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# REPORT

ON

THE OC-3 MINERAL CLAIM
KAMLOOPS MINING DIVISION
BRITISH COLUMBIA

FOR

SAMOS RESOURCES LIMITED

BY

NELS B. VOLLO, P.ENG.

MAY 14th, 1984

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## SUMMARY

The OC-3 claim is located within NTS Division 83M/3, about 30 km north of Salmon Arm, B.C. No mineral showings are presently known on the claim but it is underlain by volcanic and sedimentary rocks of the Eagle Bay - Fennell formations, known to host polymetallic sulfide deposits elsewhere in the area. Lead-zinc-silver showings are present about 3 km to the east and appear to trend towards the OC-3 claim. An airborne geophysical survey, followed by ground surveys of conductors so located, is recommended to explore for potential deposits.

## INTRODUCTION

This report was prepared at the request of Dil Gujral of Samos Resources Limited., to advise on the mineral potential of the OC-3 claim and propose a suitable exploration program if warranted. It is based on a personal examination of the property on May 2nd, 1984; on personal examinations of nearby properties in the fall of 1983; on a study of all available reports and maps and on the writers experience gained in continuous exploration of the area since 1975.

## CLAIMS

The property consists of the OC-3 Mineral Claim, record no. 5464, 20 units, in the Kamloops M.D. The location of the Legal Corner Post was verified by the writer and the claim appears to be validly staked. It is held by record by Dil Gujral at the date of this report.

## LOCATION, ACCESS AND PHYSIOGRAPHY

The claim is located along and west of Onyx Creek, north of Shuswap Lake, in NTS Division 82M/3W, about 30 km north of Salmon Arm, B.C. It can be reached by paved road along the north shore of Shuswap Lake to Celista, then via good secondary and logging roads up Onyx Creek. (Fig. 1)

Much of the property is on the steep, heavily timbered west wall of the Onyx Creek valley, with only part of the northwest corner reaching the relatively level Shuswap Plateau. Elevation ranges from 800 to 1600 m above sea level. Snowfall is heavy and at higher elevations remains until late June or early July. At the time of the examination the Onyx Creek road was blocked by snow above the 1000 m elevation.

## HISTORY AND PREVIOUS WORK

There is no record of previous work on the ground covered by the present OC-3 claim.

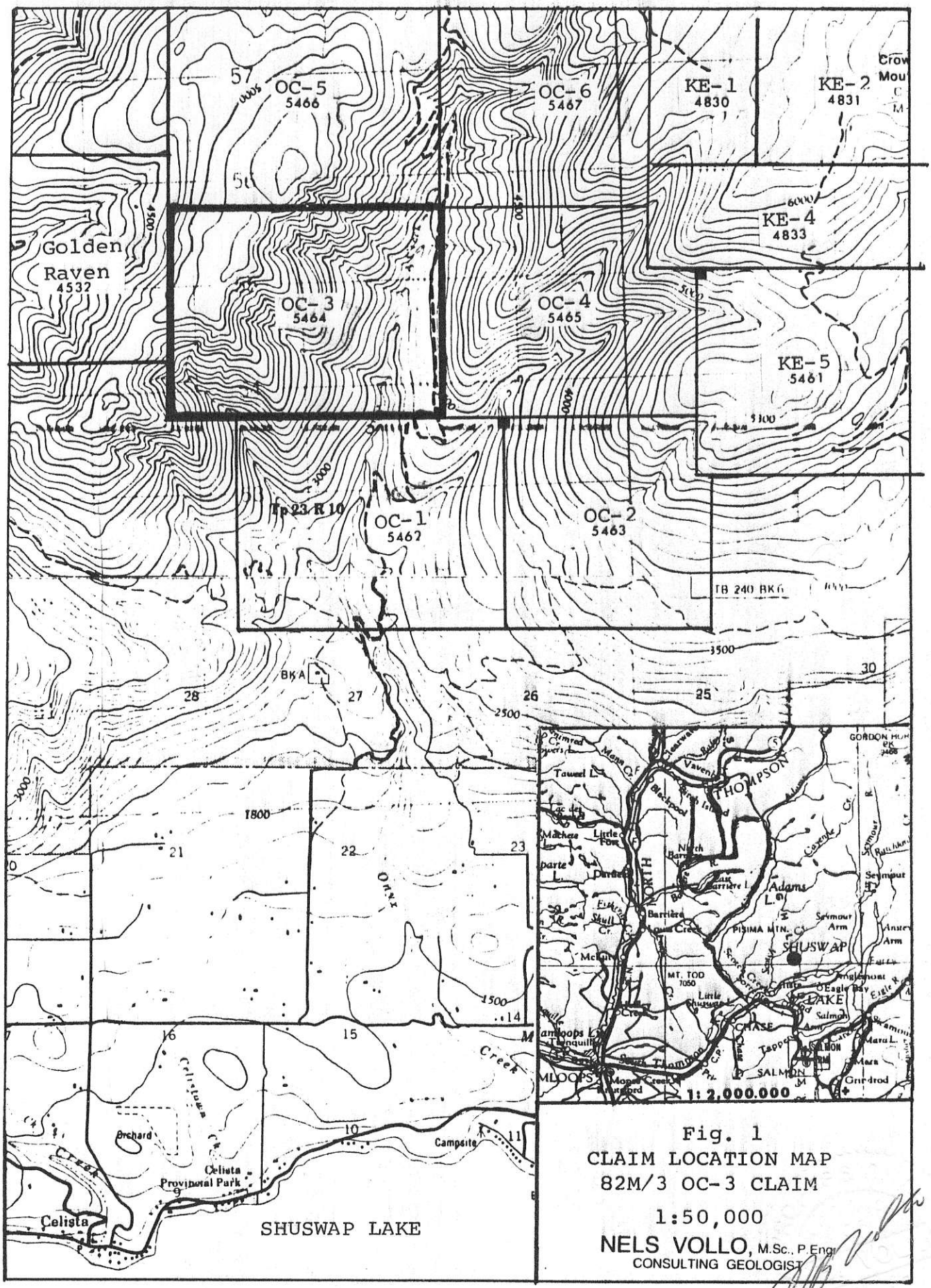


Fig. 1
CLAIM LOCATION MAP
82M/3 OC-3 CLAIM
1:50,000

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## REGIONAL GEOLOGY

The area was mapped in the early 60's by R.B. Campbell[1] as greenstones and sediments of Permian or older age. Jones[2] mapped the rocks on the adjoining Vernon Sheet as the Eagle Bay formation of the Mount Ida group, of Archean age. V.A. Preto[3] has mapped rocks on the Adams Plateau to the west as part of the Eagle Bay formation of Devonian to Mississippian age.

In the early 1970's the writer recognized that the rocks are characteristic of those hosting volcanogenic massive sulfide deposits and has conducted exploration programs in the belt, extending from Sicamous to Clearwater, since. The writer divides the belt into a lower unit, the Sicamous formation, essentially black limestone and shale; a middle unit, the Eagle Bay formation, predominantly rhyolite ignimbrites with associated acid volcanics and derived sediments; and an upper unit, the Fennell formation, predominantly basalt, with numerous siliceous tuffite units and white limestone beds (Fig. 2). The group appears to be Upper Mississippian to Permian in age.

The belt was intruded by quartz monzonite in the Upper Cretaceous, forming a series of westerly trending batholiths as well as a number of small stocks and northerly trending dike swarms.

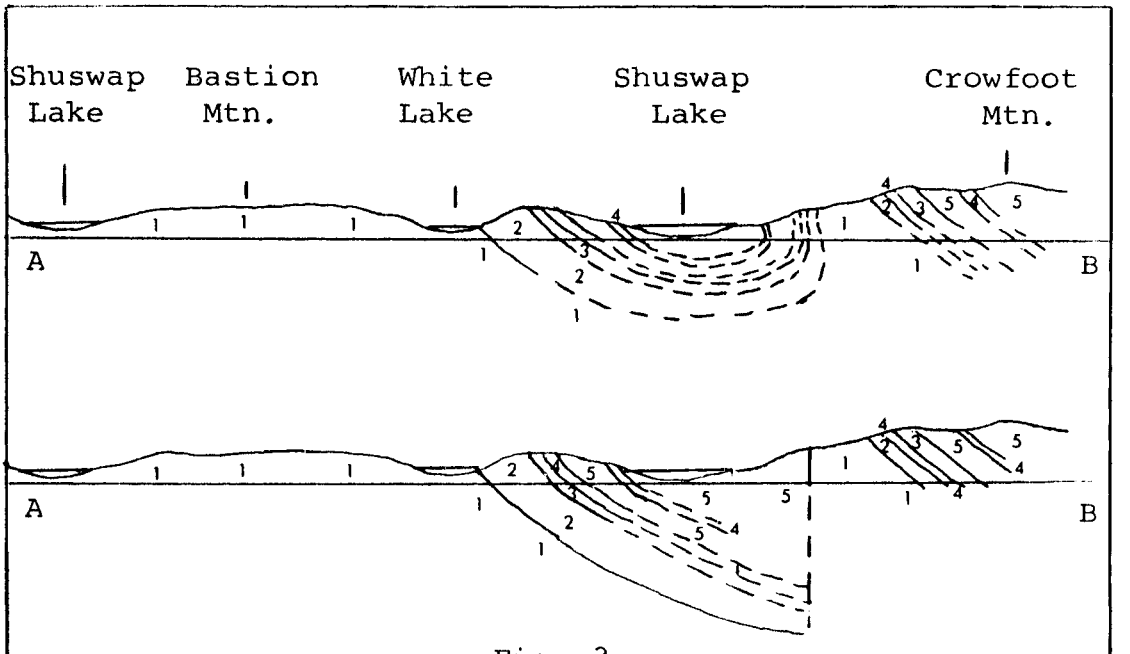


Fig. 3
GEOLOGICAL SECTIONS
Structural Interpretations
1:250,000


Fig. 2

GEOLOGICAL MAP

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The writer observed black shales characteristic of the Sicamous formation to outcrop on the south slopes of Crowfoot Mountain. This suggests that the sequence is repeated in this area, either by folding or by faulting as illustrated in Fig. 3

Numerous sulfide occurences are known throughout the belt. These include small, high grade, Pb Zn Ag deposits on the Adams Plateau, the Homestake Ag Pb Zn Ba deposit west of Adams Lake and the Chu Chua copper deposit north of Barriere. Corporation Falconbridge Copper recently reported[4] outlining 150,000 tons grading 0.43 oz/ton Au on the Hilton deposit, also west of Adams Lake. This discovery, made late in 1983, appears to be in rocks stratigraphically equivalent to those on Crowfoot Mountain (personal observation).

## PROPERTY GEOLOGY AND EXPLORATION POTENTIAL

The OC-3 claim is probably underlain by rocks similar to those exposed on Crowfoot Mountain. There, basalts, tuffites and limestones of the Fennell formation trend southwest and dip moderately to steeply northwest (Fig. 2).. Pb Zn Ag mineralization occurs in tuffites and has been explored intermittently since the late 20's[5,6,7,8],. It is reasonable to expect and to explore for similar mineralization on the OC-3 claim, about 3 km away on trend. It is also probable that due to its rugged topography and heavy growth, the OC-3 claim has been relatively little explored.

## CONCLUSIONS AND RECOMMENDATIONS

The OC-3 claim warrants exploration directed at discovering polymetallic massive sulfide deposits. The entire claim should be covered by a high quality helicopter airborne electromagnetic survey, with lines flown N30°W at 200 m intervals. Conductors defined by the survey should be evaluated geologically and explored by ground geophysics and geochemistry. Promising targets should be pitted, trenched or drilled as practical.

## ESTIMATED COST

Phase I

Airborne EM survey, 25 km at, say $120-----$ 3000

Phase II (contingent on Phase I)

Geological evaluation, ground geophysical and geochemical surveys, say---------- 7000

TOTAL----------$10000

Nels B. Vollo, P. Eng
May 15th, 1984

## APPENDIX I

### REFERANCES

1. Geological Survey of Canada Map 48-1963, R.B. Campbell.

2. GSC Memoir 296, Vernon Map Area, A.G. Jones, 1959

3. British Columbia Ministry of Energy, Mines & Petroleum Resources, Geological Fieldwork, 1980, V.A. Preto, p.15

4. The Northern Miner, March 22nd, 1984.

5. Annual Report of the Minister of Mines of BC, 1927-p.201
   1929-p.217
   1930-p.188
   1931-p.105
   1932-p.99

6. Assessment Report 609, Geological and Geophysical Investigations into the Bet and Saul Groups, H.D.B. Leitch, 1964.

7. Assessment Report 3819, Geochemical and Geophysical Report, Crowfoot Property, Guy B. Allen, 1974.

8. Assessment Report 5133, Geological Report, Fluke 7 & 8 Claims, Guy B. Allen, 1974.

## APPENDIX II

**CERTIFICATE**

I, Nels B. Vollo, do hereby certify that

1. I am a Consulting Geologist with my place of business at 1854 Russet Wynd, Kamloops, B.C., V2C 4N5

2. I am a graduate of the University of Saskatchewan, BA(Geol), in 1950, and of McGill University, MSc(Geol), in 1959.

3. I am a Registered Professional Engineer in good standing with the Association of Professional Engineers of British Columbia.

4. I am a fellow of the Geological Association of Canada, a Member of the Geological Societey of America and the Canadian Institute of Mining and Metallurgy.

5. I have practised my profession for 33 years.

6. This report is based on my personal examination of the property on May 2nd, 1984; on my personal examination of neighboring properties in September and October, 1983; on a study of all available reports and maps and on my experience gained in continuous exploration of the region since 1975.

7. I have no direct or indirect interest in the property or in Samos Resources Limited, nor do I expect to receive any.

8. Permission is granted to use this report as required by any Securities Commission or Stock Exchange.

Nels B. Vollo, P.Eng.
May 14th, 1984