

520253

Evaluation Report

for

NAKUSP RESOURCES LTD.

on the

MONASHEE WEST PROPERTY

Vernon M.D.

82L 1W and 82L 2E

March 3, 1983  
Vancouver, B.C.

L. Sookochoff, P.Eng.  
Consulting Geologist

## TABLE OF CONTENTS

SUMMARY -----	1.
INTRODUCTION -----	1.
PROPERTY -----	2.
LOCATION AND ACCESS -----	2.
PHYSIOGRAPHY AND VEGETATION -----	2.
HISTORY -----	3.
GEOLOGY AND MINERALIZATION -----	4.
CONCLUSIONS -----	8.
RECOMMENDATIONS -----	8.
ESTIMATED COST OF THE RECOMMENDED EXPLORATION PROGRAM -----	9.
BIBLIOGRAPHY -----	11.
CERTIFICATE -----	12.

## ILLUSTRATIONS

FIGURE 1	LOCATION MAP
FIGURE 2	REGIONAL GEOLOGY
FIGURE 3	CLAIM MAP
FIGURE 4	WITHROW WORKINGS - PLAN
FIGURE 5	WITHROW WORKINGS - SECTION

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MONASHEE WEST PROPERTY

SUMMARY

Nakusp Resources Ltd. hold under option 31 claims plus a 12 unit claim block at the headwaters of the Kettle River in the Monashee area where exploration activity is intensifying due to the discovery of synvolcanic gold mineralization.

The general area is historically a placer camp and includes one of the first lode mining operations in B.C. Portions of this former producer where gold mineralization occurs in association with quartz and a sedimentary-metavolcanic relationship and from which 400 oz. of gold were reportedly extracted in 1940 forms part of the Monashee West property.

Based on the known geological mineral controlling features and the potential on the property for other similar or variances to the synvolcanic gold mineralization, a three stage program estimated to cost \$154,200 is recommended for the exploration of the property.

INTRODUCTION

At the request of J. Brock of Nakusp Resources Ltd., the writer prepared this report on the evaluation of the Monashee West 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 on February 21, 1983. Due to snow cover, the examination was restricted to the verification and location of three claim posts.

### PROPERTY

The property is comprised of 32 contiguous claims which consist of 26 two post claims, one claim of 12 units and five crown granted claims as follows:

<u>Claim Name</u>	<u>Record Number</u>	<u>Expiry Date</u>
Phyl 1-2	1134-1135	October 5, 1983
Bud 1-2	1136-1137	October 5, 1983
Mort 1-2	1138-1139	October 5, 1983
John 1-4	1166-1169	November 3, 1983
Rob 1-4	1181-1184	December 4, 1983
David One	1236	July 28, 1983
Moonbeam 1-12	1314-1325	November 15, 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° 30'W 50° 06'N)

The claim group is located 23 km south of Cherryville at Monashee Pass and at the headwaters of; the easterly flowing Marsh Creek and other tributaries of the Kettle River; the northerly flowing Monashee Pass Creek; and the southerly flowing McIntyre Creek.

Access is provided to the western portion of the claim group by the all weather highway and to the eastern portion by the Keefer Lake road. A secondary dry weather road also passes centrally through the claim group.

### PHYSIOGRAPHY AND VEGETATION

The claims are within the Monashee Mountain range enveloping moderate slopes in the Monashee Pass area and predominantly gentle slopes over most of the property with steep northwesterly facing slopes from the height of land in the northeast.

Elevations range from 1675 meters along the Monashee divide in the northeast to 1065 meters along Monashee Pass Creek in the north. the claims cover moderately timbered slopes, portions of which have been logged.

### 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. The workings on the west include numerous open-cuts on the vein probably the same as the Withrow to the east. 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.

#### 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.

The Sicamous Formation of the Slocan group north of the Thompson Assemblage is comprised of argillaceous rocks, calcareous pelites, minor conglomerate, limestone greenstone and paragneiss'. Fine grained quartzites interbedded with slate which is commonly quartzitic or calcareous weathers to rusty brown.

The Nicola Group occurring sporadically through the Slocan Group and paralleling and sub-paralleling the Thompson assemblage along the north boundary consists predominantly of andesitic and basaltic lavas with tuffs, greenstones, limestone and sericite schists. The lavas locally are somewhat epidotized and silicified. Green tuff, green gray argillaceous tuff and black slate are intercalated with the lavas in small amounts.

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 Granex-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 West property is indicated to be underlain by the northwesterly trending contact of the Jurassic intrusives and the limestone, quartzite, argillite and volcanic rock sequence of the Thompson assemblage.

In the vicinity of the crown grants, argillaceous sediments, siltstones and limestones with local quartz diorite to granodiorite outcrop. In the vicinity of the upper workings, altered volcanic rocks are overlain and intimately associated on the contact with sediments.

The quartz veins and mineralization in the Withrow tunnels are as follows:

"The quartz vein in No. 3 tunnel varies from 9 to 4 inches in width and strikes in a north-west direction. A few feet to the south of the mouth of the No. 3 tunnel is a faulted outcrop of a 6 foot quartz vein in which the caved tunnel was evidently driven; the present No. 3 vein being possibly a stringer in the hanging-wall of the main lead. By crosscutting to the south from the face of No. 3 tunnel, the larger vein will probably be intersected."

"In No. 2 tunnel the vein, striking more to the east and west and dipping 34° to the south-east pinches and swells from 1 foot to 5 feet in width, the widest section occurring near faults. There is a better distribution of mineral for 185 feet from the mouth to an upraise put in close to a fault."

Tunnel No. 2 was from the portal driven in "some 155 feet" through gravel wash and slide, in which some free gold was obtained. At the end of the southerly cross-cut following the gravel-rock contact a drift was:

"made into the solid following and developing a vein of white quartz which is here ten feet wide but diminishes to about a foot. this seems to have been the chief point of ore production."

The ore-minerals seen with a hand magnifying glass are pyrite, with minute segregations and isolated crystals of chalcocite and galena. Average assays of gold and silver (calculated at \$20 an ounce for gold) are reported to be between \$7 and \$8 per ton."

Reported assays of samples from the Withrow are as follows:

<u>Location</u>	<u>Assay</u>	
	oz/ton Au	oz/ton Ag
5th portal	.21	.87
clearing	.50	---
3rd portal	1.46	5.23
Dump	.096	----

### CONCLUSIONS

The Monashee West property of Nakusp Resources Ltd. in addition to covering old workings in which significant gold-silver values occur envelops a series of lithological units that are favorable to hosting synvolcanic gold mineralization.

Geological indications such as the sedimentary-meta volcanic relationship in the area of known mineralization on the Withrow workings; the presence of known lava conduits in the volcanic-sedimentary pile; and the presence of carbonates, sericite and albite in some volcanics are encouraging features to the location of economic gold mineralization on the Monashee West property.

### RECOMMENDATIONS

To the location of potential volcanic-sedimentary gold hosted deposits, it is recommended that a three stage exploration program be carried out.

The program should be designed to establish prime correlative anomalous sites which would be trenched, sampled and possibly drilled to test for potential gold mineralization.

Stage I of the recommended program would consist of initially obtaining access to the old workings; detailed geological mapping (surface and underground); prospecting and sampling; and geochemical surveys with assays of unsifted material for gold, silver, lead and zinc. These surveys would be confined to the Withrow workings and extensions thereof.

Stage II would consist of recce surveys over the balance of the property to locate potential gold bearing zones comparable to that of the Withrow workings. Prime correlative sites would be trenched, mapped and sampled to establish favorability of bedrock for gold mineralization.

Stage III of the exploration program would only be implemented on favorable results of the initial stage and would consist of a diamond drilling program to test for indicated mineral extensions.

ESTIMATED COST OF THE RECOMMENDED EXPLORATION PROGRAMStage I (detailed)

Access to workings	allow	\$ 5,000
Geological mapping (surface and underground)		3,000
Geochemical survey	400 samples at \$17	6,800
Prospecting and sampling		1,500
Associated field expenses (travel lodging etc.)		2,000
Engineering, supervision and reports		2,500
Contingencies (for possible trenching and max-min surveys)		<u>9,200</u>
		\$30,000

Stage II (recce)

Geochemical survey (including grid)		
1,600 samples at \$17		\$ 27,200
Prospecting and sampling		2,500
Geological mapping	1.5 mo. @ \$3,000	4,500
Trenching and sampling	allow	10,000
Associated field expenses (assaying, travel, lodging etc.)		3,000
Engineering, supervision and reports		10,000
Contingencies (for possible max-min surveys on anomalous areas)		<u>7,500</u>
		\$ 64,200

Stage III

Diamond drilling - 600 meters @ \$100		<u>\$ 60,000</u>
Total estimated cost		\$154,200
		=====

It is estimated the first stage of the recommended program would take two months to complete.

Respectfully Submitted,

Laurence Sookocheff, P.Eng.  
Consulting Geologist

March 3, 1983  
Vancouver, B.C.

BIBLIOGRAPHY

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

- British Columbia Report of the Minister of Mines

1890 - 378                      1922 - 145

1891 - 576                      1935 -

1900 - 857

1902 - 189

1903 - 178

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

Memoir 296, 1956

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

MORRISSON, M. - Report on Geological and Geochemical

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

October 25 1974 Assessment Report No. 5279

McGORAN - Geochemical Report on The Keefer Claim,

September, 1982

Geology of Canadian Gold Deposits, Special Volume

24, C.I.M. 1982

- Thompson, Shuswap Okanagan Open File 637

Geological Survey of Canada, Summary

Report 1930

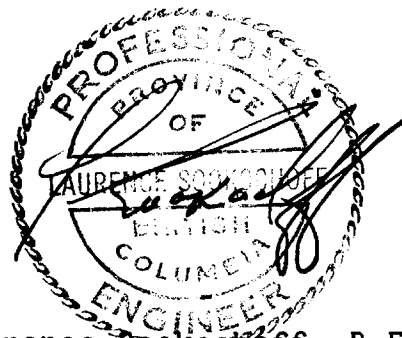
CERTIFICATE

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.

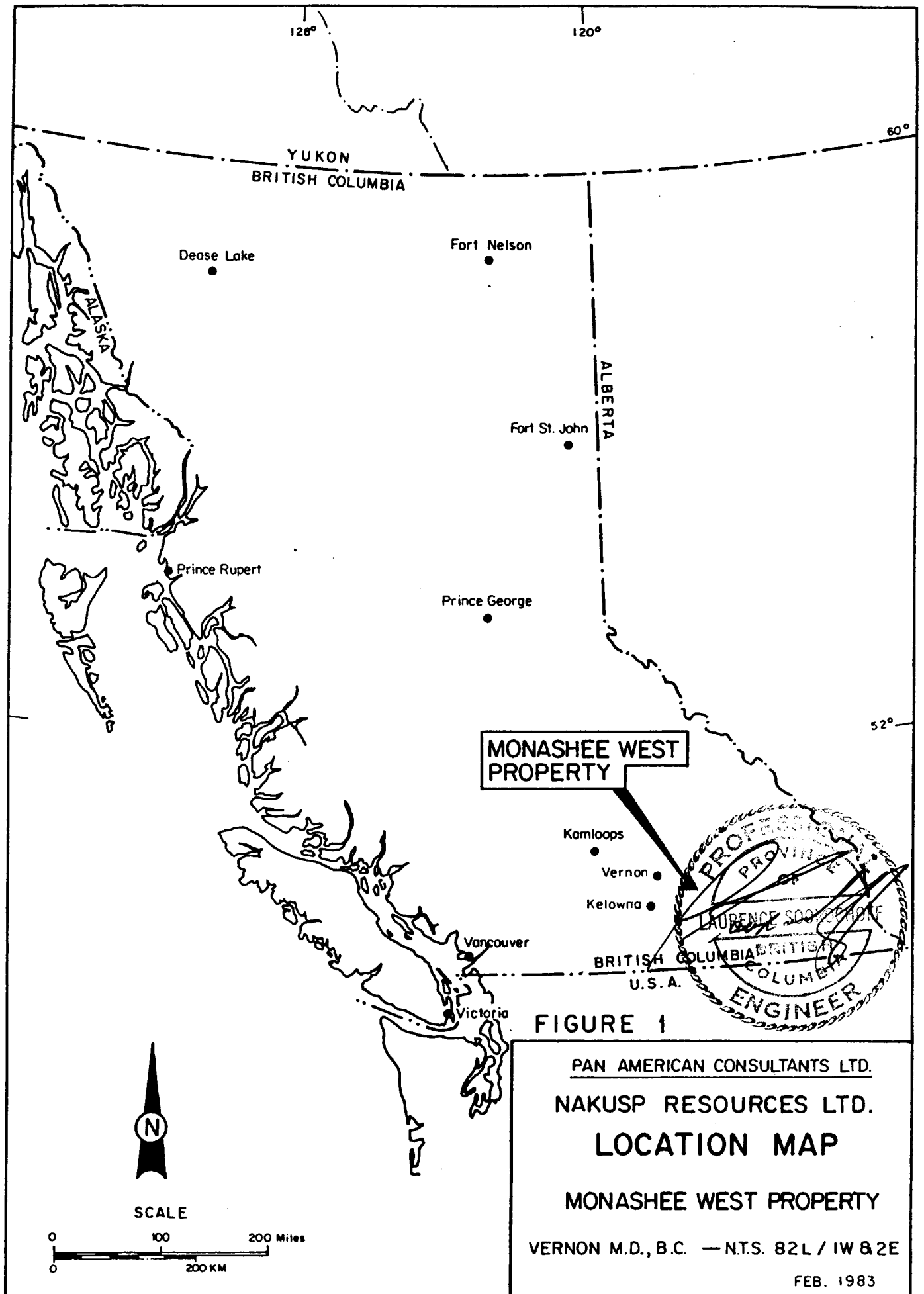
I further certify that:

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.

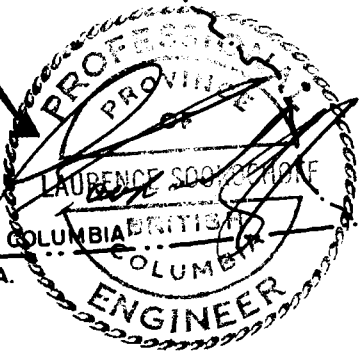


Laurence Sookochoff, P.Eng.  
Consulting Geologist

March 3, 1983  
Vancouver, B.C.



**MONASHEE WEST  
PROPERTY**



**FIGURE 1**

PAN AMERICAN CONSULTANTS LTD.

NAKUSP RESOURCES LTD.

**LOCATION MAP**

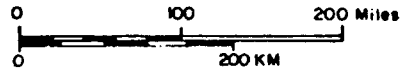
**MONASHEE WEST PROPERTY**

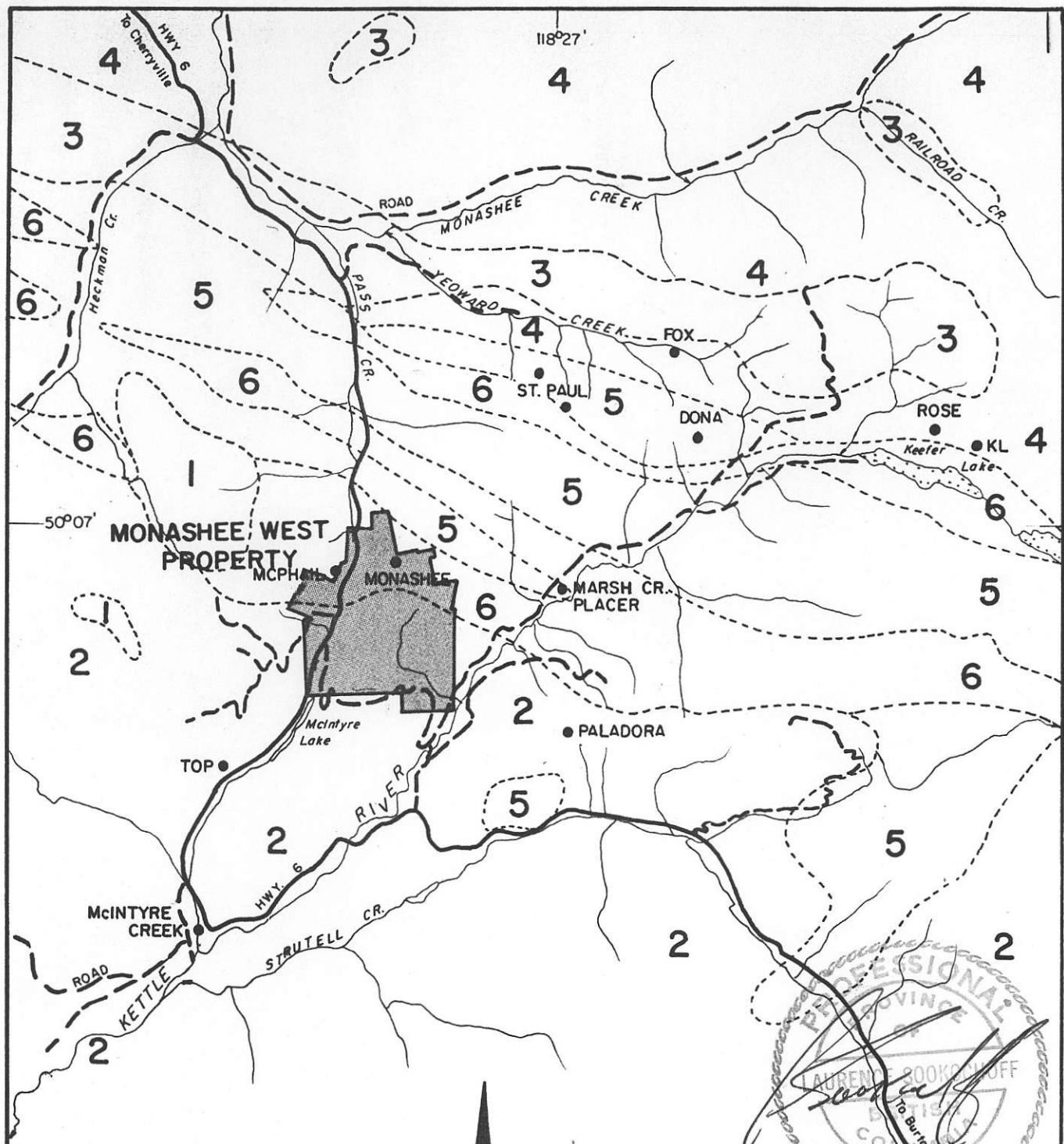
VERNON M.D., B.C. — N.T.S. 82L / IW & 2E

FEB. 1983



SCALE





- TERTIARY**  
 1 Plateau Lava - basalt
- JURASSIC**  
 2 Intrusive Rocks
- TRIASSIC**  
 3 Nicola Group - andesite, basalt  
 4 Slokan Group - mixed sedimentary & volcanic rocks
- CARBONIFEROUS & PERMIAN (MAY INCLUDE TRIASSIC)**  
 5 Thompson Assemblage - siliceous argillite, volcanoclastic sandstone, quartzite, breccia, greenstone & tuff  
 6 Limestone, chert
- Geological contact  
 ● Mineral occurrences

**FIGURE 2**

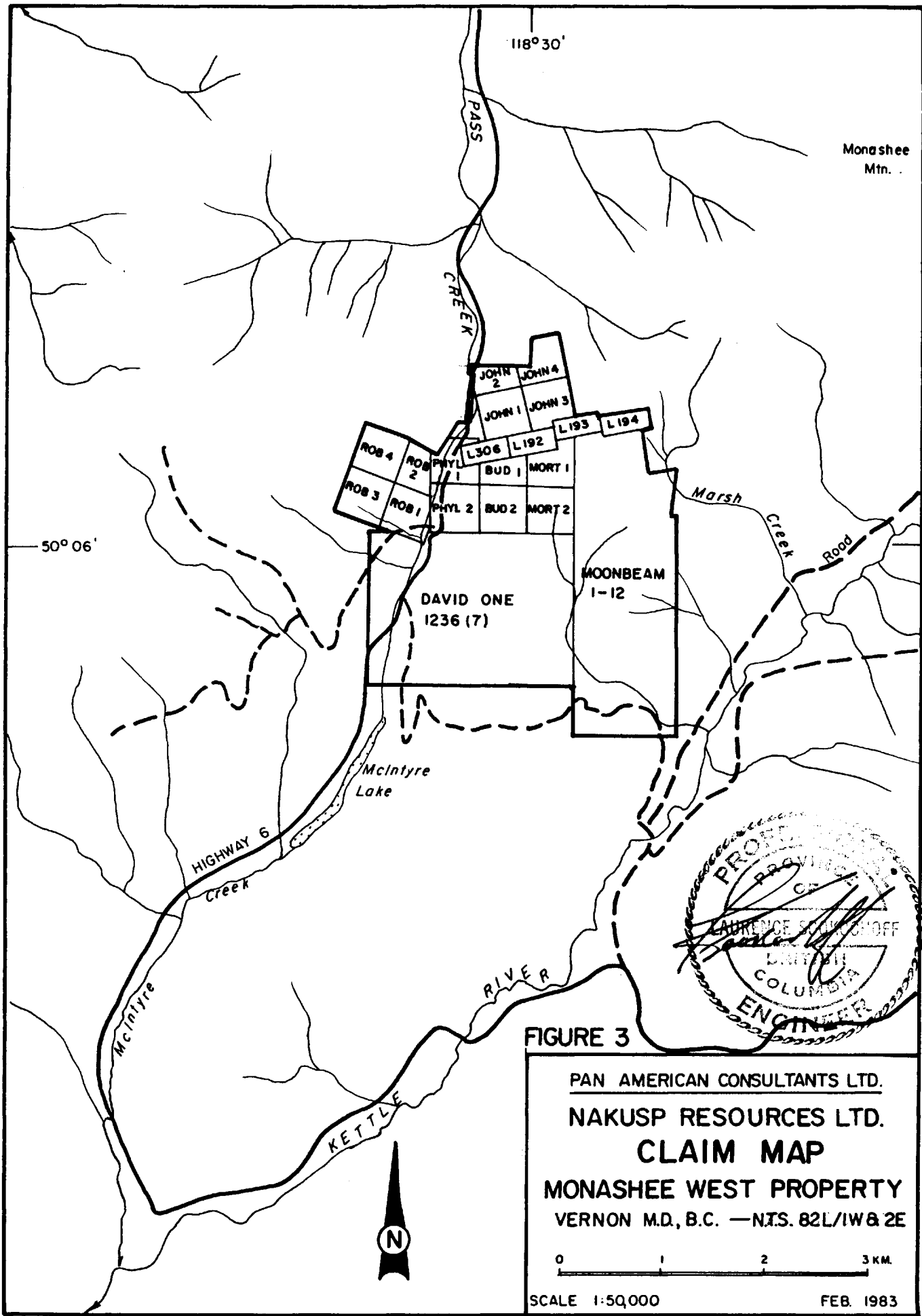
PAN AMERICAN CONSULTANTS LTD.  
 NAKUSP RESOURCES LTD.  
**REGIONAL GEOLOGY**

**MONASHEE WEST PROPERTY**  
 VERNON M.D., B.C. — N.T.S. 82L / IW & 2E

0 2 4 6 KM.  
 SCALE 1:125,000

FEB. 1983

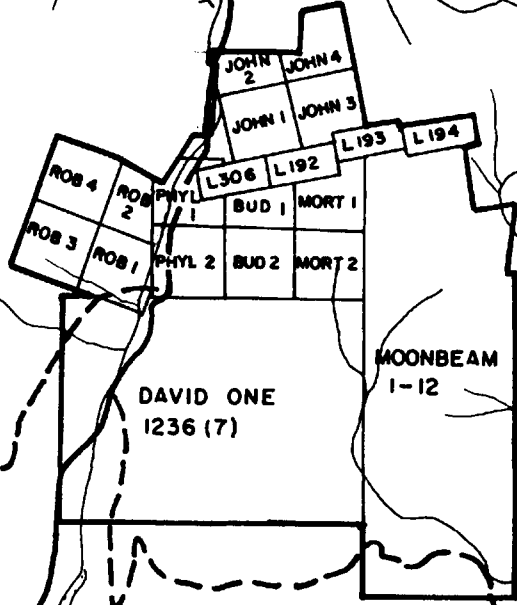




118° 30'

Monashee  
Mtn.

50° 06'



Marsh  
Creek  
Road

MOONBEAM  
1-12

DAVID ONE  
1236 (7)

McIntyre  
Lake

HIGHWAY 6  
Creek

McIntyre

RIVER

KETTLE

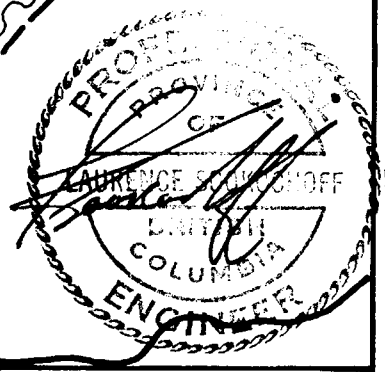


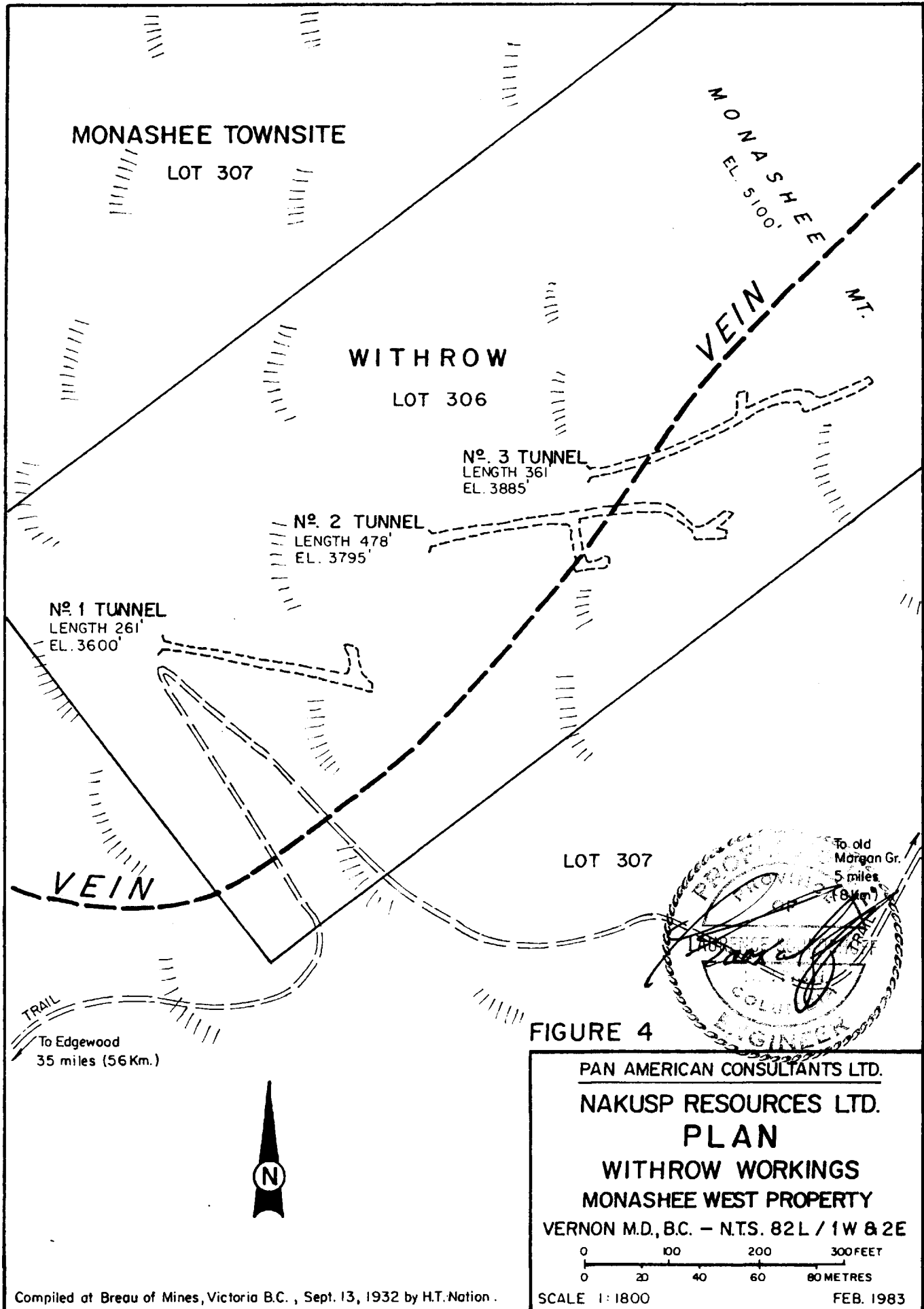
FIGURE 3

PAN AMERICAN CONSULTANTS LTD.  
 NAKUSP RESOURCES LTD.  
**CLAIM MAP**  
 MONASHEE WEST PROPERTY  
 VERNON M.D., B.C. — N.T.S. 82L/1W & 2E

0 1 2 3 KM

SCALE 1:50,000

FEB. 1983



MONASHEE TOWNSITE

LOT 307

WITHROW

LOT 306

MONASHEE  
EL. 5100'  
VEIN  
MT.

N<sup>o</sup>. 3 TUNNEL  
LENGTH 361'  
EL. 3885'

N<sup>o</sup>. 2 TUNNEL  
LENGTH 478'  
EL. 3795'

N<sup>o</sup>. 1 TUNNEL  
LENGTH 261'  
EL. 3600'

VEIN

LOT 307

TRAIL  
To Edgewood  
35 miles (56 Km.)

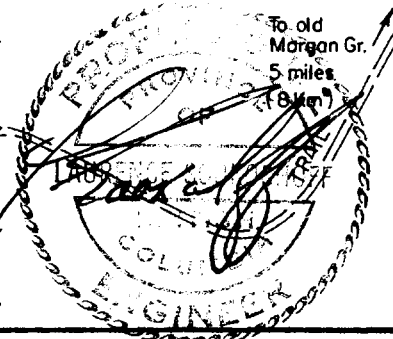


FIGURE 4

PAN AMERICAN CONSULTANTS LTD.  
 NAKUSP RESOURCES LTD.  
**PLAN**  
 WITHROW WORKINGS  
 MONASHEE WEST PROPERTY  
 VERNON M.D., B.C. - N.TS. 82L / 1W & 2E

0 100 200 300 FEET  
 0 20 40 60 80 METRES

SCALE 1 : 1800 FEB. 1983

Compiled at Breau of Mines, Victoria B.C. , Sept. 13, 1932 by H.T. Nation .

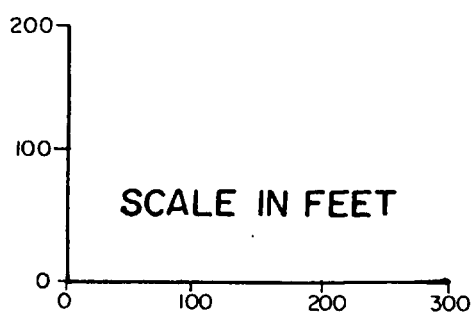
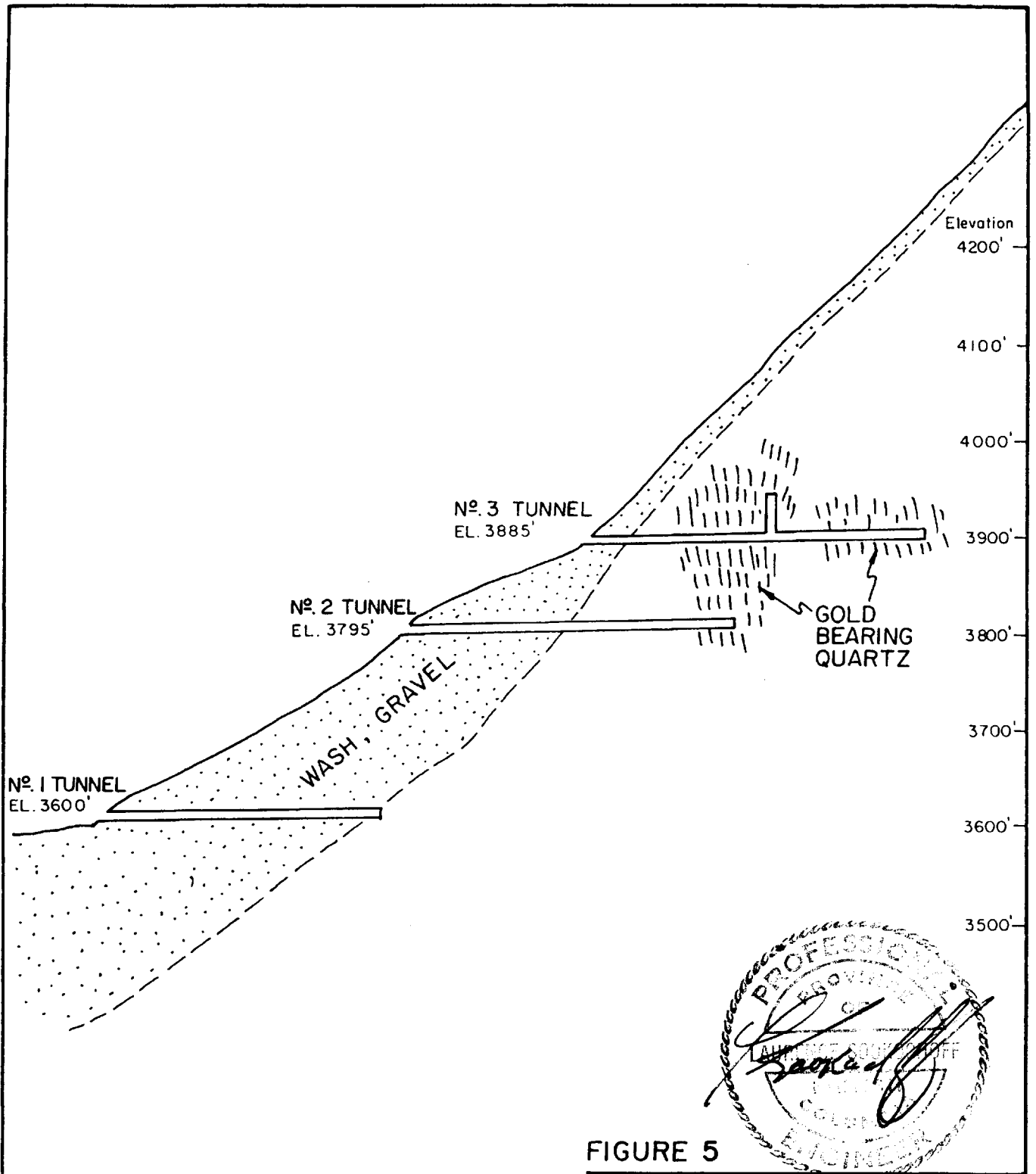


FIGURE 5

PAN AMERICAN CONSULTANTS LTD.  
 NAKUSP RESOURCES LTD.  
**SECTION**  
 WITHROW WORKINGS  
 MONASHEE WEST PROPERTY  
 VERNON M.D., B.C. - N.T.S. 82 L / 1W & 2E  
 SCALE 1:1800 FEB. 1983