

REPORT on  
THE CHINA MOUNTAIN SILVER PROSPECT  
LIKELY, BRITISH COLUMBIA  
for  
HOMER EXPLORATIONS CO. LTD. (N.P.L.)  
by: R.W. Phendler, P.Eng. Dec. 23/69

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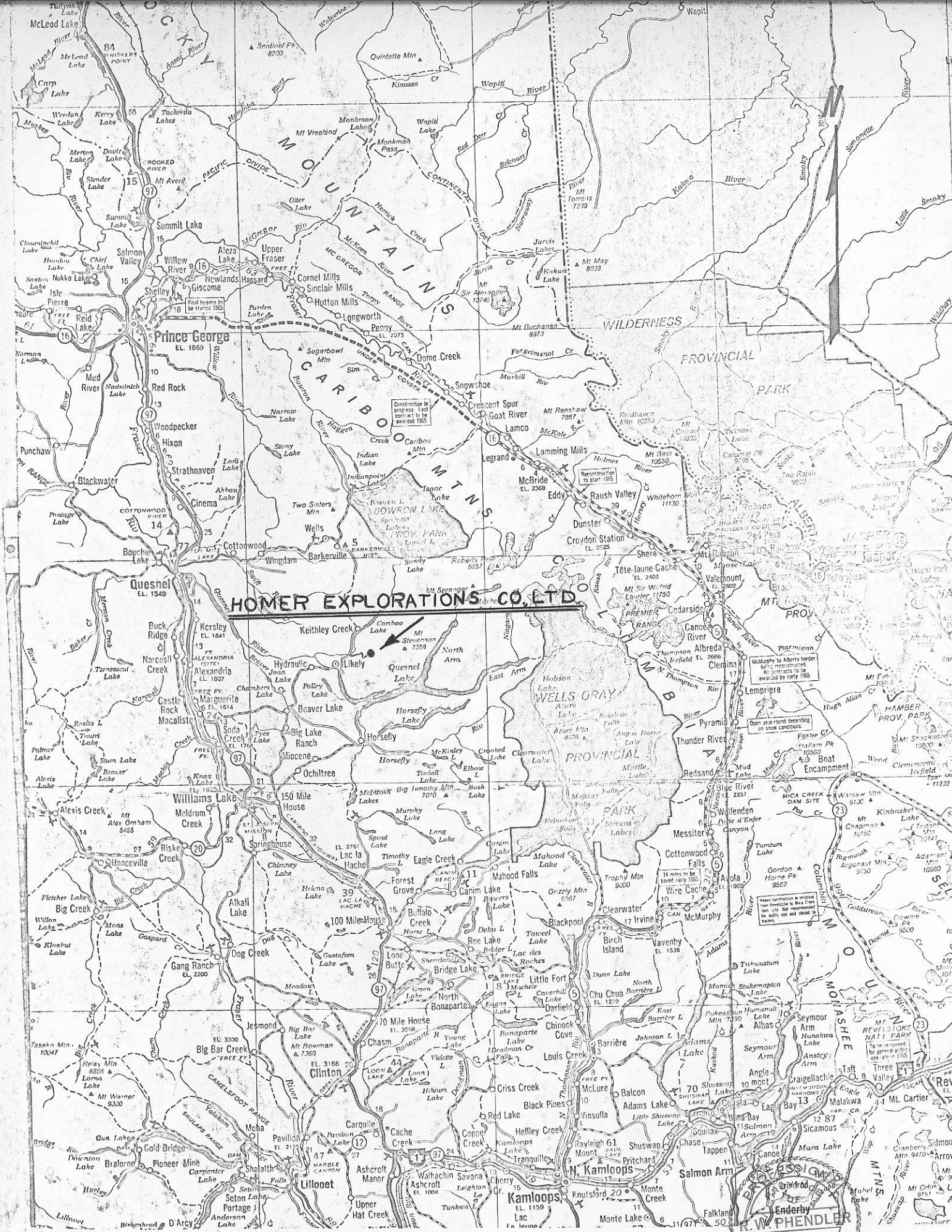
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R.W. PHENDLER, B.Sc., P.Eng.

Vancouver, B.C.

December 23rd, 1969.



**HOMER EXPLORATIONS CO. LTD.**

SCALE: 1" = 30 MILES

*R.W. Pender*  
 BRITISH  
 ENGINEER

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SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The silver prospect of Homer Explorations Co. Ltd. on China Mountain is sixty-four miles northeast of 150 Mile House in the Cariboo district of central British Columbia.

Gently dipping quartz veins in a host rock of phyllite and argillite contain galena and associated silver mineralization. The most prominent of the veins is traceable on surface for 600 feet; it strikes northwesterly and dips between  $15^{\circ}$  and  $20^{\circ}$  to the north.

Underground exploration work (tunnelling) was carried out in 1967-68 but was unsuccessful in locating the downdip extension of the principal vein. Follow-up diamond drilling disclosed the presence of three silver-bearing veins; one intersection approached commercial width and grade (5.0' of 5.35% Pb and 12.10 oz. Ag). An exploration raise was partially completed when work was suspended in late 1968.

Other quartz veins have been found in the area but little is known of their potential.

The continuity of some of the veins on the property is encouraging and more exploratory work is warranted. Geological and geochemical reconnaissance of the property should be undertaken. Such a program need not cost more than \$15,500 and future plans would depend entirely on the results of this work.

### SCOPE

The information contained in this report was gathered during several visits to the China Mountain silver prospect between June and August, 1968. During these visits, the writer did some surface and underground geological mapping, core logging and soil sampling.

### LOCATION AND ACCESS

A well-equipped camp with cookhouse, bunkhouse, office and machinshop was established in 1968 near the mine portal area but nothing is known of its present condition.

### PROPERTY AND OWNERSHIP

The mineral occurrences on China Mountain are covered by eighty-eight claims presently held by Homer Explorations Co. Ltd. (N.P.L.).

### HISTORY

Little is known of the early history of the showings but the B.C. Department of Mines Annual Report for 1951 states that a Mr. H.C. Miller of Likely shipped 7 tons of hand-picked ore yielding 1 oz. Au, 683 oz. Ag, 6401 pounds of Pb and 15 lbs. of Zn. This obviously was extracted from shallow diggings on the principal (No. 2) vein. The property was apparently dormant between 1951 and 1967 when silver prices made the prospect attractive once again.

McMartin Explorations Co. Ltd. held the ground in 1967 and carried out exploratory work under the name of Plutus Mines Ltd. Under the direction of president N. Pentecost and mining consultant V. Bjorkman, underground development was carried out during the winter of 1967-68. A total of 825 feet of tunnel was completed in an attempt to explore the downdip extensions of three lead-silver bearing quartz veins exposed on surface. The work was done on the mistaken assumption that the veins dip steeply (about 60°) and would be intersected within two hundred feet of the portal. No surface diamond drilling had been carried out.

As the principal, or No. 2, vein strikes slightly north of west, the portal was collared 140' south of the central part of the vein and the adit driven for 430' on a bearing of N15°E (see Fig. 3). At 265' from the portal this working intersected a two foot wide quartz vein containing a few specks of galena and sphalerite; it is probably the No. 1 vein. An attempt was made to drift on this vein to the west but the quartz disappeared within a few feet. The drift was driven 140' but no additional mineralization was encountered.

The main crosscut was continued for 160' north of the No. 1 vein and an exploratory drift was put out to the east for 120'. No significant quartz veining or galena was encountered.

In early 1968, because the underground development was unsuccessful in locating the veins, it was decided to carry out some underground diamond drilling. The firm of Canadian Mine Services and their subsidiary, Cameron-McCutcheon Drilling Ltd., were employed to

carry out the drilling program and to supply geological services (i.e. log core, spot drill holes and carry out geological mapping). The latter duties were performed by the writer who carried out detailed geological mapping of the principal veins on surface (Fig. 2) and all the underground workings (Fig. 3).

Between June and August of 1968 eleven BQ wireline holes were completed, totalling 2217 feet. Overall recovery was about 75%, with no appreciable difference in the quartz vein material. The drilling underground located the three quartz veins.

Subsequent to the diamond drilling, a 50° raise was driven from the adit for the purpose of opening up the three quartz veins. It is reported that this raise was terminated at 60', no significant amounts of quartz or mineralization having been encountered.

#### GEOLOGY AND MINERALIZATION

The area in which the China Mountain silver prospect is situated is underlain by interbedded black phyllites and grey argillites of the Midas Formation, which is part of the Cariboo group of Lower Cambrian age. The rocks strike northwesterly and dip between 10° and 35° to the northeast.

The argillites are medium grained, light to medium grey in colour and are moderately competent. Silicification of the argillites has occurred locally, creating generally favourable conditions for the emplacement of quartz veins of considerable size.



The phyllites are fissile, crumpled and distorted, creating rather unfavourable conditions for possible continuity of any quartz veins contained therein.

A perusal of the vertical section (Fig. 4) shows that the formations dip northerly about  $25^{\circ}$  whereas the quartz veins vary in dip, about  $5-10^{\circ}$ , crossing through the different rock types. Invariably the quartz veins are stronger within the more competent argillites.

The silver-bearing quartz veins were found on surface and the principal one has been traced for 600 feet along strike. Width of this gently-dipping vein varies between a few inches and 15 feet, averaging about five feet.

The galena mineralization is mainly in the hangingwall part of the vein, but galena has also been observed close to the middle of the vein, associated with vuggy openings partially filled with well formed quartz crystals.

Two parallel veins occur within a few tens of feet of the principal vein. The footwall vein has been designated the No. 1 vein, the principal vein the No. 2 vein, and the hangingwall vein the No. 3 vein. All three contain some silver-bearing galena.

A few miles southwest of the three veins, close to Blackbear Creek, another galena-bearing quartz vein system has been exposed. It has been traced along strike for 130' and has been designated the "Falls" showing. Mineralization is sporadic in this vein which averages about two feet in width.

Other quartz veins have been found on the Homer Explorations Co. Ltd. claim group but little is known of their potential. It is reported that large exposures of quartz have been discovered one mile north of the camp and that quantities of galena-bearing quartz has been uncovered a mile or so to the southeast.

DIAMOND DRILLING RESULTS

On the following page is a summary of the drilling with all significant mineral intersections.

<u>D.D.H. No.</u>	<u>Dip</u>	<u>Length</u>	<u>Width</u>	<u>% Pb</u>	<u>Oz. Ag</u>	<u>Vein</u>
1	+30°	300'	1.1'	3.25	5.80	#1
1	+30°	300'	1.2'	1.05	1.75	#1
1	+30°	300'	2.5'	0.67	1.37	#2
2	+30°	300'	1.1'	0.30	0.41	#2
2	+30°	300'	1.5'	0.30	0.35	#2
2	+30°	300'	0.8'	0.70	1.52	#3
3	-30°	169'	4.6'	0.26	0.39	#1
4	+30°	131'	1.2'	0.30	0.29	#2
4	+30°	131'	1.3'	3.80	12.20	#3
5	-54°	52'	-	-	-	-
6	0°	111'	-	-	-	-
7	+35°	291'	1.4'	0.80	1.83	#2
7	+35°	291'	0.8'	1.85	4.10	#3
7	+35°	291'	1.0'	-	2.60	-
8	0°	130'	-	-	-	-
9	+30°	302'	2.0'	3.50	10.90	#2
9	+30°	302'	2.5'	1.60	3.66	#2
9	+30°	302'	4.0'	-	1.11	-
9	+30°	302'	5.0'	5.35	12.10	#3
10	+15°	340'	1.5'	0.45	0.90	#2
10	+15°	340'	1.5'	0.70	1.50	#2
10	+15°	340'	0.8'	4.15	9.20	#3
10	+15°	340'	6.4'	0.60	1.30	-
11	0°	80'	0.2'	No visible mineralization		#2

The best intersection was encountered in D.H. #9 on No. 3 vein. The core assayed 5.35% Pb and 12.10 oz. Ag across 5.0'.

SOIL SAMPLING

Eleven soil samples were taken at 100 foot intervals across the principal veins (see Fig. 5). These appear to indicate a background of 20 to 50 parts per million for lead and 0.5 parts per million for silver and significantly anomalous results in the immediate vicinity of the veins. Thus, extensions of the veins beneath drift-covered areas may be traceable by this method of exploration.

COST ESTIMATE FOR WORK RECOMMENDED

Geological mapping, silt and soil sampling on 88 claims, including professional services, labour, food, lodging, transportation, sample analysis	\$14,000
10% contingencies	<u>1,400</u>
	\$15,400

Respectfully submitted,

BACON & CROWHURST LTD.

*R.W. Phendler, P. Eng*  
R.W. Phendler, B.Sc., P.Eng.

CERTIFICATE

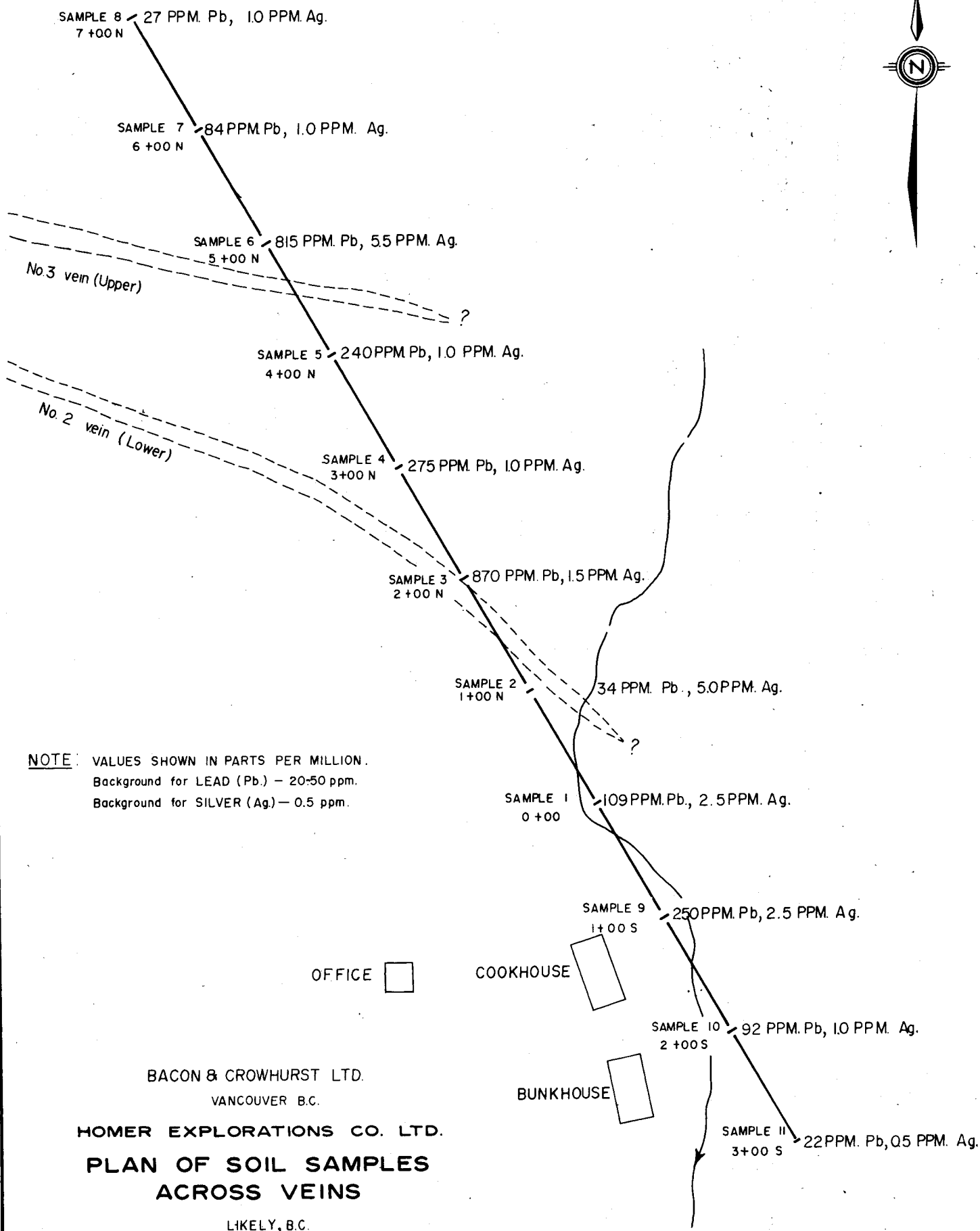
I, Roy William Phendler, of the City of Vancouver in the Province of British Columbia, hereby certify as follows:

1. That I am a registered Professional Engineer in the Province of British Columbia, No. 4421.
2. That I am a graduate of McGill University, Montreal, Quebec, with a Bachelor of Science degree in geology.
3. That I have practiced my profession as geologist continuously for the past seventeen years in Quebec, Ontario, Saskatchewan and British Columbia in Canada; in some of the western U.S.A.; Mexico; and Peru and Colombia in South America.
4. That I have no interest directly or indirectly in Homer Explorations Co. Ltd. (N.P.L.) nor do I expect to receive any.
5. That the information contained herein was compiled as a result of numerous visits to the China Mountain silver prospect during the summer of 1968 as follows: June 14-18, July 3-6, July 16-19, July 27-28, August 21-22.

*R.W. Phendler, P. Eng.*

R.W. Sc., P. Eng.





**NOTE:** VALUES SHOWN IN PARTS PER MILLION.  
Background for LEAD (Pb.) - 20-50 ppm.  
Background for SILVER (Ag.) - 0.5 ppm.

BACON & CROWHURST LTD.  
VANCOUVER B.C.  
HOMER EXPLORATIONS CO. LTD.  
**PLAN OF SOIL SAMPLES  
ACROSS VEINS**  
LIKELY, B.C.