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R E P O R T

ON THE

FANDORA GOLD PROPERTY

TOFINO, B.C.

OF

NEW PRIVATEER MINES LTD.

306, 736 Granville Street,  
Vancouver, B.C.

by

R.H. Seraphim, Ph.D., P.Eng.

October 20, 1978

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SUMMARY AND CONCLUSIONS

The Pandora gold prospect has recorded production of 1.27 ounces of gold prior to 1965. Ore reserve estimates, prior to the above production, are reported to be 46,870 tons of 0.399 oz. per ton gold (cut) proven, or 76,060 tons to 120,000 tons indicated grading 0.395 oz. per ton [cut]. Probable reserves of "shipping grade" are 9,550 tons grading 2.3 oz gold [pre-dilution].

The recorded production is all by lessees who mined individual vein sections that range from 8 to 28 inches wide and assay in the range of one to four ounces gold as shown on the included map.

A new logging road facilitates access. A spur road up to the 1500 level portal would be very advantageous for renewed production.

RECOMMENDATION

The increase in the price of gold since 1964 makes worthwhile a re-investigation of the feasibility of renewed production. The old cut road might be reconstructed but the cost-sharing of a road with MacMillan-Bloedel should be investigated first. The trail and tramline would need to be reconditioned if arrangements cannot be made with the logging company. The lower tunnels should be cleaned out in so far as practicable.

1915

|  |              |
|--|--------------|
| .....  | 1,000.00     |
| cleaned out tunnels and repairs<br>where necessary *           | 25,000.00    |
| transportation, communication,<br>expedition, and negotiation. | 5,000.00     |
|  | <hr/>        |
|  | \$ 35,000.00 |
|  | <hr/>        |

\* This cost may be much greater because extent  
of cave is not known.

INTRODUCTION

The Tofino Pandora gold property was re-examined on October 9, 1978, to determine the state of, and state of access to, the old workings. The writer was responsible for the exploration on this property in 1957 and 1958, remained involved with its financial and technical affairs until 1965, and has almost all of the engineering data.

Engineering reports by C.M. Campbell, Jr., H.C. Gunning, and M. Richmond are available and referred to herein. Reports from the B.C. Department of Mines were used also in the following text.

CLAIMS

New Privateer Mines Ltd. controls by letter agreement the Crown-granted claims.

|            |          |               |          |
|------------|----------|---------------|----------|
| Bell       | Lot 1901 | Bell No. 3    | Lot 1904 |
| Bell No. 1 | " 1902   | E.M. No. 3 in | Lot 1905 |
| Bell No. 2 | " 1903   |               |          |

and is being transferred the following located claims:

|            |             |    |               |      |   |
|------------|-------------|----|---------------|------|---|
| <u>NAT</u> |             |    |               |      |   |
| Nat No. 1  | Record #265 | on | September 13, | 1978 |   |
| Nat No. 2  | " 266       | "  | "             | "    | " |
| Nat No. 3  | " 267       | "  | "             | "    | " |
| Nat No. 4  | " 268       | "  | "             | "    | " |



STRATHCONA

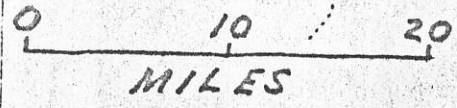
COURTENAY

PROVINCIAL PARK

CUMBERLAND

FANDORA

ALBERNI  
PORT ALBERNI



The located claims are reported to be located contiguous to and west of the Crown-granted claims, consequently the claims should give adequate coverage of the known vein system.

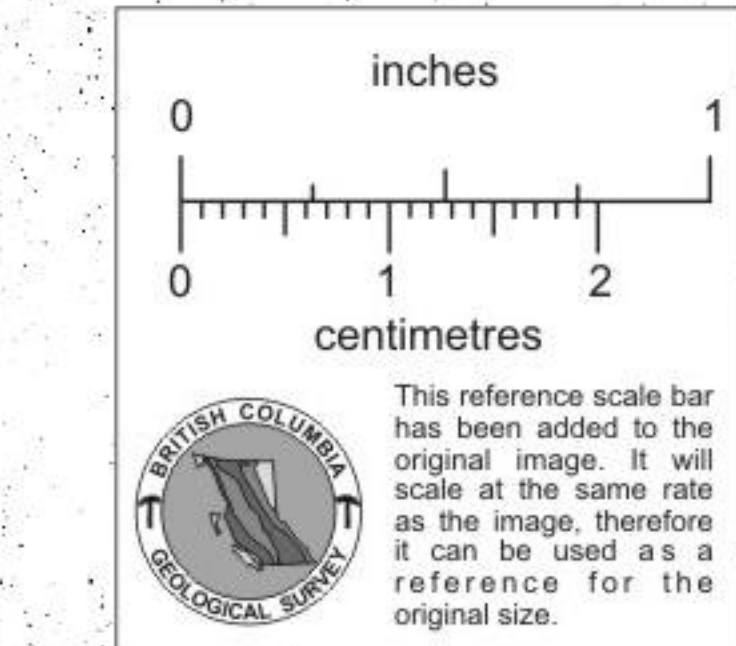
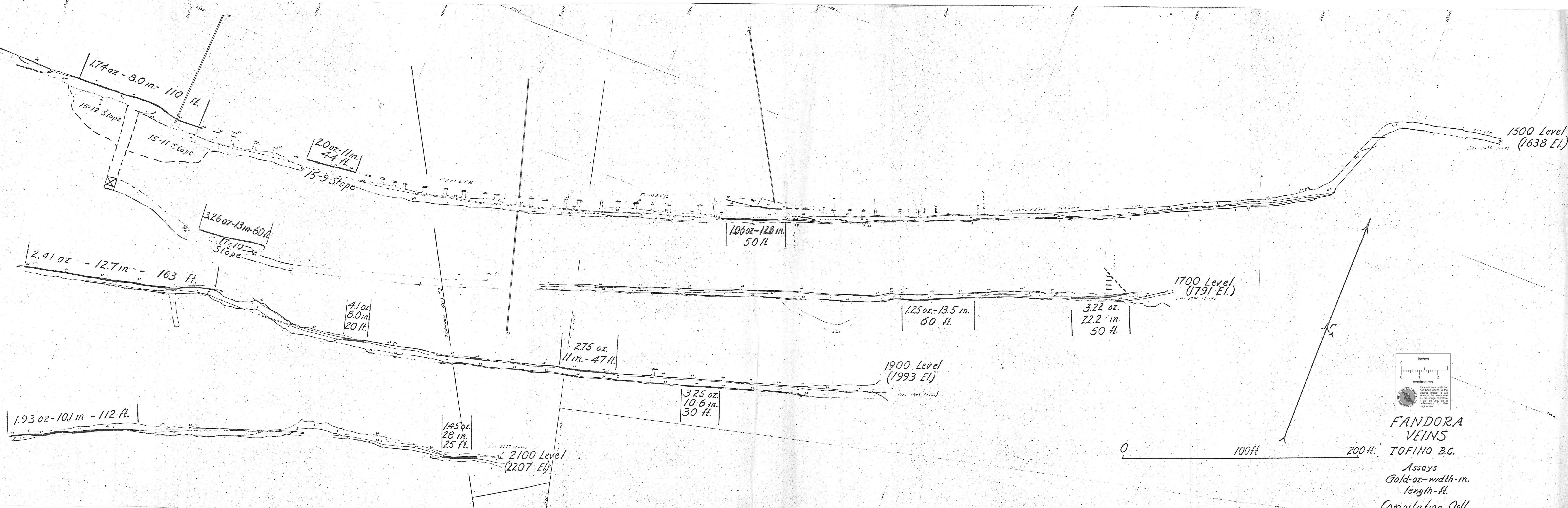
#### LOCATION AND ACCESS

Location is shown on the included maps. Access up Tranquil Creek Valley has improved greatly since 1964 because of the MacMillan-Bloedel logging roads. The road system now extends from Rankin Cove up Tranquil Creek Valley more than a mile beyond the claim group.

However, the old tramline, the foot trail and the extremely steep and rough bulldozer road to the 1500 Level are now in disrepair. A spur road to facilitate both logging and mining would be advantageous to both MacMillan-Bloedel and New Privateer.

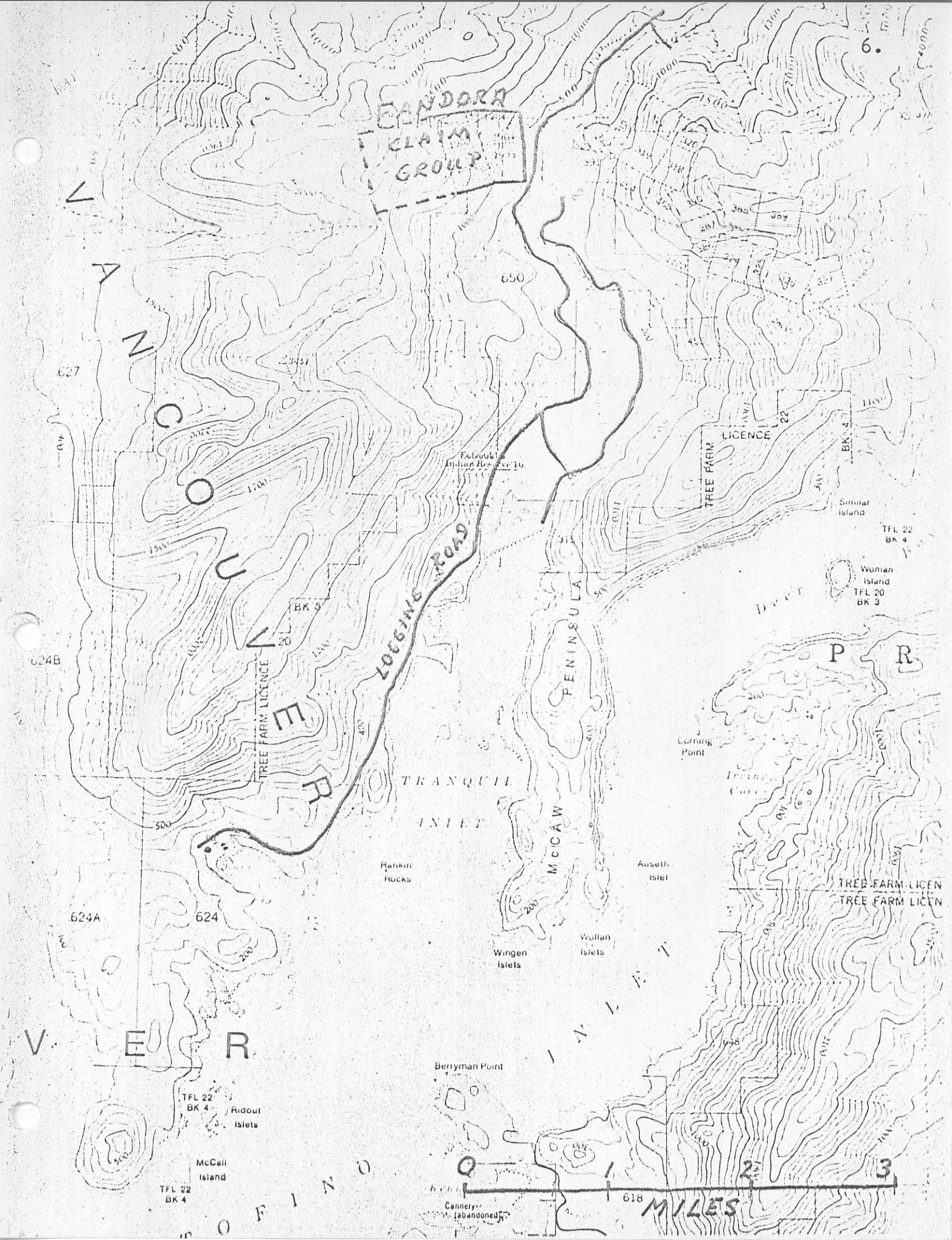
#### HISTORY

Gold veins on the property were discovered about 1940, and explored by hand trenches. The principal vein, called the 'Fandora' was explored by tunnels driven using hand-steel and wheelbarrows in 1946 and 1947 when the property was consolidated as Tofino Gold Mining Company



**FANDORA VEINS**  
**TOFINO B.C.**  
 Assays  
 Gold-oz-width-m.  
 length-ft.  
 Compilation 0-4/78 D.H.S.





under an agreement with Privateer Mines Ltd. Tofino Mines Limited optioned the property to Moneta Porcupine Mines in 1957. Moneta extended the 1500 Level tunnel. Tofino subsequently leased the property. One of the lessees shipped ore and another built a 30-ton-per-day mill and produced gold bullion. The property has been dormant since 1964.

#### EXPLORATION AND DEVELOPMENT

The principal tunnels and their lengths are:

| <u>Tunnel</u> | <u>Elevation (ft.)</u> | <u>Length (ft.)</u> |
|---------------|------------------------|---------------------|
| 1500          | 1638                   | 1380 ? *            |
| 1700          | 1791                   | 820                 |
| 1900          | 1993                   | 670                 |
| 2100          | 2207                   | 380                 |

The 1500 and 1700 Level tunnels were enlarged to facilitate tracked haulage during the operations in the years 1958 to 1964. These tunnels both now have a few feet of cave at the portal end of the drift on the vein, and were not examined beyond the cave because of dammed up water. The 1900 Level, at approximately 20 feet from the portal, has cave up to the 'back'. The 2100 level was not re-examined.

\* length of tunnel exploring for vein continuation is unknown.

also

The old data shows that two raises were completed through to 1700 Level from 1500 Level. Also, two stopes (15-9 and 15-11 & 12) on 1500 Level and one on 1700 Level (17-10) were in progress at the time of closure. The location and extent of these is indicated on the accompanying plan. The reader should realize that this data is from old stope sections which are believed to be almost, though perhaps not completely, up to date. Stoping was by cut and fill.

#### PRODUCTION

Smelter settlement statements from the shipped ore show the following:

| <u>Date</u> | <u>Tons</u> | <u>Gold/Ton</u> | <u>Total</u>         | <u>Silver/Ton</u> | <u>Total</u> |
|-------------|-------------|-----------------|----------------------|-------------------|--------------|
| Aug./62     | 39.6        | 9.8 oz.         | 388 <sup>0</sup> oz. | 2.1               | 83.2 oz.     |
| Apr./63     | 40.3        | 7.5             | 302                  | 1.8               | 72.5         |

Records of the milled ore show that by May, 1964 a total of 375 oz. of gold in bullion had been shipped to the Royal Mint and 262 oz. of gold in concentrate (2 tons of con.) had been sent to the smelter. Thus the total production recorded is 1327 oz. of gold.

The longitudinal sections of stopes show incomplete production records that include:-

15-9 (20 ft. above level) 16 Tons @ 2.29 oz. gold  
 15-11 (60 ft. above level) 49 Tons @ 2.58 " "  
 15-11 (60 to 90 ft. above level) Not recorded  
 15-12 (30 ft. above level) 50 Tons @ 3.76 oz. gold  
 15-12 (30 to 80 ft. above level) Not recorded  
 17-10 (20 ft. above level) 36 Tons @ 2.99 oz. gold

These records substantiate the production records and indicate that ore of shipping grade can be mined.

#### GEOLOGY

The Pandora and several other gold-quartz veins are emplaced in andesitic volcanic rocks. The veins are mostly oxidized, but in the few places where fresh, consist of quartz with minor sphalerite, galena, pyrite, arsenopyrite, and chalcopyrite. The gold observed is very fine grained and is found mostly close to the sulfides. The Pandora vein-zone in most places has several quartz veins up to two feet wide separated by crushed rock and gouge. The veins are in a strong fault zone, five to ten feet wide, that strikes westerly and dips from 40 to 70 degrees northerly.

MINERAL RESERVE

Reserves based on the original work by Privateer, prior to leasing, were calculated and reported by A.M. Richmond, P.Eng. and C.M. Campbell, P.Eng. as follows:

Richmond - Proved = 46,870 tons - 0.458 oz. gold uncut -  
or 0.399 oz. " cut

- Probable = 29,190 tons - 0.445

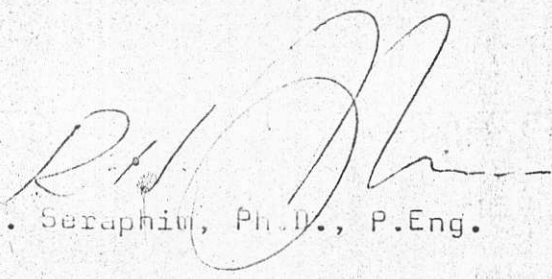
TOTAL: 76,060 tons 0.453 oz. gold uncut  
0.395 oz. gold cut

This estimate is based on the assumption that the ore as drifted continues for 50 ft. above and below each level. Campbell reports that if the ore persists throughout the entire ore zone (i.e. from level to level) the tonnage of this grade would be 120,000 tons.

The lessees preferred to mine higher grade by resuing, i.e. stoping the rich quartz veins themselves separately from the crushed and broken low-grade rock alongside them. The results were shown in the section of this report dealing with production, and indicate that resuing is practicable.

Consequently, the writer recalculated the available assay-widths to show the value and size of best individual quartz vein sections. These are displayed on the accompanying plan. One of the largest sections has

been stoped partially in 15-11+12 stope. Until the vertical extent of each of the sections is determined by raises, the total tonnage available from the sections remains speculative. However, both the strength of the structure and the results of the stoping to date make the odds of vertical continuity relatively good in the writer's opinion. Consequently, the reserve of shipping grade, 9,550 tons grading 2.3 oz gold per ton, was calculated assuming that the shoots shown on the included plan do continue to half of the distance to the level above and level below. The exception is that no reserve was calculated below 1,500 Level.



R.H. Seraphim, Ph.D., P.Eng.

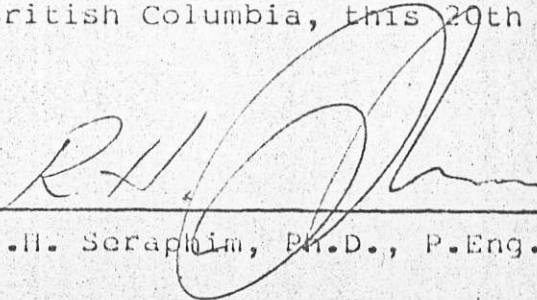
October 20, 1978.

R. H. SERAPHIM ENGINEERING LIMITED  
GEOLOGICAL ENGINEERING316 - 470 GRANVILLE STREET  
VANCOUVER, B.C. V6C1V5CERTIFICATION

I, Dr. R.H. Seraphim, of the City of Vancouver, Province of British Columbia, hereby certify as follows:

1. I am a Geological Engineer residing at 4636 West 3rd Avenue, Vancouver, B.C., and with office at #316, 470 Granville Street, Vancouver, B.C.
2. I am a registered Professional Engineer of British Columbia. I graduated with a Master of Applied Science from the University of British Columbia in 1948, and with a Doctor of Philosophy in geology from the Massachusetts Institute of Technology in 1951.
3. I have practiced my profession continually since graduation.
4. I have no interest, direct or indirect, in the claims of New Privateer Mines Ltd., N.P.L. or the company or its affiliates, and I do not expect to receive any interest.
5. The attached report is based on a study of maps and reports on examinations during 1958 to 1964, and re-examination on October 9, 1978.
6. I consent to the use of this report in or in connection with the prospectus or in a statement of material facts relating to the raising of funds for this project.

DATED at Vancouver, British Columbia, this 20th day of October, 1978.



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R.H. Seraphim, Ph.D., P.Eng.