55-125
Iskut - Takla Silver

016217

DOLMAGE, CAMPBELL & ASSOCIATES
CONSULTING GEOLOGICAL & MINING ENGINEERS
808 BANK OF CANADA BUILDING
VANCOUVER 1, B.C.

Anchor Mines Ltd. (N.P.L.)

Summary Geological Report to March, 1966

TAKLA SILVER PROPERTY

Manson Creek, B.C.

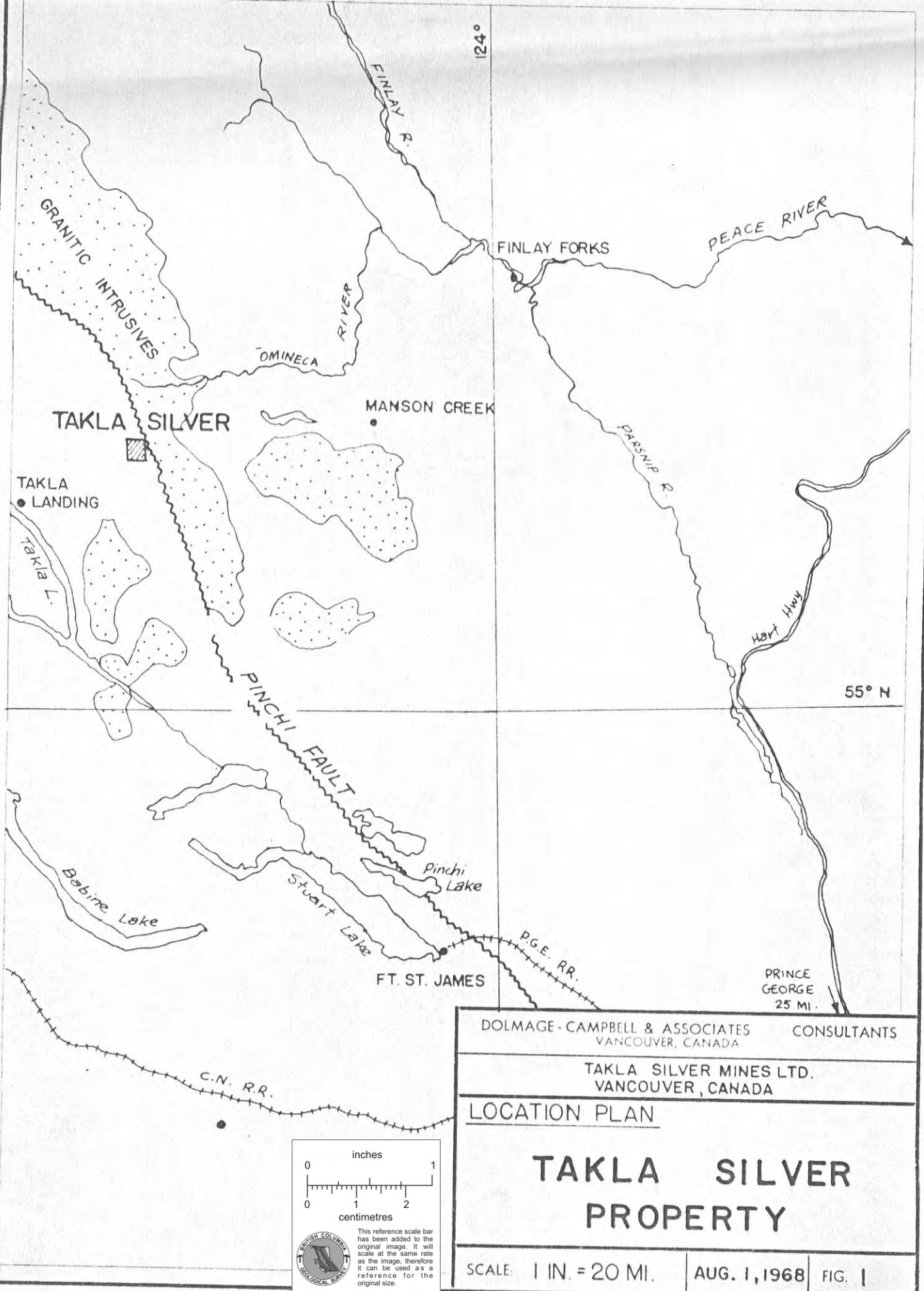
Aug. 1, 1968.

Douglas D. Campbell Dolmage-Campbell & Associates Vancouver, Canada.

093N 009

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS



inches
0 1
0 1 2
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

BRITISH COLUMBIA GEOLOGICAL SURVEY

DOLMAGE - CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA

TAKLA SILVER MINES LTD.
VANCOUVER, CANADA

LOCATION PLAN

TAKLA SILVER PROPERTY

SCALE: 1 IN. = 20 MI. | AUG. 1, 1968 | FIG. 1

DOLMAGE, CAMPBELL & ASSOCIATES
CONSULTING GEOLOGICAL & MINING ENGINEERS
808 BANK OF CANADA BUILDING
VANCOUVER 1, B.C.

INTRODUCTION

The property of Takla Silver Mines Ltd. near Manson Creek, B.C. has had a lengthy career of surface exploration and minor underground development under various owners. The property is particularly noteworthy for the variety of types of orebodies distributed in different structural sites throughout the claim group. In 1964 Takla Silver Mines Ltd. was organized to develop the showings on the property and for the next two years it accomplished considerable underground drifting and drilling as well as some surface bulldozer trenching and diamond drilling as well as some surface bulldozer trenching and diamond drilling.) As yet, no concerted comprehensive effort has been made to properly develop and evaluate all of the promising showings on the property. The present report is a compilation and summation of the available data on the property to March, 1966, presented with the writer's conclusions and recommendations for further development. Most of the surface geology was mapped originally by E. Bronlund to accompany his report on the showings in December 7, 1960. Much of this geology has been checked in the field by the writer. The underground mapping was done by the writer in the course of several visits to the property in 1965. The only record available of the pre-1965 surface drilling is in the form of graphic plots by Mr. Bronlund.

PROPERTY: The Takla Silver Mines property consists of 33 mineral claims named:

Lustdust #1-#15	Nos. 13236-13245 -	15
	13281-13285 -	
A.G. #1-#6	27742-27745 -	6
	26420-26421 -	
Ag #1-#4	26238-26241 -	4
Keno #1-#8	28292-28299 -	8
		33 claims.

They are located in the Omineca Mining District 50 miles west of Manson Creek, east of Takla Lake at 55° 30' N Lat., 125° 30' E Long. Access is by a fair road from Ft. St. James 170 miles to the southwest of the property and by good road from Takla Lake.

HISTORY: The property was first staked in the early "40's" and was optioned to Leta Explorations Ltd., a wholly owned subsidiary of Leitch Gold Mines Ltd. Leta Explorations drove an adit drift for a length of 300 feet on a silver-lead vein zone exposed in surface trenches on Lustdust #1 M.C. The adit missed the desired zone but exposed a much lower grade structure and the option was subsequently dropped and the claims were allowed to lapse. The claims were restaked in 1950-51 by Mr. J. Regan and optioned to Bralorne Mines Ltd. in 1952. From that year until 1960 Bralorne accomplished a large amount of surface exploration including: 3.5 miles of car-road and trails to workings, 7 trenches in bedrock (4x6x2 ft.), 34 pits in overburden (4x4x2-9 ft.), 5000 lineal feet of bulldozer trenches 8 ft. wide by 4-15 feet deep, and 19 diamond drill holes.

Takla Silver Mines Ltd., since its formation in 1964, has improved the main access roads to all-traffic quality and in addition has done further bulldozer stripping, driven 750 feet of underground heading and diamond drilled 750 feet underground and over 2500 feet on surface.

Besides the adits and drill holes mentioned above there are about 60 pits and open cuts now on the property, in various states of disrepair, and about 30 extensive bulldozer trenches. Most of the workings are located on the Lustdust #1 and #6 mineral claims with minor extensions into adjacent claims. All of the showings lie along a north-northeastwardly trending belt that extends about 5000 feet from the adits and camp at the south end. This belt covers a vertical topographic interval of about 300 feet and is traversed throughout its length by a car road.

This report summarizes the results available to the writer of all the work done up to the time of his last visit in 1966.

SUMMARY AND RECOMMENDATIONS

The Takla Silver property is located on the west side of and immediately adjacent to the Pinchi Fault in the Omineca District, 90 miles northwest of Fort St. James, B.C. Present access is by air or truck road from Fort St. James; however, with the Pacific Great Eastern Railroad projected to pass close to Takla Lake, transportation to the property could be considerably improved in the near future.

The mine property is entirely underlain by folded and faulted, moderately metamorphosed, discontinuous bands of limestone, chert-argillite and greenstone schist, all of which have been intruded by feldspar porphyry and granodiorite dikes.

The ore occurrences on the property consist of steeply dipping replacement and fracture filling vein type bodies localized along north trending shear zones. Four separate zones are exposed on the property, of which No. 1 and No. 2 Zones contain high grade silver-base metal ore, whereas No. 3 and No. 4 Zones contain relatively large tonnages of medium grade zinc ore in iron mineral gangue.

No. 1 Zone contains one probable silver orebody of at least 22,000 tons of $66. per ton gross value, open at depth, as well as two other possible orebodies of comparable size and grade. Further surface stripping and drilling, as well as underground drifting is definitely warranted for the exploration of this zone of silver ore. There is little data available on No. 2 Zone but it appears that it is similar to No. 1 Zone in character and warrants further exploration.

No. 3 and 4 Zones appear to have a drill and surface indicated reserve of over 1 million tons of zinc ore grading up to $20. per ton gross. The potential of these zones has not yet been delimited in any direction therefore both deserve further surface stripping and drilling. The mining widths appear to range from 10 to 100 feet.

RECOMMENDATIONS:

The following work is warranted by the available information and is recommended by the writer as the first stage of development of the potential of the property. This first stage should include surface stripping, sampling and assaying, together with surface and underground diamond drilling.

STAGE 1:

-Surface stripping, sampling and assaying No. 1 and No. 2 Zones -		$ 7,000.
-Surface diamond drilling		
No. 1 and No. 2 Zones	- 5000 ft.	
No. 3 Zone	- 2000 ft.	
	- 7000 ft. @ $8.00	$ 56,000.
-Underground diamond drilling		
No. 1 Zone	- 6000 ft. @ $6.00	$ 36,000.
-Camp rehabilitation and move in men and equipment		$ 10,000.
-Cookhouse less		$ 12,000.
-Engineering supervision and administration		$ 15,000.
-Contingencies		$ 14,000.
	Total:-	$150,000.

Success of this stage will warrant the further expenditure of at least $150,000. in underground development on all ore zones as production feasibility development.

STAGE 2:

Underground exploration following Stage 1:	$150,000.

Respectfully submitted,

Douglas D. Campbell, P.Eng., Ph.D.

GEOLOGICAL SETTING

The Takla Silver property lies one mile west of the Pinchi Fault, a major regional structure that trends northwestwardly through the Omineca District. The east side of the Pinchi Fault is underlain principally by intrusive granitic rocks comprising the Omineca Batholith of Jurassic Age. The west side of the fault, in the vicinity of Takla Silver Mines, is underlain by metasedimentary formations belongint to the Asitka Group of Permian Age. Regionally these formations strike northnorthwesterly, more or less parallel to the fault, and dip steeply to the east. In detail, they are intricately drag folded overturned, sheared and cross-faulted. The rocks of the Asitka Group consist principally of volcanic flows, tuffs and breccias which are locally intercalated with argillites, cherts and limestones. Quartzites, schists and phyllites are common in this section and attest to varying degrees of diastophism in different parts of the area.

The principal rock formations underlying the Takla Silver Mines property are limestone, chloritic schist and phyllite, interbedded ribbon cherts and argillites, and tuffs. These formations are tightly folded and intraformationally sheared. All dips are to the west, and the overturning is to the east. Faulting is well evidenced in the limited underground exposures but since surface exposures are scattered and limited largely to open cuts the overall aspect of the faulting can only be surmised.

INTRUSIVES: There are no major intrusive bodies cropping out on the property; however, large and small dikes and irregular plugs occur throughout the property area and are comprised of two principal rock types, acid aphanitic porphyries and medium crystalline monzonitic intrusives.

The monzonitic rocks occur in northnorthwesterly trending irregular dikes ranging from 50 to 200 feet in width and are confined to the northwest part of the property.

Cutting all of the rocks on the property, except the monzonitic intrusives, are irregularly branching swarms and individuals of porphyry dikes. These dikes are comprised of a dense, cream coloured aphanitic rock in which feldspar phenocrysts up to 1/2 inch in length are common. In all probability these dikes are probably genetically related to the coarser crystalline dikes and may be a later, fine grained phase of them. The porphyry dikes all exhibit contacts and commonly occupy the northnorthwest trending faults and shear zones which are also the ore zones. In such zones the dikes are entensively and intensively sheared, fractured, hydrothermally altered and locally mineralized.

FORMATIONS: Most of the rocks underlying the Takla Silver claims are included in three formations: limestone, chert-argillite and chloritic schist. The limestone and chert-argillite predominate, with the schist occurring in discontinuous belts and locally disconformable lenses, suggesting that the schists are metamorphosed lensey volcanic tuffs and/or flows. All formations trend northnorthwestward and dip vertically to steeply westward. The limestone is a mottled dark gray to black, soft, fine grained to finely crystalline marble and is generally massive within beds ranging from 100 to several hundred feet in width. The cherts are hard, gray, ribbon banded and are intercalated with more massive quartzites and black argillites. These rocks are locally fissile and in some locations are schistose. The schists are finely foliated, soft, black green, locally pyritic and locally phyllitic and are composed principally of chlorite plus argillite and thin bands of quartz. Ore-bearing shear zones commonly follow the edges of schist bands and locally dissipate into the adjoining schist.

STRUCTURE: As described earlier, the northnorthwest trend of all rock formations and intrusives is universal throughout the claim group. A few minor cross faults are indicated by surface exposures but general trends of formations are regular enough to indicate that cross dislocation by faulting is a minor structure in this area.

The dominant dislocation of the rocks is in the form of steeply west-dipping fault and shear zones that trend westnorthwest across the formations and displace them up to several hundreds of feet to the right. In many places these fault zones are essentially parallel with the formations and locally merge with bands of schist. Most of the known ore occurrences on the property are on or closely related to these extensive strike shear zones, generally located in tension structures that branch off or trend parallel to the shear zones.

All of the general geology of the property shown on the maps accompanying this report was mapped by Emil Bronlund and checked by the writer. Almost without exception the areas of the ore zones are covered by overburden up to 15 feet in depth. This material is comprised of glacial outwash as well as oxidized soil and rock detritus. The presence of considerable depths of gossan on the surface of the ore zones indicates that denudation by glaciation has not been severe in the area.

ORE OCCURRENCES

The ore at Takla Silver occurs as replacement and fracture-filling in and along a series of steeply-dipping north-trending shear zones which strike parallel to, or at a very low angle to, the formational trends. Within this environment there are two types of ore on the property; lead-zinc-antimony replacement veins with relatively high values in silver, and iron-zinc massive elongate replacement bodies with low but consistent values in silver. The high grade silver ore occurs in Zones 1 and 2 (Fig. 2) and the replacement zinc-iron ore occurs in Zones 3 and 4. There is some indication of gradation between the two types of ore in Zone 3.

Essentially all of the exposures of the ore structures are in trenches, some of which are widely spaced and most of which are not well or deeply cleaned out therefore there is necessarily considerable extrapolation involved in projecting the ore structures any appreciable distances at this time. It is evident from the available exposures, both on surface and underground, that the shear structures which are the hosts to the ores are persistent for at least thousands of feet on strike but that the orebodies are separate lenses along these structures.

Because the silver orebodies and the zinc orebodies are in separate structure, requiring markedly different exploration and development, and are of decidedly different economic potentials, they have been discussed separately in the following portion of this report. Both types of ore of course represent present and potential value to the entire property.

SILVER OREBODIES: (No. 1 and No. 2 Zones)

The known occurrences of economic silver ore on the Takla Silver property are on No. 1 Zone, with minor indications on No. 2 Zone. No. 1 Zone has been exposed on the surface by scattered hand and bulldozer trenches for a length of about 3000 feet (see Figure 2). It has been confirmed to a depth below surface of 200 feet by a crosscut from the adit as well as by 10 surface diamond drill holes. No. 2 Zone is exposed on the surface by four bulldozer trenches for a strike length of 400 feet. It has not been drilled.

MINERALOGY: No. 1 and No. 2 ore zones are comprised of vein-like bodies of replacement and fracture-filling sulphides in mixed gangues of altered wallrock gouge and local quartz and/or carbonate. These zones oxidize on the surface to rusty limonitic-manganiferous aggregates locally leached of much of their sulphides. The principal sulphides are sphalerite, pyrite, galena, arsenopyrite, stibnite and jamesonite. Earlier workers have reported the identification of andorite, freibergite and native silver, all of which would contribute to the high silver values in the ore. Free gold has also been identified in material from some surface cuts.

Underground in No. 1 Zone a number of sulphide veinlets have been exposed in the wallrocks, well removed from the mainore zones, and are vuggy fillings by quartz, sphalerite, pyrite and fine grained black sulphides, locally highly argentiferous. Similar mineral assemblages have also been exposed as fine grained dark replacement veins, more often in schists than in limestone.

TONNAGE: Ore mining widths in No. 1 Zone, as exposed in surface cuts and in the adit crosscut range from three to ten feet with an average of 5-7 feet. The only well delineated ore shoot is in the surface cuts and has an established length of 200 feet. Judging from available exposures it would appear that any orebodies will be approximately this size.

GRADES: Sampling of the surface trenches has revealed a wide range of values across the vein zone in the ore shoot, from 10 to 130 oz. Ag/ton, with a general average of about 30 oz/ton across mining widths. Because this material is locally excessively leached and oxidized it is difficult to assess what would be a true grade of the primary material. The only sample available from underground returned a grade in silver of 42.5 oz. Ag/ton across a width of two feet.

In addition to the silver the ore contains up to 0.40 oz. Au/ton as well as 1-7 percent zinc, 1-5 percent lead, and 2-10 percent antimony. It is extremely doubtful if the antimony would be marketable in this concentrate therefore it is not considered as an asset in this report. The lead and zinc in the concentrate would most certainly be a real asset, and the gold may contribute a small revenue. In this report the lead, zinc and gold have been calculated into ore grades where enough samples have been taken to justify such inclusion.

OREBODIES AND RESERVES:

Three separate ore shoots have been indicated on the surface of No. 1 Zone: one directly north of the adit portal, another one 500 feet north and the third 1200 feet north (see Fig. 2). Surface samples from trenches returned the following values for these three shoots:-

	Length (ft.)	Width (ft.)	Au (oz/t.)	Ag(oz/t.)	Pb(%)
Portal Orebody:	200	7	0.12	27.4	-
Middle Orebody:	255	7	0.13	23.4	2.0
North Orebody:	100	3.3	0.08	15.0	-

Of these ore shoots only the middle one has been investigated below surface. This zone was intersected by three surface diamond drill holes, (DH2,3 and 33), at a depth of about 100 feet, (Fig. 2) and by one cross cut heading in the 1965 adit (Fig. 3). Drill hole #1, when correlated with underground information steepened from the collar and did not reach the vein zone. The crosscut intersection assayed 42.5 oz. Ag/ton across 2 feet, with lead and zinc not determined: the DH#2 intersection assayed 0.12 oz. Au, 100 oz. Ag, 2% Lead and 3% Zinc, (all uncut), across a true width of 5 feet; however, it is not entirely positive that this intersection is on No. 1 Zone or on a branch from it. DH #3 intersected no values but also may not have reached the zone. DH #33 crossed through the zone at a very oblique angle but returned 0.09 Au, 11.6 Ag, 2.0 Pb and 6.7 Zn across a true width of 4 feet. It should be noted that core recovery from all of the drill holes was extremely low, seldom exceeding 10% in the ore zones; however, the results generally confirm the downward extension of the surface ore.

Obviously, insufficient work has been done to date on No. 1 Zone to properly prove an orebody; however, the extensive surface sampling plus the drilling and underground results suggest that the ore length of 250 feet on the surface probably extends at least to a depth of 200 feet with an average width of probably about 5 feet. Using the surface assay averages for the entire orebody the following ore can be considered as "probable" on No. 1 Zone.

PROBABLE ORE:

21,700 tons @ 0.13 oz. Au/ton, 23.4 oz. Ag/ton and 2% Pb.

Gross value per ton - $66.17 (Au - $37., Ag - $2.40, Pb - $0.13)

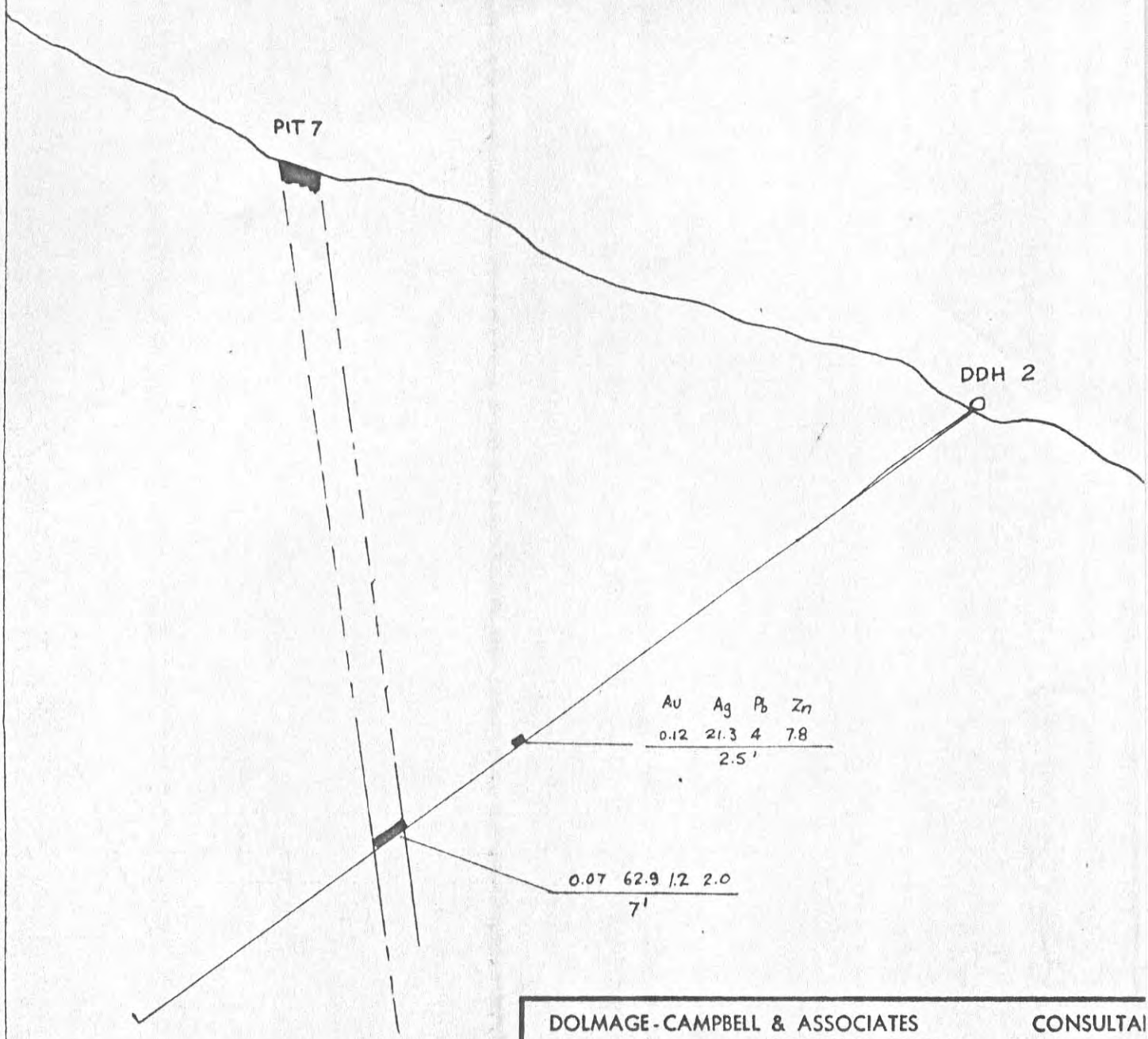
Total gross value - $1,436,000.

The potential of No. 1 Zone along strike and at depth has not yet been determined but appears to be promising and very definitely warrants considerable further surface and underground development. Certainly the Portal Orebody and the North Orebody must be further developed.

No. 1 Dike Zone: As shown in Figure 3 the original 1945 adit encountered and drifted along a shear zone largely occupied by a feldspar porphyry dike on the footwall (west) contact of which occur sulphide veins mixed with fault gouge. This same zone was exposed in the new adit crosscut 500 feet to the north.

Near the portal the sulphides occur in very lensey pockets and it is dubious if this area will return worthwhile reserves; however, in the new workings further north, (Fig. 3), a narrow vein branching from the footwall of the dike-fault zone returned ore values in silver, zinc, gold and lead for an interrupted length of 30 feet. This vein also returned good values from the early surface drill holes and it definitely warrants further investigation. The average grade for the 40 feet of best exposed portion of this vein is 0.10 Au, 29.0 Ag, 2.6% Pb and 3.2% Zn across 2.5 feet, for a gross value of $88.70 per ton.

No. 2 Zone: No. 2 Zone has been exposed by three bulldozer trenches spaced over 200 feet of strike length. Five samples from these trenches returned assays of 3 to 20 oz. Ag/ton, 3 to 12% Pb and 1 to 3% Zn across widths from 2 to 6 feet. More stripping should be done to properly expose, delineate and sample this structure.



DOLMAGE-CAMPBELL & ASSOCIATES CONSULTAI
VANCOUVER, CANADA

TAKLA SILVER MINES LTD.

OMINECA , B.C.

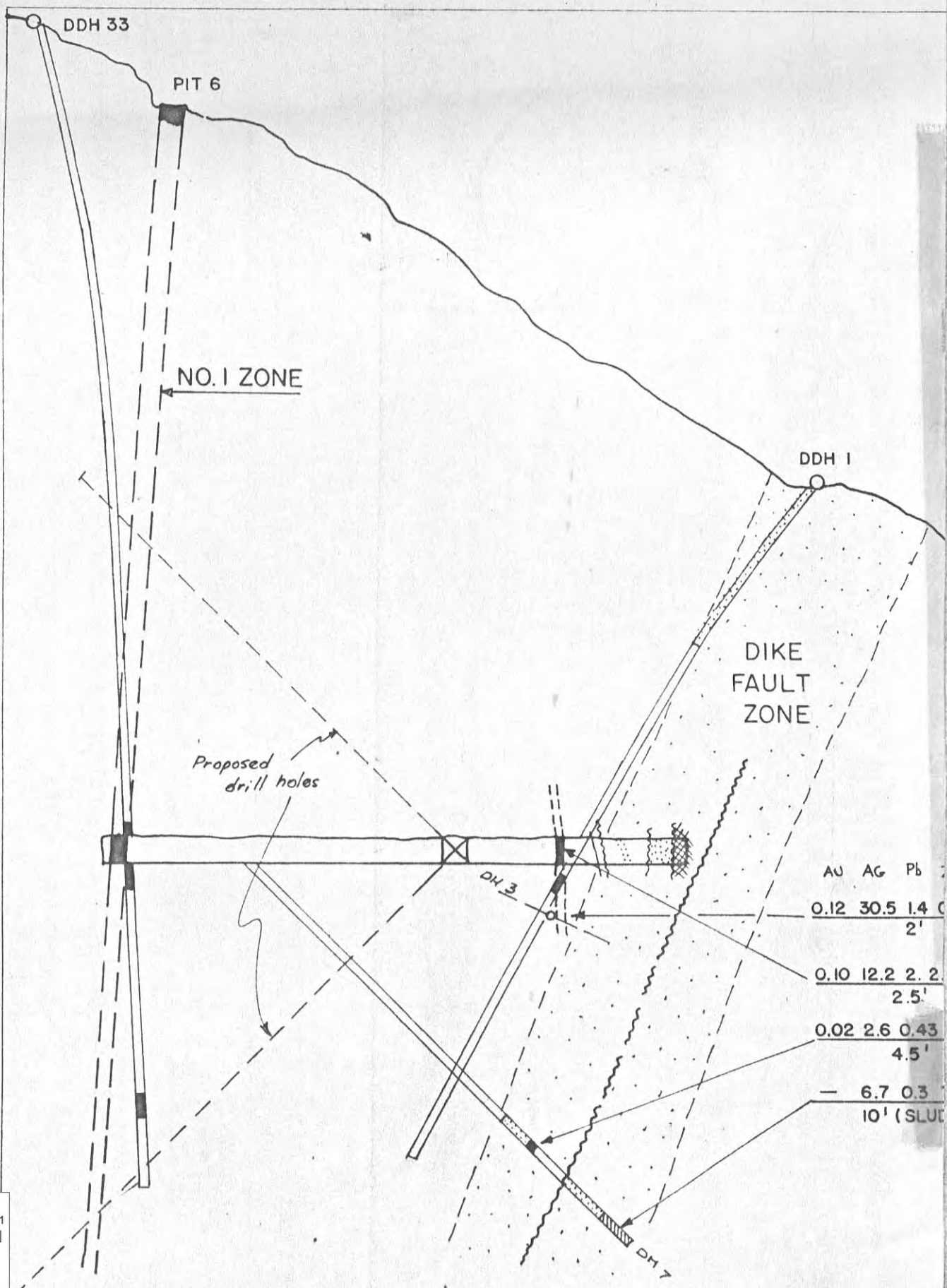
GEOLOGICAL CROSS SECTIONS

Nº 1 ZONE

SCALE: 1" = 40'

MAR 19 1966 _

FIG. 4



RECOMMENDATIONS:

Surface: Both No. 1 Zone, No. 1 Dike Zone and No. 2 Zone must be completely stripped by bulldozer and ripper for as much of the present trenched length as possible. Hand trenches should then be excavated across the bulldozer strip at 10 ft. intervals and properly channel sampled. All sampling should of course be related to new geological mapping.

Underground: Underground development recommended for No. 1 Zone is the drifting north and south from the crosscut intersection of the zone, (North end, Fig. 3), to explore the downward extension of the surface middle ore shoot. The vein zone warrants drifting for at least 200 feet in both directions from the crosscut.

In the footwall branch vein in the drift, near the fault-dike zone of the north end, also should be drifted to the north and a few rounds taken southward to expose it back towards the crosscut. The vein in the present north face assays 110 oz. Ag/ton across a width of 2.5 feet, therefore development northward is most worthwhile and should be extended for at least 100 feet or more, pending results from the underground as well as surface stripping.

In addition to the drifting recommended, the southern extension of No. 1 Zone from the north-end crosscut should be explored by diamond drill holes from the new adit, south to the portal. In conjunction with this it is recommended that the No. 1 Zone middle orebody be redrilled from the surface, with the holes collared uphill from the 1953 setups, and angled to intersect the zone half way between the surface pits and the adit level. This will give better depth correlation than did the early drill holes, most of which did not reach the zone.

ZINC-SILVER OREBODIES

As shown on Fig. 2, two extensive complex shear zones lie west and north of No. 1 Zone and are essentially parallel to it. Both zones are expressed on the surface as dark maroon and orange earthy gossan at least tens of feet in depth in most places, therefore very few bulldozer cuts managed to expose primary sulphides. Limited diamond drilling on No. 3 Zone in 1953-54 and on No. 4 Zone in 1965-66 has revealed the nature of these primary zones and has indicated local extensive tonnages of sphalerite in pyrrhotite, arsenopyrite and pyrite with small but consistent gold and silver contents. In 1954 such material could not be considered as possible ore because of the high transportation costs and low metal prices pertaining at that time. At present metal prices and with the P.G.E. Railway extending north past the property, these deposits are definitely of interest and, depending on tonnage reserves, could be ore.

No. 3 Zone: In the main showing on No. 3 Zone is a lense-shaped area of gossan, 400 x 100 feet, which lies along the footwall side of a steeply west-dipping fault zone. Exposures are poor and the mapping of many trenches not definitive therefore it is not possible to determine the exact nature of any lateral extensions of the main gossan lense at this time.

In 1953 four diamond drill holes (21-24) were drilled to explore No. 3 Zone but no core was recovered from the zone. In 1954 eight holes were drilled in the gossan lense and all returned gossan mixed with corroded sulphides and gold was reportedly panned from the sludges. The results of this drilling indicated that the primary sulphides are largely pyrite and arsenopyrite with minor sphalerite and galena all of which carries 0.10 - 0.40 oz. Au/ton, 1-15% Zinc and about 2-4 oz. Ag/ton. Both surface and drilling sampling results are difficult to assess from No. 3 Zone because of poor recovery and unsystematic drill hole and trench locations; however, the results do suggest that this zone definitely warrants further exploration to properly delineate it and determine its character and grade, particularly since it could be combined with material from No. 4 Zone to make a mill concentrate.

POTENTIAL: No detailed plan of No. 3 Zone is presented with this report; however, the writer has studied Mr. Bronlund's maps and drill hole sections and will refer to the general map (Fig. 2) of this report to generally describe the potential of this zone.

The general country rock in this area is limestone, however, the large lense of gossan on No. 3 Zone is closely associated with a discontinuous band of schist that appears to cross the zone at the lense. Beyond the schist, to the southeast, a scattering of hand and bulldozer trenches present a confused picture of the geology but it appears that the possible continuation of the No. 3 Zone is exposed in and southeast of Trench H1. In H1 and three trenches to the south a gossan-sulphide zone 15 feet in width returned an average grade of 0.06 Au, 2.10 Ag, 4.7% Pb and 5.2% Zn. Enough indications exist of continuity of this zone to the northnorthwest to suggest that it represents the southern extension of the main lense 550 feet to the northnorthwest.

The main gossan lense of No. 3 Zone was explored by four drill holes in 1953, all of which were collared in the zone. They indicated that the zone is at least 100 feet in depth and dips 60° to the west. Sludges from these holes returned 0.10 - 0.20 oz. Au/ton and 1.0 - 5.0 oz. Ag/ton throughout. In 1954 four more holes (27-30) were collared in the zone again and fanned down dip. They encountered gossan to a depth of 175 feet then intersected primary sulphides. A good example of the grade of these holes is DH29 from which the following assays were obtained:

	Au (oz)	Ag (oz)	Zn (%)
0-160 ft. - Gossan (sludge)	0.12	1.40	1.20
160-190 ft. - Sulphides (sludge)	0.24	1.33	2.09

In other holes the gold ranged up to 0.40 oz/ton, and the zinc up to 4%.

Two other holes (31-32) were drilled steeply from the west side of the zone and apparently did not reach the depth extension of it because of diverging dips.

The assays available from No. 3 Zone suggest values in gold, silver, lead and zinc, totalling $10.-$20. per ton (gross) at present metal prices, although much better work should be done to properly establish the grade. Drilling and trenching have indicated a possible tonnage potential of at least 1 million tons of this material, mostly as oxide, with the zone open to the south, and possibly the north, and at depth. The cost of reduction of this mineral assemblage will no doubt cut deeply into the gross value per ton but it will nonetheless add reserves to No. 4 Zone, being essentially similar in character of ore. Certainly the No. 3 Zone deserves further exploration to determine its tonnage potential and better define its grade.

RECOMMENDATIONS: Surface bulldozer stripping would be done on No. 3 Zone between the main lense and Trench H1 as well as at least 400 feet south from H1. Deepening and lengthening of existing trenches north of the main lense is also warranted.

In addition, a number of wireline core holes should be drilled across the zone at various depths to better sample it. This drilling should be concentrated at the main lense but several holes should also be drilled into the zone near Trench H1.

NO. 4 ZONE:

As shown on Figure 2, No. 4 Zone consists of a wide zone of branching lenses of heavily oxidized sulphides. In this zone the major primary sulphide is pyrrhotite, with subsidiary pyrite and arsenopyrite. Early sampling of Trenches M6 to M12, a distance of 550 feet, together with M14, 200 feet further north, returned an approximate average assay of: (lead assayed in only two trenches - 2%)

Sampled Width (ft.)	Au (oz/t.)	Ag (oz/t.)	Zn(%)
11	0.10	0.84	6.55

The above width is that of the sampled portion only, much of the gossan was not sampled and has not been included in the preceeding averages.

The zone was not exposed in trenches further north, down the slope, into Canyon Creek, (Fig. 2) although it apparently crops out at the creek. It remains open to the south from Trench M6.

In late 1965 and 1966 Takla Silver Mines Ltd. drilled 8 diamond drill holes across the No.4 Zone in the vicinity of trenches M10 and M12 (Fig. 2). These holes have not yet been precisely surveyed or logged, however, the core has been split and assayed therefore the results will be discussed here although no detailed plans and sections will be presented. Holes #1, 2 and 3 were drilled eastward below Trench M12, at -30°, -45° and -60° respectively and the two shallow holes intersected two zones, about 5 feet in width, of massive pyrrhotite at depths of 150 and 200 feet below surface. The third hole did not reach the target. No assays are yet available from these holes but the pyrrhotite has been reported as appearing very low in sphalerite. The results of these drill holes suggest that the zone pinches down with depth at M12; however, more shallow correlative holes should be drilled to properly define the zone here.

Holes #4 and to #8 were recently drilled from the east side of the zone near Trench M10. They are in a fan, both horizontally and vertically and returned the following assays from what appears to be the No. 4 Zone: (No data for DH#4).

Hole	Depth (ft.)	Width (ft.)	Au	Ag	Pb	Zn
5	90	6	0.14	0.60	0.28	9.25
	85	7	0.10	0.55	-	12.25
	110	20	0.06	0.70	-	6.50
6	135	13	-	0.62	-	3.22
7	110	7	0.01	0.65	0.18	11.00
8	160	11	Assays not available.			

POTENTIAL: The foregoing data on No. 4 Zone is very fragmentary but it appears evident that the zone is consistently high in zinc with low but significant values in silver. Judging from surface exposures and drill hole results it would appear that the zone extends for at least 600 feet laterally and 100 feet in depth, open in all dimensions, for an average width of 10 feet with an average zinc content

of about 7 percent or better. Using these figures, we derive a probable 50,000 tons with a gross value of approximately $20. per ton, with good potential for more of the same material.

RECOMMENDATIONS:

The old surface trenches on No. 4 Zone should be cleaned out by bulldozer and thoroughly resampled. Stripping should also be extended north and south of the known sampled portion to permit determination of the trend and width of zone.

Surface drilling should be extended north and south and at least two deep holes should be drilled beneath the best section of the zone to test for continuity at depth.

OTHER OCCURRENCES

Besides the ore zones described in the preceding pages the remainder of the Takla Silver property warrants additional careful prospecting and study by a qualified geologist. Last year a noteworthy occurrence of molybdenite was found in a road cut 1000 feet northwest of No. 4 Zone. This occurs within a granodiorite dike-like body and should be further investigated.

CONCLUSIONS

No. 1 Zone on the Takla Silver property comprises a worthwhile host for high grade silver-base metal ore, as attested in surface and underground exposures. It definitely warrants considerable development and holds the potential of containing enough reserves to support a small concentrator.

No. 3 and No. 4 Zones comprise good potential sources of considerable tonnages of complex but good grade zinc- (silver) ore. These zones warrant further development in order to determine if they have sufficient reserve to justify their metallurgical investigation.

Generally, the geological potential of the Takla Silver property is very good. The property has not been well explored to date and it definitely warrants more, well directed investigation of considerable extent. The writer recommends that such a program be directed by a resident manager who should be a technically trained person if at all possible.

Respectfully submitted,

Douglas D. Campbell, P.Eng., Ph.D.

DOLMAGE, CAMPBELL & ASSOCIATES
CONSULTING GEOLOGICAL & MINING ENGINEERS
808 BANK OF CANADA BUILDING
VANCOUVER 1, B.C.

August 1, 1968.

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, (Ph.D., 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.

5. I have presonally and repeatedly visited the Takla Silver property and reviewed all the available reports, maps and drill results up to March, 1966.

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., or Anchor Mines Ltd. (N.P.L.)

Respectfully submitted,

Douglas D. Campbell

Douglas D. Campbell, P.Eng., Ph.D.

Vancouver, B.C.