2/86

GEOLOGICAL AND PROSPECTING REPORT

on the

PASS 2 MINERAL CLAIM

Latitude 49°11' North Longitude 118°30' West

N.T.S. 82E/1+2 Greenwood Mining Division British Columbia

for
REX SILVER MINES LTD.
Calgary, Alberta

bу

C. H. Aussant, P.Geol.

TAIGA CONSULTANTS LTD.

#100, 1300 - 8th Street S.W.
Calgary, Alberta T2R 1B2

NOVEMBER 1984

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#### CERTIFICATE

- I, Claude Henry Aussant, of 31 Templebow Way N.E. in the City of Calgary in the Province of Alberta, do hereby certify that:
- I am a consulting geologist with the firm of Taiga Consultants Ltd. whose offices are located at Suite 100, 1300 - 8th Street S.W., Calgary, Alberta.
- 2. I am a graduate of the University of Calgary, B.Sc. Geology (1976).
- 3. I have practised my profession continuously since graduation.
- 4. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- 5. I have personally worked on the Pass 2 mineral claim on September 30 and October 1, 1984, and supervised exploration work carried out thereon.
- 6. I did not receive and do not expect to receive any interest, directly or indirectly, in the property described herein nor in the securities of Rex Silver Mines Ltd. or its affiliates, in respect of services rendered in the preparation of this report.

DATED at Calgary, Alberta, this 2nd day of November, A.D. 1984.

Respectfully submitted,



Claude H. Aussant, B.Sc., P.Geol.



PERMIT TO PRACTICE TAIGA CONSULTANTS LTD.

Signature

Date Nan 2 8 4

PERMIT NUMBER PROPERTY PROPERTY

#### INTRODUCTION

At the request of Mr. S. J. Stricker, Vice-President of Exploration for Rex Silver Mines Ltd., Taiga Consultants Ltd. was contracted to carry out a reconnaissance mineral exploration program on the Pass 2 mineral claim, located 20 km north of Grand Forks, British Columbia.

On September 30 and October 1, 1984, four man-days of reconnaissance exploration were conducted on the property, designed to evaluate the gold potential of the claim. The exploration approach employed consisted of reconnaissance mapping combined with detailed prospecting.

#### Location and Access

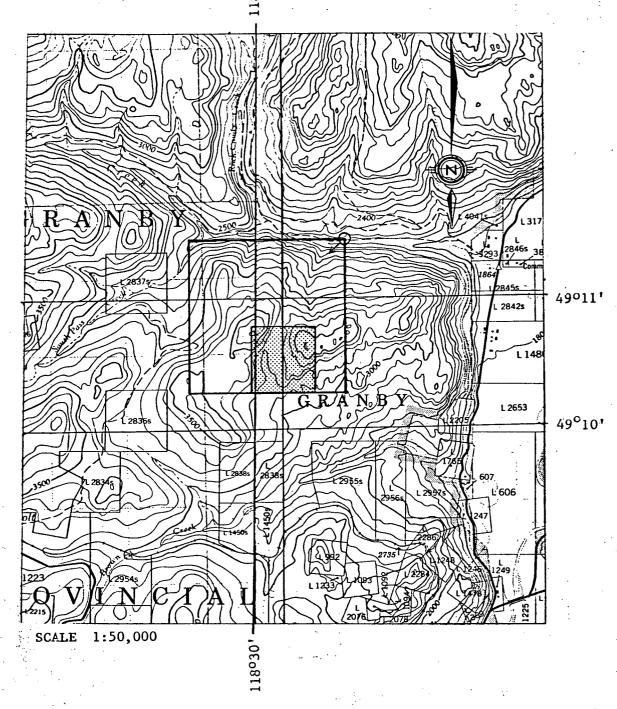
The property (Figure 1) is situated in southern British Columbia, south of the confluence of South Pass Creek and Rock Candy Creek, 20 km north of Grand Forks, and 8 km east of Jewel Lake. The claims is located at approximately 49°11' North latitude and 118°30' West longitude in the Greenwood Mining Division.

Access to the Pass 2 claim is via the main Granby River road north from Grand Forks for 6 km, and then for 6.4 km along the Rock Candy Mine all-weather road which crosses the northern part of the claim.

#### Property and Ownership

The Pass 2 is a 16-unit mineral claim staked under the modified grid system, and registered in the name of Rex Silver Mines Ltd. A portion of the claim encompasses pre-existing mineral claims which are in good standing; this area has been excluded from hte claim and is depicted on Figure 1 by hatchured pattern.

Claim Size Units Record Date of Record Pass 2 4 x 4 16 3662 March 28, 1983



Area excluded from the Pass 2 claim due to pre-existing mineral claims in good standing.



FIGURE 1 PASS 2 CLAIM

PROPERTY LOCATION MAP

## Physiography

The Pass 2 claim is situated in the Monashee Mountains subdivision of the Interior Plateau. The dominant features are the valleys of the Granby River and Pass Creek. The topography is fairly mature with most peaks rounded by glacial action.

The lowest part of the claim area (213 m ASL) is in the valley of Pass Creek, and the highest point is an un-named peak in the south portion of the claim at about 1,050 m ASL. The topography is characterized by steep rocky hills and rounded ridges with abundant outcrop exposures.

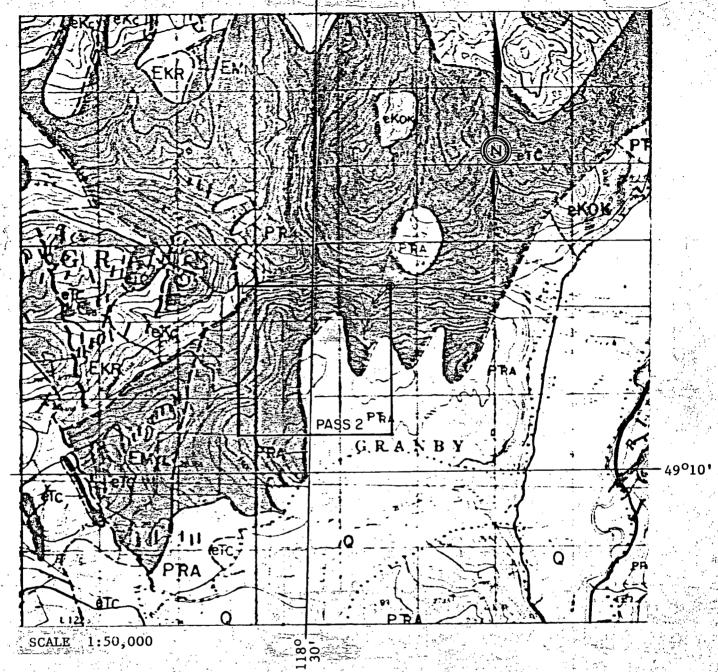
#### REGIONAL GEOLOGY

The oldest rocks in the area belong to the Anarchist Group of late Permian / early Triassic age. Formational members include chert, cherty argillite, greenstones (lavas, breccias, tuffs), and greenschist. The rocks are moderately metamorphosed and altered, with more intense alteration evident along contacts with intrusive rocks. These margins are characterized by abundant chlorite and epidote, and finely disseminated pyrite. These rocks are cut by a series of northeast trending fracture or shear zones typically well silicified.

This metasedimentary and metavolcanic formation was affected by the widespread Juro-Cretaceous orogeny during which the Nelson/Okanagan intrusions were emplaced. These intrusive rocks consist of granodiorite, minor quartz diorite, and porphyritic granite.

Resting unconformably upon the Permian rocks are the basal Kettle River Formation and the Nimpet Lake member, both belonging to the Penticton Group of middle Eocene age. These consist of lithic tuffaceous argillite, conglomerate, and trachyte. Contemporaneous intrusions include numerous plutonic bodies of syenitic to dioritic composition of the Coryell intrusive rocks, which are seen cutting all rocks in the claim area.

The regional geology is depicted on Figure 2. Table 1 summarizes the geological stratigraphy.



1	- ''	
		Quaternary, alluvium and drift
		CORYELL INTRUSIONS, syenite, quartz monzonite
		NIMPET LAKE MEMBER, trachyte, trachy-andesite
	EKR	KETTLE RIVER F <sup>m</sup> , tuffaceous argillite, volc.wacke
		VALHALLA INTRUSIONS, granodiorite
1		OKANAGAN BATHOLITH
	PT A	ANARCHIST GROUP, greenstone, quartzite,
	,	greywacke, limestone, paragneiss

FIGURE 2

PASS 2 CLAIMREGIONAL GEOLOGY MAP

0 1000 2000 METRES

Quaternary	Glacial and Recent	modified drift; clay, sand, gravel
Tertiary	Middle Eocene	Coryell syenite; Penticton Group.  Marron Formation - trachyte Kettle River Formation - lithic tuffaceous sandstone, conglomerate
Juro-Cretaceous	upper Jurassic/ lower Cretaceous	Nelson Intrusives - granodiorite, quartz diorite
Permo-Triassic		Anarchist Formation - chert, cherty argillite, greenstone

#### PROPERTY GEOLOGY

Intrusive rocks dominate the Pass 2 claim, represented by both Coryell and the less abundant Nelson intrusives. The Coryell rocks form a narrow belt projecting southward through the western part of the Pass 2 claim. Isolated remnants of Anarchist Group and Nelson intrusives occur in the northwest and southwest parts of the claim. One large irregular body of Nelson granodiorite extends through the central portion of the claim. Several isolated remnants of the Anarchist Group roof pendants were noted within this Nelson intrusive mass.

Andesite and quartzite of the Anarchist Group underlie the southeast portion of the claim with numerous small roof pendants occurring throughout the north-central portion of the claim. These rocks are fairly uniform in composition except where they are intruded by Coryell or Nelson rocks. Here, they have been propylitically altered and silicified.

All of the above rocks have been deformed by a series of faults and shears trending north-northeast, dipping steeply eastward. Generally, the lines of fracture are irregular and numerous, and where intense, show varying degrees of silicification, in some cases completely replacing the rock between fractures.

The property geology is illustrated on Figure 2 and on the accompanying geology map which depicts the work completed on the property.

#### ECONOMIC GEOLOGY

The Pass 2 claim occupies an area which is favourable for the discovery of replacement type gold deposits. In several areas, the altered andesites, which appear to constitute inclusions in the alkali-syenite intrusive rocks, have undergone intense silicification. This feature is particularly notable where fissure or shear zones but the andesitic country rock. The silicification is probably related to the adjoining intrusive rocks. It is probable that this situation is due to hot solutions following the fissure systems in the country rock, percolating through these channels, and upon meeting with changed conditions in temperature and pressure, depositing the load of vein matter replacing the original rock with this material. It appears, however, that the expected metallic sulphides were lacking in the solutions, as only minor amounts of mineralization were noted in these areas.

#### Maple Leaf Occurrence

The Maple Leaf precious metal occurrence, reported to be situated on the property, was found to be of only minor significance. Firstly, its location appears to be somewhat removed from that indicated by the B.C. Department of Mines information. Secondly, only one of the workings reported (Hedley, 1937) was located. It consists of a small open cut in an intensely fractured and silicified zone in quartzitic country rock. The quartz veining is traceable over a distance of 150 m east-west and 200 m north-south. The zone of silicification occurs adjacent to the Coryell contact to the west. Propylitic alteration is quite noticeable within this silicified zone. A quartz stockwork within the Anarchist Group was located and sampled in 1983, but returned low gold values. As indicated on Map 1, this showing is located in the north-central part of the Pass 2 claim.

Several other quartz stringers and silicified fractures on the claim were examined and sampled in 1983, returned negligible gold values.

### 1984 FIELD PROGRAM

In order to further evaluate the mineral potential of the Pass 2 claim, a geologist and a prospector spent two days conducting a reconnaissance exploration program on the property. The exploration approach employed consisted of reconnaissance mapping combined with prospecting.

The reconnaissance mapping confirmed the predominance of intrusive rocks on the Pass 2 claim, containing isolated roof pendants of quartzite and mafic andesite. No new quartz veining or mineralization was found.

#### CONCLUSIONS AND RECOMMENDATIONS

Four man-days were spent exploring the property which is underlain by Coryell syenite and Nelson granite containing isolated roof pendants of quartzite and mafic andesite of the Anarchist Group.

The exploration program consisted of prospecting along with reconnaissance geological mapping. The quartz veining discovered in 1983 was re-examined and found to be of minimal interest. No mineralized occurrences were delineated by this brief exploration program.

It is recommended that no further work be done on this property and that the Pass 2 claim be allowed to lapse.

## APPENDIX

Summary of Personnel
Summary of Expenditures

## SUMMARY OF PERSONNEL

Field	Time
C. H. Aussant, P.Geol. 31 Templebow Way N.E. Calgary, Alberta TlY 5B5	Sep.30, Oct.1
T. J. Termuende (prospector) Wild Horse Farm Fort Steele, B.C. VOB 1NO	Sep.30, Oct.1

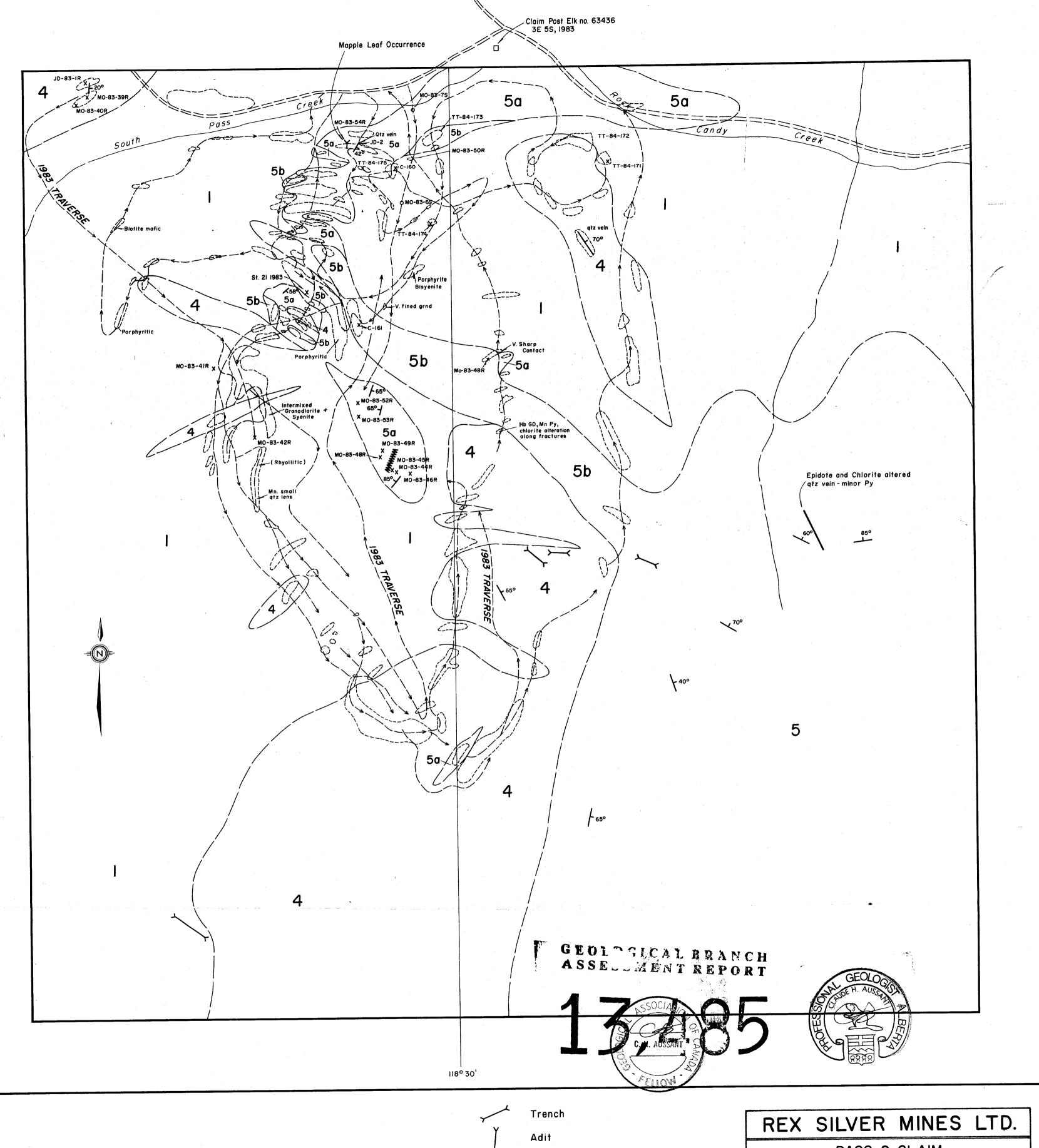
# Office

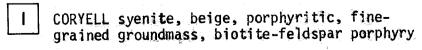
- C. H. Aussant, P.Geol.
- J. W. Davis, P.Geol.
   116 MacEwan Drive N.W.
   Calgary, Alberta T3K 2P7
- G. L. Wilson, B.Sc. 60 Ranchridge Rd. N.W. Calgary, Alberta T3G 1Z9
- E. J. Barnett (secretary) #103, 324 - 2nd Ave. N.E. Calgary, Alberta T2E 0E4

## SUMMARY OF EXPENDITURES

Pass 2 Mineral Claim Greenwood Mining Division British Columbia

Pre-Field Preparation	\$ 184.22
Field Personnel Project Geologist 2 days @ \$250/diem 500.00 Junior Prospector 2 days @ \$145/diem 290.00	790.00
Transportion (travel expenses, mob & demob, truck rental, fuel, equipment rental)	320.76
Field Accommodation 4 man days @ \$40/diem	160.00
Miscellaneous (maps, reproductions, phone)	45.17
Post-Field Compilation (report writing, drafting, secretarial)	500.00
TOTAL	\$ 2,000.15





4 NELSON granodiorite, medium-grained

ANARCHIST GROUP

a quartzite, white to greenish-grey, massive
b mafic andesite, very fine-grained, dark
greenish-grey, hornblende mafics

Trench

Adit

Fractures

Rock Sample Location

Stream Silt Sample Location

Geochemical Results Au (ppb) Ag(ppb)

Geological Contact

Outcrop Area

Traverses

# REX SILVER MINES LTD. PASS 2 CLAIM GEOLOGY & TRAVERSE MAP

DATE NOVEMBER/84

PROJECT BC-83-2E

MAPPED/DRAWN BY

C. AUSSANT

SCALE I:5000

METRES

TAIGA CONSULTANTS LTD

MAP I