84-#182 -# 12489

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FROSFECTING REFORT ON EASIN FROFERTY

Easin, Easin # 1,2,3, Eotan # 1 and 2 Claims

SKEENA MINING DIVISION 103P/11W

Latitude 55 40' Longitude 129 27'

Owner and Operator

NOR-CON EXPLORATION LTD.

Author: Regis Cavanagh Chief Geologist

November 2, 1983

GEOLOGICAL BRANCH ASSESSMENT REPORT

12, 4

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INTRODUCTION

LOCATIONS AND ACCESS

The Basin Property of Nor-Con Exploration Ltd. is located 16 kilometres north of Kitsault and 4 km. west of Kinskuch Lake at 55° 40' of latitude and 129° 27' of longitude in the Skeena Mining Division (Fig. 1 and 2).

Access is by helicopter, based in Stewart and/or Kitsault if available.

TOPOGRAPHY AND PHYSIOGRAPHY

The east flank of Stark Creek trends north-south from 760 metres in the valley up to 1 390 metres on the highest peak on the property. Basin Lake at 1 060 metres is a tarn occupying an ice gouged basin on the floor of a cirque.

Drainage from a few tarns including Basin Lake flows in a west direction into Stark Creek. Drainage on the northeast of the property flows east into Kinskuch Lake.

The basin is on the grassy upland slopes above the timber line. Alpine forest, glacial deposits and mainly talus covered more than 70 per cent of the bedrock on the property.

IROFERTY DEFINITION

The Basin Froperty comprises four reverted Grown Granted 2 Fost Claims and two claims of 9 and 3 units:

Name		Lot	Record No.	<u>#</u> of Units
basin Basin No. Basin No. Botan No. Botan No.	1 2 3 1 2	1096 1097 1098 1099	3465 3466 3467 3468 4049 4050	1 1 1 9 3

FROPERTY HISTORY

The Basin Group (the four reverted claims) was staked by Angus MacLeod of Alice Arm in July 1922. During the late 1920's, a limited amount of surface trenching was performed on a strong shear zone carrying some silver and copper values and, several pits and a short adit on a high grade of silver in a narrow shear zone. The claims were Crown Granted in 1930 but later reverted.

In 1963, the Basin Group and five adjoining claims were leased by J.P. McVittie who donated it to Sirmac Mines in 1964. The company carried out limited prospecting and a geophysical survey with no success in 1965 and permitted the claims to lapse in 1967.

In 1982, Nor-Con acquired the four reverted claims and carried out a prospecting program in the summer of 1983, two claims, Botan No. 1 and 2 surrounding the reverted claims were staked for Nor-Con during the program.

SUMMARY OF THE PROSPECTING PROGRAM

One of the two Nor-Con prospecting crews consisting of a geologist and an assistant evaluated the property.

Prospection consisted to locate and to describe the old workings and to establish the basic geology of the claims by random walking traverses. Outcrops were mapped on air photos (scale 1:20 000).

The total prospected area is about 100 hectares on and surrounding Basin and Basin No. 2 claims. No attempt has been made to go down the 200 metre cliff west of the basin.

GENERAL GEOLOGY

The area between Kitsault River and Kinskuch Lake is underlain by volcanic and sedimentary rocks of the Middle and Upper Jurassic age.

The Middle Jurassic rock are green, red, purple volcanic tuff and breccia, pillow lava, volcanic sandstone, conglomerate and minor flows trending NNW.

The Middle and/or Upper Jurassic rocks are siltstones, greywackes sandstones, conglomerate, and minor limestone generally striking North.

PROPERTY GEOLOGY

The lithology of the property is complicated. The discontinued exposure of bedrock and the topography make it impossible to follow geological contact or beddding.

The geology map (Fig. 3) is based on photo-interpretation (scale 1:20 000) and on datas collected during the prospecting program. On the southeast part of Basin claim, interfingered beds of argillite, siltstone, sandstone, conglomerate, lava flow, pillow lava and minor volcanic breccia stikes NNW with a moderate easterly dip. The conglomerates and sandstones predominate south-east of Basin claim. North, south, east and on Basin 2 claim, argillite, siltstone, sandstone, lava flow and minor conglomerate are in place slightly folded, brecciated, faulted and intruded by volcanic dykes and/or apophysis.

One outcrop of dark grey to black limestone with rounded concretions occurs 50 metres ESE of the adit.

Argillite and siltstone are greyish to dark grey. Sandstone, lava flow, volcanic porphyre and vitrophyre vary from greyish, dark grey, greenish to dark green. Pillow lavas are green to dark green. Medium to coarse sandstones and conglomerates are green excepted ESE of Basin claim where both vary from green to dark red.

Some breccias and beds of argilite, siltstone and sandstone are calcareous and/or contain a small amount of disseminated pyrite. Calcite and quartz occur sporadically in replacement and shear zones.

One irregular pyritized quartz vein up to 3 metres wide and probably more than 1 000 metres long crosses the property from the SSE to N. Near the Legal Corner Post of Botan claims, the vein strikes NNW and NS at about 200 metres east of the adit.

MINERALIZATION

Two showings are present on the property and were briefly described in previous reports (see references).

One showing located at the northwest of Basin 2 claim has been previously prospected by small open cut and an adit 4 metres long. This showing consists of a horizontal quartz calcite mineralized breccia zone 1 metre thick and approximately 5 metres long overlain by an irregular contact of grey to greenish feldspar porphyre, grey to dark grey calcareous argilite and sandstone. Underlying the breccia zone is a dark grey calcareous sandstone to limestone. The breccia zone is mineralized with disseminated and veinlets of pyrite, chalcopyrite and tetrahedrite. There is a small lens (0.15 x 1.0 metres) of massive tetrahedrite (and/or arsenopyrite) on the top of the breccia. The lens is jointed and the joints are coated with malachite, bornite, chalcopyrite and purplish and yellow

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minerals of alteration (As, Sb, Co:?).

The second showing located between 100 to 300 metres SW of Basin Lake consists of 3 small pits (2x3x3 metres) and one ESE trench 10 metres long, 2 metres wide and up to 2 metres The three pits and the trench are placed along a deep. length of 200 metres in about NNE direction. At the northern pit, at the trench 41 metres SW of the northern pit and at the second pit 44 metres SW of the trench, a greyish to grey quartzcalcite shear zone in argillite - shale - siltstone - sandstone is mineralized with disseminated, aggregates and veinlets of pyrite, chalcopyrite, tetrahedrite and in some places with malachite and azurite. The shear zone strikes about north-south and is at least 2 metres wide at the two pits and at least 8 metres wide at the trench. The shear zone appears to dip steeply east. In the trench, the shear zone appears to be bounded by dark grey piritized shaly - siltstone striking about north south.

At the southern pit 104 metres SW of the trench there is a narrow rusty (pyritized) zone in a grey fine grained volcanic or sedimentary breccia.

CONCLUSIONS

The two showings on Basin Property occur in the same environment or type of rocks but differ structurally.

The showing at the NW of Basin 2 claim is a high grade silver-copper mineralization in a horizontal quartz-calcite breccia probably included in a larger faulted or brecciated block of country rock. The other showing on Basin 1 claim is a low grade coppersilver mineralization in a quartz-calcite shear zone of country rock. Two pits and one trench indicate the shear zone is between 2 to 8 metres wide striking about NS with a steep east dip. The continuity of the shear zone which is over 90 metres long is not certain. Faults might have deplaced the shear zone.

DISCUSSION

The conclusions of the 1965 Electromagnetic Survey (Report #680) are the localization of a weak conductor occuring around the adit and the low grade shear zone is not extensive enough to constitute a conductive zone.

However, the report of the electromagnetic survey implies the transmitter has not been oriented for each station on traverse lines for Baseline A. Also, the length of traverse lines for Baseline A are short and their separations are in the order of length of the shear zone.

It is suggested that an electromagnetic survey conducted on longer traverse lines and with shorter separation could have produced more significant results.

RECOMMENDATIONS

A detailed geochemical soil and rock sampling survey and a detailed VLF electromagnetic survey of the two showings and their surrounding areas are recommended. Grab sampling for silver and gold assays of the pyritized breccia, argilite, siltstone and sandstone is also recommended.

The electromagnetic survey can be done with traverse line separation of 50 metres or shorter with station at each 10 metres.

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The combined results of these surveys if positive would defined drilling targets.

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AUTHOR'S QUALIFICATIONS

I, Regis Cavanagh, of the city of Prince Rupert, in the Province of British Columbia, do hereby certify:

That I am a full time Chief Geologist for the company "Nor-Con Exploration Ltd.", #10-342-3rd Ave. West, Prince Rupert, British Columbia, 604-627-1251 and that I am residing at 209-1200 Summit Ave. Prince Rupert, British Columbia, V8J 3Y1.

I further certify that:

- 1. I am a graduate of the Quebec University of Chicoutimi (1977), Quebec, hold a B.Sc. degree in Geological Engineering and I am a Professional Engineer registered with the Engineers' Order of Quebec.
- I have been practicing my profession in prospecting, exploration and engineering through Canada for the past six (6) years.
- 3. The information for this report was obtained from pertinent material as cited under references and from a prospecting program carried out under my supervision on the Basin Property in August, 1983.

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Regis Cavanagh Chief Geologist

November 2, 1983 Prince Rupert, B.C.

ITEMIZED COST STATEMENT

On August 1, 1983, one of the two Nor-Con prospecting crews consisting of a geologist and an assistant was mobilized from another property (Betty-Silver Cliff) to Basin Property by helicopter, based in Stewart, B.C.

Demobilization was by helicopter, based in Stewart, from Basin to Belleview Property on August 13, 1983.

The personnel were:

Regis Cavanagh Chief Geologist Stephen Bean Assistant Geologist

for the period of August 1 to 13.

Cost of Prospecting Program

a)	Salary	\$	3	204.00
b)	Food			690.00
c)	Transportation		4	048.60
d)	Accommodation and			
	Equipment Costs			973.20
e)	Office Expenses and			
	Miscellaneous			300.00
f)	Cost of Report			
	Preparation			500.00
Tota	1_Cost of Prospecting	+	~	
	Program	<u>\$</u>	2	715.80
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DETAILED ITEMIZED COST STATEMENT

a) Salary # of Day August 1 - 13 Rate/Day Totals \$ 2 400.00 Chief Geologist 12 \$ 200.00 12 67.00 804.00 Assistant Geologist Sub-total \$ 3 204.00 b) Food 1 2 men \$ 28.75 \$ 690.00 12 days c) Transportation Helicopter @ \$653.00 per hour. August 1st - 1/2 of 3.0 hrs. Betty-Silver Cliff to Basin 979.50 August 2nd - 1.0 hrs. Groceries Stewart-Basin-Stewart 653.00 August 7th - 0.8 hrs. Groceries Stewart-Basin-Stewart 522.40 August 10 - 1.6 hrs. Groceries Stewart-Basin-Stewart 1 044.80 August 13 - 1/2 of 2.6 hrs. Basin to Belleview 848.90 \$ 4 048.60 Rate/Day d) Accomodations and Equipment Costs: based on 33% of total equipment cost for field program averaged between two crews. \$ 40.55 \$ 973.20 24 Mondays \$ 300.00 e) Office Expenses and Miscellaneous \$ 500.00 f) Cost of Report Preparation Total Cost of Prospecting Program \$ 9 715.80

BIBLIOGRAFHY

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- GSC MEM 175-53

EMR MRD Corpfile (Sirmac Mines Ltd., Silver Basin Mines Ltd.)

- Air-photos BC 77068 No. 260 to 263 BC 77069 No. 176 to 179
- N.C. Carter and E.W. Grove, "Geological Compilation Map of the Stewart, Anyox, Alice Arm and Terrace Areas" Scale 1:250 000, Preliminary Map No. 8 BCDM
- Assessment Report #680 "Geophysical Report on Basin & Silver Basin Claim Group."





