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Not in file

BRENDA MINES LTD.
EXPLORATION GROUP

REPORT on D.D.H. - SS-13-80

SIWASH SILVER MINERAL PROPERTY

Latitude 49° 47', Longitude 120° 20'

Similkameen Mining Division

N.T.S. 92H/16

Del W. Ferguson

December 1980

part 2
of 2

MINERAL RESOURCES BRANCH ASSESSMENT REPORT 8926 NO. _____
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I INTRODUCTION

a) History of Property

The Siwash Creek area has been prospected since the early 1900's. Several adits have been driven into rock faces along creek banks and numerous hand trenches, following mineralized leads, have been excavated throughout the valley. Evidence of old placer workings is also apparent along the banks of Siwash Creek.

During the 1960's, mineral exploration was carried out in the area by several companies including Quality Exploration Corporation Ltd., Cyprus Exploration Corporation Ltd. and Diana Explorations Ltd. More recent work on the property was executed by E. Mullin of Princeton, B.C. and D.E. Agur of Summerland, B.C. The holdings of these persons were optioned to Brenda Mines Ltd. in April 1979 for further exploratory work.

b) Topography and Vegetation

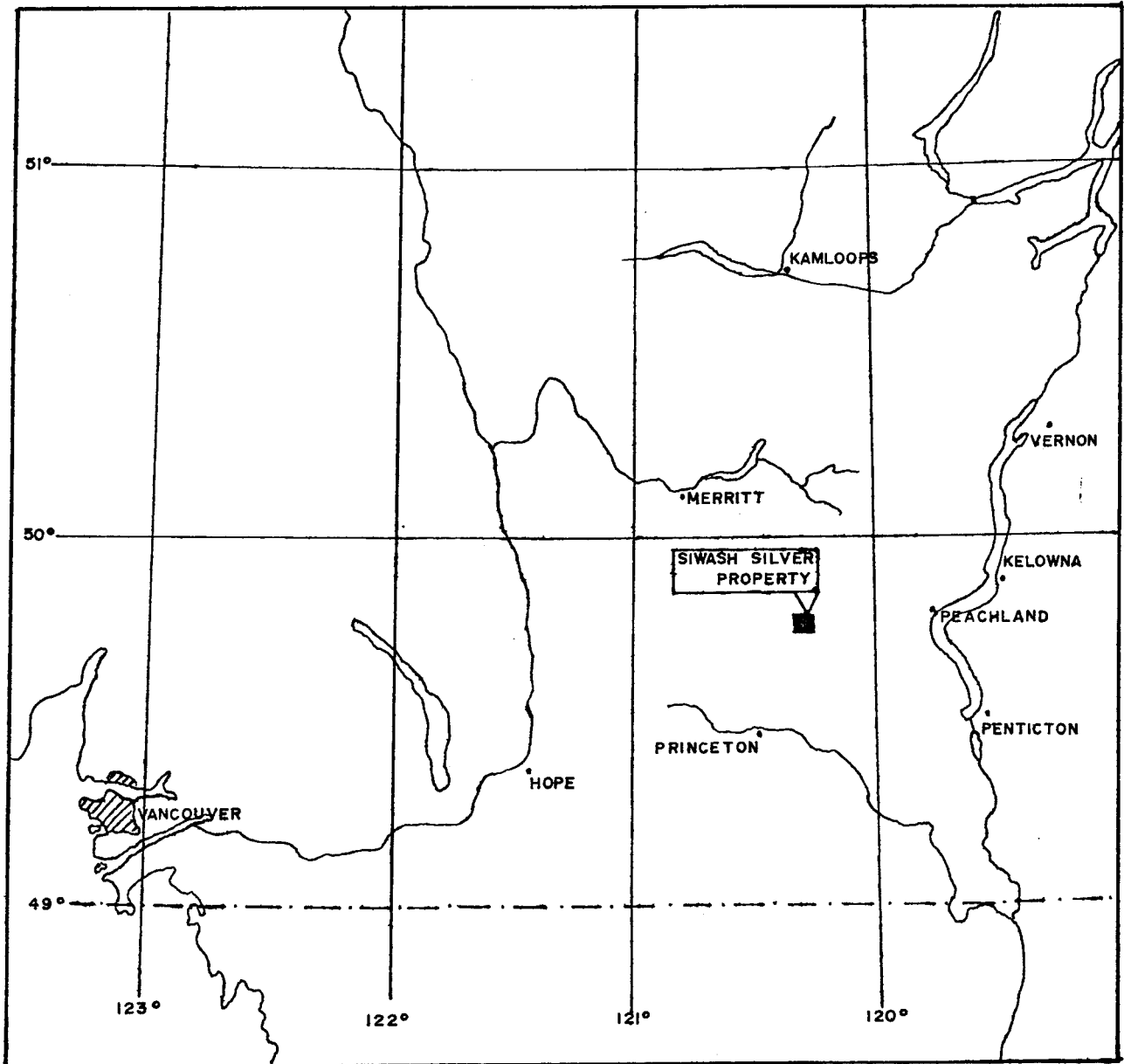
The property occupies the deep, narrow, terraced Siwash Creek valley and its surrounding plateau lands. Major tributaries include Tepee, Galena and Gavin Creeks flowing into the main valley from the east and Saskat Creek entering from the west. All of these creeks occupy the base of very steep, narrow valleys. Vegetation consists generally of well spaced stands of jackpine, fir and spruce with a lush, grassy undergrowth. Some of the more immature forests consist of tight growths of scrawny jackpine. Taigalders flourish in swampy areas within the plateau and along steep valley sides.

II PROPERTY DESCRIPTION

a) Location and Access

The Siwash Silver Property is located 38 air kilometres northeast of Princeton, B.C. The claims are situated along Siwash Creek, west of Tepee Lakes and east of Missezula Lake. There are presently two access roads to the property. One is via an 8 kilometre forestry access road which branches off of the Summerland-Princeton road, north of Osprey Lake. The other branches off of the Trout Creek logging road, 60 kilometres west of Peachland, B.C.

Figure 1 - Location Map



SCALE 1:2 000 000

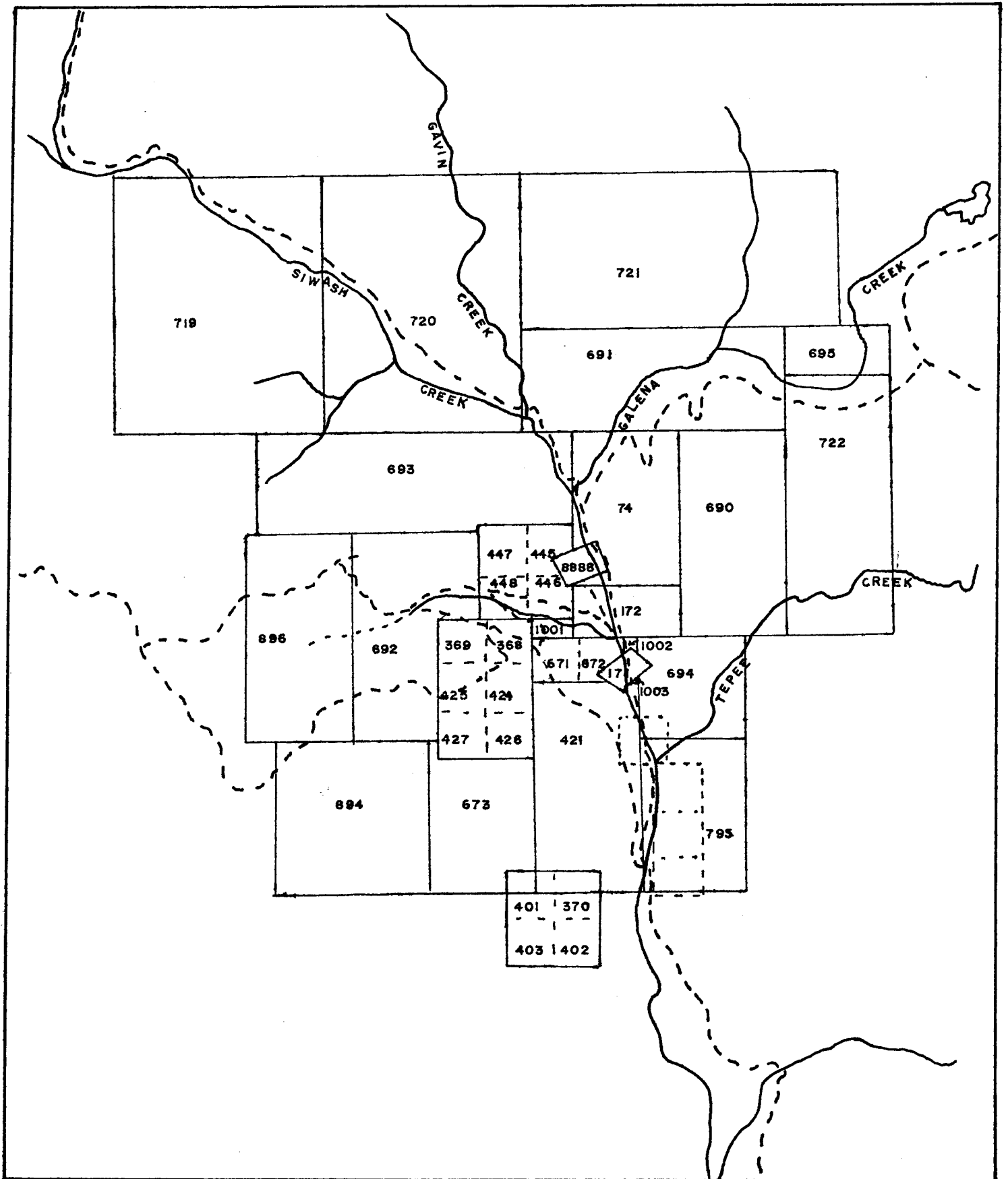
KILOMETRES 50 0 50 100 150 200 KILOMETRES

b) Claim Inventory

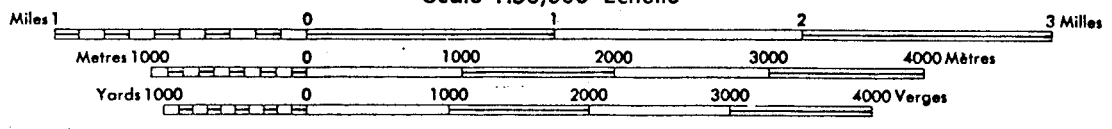
<u>Claim Name</u>	<u>Record No.</u>	<u>Units</u>	<u>Record Date</u>	<u>Assessment Date</u>
ED	74	6	June 29/76	June 29/87
ED # 2	172	2	Nov. 23/76	Nov. 23/87
Saskat 1	368	1	June 29/78	June 29/87
Saskat 2	369	1	June 29/78	June 29/87
June 1	370	1	June 29/78	June 29/86
Skye 1	401	1	Aug. 15/78	Aug. 15/86
Skye 2	402	1	Aug. 15/78	Aug. 15/86
Skye 3	403	1	Aug. 15/78	Aug. 15/86
June 2	421	8	Sept. 1/78	Sept. 1/86
Pat 1	424	1	Sept. 14/78	Sept. 14/87
Pat 2	425	1	Sept. 14/78	Sept. 14/87
Pat 3	426	1	Sept. 14/78	Sept. 14/87
Pat 4	427	1	Sept. 14/78	Sept. 14/87
V.M. 1	445	1	Oct. 5/78	Oct. 5/87
V.M. 2	446	1	Oct. 5/78	Oct. 5/87
V.M. 3	447	1	Oct. 5/78	Oct. 5/87
V.M. 4	448	1	Oct. 5/78	Oct. 5/77
Jean 1	671	1	July 26/79	July 26/87
Jean 2	672	1	July 26/79	July 26/87
Hawk	673	6	July 26/79	July 26/86
Nanci P-1	690	8	Aug. 13/79	Aug. 13/87
Nanci P-2	691	10	Aug. 13/79	Aug. 13/84
Skylab	692	12	Aug. 13/79	Aug. 13/83
B & B	693	12	Aug. 13/79	Aug. 13/84
Herdel	694	4	Aug. 13/79	Aug. 13/86
Teepee	695	2	Aug. 13/79	Aug. 13/84
ARP	719	20	Sept. 13/79	Sept. 13/82
Fergito-Allendo 1	720	20	Sept. 13/79	Sept. 13/83
Fergito-Allendo 2	721	18	Sept. 13/79	Sept. 13/84
Timbo-Tavish	722	10	Sept. 13/79	Sept. 13/82
Charlie	795	6	Oct. 25/79	Oct. 25/85
Bisbee	894	9	Dec. 12/79	Dec. 12/83
Bingham	896	8	Dec. 12/79	Dec. 12/83
Peterson	8888			Feb. 6/87
Fissure Maiden	171 (Crown Grant)			Nov. 8/86
SS 1 (fraction)	1001	frac.	Apr. 30/80	Apr. 30/81
SS 2 (fraction)	1002	frac.	Apr. 30/80	Apr. 30/81
SS 3 (fraction)	1003	frac.	Apr. 30/80	Apr. 30/81

All claims are located in the Similkameen Mining Division.

Figure 2 - Claim Map



Scale 1:50,000 Échelle



III REGIONAL SETTING

The Siwash Silver mineral property is underlain by granite, quartz-eye porphyry and quartz-feldspar porphyry related to the Otter Intrusions of Upper Cretaceous-Early Tertiary age. These units comprise the "Siwash Creek Body" referred to by Rice (1960). This body has intruded granodiorites of the Coast Intrusions, which are Jurassic in age. Older Nicola volcanics of Triassic age occur in the extreme northwest of the mineral property.

Surface mineralization occurring throughout the mineral property is hosted in:

1. Thin veinlets and brecciated areas within zones of intense chloritization and silicification.
2. Fractures crosscutting zones of intense alteration.
3. Quartz veins.

In order of abundance, the following mineralization occurs within the various host environments described; pyrite, specular hematite with minor amounts of sphalerite, galena, chalcopryrite, tetrahedrite, bornite and gold. Mineralization is not homogeneous throughout the area, but varies from one location to the next with respect to the kind of mineralization incurred and the concentrations thereof.

IV DIAMOND DRILLING

The diamond drilling of D.D.H. - SS-13-80 was contracted out to Thirty-Two Albert Crescent Ltd. of Vancouver, B.C. A total of 214 feet of NQ (1 7/8") core was drilled. Core recovery was near excellent.

a) Hole Description

Commenced: August 24, 1980	Completed: August 27, 1980
Location: 3800N/2700E	Elevation: 1,296 m (4,250 ft.)
Azimuth: 180°	Angle: 50°
Depth Drilled: 99.7 m (327 ft.)	Horizontal Distance: 64.1 m (210.2 ft.)
Overburden: 34.5 m (113 ft.)	

<u>Lithologies</u>	<u>Alteration</u>	<u>Mineralization</u>
Granodiorite (23 m)	Moderate propylitic & phyllic, weak argillic - secondary biotite.	Moderate pyrite & specular hematite.
Andesite Porphyry (6 m)		Few specular hematite veinlets.
Granodiorite (3 m)	Moderate propylitic & phyllic - secondary biotite.	Minor pyrite & specular hematite.
Andesite Porphyry (0.8 m)		Several specular hematite veinlets.
Granodiorite (17 m)	Moderate propylitic, phyllic & argillic - secondary biotite - zone of k-spar flooding.	Moderate pyrite & specular hematite.
Granodiorite #2 (5 m)	Moderate argillic - weak chloritic - 30 cm andesite dyke.	Weak pyrite & specular hematite.

<u>Lithologies</u>	<u>Alteration</u>	<u>Mineralization</u>
Granodiorite (2 m)	Moderate propylitic & phyllic - weak argillic - secondary biotite.	
Andesite Porphyry (3 m)		Few specular hematite veinlets.
Granodiorite #2 (1 m)	Weak to moderate argillic & chloritic.	Weak pyrite
Granodiorite (3 m)	Moderate propylitic & phyllic.	Few specular hematite veinlets.

b) Treatment of Results

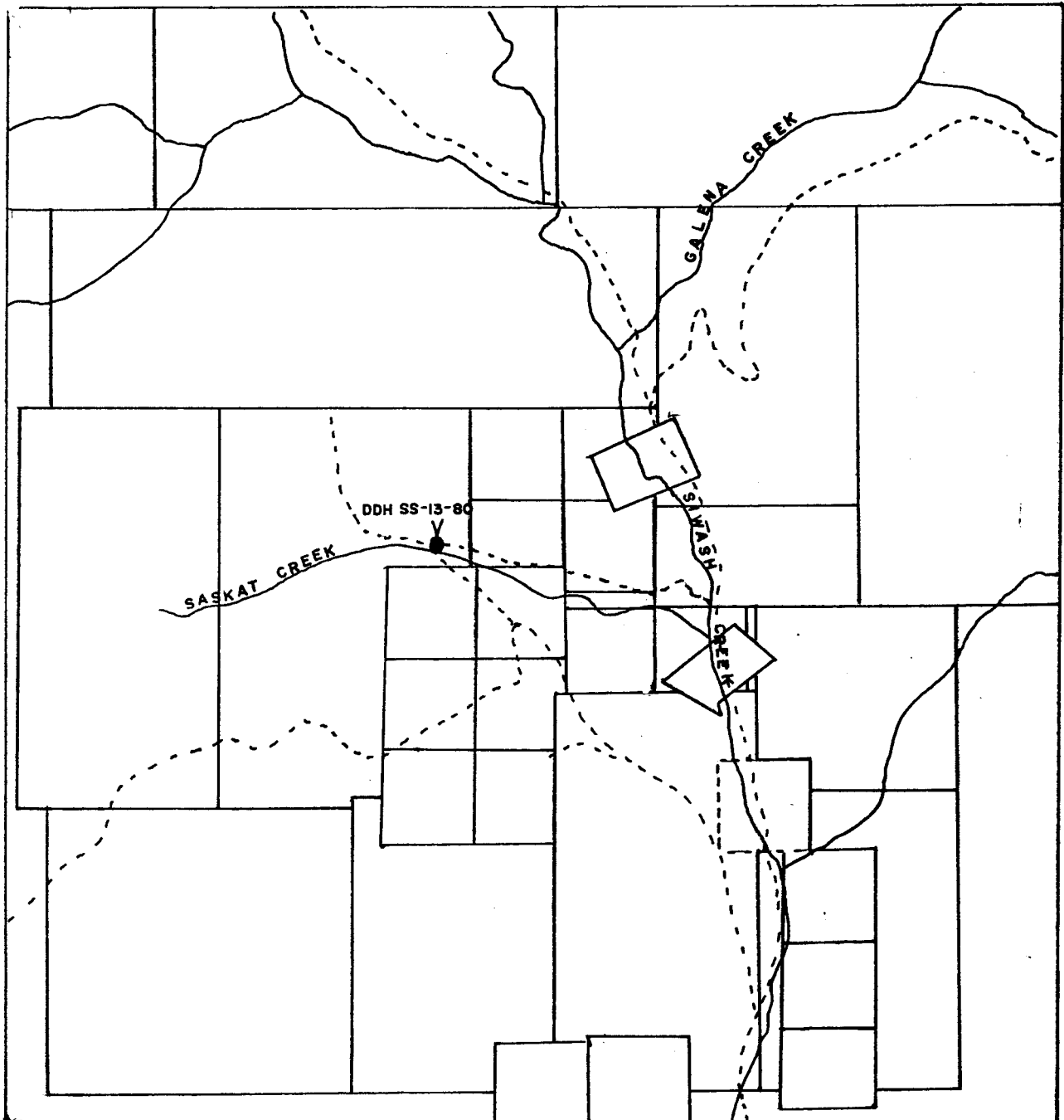
A detailed diamond drill hole record and a graphic drill hole section for D.D.H. - SS-13-80 are included in this report. A list of abbreviations, used in the text, precedes the D.D.H. record. The core has been logged at one metre intervals and is presently stored at the Brenda Mine site for later reference.

V CONCLUSIONS

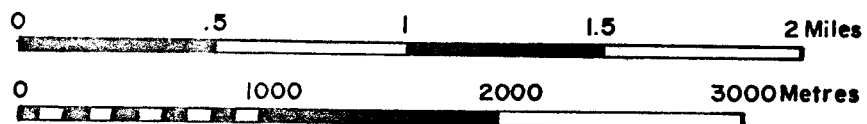
No economic mineralization was encountered in this drill hole, however, pervasive alteration was exhibited along its total length.

Figure 3

D.D.H. - SS-3-80 Location Map



SCALE 1 31,680



APPENDICIES

PREPARATION for ROCK SAMPLES and DRILL CORES

Each core is given a sample number 1, 2, 3 etc.

Preparation:

- a) Jaw crush into sample tray.
- b) Mix 2x and split sample in half using large riffle. Transfer each half to a drying tray and label A & B.
- c) Dry sample for at least 1 hour.
- d) Cool and riffle mix 3x, then split down to pot grinding size.
- e) Pot grind sample A for 2½ minutes and transfer to a number sample packet.
- f) Clean all apparatus thoroughly after each sample.
- g) Retain sample B as a coarse reject sample (pot grind every 10th B sample and run as normal).

Note: Rock samples are prepared in a similar manner depending upon size.

ANALYSIS by A.A. for Cu, Pb, Zn, Ag, and Mo.

1. Weigh 2.00 GM on the top pan balance into a 150 ML beaker (check that beaker No. is the same as written on work sheet).
2. Add 15 MLS Nitric Acid, cover with watchglass and heat on low heat until brown Nitrous fumes are gone.
3. Remove beakers from hot plate, cool for 5 minutes.
4. Add 10 ML Hydrochloric Acid. Place on hot plate. When all brown Nitrous fumes gone, remove watchglasses and take just to dryness on a low plate.
5. Remove from plate, cool, add 20 MLS distilled water, 5 MLS Conc. Hydrochloric Acid and boil salts into solution.
6. Cool in water bath, when cold transfer to 100 MLS Volumetric flask, add 1 MLS Superfloc solution and dilute to 100 MLS with distilled water.
7. Mix thoroughly and then transfer to original beaker.
8. When all samples ready, transfer to A.A. room for reading.
9. If Mo is required, 10.00 MLS of this solution is transferred to a test tube and 1.00 MLS of ALC₃ solution added.

APPENDIX II

LIST of ABBREVIATIONS

alt	- alteration	ntwk	- network
andes	- andesite	O.B.	- overburden
arg	- argillic	phenos	- phenocrysts
bio	- biotite	phyl	- phyllic
bx	- breccia	porph	- porphyry
cc	- calcite	prop	- propylitic
chlor	- chlorite, chloritic	py	- pyrite
cm	- centimetre	qz	- quartz
dissem	- disseminated	sev	- several
fracs	- fractures	sil	- siliceous, silicified
frags	- fragments	spec	- specular hematite
G.D.	- granodiorite	sphal	- sphalerite
hb	- hornblende	vn	- vein
k-spar	- potassium feldspar	vn	- veinlet
m	- metre	w	- with
mod	- moderate	Zn	- zinc

Property Siwash SilverD.D.H. No. SS-13-80Dip 50°D.D.H. Grid Location 3,800N, 2,700EElevation 4,250' (1,296 m)Azimuth SouthCore Size NQ (1 7/8") Total Depth 99.7 m (327')

ASSAYS

METRES	DESCRIPTION	MLZN	RECOV.	ASSAYS					
				Cu %	Ag g/mt óz.	Pb %	Zn %	Mo %	Au g/mt óz.
0 - 20	OVERBURDEN								
20 - 21	O.B.								
21 - 22	O.B.								
22 - 23	O.B.								
23 - 24	O.B.								
24 - 25	O.B.								
25 - 26	O.B.								
26 - 27	O.B.								
27 - 28	O.B.								
28 - 29	O.B.								
29 - 30	O.B.								
30 - 31	O.B.								
31 - 32	O.B.								
32 - 33	O.B.								
33 - 34	O.B.								
34 - 35	OVERBURDEN to 34.5 m.								
	GRANODIORITE - Mod chlor & phyll alt. Py along frac		100						
35 - 36	Mod chlor alt. Minor dissem py. One 1 cm k-spar vn along 40°.		100						
36 - 37	Mod to weak chlor alt. Py along frac. 30 cm andesite dyke contacts at 50° - contains spec, py vnlt.		90						
37 - 38	Mod chlor alt. Weak arg alt. Dissem & vnlt py & spec.		100						
38 - 39	" " " " " "								
39 - 40	Mod chlor alt, weak arg & phyll alt. Dissem & vnlt py & spec. 10 cm zone of qz, k-spar, spec flooding (pegmatitic).		100						
40 - 41	Mod chlor alt, weak arg & phyll alt. Dissem & vnlt py & spec.		100						
41 - 42	70 cm of bx. Large & small angular G.D. frags - same alt. Then, G.D. - mod chlor & arg alt. Dissem py & spec vnlt at 0°.		100						

METRES	DESCRIPTION	MLZN	RECOV.	Cu	Ag	Pb	Zn	Mo	Au
57 - 58	GRANODIORITE - Mod prop & phyll alt. Spec & py along fracs.		100						
58 - 59	ANDESITE - f.g. andesite porph. Bio & hb phenos. Cc vnlt. 2 qz, spec vnlt cut along 30°.		100						
59 - 60	f.g. andesite porph. Bio & hb phenos. Cc vnlt. 1 - 20 cm G.D. xen.		100						
60 - 61	Fine grained andesite porph. Cc vnlt. Few qz, spec vnlt. 1 - 10 cm G.D. xen.		100						
61 - 62	Fine grained andes porph. Cc vnlt. Few qz, spec vnlt. 1 - 10 cm G.D. xen.		100						
62 - 63	Fine grained andes porph. Cc vnlt. Few qz, spec vnlt. 1 - 20 cm G.D. xen.		100						
63 - 64	Fine grained andes porph. Cc vnlt. Few qz, spec vnlt. 1 - 10 cm G.D. xen.		100						
64 - 65	GRANODIORITE - Mod prop & arg alt.		100						
65 - 66	Mod prop & mod phyll alt. Secondary bio. Py & spec along fracs.		100						
66 - 67	GRANODIORITE - Mod prop & mod phyll alt. Secondary bio contacts with		100						
67 - 68	ANDESITE - Fine grained porph - 50 cm. - 30 cm of andesite. Sev cc & spec vnlt contacts with								
	GRANODIORITE - Arg at contact with sev spec vnlt & dissem py, then prop alt.		100						
68 - 69	Mod prop alt. Secondary bio. Sev spec vnlt. 50 cm qz, k-spar flood zone. Spec, py & chlor vnlt.		100						
69 - 70	Mod prop & arg alt. Sev spec & py vnlt with minor sphal.	Zn	100						
70 - 71	Mod prop & phyll alt. Sev spec & py vnlt. Secondary bio. 15 cm qz, k-spar zone contacts along 75°.		100						

METRES	DESCRIPTION	MLZN	RECOV.	Cu	Ag	Pb	Zn	Mo	Au
88 - 89	GRANODIORITE #2 - Mod arg - weak chlor alt. Spec & py vnlt. 30 cm andes dyklet cuts along 5 - 10°.		100						
89 - 90	" " " " " "		100						
90 - 91	" " " " " "		100						
91 - 92	GRANODIORITE - Well defined contact follows qz vnlt. along 30°. Mod prop & phyll alt, weak arg alt.		100						
92 - 93	Mod prop & phyll alt, weak arg alt. Secondary bio. Contact with		100						
93 - 94	ANDESITE PORPHYRY - Cc vnlt. Few qz, cc, spec vnlt.		100						
94 - 95	Andes porphy, hb & bio phenos. Cc, spec & qz vnlt.		100						
95 - 96	Andes porphy, hb & bio phenos. Cc, spec & qz vnlt. One G.D. xen. Contact with		100						
96 - 97	GRANODIORITE - Mod prop & phyll alt for 10 cm. Contact with		100						
97 - 98	GRANODIORITE #2 - c.g. - Weak to mod arg & chlor alt. Vnlt py. 1 cm k-spar vn @ 85°.		100						
98 - 99	GRANODIORITE - Mod prop & phyll alt. Contact along 45° following qz, spec vnlt.		100						
99 - 100	Mod prop & phyll alt. Few spec vnlt. Mod prop & phyll alt. Few spec vnlt. END of HOLE		100						

STATEMENT of COSTS

60 feet of overburden drilling @ \$20.00/ft.	\$1,200.00
217 feet of NQ drilling @ \$18.50/ft.	4,014.50
Hourly charges	3,143.00

Materials Consumed

Quick Gel - 81 bags @ \$7.25/bag = 587.25 + 10%	645.98
Quick Trol - 92 bags @ \$8.62/bag = 793.04 + 10%	872.34
Diesel - 121 gals. @ \$0.93/gal. = 112.53 + 10%	123.78
Tricones - 685.08 + 10%	753.59
Casing Shoes - 223.60 + 10%	245.96

Labour - geological supervision - 4 days & - core logging - 1 day	450.00
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Food - 4 days for 5 men @ \$9.00/man day	180.00
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Cook - 4 days \$ \$35.00/day	140.00
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Truck Rental - 4 days @ \$15.00/day	60.00
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Report Preparation

2 days drafting and report writing @ \$90.00/day	180.00
1 day typing @ \$50.00/day	50.00

Total	\$12,059.15
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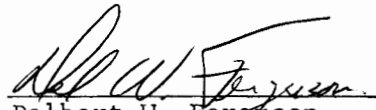
* All costs are to be applied to the Skylab Mineral Claim

Skylab - 5 years - \$12,000.00

STATEMENT OF QUALIFICATIONS

I, Delbert W. Ferguson of Peachland, Province of British Columbia, do certify that:

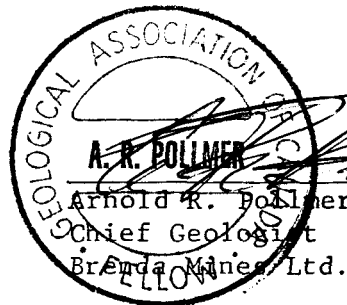
- 1) I am presently employed as an exploration geologist by Brenda Mines Ltd.
- 2) I am a graduate of the University of Western Ontario with an Honours Bachelor of Science Degree in geology (1979).


Delbert W. Ferguson
Exploration Geologist
Brenda Mines Ltd.

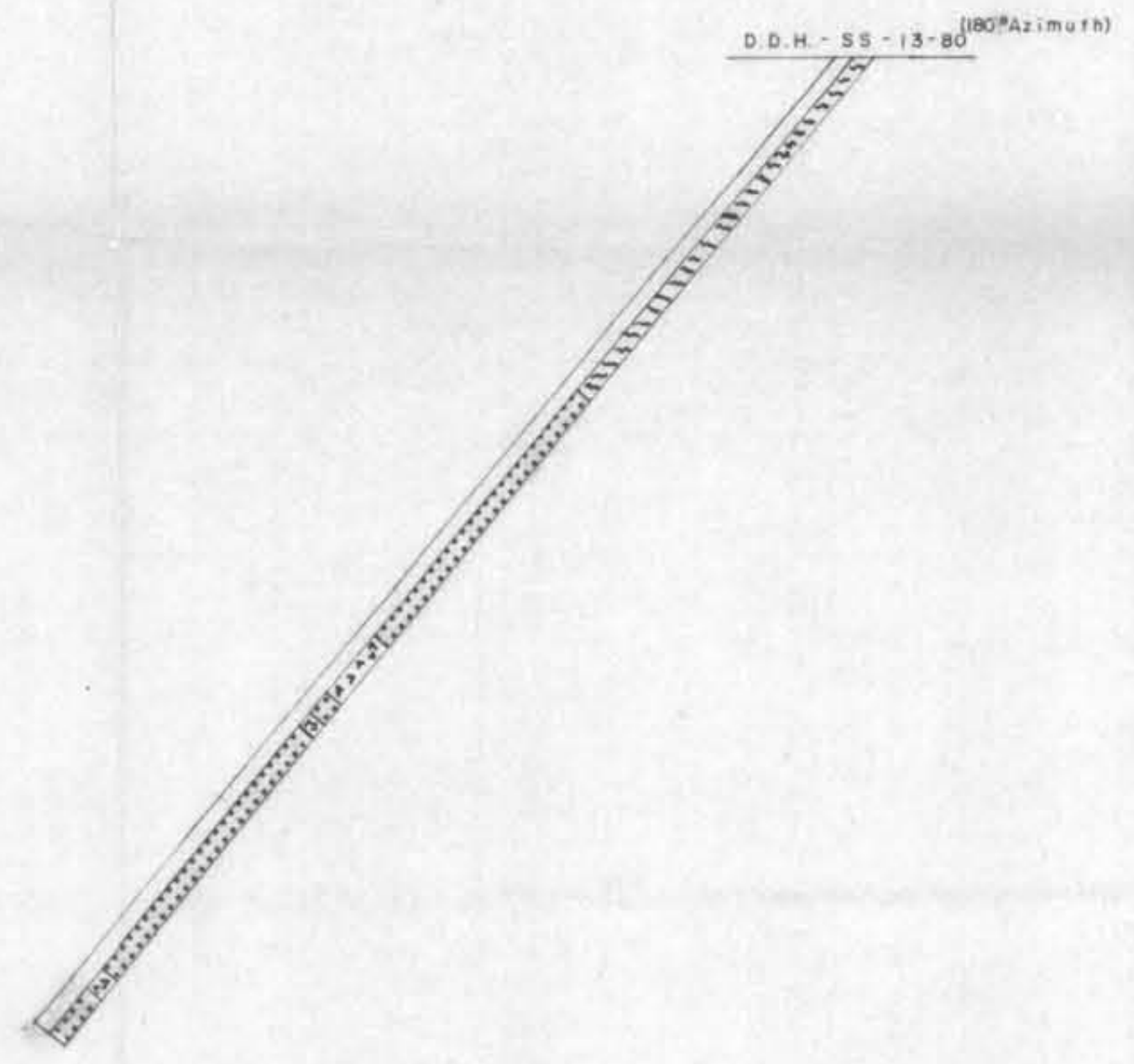
STATEMENT of QUALIFICATIONS

I, Arnold R. Pollmer of Peachland, Province of British Columbia,
do certify that:

- 1) I have been employed as a geologist by Noranda Mines Limited from December 1973 to June 1977; I am presently employed as the chief geologist by Brenda Mines Ltd.
- 2) I am a graduate of the University of Wisconsin with a Bachelor of Science Degree in Geology (1972).
- 3) I am a member of the Canadian Institute of Mining and Metallurgy.
- 4) I am a fellow of the Geological Association of Canada.



1350 EL.
1300 EL.
1250 EL.
1200 EL.
1150 EL.



- LEGEND**
- ROCK TYPE**
- OVERBURDEN
 - ANDESITE
 - QUARTZ-FELDSPAR BIOTITE PORPHYRY
 - QUARTZ-FELDSPAR PORPHYRY
 - QUARTZ-EYE PORPHYRY
 - GRANITE
 - GRANODIORITE
- ALTERATION**
- PHYLIC -weak -moderate -strong
 - SILICEOUS -weak -moderate -strong
 - ARGILLIC -weak -moderate -strong
 - PROPYLITIC -weak -moderate -strong
 - BRECCIATED ZONE



3650 N
3700 N
3750 N
3800 N
3850 N
3900 N
3950 N

Handwritten notes:
D.D.H. - 55 - 13-80
180° Azimuth

Handwritten notes:
part 2
9/2

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8926
NO.

BRENDA MINES LTD. EXPLORATION GROUP		
Drawn _____	D.D.H. SECTION 2700E	SIWASH SILVER
Check _____	SCALE: 1:500	FILE No.
Approv _____		