

520033

Evaluation Report

for

NAKUSP RESOURCES LTD.

on the

MONASHEE EAST PROPERTY

Vernon M.D.

82L 2E

March 2, 1983  
Vancouver, B.C.

L. Sookochoff, P.Eng.  
Consulting Geologist

TABLE OF CONTENTS

|  |     |
|--|-----|
| SUMMARY -----  | 1.  |
| INTRODUCTION -----   | 1.  |
| PROPERTY -----   | 2.  |
| LOCATION AND ACCESS -----                                      | 2.  |
| PHYSIOGRAPHY -----   | 2.  |
| HISTORY -----  | 3.  |
| GEOLOGY AND MINERALIZATION -----                               | 4.  |
| CONCLUSIONS -----  | 8.  |
| RECOMMENDATIONS -----  | 8.  |
| ESTIMATED COST OF THE RECOMMENDED EXPLORATION<br>PROGRAM ----- | 9.  |
| BIBLIOGRAPHY -----   | 10. |
| CERTIFICATE -----  | 11. |

ILLUSTRATIONS

|          |                  |
|----------|------------------|
| FIGURE 1 | LOCATION MAP     |
| FIGURE 2 | REGIONAL GEOLOGY |
| FIGURE 3 | CLAIM MAP        |

Evaluation Report  
for  
NAKUSP RESOURCES LTD.  
on the  
MONASHEE EAST PROPERTY

SUMMARY

Nakusp Resources Ltd. holds under option 14 claims plus a 20 unit claim block at the headwaters of the Kettle River and Yeoward Creek within a placer gold area and amidst former and recent discoveries indicative of synvolcanic gold occurrences.

One of the first lode mines worked in B.C. was the Monashee Mine southwest of the Monashee East property where gold mineralization occurs with quartz and a sedimentary-metavolcanic relationship. Similar geological gold occurrences and/or indications thereof are found on adjacent and peripheral properties.

The Monashee East property is underlain by volcanic and associated sedimentary rocks where calcereous pelites, greenstones, breccias, sericite schists, and intercalated lavas and slates with localized altered and silicified zones are contained therein.

With the known mineral controlling features of mineral occurrences in the area and the potential for locating similar or variances to the synvolcanic mineralization model on the Monashee East property, a three stage exploration program estimated to cost \$138,500 is recommended for the exploration thereon.

INTRODUCTION

At the request of J. Brock of Nakusp Resources Ltd., the writer prepared this report on an evaluation of the Monashee East Property for the purpose of assessing the potential for contained economic gold-silver mineralization.

The information for the report was obtained from publications as cited under references and from a property examination of February 21, 1983. Due to snow cover, the examination was restricted to the verification and location of one claim post.

PROPERTY

The property is comprised of two claim blocks - one a contiguous block of six two post claims and one claim of 20 units. The second claim block within three km west, consists of eight two post claims. Particulars are as follows:

| <u>Claim Name</u> | <u>Record Number</u> | <u>Expiry Date</u> |
|-------------------|----------------------|--------------------|
| Polecat 1-8       | 1285-1292            | November 2, 1983   |
| J. One            | 1176                 | November 19, 1983  |
| Mac 1-6           | 1294-1299            | November 2, 1983   |

The claim group is held under option by Nakusp Resources Ltd. of Vancouver, B.C.

Any legal aspects pertaining to the claim group are beyond the scope of this report.

LOCATION AND ACCESS (118° 21' W 50° 09' N)

The property is located between Monashee Creek and Kettle River and at the headwaters of Yeoward Creek, 19 km southeasterly of Cherryville within N.T.S. map sheet 82 L 1W.

Access is via Highway 6 south from Cherryville for 36 km to the northerly branching secondary Keefer Lake road. At nine km, a dry weather road branches northeasterly to provide access to and through the J. One claim to Yeoward Mountain and approximately the common boundary of the J. One - Mac claims.

The Polecat group of claims would be accessible to within two km by a dry weather secondary road paralleling Yeoward Creek from Monashee Creek. The Monashee Creek road branches off Highway 6, nine km south of Cherryville.

PHYSIOGRAPHY

The property covers moderate to steep forested slopes of Yeoward Mountain and the headwaters of Yeoward Creek and tributaries of Monashee Creek and Kettle River.

Elevations on the claim groups range from 2130 meters on the J. One - Mac claims covering Yeoward Mountain to 1460 meters on the Polecat claims.

### HISTORY

The history of the area stems from the placer gold workings from the early 1870's with most of the placer mining done between the years 1874 and 1895. The Cherry Creek placer deposits southeast of Cherryville have yielded more gold than any other placers in the area. In the Monashee Pass area, placer gold has been recovered from the Kettle River three km to the east and from McIntyre Creek near its confluence with the Kettle River seven km south.

Among the first lode mines worked in British Columbia was the Monashee Mine ground which consisted of a series of crown granted mineral claims to the west side and the east side of Monashee Pass on Monashee Mountain.

The crown granted claims of the Monashee group were originally staked in 1886 and have been worked periodically up until 1940 when the machinery and equipment from the mill were removed.

Development workings on the Monashee group included workings on the east and the west sides of the pass (probably on the same vein). The workings on the west include numerous open-cuts on the vein along a distance of 1,500 feet. There are two tunnels driven - "one a drift, 170 feet long, with two upraises, 25 and 50 feet respectively, and the other a crosscut about 800 feet long and 450 feet lower which did not intersect the vein."

On the east side crown grants which are included in the Nakusp Resources Monashee West property, workings on the Withrow claim consists of three tunnels. The lowest tunnel at 1,097 meter elevation is 79 meters long, No. 2 tunnel at 1,156 meter elevation is 145 meters long and No. 3 tunnel at 1,184 meter elevation is 110 meters long. A fourth and possibly fifth set of workings are located at higher elevations.

The portals of the tunnels are presently caved and inaccessible.

In 1890 a "stamp" mill was completed to crush the ore and "2 1/2 miles of ditch was built to bring in water for power. The mill was shut down in 1891 for want of water".

Production in 1939 and 1940 from the Monashee St. Paul is recorded as 2,193 tons with a reported 400 oz. of gold taken out in 1940.

The St. Paul group of claims on Monashee Mountain has had a varied history extending from the early 1900's. The Toughcut claim and the Morgan workings of the Minerva claim were the sites of predominant exploration. The Morgan claim

"and adjoining ground after being restaked and after many changes in ownership was acquired in 1926 by the present owners. In all, a few hundreds of tons of ore have been shipped or given mill tests and reported to carry high values in gold. More recently in 1927, 11 tons of ore from No. 1 adit on the Toughcut claim were shipped to the Trail smelter..."

More recently (1974 to 1978) the St. Paul group of crown grants were explored by trenching, stripping and bulk sampling. In 1982 Brican Resources in exploration work on the St. Paul group delineated a new zone of gold-arsenic mineralization east of the old mine workings. In addition, two large anomalous zones were also discovered on adjacent ground.

During 1974 and 1978 the Fox and DK claims covering the headwaters of Yeoward Creek were explored.

The Dona group of claims between the Kettle River and Yeoward Creek were explored by El Paso Mining and Milling in 1973 and 1974. The claims have been more recently worked by Granex.

In addition El Paso in 1979 carried out exploration work in the Keefer Lake area which had previously been explored by Ducanex Resources in 1973 and 1974.

Presently, exploration activity is rapidly increasing with both major and junior mining companies establishing a property position in the area.

The writer is not aware of any previous exploration work on the ground covered by the Monashee East property.

#### GEOLOGY AND MINERALIZATION

The general geology of the area from Open File Map 637 is indicated as a belt of northwesterly trending Carboniferous and Permian Thompson Assemblage flanked by Jurassic intrusives along the south and the Triassic Nicola and Slocan groups to the north. Tertiary plateau basalts cap portions of the intrusives and the intrusive - Thompson assemblage contact in the south.

The Thompson assemblage (formerly the Cache Creek group) is subdivided into three units each containing rocks of somewhat similar lithology but in different proportions. The lowermost unit is predominantly of argillaceous sediments; the middle unit consist of volcanoclastic rocks, argillite, quartzite and limestone,; and the upper unit consists of limestone, quartzite, argillite and volcanic rock.

Some of the volcanic rock of the middle division is lighter colored than the typical kind and coarser grained which is essentially a fine-grained grey diorite despite the extrusive nature. Volcanic rocks also in some cases contain fragments, particularly argillite which have broken from the lava conduit or have been rolled into the lava by the advancing front. Minerals included in altered volcanics include carbonate, zoisite, sericite, albite, quartz and calcite. Zoisite and sericite occur as thick swarms of tiny grains in the plagioclase, but albite, quartz and calcite are mostly restricted to the surrounding ground mass.

Geological descriptions on peripheral properties with known mineralization include the:

a) Dona property where:

"a diorite plug occurs in Cache Creek Group argillites and tuffs. Numerous narrow, irregular quartz veins in diorite and a few sporadic small pods of massive sulphides carry values in gold and silver."

The writer examined the mineral showing exposed within a trench on the Gnanex-Dona property. Pods of sulphide bearing quartz occur at the surface of a meta-volcanic flow. Brecciated rubble with tuffaceous material occurs in association with the flow which appears to intimately terminate with pelitic sediments. A moderate to heavy reddish soil horizon has developed above the flow with an undulating surface horizon of gray soil.

A sample of sulphide bearing quartz taken by the writer returned an assay of 6.84 oz. Ag/ton and 0.078 oz. Au/ton.

b) Fox property where:

"The claims are underlain by argillite, andesite tuff, and minor quartzite and limestone, all of the Cache Creek Group. These rocks have been injected by quartz veins ranging in thickness from one-quarter inch to more than 4 feet. On Fox 16 a trench exposes minor chalcopyrite and pyrite disseminated in argillite and a 4-inch quartz vein carrying pyrite and galena. On Fox 15 a second trench exposes minor pyrite and chalcopyrite disseminated in tuff, and further west the tuff carries heavy pyrite and arsenopyrite. On Fox 17 an old shaft was sunk in a quartz vein, 4 to 8 feet wide, containing pockets of galena."

c) St Paul crown grants where:

"Argillites and limestones of Upper Paleozoic to Upper Triassic age are intruded by sill-like bodies of altered diorite. Quartz vein stockworks with disseminations, stringers, lenses, and pods of various sulphides, sulpharsenides, and sulphosalts cut all rock types. Mineralization is disseminated in country rocks."

d) Keefer Lake property where:

"The claims are underlain mainly by Cache Creek Group black argillite and siltstone. Toward the southwest the argillite is hornfelsed adjacent to quartz diorite dykes. The southeast part of the area is underlain by Cache Creek andesite, generally metamorphosed to greenstone. A small diorite stock intrudes the greenstone on the south property line. Narrow pyrite-bearing quartz veins cut both quartz diorite and hornfels. Small amount of gold occurs with arsenopyrite in some of the quartz veins."



e) Rose showing (Keefer Lake)

"Arsenic and silver soil geochemical anomalies were outlined in the 1973 work. Pyrite and traces of pyrrhotite were the only minerals found. The property is underlain mainly by argillite and some rhyolite tuff, both of the Cache Creek Group of Permian age. Diorite is present as a small sill on Rose 2 claim."

The Monashee East property is indicated to predominantly cover the Triassic Nicola group and the Slocan group within two km north of the Thompson assemblage.

A band of Nicola rocks enveloped by the Sicamous formation of the Slocan group, originates and subparallels the Thompson assemblage north of Keefer Lake and adjoins the assemblage to the west near Highway 6 and the mouth of Yeoward Creek.

The Sicamous formation is comprised of argillaceous rocks, calcareous pelites, minor conglomerate, limestone, greenstone and paragneiss. Fine grained quartzites intercalated with slate which is commonly quartzitic or calcareous, weathers to rusty brown.

The Nicola group consists predominantly of andesitic and basaltic lavas with tuffs, greenstones, limestone and sericite schists. The lavas locally exhibit flow breccia textures and are somewhat epidotized and silicified. Green tuff, green gray argillaceous tuff and black slate are intercalated with the lavas in small amounts.

There is no known mineralization on the Monashee East claim group.

### CONCLUSIONS

The Monashee East property of Nakusp Resources, covers lithological units of the Slocan and Nicola groups within which synvolcanic gold mineralization can occur.

Favorable indicators to the location of potential economic gold mineralization are; known occurrences of mineralization associated with sedimentary-metavolcanic relationship in the area; the presence of known lava conduits in the volcanic-sedimentary pile; and the breccias and alteration associated with some volcanic flows.

### RECOMMENDATIONS

A three stage exploration program is recommended to locate and test potentially mineralized lithological units.

Stage I would consist of a recce geological survey in association with prospecting and sampling to establish favorability of the claim group for gold bearing formations.

Stage II of the recommended program would consist of geological mapping in association with prospecting and sampling and geochemical surveys. Trenching of prime anomalous zones would follow with mapping and sampling of exposed bedrock.

Stage III would consist of a diamond drilling program.

ESTIMATED COST OF THE RECOMMENDED EXPLORATION PROGRAMStage I

|                                     |              |
|-------------------------------------|--------------|
| Base map                            | \$ 1,500     |
| Geological mapping                  | 3,000        |
| Prospecting and sampling            | 2,000        |
| Geochemical sampling (sut and soil) | 5,000        |
| Supervision                         | 2,000        |
| Contingencies                       | <u>1,500</u> |
|                                     | \$ 15,000    |

Stage II

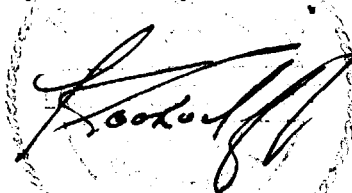
|  |              |
|--|--------------|
| Geochemical survey (including grid)<br>1,000 samples @ \$17        | \$ 17,000    |
| Geological mapping 1 mo. @ \$3,000                                 | 3,000        |
| Prospecting and sampling   | 2,000        |
| Trenching and sampling allow<br>(including access road)            | 20,000       |
| Associated field expenses<br>(assays, travel, lodging)             | 3,000        |
| Engineering, supervision and reports                               | 5,000        |
| Contingencies for possible max-min<br>surveys over anomalous areas | <u>5,000</u> |
|  | \$ 55,000    |

Stage III

|  |                  |
|--|------------------|
| Diamond drilling - 500 meters \$100<br>all inclusive | <u>\$ 50,000</u> |
| Three stage total                                    | \$120,000        |

It is estimated Stage I of the recommended program would take two months to complete.

Respectfully submitted,



Laurence Sookchoff, P.Eng.  
Consulting Geologist

March 2, 1983  
Vancouver, B.C.

BIBLIOGRAPHY

## - British Columbia Report of the Minister of Mines

1890 - 378                      1922 - 145

1891 - 576                      1935 -

1900 - 857

1902 - 189

1903 - 178

## - George Cross News Letter, No. 17, January 26, 1983

## - Geological Survey of Canada, Summary

Report 1930

## - Geology of Canadian Gold Deposits, Special Volume

24, C.I.M. 1982

- Thompson, Shuswap Okanagan Open File 637

## Ministry of Energy Mines and Petroleum Resources G.E.M.

1973 p 97-98

1974 p 87

1975 p E 50

1978 p E 87

## JONES, A.G. - Vernon Map Area, British Columbia, G.S.C.

Memoir 296, 1956

## McGORAN - Geochemical Report on The Keefer Claim,

September, 1982

## MORRISSON, M. - Report on Geological and Geochemical

Surveys, K.L. Claim, Keefer Lake Area,

October 25 1974 Assessment Report No. 5279

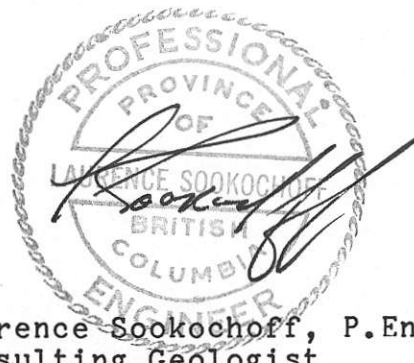
CERTIFICATE

I, Laurence Sookochoff, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist with the firm of Pan-American Consultants Ltd. of 1406-1055 West Georgia Street, Vancouver, B.C.

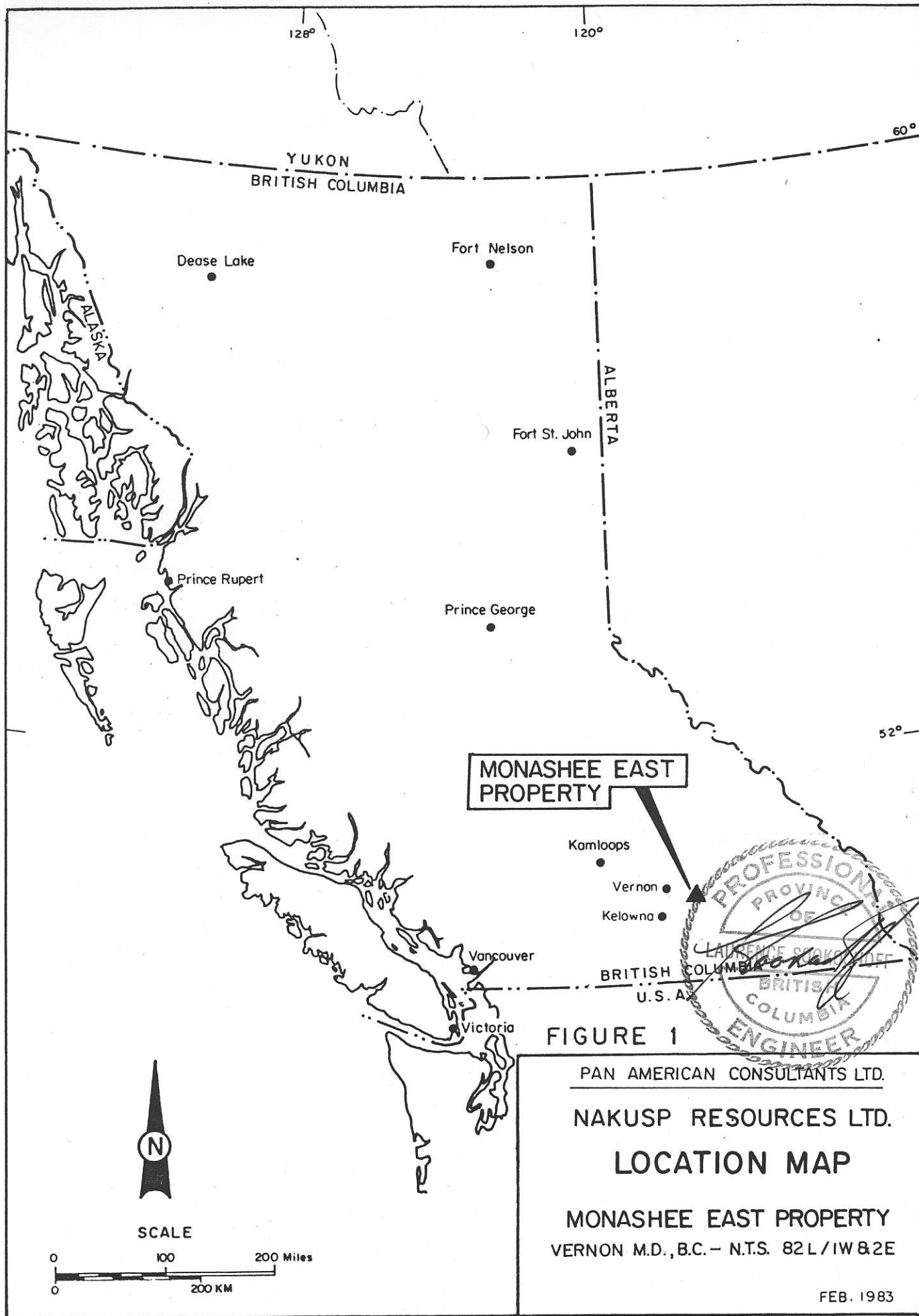
I further certify that:

1. I am a graduate of the University of British Columbia (1966) and hold a B.Sc. degree in Geology.
2. I have been practising my profession for the past sixteen years.
3. I am registered with the Association of Professional Engineers of British Columbia.
4. The information for the accompanying report is based on pertinent material as cited under references, and from a property examination carried out on February 21, 1983.
5. Neither I or Pan-American has direct or indirect interest in the property described herein, or in Nakusp Resources Ltd.
6. This report may be utilized by Nakusp Resources Ltd. for inclusion in a Statement of Material Facts.



Laurence Sookochoff, P.Eng.  
Consulting Geologist

March 2, 1983  
Vancouver, B.C.



**MONASHEE EAST  
PROPERTY**

**FIGURE 1**

PAN AMERICAN CONSULTANTS LTD.

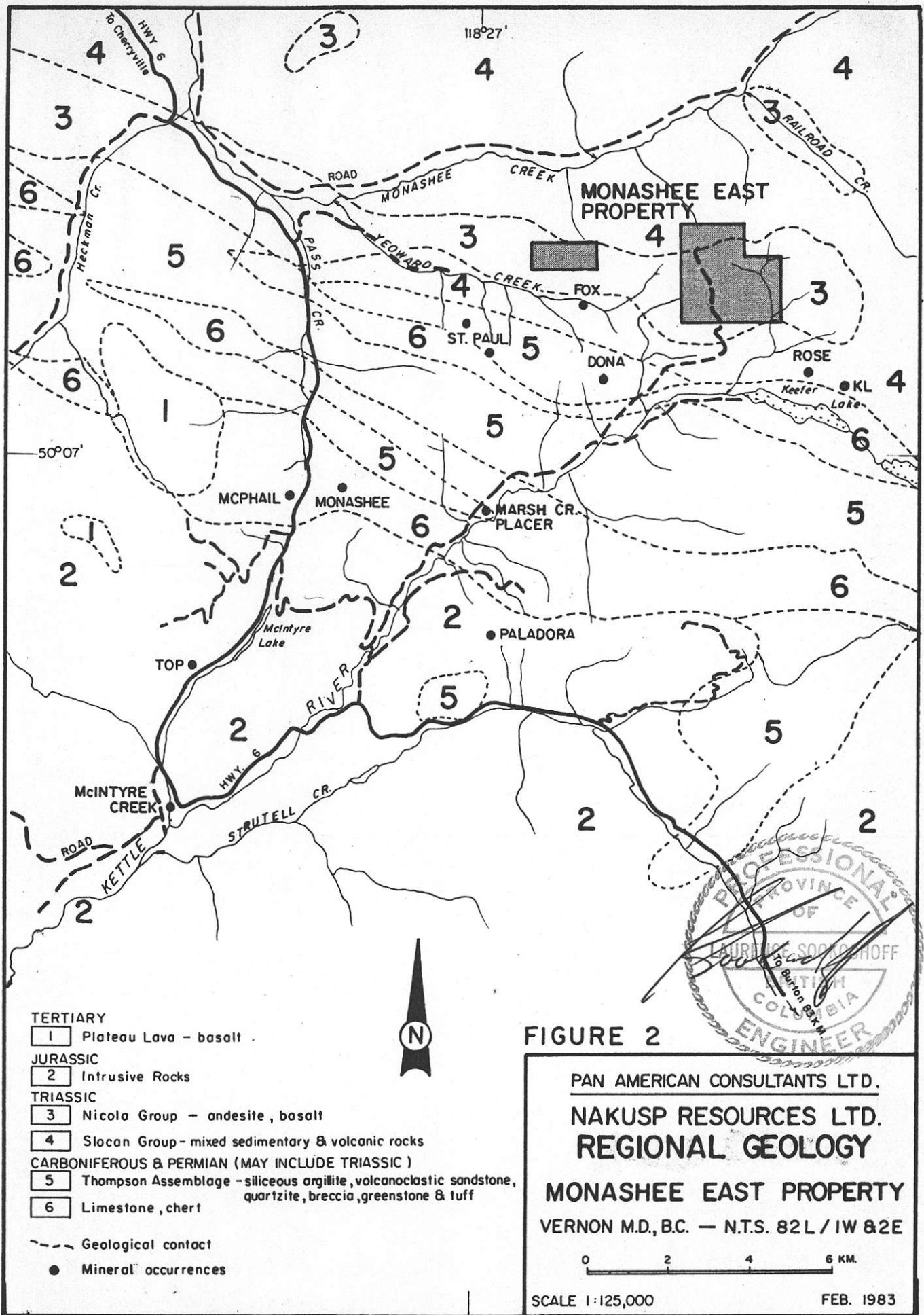
NAKUSP RESOURCES LTD.

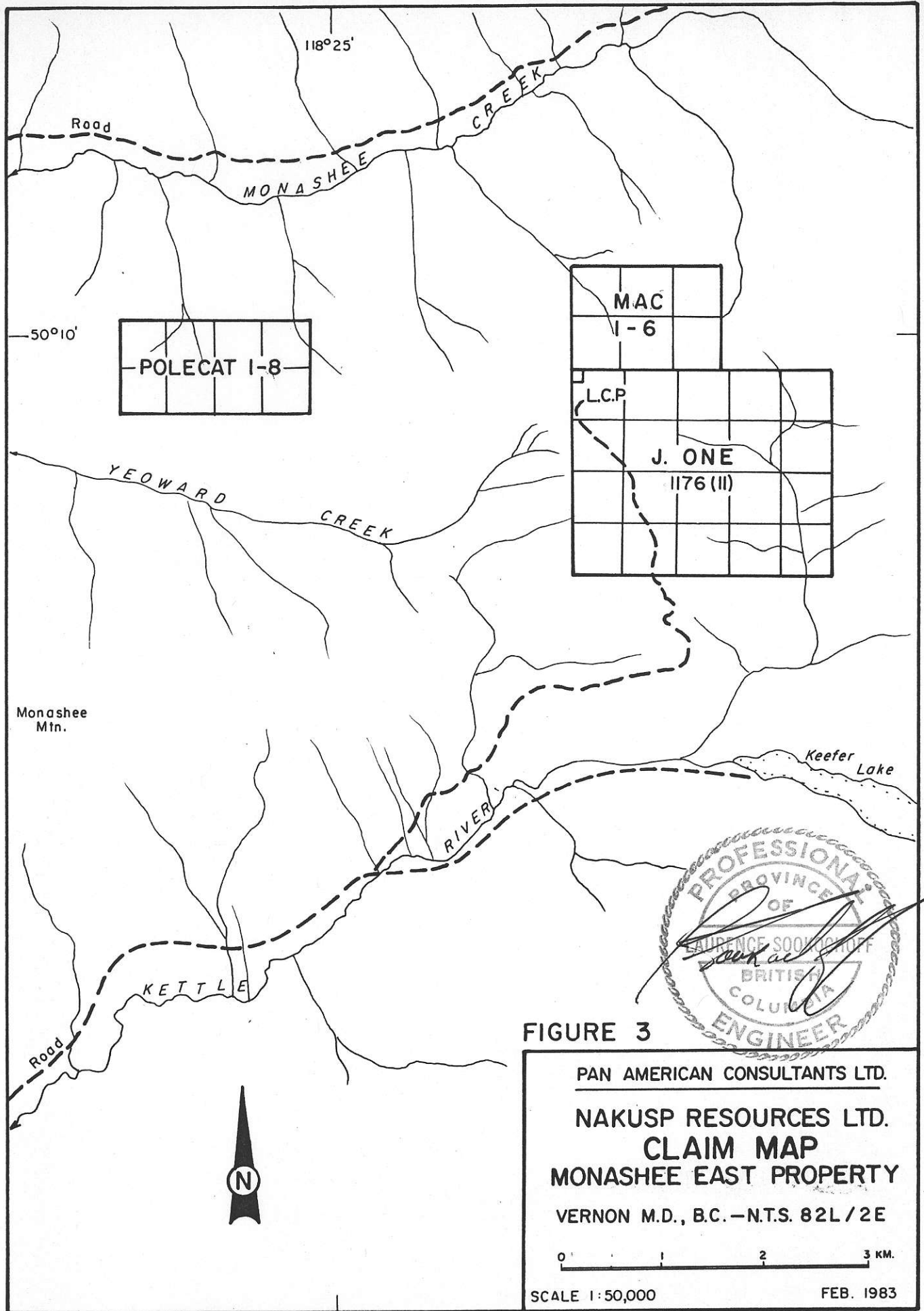
**LOCATION MAP**

**MONASHEE EAST PROPERTY**

VERNON M.D., B.C. - N.T.S. 82L/IW&2E

FEB. 1983





**FIGURE 3**

PAN AMERICAN CONSULTANTS LTD.  
 NAKUSP RESOURCES LTD.  
**CLAIM MAP**  
 MONASHEE EAST PROPERTY  
 VERNON M.D., B.C. - N.T.S. 82L/2E  
 0 1 2 3 KM.  
 SCALE 1:50,000 FEB. 1983