

CONQUEST EXPLORATION COMPANY LIMITED

SUMMARY REPORT

ON

THE EXPLORATION PROGRAM

SILVER TIP CLAIMS

Property of
A. ZABROVSKY
North Burnaby, B. C.

by

T. Hoveley

February 1958

Mile 710,
Alaska Highway,
February, 1958.

Mr. F. M. Connell,
President,
Conwest Exploration Company Limited,
1001 - 85 Richmond Street West,
Toronto 1, Ontario.

Dear Sir:

I herewith submit a summary of the exploration of the Silver Tip claims near Tootsee Lake in British Columbia during 1957.

The exploration program involved the expenditure of \$300,000.00 of which \$80,000.00 may be recovered from the sale of equipment and supplies which have now been removed from the property.

Actual exploration began March 21st, after a preparatory period involving the construction of a 17-mile sleigh road from the Alaska Highway and the gathering of supplies and equipment.

1950 feet of drifting and raising, 650 feet of underground diamond drilling involving 6 holes, 1908 feet of surface diamond drilling involving 11 holes, and a limited amount of trenching was completed. The work was mainly confined to zones 2 and 4.

* No. 4 zone is a persistent mineralized fracture or vein. Assays of 33 muck samples, involving 175 cars and representing a very small portion (a 38-foot length) of the upper part of the vein and encountered on the claims averaged 13.84 ozs silver and 15.43% lead. 11 channel samples representing the vein material where cut by an edit 600 feet deeper averaged 0.2 ozs silver, nil lead and 3.6% zinc.

1. * Trenching of No. 2 zone revealed that the high grade galena float is an insignificant portion of the vein material, probably less than 1%. The average value of samples from trenches on the zone was 5.53 ozs silver, 6.29% lead and 3.02% zinc.

2. * Diamond drilling of this zone suggested erratic mineralization. The average value of the best intersections was 3.08 ozs silver, 4.7% lead and 5.1% zinc.

COSSAN?

The indicated unit value of the Silver Tip mineralization is too low to support profitable mining under present conditions. In addition, the low unit value of the mineralization together with the decrease in depth indicates that further exploration has only a remote chance of finding ore.

The property has a possible distant future potential as a base metal property with a low precious metal content.

Respectfully submitted,

Trevor Horsley

Trevor Horsley.

A P P E N D I X (maps)

1. Road to Silver Tip Claims.
2. Early Sketch of Mineralized Area.
3. 100 Scale Plan and Sections. ✓ (2)
4. Geology Plan No. 4 Zone 5125 Elevation.
5. Channel Samples No. 4 Zone 5125 Elevation.
6. Muck Samples No. 4 Zone 5125 Elevation.
7. Surface Samples and Float Zones.
8. Longitudinal Section No. 2 Zone.
9. Longitudinal Section No. 4 Zone.
10. Sample Plan 10650 Drift - Lower Adit.
11. 20-Scale Plan of Lower Adit. *at portal?*
12. 20-Scale Plan of Lower Adit. *at face ✓*
13. Channel Samples - No. 4 Zone - 4535 Elevation.
14. Muck Samples - No. 4 Zone - 4535 Elevation.
15. Section 10400E - No. 4 Zone. ✓ ?
16. Section 10350E - No. 4 Zone. ✓
17. Section 10250E - No. 4 Zone. ✓
18. Section 10450E - No. 2 Zone. ✓

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INTRODUCTION

OPTION:

The Silver Tip claims were optioned late in the fall of 1956 from a group of 5 prospectors led by Mr. Andrew Zborousky. A large option payment would have become due November 1, 1957.

LOCATION:

The Silver Tip claims are located 4 miles north-east of Footsee Lake in the liard mining division in British Columbia, and 12 miles south of Milepost 701 on the Alaska Highway. (Refer to Map No. 1 in the Appendix)

GENERAL GEOLOGY:

The claims are on the eastern side of a limestone belt at its contact with a belt of argillite and quartzite. The limestone extends west for 6 miles to the Cassiar Batholith.

The general dip of the limestone bedding is south-east. The argillite dips eastward. Faulting apparently vertical, is evident at and parallel to the contact between limestone and argillite within two hundred feet of the mineralized area. (Refer to Map No. 2 in Appendix).

MINERALIZATION:

At the time of optioning, the showing, wholly within the limestone area, consisted of one major concentration of float containing high values in silver, lead, and zinc and several smaller concentrations of similarly mineralized float.

Fresh galena float averaged 150 ozs silver, 70% lead, and less than 1% zinc. A hard, rusty, oxidized material, hereafter referred to as gossan, and an oxidized powder, or ochre soil gave low values in silver and lead. The fresh galena is sparsely scattered in small pieces throughout the float zones.

MINERALIZATION: - (continued)

There are slumped limestone outcrops and much limestone rubble throughout the zones but no mineralized outcrops. The showings are in permafrost (Refer to Map No. 2 in Appendix for original sketch of showings and initial assays).

INITIAL WORK:

The prospectors labelled the float zones 1 to 8 in order of occurrence, south to north, along the nose of a hill, No. 8 being 2500 feet distant from No. 1.

No. 2 Zone was the most extensive zone; Nos. 1, 3, 4, and 5 Zones were of limited extent; Nos. 6 & 7 were merely inferred from the topography; No. 8 zone, 1500 feet from No. 5, was evidenced by a few small pieces of galena and a limited amount of gossan.

The prospectors had dug several large and small pits, the most notable being 3 pits on No. 2 zone which provided a few hundred pounds of galena plus gossan and ochre soil, ^{and} a pit on No. 3 zone which yielded gossan and ochre soil only. X

THE EXPLORATION PROGRAM

PLANNING AND PREPARATION:

The possibility of establishing a profitable mining operation at the Silver Tip depended upon the persistence to depth of galena carrying a high silver content.

The following local factors influenced plans for exploration of the Silver Tip claims.

1. The necessity to determine the approximate grade and extent of mineralization before the option payment became due November 1, 1957.

PLANNING AND PREPARATION: - (continued)

2. The showing is in permafrost. The limestone is severely slumped and fractured, and the possible vein matter heavily oxidized and friable.

3. The area of the showing was fully exposed to severe local winter weather conditions.

As a basis for investigation it was assumed that the mineralized zones were the surface expression of lenses or filled fractures at the contact of limestone and argillite.

Considering the local factors, trenching and diamond drilling would be limited to the summer months, results of diamond drilling would be unreliable unless checked by an adit, and would be unlikely to gain any information at depth. It was therefore decided to drive an adit about 250 feet below the crest of the hill in a direction normal to the strike of the mineralized zones and to begin this adit as soon as a camp could be established and mining equipment delivered.

To enable delivery of supplies and equipment a 17-mile sleigh road was built from milepost 701.6 on the Alaska Highway.

Driving of the upper adit began March 21st, 1957 (Refer to maps 2 and 3 for position of this adit)

UPPER ADIT:

After passing through frozen limestone talus, the adit intersected a partially mineralized and breccia-filled fracture cutting across limestone beds, the hanging wall of the fracture having been crushed by talus. At the point intersected, the foot wall of the mineralized fracture dipped moderately north and was striking east-west. This fracture was assumed to be No. 4 zone. No. 4 and 5 zones were later shown to be the surface expressions of this mineralized fracture.

UPPER ADIT: - (continued)

Fracturing and shearing of the limestone beds which dipped gently south-east to south-west with local irregularities continued for 300 feet south of No. 4 zone. Permafrost persisted to a depth of about 150 feet from the surface.

The adit was advanced a total of 510 feet to a point 225 feet vertically below No. 2 zone without encountering further significant mineralization.

This lack of any mineralization in the adit corresponding to zones 3 and 2 plus the northerly dipping altitude of No. 4 zone, suggested the possibility that zones 1, 2, and 3 were remnants of a vein roughly conforming to the surface of the hill above the adit.

On the basis of this theory, the upper adit was stopped and exploration concentrated on the No. 4 zone or vein.

EXPLORATION OF NO. 4 VEIN:

A. Upper Adit

Drifting east and west of No. 4 vein began May 15th.

Three rounds were driven east of the adit and several test holes were drilled, establishing that the mineralization was not persistent in that direction.

Drifting to the west along the mineralized fracture, which contained varying amounts of limestone breccia cemented by a frozen oxide powder, was continued for 65 feet, at which point surface talus was encountered. In the latter part of June when the snow had melted from the overlying area, it was noted that the above mentioned talus was part of a slide which was responsible for reversing the dip of No. 4 vein at the west end of the drift and moving it northward.

*would be approx. 230' of A-1400
C.P.B.*

A. Upper Adit - (continued)

A few pieces of galena, perhaps 1% of the material mined during the 65 feet of drifting, were encountered. The galena was carefully excluded from the channel and muck samples. A grab sample from a 30-pound piece (the largest found) of galena assayed 112.2 ozs silver and 72.25% lead.

Two short raises were driven up the dip in an attempt to establish the altitude of the vein more definitely and so facilitate exploration at depth.

The raise driven over the adit showed the mineralization dispersed in the talus. Then, richer layers of oxide powder containing both galena and lead carbonate had penetrated between the limestone beds which comprised downward to a moderate northerly dip.

The short raise driven south from a point 35 feet west of the adit passed out of the mineralization and into bedded footwall limestone and talus. The raise showed a trend to a reversed dip due to surface movement.

B. Diamond Drilling Underground

To further establish the latitude of the No. 4 vein, diamond drill holes 1, 2, and 3 were drilled near the portal of the upper adit. Much difficulty was encountered in drilling the frozen talus, breccia, and oxide powder, and the depth of the holes was limited. However, good recovery was obtained of the frozen oxide.

These holes together with assay values obtained are plotted on Map No. 15. The holes showed a local flattening of the dip of No. 4 vein.

C. Diamond Drilling on Surface

Early in June it was decided to drive a second adit 600 feet lower than the upper adit to intersect the No. 4 vein at depth.

To further establish the altitude and extent of this vein, a surface mounting was obtained for the JV diamond drill and holes 6 to 11 were drilled in that order. The position of these holes, together with assay values obtained are plotted on maps 3, 15, 16, and 17.

D. Lower Adit

The lower adit was collared June 19th in competent limestone which exhibited several persistent joint patterns and occasional evidence of thin bedding.

In the first 175 feet, 4 small mineralized fractures striking north-east and dipping moderately north-west were encountered. These fractures, where not completely closed, contained up to 2-inch widths of galena, sphalerite, pyrite, and calcite.

The position of these fractures, together with assays of grab samples of the sulphide material from these fractures is plotted on maps 3 and 11.

* At 250 feet from the portal, an 8-foot wide zone showing galena mineralization was cut. The south-east wall of the adit was slashed at this point and the galena was found not to persist in this direction.

The galena is here associated with jointing, the major joint system striking 055° and dipping 50° north. Some of these major joints are open a few inches and contain galena. Disseminated galena is associated with all the joints in the 8-foot width. Forming the foot-wall of this mineralized area and having the same altitude as the major

D. Lower Adit - (continued)

X joints is a 2-foot wide band of unmineralized calcite. There may be a continuation of the galena at some point on the south side of this calcite band.

Assays of this galena zone were disappointing and no further work was done on it. The assay values obtained from channel and muck samples are plotted on map No. 10.

The main geological features of the lower adit are plotted on maps 11 and 12.

No further mineralization of importance was encountered until the No. 4 vein was cut at 1200 feet from the portal.

At the point of intersection, the vein has a true width of 5 feet and strikes 70° and dips 60° north. The hanging wall is thin-bedded limestone; the foot wall is thin-bedded quartzite.

The vein material is completely oxidized, resembling a soft brown sugar. Channel and muck samples of the vein are listed below and are plotted on maps 13 and 14.

Channel Samples

Muck Samples

<u>East Wall</u>			<u>West Wall</u>					
<u>Ag</u>	<u>Pb</u>	<u>Zn</u>	<u>Ag</u>	<u>Pb</u>	<u>Zn</u>	<u>Ag</u>	<u>Pb</u>	<u>Zn</u>
.16	ozs .24	5.84	.12	Nil	.1	Nil	Nil	2.1
.2	Nil	4.6	.12	Nil	.1	.02	Nil	2.0
.06	Nil	5.6	.18	Nil	6.8	Nil	Nil	5.0
.08	Nil	7.6	.36	Nil	1.3			
.04	.2	11.0	.76	1.0	2.1			
.06	Nil	4.3						

The adit was advanced a further 70 feet, turning eastward in quartzite to follow the vein. A test hole from the adit established that the vein persisted at least 40 feet eastward.

EXPLORATION OF ZONES 1, 2, and 3:

A. Mapping

Map No. 7 represents a remapping and sampling of the surface of zones 1, 2, and 3 after the snow vanished in June. The assays confirmed the values obtained from sampling previous to optioning.

B. Trenching *

By early September, the permafrost had retreated sufficiently to allow trenching to a depth of 6 or 7 feet.

Trenching of No. 1 zone was hindered by large limestone boulders. However, the minor amount of trenching carried out uncovered no sulphides, and greatly lessened the amount of gossan and ochre soil present in the area trenched.

Several trenches were made across No. 2 zone. Much ochre soil containing a little gossan was uncovered. About 200 pounds of galena was uncovered in one trench and a few pieces in another trench. The trenches were channel sampled. The assays are plotted on Map No. 3, and are listed below.

* Channel 1

Ag	Pb	Zn
11.1 ozs	8.5%	6.1%
5.0	6.9	1.9
7.4	7.9	1.8

Channel 2

Ag	Pb	Zn
5.9 ozs	5.4%	4.7%
2.3	3.5	2.7

Channel 3

Ag	Pb	Zn
2.92 ozs	3.0%	3.1%
3.1	3.5	4.4

Channel 4

Ag	Pb	Zn
10.6 ozs	4.6%	1.0%
2.9	4.1	1.0
4.4	5.0	1.3
2.7	4.4	1.5
1.7	3.0	1.4
1.4	6.3	1.7
1.84	8.2	6.4

B. Trenching - (continued)

<u>Channel 5</u>			<u>Channel 6</u>		
Ag	Pb	Zn	Ag	Pb	Zn
12.10	9.9%	2.3%	2.06	5.6%	3.4%
17.02	13.0	2.0	1.72	5.8	2.6
9.70	9.2	2.2			
7.06	6.1	8.0			
5.42	7.8	2.1			

C. Diamond Drilling

Diamond drill holes No. 4 and 5 were drilled from the Upper Adit to search for the downward extensions of zones 2 and 3.

Hole No. 4 encountered one mineralized section. The slugged assayed 14.9 ozs silver and 57.5% lead. Two short sections of core recovered assayed 1.93 ozs silver and 2.6% lead and 22.62 ozs silver and 63.3% lead. Hole No. 5 encountered no mineralization.

X Diamond drill holes No. 12 to 16 were drilled from surface and the results were disappointing. Hole No. 17 was drilled at a dip of - 20° from the face of the upper adit. X It drilled into a large cavity and the return water was lost. However, some of the soft material encountered beyond the cavity stuck to the bit and this material resembled the oxide powder from No. 2 zone.

From the position of this intersection and the mineralized intersections in holes 12, 14, and 16 it is estimated that No. 2 zone is a steeply dipping zone, the surface expression of which has moved as much as 200 feet downslope.

The assay values of the best sections in drill holes 12 to 16 are tabulated and averaged below and are plotted on maps 18 and 19.

DDH #	Depth	In	Ag	Pb	Zn
DDH # 12	*20'	○ .0275 ozs.	6.64 ozs.	19.9%	1.5%
DDH # 13		○ Traces only			
DDH # 14	*17'	○	1.29	1.2	5.9
DDH # 15		○ Nil			
*DDH # 16	*57'	○	1.31	2.0	7.9

C. Diamond Drilling - (continued)

*Probably cut vein @ a very small angle to the dip.

*Average value from diamond drill holes 3.08 ozs Ag. 4.7% Pb. 5.1% Zn.

NO. 8 ZONE:

A sample composed of a collection of partially oxidized pieces of galena float from No. 8 zone assayed 29.2 ozs silver and 27.3% lead.

A few other pieces of galena were found downslope from the No. 8 zone, one piece weighing 30 pounds.

A minor amount of trenching done on No. 8 zone uncovered a few more small pieces of galena and very little gossan.

DECISION TO TERMINATE EXPLORATION

At the end of September, with a month remaining before payment was due on the Silver Tip option, there was no indication of ore on the claims which could be profitably mined under present economic conditions. The mineralization had a low unit value in place and was so heavily oxidized as to preclude a good mill recovery. Furthermore, the drop in silver and lead values with increase in depth in No. 4 vein indicated that even in the event that any fresh sulphide bodies existed at depth, and such sulphides would not be profitably mineable in the near future.

*Mr. R. L. Segsworth, consulting engineer, at this time recommended that if an easement of the terms of the option could be obtained, the property should be retained for its possible future potential, and that in order to determine the possible future potential before the camp was closed, a deep hole should be drilled through No. 4 vein from the lower adit, drifting should continue eastward on No. 4 vein from the lower adit, and No. 8 zone and the ore intersected 250 feet inside the lower adit should be further explored.