here are few and scattered but values in silver between 40 and 100 oz. Ag/ton across 2 - 3 ft. vein widths and in float have been obtained for a distance of 250 feet to the north. This sampling is not definitive but does point to an area worthy of further exploration.

<u>Drilling</u>: Ten drill holes have been put in to intersect the No. 1 zone from the second shoot to the third. Only the assay results are available from this drilling and of these holes #2 and #33, both under the second shoot, returned good silver values across ore widths. (#2 = 252 oz. Ag/2.3, #33 = 16 oz. Ag/9, both with poor core recovery.)

Five holes between the second and third shoot returned low values in silver and the one hole under the third shoot returned 0.19 oz. Au and 8.7 oz. Ag across 1.5 ft.

NO. 2 ZONE

Three trenches on the No. 2 zone expose two branches of a heavily oxidized mineralized shear zone lying in wallrocks of schist and limestone. Two samples taken from one branch average 5 oz. Ag. and 0.11 oz. Au. across 5 ft. and three samples from the other (east) branch range from 2 to 20 oz. Ag and 0.08 oz. Au across 2 - 5 ft.

NO. 3 ZONE

No. 3 zone has been traced by open cuts and a few short drill holes for a distance of 2200 feet north-northwest from No.2 Zone. It consists of a complexly branching system of mineralized shear zones on either side of a continuous gouge zone that dips about 80° to the west.

At the south end of this fault there is a branching pattern of oxidized carbenate veins generally high in zinc (5 - 25%) across widths of 5 to 15 feet over a length of about 400 ft.

Further north, on the footwall of the fault, a lens up to 60 feet in width of heavily oxidized vein zone comprised largely of limonite and manganite extends for 600 feet. This material on the surface contains low to medium amounts of zinc and small amounts of silver. Results of the drilling are not available to the writer.

RECOMMENDATIONS

It is evident that with the present price of silver the deposits on the Takla Silver Mine's property well warrant further exploration and development. It is apparent from results to date that core loss in diamond drilling is excessive, therefore further expenditure in this method of exploration is not advised. For the immediate future to properly assess the deposits the writer recommends the following work on the property:-

- 1. Rehabilitate the old adit and extend it 400 feet north to drift under the entire second shoot of silver mineralization.
- 2. A heavy duty bulldozer with ripper should be put to work systematically and thoroughly stripping all vein zones for complete mapping and sampling.
- 3. The entire area should be geologically remapped.
- 4. Pending results of the foregoing recommendations the writer recommends investigation of all the zones by long-hole dry drilling presently being very successfully applied on similar properties in the Yukon. Copco supply a machine for this type of drilling.

The cost of the first three recommendations would be between \$20,000 and \$30,000.

Respectfully submitted,

"Douglas D. Campbell," PhD., P.Eng.

Sept / 1964

DOUGLAS D. CAMPBELL

Consulting Geologist 314 Marine Building Vancouver 1, B.C.

September 24, 1964.

CERTIFICATE

- I, Douglas D. Campbell, with business and residential addresses in Vancouver, British Columbia, do hereby certify that:
- 1. I am a consulting geological engineer.
- 2. I am a graduate of the University of British Columbia, (B.A. Sc., Geological Engineering, 1946), and of the California Institute of Technology, (PhD., Economic Geology and Geophysics, 1955).
- 3. I am a registered Professional Engineer of the Province of British Columbia.
- 4. From 1946 until 1957 I was engaged in mining and mining exploration in Canada and the United States as geologist for a number of companies. I was chief geologist for Eldorado Mining and Refining Co. Ltd. when I retired in 1957 to begin private practice as a consulting geologist.
- I personally have examined and assessed all available government reports and private letters and plans concerning this property and in addition have interviewed the principal prospector who supervised the recent work on the property.
- 6. I have not received, nor do I expect to receive, any interest directly or indirectly in the properties or securities of Takla Silver Mines Ltd.

Respectfully submitted,

"Douglas D. Campbell", B.A.Sc., PhD., P.Eng.

Vancouver, B.C.

TAKLA SILVER MINES LTD. (Non-Personal Liability)

BALANCE SHEET

AS AT OCTOBER 5, 1964

ASSETS

CURRENT Cash on Hand and in Bank	\$ 20,001.00
MINING PROPERTIES - at Cost Mineral Claims	750,000.00
ORGANIZATION EXPENSE (Estimated)	2,000.00
사용하다 하는 것이 되었다. 그는 것이 말라는 것이 되는데 말라고 있다. 사용하다 하는데 되었다. 그는데 하는데 되었다.	\$ 772,001.00
LIABILITIES AND SHAREHOLDERS EQUITY	
CURRENT Accounts Payable	\$ 2,000.00
SUBSCRIPTIONS RECEIVED	20,000.00
SHAREHOLDERS* EQUITY Share Capital - Authorized: 3,000,000 shares of par value \$1.00 each \$3,000,000.00	
Issued for Cash: 5 shares at \$1.00 each \$5.00 Less: Discount 4.00	
Issued for Properties: 750,000 shares par value \$1.00 Total each Issued750,005	750,001.00
Approved on Behalf of the Board:	\$ 772,001.00
W. J. arristme	

This is the Balance Sheet referred to in our Report dated December 17,1964.

LIVERANT, YIP & CO.
CHARTERED ACCOUNTANTS

LIVERANT, YIP & CO.

Chartered Accountants

ROBERT LIVERANT, B.A. WEI W. YIP, B.S.A.

SUITE 202 INSURANCE EXCHANGE BLDG. 845 WEST PENDER STREET VANCOUVER 1, B.C.

TELEPHONE 682-7141

The Shareholders,

Takla Silver Mines Limited, (Non Personal Liability) Vancouver, B. C.

AUDITORS REPORT

we have examined the Balance Sheet of Takla Silver Mines Limited (Non Personal Liability) as at October 5, 1964, and have obtained all the information and explanations we have required. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and other supporting evidence as we considered necessary in the circumstances.

We have not verified titles to the mineral claims with direct confirmation to the Government Registry offices. We have received a letter from the Solicitor of the Company indicating that the Company has an option on the property, under which the Company is to receive title to the claims upon the expenditure of \$50,000.00 on the development of the property.

Subject to the foregoing, in our opinion the accompanying Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the affairs of the Company as at October 5, 1964, according to the best of our information and the explanations given to us and as shown by the books of the Company.

Vancouver, B. C. December 17, 1964

Chartered Áccountants