GEOLOGICAL OUTCROP REPORT

Silver Pine, Middlesex, Xiphis, Ougma

Claims

SKEENA MINING DIVISION

NTS 104B/8W

56 29' N, 130 28' W

FOR

NOR-CON EXPLORATION LTD.

Owner & Operator: Nor-Con Exploration Ltd.
Author: E. Lyngberg
Geologist

September 30, 1983

GEOLOGICAL BRANCH ASSESSMENT REPORT

12,255

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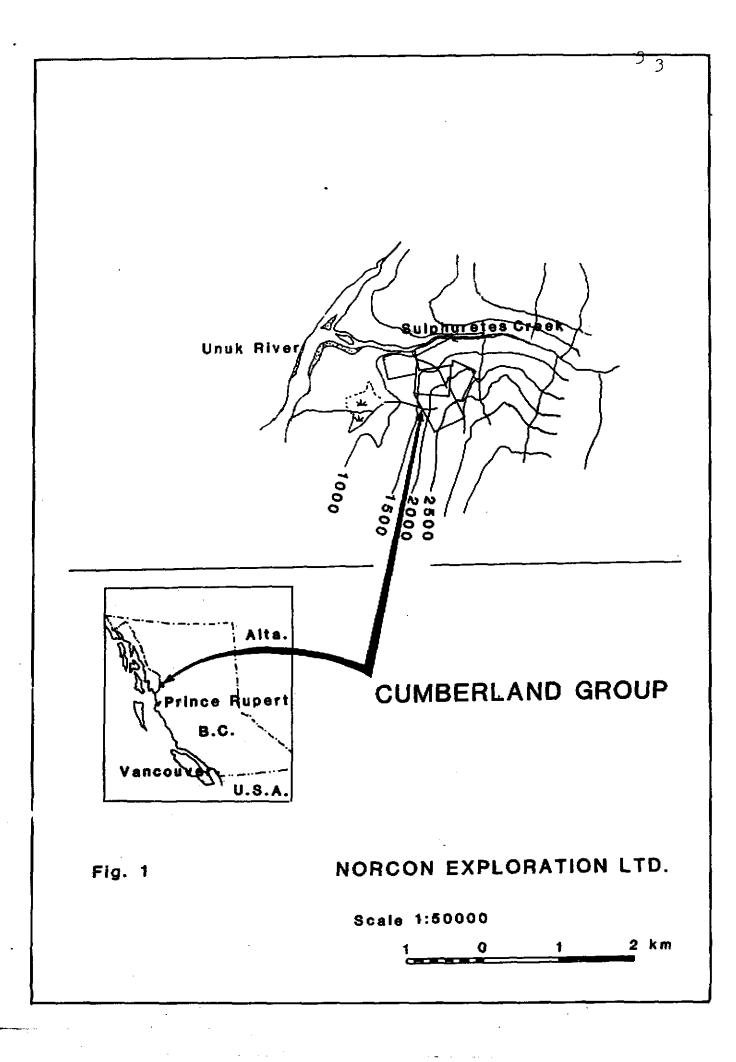
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#### SUMMARY

The Cumberland Group of Nor-Con Exploration was investigated during the summer of 1983, to locate and examine silver mineralization, first reported on the property in the early 1900's. In addition, a limited mapping and prospecting program was carried out.

Mapping and prospecting indicated that the geology consists of andesites, tuffs, argillites and conglomerates of undetermined stratigraphic and structural relationships. The original workings were not located.

Further work is recommended to locate the original mineralization and carry out further prospecting, mapping and a soil sampling program.



### PART A

#### INTRODUCTION

Between July 25, 1983 to August 6, 1983, one of Nor-Con Exploration Ltd.'s two prospecting crews evaluated the mineral potential of four crown granted claims: Silver Pine, Middlesex, Xiphis, Ougma, located on Sulphuretes Creek, Northwestern B.C.

The crew consisting of a geologist, E. Lyngberg, a geological assistant, and a prospector, were mobilized by helicopter from Stewart, B.C. to a flycamp located on the south bank of Sulphuretes Creek. Supplies were delivered by helicopter, based in Stewart.

## LOCATION AND ACCESS

The property is located at 56 29' N. Lat., 130 27'
30" W. Long., on the northwest flank of Mt. Madge, in Northwestern B.C. Fig. 1. The claims are approximately 2 km.
east of the confluence of the Unuk River and Sulphuretes
Creek, Access is by Vancouver, Island Helicopters Ltd., Bell
206 Long Ranger, based in Stewart, B.C. 80 km. to the southeast.

## TOPOGRAPHY AND PHYSIOGRAPHY

The claims lie in a moderately rugged area of the Coast Mountains. The topography is characterized by steep precipitous slopes with considerable relief. Glacier fed Sulphuretes Creeks forms the northern boundary of the property, with several minor creeks draining the property into the Unuk River and Sulphuretes Creek. Elevations range from 220 m. at Sulphuretes Creek at 850 m. at the southeastern corner of

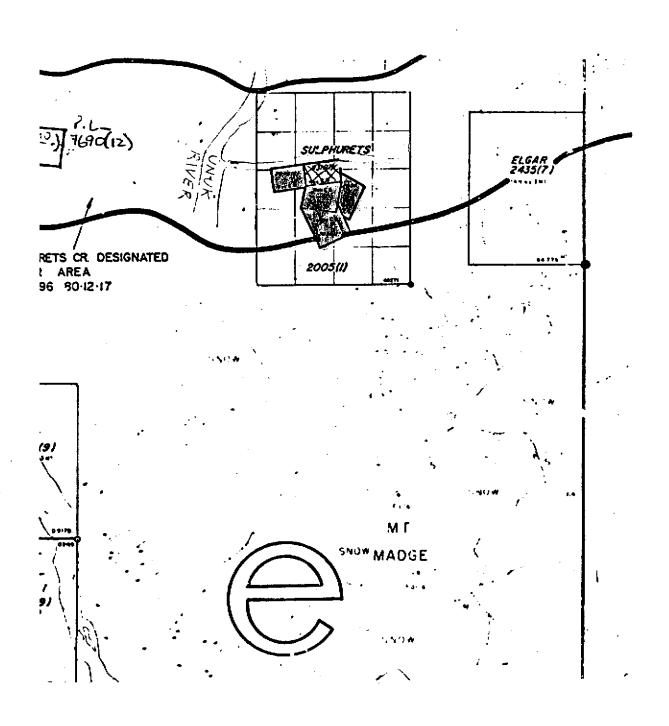


Fig. 2 GOVERNMENT CLAIM MAP
( 1:50000 )

claims. Ougma is situated on the northern flank of a steeply sloped 400 m. hill. Middlesex, Xiphis, Silver Pine, claims are situated further to the east on the northern slope of Mount Madge, Dividing Ougma from the other three claims is a north trending gulley, bounded by steep slopes and cliffs. The area is heavily forested with Alder and Willow dominating the banks of Sulphuretes Creek, to a fir-devils club dominated forest elsewhere.

## PROPERTY OWNERSHIP

The property consists of four reverted crown granted two post claims, Silver Pine L266, Middlesex L267, Xiphis L268, Ougma L269. (Fig. 2) The four claims comprised part of the old Cumberland Group. The claims were acquired by Nor-Con Exploration Ltd. on May 17, 1982.

# REGIONAL GEOLOGY

The old Cumberland Group is located near the boundary between the coast Plutonic complex and the Intermontane Belt, specifically on the eastern edge of the Bowser Basin.

The nearest crystalline rocks outcrop the west and southwest in the McQuillan Range and the Boundary Ranges. The compositions range from syenite to diorite. To the east are Bowser Basin sediments, mainly Jurassic and Cretaceous Hazelton Group sediments.

Published geology maps (Souther et al, 1979, map 1418A, GSC map 9, 1957) indicate that in the immediate claim area, the bedrock is composed of lower Jurassic sediments, primarily greywacke, argillite, conglomerate and sandstone. Volcanic rocks; andesites, basalt and tuff are also present.

#### PROPERTY GEOLOGY

Several traverses were completed on the property using air-photos: B.C. 2181, 93, 94 and a 1:5 000 enlargement of NTS 104B/8 (Frank Mackie Glacier) for control. The geology and traverse locations are plotted on Fig. 3.

The location of the traverses was limited by the precipitous nature of the terraine. Outcrops were well exposed on the steeper slopes, but generally covered by moss. Hence the stratigraphic and structural relationships were difficult to discern. Regional strike is to the northeast with an easterly dip. Andesite, a tuff-volcanic breccia, argillite, and conglomerate were the most common units. The geology for each claim is summariezed below.

Middlesex L267. Several different rock types outcrop on the claim as plotted on Fig. 3. at elevations:

- 500 m. (1640') Tuff green grey aphanitic matrix with poorly sorted angular to subangular, 2 mm. to 2 cm., rock fragments, some flow banding. Unit forms a steep cliff face dissected by gulleys.
- 625 m. (2050') Breccia similar to above but fragments tend to be larger.
- 628 m. (2060') Chert dark green-grey, massive. 4 m. thick.
- 683 m. (2240') Conglomerate Argillitic to fine grained, regressive weathering, grey sandy matrix, clast supported, rounded to subangular, cobbles to boulders, massive, cliff forming.
- 716 m. (2350') pillowed Andesite, dark grey, green aphanitic matrix with a few mafic phenocrysts, pillowed forms massive cliff 30 m. to 40 m. high. Further up the slope, an andesite outcrops but it is not clear if it is the same unit.

The distribution of the above units on the claim is shown on Fig. 3.

Silver Pine L266 - The rocks are similar to those on L267. The first unit encountered is the argillite at 380 m. (1250'). At 440 m. (1450') the Breccia unit outcrops as a cliff face. The eastern part of the claim is underlain by the conglomerate unit, which in the creek that transects the eastern part of the property, becomes partly serpentinized.

<u>Xiphis L268</u> - The geology is plotted on Fig. 3. The most common unit is the andesite which outcrops over most of the claim.

Ougma L269 - The only rock unit found on this claim was an Andesite, dark green aphanitic matrix with a few irregular mafic phenocrysts.

### MINERALIZATION

Only minor mineralization consisting of disseminated pyrite was found, in the Andesite, Breccia and Argillite. According to the original reports, there are two mineralized zones, a shear fissure vein containing Pb, Zn, and Ag, values and a brecciated quartz vein containing Au, Zn, and Cu values. A search for the mineralization and the old workings at their supposed locations proved negative.

# REFERENCES

B.C. Minister of Mines Annual Reports for years:

1903 p. 54 1906 p. 72 1919 p. 60 1923 p. 87

Geological Survey Map 9, 1957.

Kruchkowski, E.R., Prospecting Report, Sulphuretes Claim B.C. Assessment Report 8769.

Souther, J.G., Brew, D.A., Okulitch, A.K., GSC. Map 1418 A.
Iskut River, 1979.

# CERTIFICATE OF QUALIFICATIONS

- I. Erik Lyngberg, of the Municipality of West Vancouver, in the Province of British Columbia, do hereby certify that:
- 1. I am currently completing a Masters of Science degree in Geology at the University of British Columbia, Vancouver, B.C.
- 2. I have been practising my profession as a geologist since 1979.
- 3. I was employed by Nor-Con Exploration Ltd., P.C. Box 808, Prince Rupert, B.C., at the time the work was completed.
- 4. The information for this report was obtained from pertinent material as cited under references, and from a prospecting program carried out under my direct supervision between July 25, 1983 August 6, 1983.

ERIK Lyngberg, B. Sc.

Geologist

West Vancouver, B.C. September 30, 1983

### CONCLUSIONS:

- Bedrock geology consists of Andesite, Argillite, Tuffs, breccias, conglomerates, and a pillowed volcanic of undetermined structural and stratigraphic relationships.
- 2. The original workings and mineralization were not located.
- 3. No significant mineralization was found on the claims.

# RECOMMENDATIONS

Future work on the claims should be conducted to locate the original workings and mineralization. A geological and geochemical survey could then be initiated delimiting the mineralization and to locate additional anomalies.

## PART B

# ITEMIZED COST STATEMENT FOR SULPHURETES CREEK PROPERTY OF NOR-CON EXPLORATION LTD.

## Summary

Total: 30 field days.

Duration of Total Exploration Program: July 25 - August 6, 1983

a) b) c) d) e) f)	Total Salary Total Food and Accommodation Total Transportation Total Equipment Costs Office Expenses and Miscellaneous Total Preparation of Report	\$ 2 971.00 862.50 4 498.60 1 216.50 1 000.00 750.00	
g)	Total Cost of Exploration Program	\$11 298.60	

### INTRODUCTION TO COST STATEMENT

From July 25, 1983 to August 6, 1983, Nor-Con Exploration Ltd., conducted an Exploration Program of the company's Sulphuretes Creek prospect. The personnel present were:

	Lyngberg	Geologist	July	25 -	August 6, 1983
Ρ.	Guyan	Geological Assistant	July	25 -	August 6, 1983
s.	Fegen	Prospector	July	25 -	July 28, 1983

Personnel (Lyngberg and Fegen) were transported from
Prince Rupert by Transprovincial Airlines. A boat, under
private charter to Nor-Con Exploration moved field equipment
and P. Guyan from Prince Rupert to Stewart. Vancouver Island
Helicopters, based in Stewart, mobilized the crew to the work
site, as well as bringing in supplies and equipment.

# DETAILED ITEMIZED COST STATEMENT

a) <u>Salary</u>	# of Days July 25 - August 6, 1983	Rates/Day	<u>Totals</u>
Geologist Geologist Assistan Prospector	t 13 13 4	\$ 100.00 67.00 200.00 TOTAL	\$ 1 300.00 871.00 800.00 \$ 2 971.00
b) <u>Food an</u>	d Accommodation		
3 persons	30 Man days	\$ 28.75 TOTALS	\$ 862.50 \$ 862.50
c) <u>Transpo</u>	rtation		
Personnel -	nce Rupert – Stewart 1 man nce Rupert – Stewart		\$ 100.00
Equipment,		TCTAL	350.00 \$ 450.00
	Vancouver Island Helicop	oters	
Da te		Ttl Hrs.Rate/Hr.	
Date July 25, 1983 July 28, 1983	Stewart - Sulphuretes Creek Stewart - Sulphuretes;	2.3 \$653.00	\$ 1 501.90
July 25, 1983	Stewart - Sulphuretes Creek Stewart - Sulphuretes; Groceries Stewart - Sulphuretes; Groceries		
July 25, 1983 July 28, 1983	Stewart - Sulphuretes; Groceries Stewart - Sulphuretes;	2.3 \$653.00 0.9	\$ 1 501.90 587.70
July 25, 1983 July 28, 1983 August 2, 1983 August 6, 1983	Stewart - Sulphuretes; Groceries Stewart - Sulphuretes; Groceries Stewart - Sulphuretes Other camp 50% of  ht Costs: Rate/Day based on Equipment Cost for	2.3 \$653.00  0.9  1.0  4.0  TOTAL  33% of Total Field Program	\$ 1 501.90 587.70 653.00 1 306.00
July 25, 1983 July 28, 1983 August 2, 1983 August 6, 1983	Stewart - Sulphuretes; Groceries Stewart - Sulphuretes; Groceries Stewart - Sulphuretes Other camp 50% of	2.3 \$653.00  0.9  1.0  4.0  TOTAL  33% of Total Field Program	\$ 1 501.90 587.70 653.00 1 306.00
July 25, 1983 July 28, 1983 August 2, 1983 August 6, 1983 d) d) Equipment 30 Man days	Stewart - Sulphuretes; Groceries Stewart - Sulphuretes; Groceries Stewart - Sulphuretes Other camp 50% of  ht Costs: Rate/Day based on Equipment Cost for	2.3 \$653.00  0.9  1.0  4.0  TOTAL  33% of Total Field Program crews. \$ 40135	\$ 1 501.90 587.70 653.00 1 306.00 \$ 4 048.60
July 25, 1983 July 28, 1983 August 2, 1983 August 6, 1983 d) d) Equipment 30 Man days e) Office	Stewart - Sulphuretes; Groceries Stewart - Sulphuretes; Groceries Stewart - Sulphuretes Other camp 50% of  ht Costs: Rate/Day based on Equipment Cost for averaged between 2	2.3 \$653.00  0.9  1.0  4.0  TOTAL  33% of Total Field Program crews. \$ 40135	\$ 1 501.90 587.70 653.00 1 306.00 \$ 4 048.60 \$ 1 216.50 \$ 1 216.50