

Property File

082F5W063

002979

REPORT OF  
EXAMINATION OF  
PORCUPINE GROUP  
YMIR, B.C.

To:

F. R. Weekes,  
Manager, The Porcupine Goldfields, D & F Co. Ltd.

By:

Charles C. Starr.

April 15th, 1926.

**INTRODUCTION:**

Two days were consumed in making the examination.

The samples covered all vein exposures which looked like ore. The development on the property is too limited to allow the gathering of any very definite data, and both dips, strikes and values of the veins are subject to correction after further work has been done on them.

**LOCATION:**

The property is situated on the south bank of Porcupine Creek, one and one-third miles from the Marcus-Nelson Branch of the Great Northern Railway, and about three and a half miles south east of the town of Ymir. The principal vein exposures lie between an elevation of 2600 and 2800 feet.

**WATER, TIMBER, ETC:**

While no measurements of the water in Porcupine Creek are available, the volume of water power should be sufficient to furnish power for prospecting and possibly for small operations.

There is little timber on the property, and that little consists of large standing trees, remaining from a forest fire. The snowfall is comparatively light, and there is no danger from snow slides. The slope of the hills on the south banks of the Creek are fairly uniform and not very steep. Tunnels may be driven to cut the present showings at depths of 50 to 100 feet; such tunnels will gain about one foot in depth to each two and a half feet in length.

**TRANSPORTATION:**

The road from the property to the railway is good, except that at the upper end it is very narrow and banks have caved in at one or two points. There are no heavy grades.

**PROPERTY:**

There are seven claims in the group as follows: Porcupine, Franklin and Sunrise which are Crown Granted Claims and have been bought in for taxes by the present owners; the Champane which has been Crown Granted but is now <sup>leased</sup> ~~lost~~; Vagabond, Nemesis and Porcupine Fraction which were located in 1925 by the present owners;

The property is owned in partnership by E. P. Hawkendahl, Everett Gill and Peterson of Ymir.

**TERMS:**

The price asked for the property is 100,000 Dollars. Payments to be made as follows: 10% at the end of one year, 25% at the end of two years, and the remainder at the end of three years.

**HISTORY:**

The Porcupine Claim was the earliest location on the Creek and a tunnel some 200 feet in length was driven during the early days of the camp, there is also a tunnel approximately 100 feet in length on the Champane Claim, both of these tunnels had caved in, but have been recently opened up.

These claims were purchased for taxes and three new locations made by Mr. Hawkendahl and partners in 1925.

**DEVELOPMENT:**

Development consists of several short tunnels and shallow open cuts on a number of different veins as follows:

<u>Mark</u>	<u>X-O</u>	<u>Dr ON VN</u>	<u>TOTAL</u>
E (old)	12		12
C & D (old-intersecting)	132	58	190
F	51		51
G	8		8
J	8	8	16
N	<u>23</u>	<u>    </u>	<u>23</u>
	234	66	300

There also three very small open cuts and two large ones, fifteen and twenty-five feet wide respectively, but all of these cuts are very shallow and do not show the veins very well.

**GEOLOGY:** (See Geological Survey, Canada, Memoir 94 "Ymir Mining Camp", - Drysdale)

The rocks of the region consist of the Pend d'Oreille argillites, schists, and marbles which have been intruded by the Nelson granite batholith, or its accompanying dikes and tongues. The Pend d'Oreille formation in the district forms the roof of the batholith and is exposed generally as long narrow bands or "roof pendants", of schists paralleled by granitic tongues, and having a general N-NE strike and a nearly vertical dip.

The rocks of the property, or more definitely of the Porcupine claim, consist essentially of metamorphosed limestones and limey argillites which have been intruded and injected by dikes and tongues of fine grained,

silicious, differentiation products from the granite batholith. No large areas are to be seen which are purely either granite or of the Pend d'Oreille series, as there is an intermingling of the rocks everywhere exposed in the mineralized zone, the granite being injected into the schist formation to such an extent, that the boundaries between the formations are indefinite.

Rock outcrops generally consist of fragments of the sedimentaries fused into silicious differentiations of the granite; generally the latter rock somewhat predominates and often forms fairly definite dikes. Alternating with such outcrops are areas, generally covered with soil containing few rock exposures, which are evidently more subject to erosion and are presumed to be predominantly schists. These belts have a ENE trend. A thousand or fifteen hundred feet to the east of the workings there is a considerable band that is predominantly schist, while granite is predominant for nearly a mile to the west.

Occasional dikes of lamprophyre cut both formations and the veins, but probably do not affect them otherwise. Other dikes of an andesitic nature are known to occur.

#### Veins:

Several veins have been discovered on the property which dip and strike in various directions, but otherwise have a great similarity in mineralogy and general character; they are usually associated with granite tongues, or the more granitic parts of the granite-schist complex, at the points where they are exposed. Since no veins are exposed in the soil covered bands, which are presumed to be predominantly schist, it is not known how they occur in these areas. Quartz and highly silicified granite are the principal gangue materials,

and contain pyrite, galena, and sphalerite, with rare chalcopyrite.

Descriptions: (see Map)

Near the bed of Porcupine Creek at "C" there is a vein striking northeast and standing nearly vertical, which has been opened for about 50 feet by opencuts, and 55 feet by a tunnel. It is about two feet wide and consists of quartz and silicified granite, containing a little pyrite of low value. It lies in walls that are predominantly aplitic granite, and has been cut and faulted by a dike of decomposed rock of andesitic appearance.

At "F", a tunnel was started to crosscut a vein the dip and strike of which are not evident. Low grade vein matter and quartz is exposed for a length of about 20 feet on the east side of the tunnel, and a lamprophyre dike on the west side. Nearer the face of the tunnel the vein matter is absent and both walls of the dike are granite. Insufficient work has been done to indicate whether the vein is the same as that at "J" or "G", or a different one.

In tunnel "G" a three or four foot vein has been cut near the portal, which strikes northeast and dips  $70^{\circ}$  northwest. The walls are very poorly exposed but appear to be of mixed granite and schist. The vein was cut very close to its apex and little ore has been removed; it is well mineralized with galena, sphalerite and pyrite.

At "J", a short tunnel has crosscut a four and a half foot vein striking nearly east and west and dipping  $55^{\circ}$  north which carries a fair amount of mixed sulphides. The walls

are of mixed granite and schist. Twenty five feet to the south-east and 25 feet higher, at "H", a broad shallow cut exposes a vein four to six feet in width; on the hanging side there is quartz with somewhat banded galena and sphalerite, but toward the foot there is quartz with silicified granite and sparsely disseminated sulphides. The strike is east-northeast and the dip  $35^{\circ}$  to the north. It is probable that this is the same vein that is exposed at "J".

In a very small cut at "H" an 18 inch vein showing fair galena, sphalerite and pyrite is exposed. It strikes north west and dips southwest.

At the portal of tunnel "E" there is an outcrop of undetermined width which strikes more or less to the southeast. At the portal it seems to dip about  $45^{\circ}$  to the southwest but flattens and appears in the bottom, only, to within a few feet of the face where it appears to steepen. The vein does not show on the west side of the tunnel on account of a fault slip. Forty five sacks of ore have been sorted for shipment from this work; there is considerable galena and sphalerite. The vein is so poorly exposed in the tunnel that no samples were taken of rock in place.

At "P" a broad shallow open cut shows a considerable width of ore and mineralized material, which strikes northwest and dips southwest. On the northwest end of the cut on the foot side there is six and a half feet of quartz and silicified schist with spotty and generally weak sulphides, then three feet of nearly barren schist, then four and a half feet of quartz and silicified schist with a small streak of galena near the hanging wall and sparsely disseminated sulphides through the remainder.

In the southeast corner of the cut, the footwall part of the vein (or veins) is over five feet in width and consists of strong quartz with some mixed Sulphides; the hanging wall part is not exposed. It is not evident whether this cut exposes one vein with a "horse", or whether there are two slightly converging veins; it is probable that the vein in "H" tunnel is the same. The walls are probably mixed schist and granite.

At "R" and "S" stringers of low grade material are exposed.

Near the center of the Porcupine Fracture, a small outcrop exposes a vein of quartz which is from 1 to 1½ feet wide but shows nothing more than traces of pyrite. There is also a weak stockwork of fine quartz stringers. The former strikes north and south, and the latter northeast.

On the Champagne claim a short tunnel has been driven from the creek level on a small vein showing little except scattered pyrite.

#### SAMPLES;

Twelve samples were taken (see map) but the exposures of the vein are frequently so limited and poor that proper cuts could not be made. The highest sample obtained, from the solid, covered a width of one foot on the hanging side of cut "H", and assayed .10 oz. gold, 4.7 oz silver, 3.2% lead, and 5.4% zinc. The average (numerical) of all the samples taken from the solid was - 3.8 feet, .06 oz. gold, 3.6 oz. silver, 1.9% lead, 2.1% zinc.

The average of four "chip" samples from broken ore, including 45 sacks of sorted ore, was .04 oz gold, 3.9 oz, silver, 3.2% lead, 3.2% zinc.

A 60 pound sample, taken by W. T. McDowell from all ore on the dumps was sent to Trail for test. It assayed .03 oz



gold, 5.0 oz silver, 3.2% lead, 4.4% zinc, 5.4% iron; a recovery of 65% was made by flotation without any separation of the lead and zinc.

**CONCLUSION:**

The work done on the property is entirely insufficient to allow it to be properly sampled, to permit the taking of accurate dips and strikes, or to give dependable data of any kind. The property is situated in a fairly well mineralized section, and the geological conditions seem reasonably good.

The impression obtained is that the area contains a number of small veins and stringers, and that there are at least two fair sized veins. At points of intersection of the veins, especially when in granite, there may be good sized orebodies, but so far as observed no intersections have yet been opened.

The price asked for the property is high, considering the present showing. If a reduction of the price by a substantial amount, and a lengthening of the term of payment can be obtained, the showing apparently justifies a very limited amount of work, preferably by trenches and open cuts, to better expose the veins and to trace them along their strike.

Respectfully submitted,

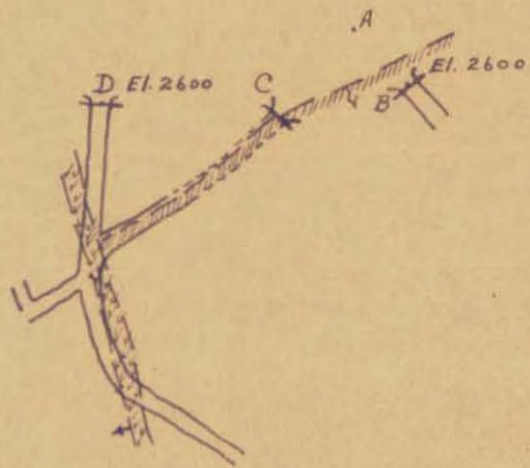
*Chas. C. Starr*



To North corner Porcupine Claim  
(Destroyed) approximately 300 Ft.

Porcupine Creek

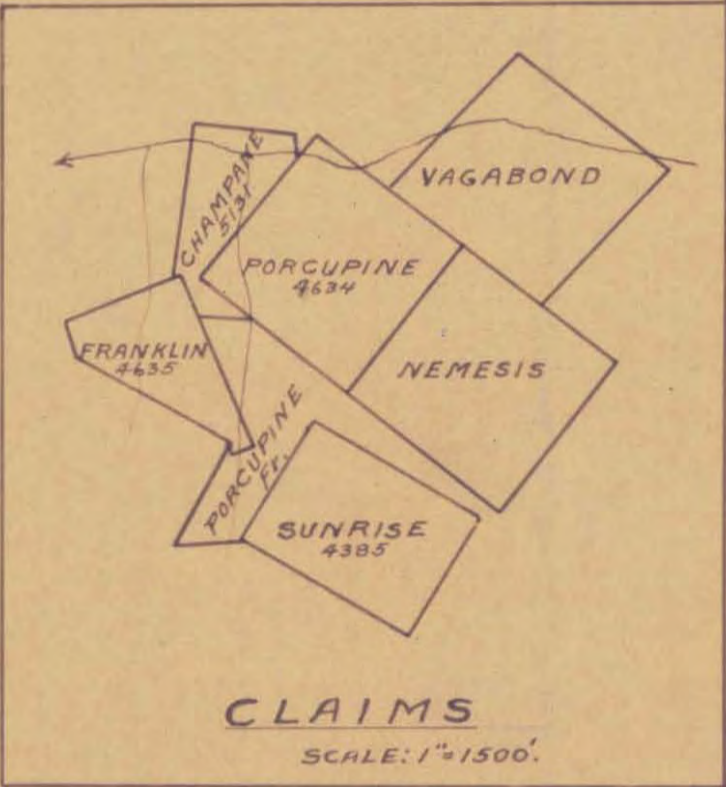
105-1.6-0.4-0.9-1.0-2.2  
El. 2698



El. 2692 G  
El. 2650 F

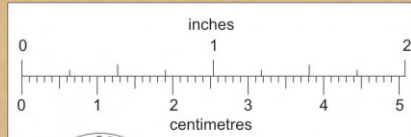
El. 2666 J 55°  
El. 2690 H 135°

104-3.7-0.6-5.6-0.9-3.9  
101-4.3-0.8-3.1-0.4-2.0  
cut sample  
Hq. 102-1.0-1.0-4.7-3.2-5.4  
Ft. 103-2.8-0.4-1.1-0.2-0.7  
chips 112-0.4-3.6-1.5-3.2



106-0.6-6.5-9.7-6.1 (Sacked Ore)  
107-0.3-2.0-3.4-1.5 (Dump - chips)  
N El. 2765  
P 109-6.5-0.2-0.7-0.4-1.0  
El. 2785  
111-0.7-3.8-2.6-2.5 - chips  
110-2.0-0.6-2.5-2.4-0.8  
S El. 2861

R El. 2792



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

**PORCUPINE GROUP**

YMIR, B.C.

SCALE: 1" = 50'

Claims from Gov't. maps and owners description.

Workings surveyed by compass and tape.

Veins *|||||*

Dikes *|||||*

Assays thus: N<sup>o</sup> - width - oz. Au - oz. Ag - % Pb - % Zn.

To accompany report of C.C. Starr  
Apr. 15, 1926.



Property File

082Fsw063

Starr

REPORT  
OF EXAMINATION OF THE  
PORCUPINE GROUP  
YMIR, B. C.

To  
Frank Eichelberger, Trustee.

By Chas. C. Starr,  
April 12, 1930

**INTRODUCTION:** The property was first examined by the writer in 1926. The samples given on the map were taken at that time and covered all vein exposures that looked like ore; no samples were taken during the present examination.

Some additional work has been done on the property in the last four years, and a little ore of probably better grade opened, there are still however many conditions which it is as yet impossible to correlate.

**LOCATION:** The property is situated on the south bank of Porcupine Creek, one and one-third miles from the Marcus- Nelson branch of the Great Northern Railway, and about three and a half miles southeast of the town of Ymir.

The principal vein exposures lie between an elevation of 2600 and 2800 feet.

**WATER, TIMBER, ETC:** A small amount of water-power can be developed on Porcupine Creek, but probably at a considerable cost.

There is little timber on the property, and that little consists of large standing trees remaining from a forest fire. The snowfall is comparatively light, and there is no danger from snowslides. The slope of the hills on the south bank of the creek are fairly uniform and not very steep. Tunnels may be driven to cut the present showings at depths of 50 to 100 feet; such tunnels will gain about one foot in depth to each two and a half feet in length.

**TRANSPORTATION:** The road from the property to the railway - about one and one-third miles - is fair.

**PROPERTY:** There are seven claims in the group, as follows: Porcupine, Franklin, and Sunrise which are Crown Granted; the Champagne, Crown Granted, held under lease; Vagabond, Nemesis, and Porcupine Fraction, which were located in 1925 by the present owners.

The property is owned by E. P. Hawkendahl, Everett Gill, and Nels Peterson, of Ymir, B. C.

No price and terms were asked but it is believed that the price would be reasonable and terms very easy.

**HISTORY:** The Porcupine claim was the earliest location on the creek, and a tunnel some 200 feet in length was driven during the early days of the camp; there is also a tunnel approximately 100 feet in length on the Champagne claim; both of these tunnels are now mostly caved.

In 1925 and 1926 most of the present work was done by the owners; in 1927 the property was under option but little underground work was done. During the past year the owners have done some further development.

**DEVELOPMENT:** Development consists of several short tunnels and shallow open cuts on various veins (see sketch map) as follows:

<u>Mark</u>	<u>X-C</u>	<u>Dr. On Vn.</u>	<u>Total</u>
B (Old)	12		12
C & D (Old)	132	58	190
F	80		80
G	8		8
J	8	8	16
N	65		65
P	20		20
T	35		35
<b>Totals</b>	<b>360</b>	<b>66</b>	<b>426</b>

There are also several very small open cuts, and two large ones, fifteen and twenty-five feet wide respectively, but all of these cuts are shallow and do not show the veins very well.

GEOLOGY: (See also Memoir 94, C. G. S.)

The rocks of the region consist of the Pend d' Oreille argillites, schists, and marbles, which have been intruded by the Nelson granite batholith, and its accompanying dikes and tongues. The Pend d' Oreille formation in the district forms the roof of the batholith and is exposed generally as long narrow bands, or "roof pendants", of schists paralleled by granitic tongues, and having a general NNE strike and a nearly vertical dip.

The rocks of the property, or more definitely of the Porcupine claim, consist essentially of metamorphosed limestones and limey argillites which have been intruded and injected by dikes and tongues of fine grained, silicious, differentiation products from the granite batholith. No large areas are to be seen which are purely either granite or of the Pend d' Oreille series, as there is an intermingling of the rocks everywhere exposed in the mineralized zone, the granite being injected into the schist formation to such an extent that the boundaries between the formations are indefinite and cover a very considerable width.

Rock outcrops generally consist of fragments of the sedimentaries fused into silicious differentiations of the granite; generally the latter rock somewhat predominates and often forms fairly definite dikes. Alternating with such outcrops are areas,

generally covered with soil, which are evidently more subject to erosion and are presumed to be predominantly schists. These belts have a NNE trend. A thousand or fifteen hundred feet to the east of the workings there is a considerable band that is predominantly schist while granite is predominant for nearly a mile to the west.

Occasional dikes of lamprophyre cut both formations and the veins, but probably do not affect the mineralization.

**VEINS:** Five or more veins have been discovered on the property which dip and strike in various directions, but have a great similarity in mineralogy and general character; they are usually associated with granite tongues, or the more granitic parts of the granite-schist complex, at the points where they are exposed. Quartz and highly silicified granite are the chief gangue minerals, and contain pyrite, galena, and sphalerite, with rare chalcopryrite.

**DESCRIPTIONS:** (See map). Near the bed of Porcupine Creek at "C" there is a vein striking northeast and standing nearly vertical, which has been opened for about fifty feet by open cuts, and fifty five feet by a tunnel. It is about two feet wide and consists of quartz and silicified granite containing a little pyrite of low value. It lies between walls that are predominantly aplitic granite, and has been faulted by a dike of decomposed rock of andesitic appearance.

A second vein is exposed at "G", "H", "J", and

"F". At "H" a broad shallow cut shows four to six feet of vein matter; on the hanging side there is quartz with somewhat banded galena and sphalerite but toward the foot there is quartz with silicified granite and sparsely disseminated sulphides. The strike is easterly and westerly and the dip at a medium angle northward.

At "J" a short tunnel shows the vein four and a half feet wide which carries a fair amount of mixed sulphides. The walls are of mixed granite and schist. At "G" a three or four foot vein has been exposed; it is well mineralized with galena, sphalerite, and pyrite. The walls have not been sufficiently exposed to show their character, definitely, but they appear to be mixed granite and schist.

At "F" the tunnel shows some twenty feet of low grade vein matter and quartz on the east side near the portal.

The west side of the tunnel is in a lamprophyre dike, near the portal, and further in it is all in lamprophyre.

The vein has evidently been faulted by the dike, but the direction of throw is not evident. The metallic mineralization in the tunnel is weak. At "M" an eighteen inch vein shows in a small cut. It shows fair pyrite, galena and sphalerite; it strikes northwest and appears to dip southwest. Except for the reverse dip it might be taken to be the faulted continuation of the vein at "G".

At "P" a broad shallow cut shows a considerable width of ore and mineralized material which strikes northwest and dips southwest. On the northwest end of the cut, on the foot side, there is six and a half feet of quartz and silicified schist with spotty and generally



weak sulphides, then three feet of nearly barren schist, then four and a half feet of quartz and silicified schist with a small streak of galena near the hanging wall, and sparsely disseminated sulphides through the remainder.

In the southwest corner of the cut the footwall part of the vein is over five feet in width and consists of strong quartz with some mixed sulphides; the hanging wall part is not exposed. A flat pitching winze from the cut shows a strong quartz vein with generally rather weak mineralization, although some shipping ore is said to have been sorted from it. At the portal of tunnel "N" there is quartz of undetermined width which strikes to the southeast. At the portal it seems to dip about 45° to the southwest, but flattens and appears in the lower part of the tunnel, only, for some twenty feet when it steepens and disappears. The vein does not show on the west side of the tunnel on account of a fault slip which approximately coincides with the course of the tunnel. Several tons of ore have been sorted for shipment from this tunnel; there is considerable rather erratic galena and sphalerite, some of which follows along the fault plane. The vein is poorly exposed so no samples were taken of rock in place. It is not evident which way the vein has been faulted.

A twelve inch vein striking nearly north and south shows near the portal of "T" tunnel and contains some galena and pyrite. This is probably not a continuation of the "P" vein, although it may be a spur from it.

Near the center of the Porcupine Fraction a small out exposes a vein of quartz which is from one to one and a half feet wide, but shows little mineralization. There is also a weak stockwerk of fine quartz stringers striking northeast.

On the Champane claim a short tunnel has been driven from the creek level on a small vein showing little except scattered pyrite.

**SAMPLES:** Twelve samples were taken (see Map) but the exposures of the vein are frequently so limited and poor that proper cuts could not be made. The highest sample obtained from the solid covered a width of one foot on the hanging side of out "H" and assayed .10 Oz. gold, 4.7 Oz. silver, 3.2% lead, 5.4% zinc. The numerical average of all samples taken from the solid was 3.8 feet (plus) .06 Oz. gold, 3.6 Oz. silver, 1.9% lead, 2.1% zinc.

The average of four "chip" samples from broken ore, including 45 sacks of sorted ore, was .04 Oz. gold, 3.9 Oz. silver, 3.2% lead, 3.2% zinc.

Eighteen tons of sorted ore have been shipped from the property, the value of which is not at hand. It was however comparatively low grade.

**CONCLUSION:** The work done on the property is insufficient to allow it to be properly sampled, or to give very dependable data of any kind.

The property is situated in a fairly well mineralized section, and the geological conditions seem reasonably good. The claims contain a number of small veins

and stringers, and there are at least two fair sized veins of which the larger is eight or ten feet wide; neither of them have been traced more than a few feet and an attempt should be made to do so.

In general the mineralization is rather weak, and no body of milling grade ore is yet exposed. However, the size of two of the veins, and the extent of the mineralization if not its intensity, justify further work in tracing the veins on the surface and in opening them underground away from the faults and dikes which show in both the crosscut tunnels, and have resulted in making the property show up worse than it otherwise would have.

While recognizing the possibilities of the property, I am not overly optimistic as regards the probable results of further development, and do not recommend that your Company become interested in the property at present.

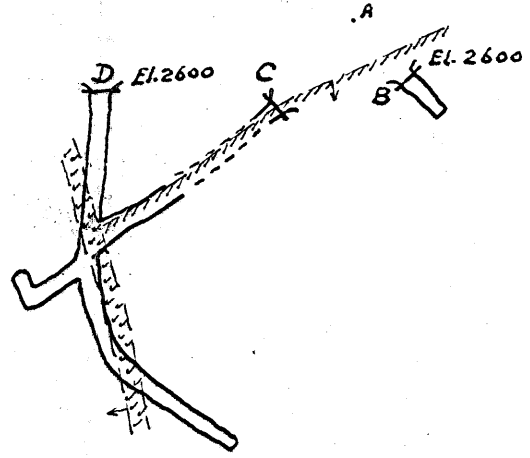
Respectfully submitted,

*Chas. C. Starr*

To North Corner Porcupine Claim  
(Destroyed) approximately 300 ft.

Porcupine Creek

M 105-16-.04-.09-1.0-2.2  
El. 2648



E  
F El. 2650  
G El. 2692

J El. 2666

H El. 2690

104-37-.06-5.6-0.9-3.9

101-4.3-.08-3.1-0.4-2.0  
cut sample

Hg. 102-1.0-1.0-4.7-3.2-5.4  
Ft 103-2.8-.04-1.1-0.1-0.7  
chips 112-.04-3.6-1.5-3.2

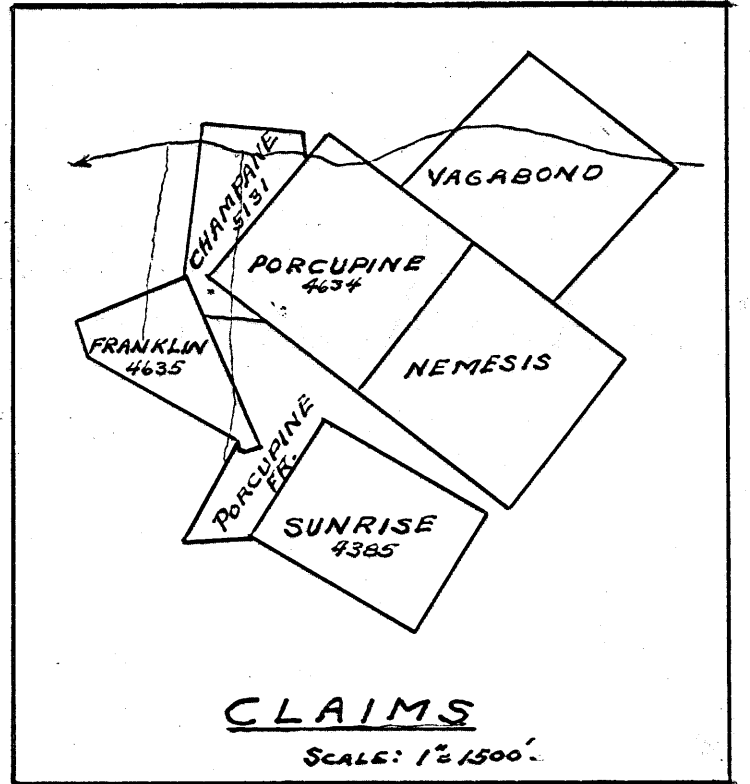
T El. 2718

106-06-6.5-9.7-6.1 (Sacked Ore)  
107-03-2.0-3.4-1.5 (Dump - Chips)

N El. 2765  
108-4.5-.12-9.9-5.9-0.5  
Fault

P El. 2785  
109-6.5-.02-0.7-0.4-1.0  
111-.07-3.8-2.6-2.5-chips  
110-2.0+.06-2.5-2.4-0.8

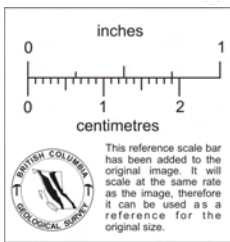
R El. 2792



CLAIMS

SCALE: 1" = 1500'

S El. 2861



**PORCUPINE GROUP**

Y.M.R., B.C.

SCALE: 1" = 50'

Claims from Gov't maps and owners description.

Workings surveyed by compass and tape.

Veins Dikes

Assays thus: No width Oz Au - Oz Ag - f. Pb - f. Zn

To accompany report of C.E. Starr

April 1926.  
April 1930.