

800197

SUMMARY REPORT  
SILVER RAY MINING & EXPLORATION LTD.,  
INVERMERE AREA  
BRITISH COLUMBIA

Jan. 4, 1973  
Vancouver, B.C.

W.G. Hainsworth P.Eng.

82K/9

CONTENTS

|                       |                 |
|-----------------------|-----------------|
| Introduction ..       | .. Pg. 1        |
| Property ..           | .. 1            |
| Location & Access ..  | .. 1            |
| Topography ..         | .. 2            |
| Geology ..            | .. 2            |
| Claim Geology ..      | .. 2            |
| Drilling ..           | .. 3            |
| Discussion ..         | .. 33           |
| Recommendations ..    | .. 4            |
| Certificate ...       | .. 6            |
|                       |                 |
| Maps                  |                 |
| Claim Location ..     | Following Pg. 1 |
| Drill Section ..      | In Pocket       |
| Picket Line Layout .. | In Pocket       |

## INTRODUCTION

The Invermere property of Silver Ray Mining and Exploration Ltd., was twice visited by the writer. The first visit was on May 7, 1972 and was followed by a report dated May 19, 1972 making specific recommendations on an exploration program.

On August 31, 1972, following the completion of the summer program, the writer again visited the property in order to check out the results of that program. This report is the outcome of that visit.

## PROPERTY

The Silver Ray claim block, located in the Golden Mining Division of B.C., is composed of thirty-nine (39) contiguous claims held by right of location. The claims were originally staked by Mr. G. Larrabee, who in turn has optioned them to Silver Ray Mining and Exploration Ltd.

The claims have all had assessment work recorded against them.

The claims forming the block are:

| <u>Name</u>        | <u>Record Number</u> | <u>Expiry Date</u> |
|--------------------|----------------------|--------------------|
| Mag 1 & 2          | 3111 & 3112          | May 20, 1973       |
| Brown Bear 1 & 2   | 12940 & 12941        | May 3, 1973        |
| Discovery 2 - 7    | 12947 - 12952        | May 3, 1973        |
| Silver Chief 1 - 3 | 13001 - 13003        | May 25, 1973       |
| Puzzler 1 & 2      | 12934 & 12935        | May 3, 1973        |
| Wilderness 1 - 8   | 15716 - 15723        | June 12, 1973      |
| Nimrod 1 & 2       | 9822 & 9823          | March 15, 1973     |
| B 1 - 14           | 15806 - 15819        | July 31, 1973      |

## LOCATION AND ACCESS

The claim block lies sixteen miles west and slightly north of the town of Invermere. The lower limits of the block lie close on the marsh ground of Horsethief Creek and extend up the southern slope of Starbird Ridge almost to the peak. Co-ordinates of the property are approximately 50° 35' North Latitude and 116° 22' West Longitude. Its N.T.S. identification is 82 K/9.

Access to the claims is made by following the Horsethief Creek road for some 20 miles from Invermere. At this point, a logging road departs up the side of the ridge for 4 miles. Due to the precipitous nature of the side hill, a four-wheel drive vehicle is highly recommended. It should be noted that this road crosses two slide areas of good proportion near the top.

### TOPOGRAPHY

The topography of the claims can be described as rugged. The southernmost claims are located almost in the valley of Horsethief Creek at an elevation of 4,000 feet. At the trenching and drilling area, midway in the group, the elevation is around the 6,000 foot mark. The northern boundaries of the claims extends beyond the 9,000 foot peak.

The young mountain ridges of the area give rise to steep slopes which are heavily drift covered. In addition, the greater majority of the claims lie below the tree line. Spruce, balsam and fir are plentiful and could supply sufficient timber should a mining operation be carried on.

### GEOLOGY

The general geology of the area is documented in my report of May 19, 1972. The reader is referred to this report for a general review of the regional geology.

### CLAIM GEOLOGY

The recommendations of the May 19, 1972 report included the following statement - " All rock exposures, whether outcroppings or trench exposures, should be carefully examined, geologized and sampled if mineralized. The location of these points should be tied into a grid system composed of taped lines running north-south every six hundred feet." The line cutting has been carried out and rock exposures have been related to these lines. Unfortunately the company management did not decide to carry out the geological program.

During my examination of August 31, 1972 the writer walked the northern baseline for some 5600 feet to check out the terrain and geological conditions of the western portion of the property. The following observations are pertinent to the north and western portions of the claims, in addition to the active area where the drilling and trenching took place.

On the whole the property is underlain by a sequence of shales, argillites, quartzites and to a lesser extent, limestones. These formations are part of the sedimentary horizons of the Purcell Formation.

During the examination of the trenches and various outcroppings in the north-west sector it became obvious that the interlayering of the shales, argillites and quartzites was of a random structure. In many places the gradation between formations took place over great lengths whereas conversely, many exposures showed sharp abrupt contacts.

The quartzite bands tended to be of a lenticular shape and of narrow dimensions. In general they had short strike lengths. Mineralization in the form of veinlets of quartz, galena, some sphalerite and occasional brown carbonates was normally associated with this formation.

The shales and argillites are the main country rocks. They form the greater bulk of the claim groups formation. Many of the argillite members are carbonaceous.

The limestone bands are more frequently revealed in the area of the trenching. The writer suspects more limestone underlies the property than was observed during the examination. The black, fine-grained limestone is often, like the quartzites, associated with mineralized veinlets.

Several exposures of intrusive formations were observed. In one of the trenches granitic material was exposed at one end of the trench. A relatively large exposure in the north west portion of the property revealed granite gneiss.

### DRILLING

Eleven packsack holes totalling some 383 feet, were put in along the shear structure. The majority of the holes were of short lengths, due primarily to the non-coring ability of the formations. These shorter holes were later used as blast holes to open up the trenches.

Reference should be made to the accompanying map prepared by Shire Geophysical as to the drill hole locations.

The only holes to core were #1, #2 and #3A holes. The core had been badly juggled about during its transportation from the property to Invermere. Examination of the cores was of slight value due to this poor handling. What core was seen showed mostly quartzites and some argillites and limestones. Little mineralization had been intersected. What mineral had been cut was assayed and ran:

Hole # 1 - 0 to 8 ft - 0.05% Pb; 0.46% Zn; Tr Ag.  
Hole # 2 - 4ft - unknown measurements - 0.30% Pb; 0.86% Zn; 0.15 oz/T Ag.  
Hole # 3A - 0 to 2 ft - 1.25% Pb; 0.21% Zn; 0.68 oz/t Ag.  
Hole## 3A - 36 to 41 ft (7) - 0.14 % Pb; 0.07% Zn; Tr Ag.

In all, the drilling resulted in little contribution to the property's knowledge.

### DISCUSSION

Examination of the trenches has shown the mineralized veinlets to be short, thin structures carrying variable amounts of mineralization. Although not typical, they appear to be of the gash vein type. If this is true one would expect to find an accumulation of these veinlets only in the vicinity of the shear. They would be of short dimensions and arranged roughly in the same orientation. All these conditions exist save the last. There appears to be no pattern to the structures. That the mineralized structures are tied to the shearing appears to

have no opposition. Trenching across the shear exposes no mineralization beyond 10 to 15 feet from the shear. Blasting and trenching along the shear exposes mineralization.

On the above basis it may be assumed that whatever mineralization exists on the Silver Ray claims is definitely related to major shear structures. To date the mineralization exposed is of insufficient grade and dimensions to be classified as ore.

The bulk of the formations are of the incompetent type tending to deform more than rupture. The shales and argillites would slide along their layering axis when subjected to strong forces. This would result in 'tight formations' allowing little open space for mineralizing solutions to fill. The quartzites, however, are more competent as are the limestones. They would rupture forming fractures, shears and/or faults - areas that could be occupied by the mineralizing solutions. From the abbreviated examination of the surface geology, these latter formations appear to be in the minority within the claim boundaries. If this is true the possibilities of further mineralized areas appears remote.

The property is in an extremely hilly location. A good amount of road work was done by the summer crews prior to the exploration program. Should further programs be laid on for the property, it is emphasized that the resulting expenditures in road construction could be a substantial portion of the budget.

In a report dated October 29, 1970, F.L. Croteau P.Eng. suggests for the property a series of flat drill holes from the base of the hill. This location is more convenient from a drilling standpoint than other positions on the sidehill but hole lengths could be an unknown factor. On the basis that the company might consider this recommendation at a later date, certain claims down hill and on strike from the main showing should be considered strategic.

The discussion leads to the end result that the claims are, in toto, an unnecessary financial burden to retain. Their topography makes for expensive exploration programs. The results to date are teasing and a far cry from encouraging.

#### RECOMMENDATIONS

On the basis of the work to date, the writer recommends that the company seriously consider the dropping of the greater bulk of their claim grouping and consolidate the group into a package of ten claims. These ten claims would include those upon which trenching and drilling has already been done, and those in the immediate vicinity which might eventually see future work. I refer the reader to the plan of the claim group which forms part of this report.

With respect to future work it would be the companys option whether, and when, to proceed with deep horizontal drilling. At this time, considering past work performances and present metal prices, the writer is of the opinion that it would be wiser to await a more propitious time before initiating another exploration program.

Respectfully submitted,

Vancouver, B.C.  
January 4, 1973

W.G. Hainsworth P.Eng.



CERTIFICATE

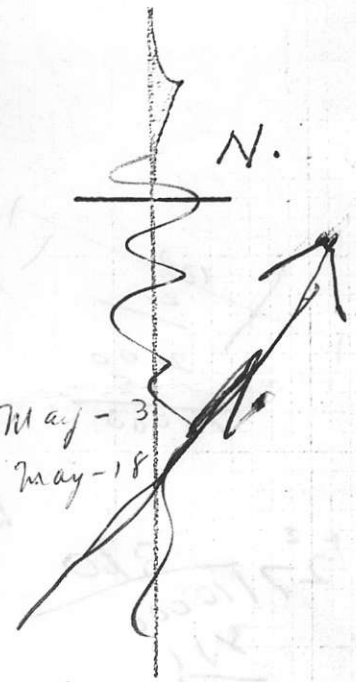
I, WILLIAM G. HAINSWORTH, HEREBY CERTIFY:

1. That I am a geologist residing at 3473 Capilano Road, North Vancouver, B.C.
2. That I am a graduate of the University of Western Ontario, London, Ontario with a B.Sc. degree and am a registered member of the Association of Professional Engineers of the Province of British Columbia.
3. That I have practiced my profession for twenty-three years.
4. That I have no financial interest, either direct or indirect, in the subject properties, in the securities of Silver Ray Mining and Exploration Ltd., (N.P.L.) nor in that of any of its affiliates and that I do not expect to obtain any such interest.
5. That the information contained in this report is based on my personal knowledge of the general area and specific examinations of the property pertained to in this report on May 7 and August 31, 1972.

W.G. Hainsworth P.Eng.



|      |      |                  |                     |                     |
|------|------|------------------|---------------------|---------------------|
| B-14 | B-13 |                  |                     |                     |
| B-12 | B-11 | DISCOVERY<br>2 ✓ | WILDERNESS<br>8 ✓   | WILDERNESS<br>7 ✓   |
| B-10 | B-9  | DISCOVERY<br>3 ✓ | BROWN BEAR<br>2 ✓   | BROWN BEAR          |
| B-8  | B-7  | DISCOVERY<br>4 ✓ | NIMROD<br>1 ✓       | NIMROD<br>6 ✓       |
| B-6  | B-5  | DISCOVERY<br>5 ✓ | MAG<br>1 ✓          | MAG<br>2 ✓          |
| B-4  | B-3  | DISCOVERY<br>6 ✓ | PUZZLER<br>1 ✓      | PUZZLER<br>2 ✓      |
| B-2  | B-1  | DISCOVERY<br>7 ✓ | SILVER CHIEF<br>3 ✓ | SILVER CHIEF<br>1 ✓ |



May - 3  
May - 18

TR. #1  
N 65° E  
200 x 15' x 3' =  
9000 cu. ft =  
223 cu. yds  
Back to b.  
per acre ft

39 M.C.S

17 claims

23 - New

LOCATION MAP  
VARIOUS CLAIMS - INVERMERE  
SILVER RAY MINES LTD (N.P.A.)  
Scale: 1" = 1875'  
OCT. 28, 1970  
H. Croutan

3  
3

